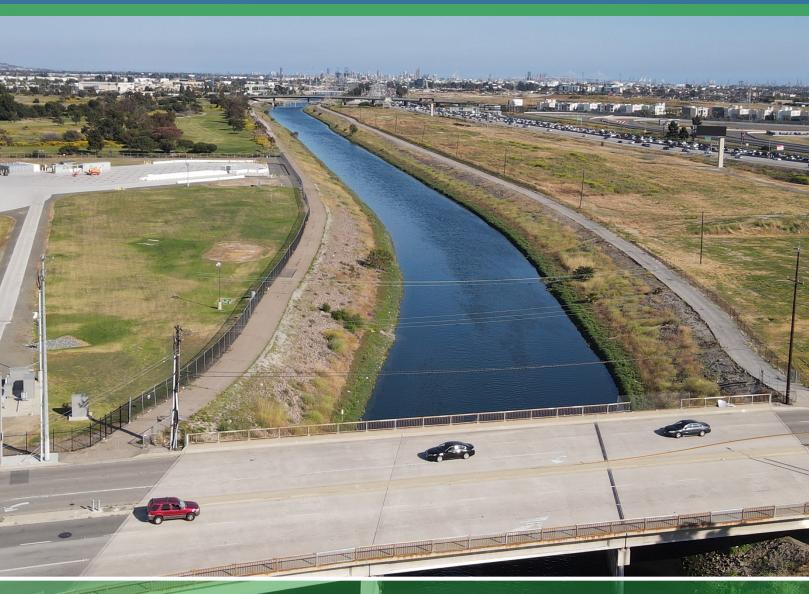
City of Carson

ECONOMIC DEVELOPMENT STRATEGIC PLAN





Prepared for:



CITY OF CARSONEconomic Development Strategic Plan

Approved on

September 19, 2023

PREPARED FOR:



City of Carson

Community Development Department Economic Development

PROJECT TEAM:









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"Carson – Where Creativity Comes to Live, Work and Play"

1. Introduction

This document provides a strategic framework to guide the City of Carson's economic development policies and programs over the next 5-10 years. The Carson Economic Development Strategic Plan (EDSP) is based on a comprehensive research and stakeholder input and outreach process, and reflects consensus views on the most promising opportunities and the most pressing challenges facing Carson's economy. While the EDSP places primary emphasis on actions and initiatives to be pursued by the City, it recognizes that a wide array of public- and private-sector entities have roles in influencing the economic vitality of Carson. In this regard, some of the recommended actions will be carried out through partnerships with other entities. Even for those action items in which the City's role is essentially coordination, this function can take many forms and is often critical to solving problems that may not otherwise have a clear constituency or single responsible entity assigned to resolving them.

Overview of the Strategic Planning Process

The recommended policies and program activities are based on an extensive planning process that included the following components:

- A review of the City's previous economic development strategy, and of existing and past economic development policies and programs.
- An analysis of Carson's existing and projected demographic profile, providing an understanding of underlying trends that may affect economic growth potentials.
- Direct input from a cross section of the City's economic development stakeholders via individual interviews and a series of workshop-type meetings (three Economic Development "Summit" meetings).
- A review of the various public- and private-sector entities involved in different aspects of economic development (or related activities), along with a summary of their existing program offerings.
- An industry "cluster" analysis to identify the industry groups (clusters) that are the most important "engines" of the existing local economy, as well as the industry groups that are likely to offer the most attractive growth potentials in the future.
- A real estate market analysis to identify potential future demand for commercial and industrial development in the City.
- An in-depth analysis of Carson's "visitor economy," including an evaluation of existing tourism/ visitation patterns, direct input from the major visitor venues in the City, and a market study to forecast demand for new hotel development.



For both the industry cluster analysis and the real estate demand projections, conclusions were screened through the lens of the recent pandemic to identify ways in which immediate and longer-term market opportunities may be altered due to shifts in consumer preferences and workforce practices.

Where relevant, key findings of the background and technical studies are referenced in the EDSP. The full studies are provided as separate reports.





2. Executive Summary

This Executive Summary of the EDSP contains the following sections:

- Carson's existing and potential positioning for economic development
- SWOT summary a distillation of Strengths, Weaknesses, Opportunities and Threats identified for Carson, based on technical studies and stakeholder input conducted for the EDSP process
- Overview of key EDSP initiatives selected, high-profile "gamechanger" initiatives intended to jump-start the implementation of the Action Plan and create high-impact "wins" for the City's economic development program
- Management of EDSP implementation within City of Carson's organizational structure recommended staffing for carrying out the Action Plan
- Targeted industry clusters recommended targets for business retention, expansion, attraction, and entrepreneurial development, based on research results and stakeholder contributions
- Geographic focus areas (Downtown, Avalon corridor, etc.) a map of key real estate redevelopment opportunities, and places of interest in the City most relevant to economic development
- Summary of projected 10-year demand for new commercial and industrial development in Carson
- Summary of tourism assessment and hotel market study



Carson's Existing and Potential Positioning for Economic Development

Carson's Tremendous Potentials

With a combination of inherent locational strengths and first-rate business and institutional assets, the City of Carson is extremely well positioned to pursue high-impact economic development. Carson's core advantages include:

Geographic/locational strengths

- Central, *strategic location* within the dynamic South Bay region of Los Angeles County.
- Excellent visibility and access to other key Southern California markets via the San Diego (405),
 Harbor (110) and Artesia (91) freeways.
- Proximity to world class port and airport infrastructure.
- Possible recreational and placemaking opportunities associated with the Dominguez Channel.
- Large resident workforce and stable residential neighborhoods with high rates of home ownership.

Business/institutional assets

- Mix of legacy and newer *industries* (including energy, manufacturing, and logistics), with potential connections to the region's technology and entertainment sectors.
- Regionally important retail shopping facilities, leveraging Carson's excellent freeway frontage.
- A major visitor destination (*Dignity Health Sports Park*, or "DHSP") and other one-of-a-kind attractions such as The Porsche Experience Center and the Goodyear Blimp.
- Recent and pending development activity (including new housing types that are broadening the community's appeal to a broader demographic) and key sites with major redevelopment potential.
- The longstanding presence of *California State University, Dominguez Hills (CSUDH)*, which is critically important both as a high-caliber educational institution and as a purveyor of unique programming focused on entrepreneurship and inclusive economic development.
- Existing *City partnerships* with CSUDH and the South Bay Workforce Investment Board (SBWIB), providing a foundation for ensuring effective connections between Carson's resident workforce and emerging job opportunities in high-paying industries.
- The City's newly formed *Enhanced Infrastructure Financing District (EIFD)* an important public financing mechanism that can be leveraged to attract private development investment.
- Viable opportunities for major *Federal/State grant funding*, based on the significant presence of fundable issues (e.g., transitioning of fossil fuel industry and remediation of brownfield sites).
- A newly-adopted *General Plan Update*, which lays a groundwork for development-friendly land use policies responsive to contemporary market trends.



New fiscal revenue sources (EIFD, Utility Users Tax, Measure K Sales Tax, Gross Receipts
Petroleum Tax, etc.) that effectively mitigate City fiscal constraints which historically prevented
proactive implementation of economic development programming.

Unfulfilled Potential – Some Existing Hindrances to Economic Development

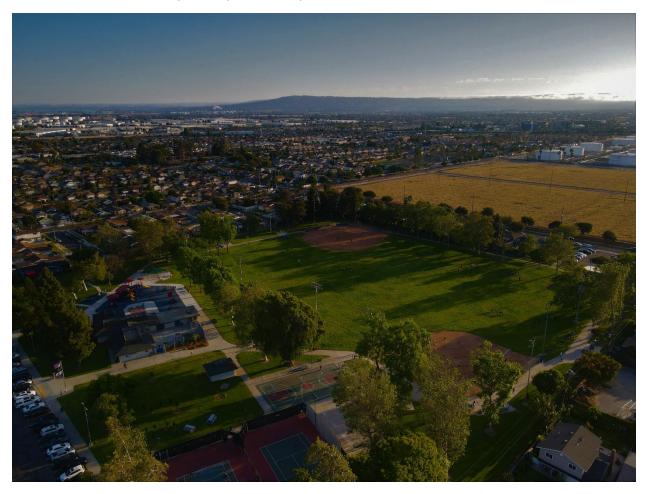
The strengths and assets described above are in some cases *unfulfilled* potentials. At present, the following issues are barriers to Carson fully activating its advantages:

- An *undersupply of hotels, restaurants, and entertainment amenities* attractive to visitors resulting in poor "retention" of DHSP patrons for extended stays (and associated expenditures) in Carson.
- A downtown area which, despite attracting new higher-density residential development in recent years, has yet to become a "destination worthy" district attractive to both residents and visitors.
- *Image problems* Carson's public image in Southern California tends to be neutral (people are unfamiliar with it) or negative (some people have the perception that Carson is a blighted, high-crime area).
- Limited developable land and shifting market trends (e.g., global reduction of demand for brickand-mortar retail facilities and a softening office market), which will increasingly require the City to facilitate redevelopment of older retail and office properties to accommodate growth.



EDSP – a Roadmap for Taking Carson to the "Next Level"

During 2022 and 2023, the City of Carson initiated an ambitious strategic planning effort to assess existing conditions, evaluate market opportunities, and engage a broad array of public and private stakeholders to define priorities and chart a detailed course of action for the City's economic development program. The resulting Economic Development Strategic Plan (EDSP) is intended to guide the City's economic direction for the next 5-10 years, in concert with other City plans and policies addressing land use, infrastructure and workforce development. As outlined in the EDSP Action Plan (Chapter 4), meaningful implementation of this plan will require persistence, a shared vision, and bold commitment of resources by the City's leadership.





SWOT Summary – Strengths, Weaknesses, Opportunities and Threats Identified by the EDSP Process



Overview of EDSP "Gamechanger" Initiatives

The overall EDSP is organized around eight high-profile initiatives ("gamechangers"), which are highlighted in this Executive Summary. The full EDSP Action Plan (Chapter 4) details the gamechanger initiatives in terms of 21 operational strategies (each with prioritized lists of specific action items).

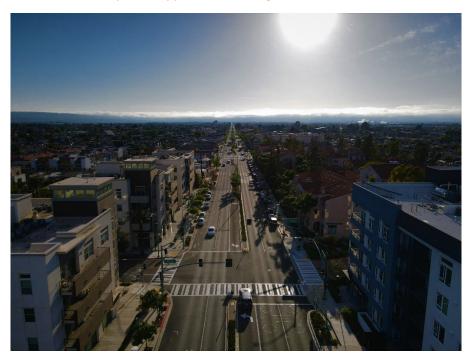
The Eight "Gamechanger" Initiatives

Overall Positioning

Gamechanger #1:

Marketing/branding initiative to position Carson as a center of innovation, creativity, and resilience leveraging Carson's rich industrial legacy and unmatched location in Southern California

Why this gamechanger is an urgent priority: Carson offers a unique mix of the kinds of "ingredients" that economic development success stories are made of: a major university, world-class entertainment venues, a strategic freeway location with regional-scale retail facilities, an impressive industrial/manufacturing base, and major "legacy" industries that are poised to lead a transition to an innovation-driven economy. Yet, Carson's position in the dynamic Southern California economy is largely unknown and underappreciated. A systematic, sustained marketing effort is needed to bring Carson's tremendous business and development opportunities to light.





Visitor Economy

Gamechanger #2:

Create "destination worthy" downtown (anchored by repositioned Carson Events Center, additional hotels, new housing)

Why this gamechanger is an urgent priority: Carson has made notable headway in recent years towards fulfilling an evolving vision for its downtown. This progress includes the attraction of several high-caliber urban housing developments (with more underway), modernization of City Hall, and initial work on revitalizing the Carson Events Center. However, the downtown as a whole still falls short of the promise of functioning as a unified "place" and visitor destination. Additional marketing and strategic placemaking investments are needed to tie Downtown's assets together to create a true "there", which in turn can anchor revitalization of the larger Carson Street and Avalon Boulevard corridors.





Gamechanger #3:

Create live entertainment district(s) (restaurant, retail, hotel, mixed-use housing) to more fully capture the potential economic value of Carson's visitor venues (at DHSP or other sites in Carson)

Why this gamechanger is an urgent priority: Carson's most important activity generators – DHSP, CSUDH, the Porsche Experience Center, and the Carson Events Center – create a huge potential market for visitor spending on meals, specialty retail shopping, entertainment and hotel stays before and after major events. As documented by the tourism market assessment completed for the EDSP, Carson is largely "missing the boat" on these opportunities, with much of this spinoff demand from Carson venues/events being captured in neighboring cities with more developed visitor economies. Carson is ripe for the development of additional visitor "infrastructure" to capture more of the business demand created by its existing venues.





Gamechanger #4:

"Reinvigorate Retail" initiative (shore up stronghold centers with support for retail attraction; facilitate the improvement of business skills of existing retailers; promote cooperative marketing and promotion within business districts; and support market-based reuse of underutilized commercial properties to expand housing and industrial development capacity where such reuse has a positive economic impact)

Why this gamechanger is an urgent priority: Carson faces two distinct sets of challenges with respect to the retail industry: 1) Regional-scale shopping facilities – which have long been a prominent part of Carson's economy and tax base – are threatened by the global reduction in demand for brick-and-mortar retail development, and 2) Neighborhood-level shopping centers are an ongoing concern due to longstanding voids in the retail tenant mix in some parts of the community (resulting, for example, in "food deserts"). To effectively navigate these challenges, the City will need to be open to flexible approaches that in sync with evolving market conditions, while maintaining a commitment to traditional best practices such as marketing to support tenant recruitment and marshaling financial resources to incentivize private reinvestment in older shopping centers.





Ready for Business and Development

Gamechanger #5:

Transform Carson into "the most business and development friendly" city in Los Angeles County by streamlining all its development, permitting and entitlement processes

Why this gamechanger is an urgent priority: Fiscal constraints historically limited the City's staffing levels for core economic/community development functions such as business outreach and retention, and timely processing of proposed development projects. Over time, these constraints negatively impacted the City's reputation for business and development friendliness. With the availably of new funding resources, the City now has an important opportunity to streamline processing (an effort which is already underway) and to significantly increase its visibility in the realm of business outreach and assistance. These functional improvements also need to be aggressively marketed, sending a clear message that Carson is "open for business."

The development streamlining initiative needs to be comprehensive and cut across all development review and approval processes. The City has already taken an important initial step by outsourcing processing previously handled by Los Angeles County with a private consulting firm, resulting in much shorter turnaround times for plan checks and inspections. However, the County still provides civil engineering services, causing a remaining "drag" on development project approvals. In addition, review processes for the Fire Department and Planning Division need to be brought into alignment with the recent Building and Safety process improvements.

Gamechanger #6:

Focus City policies, resources and partnerships to incentivize land uses with high job-creation and placemaking value (this initiative is intended to cover land uses and geographic subareas not specifically addressed by the other gamechangers)

Why this gamechanger is an urgent priority: Carson has several distinct opportunities to influence public and private investment in projects with high job-creation and placemaking value. These include potential improvements to Dominguez Channel, potential redevelopment of The Links at Victoria Golf Course, and opportunities to attract high-value industrial and office uses. In the absence of the City serving in a coordinator/collaborator role, these opportunities are less likely to come to fruition with outcomes that support the City's overall vision for economic development.



Tech-focused Economy

Gamechanger #7:

Position Carson as a technology startup leader and a partner with established technology companies (with a focus on Clean Tech and transitioning of legacy industries¹)

Why this gamechanger is an urgent priority: Carson has exceptional "starting points" for cultivation of a local technology economy: an emerging clean tech cluster with linkages to the area's legacy industries; university-based entrepreneurial development resources; industrial facilities/land where tech companies can potentially find room to grow; and a strategic location within the larger Southern California cluster of technology firms. To position Carson as a full-fledged "player" in the regional tech economy, it will be essential for the City to forge a range of public and private partnerships to take these various opportunities to the next level



¹ These focus areas would potentially include electric vehicle (EV) technology, hydrogen, water/land recycling technology, and best-practice leadership in remediation and redevelopment of brownfield properties.



Gamechanger #8:

Position Carson as a "training center of excellence" (linkage of workforce development programs to staffing/training needs of emerging industries)

Why this gamechanger is an urgent priority: Carson's resident workforce – and its prominent educational and training institutions (including CSUDH and the South Bay Workforce Investment Board) – are strong community "selling points" from an industry attraction perspective. To ensure that Carson's residents will fully benefit from the future economic growth that will result from the EDSP, the City can play a vital role in improving the connection between core industries and the local workforce. While the City does not envision getting directly into the business of providing workforce training programs, it can meet these needs through expanded collaboration with existing workforce development partners and by facilitating communication flows between private employers and workforce development service providers.

The table on the next page provides additional summary-level information about the proposed game-changer initiatives. The specific strategies comprising each gamechangers are detailed in Chapter 4 of the EDSP.





ESSENTIAL FEATURES OF GAMECHANGER INITIATIVES

	Gamechanger Initiative	SWOT Issues Addressed	Key Programmatic Elements	City's Role
1.	Marketing/branding initiative to position Carson as a center of innovation, creativity, and resilience leveraging Carson's rich industrial legacy and unmatched location in Southern California	 Need for image enhancement Opportunity to promote business and development opportunities in Carson 	 Upgraded ED website and social media strategy Promotion of development sites and incentives Business attraction (within Los Angeles County) Retail/restaurant recruitment Campaign targeted at Carson's existing business community to raise awareness of available City resources for business assistance 	This would be a core, in-house function of the City's ED program. Initial planning of marketing campaign (and possibly some elements of implementation) could be outsourced to a professional marketing agency. Marketing initiative (messaging, etc.) should be positioned to support other gamechanger initiatives.
2.	Create "destination worthy" downtown (anchored by repositioned Carson Events Center, additional hotels, new housing)	Opportunity to leverage recent and pending housing development (and the presence of the Civic Center) to create a full-service downtown	 Reinvest in (and rebrand) Carson Events Center Attract hotel development Attract high-caliber urban housing Link Downtown to larger Avalon corridor (potentially connected by shuttle system) Invest in public-realm placemaking projects 	This initiative – which is largely a function of developer outreach and coordination – would involve both economic development and community development roles by the City.
3.	Create live entertainment district(s) (restaurant, retail, hotel, mixed-use housing) to more fully capture the potential economic value of Carson's visitor venues (at DHSP or other sites in Carson)	"Lost potential" of DHSP patrons and other visitors who do not stay in Carson after events	 Identify candidate site(s), coordinate with landowners and create "vision plan" Marketing effort (linked to Gamechanger #1 above) to attract developer/tenants Developer RFP process 	City's initial efforts should focus on candidate site identification, followed by developer outreach when "vision plan" is ready. City should engage DHSP and CSUDH as partners in the visioning effort.



	Gamechanger Initiative	SWOT Issues Addressed	Key Programmatic Elements	City's Role		
4.	"Reinvigorate Retail" initiative (shore up stronghold centers with support for retail attraction; facilitate the improvement of business skills of existing retailers; promote cooperative marketing and promotion within business districts; and support market-based reuse of underutilized commercial properties to expand housing and industrial development capacity where such reuse has a positive economic impact)	 Global trend of shrinking and evolving footprint for brick-and-mortar retail 	 Identify high-priority target sites for reuse Establish incentives (potentially including sales/property tax rebates) to facilitate land use change Coordinate with property owners to maximize use of available City incentives and resources (including façade improvement grants and other financial support of retail building reinvestment) 	This initiative – which is largely a function of developer outreach and coordination – would involve both economic development and community development roles by the City.		
5.	Transform Carson into "the most business and development friendly" city in Los Angeles County	 Complaints from business/development community about slowness of City's entitlement and permitting processes Limited City resources currently devoted to business retention 	 "Streamline Carson" program (expedited development processing across Planning, Building, and Engineering) "Carson Cares" business outreach program (systematic and permanent business retention and small business assistance) Focused infrastructure and law enforcement investments 	This initiative would involve two levels of City involvement: 1) comprehensively reviewing and improving development processing and business permitting systems, and 2) promoting these improvements and business assistance programs through branded programs (as part of the marketing initiative)		



Gamechanger Initiative	SWOT Issues Addressed	Key Programmatic Elements	City's Role
6. Focus City policies, resources and partnerships to incentivize land uses with high job-creation and placemaking value (this initiative is intended to cover land uses and geographic subareas not specifically addressed by the other gamechangers)	 Unique placemaking potentials associated with Dominguez Chanel and The Links at Victoria Golf Course (redevelopment opportunity) Need to create professional office district to accommodate potential attraction of professional/creative businesses Unique challenges and opportunities associated with the concentration of brownfield sites in Carson 	 Promote public-realm improvements to Dominguez Channel and incentivize reinvestment in adjacent private properties Coordinate with County to optimize redevelopment potentials of The Links at Victoria Create opportunity sites to incentivize creation of professional office district(s) Incentivize attraction of manufacturing/R&D firms as tenants of existing and future industrial buildings Position Carson as a "national best-practices leader" in brownfield remediation and redevelopment (and pursue related opportunities for state/federal grant funding) 	This gamechanger will involve forging partnerships with a range of public and private partners to expand opportunities for Carson's remaining land resources to be developed (or redeveloped) with projects that deliver the highest economic impact. The City can support these partnerships by coordinating the preparation of conceptual and business plans; targeting compatible uses in the City's marketing efforts; and adopting focused incentives (potentially including sales/property tax rebates and waived development impact fees) to attract private investment.



Gamechanger Initiative	SWOT Issues Addressed	Key Programmatic Elements	City's Role
7. Position Carson as a technology startup leader and a partner with established technology companies (with a focus on Clean Tech and transitioning of legacy industries)	 Clean tech opportunities tied to inevitable transition of oil industry Potential connection to South Bay region's "Silicon Beach" (as a possible technology focus separate from the Clean Tech and fossil fuel transition initiatives) Potential to leverage CSUDH resources and connections Potential to create development capacity by remediating and redeveloping Carson's substantial inventory of brownfield sites 	 Partner with CSUDH (and possibly other regional institutions within CSUDH's network) to provide full-service incubator/accelerator services in Carson Coordinate with oil/energy companies to identify specific opportunities for clean tech development in Carson Pursue grant funds to support transition of legacy industries Network within "Silicon Beach" business community to identify potential expansion opportunities capturable by Carson Establish networking opportunities within Southern California electric vehicle industry cluster to identify potential expansion opportunities capturable by Carson Include clean tech focus in City's marketing campaign 	City should focus initial efforts on establishing partnership with CSUDH (this would likely take the form of expanding the City's existing contract for services with CSUDH). City should also take initial steps to establish a consortium of energy companies (and other firms with a potential connection to clean tech) to define a "game plan" for leveraging transition of legacy industries into a business development opportunity.



Gan	nechanger Initiative		SWOT Issues Addressed		Key Programmatic Elements	City's Role
cente of wo progr	on Carson as a "training er of excellence" (linkage orkforce development rams to staffing/training is of emerging industries)	•	Opportunity to leverage Carson's resident workforce as a resource for business attraction and entrepreneurial development	•	workforce development/ training organizations	This initiative would mostly involve coordination with workforce development partners (SBWIB, CSUDH, Community Colleges, high school districts, and labor unions) to facilitate focusing of available resources in Carson. City would also serve as a "conduit" between business community and workforce training programs/resources. As a demonstration project for the Training Center of Excellence concept, City could implement a consortium-sourced program focused on construction careers.



Management of EDSP Implementation within City of Carson's Organizational Structure

The EDSP recommends that the City of Carson devote two staff positions (housed within the Community Development Department) to spearhead implementation of the EDSP:

- 1. Economic Development Manager
- 2. Administrative Specialist, Economic Development Division

Given the close nexus between economic development and land use, it is recommended that the City's Community Development Director also have a significant role in EDSP implementation. The table below shows the general delineation of EDSP roles and responsibilities between the new Economic Development Manager and the Community Development Director.

Economic Development Manager	Community Development Director
Core responsibilities: Business growth and attraction, shepherding key initiatives:	Core responsibilities: Development capacity (responsibility shared with economic development) and support for placemaking:
 Retention/expansion/attraction, including marketing for ED and tourism Placemaking areas/projects Regional partnerships and linkages Business friendliness Responses to changing economic conditions 	 Preserve/create additional land capacity for housing and economic diversification Support site selection and planning processes for major physical projects, such as a Live Entertainment Center project Oversee redevelopment scenarios and implementation for sites such as The Links at Victoria Golf Course



Targeted Industries for Growth, Retention and Workforce Development

As part of the EDSP process, The Natelson Dale Group, Inc. (TNDG) prepared an in-depth analysis of the existing mix of industries in Carson relative to regional (Los Angeles County) and national benchmarks. This analysis, called an "industry cluster study," is fully documented in a separate report. Based on the industry cluster study and direct input from business stakeholders participating in the EDSP process, the EDSP recommends that the City focus its business retention/expansion/attraction and entrepreneurial development efforts around five broad themes or categories of business activity:

- 1. Visitor Economy
- 2. Clean Tech
- 3. Manufacturing
- 4. Logistics/Transportation
- 5. Professional/Creative
- 6. Construction

A sixth focus area – construction related industries – is included as primarily a workforce development initiative (part of Gamechanger #8).

As shown on the table beginning on the next page, each of the five broad categories includes a range of specific industry/business types determined to be viable targets for Carson. The table also indicates the potential for each industry group to address the following areas of strategic focus:

- Technology focus
- Manufacturing focus
- Placemaking value



Targeted Industry Clusters (grouped by broad themes)

Broad Theme								Technology Focus	Manuf. Focus	Placemaking Value
Visitor Economy										
STRATEGIC FOCUS: PI economic benefit from					ues" (e.g., DHSP)	and thereby incre	ease capture of			
Targeted Business Types	Hospitality (hotels)	Entertain- ment	Sports	Performing arts	Visual arts	Retail/ restaurant	Recreation			
Selling Points / Rationale	_	•		•	rve as strong anch to leverage 2028 (l" initiatives to			
City's Potential Strategic Roles		ment; lead publi		-	Dominguez Channe eting; targeted bus		•			
Clean Tech										
STRATEGIC FOCUS: Bu production) and the		•			_		energy			
Targeted Business Types	Renewable fuels	Carbon recapture	Electric vehicle- related	Battery storage	Environmental Services	Automotive (electric vehicles and components)	Lighting and Electrical Equipment (green energy)			
Selling Points / Rationale Based on Carson's longstanding connection to the energy sector, the inevitable transitioning of the fossil fuels industry, and the existing presence of alternative energy companies already, Carson can position itself as a regional leader in renewable fuels (a status no other community has clearly claimed yet).										
City's Potential Strategic Roles	Pursue federal and state grant funding; facilitate cleanup of brownfield sites; zoning/ entitlement of industrial buildings; lead public/private partnerships; targeted business attraction/sponsoring pilot projects or project sites.									



Broad Theme							Technology Focus	Manuf. Focus	Placemaking Value
Manufacturing									
Targeted Business Types	Aerospace Vehicles and Defense	Downstream Chemical Products	Food Processing and Manufacturing	Information	oncentration of noncentration of n	nanufacturing firms in Carson			
Selling Points / Rationale	I everage (arcon's nosition as an evicting manufacturing stronghold, notential ties to higher-tech activities								
City's Potential Strategic Roles	Zoning/entitle attraction.	ment of industri	al buildings; inte	erface with re	gional partnership	os; business retention and			
Logistics/Transportati	ion								
STRATEGIC FOCUS: This cluster is <i>not</i> recommended as an attraction target (market strengths are likely to continue to attract these uses to Carson, without a special marketing focus by the City); City should focus on incentivizing higher value logistics firms (those creating more employment opportunities and tax revenue) and potential alternative uses of industrial space (manufacturing and R&D tenants)									
Targeted Business Types	Local Transpor- Logistical tation and Services Logistics Distribution and Electronic Commerce								
Selling Points / Regional demand for industrial space in recent years has been dominated by logistics facilities; Carson can continue to capture this demand while being selective about project types (focus on employment and tax generators).									
City's Potential Strategic Roles	Incentivize hig	her-value uses c	of industrial build	lings/land.					



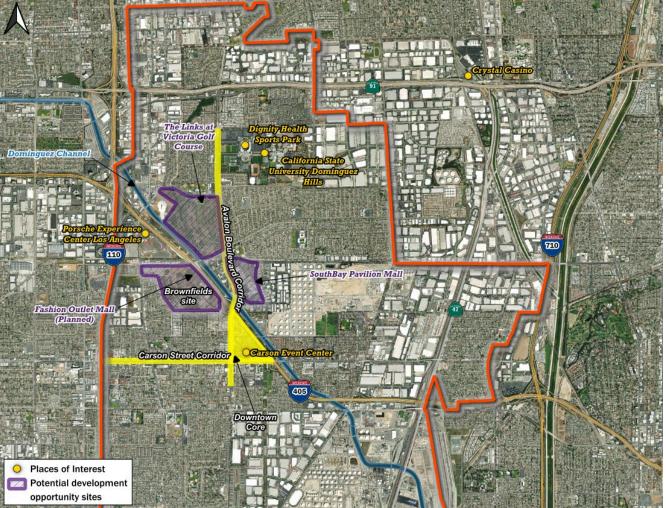
Broad Theme								Technology Focus	Manuf. Focus	Placemaking Value
Professional/Creative	2									
STRATEGIC FOCUS: This cluster represents a longer-term/visionary opportunity for the City to "bridge" the emerging presence of technology oriented industries and the creative potentials associated with unique land uses such as CSUDH, DHSP and the Porsche Experience Center. The intention of targeting creative industries also reflects Carson's proximity to the larger entertainment/media industry cluster which dominates other parts of Greater Los Angeles.										
Targeted Business Types	Business Services	Education and Knowledge Creation	Insurance Services	Local Health Services	Marketing, Design, and Publishing	Video Production & Distr. (studios)	Music and Sound Recording			
Selling Points / Rationale	Inditioning them to have greater hiscomaking value to the community. The focus on creativity can become an									
City's Potential Strategic Roles	partnerships; t	_	s attraction. Part		fessional building mprove broadban		_			
Construction-related	•		-							
STRATEGIC FOCUS: This cluster is included in the EDSP strictly as a potential "showcase" focus of workforce development programming. Positioning the cluster as a workforce development strategy reflects the reality that construction careers tend not to be place-specific (i.e., job opportunities are not confined to the City where a construction firm is headquartered); as such, Carson residents skilled in construction trades can potentially take advantage of employment opportunities both within and outside Carson.										
Targeted Business Types	Construction Products and Services	Vulcanized Materials (constructior	("durable"							
Selling Points / Rationale	Recommended based on target industry analysis (and compatibility/complementarity with other targeted clusters)									
City's Potential Strategic Roles	Leverage publi	c sector constru	ction projects th	rough PLA's	and local hire polic	cies.				



Geographic Focus Areas

The following figure highlights key real estate development opportunity sites within Carson, most of which are incorporated into EDSP strategies. The map also shows places of interest within the City that have an economic development connection.





Source: US Census (city boundary and transportation), City of Carson (POI and Other), TNDG



Potential Demand for New Commercial/Industrial Development in Carson

As part of the EDSP process, The Natelson Dale Group, Inc. (TNDG) prepared 10-year forecasts of potential demand for new retail, office and industrial space in Carson. TNDG's projections are summarized below and fully documented in a separate report.

Industrial Development Demand. Summary Table A provides an overview of TNDG's industrial demand analysis for current conditions and recent past trends. Future industrial development opportunities are summarized below the table.

SUMMARY TABLE A

OVERVIEW OF INDUSTRIAL MARKET CONDITIONS AND TRENDS

CARSON AND LOS ANGELES COUNTY

Existing Conditions	Los Angeles County	Carson				
Total Industrial Building Inventory	947.3 million square feet (67% logistics)	32.6 million square feet (83% logistics)				
Average rent	\$1.55/SF/month	\$1.50/SF/month				
Vacancy rate	2.7%	1.7%				
Recent Demand/ Absorption Trends	Average industrial absorption of 1.5 million square feet per year over the past 3 years (100% of net absorption was logistics space) For the prior 7 years (2012-2019), industrial absorption averaged 4.4 million square feet per year (88% logistics)	Average industrial absorption of 27,000 square feet per year over the past 3 years (100% of net absorption was logistics space) For the prior 7 years (2012-2019), industrial absorption averaged 84,000 square feet per year (49% logistics)				
Market Tailwinds (Favorable Factors)	 The pandemic-induced surge in demand for logistics facilities is expected to remain strong in Southern California but will gradually taper off over the next five years. The extremely low existing vacancy rate for industrial space in Los Angeles County (2.7% overall, 2.8% for logistics space) represents significant "pent up" demand which translates into immediate development opportunities – even in the absence of new firms moving into the region. 					



Existing Conditions	Los Angeles County	Carson
	Absorption rates for "specialized" industrial space (including manufacturing facilities) have been negative in 5 of the last 7 years, reflecting an ongoing trend of a net reduction in manufacturing firms and employment. According to various forecasts reviewed by TNDG, these trends are expected to continue.	
Market Headwinds (Constraining Factors)	Although absorption of "flex" space (hybrid space combining office and production areas) totaled 700,000 square feet countywide between over the past 10 years, absorption has been mostly negative since 2017 and is expected to remain negative for at least the next five years. In contrast to logistics, firms occupying flex space were more likely to adopt work-fromhome practices during the pandemic and this trend is expected to have a continuing impact on space demand.	

Future Industrial Development Opportunities

- The extremely low industrial vacancy rates in Los Angeles County create a strong starting point that can fuel new construction demand for several years even in the absence of new firms locating in the region. For purposes of this analysis, TNDG has assumed that a "healthy" industrial market has a stabilized vacancy rate of 3.5%. The current vacancy rate of 2.7% is well below this benchmark and creates tight market conditions that constrain regional economic growth. The difference between the benchmark vacancy rate and the actual vacancy rate (3.5% minus 2.7%) represents pent-up demand. Countywide this pent-up demand equates to about 7.5 million square feet (MSF) of new industrial space that could be added to the existing supply without creating a glut of vacant space. In theory, this pent-up demand represents an immediate development opportunity in the county.
- In addition to the space supportable by pent-up demand, Los Angeles County is expected to generate additional industrial demand based on growth in industries occupying industrial buildings. Total countywide demand for new industrial buildings over the next 10 years is projected to range between 13.5 MSF and 17.5 MSF (including the existing pent-up demand).
- For planning purposes, TNDG forecasts that Carson can potentially capture up to 10% of countywide industrial demand, translating into <u>demand for up to 1.75 MSF of new industrial</u> <u>space over the next 10 years.</u>
- Based purely on current market trends, industrial space absorption in the next 5-10 years is expected (by TNDG and other market analysts such as CoStar) to continue to be dominated by demand for logistics facilities. Logistics facilities are expected to sustain low vacancy rates (increasing to only 3.1% by 2027) and achieve strong rent growth (increasing by 29% from \$1.53/SF in 2022 to \$1.97/SF in 2027, according to CoStar).
- Flex and specialized industrial space are also expected to achieve rent growth over the next five years (29% for specialized space and 27% for flex space) but are not expected to generate



substantial demand for new building construction. (CoStar is projecting that the total inventory of specialized industrial space (i.e., manufacturing) will actually *shrink* by 3.8 MSF countywide over the next five years, and the inventory of flex space is projected to shrink by 700,000 square feet).

 Given the relatively small capacity for additional industrial growth in Carson (with total demand over the next 10 years projected at 1.75 MSF or less), TNDG believes that Carson can potentially capture flex/manufacturing/R&D uses despite the unfavorable demand conditions in Los Angeles County overall. However, this will largely depend on two factors: 1) an aggressive marketing/ economic development effort by the City to attract targeted business types, and 2) the ability to offer new competitive industrial building product attractive to these firms.

Office Development Demand. Summary Table B provides an overview of TNDG's office demand analysis, for existing/recent office market conditions.

SUMMARY TABLE B

OVERVIEW OF OFFICE MARKET CONDITIONS AND PROJECTED DEVELOPMENT OPPORTUNITIES

CARSON BUSINESS PARK SPECIFIC PLAN

Existing Conditions	Los Angeles County	Carson
Total Office Building	434.4 million square feet	1.25 million square feet
Inventory	(40% Class A)	(10% Class A)
Average rent	\$3.50/SF/month	\$2.38/SF/month
Vacancy rate	14.5%	2.7%
Recent Demand/ Absorption Trends	Average office absorption of	
	NEGATIVE 4.6 million square feet per	
	year over the past 3 years	
	For the prior 7 years (2012-2019), office absorption was positive by an average of 1.3 million square feet per	N/A – City-level data not available ²
	<u>year.</u>	

-

² Due to the small size of Carson's existing office market, detailed absorption data are not available at the city level.



Existing Conditions	Los Angeles County	Carson
Market Tailwinds (Favorable Factors)	Los Angeles County is projected to have strong growth in business sectors that typically occupy office space. Countywide office-based employment is projected to grow by as many as 71,000 jobs over the next 10 years. (However, as noted below, a higher-than-historic proportion of "office workers" will be remote or hybrid workers. As such the growth in jobs will generate less demand for office space than in previous growth cycles).	
	Notwithstanding the currently very high vacancy rates (20.5%) for Class A office space, market observers such as CoStar are projecting that most new office space in Los Angeles County over the next 10 years will be in the Class A category. In effect, older Class B and Class C buildings are likely to be replaced with new Class A facilities.	
	1	countywide represents an oversupply bed before there will be net demand
Market Headwinds (Constraining Factors)	over the next 10 years, the "new re workers will result in less new dem Angeles County the average office	and for office space. Historically in Los worker generated demand for as pace. For forecasting purposes, TNDG

Future Office Development Opportunities

- The current office vacancy rate of 14.5% countywide represents an oversupply of space that will need to be absorbed before there will be net demand for new office construction. Based on assumed "equilibrium" vacancy levels (19.5% for Class A, 12.0% for Class B, and 7.5% for Class C), TNDG estimates a current oversupply of 2.5 MSF of office space countywide (1.8 MSF of Class A space, 500,000 SF of Class B space and 200,000 SF of Class C space).
- In spite of the currently challenging office market conditions, Los Angeles County is expected to generate additional office demand in the coming years based on employment growth in industries that typically occupy office space. TNDG forecasts that countywide growth in office-based employment will range between 65,000 and 71,000 jobs over the next 10 years. However, a higher-than-historic proportion of "office workers" will be remote or hybrid workers. As such the growth in jobs will generate less demand for office space than in previous growth cycles. Historically in Los Angeles County the average office worker generated demand for as much as 250 square feet of office space. For forecasting purposes, TNDG has applied a reduced factor of 125 square feet per new office-based job.
- Consistent with forecasts from CoStar (and observable market trends), TNDG projects that most new office development in Los Angeles County over the next 10 years will be Class A buildings.



Based on the above factors, TNDG projects that gross demand for Class A office space over the next 10 years (2022-2032) will range from 8.1 MSF to 8.9 MSF countywide. After adjusting for the 1.8 MSF of current "excess" Class A space, TNDG projects that net demand for new Class A office space in Los Angeles County will range from 6.3 MSF to 7.1 MSF over the next 10 years.

- For planning purposes, TNDG forecasts that Carson can potentially capture up to 2% of countywide office demand, translating into <u>demand for up to 142,000 square feet of new office</u> space over the next 10 years.
- As noted in the industrial discussion above, Carson's ability to fully participate in the highly competitive office market in the coming decade will largely depend on two factors: 1) an aggressive marketing/economic development effort by the City to attract targeted business types, and 2) the ability to offer new competitive office building product attractive to these firms.

Retail/Restaurant Development Demand. Summary Tables C and D provide an overview of TNDG's retail demand analysis.

SUMMARY TABLE C

OVERVIEW OF RETAIL MARKET CONDITIONS AND PROJECTED DEVELOPMENT OPPORTUNITIES IN CARSON

Existing Conditions	Carson	
Market Tailwinds (Favorable Factors)	Projected ongoing population growth in Carson and the surrounding market area will continue to increase overall demand for retail space in Carson. Expanding, and possibly diversifying, retail offerings can potentially leverage the capture of other stores not found or well represented within Carson, as the community becomes more attractive in general for retailers. These benefits of growth would be augmented through implementing strategies in this EDSP addressing improvements to shopping centers that could make them both more efficient and attractive.	
Market Headwinds (Constraining Factors)	E-commerce as a proportion of all retail trade is expected to expand, which will erode demand for physical space, particularly in certain categories, as shown in this report. Aging shopping centers will need ongoing reinvestment, and some cases involving repurposing of existing uses, for them to remain attractive and otherwise viable. Other communities in the region will be attempting to some extent to help their own shopping centers remain competitive.	
Projected Development Demand (Carson)	For planning purposes, TNDG forecasts that Carson can potentially capture demand for up to 930,000 square feet of new retail space over the next 10 years, based on the indicators summarized in Table D below.	



SUMMARY TABLE D SUMMARY OF RETAIL SALES POTENTIAL AND SUPPORTABLE SPACE IN CARSON

TOWNSHIP OF THE PARENT OF THE			
Indicators of supportable retail sales in Carson			
(demand and sales figures in thousands of constant dollars)			
Estimates	2021	2025	2032
Demand	\$1,942,804		
Sales	\$1,871,241		
Supportable sales, <u>above</u> 2021 estimated	\$71,563	\$421,649	\$529,162
Supportable space (with allowances for e-commerce growth), square feet (SF)	165,545 SF	896,513 SF	930,757 SF

Future Retail Development Opportunities

- Given Carson's excellent freeway access and established status as a regional retail shopping
 destination, TNDG's retail market analysis considers demand potentials for a relatively large
 trade area defined by a 10-mile radius. Based on achievable "capture rates" (i.e., market shares)
 of regional spending potentials, TNDG's projections of retail demand indicate that developing an
 additional 900,000 square feet by 2025 is within the realm of possibility. Accomplishing this
 would involve focused efforts in retailer recruitment, along with other strategies to enhance
 existing shopping centers.
- The study findings indicating strong development opportunities despite global trends in the "footprint" of retail facilities tends to be shrinking rather than growing are validated by fact that a major retail development project has been pending for a number of years (and as of now still appears to be viable) on a former brownfield site in Carson. This project, which would be positioned as one of the region's largest fashion outlet centers, would potentially absorb nearly two-thirds of the projected citywide demand for new retail space in Carson.
- Beyond 2025, a combination of increased population in the defined trade area and assumptions about the counteracting effects of reduced sales due to growth in e-commerce will tend to have a stabilizing effect on supportable retail space in the City.



Summary of Tourism Assessment and Hotel Market Study

This section of the Executive Summary consists of selected excerpts from the *Tourism Assessment and Hotel Market Study, City of Carson Economic Development Strategic Plan*, prepared by HVS Convention, Sports & Entertainment Facilities Consulting,³ dated May 26, 2023. HVS is an international leader in sports venue, tourism, and hospitality consulting.

Carson's Tourism Demand Generators. HVS identified four main tourism demand generators in the City of Carson:

- Dignity Health Sports Park [DHSP]
- California State University, Dominguez Hills [CSUDH]
- The Carson Event Center
- Porsche Experience Los Angeles.

Other attractions in Carson are the Carroll Shelby Car Museum and the International Printing Museum. Based on geocoded visitation data, DHSP and CSUDH are by far the largest sources of visitation to Carson. However, any analysis should consider that CSUDH has significant repeat visitation from commuting students and that, due to proximity, there may be some overlap between the campus and DHSP.

Potential Demand for New Hotel Development For the purposes of forecasting the Carson Hotel Market, HVS assumes that:

- Carson is able to attract a high-quality, select-service, 120-room property adjacent or attached to the Carson Event Center (the "Proposed Hotel").
- The property would have significant meeting space, business amenities, and a restaurant. HVS
 assumes the Proposed Hotel would open by 2027 in order to service demand during the
 Olympics in 2028.

The projected growth in room-night demand within the Carson hotel market provides the foundation for the development of additional hotel rooms. The Proposed Hotel attached to the Carson Event Center could enter the market and claim a portion of the room night demand as well as induce meeting and group room nights. After the new supply has stabilized in the market, demand growth and supply growth are balanced, resulting in little change in occupancy rates. The prevailing outlook is that hotel markets will continue to recover from the pandemic's direct impact on the travel industry. Carson's existing hotels have historically experienced strong occupancy and consistent ADR growth. If strategically developed, new hotel developments could help grow room night demand as part of a conference and meetings complex or an entertainment district.

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³ This summary is provided for general information only, and is not intended for any decision making, in keeping with the authors' assertion that, "This report is to be used in whole and not in part."



Strategic Priorities. A range of public incentives to support hotel development (including sharing of transient occupancy tax revenue), commonly applied in comparable situations, could be considered by Carson (and are discussed in detail in the HVS report).

In the past, Carson has not had unified efforts to attract out-of-town visitation or retain visitors to Carson. The marketing and placemaking initiatives included in the EDSP Action Plan are designed to directly address this need for a more comprehensive approach to growing Carson's visitor economy.

Though Carson may never capture all of the associated spending with drive-in and out-of-town visitors to major venues in the City, there is a substantial room to grow in serving visitors' needs for lodging, food and beverage, and other leisure and entertainment options. Compared to other sports venues in the region, DHSP struggles with keeping visitors on campus when they do visit. Improving the on-site amenities will help make DHSP and the surrounding areas a destination which attracts people looking for entertainment, rather than just a venue that people visit and then depart.



3. Highlights of Other EDSP Background Studies

In addition to the real estate market analysis, tourism/visitation assessment and target industry/cluster study summarized in the preceding chapter, the consultant team for the EDSP completed the following background/technical studies (which are provided as separate documents and available on the online EDSP Story Map) to provide guidance to the strategic planning process:

Summary of Key EDSP Datasets

This document – prepared early in the EDSP process – summarizes a range of relevant demographic and economic data at multiple levels of geography, allowing for comparison of local (Carson) conditions to larger-area benchmarks. In particular, the report compares data for the following geographic areas:

- City of Carson
- Larger reference areas (Los Angeles County and California)
- Selected peer-group cities in the South Bay COG subregion (El Segundo, Inglewood, Redondo Beach, and Torrance)
- Selected peer-group cities in Gateway COG subregion (Cerritos, Commerce, Industry, Long Beach, and Santa Fe Springs)

The selection of the "peer group" cities reflects the fact that Carson is located in immediate proximity to two Los Angeles County subregions. While Carson is technically part of the South Bay subregion, it is also adjacent to (and shares important economic characteristics with) the Gateway subregion. The selected cities are intended to represent the competitive characteristics of the two subregions relative to Carson. In this regard, each of the peer group cities has notable economic development strengths of interest or relevance to Carson:

El Segundo – premier location for aerospace and technology firms

Inglewood – location of SoFi Stadium

Redondo Beach - visitor destination

Torrance – strong mix of retail, office and industrial uses

Cerritos – strong mix of retail, office and industrial uses

Commerce – strong industrial location

Industry – strong industrial location

Long Beach – largest of the peer-group cities and dominant across multiple economic sectors;

also has a Cal State University campus

Santa Fe Springs – strong industrial location

The datasets report was used as one basis for framing the issues discussed at the EDSP "Summit" meetings (stakeholder workshops). It also provides a baseline for tracking changes in demographic and economic conditions over time.



Creation of "Downtown" Carson

RRM Design Group developed a memorandum that identifies the opportunities and challenges that exist for furthering the City of Carson's vision for creating a downtown. It summarizes the existing policy documents that guide development within the area and builds on and refines the vision for downtown. It also includes recommendations for near-term implementable action items supporting this vision. While Carson does not have a traditional, walkable downtown, there is potential to create a future Downtown Core using the existing "bones." Key programmatic elements included within the study promote the following objectives:

- Destination worthy downtown
- Implement a façade improvement program
- Integrate the arts to promote placemaking and streetscape beautification
- Reinvest in (and rebrand) Carson Events Center
- Promote redevelopment and revitalization
- Streamline infill development
- Link Downtown to larger Avalon corridor (potentially connected by shuttle system)
- Attract hotel development
- Increase mobility and connectivity into and throughout the downtown

Residential Development and Housing Memorandum

Housing is a key component to economic development. If a city has housing for all income levels of the workforce, it can attract talent and thereby employers and create a stronger economy. Economic strategies to promote Livable Communities include:

- Attract high caliber urban housing
- Provide for a variety of housing types to accommodate Carson's workforce
- Repurpose and rezone underutilized sites for residential needs
- Encourage the use of publicly owned land for construction of affordable housing
- Streamline review and approval of proposed housing developments

RRM Design Group created a companion study that incorporates relevant information regarding housing sites for the development of all types of housing – market rate, affordable, supportive/transitional – into one location. The memorandum summarizes research and data collection prepared to address the housing market and specifically market rate housing in the City of Carson. In addition, policies and programs within the adopted Housing Element and the General Plan Update are summarized to identify City policies as to sites where affordable housing can be developed. Strategies for the preservation and protection of mobile home parks are also summarized. The document also includes a few case studies are identified that provide planning and zoning approaches for additional opportunities in largely built-out cities in the nearby region.



Brownfield Redevelopment Roadmap Companion Study

One objective of Carson's Economic Development Strategic Plan is the evaluation of former landfill and industrial lands for potential reuse, including a zoning designation as a brownfield property. A brownfield site is one where the expansion, redevelopment, or reuse of the site may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, improves visual character, and takes development pressures off greenspaces and working lands. As part of the EDSP, Catalyst Environmental Solutions developed a companion study that provides a "roadmap" for brownfield redevelopment within the City of Carson.

Workforce and Educational Institution Analysis

This document provides a summary of labor force and employment data to identify key trends, needs and opportunities related to Carson's local and regional workforces. In particular, the report profiles the occupational mixes and associated educational/training requirements for each of the target industry clusters identified in the EDSP. The data compiled for this report are intended to guide Carson's programmatic initiatives to ensure a competitive workforce suitable for the City's targeted industries.

Profile of Local and Regional Small Business Assistance and Entrepreneurial Development Programs

This document (provided as Appendix A of the EDSP) lists and describes existing small business and entrepreneurial development programs available in Carson or readily accessible to Carson workers and businesses, including City programs and resources available through other organizations. The summarized information provides a "snapshot" of existing programs and resources as of the time the research was completed. It is anticipated that the City will continue to expand and refine this information, and ultimately publish it as an online resource directory for the business community.

Profile of University-based Resources Relevant to the EDSO

This report (attached as Appendix B of the EDSP) profiles a range of university-based programs that are potential partnership resources for the City of Carson's economic development efforts. Whereas the list includes relevant programs for colleges and universities throughout southern California, particular attention is given to facilities and programs based at California State University, Dominguez Hills (CSUDH). The emphasis on CSUDH reflects the unique advantages and opportunities Carson has by virtue of being host to a state university campus (which very few California communities of Carson's size have).

Benchmark Comparisons of Peer-city Economic Development Programs

A supplemental study was conducted to compare and benchmark peer-city economic development programs. The cities of Downey, El Segundo, Gardena, Inglewood, Long Beach, Norwalk, Santa Clarita, Santa Fe Springs, and Torrence were selected, in consultation with City of Carson staff, as potential aspirational models and/or competitors for Carson's economic development program and the findings were summarized within this study (which is attached as Appendix C of the EDSP).



4. EDSP Action Plan

Action Plan Overview

The EDSP Action Plan implements the eight "Gamechanger" initiatives through a total of 21 specific strategies. The 21 strategies are outlined below and detailed on the following series of tables.

Gamechanger #1:

Marketing/branding initiative to position Carson as a center of innovation, creativity, and resilience leveraging Carson's rich industrial legacy and unmatched location in Southern California

- 1.A Design and implement comprehensive economic development marketing program
- 1.B Promote expanded tourism/visitation ("Stay Carson" program), leveraging regional attractions and tourism-promotion organizations and building on existing, unique assets

Gamechanger #2:

Create "destination worthy" downtown (anchored by repositioned Carson Events Center, additional hotels, new housing)

- 2.A Promote Events Center reinvestment/rebranding
- 2.B Pursue placemaking investments in Downtown Carson and connecting corridors (Carson Street and Avalon Boulevard)

Gamechanger #3:

Create live entertainment district(s) (restaurant, retail, hotel, mixed-use housing) to more fully capture the potential economic value of Carson's visitor venues (at DHSP or other sites in Carson)

3.A Create live entertainment district (restaurant, retail, hotel, mixed-use housing)

Gamechanger #4:

"Reinvigorate Retail" initiative (shore up stronghold centers with support for retail attraction; facilitate the improvement of business skills of existing retailers; promote cooperative marketing and promotion within business districts; and support market-based reuse of underutilized commercial properties to expand housing and industrial development capacity where such reuse has a positive economic impact)

4.A Implement "Reinvigorate Retail" initiative



4.B Implement retail/restaurant tenant recruitment campaign (part of Strategy 1.A)

Gamechanger #5:

Transform Carson into "the most business and development friendly" city in Los Angeles County by streamlining all its development, permitting and entitlement processes

- 5.A Establish comprehensive business retention and expansion ("BRE") program including direct outreach, contact management and linkages to business assistance resources
- 5.B Establish branded development streamlining program ("Streamline Carson")
- 5.C Focus law enforcement resources including cameras, automated license plate readers, and officers in neighborhoods/corridors/districts where most needed
- 5.D Focus City resources and coordinate with partners to prioritize infrastructure investments (including broadband) that support targeted economic development

Gamechanger #6:

Focus City policies, resources and partnerships to incentivize land uses with high job-creation and placemaking value (this initiative is intended to cover land uses and geographic subareas not specifically addressed by the other gamechangers)

- 6.A Pursue Dominguez Channel improvement concepts with focus on adjacent development
- 6.B Determine the potential for The Links at Victoria Golf Course redevelopment (with possible recreation/open space uses plus non-recreation uses including housing)
- 6.C Identify opportunity sites for professional office development and implement policies/incentives to attract office development
- 6.D Support recruitment of manufacturing tenants and provide incentives to maximize creation of quality jobs in existing and future industrial buildings
- 6.E Partner with property owners to assess, investigate, and clean-up contaminated sites, establishing Carson as a "national best-practices leader" in brownfield remediation and redevelopment



Gamechanger #7:

Position Carson as a technology startup leader and a partner with established technology companies (with a focus on Clean Tech and transitioning of legacy industries⁴)

- 7.A Address entrepreneurial/small business development either locally (in house) or with linkages to regional business assistance and small business lending resources
- 7.B Strengthen linkages to innovation (e.g., through collaboration with CSUDH)
- 7.C Launch public/private industry cluster initiative

Gamechanger #8:

Position Carson as a "training center of excellence" (linkage of workforce development programs to staffing/training needs of emerging industries)

- 8.A Coordinate workforce development through linkages to available local and regional partner assets, augmenting as appropriate
- 8.B Establish "showcase" workforce development program focused on employment opportunities in construction and related industries

September 11, 2023

⁴ These focus areas would potentially include electric vehicle (EV) technology, hydrogen, water/land recycling technology, and best-practice leadership in remediation and redevelopment of brownfield properties.



Strategy Details

Gamechanger #1 – Marketing/branding initiative

- 1.A Design and implement comprehensive economic development marketing program
- 1.B Promote expanded tourism/visitation ("Stay Carson" program), leveraging regional attractions and tourism-promotion organizations and building on existing, unique assets

STRATEGY 1.A: Design and implement comprehensive economic development marketing program

Brief Description of Program

The City will launch a new marketing program (specific to economic development) that will address the following objectives:

- Increasing the City's exposure to selected targeted industry clusters, at selected locations.
- Raising public awareness of City's competitive advantages, business assistance resources, and enhanced "business and development friendly" policies/programs.
- Promoting development opportunities and quality-of-life enhancements represented by placemaking initiatives within the EDSP.
- Incorporating enhanced social media and other contemporary approaches to marketing.
- Recognizing Carson's diversity, in population and the business community, in marketing materials.

Tactically, the marketing program should include the following seven elements:

- Recognizable brand for the City (newly developed as part of EDSP implementation)
- 2. Marketing to general community (social media, special events, etc.)

- 3. Marketing to existing Carson business community (to raise awareness of City resources, etc.)
- 4. Marketing to recruit targeted retail and restaurant tenants
- Marketing to development community to attract targeted land uses (e.g., housing, hotels)
- Marketing to targeted (and aspirational) industry clusters such as clean tech and the creative arts
- 7. General marketing to promote "Shop Carson" program (residents, daytime population)⁵

Note: a separate but related marketing effort focused on tourism/visitation promotion is outlined in Strategy 1.B below.

City's Positioning/Roles in Implementation

The City will take a <u>lead role</u> in implementing the economic development-specific marketing program. Initial program design (and some elements of implementation) may benefit through support from a professional marketing agency. The program will be designed in recognition of the complementary roles that regional marketing initiatives (i.e., led by external partner organizations) can fill.

⁵ The Open Rewards program sponsored by the City of Lancaster provides a strong model for a shop local program (see https://www.cityoflancasterca.org/our-city/departments-services/economic-development/open-rewards).



STRATEGY 1.A: Design and implement comprehensive economic development marketing program

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Maintain and update the EDSP Story Map (an online companion to the EDSP document) on an ongoing basis. (The Story Map is being launched concurrently with the publication of the EDSP and will serve as the main online presence of the City's economic development program; this online material will be frequently updated as additional elements of the City's marketing plan and overall EDSP are implemented over time.)
- B. Inventory and review all current City of Carson marketing activities (across all departments with a nexus to economic development) and consider revisions that will reflect the most current thinking about marketing/communications strategies (e.g., enhanced social media, etc.). Based on that review, identify specific marketing activities that would be enhanced by support from a professional marketing firm (retained to undertake development of a tactical marketing plan and related media focused on EDSP objectives).
- C. Define work scope and issue request for proposals (RFP) for a professional marketing agency to support initial design and implementation of City's economic development marketing plan and to develop recognizable brand suitable for economic development.
- D. Complete ED-specific marketing plan (through contracted marketing agency retained in Step C above).
- E. Coordinate with external/regional partner organizations to ensure that the City's marketing targets and other marketing objectives are optimally positioned within regional marketing initiatives (including partner websites, etc.)
- F. In tandem with Strategies 4.A and 4.B below ("Reinvigorate Retail" initiative), implement marketing component directed towards retail/restaurant tenant recruitment.
- G. Implement messaging targeted at Carson's existing business community to raise awareness of available City resources for business assistance. This can be accomplished through the creation of a City of Carson Economic Development E-Newsletter that is released on a regular (e.g., quarterly) basis.
- H. Actively promote available development sites and incentives (as defined in other EDSP strategies) and available vacant properties to targeted businesses (these resources should be clearly catalogued online and in other elements of marketing program).
- I. Implement business recruitment/attraction campaign (pursuant to marketing plan developed in Step D), focused on capturing firms from within Los Angeles County that are seeking expansion or relocation options.

Year 1 Milestones/Checklist (milestones for later years are provided in Chapter 5 of the EDSP)

- Professional marketing agency retained to complete marketing plan
- Marketing plan completed (by contracted professional agency)
- Completed outreach to marketing partners (including Carson Chamber of Commerce and LAEDC)



STRATEGY 1.B: Promote expanded tourism/visitation ("Stay Carson" program), leveraging regional attractions and tourism-promotion organizations and building on existing, unique assets

Brief Description of Program

Carson and its surrounding region host a complex web of visitor attractions and visitor infrastructure, with extensive interrelationships among these elements. These assets are promoted at a number of different geographic and institutional levels but there is currently no sub-regional tourism or visitor organization (such as a "Visit South Bay" initiative) to provide a coordinated marketing front. Consequently, messaging about these resources from the City's position is particularly challenging and will require the focused cooperation of other private and public entities.

Promoting Carson for visitors can be combined with promotional efforts directed to businesses/employers (as in the preceding strategy, 1.A). While the messages directed to each of the two groups are different, considering visitors and businesses simultaneously can help ensure that

assets valued by visitors are also recognized as having value to businesses in terms of quality-of-life enhancements, etc. At the same time, the image of the City can be managed to avoid over-identification with either tourism or industry.

City's Positioning/Roles in Implementation

Although partners will have a major role in implementing this strategy, the City will need a strong leadership role in coordinating among them, given the complexity of conditions as noted. This could culminate in either a local-focused promotional effort, like Discover Torrance, or the organization of a regional tourism bureau for the South Bay.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Convene a meeting of potential public and private partners to identify specific areas of focus for a collaborative local tourism promotion program ("Stay Carson"). At a minimum, these partners would include Dignity Health Sports Park, The Porsche Experience Center, the Goodyear Blimp, CSUDH, local hotel operators, major retail/restaurant stakeholders (e.g., South Bay Pavilion) and City staff responsible for Carson Events Center promotion and programming.
- B. As warranted based on the initial priorities identified in Step A above, establish a structured Tourism Working Group comprising the above partners and meet quarterly to define mutual priorities (and assign responsibilities for implementation of specific tasks).
- C. As an initial task for the working program, inventory and assess all related promotional materials, from all sources (i.e., private partners including visitor venues, hotels, etc.), to secure an understanding of content and the context of such content, intended audiences, means by which information is accessed, timeliness, and other details. Based on this assessment, identify the extent to which tourism-related marketing should be included in the scope of the professional marketing agency RFP described in Strategy 1.A above (depending on the working group's initial scoping of issues, promotional activities related to tourism may ultimately be handled outside the scope of the Strategy 1.A marketing plan, but should still be closely coordinated with it to ensure appropriate consistency of branding, messaging and graphic materials).



STRATEGY 1.B: Promote expanded tourism/visitation ("Stay Carson" program), leveraging regional attractions and tourism-promotion organizations and building on existing, unique assets

- D. As a potential extension of the local (Carson) Tourism Working Group, convene an exploratory meeting of potential *regional* partnership for tourism development and promotion ("Visit South Bay"). This initial meeting would include City of Carson officials and representatives of neighboring cities and convention/visitor bureaus. The meeting should be scheduled late in Year 1, once the direction and priorities of the local Tourism Working Group have been sufficiently defined to allow for effective participation in a complementary regional initiative.
- E. As warranted based on the outcome of the exploratory meeting in Step D above, convene quarterly planning sessions with regional tourism partners to define mutual priorities and to identify funding needs, potential funding sources, and implementation roles.
- F. Based on the outcome of the regional planning sessions, generate coordinated visitor marketing/information materials that function across jurisdictional lines within a defined "South Bay" region. Coordinate these materials with Carson's overall marketing program.
- G. Support (financially and through other appropriate resource commitments) formal establishment of a "Visit South Bay" tourism promotion organization.

- Carson Tourism Working Group established (initial plan developed for coordinated visitor promotion based on compilation of existing materials from various sources, as described)
- "Visit Carson" webpage (as warranted, based on plan developed by Tourism Working Group)
- Initial/exploratory meeting with prospective members of a "Visit South Bay" partnership



Gamechanger #2 – "Destination worthy" downtown

- 2.A Promote Events Center reinvestment/rebranding
- 2.B Pursue placemaking investments in Downtown Carson and connecting corridors (Carson Street and Avalon Boulevard)
- 2.C Incorporate key Downtown-connecting corridors (Carson Street and Avalon Boulevard) into overall urban design plans

Note: the strategies supporting Gamechanger #2 are in part derived from a detailed memorandum report ("Carson Economic Development Strategic Plan - Creation of 'Downtown' Carson") prepared by RRM Design Group as part of the EDSP process. Where appropriate, the strategy descriptions below reference RRM's recommended strategic actions; RRM's full memorandum provides more detailed descriptions of these recommendations.

STRATEGY 2.A: Promote Events Center reinvestment/rebranding

Brief Description of Program

As one of the largest ballrooms and group meeting spaces in the South Bay, the Carson Events Center is an integral visitation asset for both the City and the surrounding region. It would ideally represent a strong statement of the City's commitment to such relationships and activities. A vibrant Events Center is partly a matter of physical design and reinvestment and partly a function of management/promotion to maximize use of the spaces available, on the part of organizations that can make use of what the Center has to offer.

The primary responsibility for the Events Center resides outside the economic development program, but the physical and programmatic quality of the Center are key to the City's objectives in the tourism/visitor area. Some of these projects, like EV charging stations and interior improvements, are already underway but other improvements should be prioritized.

City's Positioning/Roles in Implementation

The City will take a lead role in setting up and implementing this strategy, which could include additional physical improvements, the development of a potential hotel site on the Event Center campus, and further branding/marketing focus.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Review the Center's business/management plans in light of the intention to cost-effectively reinvest in the Center in various ways.
- B. Incorporate marketing of the Events Center (including rebranding if necessary), into the overall marketing efforts undertaken within the EDSP, including overall marketing for economic development (1.A) and the strategy addressing tourism promotion (1.B).
- C. Attract/incentivize development of new hotel/conference facilities proximate to the Events Center including undertaking work to identify feasible parcel(s) for the development of such a hotel, marketing it as a prime development opportunity, and defining an incentives package (potentially including TOT and



STRATEGY 2.A: Promote Events Center reinvestment/rebranding

property tax sharing and waived development fees) as needed to attract developer/investor interest in the project.

Year 1 Milestones/Checklist

- Coordination meeting(s) between City's new ED Manager and the Community Services Department (which has the lead on Events Center repositioning)
- Develop Events Center messaging/selling points to be incorporated into EDSP marketing plan (Strategies 1.A and 1.B)
- Progress on recruitment of additional Downtown hotel

STRATEGY 2.B: Pursue placemaking investments in Downtown Carson and connecting corridors (Carson Street and Avalon Boulevard)

Brief Description of Program

Placemaking is an umbrella term that encapsulates all the tools used to create places that transform public spaces to strengthen the connections between people and these places. In layperson words, placemaking refers to the creating of "there." It's the creation of places where people want to be on a Saturday afternoon or Sunday morning. Most of these places have not come about organically, but rather through strategic investment and curation. This strategy outlines an arsenal of placemaking tools – some of which Carson already deploys – that if invested in could reinforce and foster a more cohesive downtown environment.

The recommended inclusion of the "connecting corridors" is important both from the perspective of the improving the corridors themselves but also due to the reality that the improvement of the Avalon corridor, especially, provides an important opportunity to better link (physically and thematically) the Downtown to key activity generators to the north (DHSP, CSUDH, South Bay Pavilion, and Victoria Golf Course). These potential linkages are critical to maximizing Downtown's viability as a destination.

Much of the walking experience on Avalon north of 213th Street is not conducive to a walkable environment and its connection with another activity node – the South Bay Pavilion – is very poor. Walking and biking north of Del Amo is very secondary to automobile traffic and the sidewalk aesthetics are very poor. All of these conditions create opportunities for innovative approaches using public art and engineering solutions.

Note: The concept of creating a live entertainment district (pursuant to Strategy 3.A below) would most likely be fulfilled at one more locations within the Downtown core and/or connecting corridors. Thus, strategies 2.B and 3.A are integrally related.

Also, although not reiterated as part of Strategy 2.B, two key components of the "Reingorate Retail" initiative (Strategies 4.A and 4B) are potentially applicable to Downtown revitalization:

- City funded façade improvement program
- City marketing efforts to support retail/ restaurant tenant recruitment



STRATEGY 2.B: Pursue placemaking investments in Downtown Carson and connecting corridors (Carson Street and Avalon Boulevard)

Locational and transportation issues associated with the connecting-corridor concept include the following:

- Avalon's access to the 405 Freeway supports the idea that converting vacant or underutilized car dealerships to uses compatible with a downtown function can accelerate Downtown creation.
- Access to key destinations in the City is needed by way of alternative transportation infrastructure, for bicycles and other modes.
 - There could be "green walk" walking paths
 - According to some stakeholders, CSUDH students have indicated a strong desire for bike lanes and linkages from the campus to other places within Carson
 - A shuttle system could be established to move people from CSUDH/Dignity Health Sports Complex to Downtown or other parts of Carson
 - There is also an opportunity to upgrade the aesthetics of most of the Avalon Boulevard walk (between Elsmere Drive and University Drive) with artistic/landscape treatment.

City's Positioning/Roles in Implementation

From the standpoint of the EDSP, the City's role will be to leverage the leadership of Downtown plan development to foster economic development opportunities associated with a Downtown plan, which might include marketing the area to specific business types, including the area as an element of quality-of-life enhancement in Carson, and helping make the development community aware of opportunities in the plan area and expediting such development through various resources, incentives,

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. In conjunction with the City's Community Services Department (which has current oversight of Carson Events Center programming), develop plan for additional "pop-up" events in the Downtown core (see RRM's "Creation of Downtown Carson" memo for additional details on this concept).
- B. Collaborate with Downtown property owners to create opportunities for short-term ("pop-up") art galleries and other short-term retail tenancies to fill currently vacant commercial spaces in the Downtown (see RRM memo for additional details); consider allocating City funding to partially underwrite these short-term tenancies (focusing on uses that have a high-impact potential to draw visitors to the Downtown).
- C. Prioritize Downtown projects in the City-funded façade improvement program (see Strategy 4.A) and retail/restaurant tenant recruitment efforts (Strategy 4.B). City assistance with tenant recruitment should be offered to owners of existing vacant commercial spaces (e.g., Union South Bay) and forthcoming development projects with commercial components.



STRATEGY 2.B: Pursue placemaking investments in Downtown Carson and connecting corridors (Carson Street and Avalon Boulevard)

- D. Incorporate marketing of key Downtown/corridor "opportunity sites" into developer outreach element of EDSP marketing plan (Strategy 1.A). This component of the marketing program would focus on attracting the following types of uses to the Downtown core and corridors:
 - High-caliber urban housing
 - Hotel (next to Events Center)
 - Live Entertainment District (LED) compatible uses see Strategy 3.A below
- E. Consistent with concepts detailed in RRM's "Creation of Downtown Carson" memo, develop prioritized capital improvements plan for Downtown/corridor placemaking investments. These would include the following types of improvements:
 - o Infrastructure to support multi-modal connectivity (walking and bicycle paths)
 - Freeway underpasses and pedestrian bridges
 - Shuttle system connecting Downtown core to DHSP and CSUDH (potentially with funding support from these partners)
 - Gateway features
 - Decorative crosswalks
 - Streetscape beautification to develop a more defined community core (streetscape furnishings, lighting and paving; wayfinding elements; public art and focus points; streetscape planting; outdoor gathering areas)
- F. As a pilot program for improving the visual appeal of the Avalon corridor, create an improvement plan for the Avalon walk between Elsmere Drive and University Drive (currently the least visually attractive segment of Avalon). The improvement plan should incorporate public easement artistic, landscape and hardscape treatments, as well as incentives (potentially including matching grants and/or low-interest loans) for improving the maintenance/appearance of private rear yards visible from Avalon.
- G. In tandem with (or as follow-up to) Step F above, issue an RFP to retain a consultant to prepare a comprehensive improvement plan to enhance the Avalon corridor between Carson Street and Victoria Street. This plan should address enhanced landscaping, the addition of public art, and improving the Avalon wall.

- Policy/game plan for "pop-up" events and businesses
- Revised guidelines for City's façade improvement program (to define criteria for prioritization of funding for targeted Downtown projects)



Gamechanger #3 - Live entertainment district

3.A Create live entertainment district (restaurant, retail, hotel, mixed-use housing)

STRATEGY 3.A: Create live entertainment district (restaurant, retail, hotel, mixed-use housing)

Brief Description of Program

As with other placemaking initiatives related to Downtown and connecting corridors (Strategy 2.B above), this strategy, while focused on a live entertainment district, is also intended to help ensure coordination among all of the planning/design initiatives within the City.

Potential concepts to consider in relation to a live entertainment district include the following:

- Existing models for the scale of an
 Entertainment District in the CSUDH area
 appropriate for Carson might include smaller
 college towns such as Downtown Orange,
 which is home to Chapman University. This
 could be a more appropriate model for Carson
 versus a very large complex like (for example)
 the Irvine Spectrum.
- An alternative to having one live entertainment district would be to have multiple entertainment districts, such as the Carson Country Mart project, with some functions complementary to Downtown and also space for venues for events and other functions. With separate locations for each type of use, visitors can be spread around the City to be exposed to other community assets, businesses, etc.

Other locational considerations include the following:

- The old Don Kott property (car-dealer lot) may be particularly suitable for this type of development (NEC of Avalon and 213th Ave.)
- A live entertainment district (or at least portions of it, under the multiple-district scenario) ideally needs to be within walking distance of DHSP and CSUDH. As such, north end of the Victoria Golf Course is a possibility but would barely meet the walkability criterion)
- To "test out" locations for permanent gathering places such as the live entertainment district, music events or a quarterly street fair could be set up, with testing locations to include the South Pavilion Mall Parking lot, vacant retail spaces, and the plaza area of some new developments along Carson Street/Avalon Boulevard

City's Positioning/Roles in Implementation

From the standpoint of the EDSP, the City's role will be similar to that of other placemaking strategies, namely leveraging the leadership of encouraging development of the live entertainment district based on plans to be developed, to foster economic development opportunities associated with the proposed district, including marketing the district to specific appropriate business types, and helping make the development community aware of opportunities both within the district and associated with it in some way, and expediting such development through various resources, planning, land assembly or remediation, financial incentives, etc.



STRATEGY 3.A: Create live entertainment district (restaurant, retail, hotel, mixed-use housing)

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Define the business/venue/organizational "universe" for these kinds of activities that now exist within the surrounding region. This includes both permanent installations and festivals, etc. that could be accommodated in (and also could be competitive to) a live entertainment district (LED) in Carson.
- B. Identify possible "candidate" sites for development of one or more projects responding to the need for entertainment-related uses; reach out to these property owners to determine the realistic availability of portions of their land for this type of development. At a minimum, this outreach would include discussions with representatives of the County of Los Angeles (Victoria Golf Course), South Bay Pavilion, CSUDH, DHSP, and the owners of the former Don Kott car dealership property; the City should also consider City-owned land proximate to the Events Center as part of the LED strategy (especially for potential hotel development).
- C. Convene meeting with DHSP and CSUDH to assess these partners' interest in collaborating on an initiative to prepare graphic materials (i.e., conceptual designs) that could be used to market the LED initiative to property owners and prospective master developers. (Note: DHSP and CSUDH are specified do their "dual status" as both visitor generators and owners of land that could potentially be used for this type of development; other private stakeholders expressing an interest in the LED concept could also be included in this initial coordination meeting).
- D. Based on the outcome of discussions in Steps B and C above, secure participation of interested property owners in an RFP process for one or more master developers to implement the LED concept (as defined by the participants).
- E. As warranted by the Year 1 reconnaissance process (Steps A-D above), implement master developer RFP process for LED uses.
- F. In preparing resources to support economic development, such as marketing programs, incentives, etc., anticipate to the extent possible how plans for the LED can be supported within these processes, recognizing the need for flexibility as plans evolve; as appropriate, document these potential supporting policies/incentives in the master developer RFP package.

- Report on the business/venue/organizational "universe" now existing within the region and that a live entertainment district in Carson would need to recognize as a competitive or complementary entity (and possibly both) and be planned accordingly.
- Coordination meeting(s) with DHSP and CSUDH
- Identification of candidate sites and outreach to selected property owners
- Game plan for issuing master developer RFP (if warranted based on preceding steps)



Gamechanger #4 – "Reinvigorate Retail"

- 4.A Implement "Reinvigorate Retail" initiative
- 4.B Implement retail/restaurant tenant recruitment campaign (part of Strategy 1.A)

STRATEGY 4.A: Implement "Reinvigorate Retail" initiative

Brief Description of Program

This initiative is intended to serve multiple purposes:

- To help shopping centers negatively affected by global trends in the retail industries such as the growth of e-commerce, the decline of certain major retailers, etc.
- Recognizing that struggling centers may or may not be located or configured where retail activity could still thrive, helping some centers repurpose underutilized buildings or areas to other uses, such as residential or office, and others through creation of more effective retail space (potentially in a mixed-use format)
- Where it is strategically important to retain a predominantly retail focus on specific properties, focus City resources and policies on the objective of incentivizing reinvestment in older properties
- Identifying and incentivizing new retail projects (and tenants), recognizing that these opportunities vary by subarea of the City and potentially include both regional and neighborhood-scale retail uses

City's Positioning/Roles in Implementation

The City will take a <u>lead, in-house role</u> in implementing this strategy. The program will also involve direct coordination with property owners and the development community.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Evaluate the City's current Commercial Façade Improvement program and consider its continuation from a one-time funded program to a long-term commitment in support of the overall "Reinvigorate Retail" initiative; consider raising the per-project funding limits in cases of high-impact/high-need projects.
- B. Inventory all existing retail centers, and foster relationships with property owners. Identify high-priority target sites for revitalization and/or reuse (full or partial. Identify vacant storefronts that could benefit from targeted marketing and recruitment under strategy 4.B below.
- C. Include in marketing plan (1.A) retail uses identified within the EDSP as being deficient in Carson and also having some potential to be recruited based on other market factors, such as having sufficient space, the location of regional competition, etc.
- D. Establish incentives (potentially including sales/property tax sharing, waived development impact fees, and density bonuses) to facilitate land use change for high-priority sites (especially gear these incentives toward opportunities to add urban housing products to retail sites with under-utilized land).
- E. Coordinate with property owners to maximize use of available City incentives and resources (potentially through some type of competitive process, establish a system for working proactively with shopping center owners/managers to identify issues and define mutually beneficial solutions to these challenges).



STRATEGY 4.A: Implement "Reinvigorate Retail" initiative

- F. As resources permit, the City could provide support to centers based on the outcome of the preceding action item, which could include incentives (e.g., sales/property tax sharing agreements), marketing, participation in a planning process (and coordination with other relevant City-sponsored planning/urban design initiatives), advising on the applicability of state and federal incentives, and adjusting development entitlements.
- G. Convene meeting with development community representatives (developers and real estate brokers engaged with the community and region) to identify perceptions of the prospects for various shopping center reuse uses such as:
 - Mixed-use development
 - Affordable housing, which could help fulfill the City's RHNA obligations, and/or market-rate housing
 - Office space

Year 1 Milestones/Checklist

- Identification of high-priority retail sites to be targeted for revitalization and/or reuse (full or partial)
- Define incentive programs/policies (including framework/guidelines for potential sales/property tax sharing agreements) that support revitalization and/or reuse of targeted shopping centers
- Initial outreach to key commercial property owners
- Develop messaging/selling points (about retail/restaurant development opportunities) to be incorporated into EDSP marketing plan (Strategies 1.A and 1.B)

STRATEGY 4.B: Implement retail/restaurant tenant recruitment campaign

Brief Description of Program

A most critical element of the overall Reinvigorate Retail initiative will be a focused marketing campaign (and supporting incentive packages) targeting attraction of new retail/restaurant tenants to available commercial spaces in Carson. This campaign should have three distinct groups of targets:

- National retail/restaurant chains appropriate as tenants in major regional shopping centers (existing and planned).
- Independent restaurants and specialty retail stores appropriate as tenants in the Downtown core.
- Specific targets aimed at filling neighborhood-level voids in Carson's retail mix (e.g., target attraction of supermarkets in areas where "food deserts" currently exist).

City's Positioning/Roles in Implementation

The City will take a <u>lead role</u> in implementing this component of the larger marketing program. Initial program design (brochures, media) may benefit from support from a professional marketing agency. The strategy will also involve direct collaboration with retail commercial property owners and leasing agents.



STRATEGY 4.B: Implement retail/restaurant tenant recruitment campaign

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

Note: Year 1 activities for this strategy will be closely tied to the marketing plan developed in Strategy 1.A.

- A. In collaboration with retail property owners and leasing agents, develop specific list of national retail/restaurant chains to be targeted for attraction to Carson.
- B. Research tenant mixes (i.e., identify names and profiles of key anchor tenants) in Southern California downtown areas that are appropriate aspirational models for Downtown Carson; compile list of target "non-chain" tenants based on this research.
- C. Investigate options for restructuring City's façade improvement grant program to allow the flexibility for funds to be used for interior building improvements (including restaurant equipment) for high-priority tenant types in key locations (e.g., mixed-use projects in Downtown Core).
- D. Define other incentives (including reduced/waived permitting fees) that can be offered to targeted retail/restaurant tenants.
- E. Participate in International Council of Shopping Centers (ICSC) conferences to get direct exposure to site selectors for targeted retail/restaurant chains; utilize brochure(s) and other collateral materials developed as part of the Strategy 1.A marketing plan.
- F. Conduct regional outreach effort (including direct mail and site visits) to attract independent retail and restaurant operations to consider locations in Downtown Carson.
- G. Host annual "broker appreciation" event to highlight retail/restaurant locational opportunities to the commercial real estate brokerage community.

- Meeting(s) with retail property owners and leasing agents
- Target list of national retail/restaurant chains
- Target list of regional (independent) restaurants and specialty retail stores
- Revised guidelines for City's façade improvement program (flexibility to fund interior building improvements for selected, high-priority business types)
- Package of other incentives relevant to retail/restaurant tenant recruitment



Gamechanger #5 – Business and development friendly city

- 5.A Establish comprehensive business retention and expansion ("BRE") program including direct outreach, contact management and linkages to business assistance resources
- 5.B Establish branded development streamlining program ("Streamline Carson")
- 5.C Focus law enforcement resources including cameras, automated license plate readers, and officers in neighborhoods/corridors/districts where most needed
- 5.D Focus City resources and coordinate with partners to prioritize infrastructure investments (including broadband) that support targeted economic development

STRATEGY 5.A: Establish comprehensive business retention and expansion ("BRE") program including direct outreach, contact management and linkages to business assistance resources

Brief Description of Program

Although fiscal and staffing constraints in recent years have limited the City's ability to provide business retention and expansion (BRE) services, BRE is recognized as an essential element of a robust economic development program. Within the economic development profession, a strategic focus on supporting the continued viability and growth of existing businesses is recognized as a best practice that in many communities yields a higher return on investment (in terms of jobs created) than efforts to attract new firms and industries. Moreover, a highly visible BRE program can significantly enhance a city's reputation for "business friendliness" — which, in turn, makes a community more attractive to both existing and prospective firms.

At its core, an effective BRE program involves two related types of activities:

- Direct, ongoing outreach to the business community to assess retention needs and expansion opportunities, and to raise awareness of available assistance resources.
- "Packaging" business assistance for individual firms based on needs identified via the outreach efforts.

Strategy 5.A focuses mostly on BRE <u>outreach and</u> <u>communications</u>. The specific business assistance resources available to response to the identified needs of individual firms are mostly addressed in other strategies (especially Strategy 7.A, which focuses on entrepreneurial development and small business assistance).

This strategy is also an appropriate place to consider other potential forms of support for local businesses, including adopting local preference/local hire or Small Business Enterprise (SBE) / Women Business Enterprise (WBE) / Minority Business Enterprise (MBE) polices (i.e., for City public works projects).

To send a strong message about the City's commitment to business friendliness, it is recommended that the BRE program be branded under a name such as "Carson Cares About Business."

City's Positioning/Roles in Implementation

The City will take a <u>lead, in-house role</u> in implementing this program. The program could also involve support from external partner organizations (e.g., Carson Chamber of Commerce) and from members of the City's Economic Development Commission (who could provide additional capacity for on-the-ground interface with local businesses).



STRATEGY 5.A: Establish comprehensive business retention and expansion ("BRE") program including direct outreach, contact management and linkages to business assistance resources

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Consider extending the existing "Carson Cares" community outreach program (to specifically integrate it with business retention and small business assistance strategies).
- B. Define outreach strategy for establishing and maintaining ongoing communication with existing firms in both targeted clusters and legacy industries. Outreach tactics could include a mix of industry meetings/mixers, online surveys, site visits, and direct mail. The objective of the outreach is to build trust and cooperative relationships with the Carson business community, provide support and resources and address concerns and challenges accordingly. A database network of business contacts would be developed that can be used in conjunction with other EDSP strategies including marketing and coordination of industry round table meetings to further growth and development.
- C. Investigate the use of software tools (e.g., <u>www.bludot.io</u>) to enhance and streamline traditional BRE outreach and contact management processes.
- D. Conduct needs assessment (via outreach process defined in Steps B and C above) of firms receptive to business retention/expansion assistance and develop customized responses (packaging of City and non-City resources) to address specific needs of assisted firms.
- E. Establish forum (and staffing resources) to promptly respond to concerns/complaints from local businesses.
- F. Build on the "Small Business Assistance, Entrepreneurship and Incentive" report prepared as part of the EDSP process (see Appendix A) and develop a toolkit for businesses outlining resources, programs, and incentives on the City's webpage as a resource to the Carson business community and EDSP partners.
- G. Close out the one-time pandemic Small Business Assistance Grant program and evaluate new longer term incentive program(s) to promote Carson small businesses.
- H. Adopt (or continue) proactive policies to promote local businesses that the City can institute through its own practices, such as:
 - Local small business preferences for City contracting/procurement (see Section 916 of City's Charter)
 - Local-hire policies for City (or partner) construction projects
- I. Coordinate with partners to ensure that the message of Carson's business friendliness ties into whatever similar messaging is applicable to the region, through their various marketing platforms as appropriate (per marketing plan developed in Strategy 1.A).

- Memorandum (staff generated) outlining in-house plan and initial contacts for existing-business outreach.
- Memorandum on recommendations for a comprehensive approach to small business assistance on the part of the City, documenting relative success of existing programs, relationships with related resources both within the city and outside, and the like (this milestone also relates to Strategy 7.A)
- Close out of pandemic-related Small Business Assistance Grant program and creation of new small business funding program to replace it



STRATEGY 5.B: Establish branded development streamlining program ("Streamline Carson")

Brief Description of Program

This strategy is intended primarily to address the City's efforts to expedite and clarify development approval processes, business permitting and other City approvals.

During the "Economic Development Summit" workshops conducted for the EDSP, a number of stakeholders from the business and development community noted that the City's approval and permitting processes in recent years have become relatively slow (and City staff acknowledges that fiscal constraints have limited available staffing to expedite these functions). Notwithstanding current conditions, some stakeholders in the EDSP process have suggested that Carson can and should aim to be "the most business friendly" city in Los Angeles County. This ambitious goal would necessarily include coordination with other permitting agencies with jurisdiction in the City, including LA County Fire, the County Health Department, LA County Public Works (for engineering approvals) and policies to facilitate new businesses openings as well as a more visible outreach effort to existing businesses.

Separate from the EDSP process, the City is already taking important steps to address this topic. Several City departments (including Planning, Building & Safety, and others) are currently working on streamlining permitting processes through an Enterprise Permitting & Licensing Software program (Tyler Technologies).

The development streamlining initiative needs to be comprehensive and cut across all development review and approval processes. The City has already taken an important initial step by outsourcing processing previously handled by Los Angeles County with a private consulting firm, resulting in much shorter turnaround times for plan checks and inspections. However, the County still provides civil engineering services, causing a remaining "drag" on development project approvals. In addition, review processes for the Fire Department and Planning Division need to be brought into alignment with the recent Building and Safety process improvements.

City's Positioning/Roles in Implementation

The City will take the <u>lead role</u> as necessary, while ensuring coordination with other marketing/ branding efforts in the community and, as appropriate, the region.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

A. Conduct comprehensive review of City's business/development friendliness (entitlement/ permitting/licensing processes, fee/tax structures). It is expected that the City's current work to implement the Enterprise Permitting & Licensing Software program will largely address this action step; nevertheless, City should comprehensively review all processes and fee structures to ensure that opportunities to enhance business friendliness have been fully addressed. Beyond the new software tools, City should assess: 1) other opportunities to improve processing times and overall user-



STRATEGY 5.B: Establish branded development streamlining program ("Streamline Carson")

friendliness of permitting processes, and 2) the potential need for expanded City and/or contract staff to ensure excellent customer service.

- B. Met with Fire Department to explore ways to improve and streamline their review and approval processes. This might include an option for the Fire Department to have a "civilian" plan-checker assigned to Carson (at the City's cost).
- C. Streamline Planning Division review process to allow high-priority development projects to be reviewed on an expedited basis.
- D. Implement other process improvements pursuant to Step A above.
- E. As part of the Strategy 1.A, brand the City's development streamlining program under a name such as "Streamline Carson" and actively promote it as a locational advantage to existing and prospective firms.

- Announce creation of "Streamline Carson" and incorporate into overall marketing/messaging plan
- Implementation of Enterprise Permitting & Licensing Software program
- Coordination with Fire Department and Planning Division to streamline processes
- Staff memorandum summarizing baseline review of processes and highlighting specific opportunities to improve business friendliness



STRATEGY 5.C: Focus law enforcement resources including cameras, automated license plate readers, and officers in neighborhoods/corridors/districts where most needed

Brief Description of Program

This strategy will require close coordination with of the City. The City is familiar with how even isolated acts of violence or other crimes can have ripples throughout the community and have longlasting impacts on the community's sense of strategy is to add Economic Development to the analysis of public safety resources in the community and add Public Safety as an element in the economic development outreach to the business community. One assumption behind this strategy is that the focus on certain areas or certain types of crime will change as the EDSP is implemented, possibly triggering the need for changes in law enforcement in these subareas of the City.

Given the relatively recent advent of new City funding sources (including Utility Users Tax and Measure K Sales Tax), the potential exists to strategically expand law enforcement resources to address specific concerns that are currently a hindrance to economic development. Since a community's reputation for public safety (whether based on facts or perceptions) has a direct influence on its image within the regional business community, new investments in public safety can be positioned as "business friendliness" measures and highlighted as such in the City's economic development marketing messages.

City's Positioning/Roles in Implementation

The City will take the lead role in defining and the Carson Sheriff's Station and other departments coordinating this strategy internally. Since this strategy is fundamentally about law enforcement, it would not be primarily managed by the City's economic development staff. However, economic development staff would play a key role in identify law enforcement safety, regional image, and future investment. This issues that affect (either positively or negatively) the Carson business community and working as an "interface" between the business community and the Sheriff's Department to define business-friendly solutions.

> The specific delineation of roles between the Sheriff's Department and economic development staff would also depend on the nature of the issues being addressed. Two areas of current concern are retail crime (shoplifting, "smash and grab" robberies) and a reversal of the downward trend in gun violence. These are handled by the Sheriff. Other "quality of life" issues like homelessness, street racing (and street takeovers) may require a coordinated response with City resources and Sheriff's resources.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

A. Working with other City officials, identify places within the City with an economic connection at which a need for supplemental law enforcement potentially exists. Where needs can be confirmed, devise a plan for coordinating this change within overall law enforcement planning. This plan could include the deployment of pan-tilt-zoom cameras, where feasible, in certain areas and automated license plate reader (ALPR) cameras along main corridors and other key points, in addition to deploying additional staff resources.



STRATEGY 5.C: Focus law enforcement resources including cameras, automated license plate readers, and officers in neighborhoods/corridors/districts where most needed

- B. Identify potential costs associated with proposed supplemental law enforcement and assess availability of funding resources. Consider the creation of a public safety business liaison program to better engage local business, provide advice on crime prevention, and respond to concerns.
- C. Deploy supplemental law enforcement resources to specific target areas consistent with EDSP implementation priorities.

Year 1 Milestones/Checklist

 Staff memorandum summarizing needs assessment, general prioritization/timing recommended for supplemental law enforcement deployment, and funding implications.

STRATEGY 5.D: Focus City resources and coordinate with partners to prioritize infrastructure investments (including broadband) that support targeted economic development

Brief Description of Program

Although the development of infrastructure is not typically within the purview of a city's economic development program, it clearly has a direct influence on a community's economic development potentials and performance. As such, this strategy is not intended to replace the City's normal procedures for planning and funding capital improvements, but is instead intended to ensure that an economic development perspective is reflected in the City's decisions about the *prioritization* of future infrastructure investments.

In addition, it is recognized that some of the most important infrastructure from a business perspective (broadband and electricity) is controlled by non-City service providers. Nevertheless, the City's economic development staff can have an effective role in coordinating with these service providers to identify needs and to facilitate needed infrastructure investments.

Whereas the EDSP process identified general priorities for infrastructure improvements, it was beyond the scope of the EDSP to complete the full technical studies necessary to plan specific infrastructure improvement projects. Strategy 5.D therefore includes follow-up steps to provide the more in-depth assessment of needs for specific infrastructure improvements to support growth of anticipated/targeted industries.

City's Positioning/Roles in Implementation

The City will take a <u>lead</u>, in-house <u>role</u> in implementing this strategy. The program will also potentially involve coordination with external agencies involved in regional infrastructure planning and with private providers of broadband and other utilities.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

A. Conduct comprehensive assessment of broadband conditions, needs, and options for improving/expanding broadband infrastructure. This assessment should especially consider broadband



STRATEGY 5.D: Focus City resources and coordinate with partners to prioritize infrastructure investments (including broadband) that support targeted economic development

- availability for industrial areas where the City intends to target attraction of technology-oriented firms and industries.
- B. Coordinate with Southern California Edison to review Carson's electricity capacity in industrial zones (especially in areas where electrification of trucks will be important to the City's sustainability goals).
- C. Conduct annual review of City's capital improvement plan (CIP) to ensure that infrastructure projects needed to facilitate targeted industrial growth are appropriately prioritized.
- D. In coordination with service providers, initiate capital improvement projects to improve broadband capacity by the most cost-effective means, consistent with identified needs in areas targeted for technology-oriented industrial development.
- E. As warranted based on Step C above, coordinate with SCE to prepare long-term strategy to ensure adequacy of Carson's electricity infrastructure for the City's industrial development goals.
- F. Investigate the potential for incorporating "neighborhood digital centers" (e.g., enhanced infrastructure access at libraries or other public meeting spaces) into the overall strategic approach to expand broadband access.
- G. Investigate the feasibility and other aspects of a Green transportation/Smart City infrastructure initiative for Carson. (Stakeholders have commented that Carson could be the "green capital of LA" a concept that relates to Strategy 7.B on innovation.)

- Broadband needs assessment
- Coordination (and agreement on next steps) with SCE
- Review and comment on CIP to prioritize projects with nexus to EDSP



Gamechanger #6 - Incentivize land uses with high job-creation and placemaking value

- 6.A Pursue Dominguez Channel improvement concepts with focus on adjacent development
- 6.B Determine the potential for The Links at Victoria Golf Course redevelopment (with possible recreation/open space uses plus non-recreation uses including housing)
- 6.C Identify opportunity sites for professional office development and implement policies/incentives to attract office development
- 6.D Support recruitment of manufacturing tenants and provide incentives to maximize creation of quality jobs in existing and future industrial buildings
- 6.E Partner with property owners to assess, investigate, and clean-up contaminated sites, establishing Carson as a "national best-practices leader" in brownfield remediation and redevelopment

STRATEGY 6.A: Pursue Dominguez Channel improvement concepts with focus on adjacent development

Brief Description of Program

Improving the Dominguez Channel is understood to have multiple *potential* purposes and benefits, including:

- Improving its visual aesthetics through improvements and operational changes including the development of a bike path along the Channel from Main Street to Carson Street and integrating the path with a County Flood Control-designed "greenway" along the same stretch
- While the City's focus should be on the visual and aesthetic quality of the Dominguez Channel, the City must remain steadfast in its efforts to ensure LACFCD takes measures to improve the water quality in the Channel such that it is no longer (perceived as) a health risk; otherwise, efforts to improve access to the Channel are unlikely to be transformative
- Making it more of a recreational resource, especially along the bike route with a special focus along the Victoria Golf Course frontage

 Fostering adjacent development including a reorientation of buildings and patios to face the Channel, conceptually similar to other waterfront revitalization areas

Given the administrative and physical complexity of the Channel, any plans put forth for improvements must be sensitive to the need to manage expectations about what is realistically possible.

From the standpoint of the City, the focus may be on supporting "private placemaking" in relation to the Channel, while helping coordinate physical and other improvements through partners that bear primary responsibility for the Channel's operation

City's Positioning/Roles in Implementation

Although implementing the planning and development of a Channel reinvestment project will require active participation of partners involved in its ownership, management, etc., where the City will play a coordinating role, such as taking the lead in the development of the Bike Path and potential pedestrian bridges over the Channel and in setting up planning initiatives (through the City and through Flood Control) for private development.



STRATEGY 6.A: Pursue Dominguez Channel improvement concepts with focus on adjacent development

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Review the regulatory/legal fundamentals applicable to some targeted form of a reinvestment concept for the Channel, sufficient to serve as a basis for encouraging private placemaking.
- B. Based on the review in Step A, identify existing and potential City incentives (including financial resources, technical assistance, and regulatory exemptions) that could be offered to encourage reinvestment in private properties adjacent to the Channel in ways that promote placemaking and create a better visual environment along the Channel. City incentives could include financial assistance via matching grants and/or low interest loans. Non-City agencies with jurisdiction over the Channel (e.g., LACFCD) should also be encouraged to provide appropriate incentives for improvement of Channel-adjacent properties.
- C. Develop a physical plan that also makes the business case for private placemaking associated with the Channel. The planning process should include consideration of how the Channel can relate to existing Carson attributes, including planned improvements addressed in this EDSP.

Year 1 Milestones/Checklist

Although this strategy is focused on later years, the concept of taking some action with regard to
Dominguez Channel could be a deliberate ongoing agenda item for actions related to the EDSP and/or
placemaking efforts.

STRATEGY 6.B: Determine the potential for The Links at Victoria Golf Course redevelopment (with possible recreation/open space uses plus non-recreation uses including housing)

Brief Description of Program

Potential redevelopment of this golf course has been noted as a significant challenge because of its ownership by Los Angeles County, its status as a former landfill, and current designation as park and recreation space, but the golf course remains an important opportunity to fulfill various City objectives, including those associated with the EDSP. It, along with the Former Cal Compact Landfill across the freeway, remains the largest underdeveloped parcel in the center of Carson.

Although highest and best uses and other details of the site's potential are still under consideration, with recreational and sports uses proposed by the current private developer, one possible use that has been mentioned is housing, which at this location could also help diversify Carson's housing stock. As has been noted elsewhere, housing development is also relevant to economic development, in Carson as in many other places. Also elsewhere, the northern tier of the course could be a possible location for a live entertainment district (see Strategy 3.A) given its walking proximity (albeit marginal) to DHSP.

City's Positioning/Roles in Implementation

Because the site is a former landfill, the City and/or Carson Reclamation Authority could have an important coordinating role in the site's redevelopment, and working with Los Angeles County could take a lead role to proactively encourage such activity.



STRATEGY 6.B: Determine the potential for The Links at Victoria Golf Course redevelopment (with possible recreation/open space uses plus non-recreation uses including housing)

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. In coordination with Los Angeles County, generate the essential components of a management plan to determine the overall feasibility of redeveloping the course, including ownership, environmental, physical constraints, etc.
- B. If warranted by the preceding step, identify and analyze a range of appropriate uses for the site, given the range of objectives that it could potentially serve, eventually arriving at highest and best use recommendations within the context of those objectives as well as other financial, fiscal, urban design and related considerations, including potential private development interests.

Year 1 Milestones/Checklist

N/A – no Year 1 actions for this strategy

STRATEGY 6.C: Identify opportunity sites for professional office development and implement policies/incentives to attract office development

Brief Description of Program

At present, Carson's non-residential land use mix is dominated by retail and industrial buildings. Whereas Carson has a current inventory of over 32 million square feet of industrial space (83% of which is used by logistics facilities), the existing inventory of office space is only 1.25 million square feet. Moreover, a very small portion (10%) of Carson's office inventory is classified as Class A space.

In order for Carson to fully realize its vision of being a full-service economy conducive to attracting technology firms, creative industries, and related professional services, additional development of high-caliber office space will be needed.

Carson's current market position (i.e., essentially a non-player in the regional office market) and overall trends negatively affecting demand for new office construction (high vacancy rates and an increase in remote workers) suggest that creation of an office market in Carson is not likely to be a near-term proposition.

The market study completed for the EDSP forecasts citywide demand for new office space at 142,000 square feet over the next 10 years, suggesting that even longer-term prospects for office development will be modest. The City should nevertheless work proactively to identify potential sites for professional office space (ideally concentrated in a single area that could become an office "district") and aggressively market opportunities for this type of development.

Given that Carson is mostly built out, planning for major new office development will necessarily be coordinated with other strategies aimed at increasing capacity for new development. These other strategies include the Reinvigorate Retail initiative (Strategy 4.A, which would potentially facilitate transitioning of underutilized retail land to other uses such as office) and the brownfield remediation/redevelopment strategy (6.E below).

City's Positioning/Roles in Implementation

The City will take a <u>lead, in-house role</u> in implementing this strategy. The program will also involve direct coordination with property owners and the development community.



STRATEGY 6.C: Identify opportunity sites for professional office development and implement policies/incentives to attract office development

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. As part of Reinvigorate Retail initiative (Strategy 4.A), identify potential areas to designate underutilized retail land for office development (potentially in a mixed-use environment where a portion of a site would retain retail uses).
- B. As part of Strategy 6.E below, identify brownfield sites that would be potential candidates for reuse with new office development if remediated.
- C. Prepare development prototypes (i.e., drawings/renderings) and pro forma financial analyses to document the potential financial attractiveness (to property owners) of site repurposing/ redevelopment with office space.
- D. Develop information packages to demonstrate the economic/financial advantages (to property owners) of site redevelopment, which would include case study analyses (per Step C above), incentives targeting this type of activity, overlay zones or other entitlement benefits, etc. The incentives package could potentially include a framework for property tax sharing agreements.
- E. As part of Strategy 1.A marketing plan, actively promote office development opportunities to the commercial development and brokerage communities.

Year 1 Milestones/Checklist

N/A – no Year 1 actions for this strategy



STRATEGY 6.D: Support recruitment of manufacturing/R&D tenants and provide incentives to maximize creation of quality jobs in existing and future industrial buildings

Brief Description of Program

This strategy focuses on City policies and investments that can potentially enhance the market for high-value manufacturing (and/or research and development) activities as prospective tenants for existing and future industrial buildings. The intent of this strategy is not to limit future industrial occupancies by logistics firms, but to create a market environment in which industrial property owners will in some cases have viable alternatives to logistics when determining the highest and best use of their properties.

Large scale industrial development is one of the defining features of Carson's built environment, with the existing inventory totaling over 32 million square feet of leasable building space. At present, the vast majority (83%) of Carson's industrial space is occupied by logistics facilities (compared to 67% for Los Angeles County as a whole). Over the past three years, 100% of Carson's net absorption of industrial space was for logistics tenants.

From an economic development perspective, logistics facilities are typically considered a less desirable industrial tenant than manufacturing or R&D uses, due to the relatively low employment density of logistics warehouses. In addition to generating fewer jobs per square foot, logistics also tends to create lower-paying jobs than manufacturing (especially in higher-tech manufacturing sectors) and R&D.

The logistics industry has undeniably been an important driver of Carson's historic economic growth – creating jobs, providing development opportunities for landowners, and expanding the City's property tax base.

Logistics facilities are a focus of attention in many Southern California cities because the truck traffic they generate can become disruptive to some parts of the community and can be costly in terms of municipal street maintenance budgets. In Carson, this concern has been addressed through an independent cost-benefit analysis leading up to the formation of a Community Facilities District (CFD) to provide a funding mechanism to offset the relatively high infrastructure maintenance costs associated with truck traffic.

Discussions about the perceived "downsides" of logistics facilities need to be carefully tempered with an acknowledgement that the regulatory and business cost environment in California is considered to be generally unfavorable for the growth of manufacturing. As such, the proliferation of logistics buildings in Southern California in recent decades has not in itself displaced manufacturing – it simply occurred in response to market demand in an era in which demand for manufacturing space was modest.

This strategy seeks to create demand for viable alternative uses, while still allowing property owners appropriate flexibility to respond to market trends.

City's Positioning/Roles in Implementation

The City will take a <u>lead</u>, in-house <u>role</u> in implementing this strategy. The program will also involve appropriate coordination with property owners and the industrial development/brokerage community.

This strategy will be closely linked to Gamechanger #7 (Strategies 7.A, 7.B and 7.C) which focus on positioning Carson as a technology startup leader in the Southern California region. Gamechanger #5 focusing on Carson's overall business friendliness (which can enhance a community's attractiveness for manufacturing firms) is also a relevant foundation to Strategy 6.D.



STRATEGY 6.D: Support recruitment of manufacturing/R&D tenants and provide incentives to maximize creation of quality jobs in existing and future industrial buildings

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

(Most Year 1 work supporting this strategy will be carried out through foundational efforts in Strategies 5.A, 5.B, 7.A, 7.B and 7.C)

- A. Create a set of "manufacturing-friendly" policies to attract manufacturing firms and incentivize industrial property owners to target manufacturing tenants. The policies could include:
 - o Exemption from CFD assessments charged to other industrial use types
 - o Expedited entitlement (including CEQA process) where feasible
 - Reduced or waived development impact fees
 - o Reduced of waived business permitting fees and business license taxes
 - Consideration of property-tax sharing for initial years a building is occupied by high value (to be defined) manufacturing or R&D tenants
- B. Conduct outreach to major industrial property/building owners to assess potential interest in attracting manufacturing uses, to set realistic targets (in terms of building square footages citywide), and to identify specific City incentives that could facilitate recruitment of targeted business types. Incentives could include sales/property tax sharing agreements, waived development impact/processing fees, and exemption from CFD assessments applicable to other industrial uses.
- C. As part of the Strategy 1.A marketing plan, include a specific focus on Carson's competitiveness for manufacturing (from both tenant and landlord perspectives), including promotion of the incentives adopted in Steps B and C above.

- Define and adopt "manufacturing-friendly" City policies/incentives
- Outreach to industrial property/building owners



STRATEGY 6.E: Partner with property owners to assess, investigate, and clean-up contaminated sites, establishing Carson as a "national best-practices leader" in brownfield remediation and redevelopment

Brief Description of Program

This strategy is premised on the following conditions unique to Carson:

- The presence, due to the long-term impacts of legacy industries such as oil extraction, of substantial acreages of brownfield land requiring costly remediation before it can be put to productive reuse.
- The successful track record of the City of Carson and the Carson Reclamation Authority on securing and overseeing external funding to remediate brownfield sites, and of structuring complex development agreements allowing for feasible redevelopment of remediated sites.

 The potential to position Carson as a "best practices leader" for brownfield issues and to leverage this leadership as a selling point as the City positions itself to attract emerging industries (e.g., clean tech) focused on sustainability issues.

In addition to taking strategic advantage of the above opportunities, this strategy will also directly support the need to create additional land/development capacity (in Strategies 6.C and 6.D).

City's Positioning/Roles in Implementation

The City will take a <u>lead, in-house role</u> in implementing this strategy. The program will also involve direct coordination with property owners, the development community, and relevant state/federal funding sources.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Compile an updated inventory (parcel database) for contaminated properties subject to remediation.
- B. Contact property owners (from list compiled in Step A) to identify most significant opportunities for remediation and redevelopment. These opportunities would be prioritized based on: size of site; suitability for land uses targeted as priorities in the EDSP (i.e., industrial, office, retail and housing); location vis-à-vis likely development/infrastructure investment; degree (cost) of remediation required; and willingness of property owner to collaborate with the City (or Carson Reclamation Authority) to pursue remediation.
- C. Identify and profile funding sources/programs potentially available (to the City and/or property owners) underwrite remediation costs.
- D. Prepare funding application for pilot project(s) identified through the initial steps above.
- E. Coordinate with regional academic, regulatory and nonprofit environmental communities to define opportunities to position Carson as a national leader in brownfield remediation based on demonstration of the most contemporary best practices.
- F. Expand resources (and applications for external funding) over time based on success of initial projects.

- Inventory and prioritization of major brownfield sites potentially suitable for remediation
- Outreach to selected property owners
- Completed research on funding sources/programs (summarized in staff memorandum)



Gamechanger #7 – Technology startup leader

- 7.A Address entrepreneurial/small business development either locally (in house) or with linkages to regional business assistance and small business lending resources
- 7.B Strengthen linkages to innovation (e.g., through collaboration with CSUDH)
- 7.C Launch public/private industry cluster initiative

STRATEGY 7.A: Address entrepreneurial/small business development either locally (in house) or with linkages to regional business assistance and small business lending resources

Brief Description of Program

This program has two areas of focus: 1) To build on the existing CSUDH-run Carson Small Business Growth Academy, which provides basic business training services to local, established small businesses; and 2) To help expand access, as necessary, to additional programs of this type, i.e., those addressing business training fundamentals (e.g., financial literacy) applicable to both new and existing firms. Ultimately, small business assistance resources provided by the City (or through partnerships with external organizations) should include the following:

It is also recommended that the City position itself as a leader in promoting access to private capital for small businesses through relationships with CDFIs, SBA lenders, and other micro-lending organizations in Southern California.

- Market analysis assistance (for new, expanding or repositioning businesses)
- Site selection assistance (for new, expanding or relocating firms)
- Training on marketing and social media
- Training on financial literacy (basic accounting, etc.)

City's Positioning/Roles in Implementation

The City can continue and possibly expand its role directly supporting CSUDH's Carson Small Business Growth Academy, and also serve in a <u>coordination/clearinghouse capacity</u>, drawing on the established programs of regional partners.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Set up and maintain an online directory of business assistance resources available through the City or its partners. As part of the EDSP, TNDG has inventoried and evaluated existing small business and entrepreneurial development programs available in Carson (through the City and other entities). Those programs that relate to mission of the Carson Small Business Growth Academy can be noted as part of an overall inventory of available resources for small business entrepreneurial development: institutions, physical spaces/areas, virtual and physical incubators, etc.
- B. Setup and maintain an online directory of private capital sources for small businesses, including CDFIs, SBA lenders and other regional micro-lending organizations. As part of the process of setting up this directory, City should meet with these partner organizations to identify opportunities to increase the exposure of Carson businesses to available sources of startup and expansion capital.



STRATEGY 7.A: Address entrepreneurial/small business development either locally (in house) or with linkages to regional business assistance and small business lending resources

- C. Meet with CSUDH officials to determine needs and opportunities to expand the scope of the CSUDH-run "Carson Small Business Growth Academy" (business training services). As warranted based on participant demand (and specific opportunities for the Academy to fulfill EDSP objectives), increase the City's annual financial support of the Academy to help scale it up to expand the number of participants/businesses served.
- D. Annually review partnerships through which the City provides business assistance and small business lending resources; identify future opportunities to expand the scope (and funding) of these partnerships based on participant demand and the demonstrated returns on the City's earlier investments.

Year 1 Milestones/Checklist

- Online directory of business assistance resources
- Online directly of private capital sources
- Coordination with CSUDH to define game plan (and formal agreement) for expansion of Carson Small Business Growth Academy program



STRATEGY 7.B: Strengthen linkages to innovation

Brief Description of Program

The intent of this strategy is to identify and cultivate linkages with entities associated with innovation, both as a way of augmenting entrepreneurial support and enhancing the City's image as a center of innovation, creativity, and possibly related concepts such as resilience, smartcity leadership, and the like. In part, the strategy is intended to take advantage of Carson's locational affiliations within the Los Angeles region, and the fact that it also has the scale sufficient to establish a strong unique identity and sustain it within a region of cities with their own identities and functional associations.

The EDSP recommends that Carson pursue two distinct (but potentially overlapping) opportunities for technology-led economic development:

- Cleantech activities related to the inevitable transitioning of the fossil fuels industry historically prominent in Carson
- Potential connection (by virtue of geographic proximity) to the "Silicon Beach" technology cluster, whereby Carson could capture a share of the "overflow" growth from the coastal communities where this cluster has historically been concentrated.

Related to the clean tech theme (and the associated issue of legacy industry transitioning), the opportunity also exists to position Carson as a "national best-practices leader" in brownfield remediation and redevelopment (and to pursue related opportunities for state/federal grant funding). (This opportunity is addressed separately in Strategy 6.E but is noted here to emphasize the thematic connections among various EDSP initiatives.)

Note: Workforce-related linkages to innovation are further addressed in Strategy 8.A below.

City's Positioning/Roles in Implementation

The City will take the <u>lead role</u> in identifying and coordinating with these potential partners and establishing relevant marketing messages.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Identify potential collaborators for cleantech development program (at a minimum, these collaborators would include CSUDH, representatives of major oil companies connected with Carson, and representatives of regional clean tech initiatives).
- B. Establish "Cleantech working group" comprising interested parties identified above.
- C. Conduct initial meeting(s) with working group to define near-term action steps for cleantech program. These initial discussions should address the following topics: potential partnership(s) to provide business incubator/accelerator services; potential opportunities for City to take lead in pursuing state/federal funding to support remediation of brownfield sites and facilitate overall transitioning of legacy industries; potential outreach to regional cleantech firms to promote opportunities for business startups in Carson.



STRATEGY 7.B: Strengthen linkages to innovation

- D. Based on direction defined during Year 1 discussions, partner with CSUDH (and possibly other regional institutions within CSUDH's network) to provide full-service incubator/accelerator services in Carson.
- E. Begin to aggressively pursue grant funding to support transitioning of legacy industries and associated remediation of brownfield sites.
- F. As warranted based on the focus of Year 1 discussions, establish networking opportunities within Southern California electric vehicle industry cluster to identify potential expansion opportunities capturable by Carson (some firms in this emerging industry already existing in Carson).
- G. Begin to network within "Silicon Beach" business community to identify potential expansion opportunities capturable by Carson.

Year 1 Milestones/Checklist

- Initial meetings with potential collaborators (Cleantech working group)
- Staff memorandum identifying opportunities and priorities for cleantech development (including delineation of City's roles), based on Year 1 discussions with working group



STRATEGY 7.C: Launch public/private industry cluster initiative

Brief Description of Program

Under optimal circumstances, a community's business attraction efforts go beyond targeting individual industry sectors to a more holistic focus on industry "clusters" – closely related *groups* of industries organized around the full supply chain involved in delivering a product or service to the market. The most dynamic regional economies are characterized by geographic concentrations of strong clusters in which a variety of firms support an overall supply chain are located in close proximity of each other.

While industry clustering is a market phenomenon, a true cluster is more than the coincidental colocation of complementary firms and industries in a particular region. A full-fledged cluster involves systematic interaction and networking among the co-located firms. The most successful clusters have evolved over long periods of time and have often been facilitated by public/private partnerships to strengthen networking opportunities and to enhance the area's comparative advantages through strategic investments in foundational elements critical to the clustered industries.

The cluster framework provides a sound market rationale for industry targeting, and also provides a built-in mechanism for establishing private/public partnerships to carry out identified initiatives. The array of foundational elements, which become integral parts of a comprehensive economic development strategy, open the doors through which a wide range of institutional partners become genuine stakeholders in the economic development process.

For purposes of focusing initial resources and keeping the scope of the initial cluster program manageable, it is recommended that Carson's initial cluster initiative focus on a single cluster – clean tech/electric vehicles/renewable energy (in Carson's case, this cluster would include "legacy industry" energy firms, given their vested interest in transitioning to emerging business activities sustainable over the long-term).

The action items listed below are intended to enhance formal and informal cluster networking among Carson firms within the context of the larger regional clusters to which they are connected. It should be emphasized that coordination of cluster networks (a role for which the Carson Chamber of Commerce would potentially be well positioned) is an activity that can be pursued at various levels of effort/investment, depending on available resources, local interest/support, etc. In Caron's case, it is anticipated that these efforts will begin modestly (on a pilot basis) and evolve over time based on initial results. At its core, cluster networking is a matter of identifying the relevant local "constituents" (primary and support firms, institutional assets, etc.) for the cluster and promoting interaction among them. The actual format of this interaction can be tailored to the preferences of the participants and the level of available resources to support the coordination effort.

City's Positioning/Roles in Implementation

The City will take a <u>lead/convenor role</u> to launch the industry cluster initiative, with the intent that this effort would ultimately be led by private sector partners (participating firms).

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

A. Conduct "cluster mapping" process to identify existing firms and institutional assets for the clean-tech/renewable energy cluster. Cluster mapping involves taking an inventory (and continually expanding a



STRATEGY 7.C: Launch public/private industry cluster initiative

- database) of existing Carson (and regional) firms that are relevant to the cluster. This is an essential first step in facilitating networking of firms in a target cluster.
- B. Identify key local firms that could form the nucleus of an "industry resource group" for the pilot cluster. This group would serve as the City's "go to" resource for interaction with businesses in the cluster and can be relatively informal in structure. Once in place, the resource group would provide a mechanism for the City (or partner such as the Chamber of Commerce) to identify cluster-specific networking opportunities, business expansion/retention needs, etc. Ideally, the resource group would represent a cross section of the cluster in terms of firm size and mix of industries. A minimum of 5 initial participants (firms) is recommended.
- C. Facilitate an initial "network organizing" meeting with the cluster resource group. The purposes of this meeting would be to facilitate a roundtable discussion about potential networking opportunities within the cluster and to identify specific activities the City (or Chamber) could pursue in order to strengthen the local cluster network.
- D. Conduct periodic follow-up meetings with the cluster resource group to report on progress and refine action items as appropriate to respond to emerging/changing opportunities. The frequency and format of these meetings will be defined based on available resources and the level of involvement of the business community.
- E. Promote cluster-oriented, local supplier relationships via a "Carson Delivers" campaign. The intent of this campaign would be to expand local supplier capacity (to the extent that local cluster demand is currently exported) and to expand opportunities for existing suppliers to achieve greater capture of local demand (either existing or potential) through buy-local initiatives. In conjunction with the "cluster mapping" process (Step A above), region-wide (i.e., Southern California) supplier relationships could eventually be facilitated via a website that identifies available suppliers and potential linkages.

Year 1 Milestones/Checklist

N/A – no Year 1 actions for this strategy



Gamechanger #8 - Training center of excellence

- 8.A Coordinate workforce development through linkages to available local and regional partner assets, augmenting as appropriate
- 8.B Establish "showcase" workforce development program focused on employment opportunities in construction and related industries

STRATEGY 8.A: Coordinate workforce development through linkages to available local and regional partner assets, augmenting as appropriate

Brief Description of Program

This program explicitly recognizes the critical role of workforce training, and retraining, in the face of global economic trends including re-shoring of manufacturing and other activities, increasing automation, and record low unemployment rates (and possible labor shortages in critical skills/industries that can result from such conditions). There is a particular need to preserve and foster critical skill sets in industries crucial to Carson's continued prosperity, including legacy industries such as oil, even while such activities may be contracting due to various influences. At the same time new skills needs are emerging in new industries and technologies that are finding a home in Carson.

City's Positioning/Roles in Implementation

Whereas core educational/workforce development services will continue to be delivered primarily by partner organizations, the intent of this strategy is to more strongly support these partners in a coordination/clearinghouse capacity. This coordination role by the City would involve:

- Streamlining and clarifying regional/partner resources (and including them as core parts of Carson's marketing and business outreach efforts) to maximize their value to Carson's business community.
- Positioning recruiting and workforce development services (even those provided through external partner organizations) as part of the suite of services and incentives offered by the City to new and existing businesses.
- Providing local facilities/venues for partner organizations to conduct hiring/interview events, customized training programs, etc.
- Serving as a critical conduit of information (e.g., on industry- or firm-specific training needs) between private employers and workforce training organizations.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

- A. Establish an informal consortium of workforce development training organizations, organized around the "Training Center of Excellence" theme.
- B. Inventory education/training programs in the city and region that have a role in implementing this strategy, and identify any potential gaps from this process and the following action item.



STRATEGY 8.A: Coordinate workforce development through linkages to available local and regional partner assets, augmenting as appropriate

- C. Conduct business outreach and establish processes to improve information flow between employers and educators/trainers regarding needed skills for targeted industry clusters and other critical local clusters. This topic could be included as part of the BRE outreach/survey (Strategy 5.A).
- D. Increase awareness of Carson businesses and residents about available training/job placement services, as part of a coordination/clearinghouse function, while also enabling equal access to workforce development programs by all Carson residents.
- E. If not currently available through partners, consider encouraging the establishment (by partner organizations) of internship/apprenticeship programs, which also become another way to connect education/workforce development partners with private firms and improve the information flow between them.

Year 1 Milestones/Checklist

- Informal consortium established (convene one organizational meeting to define parameters for collaboration)
- Memorandum summarizing education/training programs and initial assessment of unmet needs, with particular attention on critical skills and workers likely to require retraining due to global trends.

STRATEGY 8.B: Establish "showcase" workforce development program focused on employment opportunities in construction and related industries

Brief Description of Program

The EDSP target industry study identified the Construction cluster (including construction services and manufacturing of construction materials) as a potential strategic target for Carson. Given the "transient" nature of the construction industry (i.e., construction contracts and related employment opportunities tend not to be geographically limited to the community where the construction company is headquartered), the EDSP recommends addressing this cluster as primarily a workforce development opportunity. As such, Carson residents skilled in construction trades can benefit from construction industry growth (and related occupational opportunities) both within and outside Carson.

As a "showcase" workforce development program, the focus on construction workers would serve as a pilot project for the larger "Training Center of Excellence" initiative.

City's Positioning/Roles in Implementation
Similar to the approach to Strategy 8.A, the core
training and workforce development services
associated with Strategy 8.B would be delivered
primarily by partner organizations. The City would
support these partners in a
coordination/clearinghouse capacity.

Action Steps

(Gold = Year 1; Green = Year 2; Purple = Year 3 or later)

A. Convene meeting (or series of meetings) of interested parties to assess needs/opportunities for a Carson-based training and placement program focused on apprenticeship and job opportunities in the construction trades. This initial working group should include the following categories of stakeholders:



STRATEGY 8.B: Establish "showcase" workforce development program focused on employment opportunities in construction and related industries

- construction trade unions; representative construction firms (including MBE/WBE/SBE/DBE companies) based in Carson; and workforce development partners (South Bay Workforce Investment Board).
- B. Based on the proceedings of the above working group meeting(s), identify specific resources the City of Carson could offer (including business outreach support, use of City meeting facilities for recruitment/hiring events, and sponsorship of selected Carson residents for training programs) to facilitate implementation of a formal public/private partnership to implement this initiative.
- C. As appropriate based on Steps A and B above, collaborate with working group to prepare business plan for this program (define actions, costs, funding sources and partner responsibilities/commitments).
- D. As appropriate based on above steps, draft and sign memorandum of understanding (MOU) to formalize a partnership (potentially with multiple parties) to pursue full implementation of this initiative.

Year 1 Milestones/Checklist

- Initial meeting(s) with working group
- Staff report outline potential formal relationship with partners and defining City roles



Partnerships for EDSP Implementation

The comprehensive nature of the EDSP will require the involvement of numerous partnering entities, some that will take on an active involvement in implementation, and some whose relationship to the strategy simply needs some form of acknowledgment (and others that will be elsewhere on this scale of participation).

The table below shows the recommended assignment of lead and support roles for each major strategy. Some components of the EDSP will be carried out through partnerships with non-City partners, with lead, support and coordination roles assigned as shown:

RECOMMENDED EDSP IMPLEMENTATION ROLES WITHIN CITY AND FOR PARTNERS

	Rec	ommended Role	e: Lead, Support,	or Coordination	on							
Gamechanger Initiative, Strategy	City Economic Development Manager	Community Development Director	Other City Depts.	Partners	Contractors/ Consultants							
Gamechanger #1 – Mar	amechanger #1 – Marketing/branding initiative											
1.A Comprehensive ED marketing program	Lead		Support	Support	Support							
1.B Promote tourism/ visitation	Lead		Support	Support	Support							
Gamechanger #2 – "Des	stination worthy	" downtown										
2.A Events Center reinvestment/ rebranding	Support		Lead	Support	Support							
2.B Invest in downtown placemaking	Lead	Support	Support		Support							
Gamechanger #3 – Live	entertainment	district										
3.A Create live entertainment district	Lead	Support		Support	Support							
Gamechanger #4 – "Rei	nvigorate retail	" initiative										
4.A Reinvigorate retail	Lead	Support	Support	Support	Support							
4.B Retail/restaurant tenant recruitment												
Gamechanger #5 – Busi	ness and develo	pment friendly	city									
5.A Business outreach/retention	Lead			Support								
5.B Development streamlining	Co-Lead	Co-Lead			Support							



	Rec	ommended Role	e: Lead, Support,	or Coordinati	on
Gamechanger Initiative, Strategy	City Economic Development Manager	Community Development Director	Other City Depts.	Partners	Contractors/ Consultants
5.C Focused law enforcement	Support		Support	Lead	
5.D Prioritized infrastructure	Coordination	Support	Lead		Support
Gamechanger #6 – Ince	ntive land uses	with high job-c	reation and plac	emaking valu	е
6.A Dominguez Channel improvements	Lead (Coordination)	Support	Support	Support	Support
6.B Golf course redevelopment	Coordination	Support		Lead	Support
6.C Office development	Support	Lead	Support	Support	Support
6.D Recruit manufacturing tenants	Lead	Support	Support	Support	Support
6.E Brownfield "best practices leader	Lead	Support	Support	Support	Support
Gamechanger #7 – Tech	nology startup	leader			
7.A Entrepreneurial/ small business development	Coordination	Support	Support	Lead	
7.B Linkages to innovation	Lead			Support	
7.C Industry cluster initiative	Lead			Support	
Gamechanger #8 – Train	ning center of ex	xcellence (work	force developme	ent)	
8.A Workforce development coordination	Coordination			Lead	
8.B Showcase program for construction careers	Coordination			Lead	

The following table and accompanying narrative shows the relationship of specific potential partners to each of the strategy topics.



MATRIX OF STRATEGIES AND POTENTIAL PARTNERS

		Associated Builders and Contractors, Inc.	Associated General Contractors, California	Building Industry Association (BIA) of So. CA	California Department of Education	California State Univ., Dominguez Hills (CSUDH)	Carson Chamber of Commerce	Carson Public Safety Services	City of Carson / Carson Reclamation Authority	CSU DH Innovation Incubator	Developers, other development community	Dignity Health Sports Park (DHSP)	El Camino College/SBDC	LA County Economic Development Corp. (LAEDC)	LA County Flood Control District	LA County Recycling Marketing Dev. Zone (RMDZ)	LA/Orange Cos. Building & Constr. Trades Council	LAUSD Local District South	Porsche Experience Los Angeles	SCORE Long Beach/South Bay	Shopping center owners/managers	South Bay Cities Council of Govts.	South Bay Entrepreneurial Center (SBEC)	South Bay Workforce Investment Board	Southern California Edison (SCE)
Gamech	nanger #1: Marketing/branding initiative to position Carson as a center of innovation																					0,	01	01	0,
	esign and implement comprehensive ED marketing program								ľ								•								
1.B Pr	omote expanded tourism/visitation ("Stay Carson") program																								
Gamech	nanger #2: Create "destination worthy" downtown (anchored by repositioned Carso	n Eve	ents	Cen	ter,	addi	tion	al ho	otels	, nev	v ho	usin	g)												
2.A Pr	omote Events Center reinvestment/rebranding																								
2.B Pu	rsue placemaking in Downtown and connecting corridors																								
Gamech	nanger #3: Create live entertainment district(s) (restaurant, retail, hotel, mixed-use	hous	sing)	to n	nore	full	у сар	pture	e the	eco	nom	ic va	alue	of C	arso	n's v	isito	r ve	nue	s					
3.A Cr	eate live entertainment district (with multiple uses)																								
Gamech	nanger #4: "Reinvigorate Retail" initiative (shore up stronghold centers; facilitate in	prov	/eme	ent c	of bu	sine	ss sl	kills;	pro	note	coo	pera	ative	ma	rketi	ing a	nd p	rom	otio	n; e	tc.)				
4.A In	plement "Reinvigorate Retail" initiative																								
4.B Im	plement retail/restaurant tenant recruitment (see Strategy 1.A)																								
Gamech	nanger #5: Transform Carson into "the most business and development friendly" cit	y in L	os A	nge	les C	oun	ty by	y str	eaml	inin	gall	its d	level	lopn	nent	, per	mitt	ing,	etc.	pro	esse	25			
5.A Es	tablish comprehensive business retention and expansion ("BRE") program																								
5.B Es	tablish branded development streamlining program ("Streamline Carson")																								
5.C Fo	cus law enforcement resources in neighborhoods etc. where most needed																								
5.D Fo	cus City resources and coordinate with partners to prioritize infrastructure																								
Gamech	nanger #6: Focus City policies, resources and partnerships to incentivize land uses w	ith h	igh j	ob-c	reat	ion a	and p	place	emal	cing v	valu	e (fo	r us	es/a	reas	not	othe	erwi	se ac	ldre	ssed)			
6.A Pu	rsue Dominguez Channel improvement, with focus on adjacent development																								
6.B De	etermine the potential for The Links at Victoria Golf Course redevelopment																								
	entify opportunity sites for professional office development and Incentivize																								
	pport recruitment of manufacturing tenants and incentivize, incl. reuse																								
	rtner with property owners to assess, investigate, and clean-up contam. sites																								
	nanger #7: Position Carson as a technology startup leader and a partner with establis	hed	tech	nolo	ogy o	omp	anie	es (fo	ocus	on C	lean	Tec	h an	d tra	insit	ioni	ng of	f leg	acy i	nds.)				
	ddress entrepreneurial/small business development either locally or regionally																								
7.B St	rengthen linkages to innovation (e.g., through collaboration with CSUDH)																								
7.C La	unch public/private industry cluster initiative												-	-											
7.C La	nanger #8: Position Carson as a "training center of excellence" (linkage of workforce	dev	elop	mer	nt pr	ogra	ms t	o sta	affin	g/tra	inin	g ne	eds	of e	merg	ging	indu	strie	25)						
7.C La Gamech 8.A Co		dev	elop	mer	nt pr	ogra	ms t	o sta	affin	g/tra	inin	g ne	eds	of e	nerg	ging	indu	strie	es)						



Partner Descriptions and Roles (listed alphabetically)

1. Associated General Contractors, California

AGC offers courses for all levels of construction- industry employees. This includes over 60 inperson and virtual training sessions, covering topics ranging from COVID-19 to building information modeling, construction accounting, and project management.

This industry trade organization's training capabilities will be important to recognize and possibly incorporate into Carson's construction workforce strategy.

2. Associated Builders and Contractors, Inc. (ABC, Southern California)

The focus of focus of ABC, Southern California is to ensure free and fair marketplaces, improve the industry through education and training, raise the professional level of contractors through continued education, implement safety programs that benefit the entire industry, and preserve the free enterprise system.

Another industry trade organization with training capabilities that will be important to recognize and possibly incorporate into Carson's construction workforce strategy.

3. California Department of Education, Building and Construction Trades (BCT) Industry Sector

This program is designed to identify and develop model curriculum standards, instructional resources, and assessment strategies for teachers, guidance personnel, curriculum planners, and administrators. Leadership in the BCT sector is fostered through partnerships with a variety of building and construction business and industry partners along with key representatives from the CDE, California Community Colleges, California State Universities, and the University of California.

This branch of the Department of Education may be important for higher-level construction workforce training strategies.

4. Building Industry Association (BIA) of Southern California

BIA is an advocate group for building industry leaders whose focus is on building communities, creating jobs, and ensuring housing opportunities for everyone.

This group may be able to contribute to networking within the development community, to help engage potentially interested development partners.

5. California State University, Dominguez Hills (CSUDH)

California State University, Dominguez Hills is a public university in Carson and is part of the California State University system. CSUDH prides itself on fostering economic diversity and economic mobility for its students. Assets of particular interest include the CSUDH innovation incubator (see below).



Already an active partner with the City, having the University as a partner in economic development offers many potential linkages that are mutually beneficial to the City and CSUDH.

6. Carson Chamber of Commerce

The Carson Chamber of Commerce serves as an advocate for the needs of the business community in Carson, from the local to state level, and "is dedicated to making the City of Carson a stable, friendly community to work, shop, reside, and play." In fulfilling this mission, the Chamber also provides resources to help businesses thrive and grow.

Already an active partner with the City, the Chamber would play a vital role in networking within the business community, from its strong advocacy and business-coordination position.

7. City of Carson / Carson Reclamation Authority

Formed in 2015, the Carson Reclamation Joint Powers Authority was established for the purposes of overseeing and facilitating the remediation of contaminated properties in the City of Carson, which includes the acquisition and subsequent reclamation of contaminated properties.

The Reclamation Authority has unique capabilities to apply to the repurposing of contaminated sites.

8. Commercial/industrial real estate brokers

This group of brokers is assumed to be those active in or otherwise knowledgeable about real estate conditions in the City of Carson.

Commercial real estate brokers will have a unique perspective on development prospects and also networking capabilities with which to help engage potential development partners.

9. CSUDH Innovation Incubator

The Innovation Incubator at California State University, Dominguez Hills (CSUDH) offers a unique variety and combination of formal and informal programming that provides students, staff, faculty, alumni, and the local community collaborative access to mentorship, education-based programming, dynamic events, and other value-added services designed to help startups and main street businesses achieve their growth goals.

This unique local asset would be "featured" in Carson's innovation strategy, as well as integral to CSUDH's general role as an economic development partner.

10. Developers, other development community

The development community in this context is assumed to include homebuilders and other developers, property owners and managers, and building industry professional service providers.

These entities can be important development partners as well as providing their expert opinions on the details of strategic approaches, design options, etc. related to property improvements and repurposing.



11. Dignity Health Sports Park (DHSP)

Dignity Health Sports Park features an 8,000-seat tennis stadium, a 27,000-seat stadium for soccer, football and other athletic competitions and outdoor concerts, a 2,000-seat facility for track & field events and a 2,450-seat indoor Velodrome for track cycling. Dignity Health Sports Park is also home to:

- Major League Soccer's LA Galaxy
- The United States Tennis Association's (USTA) High-Performance Training Center, and
- The national team training headquarters for the U.S. Soccer Federation (USSF).

Already an active partner with the City, this major and unique community asset will have a critical ongoing role in tourism/entertainment-related strategies.

12. El Camino College/SBDC

The Los Angeles Regional Small Business Development Center (SBDC) hosted by El Camino College provides individualized consulting and training to new and growing businesses.

Of additional interest in Carson, the College offers a career education program in construction technology, in addition to its entrepreneurial support through the SBDC.

13. Los Angeles County Economic Development Corporation (LAEDC)

LAEDC is a non-profit organization that promotes equitable economic growth across the Los Angeles region through collaboration with community, government, business, and education partners to "inform, advance, and achieve a reimagined regional economy."

Already an active partner with the City, the LAEDC pursues numerous strategies at a regional level that are complementary to some of Carson's strategic interests, and consequently can help guide policy details as well as help legitimize certain programs. For example, LAEDC industry councils include the SoCal Aerospace Council, the e4 Mobility Alliance for advanced transportation, the Bioscience Council, Blue and Green Goods Movement, and Digital Media & Entertainment (DME) Council.

14. LA County Flood Control District

The Los Angeles County Flood Control District was established to provide flood protection, water conservation, recreation, and aesthetic enhancement within Los Angeles County.

The Flood Control District is a crucial partner to efforts involving the Dominguez Channel, which is an integral part of flood control infrastructure in the region.

15. LA County Recycling Marketing Development Zone (RMDZ)

The Los Angeles County RMDZ is under the administration of the Los Angeles County Public Works, Environmental Programs Division, and administers programs that assist residents and businesses in recycling traditional (metals, paper, and plastic) and non-traditional (construction &



demolition debris, home-generated sharps waste, and electronic waste) materials, including various incentives promote recycling processing and related activity.

This asset can be particularly relevant to Carson, where creative approaches to repurposing contaminated properties might include direct involvement in waste processing.

16. Los Angeles/Orange Counties Building and Construction Trades Council

The Los Angeles/Orange Counties Building and Construction Trades Council is an umbrella group representing 48 local unions and district councils in 14 Trades. Membership in these unions totals more than 140,000 skilled men and women.

One of their key programs is operating an accredited, traditional system of construction-trades apprenticeships. Apprentices take classes and work full time, receiving pay and benefits. They do not pay tuition for their classes.

17. LAUSD Local District South

The Los Angeles Unified School District, Region South enrolls about 100,000 students in transitional kindergarten through 12th grade. The Region South stretches from Mid-City to South Los Angeles to San Pedro.

The local school district can be an important partner in workforce development, either through specialized training programs or through the use of curricula that encourage work-readiness and other desirable workforce traits.

18. Porsche Experience Los Angeles

The Porsche Experience Los Angeles facility in Carson, California features a 53-acre driver development track, a variety of meeting and special event spaces, a personal design studio including new vehicle delivery, a Simulator Lab equipped with virtual reality, the Porsche Retail Store offering all three Porsche brands (Porsche Design, Porsche Lifestyle and Porsche Museum), Speedster Café and Restaurant 917 for fine dining.

The presence of this unique asset and help leverage other tourism/entertainment initiatives within the City, as well as be mutually beneficial to Porsch Experience. All this could be maximized through some formal or informal partnership arrangement.

19. SCORE Long Beach/South Bay

The SCORE Long Beach South Bay branch features various resources, workshops, and experienced mentors that provide business professionals and entrepreneurs the resources needed to achieve small-business goals.

SCORE has a long-standing history of supporting entrepreneurs through its unique mentorship program.



20. Shopping center owners

Owners and managers of shopping centers would have expectations that they have access to reasonable opportunities for maximizing the value of their properties.

They can be development partners and also provide their unique expertise in refining development initiatives, including policy, design options, etc.

21. South Bay Entrepreneurial Center (SBEC)

The SBEC is a non-profit community-based center for public benefit providing incubation, training, mentoring, and funding resources for entrepreneurs throughout the 18 cities of the South Bay.

This entity, and there are other entrepreneurial-support organizations in the region, can help cover the variety and intensity of support ideally made available to entrepreneurs at various stages of their startup process.

22. South Bay Workforce Investment Board (SBWIB)

The South Bay Workforce Investment Board promotes an innovative workforce development system that supports job retention and creation, and accelerates economic growth in 11 cities in the Los Angeles South Bay region. SBWIB routinely collaborates among a wide range of stakeholders including business, labor, education, social services, philanthropic organizations and community-based agencies.

Already an active partner with the City, this entity has specific authority and capabilities that make its involvement essential in workforce-related strategies.

23. South Bay Cities Council of Governments

The South Bay Cities Council of Governments is a joint powers authority government agency of 16 cities and Los Angeles County that share the goal of maximizing the quality of life and productivity of the South Bay subregion of Los Angeles.

Programs of particular relevance to Carson include transportation infrastructure/services, fiber network, environmental services, and senior and homeless services.

24. Southern California Edison (SCE)

As one of the nation's largest electric utilities, SCE delivers power to 15 million people in a 50,000 square-mile area across central, coastal and Southern California.

Already an active partner with the City, SCE leverages its pivotal role in providing power through active involvement with regional and local economic development entities. For individual firms, SCE Economic Development Consultants provide one-on-one, specialized consulting services at no cost to business prospects. This includes guidance on site selection, available incentives, and other tools and programs to reduce operating costs and help make businesses more competitive.



25. Target/major industry firms representatives

Representatives of target industries and major firms in Carson would be expected to have a role in programs that support their operations and expansion in the City.

These entities can also be the core of cluster strategies that include raising the profile of clusters as identifiable interest groups, for example promoting cluster growth and working relationships within the City.



5. EDSP Monitoring Guidelines

Reporting Progress and Measuring Results

In order to keep all interested stakeholders apprised of the City's headway on implementing the EDSP Action Plan, City staff will prepare an Annual Progress Report (APR) for the EDSP. A general framework for the APR is outlined below. The specific format of the report will be defined by City staff based on these guidelines.

Two broad categories of progress monitoring are recommended:

- 1. Tracking of the overall health of the local economy; and
- 2. Progress reporting on specific EDSP action items.

Reflecting the nature of economic development programs and the practical consideration of utilizing readily available data, the suggested performance metrics include a mix of quantitative and qualitative measures.

General Performance Measures for Local Economy

As context to describing progress on the EDSP itself, the APR will include a broad "report card" on Carson's overall economy, utilizing readily available data for key measures of economic health. In this regard, it is critical to recognize that the performance of the local economy is in large part driven by external factors that are beyond the City's control. As such, it is important that the economic "report card" not be positioned as a direct gauge of the effectiveness of the EDSP. The reporting of general economic trends should instead be viewed as a means of conveying background information that can help to understand and explain the overall setting in which the EDSP is being implemented, which in turn may influence future reprioritization of individual EDSP strategies and action items.

With respect to reporting on the overall health of the local economy, it is also important that city-level trends be compared to larger-area (i.e., county and state) benchmarks. Whereas a strong economic development program is not likely to make a city's economy immune to larger economic cycles, it can potentially allow the local economy to be more resilient than the general economy. For example, a local economy might still experience a downturn in key fiscal revenues during a national recession, but could have less severe reductions than the regional economy as a whole. By including comparison data for larger reference areas, the local economic "report card" can be useful in identifying areas in which Carson is performing *relatively* well (or poorly) – even if the overall national trend is negative (or positive) during a particular year.

The table below lists the metrics and data sources to be included in the "report card" for the local economy. For each of the indicated variables, the APR should include data for the most recent full year available and for the five preceding years (allowing for trend line evaluation). Unless otherwise noted, the recommended data are available from public sector sources at no charge.



DATA TO BE COMPILED FOR ANNUAL "REPORT CARD" ON LOCAL ECONOMY

Variable	Data Source	Comparison Areas
Core data elements:	1	
Total Population	California Department of Finance	County, State
Taxable Retail/Restaurant	California Department of Tax	County, State
Sales by Category	and Fee Administration	County, State
Taxable Non-Retail Sales	California Department of Tax	County, State
	and Fee Administration	
Total Assessed Valuation	Los Angeles County Assessor's	County, State
	Office	
Resident Unemployment Rate	State Employment Development	County, State, U.S.
. ,	Department (EDD); U.S. Bureau	, ,
	of Labor Statistics (BLS)	
Labor Force Participation Rate	American Community Survey	County, State, U.S.
	(ACS), latest 5-year survey	
Median Household Income	American Community Survey	County, State
	(ACS), latest 5-year survey	
Mean Household Income	American Community Survey	County, State
	(ACS), latest 5-year survey	
Average Per Capita Income	American Community Survey	County, State
	(ACS), latest 5-year survey	
Residential and Non-Residential	Construction Industry Research	County, State
Building Permits (and Permit	Board (requires a subscription)	
Valuations)		
Retail, office and industrial	CoStar (requires subscription);	County, selected sub-county
vacancy rates	or commercial brokerage	comparison areas
	reports (more difficult to	
	standardize from year to year)	
Optional (higher cost) data elem	ents:	
Hotel occupancy rates	STR	County, selected sub-county
(annual and by month)		comparison areas
Hotel room count (inventory)	STR	County, selected sub-county
, , , , , , , , , , , , , , , , , , , ,		comparison areas
Hotel room demand (occupied	STR	County, selected sub-county
room nights per year)		comparison areas
Revenue per available hotel	STR	County, selected sub-county
room (RevPar)		comparison areas
Total annual visitors by major	Placer.ai	To be determined
Carson venue		



The optional data elements listed above all relate to the visitor economy and are therefore highly relevant to the EDSP. However, the indicated data sources (especially Placer.ai) require a substantial investment in annual subscriptions (and also require some level of technical training to optimally use). The cost of the Placer.ai data could further be justified by the potential usefulness in pinpointing action items and tracking progress for several individual strategies (as outlined below). In light of the data costs involved, the City might defer these components of the data collection until such time as local and/or regional visitor-economy partnerships are in place (whereby the costs could potentially be absorbed by a separate organization that would have uses for these valuable data beyond Carson's APR).

Progress Reporting on EDSP Action Items

The tables beginning on the following page lay out a set of performance measures for each of the 21 EDSP strategies. The table for each strategy includes the following information:

Goals/Completion Milestones

- 1-year targets
- 3-year targets

Annual Progress Reporting Measures (information to be included in APR)

- Activities to be reported (qualitative and quantitative descriptions of what the City did during the year to advance this strategy)
- Results to be measured (outcomes of the City's activities)

The indicated goals/milestones for Year 1 are typically more specific than the 3-year goals (covering activities in Years 2 and 3), since some of the later-year activities cannot be fully defined until the Year 1 actions (which in some cases involve assessing the feasibility of more intensive programmatic investments in subsequent years) are completed.



Strategy 1.A: Design and impleme	Progress Reporting Guidelines ent comprehensive economic develo	ppment marketing program			
	d 3-Year Milestones for this Strategy Annual Progress Reporting for this Strategy				
Year 1 targets:	Year 3 targets:	Activities to be reported:	Results to be measured:		
 Professional marketing agency retained to create marketing plan Marketing plan completed Completed outreach to local and regional marketing partners 	 City brand developed and integrated into all marketing materials/media All elements of marketing plan fully implemented Key EDSP programs (as specified in other strategies) branded and marketed Economic development website (story map) launched and frequently updated Social media presence expanded E-Newsletter launched Regular participation in industry associations/trade shows for targeted industries (retail, clean tech, manufacturing, etc.) 	 Marketing/advertising budget (dollars budgeted/spent) Size of audience reached by print/online advertising (broken down by media outlet) Newsletter circulation (number of recipients on distribution list) Number and description of City-sponsored events related to economic development marketing Number of industry trade shows (e.g., ICSC) attended Other marketing activities/programs (to be defined by marketing plan) 	 (Metrics for marketing outcomes will be further specified in marketing plan; examples listed below) Website traffic/analytics Business attraction leads (tracked by source and degree of interaction with City, where possible) Special event participation/attendance (where trackable) 		



Progress Reporting Guidelines Strategy 1.B: Promote expanded tourism/visitation ("Stay Carson" program), leveraging regional attractions and tourism-promotion organizations and building on existing, unique assets Goals: 1-Year and 3-Year Milestones for this Strategy Annual Progress Reporting for this Strategy Activities to be reported: Results to be measured: Year 1 targets: Year 3 targets: (Metrics for tourism promotion Local (Carson) Tourism Regional tourism partners Tourism advertising budget Working Group established meeting quarterly to define (dollars budgeted/spent) outcomes will be further and initial plan developed for coordinated marketing Size of audience reached by specified in marketing plan; examples listed below) coordinated visitor approaches print/online advertising Webpage traffic/analytics promotion Formal regional tourism (broken down by media • "Visit Carson" webpage (as promotion organization outlet) Year-over-year changes in warranted, based on plan ("Visit South Bay") Other tourism marketing hotel occupancy rates, room activities/programs (to be nights, and average daily developed by Tourism established and funded Working Group) defined by marketing plan) rates Initial/exploratory meeting Changes in total numbers of with prospective members of visitors attracted to DHSP, a "Visit South Bay" Porsche Experience Center, partnership CSUDH, Events Center (Placer.ai data) Changes in capture of potential restaurant/hotel spending in Carson (for visitors coming to major venues/events), using Placer.ai data (compare to baseline data provided by

HVS for the EDSP process)



Goals: 1-Year and 3-Year N	Milestones for this Strategy	Annual Progress Reporting for this Strategy				
 Year 1 targets: Coordination meeting(s) between City's new ED Manager and the Community Services Department Develop Events Center messaging/selling points to be incorporated into EDSP marketing plan (Strategies 1.A and 1.B) Progress on recruitment of additional Downtown hotel 	 Year 3 targets: Events Center reinvestment/ rebranding completed New hotel development underway proximate to Events Center 	Activities to be reported: Narrative summary of progress on hotel recruitment/development Number and description of City-sponsored events at Events Center	 Results to be measured: Webpage traffic/analytics Number of events (total and by major category) Number of visitors (total and by major category); these estimates can be compiled from a combination of available records for individual events and Placer.ai data) City revenue from Event 			

Goals: 1-Year and 3-Year N	Milestones for this Strategy	Annual Progress Reporting for this Strategy				
Year 1 targets:Policy/game plan for "popup" events and businesses	Year 3 targets:Prioritized capital improvements plan for	 Activities to be reported: Narrative summary of progress on plans/policies 	 Results to be measured: Number of pop-up events and pop-up businesses active 			
 Revised guidelines for City's façade improvement program (to define criteria for prioritization of funding for targeted Downtown projects) 	 Downtown core and corridors Improvement plan for Avalon corridor (focusing on segment between Elsmere Drive and University Drive) 	 supporting Downtown placemaking Summary of completed capital improvement projects in Downtown/corridors 	 in Downtown during year Number (and dollar amounts of Downtown/corridor-area projects applying for and funded by City's façade 			
	 Comprehensive improvement plan to enhance the Avalon corridor between Carson Street and Victoria Street 	(project descriptions, total cost, funding sources)	improvements program			



Goals: 1-Year and 3-Year N	Ailestones for this Strategy	Annual Progress Reporting for this Strategy					
Year 1 targets:	Year 3 targets:	Activities to be reported:	Results to be measured:				
 Report on the business/venue/organizational "universe" (i.e., potential models or competitors for Carson) in region Coordination meeting(s) with DHSP and CSUDH Identification of candidate sites and outreach to selected property owners Game plan for issuing master developer RFP (if warranted based on preceding steps) 	 Policies/incentives to support concept of live entertainment district (LED) RFP issued for master developer (If warranted based on responses to RFP) master developer agreement negotiated 	 Meetings with relevant stakeholders (numbers of meetings broken down by category of stakeholder) Narrative summary of activities completed in support of LED attraction (recognizing that the LED might ultimately take the form of multiple projects on separate sites, and could also be achieved through market positioning/repositioning of existing or anticipated retail shopping centers) 	Summary of new development proposals that relate to LED concept (i.e., projects including visitor-oriented retail/restaurant uses, entertainment uses, hotel development and/or urban housing proximate to DHSP); this summary should include all relevant projects at various stages of the planning, entitlement and construction processes				



Goals: 1-Year and 3-Year N	Milestones for this Strategy	Annual Progress Repo	orting for this Strategy
 Vear 1 targets: Identification of high-priority retail sites to be targeted for revitalization and/or reuse (full or partial) Define incentive programs/policies (some of which may already exist) that support revitalization and/or reuse of targeted shopping centers Initial outreach to key commercial property owners Develop messaging/selling points (about retail/ restaurant development opportunities) to be incorporated into EDSP marketing plan (Strategies 1.A and 1.B) 	 Vear 3 targets: Define/adopt incentives to facilitate land use changes for high-priority retail sites Meeting with development community to define realistic targets for retail revitalization/reuse projects 	 Activities to be reported: Meetings with relevant stakeholders (numbers of meetings broken down by category of stakeholder) Narrative summary of activities completed in support of LED attraction (recognizing that the LED might ultimately take the form of multiple projects on separate sites, and could also be achieved through market positioning/repositioning of existing or anticipated retail shopping centers) 	Results to be measured: Summary of new development proposals that relate to "Reinvigorate Retail" concept (i.e., projects involving reinvestment in or redevelopment of existing shopping centers); this summary should include all relevant projects at various stages of the planning, entitlement and construction processes Number (and dollar amounts) of projects applying for and funded by City's façade improvements program Year-to-year changes in taxable retail sales in Carson (broken down by major sales category)



Goals: 1-Year and 3-Year N	Milestones for this Strategy	Annual Progress Repo	orting for this Strategy
 Year 1 targets: Meeting(s) with retail property owners and leasing agents Target list of national retail/restaurant chains Target list of regional (independent) restaurants and specialty retail stores Revised guidelines for City's façade improvement program (flexibility to fund interior building improvements for selected, high-priority business types) Package of other incentives relevant to retail/restaurant tenant recruitment 	 Year 3 targets: (Ongoing) participation in ICSC conferences (Ongoing) City-hosted "broker appreciation" events to highlight retail/restaurant locational opportunities to the commercial real estate brokerage community 	 Activities to be reported: Advertising budget (dollars budgeted/spent) for retail/restaurant tenant recruitment program Meetings with relevant stakeholders (numbers of meetings broken down by category of stakeholder) ICSC events attended Number and description of "broker appreciation" events 	 Results to be measured: Webpage traffic/analytics (for retail site selection searches) List of new retail/restaurant tenants locating in City (list type, square footage and location of business) List of existing retail stores closing (list type, square footage and location of business)



Progress Reporting Guidelines

Strategy 5.A: Establish comprehensive business retention and expansion ("BRF") program including direct outreach, contact management

•	•	ion ("BRE") program including direct	outreach, contact management
and linkages to business assistance	e resources Milestones for this Strategy	Annual Progress Reno	rting for this Strategy
Year 1 targets:	Year 3 targets:	Results to be measured:	
 Memorandum outlining inhouse plan for comprehensive business outreach initiative Initial round of business outreach conducted (via email and site visits to selected existing firms) Small business assistance program and incentives adopted (see Strategy 7.A) 	 BRE software implemented Annual (or more frequent) online business survey implemented BRE program branded (e.g., as "Carson Cares") and prominently featured in all marketing materials/media 	 Numbers of existing businesses contacted (broken down by type contact – online, direct mail, telephone, site visit, City hosted event) Narrative summary of small business assistance needs identified through the business outreach process Summary of City business assistance resources deployed in response to identified needs (Identified needs and deployment of City assistance resources would be summarized in an "aggregate" format that does not disclose information about individual firms) 	 Webpage traffic/analytics (for online BRE searches and services) Numbers of existing firms retained (or assisted with expansions) through City's BRE efforts Estimated numbers of jobs retained/created through BRE efforts



Goals: 1-Year and 3-Year N	Milestones for this Strategy	Annual Progress Repo	orting for this Strategy
 Year 1 targets: Announce creation of "Streamline Carson" and incorporate into overall marketing/messaging plan Implementation of Enterprise Permitting & Licensing Software program Coordination with Fire Department and Planning Division to streamline processes Staff memorandum summarizing baseline review of processes and highlighting specific opportunities to improve business and 	Year 3 targets: Ongoing process reviews, reporting and improvements	Activities to be reported: Numbers of new development projects submitted to City for entitlement, review, approval and permitting Maintain active projects log (with status of each project) online	Results to be measured: (Specific performance measures to be defined based on reporting features of Enterprise Permitting & Licensing Software program)



Progress Reporting Guidelines Strategy 5.C: Focus law enforcement resources including cameras, automated license plate readers, and officers in neighborhoods/corridors/districts where most needed Goals: 1-Year and 3-Year Milestones for this Strategy Annual Progress Reporting for this Strategy Year 1 targets: Year 3 targets: Activities to be reported: Results to be measured: Ongoing deployment of new • Annual summary of • Staff memorandum Year-to-year changes in summarizing needs technologies and staffing supplemental law numbers and types of crime related issues raised by assessment, general resources as needed enforcement measures and prioritization/timing business community (through resources deployed in recommended for the forum provided by the response to specific problems supplemental law identified by business Strategy 5.A business enforcement deployment, community outreach program) and funding implications



Progress Reporting Guidelines

Strategy 5.D: Focus City resources and coordinate with partners to prioritize infrastructure investments (including broadband) that support targeted economic development

targeted economic development			
Goals: 1-Year and 3-Year Milestones for this Strategy		Annual Progress Reporting for this Strategy	
Year 1 targets:	Year 3 targets:	Activities to be reported:	Results to be measured:
 Broadband needs assessment Coordination (and agreement on next steps) with SCE Review and comment on CIP to prioritize projects with nexus to EDSP 	 Long-term strategy (with SCE) for business-critical electricity infrastructure Feasibility assessments (and strategic plans, to the degree warranted by initial investigations) for special concepts such as "neighborhood digital centers," and Smart City and Green transportation infrastructure 	Narrative summary of partner coordination and strategic plans developed	 Dollar investment in City infrastructure related to EDSP priorities Dollar investment in third-party infrastructure tied to EDSP priorities Documentation of new development projects (or business openings, expansions, etc.) facilitated by or tied to specific infrastructure projects



Goals: 1-Year and 3-Yea	r Milestones for this Strategy	Annual Progress Reporting for this Strategy	
Year 1 targets: N/A – no Year 1 action items	Year 3 targets: Coordination with LACFCD to define and adopt incentives to encourage reinvestment in private properties adjacent to Channel Physical improvement plan for Channel (in cooperation with LACFCD) Webpage promoting recreational opportunities (walking, biking, etc.)	Activities to be reported: Narrative summaries of coordination with LACFCD (and other relevant stakeholders) to plan and implement improvement concepts for Channel	Results to be measured: Webpage traffic/analytics Dollar investment in public improvements to Domiguez Channel Number of private propertie improved (and dollar amour of investment) based on City plan/incentives for Channel area



Progress Reporting Guidelines

Strategy 6.B: Determine the potential for The Links at Victoria Golf Course redevelopment (with possible recreation/open space uses plus non-recreation uses including housing)

Goals: 1-Year and 3-Year Milestones for this Strategy		Annual Progress Reporting for this Strategy	
Year 1 targets:	Year 3 targets:	Activities to be reported:	Results to be measured:
N/A – no Year 1 action items	 Coordination and agreement with County of Los Angeles on approach to redeveloping the golf course (Since the golf course is potentially a suitable site for a live entertainment district, targets for Strategy 3.A are also relevant) 	• TNDG •	 Narrative summary of development proposals generated Narrative description of development projects (including metrics such as dollar amount of private investment) for new uses ultimately attracted to this site



Goals: 1-Year and 3-Year Milestones for this Strategy			orting for this Strategy
Year 1 targets:	Year 3 targets:	Activities to be reported:	Results to be measured:
N/A – no Year 1 action items	 Identification of sites/areas (including brownfield sites and underutilized retail properties) that would potentially be suitable for long-term development of Class A professional office facilities Planning process to prepare development prototypes and financial pro forma to promote office development opportunities in Carson Information/incentive packages to demonstrate financial advantages (to property owners) of redeveloping sites with office uses (As part of Strategy 1.A marketing plan), outreach to commercial development and brokerage communities to highlight office development opportunities 	 Narrative summary of planning/research completed in support of this strategy Summary of promotional activities implemented to market office development opportunities to developers/brokers (where possible, quantify the numbers of stakeholders reached through these outreach efforts) 	 Descriptions of new office development projects proposed Summary of new office projects completed (description, square footage dollar investment, and anticipated tenant profile)



Progress Reporting Guidelines Strategy 6.D: Support recruitment of manufacturing/R&D tenants and provide incentives to maximize creation of quality jobs in existing and future industrial buildings Goals: 1-Year and 3-Year Milestones for this Strategy Annual Progress Reporting for this Strategy Year 1 targets: Activities to be reported: Results to be measured: Year 3 targets: • (Ongoing) implementation of Advertising budget (dollars Define and adopt Webpage traffic/analytics (for "manufacturing-friendly" City manufacturing/R&D-related budgeted/spent) for manufacturing/R&D site policies/incentives components of Strategy 1.A manufacturing/R&D tenant selection searches) Outreach to industrial marketing plan recruitment program List of new manufacturing/ property/building owners Webpage devoted to **R&D** tenants locating in City Manufacturing association manufacturing/R&D (list type, square footage, events attended opportunities and incentives location, and estimated Number and description of number of jobs) "broker appreciation" events (Strategies 7.A, 7.B and 7.C also Summary of City incentives focused on manufacturing/ directly relate to manufacturing utilized by each attracted R&D tenant attraction and R&D attraction)

tenant



Progress Reporting Guidelines

Strategy 6.E: Partner with property owners to assess, investigate, and clean-up contaminated sites, establishing Carson as a "national best-practices leader" in brownfield remediation and redevelopment

practices leader" in brownfield remediation and redevelopment			
Goals: 1-Year and 3-Year Milestones for this Strategy		Annual Progress Reporting for this Strategy	
 Goals: 1-Year and 3-Year Now Year 1 targets: Inventory and prioritization of major brownfield sites potentially suitable for remediation Outreach to selected property owners Completed research on funding sources/programs (summarized in staff memorandum) 	Year 3 targets: • Funding applications (for state/federal programs) for pilot remediation project(s) • Coordination with partners (academic, regulatory and nonprofit sectors) to opportunities to position Carson as best-practice leader • Ongoing research on best practices and funding	Annual Progress Rep Activities to be reported: Narrative summary of research/planning activities Funding applications submitted	 Results to be measured: Dollar amount of state/federal funding secured Number of sites remediated (or in process of remediation) Description (including dollar amounts of private investment) of development/redevelopment projects constructed on remediated sites



Progress Reporting Guidelines

Strategy 7.A: Address entrepreneurial/small business development either locally (in house) or with linkages to regional business assistance

and small business lending resources Goals: 1-Year and 3-Year Milestones for this Strategy Annual Progress Reporting for this Strategy											
Goals: 1-Year and 3-Year I	Milestones for this Strategy	Annual Progress Reporting for this Strategy									
Year 1 targets:	Year 3 targets:	Activities to be reported:	Results to be measured:								
 Online directory of business assistance resources Online directly of private capital sources Coordination with CSUDH to define game plan (and formal agreement) for expansion of Carson Small Business Growth Academy program 	 (Annual) review of partnerships through which City provides small business assistance and small business lending resources (As warranted based on above reviews), expand scope of partnerships to increase numbers of businesses served 	 Narrative summary of partner coordination activities (meetings, program reviews, etc.) Narrative summary of City's marketing/promotion of small business programs Dollar amount of City's funding support for Carson Small Business Growth Academy Annual progress report (from CSUDH) describing services offered by Carson Small Business Growth Academy, including numbers of participants by course Numbers of Carson businesses referred to partner organizations for lending resources 	 Webpage traffic/analytics (for online directories of business assistance and lending resources) Numbers of new, expanded or retained businesses tied to City/partner small business assistance programs Numbers of businesses approved for lending (or other financial resources) through City's lending partners (document total dollar amounts, where possible) 								



Goals: 1-Year and 3-Year N	Ailestones for this Strategy	Annual Progress Reporting for this Strategy								
 Initial meetings with potential collaborators (Cleantech working group) Staff memorandum identifying opportunities and priorities for cleantech development (including delineation of City's roles), based on Year 1 discussions with working group 	 Year 3 targets: Launch full-service incubator/accelerator services (through partnership with CSUDH) Aggressively pursue state/federal funding to support transitioning of legacy industries to clean-tech compatible activities Actively network (for purposes of promoting business opportunities in Carson) within local/regional electric vehicle (EV) industry cluster (also see Strategy 7.C) Initiate networking/outreach (and define related marketing approach) to "Silicon Beach" business community 	 Activities to be reported: Number of applications submitted for state/federal funding to support legacy industry transitioning Dollar amount of City's funding support of incubator partnership with CSUDH Annual progress report (from CSUDH) describing services/ resources deployed through incubator program Narrative summary (including quantitative measures where possible) of outreach and networking efforts within EV industry Narrative summary (including quantitative measures where possible) of outreach and networking efforts within "Silicon Beach" community 	 Results to be measured: Webpage traffic/analytics (for site selections for innovation firms) Numbers (and descriptions) of startups launched or grown through incubator/accelerator program Documentation of EV firms attracted to or grown in Carson (track number of firms, number of employees, square footage of building space) Documentation of firms attracted from Silicon Beach area (track number of firms, number of employees, square footage of building space) 							



	Milestones for this Strategy	Annual Progress Repo	ing for this Strategy esults to be measured:				
Year 1 targets: N/A – no Year 1 action items	 Year 3 targets: Cluster mapping completed for local clean-tech firms (including EV firms) Initiate "industry resource group" (informal organization of local firms) for clean tech cluster Facilitate initial "network organizing" meeting(s) for local/regional clean tech firms Launch "Carson Delivers" campaign (a buy-local initiative) to promote local supplier (business-to-business) relationships within clean tech cluster 	 Activities to be reported: Narrative summary of progress on cluster mapping Numbers (and types) of firms participating in clean tech "industry resource group" and networking meetings Narrative summary of progress on designing and implementing "Carson Delivers" buy local campaign 	 Webpage traffic/analytics (for searches related to clean technical and cluster participation) Documentation of supplier relationships facilitated by "Carson Delivers" buy-local campaign Numbers of new firms started/attracted within context of clean-tech cluster initiative (note: this performance measure may overlap with Strategy 7.B above) 				



Progress Reporting Guidelines
Strategy 8.A: Coordinate workforce development through linkages to available local and regional partner assets, augmenting as

Strategy 8.A: Coordinate workford appropriate	ac development timodgii iiiikages to								
	Milestones for this Strategy	Annual Progress Reporting for this Strategy							
Year 1 targets:	Year 3 targets:	Activities to be reported:	Results to be measured:						
 Informal consortium established (convene one organizational meeting to define parameters for collaboration) Memorandum summarizing education/training programs and initial assessment of unmet needs, with particular attention on critical skills and workers likely to require retraining due to global trends. 	 Assessment of employer skill/ training needs (include as part of Strategy 5.A business survey process) (As warranted based on initial discussions), sign MOU to formalize partnership(s) needed to fully implement this initiative Create "Training Center of Excellence" webpage as part of overall EDSP marketing plan 	 Narrative summary of progress on forging informal (and ultimately more formal) consortium to support Training Center of Excellence service delivery Narrative summary describing progress on customizing workforce development services to support needs of industry cluster participants Numbers of firms providing data about training/hiring needs Numbers of customized training and/or hiring programs (i.e., for specific employers) provided through based on consortium resources 	 Webpage traffic/analytics (for Training Center of Excellence resource page) Numbers of firms served by training/hiring resources provided through City's consortium partners Numbers of employees trained/recruited Numbers of new firms attracted for which workforce development support was offered as an incentive 						



Progress Reporting Guidelines

Goals: 1-Year and 3-Year N	Milestones for this Strategy	Annual Progress Reporting for this Strategy									
 Year 1 targets: Initial meeting(s) with working group Staff report outline potential formal relationship with partners and defining City roles 	 Year 3 targets: Detailed business/ organization plan for construction-industry workforce development program MOU to formalize partnership(s) to implement program Create "Construction Career Training Center of Excellence" webpage as part of overall EDSP marketing plan 	 Activities to be reported: Narrative summary of business planning process Narrative summary of new (or newly marketed) construction career resources offered through this initiative Quantitative summaries of new program resources (i.e., numbers of participants starting and completing each program) 	Webpage traffic/analytics (for Construction Careers Training Center of Excellence resource page) Numbers of construction-related firms served by training/hiring resources provided through City's consortium partners Numbers of construction workers trained Number of trainees placed in apprenticeship and/or job opportunities								

Appendix A:

Profile of Local and Regional Small Business Assistance and Entrepreneurial Development Programs



Prepared for:



Small Business Assistance and Entrepreneurship Programs, and Incentives

This appendix lists and describes existing small business and entrepreneurial development programs available in Carson or readily accessible to Carson workers and businesses, including City programs and resources available through other organizations. While many of the organizations listed here provide multiple services, they are organized generally according to what appears to be a primary programmatic emphasis, as well as separately for those associated with the City and those outside.

It should be noted that the material in this appendix was developed as a background research task for the EDSP process, primarily from program descriptions available online. The summarized information provides a "snapshot" of existing programs and resources as of the time that the research was completed. It is anticipated that the City will continue to expand and refine this information, and ultimately publish it as an online resource directory for the business community.

Within this summary, programs are organized under the following headings:

- Carson Business Development
- Carson Workforce-Related Business Assistance
- Business Incubators/Accelerators, Including Those With a Specific Technological Focus
- Focus on Financial Assistance
- Workforce Development Support
- General Small Business or Other Business Type Development Support
- Focus on Networking for Entrepreneurs

CITY OF CARSON

Carson Business Development

The City of Carson has two new programs available for Carson business owners and/or property owners: (1) Small Business Grant Program, and (2) Commercial Façade Improvement Program. Prospective applicants can visit the program webpage to review requirements and gather required documents.

1. Small Business Grant Program

This one-time business assistance grant is for businesses in Carson who have been negatively impacted financially by COVID-19, but not have not yet received any type of COVID-19 related assistance from the City. The grants range from \$5,000 to \$25,000. To qualify for this grant, businesses must meet the below criteria:

- Be physically located and have operated in Carson prior to March 15, 2020
- Have 50 employees or less
- Be able to demonstrate a decline in revenue due to COVID-19
- Cannot be a recipient from past City of Carson COVID-19 assistance programs
- Funds must be used for business-related items, and other requirements may apply

Once awarded, grants do not have to be repaid. To apply, or for any questions, call 310-952-1778 or email smallbusiness@carsonca.gov and specify the Small Business Grant Program in the subject line.

https://ci.carson.ca.us/CommunityDevelopment/SBGProgram.aspx

2. Commercial Façade Improvement Program

The Commercial Façade Improvement Program provides Carson business and property owners with matching grants to improve their storefronts and enhance the City's major commercial corridors.

Under the Commercial Façade Improvement Program, tenants and/or property owners may qualify for a reimbursement grant of \$2,500 to \$25,000 for storefront aesthetic improvements. A dollar-for-dollar matching is required for amounts over \$2,500. For owners of multi-tenant centers, the maximum grant is \$250,000 based on a total expenditure of no less than \$500,000 on eligible exterior improvements subject to additional requirements.

Examples of eligible funded improvements include:

- Window and door replacements, including awnings and sunshades
- Decorative outdoor fixtures including lighting
- Courtyard decorative pavers, masonry walls and footings
- ADA improvements, access ramps and signage
- Asphalt paving and restriping
- Exterior treatments, repairs, or replacement (paint, stucco, brick, or stone)
- Decorative fencing and walls
- Outdoor landscaping or replacement to drought-tolerant
- Design and permit fees associated with eligible improvements

The geographic focus of this program is the following areas: Carson Street, Avalon Boulevard, Main Street, Sepulveda Boulevard, and Figueroa Street. Commercial properties on major streets will be considered if they are near the intersections of the major thoroughfares.

https://ci.carson.ca.us/CommunityDevelopment/CommercialFacade.aspx

3. Carson EIFD

The proposed Carson EIFD encompasses 1,735 acres. The EIFD'S purpose is to assist in generating public facilities "of communitywide significance" that provide significant benefits and promote economic development. This includes public infrastructure, low and moderate income and workforce housing, property rehabilitation, and environmental mitigation and remediation of brownfields. Projects related to the façade improvement program, above, are eligible. The program can also serve as a vehicle for incentivizing qualifying development through provision of infrastructure within a "new-development financed" financing mechanism (new increments of tax payments cover costs).

https://ci.carson.ca.us/communitydevelopment/EIFD.aspx

Carson Workforce-Related Business Assistance

4. Carson One-Stop Career Center, Business Solutions for Employers

The Carson One-Stop Career Center provides an array of free services designed specifically for individual businesses. For assistance with recruitment or businesses with a current job opening, call (310) 233-4888 to receive assistance. You may also complete and fax a job order to (310) 233-4886. Services include:

- Applicant testing and screening
- Computerized Job Match System
- On-site facility for applicant interviews
- On-The-Job training
- Labor Market Information

WOTC Tax Credit

The Work Opportunity Tax Credit is a federal hiring incentive for companies that employ individuals from the following target populations: Temporary Assistance for Needy Families (TANF) - recipients, Veterans, Ex-Felons, SSI Recipients, High-Risk Youth, Vocational Rehabilitation referrals, Youth Employment program participants and food stamp recipients.

Employers who hire their employees through the program may be eligible for Work Opportunity Tax Credits (WOTC). Some positions may qualify for cash reimbursements through the On-the-Job Training Program (OJT), which pays for up to 50% of an employee's salary. Employer reimbursements vary from 320 to 440 hours depending on the type and length of training required. On-the-job training provides an employer the opportunity to hire a slightly qualified candidate to train according to job specifications.

Rapid Response Program

The Carson Career Center can provide assistance to workers in situations involving downsizing or relocating, through the Rapid Response Program. At no charge to the employer, the Carson Career Center, the South Bay Workforce Investment Board, (SBWIB) Rapid Response team provides information and referrals to employees on unemployment and medical insurance, job search services and community resources. In some instances, Rapid Response may be able to help avert layoffs and business closures.

https://ci.carson.ca.us/communitydevelopment/jchouse.aspx

5. Organizational Referrals on City of Carson Businesses webpage

The Tools for Business link on this webpage connects to a system of a series of search-guided web links that address a multiplicity of business-related topics, including:

- Business support organizations
- Resources for starting a business
- Resources for multiple aspects of developing sustainable businesses
- Resources applicable to Specialty Businesses businesses in specific industries, and categories of businesses including global businesses, veteran businesses and minority and women-owned businesses, and businesses that sell to the government
- Business essentials, such as tax information, compliance, human resources practices and regulations, and the like
- Funding and cash flow, including sources of business capital
- Hiring and training resources
- Resources for business planning, feasibility analysis

- Resources for cybersecurity and other security and related measures
- Business management resources
- Resources for business promotion and selling

https://ci.carson.ca.us/forbusinesses.aspx

OUTSIDE CARSON

Business Incubators/Accelerators, Including Those With a Specific Technological Focus

6. CSUDH Innovation Incubator

The Innovation Incubator is a multi-faceted hub for services supporting entrepreneurship and innovation, with a unique combination of formal and informal programming intended to give students, staff, faculty, alumni, and the local community collaborative access to mentorships, education-based programming, dynamic events, and other value-added services.

Both startups and main street businesses are targeted for assistance, including micro-entrepreneurs, and traditionally disadvantaged populations and communities are another area of focus.

The one-of-a-kind Catapult™ program offers startups access to specialty teams of students and volunteers that address the targeted needs of the startups under the supervision of industry experts. The projects are structured as micro-internships for students and generally run 6-8 weeks.

In addition to the Catapult program, other programs include:

- Innovation Leadership Speaker Series. (high-profile innovative leaders from the community, nation, and internationally)
- **Transform LA.** (support to local high school students through educational workshops, seminars, and access to the entrepreneurial ecosystem at and around the CSUDH campus)
- Alpha Start. (two intensive Friday sessions to empower entrepreneurs with hands-on training through immersive entrepreneurial experience)
- **GrowthBook.** (Combining the wisdom of classic sales training (branded) leaders with the modernday efficiencies of high-tech sales approaches into a sales training program focused specifically on startups and their early sales needs. Features one-of-a-kind audio from industry experts)
- **Student Startup Fund.** (a pool of philanthropic funds designed to support student entrepreneurs with micro-grants for their startup)
- LACEI. (The Los Angeles Community Entrepreneurship Initiative (LACEI) is a special program based upon the belief that entrepreneurship can, and should, play a role in poverty alleviation. Program functions as a chapter of the University of Notre Dame's Urban Poverty and Business Initiative (UPBI), and takes the form of an 11-month program dedicated to the alleviation of poverty through business ownership)
- **10 x 10 Venture Challenge.** (Students are challenged to work 10 hours per week for 10 weeks to see if they can earn \$1,000, with Innovation Incubator providing training, support, and coaching)
- JAM Zone. ("Just Ask a Mentor" Zone; informal one-on-one sessions)
- Impact Founders Challenge. (Annual program focused on identifying, assisting, and growing the businesses of founders of scalable and/or impact businesses from diverse backgrounds. Three phases throughout a year: 1) Spring Pitch Competition, 2) Summer Mentoring (customized coaching), 3) Progress Mentoring & Ongoing Launch Support)

https://incubator.csudh.edu/

7. South Bay Entrepreneurial Center (SBEC)

The SBEC is a business incubator that makes use of seasoned professionals in a variety of specialties to provide mentorship as well as providing space and ancillary services to startups and emerging growth companies in the South Bay geographical area and the communities therein. The purpose of the SBEC is:

- To educate entrepreneurs and startup companies in developing their technologies and businesses;
- To foster innovation in the South Bay;
- To facilitate commercialization of university-developed technologies;
- To marshal educational resources for entrepreneurs' training;
- To arrange technology transfer arrangements between large defense/aerospace companies and small technology-oriented firms in the South Bay, and
- To foster venture capital groups to provide equity capital to the emerging growth companies in the South Bay.

The City of Torrance Economic Development Manager serves on the Board of Directors. SBEC operates out of the Community Center in Old Torrance.

https://www.thesbec.org

8. California Manufacturing Technology Consultants (CMTC)

CMTC, a private non-profit corporation, was established to provide consulting services to small and mid-size manufacturers in Southern California. CMTC describes its mission as follows:

- We are recognized as the only organization exclusively servicing the manufacturing sector.
- We have the capability to deliver a broad array of services from the production floor to the discovery of new products and markets.
- We offer incentives to proactive manufacturers who want to grow their businesses.
- We deploy third-party surveys to measure customer impact and value.

California Manufacturers Advantage® (CMA) is a program designed for small and medium-sized manufacturers providing a "fresh review of your business," bringing technical expertise and leadership to identify and solve problems.

https://www.cmtc.com

9. California Office of the Small Business Advocate (CalOSBA), Los Angeles Regional SBDC Network Lead Center

The LA SBDC Network provides small business entrepreneurs with no-cost, confidential, business advising services and low-cost training opportunities, for starting a business, improving business management practices, and expanding a business.

California Dream Fund. A training and microgrant program for California entrepreneurs. The training, provided by a partner such as the LA SBDC, is required in order to qualify for a micro grant.

https://smallbizla.org/

Inclusive Innovation Hub (IHub²) Program.

CalOSBA, as part of the Governor's Office of Business and Economic Development (GO-Biz), is the entity behind all be a revised iHUB program (iHub²), 10 centers that will have the role of accelerating technology and science-based firms in underserved regions and communities, including women and people of color. iHub² is designed to serve as a bridge between local innovation ecosystems and state technical assistance, resources, and networks to support the success of the program.

https://www.grants.ca.gov/grants/inclusive-innovation-hubs-ihub2/

10. Idea Lab

This technology-oriented incubator has a particular focus on four tech areas: Al/Robotics, Consumer/Commerce, Enterprise, Clean Energy/Environment.

https://idealab.com/

11. LA CleanTech Incubator (LACI)

LACI has multiple programs for entrepreneurs with a cleantech focus, some of which are restricted to City of Los Angeles-based companies (Founders Business Accelerator). Through its Innovators & Incubation Programs, LACI is focused on accelerating climate action, specifically in the areas of clean energy, zero emissions transportation, and smart and sustainable cities.

https://laincubator.org/innovators-incubation/

12. StartUp Boost LA

StartUp Boost LA is part of a global tech startup pre-accelerator with the stated intention to work with "great" early stage entrepreneurs to prepare them for accelerator programs, seed investment, and revenue, through a six-week part-time program. There are no fees or equity taken with this program, which features expert speakers, pitch coaching, and one-on-one mentors.

The FoundersBoostX programs is particularly accessible to early stage founders anywhere, with weekly member workshops featuring VC's, industry experts, and founders. Also available is a growing library of ondemand workshops, and over 2000 members within this membership-based program.

https://www.foundersboost.com/programs/la

Focus on Financial Assistance

13. Financing Assistance, SBA Loans

The 7(a) Loan Program, SBA's most common loan program, includes financial help for small businesses with special requirements. This is the best option when real estate is part of a business purchase, but it can also be used for:

- Short- and long-term working capital
- Refinance current business debt

• Purchase furniture, fixtures, and supplies

https://www.sba.gov/funding-programs/loans/7a-loans

14. Advantage CDC Certified Development Corporation

This Long Beach Area CDC is a private, non-profit corporation, licensed and certified by the U.S. Small Business Administration to provide low-cost, long-term (504 loan program) SBA loans to assist eligible small businesses in the Long Beach area, including Carson. The organization also offers placement services for SBA 7(a) Loans, Community Advantage Loans (an SBA pilot program to assist small businesses in underserved markets for a limited time, set to expire Sept. 2024), and conventional loans.

The CDC provides financing for:

- Land & building acquisition
- New construction
- Renovation, modernization & restoration
- Acquisition of machinery and equipment

CDC's financing terms include:

- Amounts of up to 90% of the total project cost
- Projects in excess of \$125,000 up to several million dollars
- Terms up to 25 years

www.advantagecdc.org

15. Los Angeles County Economic Opportunity Grant (EOG)

In January of 2023, the Los Angeles County Department of Economic Opportunity (DEO) announced the launch of the first phase of the Economic Opportunity Grant (EOG) program for small and microbusinesses and non-profit agencies in LA County. EOG will award more than \$54 million in federal American Rescue Plan Act (ARPA) funds across 6,800 grants in a phased rollout to regions and organizations adversely affected by COVID-19.

A microbusiness owner who is a recipient of a grant pursuant to this Program must self-certify that grant funds will be used for one or more of the following eligible uses:

- The purchase of new certified equipment including, but not limited to, a cart.
- Investment in working capital.
- Application for, or renewal of, a local permit including, but not limited to, a permit to operate as a sidewalk vendor.
- Payment of business debt accrued due to the COVID-19 pandemic.
- Costs resulting from the COVID-19 pandemic and related health and safety restrictions, or business interruptions or closures incurred as a result of the COVID-19 pandemic

https://eog.smallbizla.org/

16. L.A. County Recycling Marketing Development Zone (RMDZ)

The Recycling Market Development Zone (RMDZ) program combines recycling with economic development to fuel new businesses, expand existing ones, create jobs, and divert waste from landfills.

This program provides attractive loans, technical assistance, and free product marketing to businesses that use materials from the waste stream to manufacture their products and are located in a zone. The local zone includes Carson and 19 other cities in Los Angeles County, including unincorporated areas. The loan program can fund a maximum of 75% of costs directly attributed to an eligible project up to a maximum of \$2 million whichever is less. For real estate purchases, only \$1 million is available. The interest rate is 4.0 percent (as of the date of this report).

Assistance is provided by local zone administrators. CalRecycle also offers free product marketing through the Recycle Store: http://www.calrecycle.ca.gov/RecycleStore/

The following materials are eligible and are a priority of CalRecycle to develop sustainable markets:

- Agricultural waste
- Construction and demolition debris
- Food waste
- Green waste
- Paper
- Plastic
- Waste automotive tires

Projects are likely to qualify if similar to these:

- Waste Prevention Projects
- Reuse Projects
- Recycling Projects
- Conversion Technology and Biomass Projects

https://dpw.lacounty.gov/epd/RMDZ/index.cfm

17. Foreign Trade Zone (FTZ)

An FTZ is a geographical area, in (or adjacent to) a United States Port of Entry, where companies can set up operations with exempted or deferred tariffs on foreign merchandise. The intent is to level the competitive field for US firms by reducing or eliminating unfair tax burdens on companies that make or assemble finished products using foreign components.

Port of Long Beach - https://polb.com/business/foreign-trade-zone-ftz/#ftz-overview-and-benefits

Port of Los Angeles – https://www.portoflosangeles.org/business/supply-chain/warehousing-and-distribution

California Business Incentives Gateway. The California Business Incentives Gateway has been retired and replaced by the **California Grants Portal.**

18. California Grants Portal

The California Grants Portal (a project by the <u>California State Library</u>) is a selection system to find all grants and loans offered on a competitive or first-come basis by California state agencies. This system may have very limited direct applicability to the business community.

https://www.grants.ca.gov/

19. CAMEO

CAMEO has a mission to "create economic opportunity for entrepreneurs and small businesses in Los Angeles County by connecting human, technical, and capital resources through regional collaboration."

CAMEO Academy offers courses to entrepreneurs in subjects such as Digital Literacy and Fluency.

CAMEO's multi-faceted approach to expand microlending in California includes:

- Expanding available loan capital;
- Training on financial statements and loan referrals;
- Streamlining the underwriting process with web-based platforms;
- Providing options for loan loss reserves; and
- Advocating for state and federal microfinance and business assistance programs.

https://cameonetwork.org/

20. Grid 110

Idea to Launch Bootcamp. For early stage companies in pre-launch (idea, proof of concept, prototype or minimum viable product stage), helps develop the foundational skills necessary to validate a business idea, discover/understand customers, and accomplish other objectives needed to launch a functional product or service.

PledgeLA Founders Fund. A partnership with PledgeLA, and open to Black & Latinx led businesses in Los Angeles County, the fund targets "underestimated" founders with \$25,000 in non-dilutive funding support.

Friends & Family. A partnership with Slauson & Co. and open to emerging entrepreneurs nationwide, this 12-week program is focused on demystifying fundraising and giving founders guidance on becoming a category-defining company.

https://www.grid110.org/

Workforce Development Support

21. South Bay Workforce Investment Board

SBWIB's One-Stop Business & Career Centers provide an array of "off-the-shelf" and specialized services to assist local companies in meeting their hiring goals, lowering training costs, improving employee skill levels, reducing turnover rates and managing a more qualified workforce. Services are frequently customized to meet specific business and industry employment requirements.

Career Services (Resident Workers)

One-Stop Centers offer convenient access to a wide array of services. Job information, training and job placement services including job club, labor market information, career workshops, job and career placement assistance, individualized assessment and more are available for free. The list of services offered to workers through the one-stop centers includes:

- Assessment of skills, abilities and interests.
- Career counseling.
- Computer introduction and advanced training.
- Assistive technologies are available to those with disabilities.
- Internet Job Search, available as a self-directed resource tool.
- Career Resource Center equipped with current technology and knowledgeable staff.
- Assistance with job placement.
- Labor market information, listing available occupation opportunities.
- Office equipment such as phones, faxes, computers and copiers is available.
- Career Exploration.
- Resume assistance.
- Interviewing assistance.
- Support services for those who qualify.
- Job Club, a workshop environment to network with fellow job seekers.
- Job placement for dislocated workers workers laid off either due to plant closure or downsizing, or who have been out of work for prolonged periods.

Business Services

The list of business services offered by the one-stop centers includes:

Recruitment Services

- New-hire and job placement resources
- Publicizing positions
- Broadcasting available jobs to candidates
- Targeted recruitments
- Job fairs

Business Support & Services

- Rapid Response and Lay-Off Aversion services
- Information on business incentives
- Customized training
- No-cost workshops
- Incumbent worker training

Subsidized Labor Programs

 Transitional Subsidized Employment Program – Hire an entry-level worker through the SBWIB and the SBWIB will cover a large portion of the employee's wages for 10 months, for private and nonprofit organizations. Businesses provide the training.

- On-the-Job Training (WIOA program) Hire a permanent employee through the SBWIB and the SBWIB will reimburse a portion of the wages for up to 6 months for on-the-job training.
- Hire an Intern student workers are available for summer jobs and year-round part-time work.
- Apprenticeship programs This website describes apprenticeship programs for which this
 organization is a partner, particularly targeting the industries of advanced manufacturing,
 bioscience, and IT. https://www.sbwib.org/aero-flex

Hiring Support

- Screening/Assessment
- Job matching
- Work readiness support
- Skills testing
- Reference checks
- Referrals
- SouthBayTraining.org
- Apprenticeships
- Custom Services

https://www.southbay1stop.org

22. The Los Angeles County Department of Workforce Development, Aging and Community Services (WDACS)

WDACS and their America's Job Centers of California (AJCC) deliver no-cost workforce and economic development services to businesses. They offer business solutions and tools to businesses transitioning through various changes of the business cycle.

Financial Incentives & Tax Benefits:

- Advance Earned Income Tax Credit, Work Opportunity Tax Credit (for businesses hiring individuals from targeted groups such as those having high unemployment or having special employment needs)
- Tax credits for businesses located in an Enterprise Zone

www.workforce.lacounty.gov

23. Los Angeles County Economic Development Corporation (LAEDC)

LAEDC's Business Assistance Program team (BAP) offers confidential, free-of-charge consulting to large and small businesses and microenterprises, domestic and international businesses across all industry sectors and business types.

https://www.laedc.org

General Small Business or Other Business Type Development Support

24. Small Business Development Center (SBDC), El Camino College

The Los Angeles Regional Small Business Development Center (SBDC) Network is funded in part by the Small Business Administration (SBA). It provides individualized consulting and training to new and growing businesses. The El Camino College (Torrance) Business Training Center is a local host of the SBDC, and the College also provides workforce training, cybersecurity training, and special services to support small businesses in the California defense industrial base – in adopting Smart Manufacturing technologies and methodologies.

https://www.southbaysbdc.org

25. Governor's Office of Business and Economic Development (GO-Biz)

GO-Biz is intended to serve as California's single point of contact for economic development and job-creation efforts. GO-Biz offers a range of services to business owners including: attraction, retention and expansion services, site selection, permit streamlining, clearing of regulatory hurdles, small business assistance, international trade development, assistance with state government, and more.

The Small Business Unit provides small business assistance through inter-agency projects, informational workshops, and direct advocacy. It also maintains a comprehensive list of resources for small business technical assistance, financing, and state procurement.

The Innovation and Entrepreneurship unit is the state's primary point of contact for promoting California's innovation infrastructure, promoting long-term economic growth and facilitating job creation through innovation.

https://www.business.ca.gov

26. SCORE Long Beach/South Bay

SCORE, the nation's largest network of volunteer, expert business mentors, is dedicated to helping small businesses get off the ground, grow and achieve their goals. SCORE offers educational resources and services tailored to business stage. They also have a special program for women entrepreneurs.

https://longbeach.score.org

27. Small Business Majority

Small Business Majority is a national small business organization with a network of more than 85,000 small businesses and 1,500 business and community organizations. The organization provides resources to entrepreneurs and advocates for public policy solutions that promote inclusive small business growth. Along with educational resources are tools such as Venturize.org, a free online resource hub [guided search portal] for small business owners that need help accessing tools and information to sustain themselves and grow. Venturize was designed to offer unbiased education and resources to businesses to help them make informed financing decisions.

https://smallbusinessmajority.org/

28. New Economics for Women (NEW)

New Economics for Women (NEW) is a California-based nonprofit founded in 1985. NEW's mission is to build economic mobility, particularly for Latinas and their families, through wealth creation, housing, education, entrepreneurship, and civic engagement.

NEW Women's Business Center (NEW-WBC) offers mentorship and programs focused on particular industries such as restaurants, fashion, and entertainment as well as general business support. NEW-WBC is a collaboration with the U.S. Small Business Administration and the California Governor's Office of Business Economic Development (GO-Biz) with 3 locations – Canoga Park, Van Nuys, and Lancaster. In addition to offering small business-focused programs, workshops, resources, one-on-one consultations, and mentoring on-site and virtually, NEW-WBC also provides bilingual services and programs to the different communities to further support a wide range of women, BIPOC, and immigrant entrepreneurs. Part of their focus is to help ensure that women entrepreneurs are on the right track to economic independence through small business ownership.

https://www.new-wbc.org/programs/

29. FOUND/LA

FOUND/LA supports local entrepreneurs in the Greater Los Angeles area to help them build their business, purpose, and community.

The organization connects future and existing business owners – particularly women, immigrants, and minorities – with resources to help them succeed, including funding, educational tools, incubator-style workshops, unique mentorship opportunities, and a community of other local entrepreneurs.

Programs include the FOUND/LA Small Business Recovery Fund, a partnership with Pacific Community Ventures and TMC Community Capital. This grant program, put in place in response to the pandemic, is intended to help protect small businesses across Los Angeles County.

https://www.foundla.org/

30. Multicultural Women Executive Leadership Foundation

This organization's Multicultural Entrepreneur Program is comprised of three main components:

- Development of Multicultural Entrepreneurial Leadership skills through Harvard's "Authentic Leadership" curriculum.
- Integrated study of a comprehensive step-by-step systematic business growth model.
- A network of successful Multicultural Entrepreneurs to help business owners focus on their most critical business issues, and increase business capacity.

The Multicultural Entrepreneur Program is focused on unlocking the growth and job-creation potential of multicultural-owned small businesses in California through greater access to business education, financial capital, and business support services. The program is co-sponsored and hosted in partnership with the USC Marshall School of Business and the USC Latino Alumni Association. Tuition for this program is \$9800-\$10,800, depending on receipt of scholarship.

Other programs offered by this organization include:

- The Executive Leadership Program for Multicultural Women
- Women's Negotiation and Leadership Program

https://multiculturalwomenlead.org/

31. Operation Hope

Operation HOPE's Small Business Development program has a team of small business coaches to help identify and address issues in starting or growing a business (for entrepreneurs and for other new or existing small business owners), including assistance in developing a plan to help achieve business goals. Services include small business group education sessions, small group coaching, individual / personalized coaching, and facilitating connections to other resources, for mastering business basics to gaining access to funding and other resources. A specialized business assistance program, 1MBB, targets Black entrepreneurs or existing small business owners. Services are provided at no cost.

https://operationhope.org/how-we-help/small-business-development/

32. Minority Business Development Agency Business Center (MBDA)

The Los Angeles MBDA Business Center is managed and operated by the **Pacific Asian Consortium in Employment (PACE)**, a non-profit 501 (C)(3) organization. PACE provides extensive business training and direct technical assistance (TA), specialized procurement assistance, and partnership resources including business expansion support tools: financing, insurance, and bonding for MBEs, focusing on capacity building.

The Center has a focus on assisting Minority Business Enterprises (MBEs, generally having annual revenues of \$500,000 or more) with securing capital, competing for a contract, identifying a strategic partner, or becoming export-ready. Services include:

- Extensive business training and direct technical assistance (TA).
- Specialized procurement assistance.
- Partnership resources including business expansion support tools: financing, insurance, and bonding.

The Minority Business Development Agency also developed the Enterprising Women of Color (EWOC) program to focus on the fast-expanding minority women entrepreneur population.

https://www.mbda.gov/business-center/los-angeles-mbda-business-center

33. SoCal Veterans Business Outreach Center

The Veterans Business Outreach Center (VBOC) program provides entrepreneurial development services such as Boots to Business/Reboot, counseling, and referrals for eligible veterans owning or considering starting a small business. The Center also hosts workshops on topic such as government contracting.

Boots to Business/Reboot. This program combination can include evaluating business concepts, understanding business plan concepts, accessing start-up capital, learning market research techniques, and

additional technical assistance, including connecting with local small business resources, to launch a business.

https://socalvboc.org/

34. Pacific Community Ventures, Free Business Advising Program

The award-winning **BusinessAdvising.org** small business advising and mentoring platform matches business owners who are beyond the startup phase with pro bono business coaches and mentors who provide tailored, hands-on advising. All advice is completely free and completely confidential.

Pacific Community Ventures is a mission-driven lender with the intent to provide "fair and affordable" loans up to \$250,000 to California small businesses. Loans are also geared to help small business owners build back better from the COVID-19 pandemic, including the capital and advice needed to pivot or reopen safely and sustainably. Staff and financial advisors can help get small businesses' finances in order, and borrowers also get free access to a network of over 2,000 business advisors for help in areas such as marketing, business strategy, or sales.

https://www.pacificcommunityventures.org/small-business-services/business-advising/

35. OmniWorks Economic Development Corporation

OmniWorks Economic Development Corporation works to close the support gaps available for women and BIPOC entrepreneurs, by providing resources for realizing growth, with a focus on equity and cultural sensitivity -- moving solo-preneurs to employers, family businesses to resilient companies, and small firms to prime contractors.

The NEXT program prioritizes relationships, leverages existing ecosystem resources, and utilizes data and technology to scale impact. NEXT is a year-long, cohort-based, virtual program incorporating personalized business coaching, mastermind groups, vetted subject-matter-expert consultants, Expert Workshops, CONNECT networking events, and an online community where small business owners can meet and exchange ideas.

https://www.owedc.org/

36. Disaster Response Resources for California Businesses

Based on designations of a federal disaster area and state of emergency designation by California, a number of programs are available for disaster relief. For businesses:

- Federal assistance includes low-cost loans to cover uninsured property losses for individuals and business owners (and other programs are also available).
- Through the SBA Disaster Declaration, Emergency Injury Disaster Loans (EIDL) are available through the SBA Small Business Center network, to supplement working capital for small businesses.

37. Women Founders Network

Women Founders Network is a 501(c)(3) nonprofit organization that provides education on entrepreneurship and investing to women and girls.

The annual Fast Pitch competition provides access to capital, visibility, and mentoring for female founders. Entrants can compete in three categories:

- Tech/Tech-enabled.
- B2B or B2C company that relies on significant development of technology to deliver the product or service.
- Consumer/CPG/Other Non-tech (any product sold to consumers as physical units or consumer focused media/content, e-commerce sites, or services provided to consumers).

The Startup Fundamentals webinar series offers practical information and advice for entrepreneurs.

Two programs are intended to inspire the next generation of women entrepreneurs and investors: The Due Diligence Analyst program for college women, and the Junior Venture Capitalist program for young women in grades 9-12.

https://www.womenfoundersnetwork.org/

Focus on Networking for Entrepreneurs

38. National Association of Women Business Owners (NAWBO) Los Angeles

This organization features events, a video library, and a newsletter.

39. 1 Milliom Cups

This nationwide organization, with local "communities," including Long Beach, functions as a structured networking platform for entrepreneurs, with regular programs for attendees, and other commitments to a networking system as a platform for learning through association with others.

https://www.1millioncups.com/s/

PROGRAM SUMMARIES

Located in Carson/Outside Carson – Organization	Nr	Geog. Focus	Functional Focus, Entrepreneurial Processes	Special Groups	Notes
CARSON					
Business Development					
Small Business Grant Program	1	Carson	Covid recovery, general economic relief	Covid-impacted	1-time, matching \$
Commercial Façade Improvement Program	2	Specific streets	Property improvements		
Carson EIFD	3	Designated area of over 1700 acres	Tax increment financing to support qualifying improvements, new development, etc.		
Workforce-Related					
Carson One-Stop Career Center, Business Solutions for Employers	4	Carson	Hiring support for businesses and job training; job- finding for workers		
WOTC Tax Credit			Tax breaks for using targeted worker populations	Specific worker types	
Rapid Response Program			Support for downsizing businesses and their workers		
Organizational Referrals on City of Carson Businesses webpage	5		Links to a wide range of business support resources		
OUTSIDE CARSON					
Incubators, Accelerators, Training					
CSUDH Innovation Incubator	6	So. Bay	Startup plus Main Street businesses, support in numerous programs, through education and other resources	Program for poverty alleviation; entrepr. With diverse backgrounds	Also serves micro- entrepr. and students
South Bay Entrepreneurial Center (SBEC)	7	So. Bay	Physical space plus educational programs & mentors, with technical and general business focus; tech transfer in defense/aerospace and other industries		
California Manufacturing Technology Consultants (CMTC)	8	CA	Technical guidance, incentives; review of business practices	Manuf. firms	

Located in Carson/Outside Carson – Organization	Organization Nr Geog. Focus Functional Focus, Entrepreneurial Processes		Special Groups	Notes	
California Office of the Small Business Advocate (CalOSBA), Los Angeles Regional SBDC Network Lead Center		CA	Advisory services for all phases of business development	Underserved communities, thru iHub ²	Includes micro- businesses
Idea Lab	10	(Based in Pasadena)	Tech incubator; take selected firms from idea to market		
LA CleanTech Incubator (LACI)	11	Some prog. for LA city	Cleantech; accelerator programs		
StartUp Boost LA	12		Early stage tech; pre-accelerator services		
Focus on Financial Assistance					
Financing Assistance, SBA Loans	13	N/A	Business loans (7a) for full range of uses, from working capital to real estate		
Advantage CDC Certified Development Corporation	14	CA (So. Bay)	SBA 504 loans, for uses such as real estate and equipment		
Los Angeles County Economic Opportunity Grant (EOG)	15		ARPA dollars, for Covid-impact recovery		Micro- entrepr. also
L.A. County Recycling Marketing Development Zone (RMDZ)	16	Through-out CA	Waste stream processing; support including loans, TA, product marketing	Ind. Cluster-specific	
Foreign Trade Zone (FTZ)	17	Port regions	Incentives in form of exempted/deferred tariffs	Exporters/ importers	
California Grants Portal	18	CA	Search system for finding grants and loans		
CAMEO	19	CA	Support in human, technical, capital resources, through courses, other programs	Very small businesses	Micro- entrepr. also
Grid 110	20	LA County	Programs for primarily early business stages; funding guidance and (limited) funding	Programs for underserved	
Workforce Development Support					
South Bay Workforce Investment Board 21 So. Bay					
Career Services (Resident Workers)			Help workers find and prepare for jobs		
Business Services			Help businesses recruit, train workers; subsidized workers through some programs	Apprentice- ship/intern programs	

Located in Carson/Outside Carson – Organization	Nr	Geog. Focus	Functional Focus, Entrepreneurial Processes	Special Groups	Notes
The Los Angeles County Department of Workforce Development, Aging and Community Services (WDACS)	22	LA County	Incentives tied to workforce, for businesses at various stages		
Los Angeles County Economic Development Corporation (LAEDC)	23	LA County	Focused consulting, for firms of all sizes		
General Small Business or Other Busines	s Typ	e Development	Support		
Small Business Development Center (SBDC), El Camino College	24	LA region	Consulting and training targeting workforce and technical assistance; connection to SBA		Programs for CA defense industries
Governor's Office of Business and Economic Development (GO-Biz)	25		Clearinghouse of programs/resources; workshops; business advocacy		Innovation unit
SCORE Long Beach/South Bay	26	So. Bay	Services tailored to businesses at all stages, also involving mentors	Programs for women	
Small Business Majority	27	National	Guided-search clearinghouse of resources for businesses; educational programs		
New Economics for Women (NEW)	28	CA	Entrepreneurship training as one of several life skills training programs	Latinas/BIPOC/immi grants	
FOUND/LA	29	LA County	Full range of business support resources, plus "community" for networking		
Multicultural Women Executive Leadership Foundation	30	CA (offered globally)	Tuition-based entrepreneurial training, plus networking	Multicultural women	
Operation Hope	31	National	Coaching in starting and growing businesses, through mentors and other means; group plus individual training	Programs for black entrepreneurs	
Minority Business Development Agency Business Center (MBDA)	32	Our County	Business training, TA, business expansion support, and procurement assistance	Programs for women of color	
SoCal Veterans Business Outreach Center	33	So. CA	Startup support through education and TA	Veterans	
Pacific Community Ventures, Free Business Advising Program	34	CA	Business advising and mentoring with pro bono coaches & mentors (plus network of others); loan programs, and financial advice		

Located in Carson/Outside Carson – Organization	Nr	Geog. Focus	Functional Focus, Entrepreneurial Processes	Special Groups	Notes
OmniWorks Economic Development Corporation	35	LA County?	Addresses business-support gaps for women/BIPOC; year-long training program	Women/BIPOC	
Disaster Response Resources for California Businesses (from storm systems in spring of 2023)	36	CA – selected counties incl. LA	With SBA Disaster Declaration, loans (EIDL), to supplement working capital. Other federal assistance includes low-cost loans for uninsured property losses		
Women Founders Network	37	(Based in Santa Monica)	Education plus network system, for female entrepreneurs and students	Youth/ students	
Focus on Networking for Entrepreneurs					
National Association of Women Business Owners (NAWBO) Los Angeles	38	National	Events, a video library resource, and a newsletter	Women	
1 Million Cups	39	National	Structured networking platform for entrepreneurs, with meetings, etc.		

Appendix B:

Profile of University-Based Resources Relevant to EDSP



Prepared for:



PROFILE OF UNIVERSITY-BASED RESOURCES RELEVANT TO CARSON'S ECONOMIC DEVELOPMENT STRATEGIC PLAN

Prepared for:

City of Carson

June 16, 2023

PREPARED BY:



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Introduction

This report profiles a range of university-based programs that are potential partnership resources for the City of Carson's economic development efforts. Whereas the list includes relevant programs for colleges and universities throughout southern California, particular attention is given to facilities and programs based at California State University, Dominguez Hills (CSUDH). The emphasis on CSUDH reflects the unique advantages and opportunities Carson has by virtue of being host to a state university campus (which very few California communities of Carson's size have).

Potential University Connections to EDSP

There are five distinct ways in which the City of Carson can leverage university partnerships to support implementation of the City's Economic Development Strategic Plan (EDSP):

- 1. Workforce development interface (education/training resources);
- 2. Entrepreneurial development programming (training, networking, startup resources, incubator facilities and services, etc.);
- 3. Support for targeted industry clusters (networking, workforce training/recruitment resources, lobbying/advocacy roles);
- 4. Image enhancement related to business development, talent retention/attraction and overall quality of life (positioning Carson as a premiere place to live, work, invest and pursue higher education); and
- 5. Placemaking (leveraging campus facilities as community amenities and activity centers).

As indicated on the following table, some of the above functions would potentially apply to university partnerships throughout the region, whereas some are very specific/unique opportunities related to CSUDH.

Program Category/Connection to Carson	Potential Connections to Regional Colleges and Universities	Unique Opportunities Related to Presence of CSUDH in Carson
Workforce development	X	X
Entrepreneurial development	X	X
Support for targeted industry clusters	X	X
Image enhancement		X
Placemaking		X

Regional Matrix (University Programs Potentially Relevant to Carson's Industry Clusters)

Table B-1 provides brief profiles (and links to associated websites) for regional university-based programs that are potentially relevant to Carson's EDSP. Given that the overall EDSP is organized around a set of high-priority industry clusters (i.e., the City's target industries), TNDG has prepared a matrix (next page) that indicates the potential relevance of selected programs to each of Carson's "candidate" clusters.

UNIVERSITY AND RELATED PROGRAMS IN RELATION TO CARSON'S CANDIDATE CLUSTERS

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	TARGET CLUSTERS AND UNIVERSITY AND RELATED PROGRAMS	General entrepreneurial support	Local Logistical Services	Local Education and Training	Local Household Goods and Services	Aerospace Vehicles and Defense	Business Services	Construction Products and Services	Distribution and Electronic Commerce	Downstream Chemical Products	Education and Knowledge Creation	Environmental Services	Food Processing and Manufacturing	Oil and Gas Production and Transportation	Performing Arts	Transportation and Logistics	Vulcanized and Fired Materials	Information Technology and Analytical Instr.	Insurance Services	Marketing, Design, and Publishing	Music and Sound Recording	Video Production and Distribution
	University Programs																					
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CSU Long	B.4. CSULB-The Beach Women in Engineering Conference																				ш	
CSI	B.5. CSULB-Center for Contemporary Ceramics (CCC)																					
	C.1. CSU Northridge-Institute for the Advancement of Educational Studies																					
	and Programs, Michael D. Eisner College of Education																	ľ			Ш	
	D.1. UC Irvine-Beall Applied Innovation.																					
Α	E.1. UCLA-Ways to Engage with UCLA Research																				Ш	
UCLA	E.2. UCLA-Technology Development Group																				Ш	
_	E.3. UCLA-Incubators/Accelerators (links on UCLA webpage)																				ш	
r)	F.1. Caltech-Technology Transfer & Corporate Partnerships																				ш	
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	California Manufacturing Technology Consultants (CMTC)																				Ш	ш
	2. Cal. Office of the Small Business Advocate (CalOSBA), LA SBDC																				Ш	
	California Dream Fund																				ш	ш
ms	Inclusive Innovation Hub (IHub ²) Program																					
Other Programs	3. Idea Lab																					
Prc	4. LA CleanTech Incubator (LACI)																					
her	5. L.A. County Recycling Marketing Development Zone (RMDZ)																					
ot	6. New Economics for Women (NEW)																					
	7. Multicultural Women Executive Leadership Foundation																				Ш	Ш
	8. Women Founders Network																	<u> </u>			Ш	Щ
	9. National Association of Women Business Owners (NAWBO), LA																					

Recommended Next Steps for Expanding City's Collaboration with CSUDH

The following topics represent potential areas of focus for an expanded partnership between the City and CSUDH:

- Increase the City's financial support of the CSUDH-run "Carson Academy" (business training services) to expand numbers of participants/businesses served.
- Through CSUDH, establish regional partnerships (with other southern California universities) to provide full-service incubation/acceleration services to Carson-based startups (beyond current focus on CSUDH student micro enterprises).
- Expand internship opportunities (focus on partnerships with local firms in priority industry clusters).
- Partner with CSUDH on feasibility study for performing arts center.
- Coordinate with CSUDH on the planning process for the potential "live entertainment district" described elsewhere in the EDSP documentation.
- Define opportunities to collaborate with CSUDH on the development of student/faculty housing (within the context of the university's master planning process and the City's Housing Element objectives).

Table B-1. Profile of Relevant Programs of Regional Colleges and Universities (from online research)

UNIVERSITY PROGRAMS

A. California State University Dominguez Hills

A.1. CSUDH-California Black Women's Think Tank. Gov. Gavin Newsom signed a budget trailer bill approving \$5 million in funding to the California State University at Dominguez Hills (CSUDH) to house the California Black Women's Think Tank. The California Black Women's Collective (CBWC) Empowerment Institute will be a founding partner in the development of the policy research institution. CBWC, in partnership with Black Women Organized for Political Action (BWOPA), is a coalition of more than 1,500 Black Women leaders throughout California. The coalition utilizes Black women's expertise and collaboration skills in political, community, and social justice activism to amplify their voices, knowledge, and issues throughout the state. The CBWC's goal for the Think Tank is for it to be "relevant and accessible" in providing an "independent, academic, research entity that provides a rigorous analysis approach to policy," CBWC explained in a written overview. The Think Tank is an effort to serve as a research institution and resource for lawmakers, elected officials, business leaders, and advocating organizations willing to impact sustainable and scalable change [article edited for brevity].

Antonio Ray Harvey, California Black Media. "Newsom Signs Legislation Funding Nation's First Black Women's Think Tank." *Los Angeles Sentinel.* September 15, 2022.

https://www.cablackwomenscollective.org/about

A.2. CSUDH-California Black Women's Collective, Empowerment Institute. Through partnerships with corporate, social, not-for-profit, and advocacy entities, the Empowerment Institute develops programs and initiatives that have a meaningful impact on dismantling systemic social, economic and physical barriers. The purpose of the Empowerment Institute is to:

- Serve as the anchor organization for the CA Black Women's Think Tank housed at California State University,
 Dominguez Hills;
- Elevate our voice, power, and participation to secure adequate representation and reparations;
- Amplify our issues and priorities that are vital to elevate Black Women [to] organize and leverage;
- Utilize our extensive talent, influence, networks, and brilliance into areas of collective alignment;
- Eliminate the racist and sexist attacks on Black Women and Girls; and
- Elevate the agenda and collective power of Black Women locally and nationally to secure the social and economic safety net.

https://www.cablackwomenscollective.org/empowermentinstitute

A.3. CSUDH-Center for Innovation in STEM Education (CISE). Since 2015, CISE has engaged over 20,000 K-12 students and prepared and trained thousands of pre-service and in-service teachers, parents, and community members. CISE was designed to bring STEM to the forefront of K-16 education through leadership and service. CISE has developed innovative undergraduate, credential, and graduate programs, and we are continuously forming multiple partnerships with high-need schools, school districts, community colleges and private sector and industry partners. CISE is committed to bringing STEM to all K-12 students and to offering undergraduate students and future teachers the opportunity to make a difference where they are needed most. The campus specifically recognizes the crucial need for STEM initiatives, aiming to develop underserved students' skills and knowledge in critical science, technology, engineering and mathematics (STEM) areas. The list of programs is available at: https://www.csudh.edu/cise/

A.4. CSUDH-Innovation Incubator

The Innovation Incubator is a multi-faceted hub for services supporting entrepreneurship and innovation, with a unique combination of formal and informal programming intended to give students, staff, faculty, alumni, and the local community collaborative access to mentorships, education-based programming, dynamic events, and other value-added services. Both startups and main street businesses are targeted for assistance, including micro-entrepreneurs, and traditionally disadvantaged populations and communities are another area of focus.

The one-of-a-kind Catapult™ program offers startups access to specialty teams of students and volunteers that address the targeted needs of the startups under the supervision of industry experts. The projects are structured as microinternships for students and generally run 6-8 weeks.

In addition to the Catapult program, other programs include:

- Innovation Leadership Speaker Series. (high-profile innovative leaders from the community, nation, and internationally)
- **Transform LA.** (support to local high school students through educational workshops, seminars, and access to the entrepreneurial ecosystem at and around the CSUDH campus)
- **Alpha Start.** (two intensive Friday sessions to empower entrepreneurs with hands-on training through immersive entrepreneurial experience)
- **GrowthBook.** (Combining the wisdom of classic sales training (branded) leaders with the modern-day efficiencies of high-tech sales approaches into a sales training program focused specifically on startups and their early sales needs. Features one-of-a-kind audio from industry experts)
- **Student Startup Fund.** (a pool of philanthropic funds designed to support student entrepreneurs with microgrants for their startup)
- **LACEI.** (The Los Angeles Community Entrepreneurship Initiative (LACEI) is a special program based upon the belief that entrepreneurship can, and should, play a role in poverty alleviation. Program functions as a chapter of the University of Notre Dame's Urban Poverty and Business Initiative (UPBI), and takes the form of an 11-month program dedicated to the alleviation of poverty through business ownership)
- **10 x 10 Venture Challenge.** (Students are challenged to work 10 hours per week for 10 weeks to see if they can earn \$1,000, with Innovation Incubator providing training, support, and coaching)
- JAM Zone. ("Just Ask a Mentor" Zone; informal one-on-one sessions)
- Impact Founders Challenge. (Annual program focused on identifying, assisting, and growing the businesses of founders of scalable and/or impact businesses from diverse backgrounds. Three phases throughout a year: 1) Spring Pitch Competition, 2) Summer Mentoring (customized coaching), 3) Progress Mentoring & Ongoing Launch Support)

https://incubator.csudh.edu/

B. California State University Long Beach

B.1. CSULB-Advanced Media Production. The Advanced Media Production (AMP) Center is housed on campus, and known for producing high-quality, award-winning television shows and video programs. Equipped with high-tech production and post-production facilities, AMP conducts programming and operational support for the campus educational cable TV channel known as Beach TV. AMP also provides production and media distribution services for the College of Professional and Continuing Education (CPaCE) and its campus partners; and interfaces with external clients.

AMP Facilities and Services:

- A High-Definition TV production studio and control room.
- A "green screen" Chroma key space for single-camera uses, with "Virtual set" software also available.
- A multifaceted digital post-production room, complete with a sound-proofed narration recording booth; software utilization includes Adobe Creative Cloud.
- High-Definition field cameras and camera kits for field documentary production and recording.
- A Digital Storage Area Network that includes massive video data storage for post-production purposes, as well as video program archiving and program play-out for Beach TV.

https://www.cpace.csulb.edu/advanced-media-production

B.2. CSULB-The John and Helen Apostle Enterprise Lab & Incubator. Open to all CSULB students, the John and Helen Apostle Enterprise Lab and the Apostle Incubator provide interdisciplinary and inclusive entrepreneurial learning experiences. The Lab is a classroom experience that immerses students in the theory and practice of new business creation, while the Incubator is a non-credit activity that provides hands-on, applied opportunities that connect the university's rich talent pipeline to the greater Long Beach entrepreneurial community.

What to Expect:

- Study Entrepreneurship with students from across the university
- Work in cross-college teams on an innovative, entrepreneurial project
- Connect with guest speakers, mentors, and advisors from the Long Beach business and entrepreneurial community
- Learn by applying knowledge to projects not just exams

https://www.csulb.edu/college-of-business/apostle-enterprise-lab

B.3. CSULB-Center for International Trade & Transportation. The Center for International Trade and Transportation (CITT) is dedicated to delivering education programs, innovative research, and community outreach in the area of goods movement. CITT is the Long Beach home for four major research centers: METRANS Transportation Center, a U.S. Department of Transportation-designated university transportation center; the U.C. Davis-led National Center for Sustainable Transportation; MetroFreight, a Volvo Research and Education Foundations Center of Excellence in Urban Freight based at the University of Southern California; and the Federal Highway Administration's Southwest Transportation Workforce Center (SWTWC) covering eight states—California, Arizona, Nevada, New Mexico, Utah, Colorado, Oklahoma and Texas. The Center's research portfolio features policy analysis in the areas of trade and transportation, as well as workforce development. Outreach programs include educational forums, including the nationally recognized State of the Trade and Transportation Town Hall series, research conferences such as the International Urban Freight Conference, and media-based efforts including podcasts and newspaper columns that engage the broader community in the discussion surrounding international trade and transportation. CITT's education programs include the award-winning Global Logistics Professional program and the Marine Terminal Operations Professional designation, the only program of its kind in the country.

https://www.cpace.csulb.edu/center-for-international-trade-and-transportation

B.4. CSULB-The Beach Women in Engineering Conference will be back for another year! [2023 session held in April] – join us to learn how women are impacting the world through engineering and computer science. Come celebrate the sisterhood and be inspired from trailblazers in the field! Events include:

- Technical Presentations from industry experts.
- Professional Panels discussing soft skills and personal development.
- Career Panels to explore career options for your degree.
- Coaching Circles for advice from industry professionals.
- Speed Networking to jumpstart your professional network.

https://www.csulb.edu/college-of-engineering/beach-women-engineering-conference-2023

B.5. CSULB-Center for Contemporary Ceramics (CCC) is a combined entity and site committed to the mission of fostering exchange, inquiry, creative production, and learning beyond the curriculum among CSULB Ceramic Arts faculty and a highly diverse group of students, visiting artists and scholars, and artists in residence, with a goal of inspiring and empowering all participants to expand the limits of their own work to the benefit of both the participants in our community and the broader community and field of contemporary ceramics.

https://www.csulb.edu/college-of-the-arts/center-for-contemporary-ceramics

C. California State University Northridge

C.1. CSU Northridge-Institute for the Advancement of Educational Studies and Programs, Michael D. Eisner College of Education. The Institute will promote professional development opportunities for College alumni and other educators in the region and will facilitate collaboration with outside organizations that enhance the College mission. Through integration of the College's scholarly activities and community services with the activities and research of relevant partners and professionals in the community, the Institute will advance effective educational practice and integrate new methodological approaches into the College curriculum, to strengthen teaching and learning. As such, The Institute will be a primary vehicle to aid in maintaining College research and programming at the forefront of educational innovation.

https://www.csun.edu/eisner-education/institute-advancement-educational-studies-and-programs

D. UC Irvine

D.1. UCI-Beall Applied Innovation. This program/facility has multiple functions: to convert campus research into technology, which can involve partnering with researchers and industry to move UCI knowledge and discoveries into products and markets. In that sense, UCI Beall Applied Innovation helps connect both new and established companies with leading-edge ideas and technology developed in the R&D environment of UCI. Four core units within UCI Beall Applied Innovation are involved in redefining the path of UCI entrepreneurship education, the mind-set of UCI researchers, and the University connection with industry and community:

- Research Translation Group, to take inventions to market.
- Enterprise Collaborations Group is the "front door" by which entrepreneurially minded staff and others involved in emerging research and technologies can connect with the center.
- New Ventures Group creates and provides programs and resources to enhance support for current and future generations of innovators and entrepreneurs.
- The Cove at UCI was built specifically to be a physical location for entrepreneurial connections for UCI and the community, and is designed to accelerate innovation. Resources include a variety of event and meeting space options with state-of-the-art technology and services, offices and workstations, and prototyping labs.

https://innovation.uci.edu/

E. UCLA

E.1. UCLA-Ways to Engage with UCLA Research:

- Engage in Research as a UCLA or Visiting Student.
- Share an Opportunity.
- Sponsor Research or Identify Potential Commercialization Opportunities.
- Participate in a Clinical Trial.
- Find a Subject Matter Expert.
- Read About UCLA Research.
- Give to UCLA Research.

https://www3.research.ucla.edu/engage

E.2. UCLA-Technology Development Group serves as a campus-wide gateway to Innovation, Research and Entrepreneurship. The Group's mission is to:

- Promote UCLA innovation, research, teaching and entrepreneurship to benefit society.
- Create economic value to support UCLA's scholarly and educational missions and the State of California.
- Lead UCLA's research community to bring innovation to market.

The Group's collaboratively (as well as internally) oriented scope of activities includes:

- Commercially evaluating new technologies.
- Determining patentability and commercial value.
- Prosecuting patents.
- Marketing and licensing inventions.
- Facilitating UCLA faculty startups.
- Engaging industry to facilitate research collaboration.
- Negotiating license agreements and Material Transfer Agreements.

https://tdg.ucla.edu/

E.3. UCLA-Incubators/Accelerators (links on UCLA webpage)

- Anderson Venture Accelerator
- ExpertDojo
- Magnify at CNSI
- LA Biolabs
- Lab Launch
- Pasadena Bio Collaborative Incubator
- Preccelerator
- Scale LA
- Startup UCLA

https://hub.tdg.ucla.edu/

F. Caltech: The California Institute of Technology

- **F.1. Caltech-Technology Transfer & Corporate Partnerships.** Our mission is to drive the transfer of scientific and engineering knowledge created by our researchers to maximize societal impact by developing partnerships with industry through the creation of new ventures, collaborations with corporations, and transfer of intellectual property while nurturing an entrepreneurial environment. Areas of involvement:
- Corporate Partnerships
- New Venture Creation & Entrepreneurship
- Patents & Licensing

https://ottcp.caltech.edu/

- **F.2. Center for Autonomous Systems and Technologies (CAST).** At CAST, researchers from Caltech's Division of Engineering and Applied Science (EAS), Division of Geological and Planetary Sciences (GPS), and the Jet Propulsion Laboratory (JPL) collaborate to create the next generation of autonomous systems, advancing the fields of drone research, autonomous exploration, and bio-inspired systems. Researchers will continue pioneering work on technologies ranging from prosthetic legs that use machine learning to flying, self-driven ambulances. https://cast.caltech.edu/
- **F.3. Caltech-The Resnick Sustainability Institute (RSI)** advances global sustainability through transformational science, engineering, and education. We prioritize research across campus that addresses challenges and opportunities associated with climate change and the stewardship of natural resources. The fundamental insights gained are directed towards implementation and scale-up for real-world impact. RSI research is broadly focused on four interconnected initiatives, where Caltech researchers are poised to provide uniquely impactful science and technology solutions:
- **Sunlight to Everything:** Supporting science and engineering to make materials and build systems that harness sunlight while reducing greenhouse gas emissions, waste, and facilitating carbon drawdown.
- Climate Science: Supporting science and engineering to diagnose, adapt to, and mitigate against climate change.
- Water Resources: Supporting science and engineering to improve our ability to predict, manage, and improve availability of fresh water.
- **Ecology and Biosphere Engineering:** Supporting science and engineering to understand and sustain the biosphere. https://resnick.caltech.edu/

G. Chapman University

G.1. Chapman University's Launch Labs is part of the Ralph W. Leatherby Center for Entrepreneurship and Business Ethics. Launch Labs is an incubator for teams in the development and startup phases, meaning teams are pre-revenue (that is, has not yet earned revenue from your product or service). Progression through the other phases is facilitated by external business funding. Teams in the Launch Labs participate for a maximum of two semesters and must be led by – and have a majority of team members comprised of -- Chapman University undergraduate or graduate students, faculty, staff or alumni from any Chapman University school or college, targeting any industry, at any stage including just having an idea for a product or service.

https://www.chapman.edu/research/institutes-and-centers/leatherby-center/index.aspx

H. Los Angeles Film School

H.1. L.A. Film School is located in Hollywood, California, and is an ACCSC Accredited institution offering an immersive curriculum that integrates technical knowledge with artistic exploration and creativity, taught by industry-experienced professionals. The school offers on-campus degrees in: Animation · Audio Production · Entertainment Business · Film Production · and Music Production; and online degrees in: Animation · Audio Production · Entertainment Business · Digital Filmmaking · Graphic Design · Media Communications · Music Production · and Writing for Film & TV. https://learn.lafilm.edu/

J. Claremont McKenna

J.1. Claremont McKenna-The Roberts Environmental Center conducts environmental research and analysis, and promotes understanding of the complex issues of environmental protection, economic growth and technological change. The Roberts Center owns a state-of-the-art computer laboratory operating geographical information system (GIS), data modeling, simulation modeling, database management, and statistical analysis software. The Center takes on environmental consulting assignments when they serve an academic purpose, utilizing students and professional staff drawn from the faculty of the Claremont Colleges and the Southern California area. https://rec.cmc.edu/

K. Cal Poly Pomona

K.1. Cal Poly Pomona-Center for Antimicrobial Research & Food Safety (CARFS) was established to meet corporate demands on food safety along the farm-to-table continuum. The Center's purpose is research involving microbial foodborne pathogens of public health and economic significance, with an emphasis on pathogens associated with animal foods (milk, meat and meat products), produce, and environmental samples (water, soil, manure). Research focuses on isolation, identification and characterization of pathogens using conventional and molecular-based methods (PCR/qPCR, recombinase polymerase amplification, genetic fingerprinting, next generation sequencing) and development of on-farm and processing-plant based interventions. Future research will also target discovery and application of natural antimicrobial agents. Emergence of new foodborne pathogens, increased consumer awareness and federal recommendations on food safety/public health issues redefine the rules of microbial pathogen quality control in the food industry. CARFS was established to meet these corporate demands. The Center's on-farm food safety goals are linked to regional and national Food Safety and Food Protection efforts. Current research efforts emphasize multi-disciplinary and multi-institutional collaborative research efforts. https://www.cpp.edu/agri/centers-and-more/carfs.shtml

K.2. Cal Poly Pomona-Lyle Center for Regenerative Studies. The vision for the Lyle Center is for it to be recognized for its collective impact toward a sustainable future, convening diverse groups of students, academic experts, policy makers, and community members committed to catalyzing pro-environmental change. Within this vision, a sustainable and healthy future is best achieved through the development of ecological, social, and economic systems that regenerate, enabling communities to provide for the future as well as the present. https://www.cpp.edu/env/lyle/index.shtml

RELATED MATERIAL FROM EARLIER EDSP RESEARCH TASKS:

Business Incubators/Accelerators, Including Those With a Specific Technological Focus

1. California Manufacturing Technology Consultants (CMTC)

CMTC, a private non-profit corporation, was established to provide consulting services to small and mid-size manufacturers in Southern California. CMTC describes its mission as follows:

- We are recognized as the only organization exclusively servicing the manufacturing sector.
- We have the capability to deliver a broad array of services from the production floor to the discovery of new products and markets.
- We offer incentives to proactive manufacturers who want to grow their businesses.
- We deploy third-party surveys to measure customer impact and value.

California Manufacturers Advantage® (CMA) is a program designed for small and medium-sized manufacturers providing a "fresh review of your business," bringing technical expertise and leadership to identify and solve problems.

https://www.cmtc.com

2. California Office of the Small Business Advocate (CalOSBA), Los Angeles Regional SBDC Network Lead Center

California Dream Fund. A training and microgrant program for California entrepreneurs. The training, provided by a partner such as the LA SBDC, is required in order to qualify for a micro grant.

https://smallbizla.org/

Inclusive Innovation Hub (IHub²) Program. CalOSBA, as part of the Governor's Office of Business and Economic Development (GO-Biz), is the entity behind all be a revised iHUB program (iHub²), 10 centers that will have the role of accelerating technology and science-based firms in underserved regions and communities, including women and people of color. iHub² is designed to serve as a bridge between local innovation ecosystems and state technical assistance, resources, and networks to support the success of the program.

https://www.grants.ca.gov/grants/inclusive-innovation-hubs-ihub2/

3. Idea Lab

This technology-oriented incubator has a particular focus on four tech areas: AI/Robotics, Consumer/Commerce, Enterprise, Clean Energy/Environment.

https://idealab.com/

4. LA CleanTech Incubator (LACI)

LACI has multiple programs for entrepreneurs with a cleantech focus, some of which are restricted to City of Los Angeles-based companies (Founders Business Accelerator). Through its Innovators & Incubation Programs, LACI is focused on accelerating climate action, specifically in the areas of clean energy, zero emissions transportation, and smart and sustainable cities.

https://laincubator.org/innovators-incubation/

5. L.A. County Recycling Marketing Development Zone (RMDZ)

The Recycling Market Development Zone (RMDZ) program combines recycling with economic development to fuel new businesses, expand existing ones, create jobs, and divert waste from landfills. This program provides attractive loans, technical assistance, and free product marketing to businesses that use materials from the waste stream to manufacture their products and are located in a zone. The local zone includes Carson and 19 other cities in Los Angeles County, including unincorporated areas. The loan program can fund a maximum of 75% of costs directly attributed to an eligible project up to a maximum of \$2 million whichever is less. For real estate purchases, only \$1 million is available. The interest rate is 4.0 percent (as of the date of this report).

Assistance is provided by local zone administrators. CalRecycle also offers free product marketing through the Recycle Store: http://www.calrecycle.ca.gov/RecycleStore/

The following materials are eligible and are a priority of CalRecycle to develop sustainable markets:

- Agricultural waste
- Construction and demolition debris
- Food waste
- Green waste
- Paper
- Plastic

Waste automotive tires

Projects are likely to qualify if similar to these:

- Waste Prevention Projects
- Reuse Projects
- Recycling Projects
- Conversion Technology and Biomass Projects

https://dpw.lacounty.gov/epd/RMDZ/index.cfm

6. New Economics for Women (NEW)

New Economics for Women (NEW) is a California-based nonprofit founded in 1985. NEW's mission is to build economic mobility, particularly for Latinas and their families, through wealth creation, housing, education, entrepreneurship, and civic engagement.

NEW Women's Business Center (NEW-WBC) offers mentorship and programs focused on particular industries such as restaurants, fashion, and entertainment as well as general business support. NEW-WBC is a collaboration with the U.S. Small Business Administration and the California Governor's Office of Business Economic Development (GO-Biz) with 3 locations — Canoga Park, Van Nuys, and Lancaster. In addition to offering small business-focused programs, workshops, resources, one-on-one consultations, and mentoring on-site and virtually, NEW-WBC also provides bilingual services and programs to the different communities to further support a wide range of women, BIPOC, and immigrant entrepreneurs. Part of their focus is to help ensure that women entrepreneurs are on the right track to economic independence through small business ownership.

https://www.new-wbc.org/programs/

7. Multicultural Women Executive Leadership Foundation

This organization's Multicultural Entrepreneur Program is comprised of three main components:

- Development of Multicultural Entrepreneurial Leadership skills through Harvard's "Authentic Leadership" curriculum.
- Integrated study of a comprehensive step-by-step systematic business growth model.
- A network of successful Multicultural Entrepreneurs to help business owners focus on their most critical business issues, and increase business capacity.

The Multicultural Entrepreneur Program is focused on unlocking the growth and job-creation potential of multicultural-owned small businesses in California through greater access to business education, financial capital, and business support services. The program is co-sponsored and hosted in partnership with the USC Marshall School of Business and the USC Latino Alumni Association. Tuition for this program is \$9800-\$10,800, depending on receipt of scholarship.

Other programs offered by this organization include:

- The Executive Leadership Program for Multicultural Women
- Women's Negotiation and Leadership Program

https://multiculturalwomenlead.org/

8. Women Founders Network

Women Founders Network is a 501(c)(3) nonprofit organization that provides education on entrepreneurship and investing to women and girls.

The annual Fast Pitch competition provides access to capital, visibility, and mentoring for female founders. Entrants can compete in three categories:

- Tech/Tech-enabled.
- B2B or B2C company that relies on significant development of technology to deliver the product or service.
- Consumer/CPG/Other Non-tech (any product sold to consumers as physical units or consumer focused media/content, e-commerce sites, or services provided to consumers).

The Startup Fundamentals webinar series offers practical information and advice for entrepreneurs. Two programs are intended to inspire the next generation of women entrepreneurs and investors: The Due Diligence Analyst program for college women, and the Junior Venture Capitalist program for young women in grades 9-12.

https://www.womenfoundersnetwork.org/

Focus on Networking for Entrepreneurs

9. National Association of Women Business Owners (NAWBO) Los Angeles

This organization features events, a video library, and a newsletter.

CARSON'S "CANDIDATE" INDUSTRY CLUSTERS

Cluster	Narrative Description	Key Component Industries								
Group 1 – Carson's Existing Core and Emerging Strengths										
Local Logistical Services	Establishments that offer local passenger transportation and local transportation of freight and goods, including moving companies and couriers. This cluster also includes local storage facilities, truck and RV leasing, and passenger car rental services.	 Couriers and Express Delivery Services Bus and Other Motor Vehicle Transit Systems Specialized Freight (except Used Goods) Trucking, Local 								
Local Education and Training	Local educational institutions. These include schools for elementary and secondary education, technical and vocational training, fine arts instruction, as well as automobile driving.	Elementary and Secondary Schools (Local Government) Elementary and Secondary Schools								
Local Household Goods and Services	Local establishments and services designed to support individual households such as landscape services, electronics repair, as well as retail stores for appliances, hardware, gardening, and furniture.	Landscaping ServicesFurniture Stores								
Aerospace Vehicles and Defense	Establishments that manufacture aircraft, space vehicles, guided missiles, and related parts. This cluster also contains firms that manufacture the necessary search and navigation equipment used by these products.	 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing Aircraft Manufacturing 								
Business Services	Establishments and services primarily designed to support other aspects of a business or to assist unrelated companies. This includes corporate headquarters. Professional services such as	 Corporate, Subsidiary, and Regional Managing Offices Administrative Management and General Management Consulting 								

Cluster	Narrative Description	Key Component Industries			
	consulting, legal services, facilities support services, computer services, engineering and architectural services, and placement services. All for-hire ground passenger transportation services are also present in this cluster.	Services • Custom Computer Programming Services • Engineering Services			
Construction Products and Services	Establishments that supply construction materials, components, products, and services. Construction materials and components include those made of sand, stone, gravel, asphalt, cement, concrete, and other earthen substances. Construction products include pipes and heat exchangers. Construction services include the construction of pipelines for water, sewers, oil and gas, power, and communication, as well as building services for homes and industrial buildings.	 Water Supply and Irrigation Systems Steam and Air-Conditioning Supply Other Heavy and Civil Engineering Construction 			
Distribution and Electronic Commerce	Traditional wholesalers as well as mail order houses and electronic merchants. The companies in this cluster mostly buy, hold, and distribute a wide range of products such as apparel, food, chemicals, gasses, minerals, farm materials, machinery, and other merchandise. The cluster also contains firms that support distribution and electronic commerce operations, including packaging, labeling, and equipment rental and leasing.	 Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers Industrial Machinery and Equipment Merchant Wholesalers Fresh Fruit and Vegetable Merchant Wholesalers 			
Downstream Chemical Products	Establishments that manufacture complex chemical products for end users. These products include adhesives, beauty products, soaps, cleaners, film processing chemicals, dyes, paints, explosives, and lubricating oils.	Adhesive Manufacturing Toilet Preparation Manufacturing			
Education and Knowledge Creation	All educational and training institutions, as well as related supporting establishments. It also includes research and development institutions in biotechnology, physical sciences, engineering, life sciences, and social sciences.	 Colleges, Universities, and Professional Schools (State Government) Colleges, Universities, and Professional Schools Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) 			
Environmental Services	Establishments primarily engaged in collection, treatment, processing, and disposal of hazardous and non-hazardous waste.	 Materials Recovery Facilities Hazardous Waste Collection All Other Miscellaneous Waste Management Services 			
Food Processing and Manufacturing	Firms involved in the processing of raw food materials and the manufacturing of downstream food products for end users. This includes millers and refineries of rice, flour, corn, sugar, and oilseeds. These upstream products contribute in part to producing specialty foods, animal foods, baked goods, candies, teas, coffees, beers, wines,	Perishable Prepared Food Manufacturing Flour Milling Soft Drink Manufacturing All Other Miscellaneous Food Manufacturing			

Cluster	Narrative Description	Key Component Industries			
	other beverages, meats, packaged fruits and vegetables, and processed dairy products.				
Oil and Gas Production and Transportation	Firms involved in locating, extracting, refining, and transporting oil and gas. This includes companies that manufacture the equipment necessary to extract oil and gas, as well as companies that provide support services for oil and gas operations and pipeline transport.	Petroleum Refineries			
Performing Arts	Services that produce, promote, and support live artistic performances. Live performances include those by theater companies, dance troupes, musicians, and independent artists.	 Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures Independent Artists, Writers, and Performers 			
Transportation and Logistics	All air, rail, bus, and freight transportation services. It also includes related operation services and support activities such as inspections, maintenance, repairs, security, and loading/unloading.	 Freight Transportation Arrangement General Freight Trucking, Long- Distance, Truckload 			
Vulcanized and Fired Materials	Firms that manufacture construction and other materials out of earthen substances such as clay, sand, and rubber at extremely high temperatures. The production processes create goods made of tile, brick, ceramic, glass, and rubber (including refractories and tires).	Glass Product Manufacturing Made of Purchased Glass			
Group 2 – Domin	ant/Emerging Regional Clusters				
Information Technology and Analytical Instruments	Information technology and analytical products such as computers, software, audio visual equipment, laboratory instruments, and medical bread. The cluster also includes the standard and precision electronics used by these products (for example, circuit boards and semiconductor devices).	 Software Publishers Electromedical and Electrotherapeutic Apparatus Manufacturing Other Electronic Component Manufacturing Semiconductor and Related Device Manufacturing 			
Insurance Services	Firms providing a range of insurance types, as well as support services such as reinsurance and claims adjustment.	 Direct Health and Medical Insurance Carriers Direct Property and Casualty Insurance Carriers Claims Adjusting 			
Marketing, Design, and Publishing	Establishments involved in design services (physical and graphical), marketing (including advertising creation, marketing research, media buying, and public relations), and publishing (both in hard copy and on the internet).	 Advertising Agencies Marketing Consulting Services Internet Publishing and Broadcasting and Web Search Portals 			
Music and Sound Recording	Establishments primarily involved in the production and distribution of music and other sound recordings.	Sound Recording StudiosRecord Production and DistributionMusic Publishers			
Video Production and Distribution	Establishments that are primarily involved with the production and distribution of motion pictures and other video. This includes specialized viewing venues such as drive-in theaters.	 Motion Picture and Video Production Teleproduction and Other Postproduction Services 			

Appendix C:

Benchmark Comparisons of Peer-City Economic Development Programs



Drenared for:



BENCHMARK COMPARISONS OF PEER-CITY ECONOMIC DEVELOPMENT PROGRAMS FOR CARSON ECONOMIC DEVELOPMENT STRATEGIC PLAN



Prepared for:

City of Carson

April 10, 2023

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Introduction

The cities listed below have been selected, in consultation with City of Carson staff, as potential aspirational models and/or competitors for Carson's economic development program:

- 1. Downey
- 2. El Segundo
- 3. Gardena
- 4. Inglewood
- 5. Long Beach
- 6. Norwalk
- 7. Santa Clarita
- 8. Santa Fe Springs
- 9. Torrance

This report profiles the peer-city economic development programs for comparison and benchmarking purposes. The report is organized in two sections:

Section 1: Peer City Market Positioning (how they describe/market themselves online); and

Section 2: Organizational Structures (budgets, staffing, etc.) of Peer City Economic Development

Section 1: Market Positioning of Peer City Economic Development Programs

Market positioning and program characteristics for the comparison cities are organized under the following five headings, as applicable:

- A. Business support programs, including:
 - Entrepreneurial development and business startup assistance
 - Workforce development initiatives/partnerships
- B. Marketing (general), including:
 - General (not industry-specific) site selection marketing
 - Existing business retention and expansion outreach
 - Media/public relations programs
- C. Prominent industries (currently marketed as assets)
- D. Target clusters/industries (specifically promoted/targeted in marketing)
- E. Economic resilience and community preservation initiatives

In many cases, descriptive language is reproduced verbatim from the other cities' web pages, to retain a sense of the spirit as well as technical accuracy, where summarization might not suffice.

The table on the next page indicates key economic development functions within each peer city.

COMMON ECONOMIC DEVELOPMENT FUNCTIONS FOR BENCHMARK CITIES

	Busine	ss Support	Marketing (General)					Econ.
City	Bus. startup /Entre.	Workforce Dev.	Site Selection / Focus Areas	Retention & Expansion	Media / PR	Prominent Ind./Asset Marketing	Targeted Ind. Marketing	Resil./ Comm. Pres. ¹
Downey		X (SELACO)	Χ					
El Segundo ²	Х	X (SBWIB)	Χ	Χ	Χ	X	Х	
Gardena		X (SBWIB)	Χ	Χ	Χ		Х	
Inglewood			Χ	Χ				Χ
Long Beach	Х	X (PGWIN)	Х	Χ	Χ			Χ
Norwalk	X (Long Beach SBDC)	X (SELACO)	X					Х
Santa Clarita	Х		Χ	Χ	Χ	X	Х	
Santa Fe Springs	Х		Х	Х				
Torrance	Χ	X (SBWIB)	Χ	Χ	Χ			

Notes

- 1. The full title of this category is "Economic Resilience / Community Preservation".
- 2. El Segundo also makes mention of the "Creative Economy" as part of their marketing and target industry promoted marketing strategies.

Sources: TNDG.

Additional market positioning details for each city's economic development programs are summarized below.

City of Downey

A. BUSINESS SUPPORT

Website references the Southeast Los Angeles County Workforce Development Board (SELACO) for Workforce Development, but does not specifically mention other business support services.

B. MARKETING (GENERAL)

Website references Opportunity Sites, Downey Redevelopment Project, and Specific Areas for development opportunities.

- Opportunity Sites
- Specific Areas for development opportunities
 - o Firestone Boulevard Area
 - o Downtown Area
 - o Imperial Highway Area
 - Woodruff Industrial Project

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of El Segundo

A. BUSINESS SUPPORT

Website references the following business support services:

- How to get a Business License
 - Business Taxes
 - Streamlined Permitting
 - Appointment Plan Check This process involves scheduling an appointment to review plans with the City's development team made up of representatives of all the City departments involved in the development review process.
 - Accelerated Plan Check This offers customers an optional expedited plan check service. The process is conducted by staff after regular business hours and requires additional fees. With accelerated plan check, staff from each of the departments complete their plan checks usually within 2 to 3 weeks.
- First Year Business License Tax Credit
- South Bay Workforce Investment Board (SBWIB)

B. MARKETING (GENERAL)

The website showcases various companies and highlights important features that contribute to the branding of the city.

- Named "Most Business-Friendly City" in LA County for the third time
- Competitive tax rates
- Highly-skilled workforce
- Excellent infrastructure
- Range of corporate and creative commercial office space
- Experienced ED staff
- Centrally located and minutes away for LAX, 105 and 405 Freeways, MTA bus depot, and three Metro Line rail stations
- Less than 30 minutes from Downtown Los Angeles, Long Beach, Torrance, and Santa Monica
- "Entrepreneurial Spirit"

- Unique mix of industries
- Local entrepreneurial spirit
- Abundance of highly skilled labor accounts for the business
- "The Champions of Business Celebration" Annual event hosted by the City of El Segundo and its Economic Development Advisory Council.
- Downtown (Destination Marketing)
- Shopping (Destination Marketing)
- Dining (Destination Marketing)
- Smoky Hollow (Destination Marketing for businesses)
 - Explore properties
- El Segundo Back to Business Roundtable
- Available properties (Loopnet)
- New developments (Map points)
- Schedule a Tour of the city via email
 - Request a city tour with City Manager
 - o Inquire about expanding or relocating your business in El Segundo
 - o Inquire about an available property
- "Made in El Segundo"
 - A tradition that includes everything from satellites, planes, semi-conductors, energy, and toys.
 - A city with roots in refinery, aerospace, and innovation that's evolved into a technology hub
 of world-class businesses involving high-tech engineering, advanced information technology,
 data systems, and digital media.
 - Strong infrastructure, fiber optic network, and skilled workforce make it an ideal setting for leading engineering and tech firms.
- Great place to start a business
- World class talent
- Lower lease rates

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

The City's website provides the following information for currently marketed target industry assets:

- Aerospace and Defense (Aerospace Capital of The World) 7 prominent firms listed
- Other Industries (well represented)
 - Creative Services
 - o Sports
 - o Media
 - Financial and Professional Service

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

The website provides the following information for promoted marketing for target industries:

• "Increasingly the location of choice" for bioscience R+D and manufacturing facilities

Carson Economic Development Benchmark City ED Program Comparisons

- o Increased infrastructure caters to the growing demand from creative office users that require large internet bandwidth as well as cloud applications.
- Showcasing office and flex space
 - Continental Park, a 100-acre business center defining the South Bay's Rosecrans Corridor, developed and owned by Continental Development Corporation, is home to dozens of national and regionally and locally prominent firms, spanning the entire economic spectrum, and is one of the largest office parks in the Metropolitan Los Angeles area.
 - Pacific Corporate Towers Pacific Corporate Towers, is a 1.5 million square foot, 10-acre complex that anchors the Tower District.
 - Elevon elevon, at campus El Segundo, is a \$100 million executive office complex featuring
 210,000 square feet of office space complemented by 13,500 square feet of high-end retail.
 - Other Data Centers
 - Equinix
 - T-5 Data
 - Digital Realty

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Gardena

A. BUSINESS SUPPORT

Website references the economic profile, the planning process for starting a new business in the city, a map showing various development projects going on in the city, market analytics, Downey Redevelopment Project, and Specific Areas for development opportunities.

- Economic Profile
 - Market Profile
 - Demographics
 - o Other data
- Business Programs
- Specific Areas for development opportunities
 - Firestone Boulevard Area
 - Downtown Area
 - o Imperial Highway Area
 - Woodruff Industrial Project
- Online Services (Gardena Direct)
 - o Business License
 - Permit Inspection Requests
- South Bay Workforce Investment Board Gardena One-Stop Center
 - New hire and job placement resources
 - Publicizing Positions

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- Broadcasting Available Jobs to Candidates
- Targeting Recruitments
- Job Fairs
- Hiring Support
 - Screening/Assessment
 - Job Matching
 - Work Readiness Support
 - Skills Testing
 - Reference Checks
 - Referrals
 - Apprenticeships
 - Custom Services
- Business Support & Services:
 - Rapid Response & Lay-Off Aversion Services
 - Information on Business Incentives
 - Customized Training
 - No Cost Workshops
 - Incumbent Worker Training

B. MARKETING (GENERAL)

The website provides several resources for businesses looking to relocate to Gardena

- Community Profile
- Market Analytics
- Sites and Properties (Commercial properties and sites available in Gardena)
- Gardena Project Development Map
- Master Planned Communities
- Opportunity Zones
- "Most Business-Friendly City"
 - Offers exciting new opportunities for business relocations and new development
 - o Centrally located and holds the keys to the Los Angeles freeway system
 - The City's staff take a pro-business approach to real estate development, always challenging itself to solve for "yes"
 - Foundation was built on the strength of its business industry and continues to thrive under the current leadership
 - Excellent location, diverse and strong business community, and supportive government make Gardena a very business-friendly city in Los Angeles County
 - Gardena has been named "Most Business Friendly City" in Los Angeles County by the Los Angeles County Economic Development Corporation (LAEDC)
 - The Eddy Awards recognized Gardena for doing the most to encourage job creation, facilitate ease-of-doing-business, and cutting through red tape
- Discover Gardena (Profiles)
 - The Pan (Restaurant)

- Rosecrans Place (Townhome Development)
- Hustler and Lucky Lady Casino
- Gardena Supermarket
- Oh My Burger (Restaurant)
- The website showcases several success stories of recent developments
 - o Best Western Plus
 - Brand-new establishment that offers contemporary accommodations, deluxe amenities, and an unbeatable location near the I-105 and I-405 freeways.
 - State Brewery Company
 - A craft brewery located in the South Bay of Los Angeles that is working to bring consumers a variety of high-quality craft beers inspired by L.A. history.
 - o Pulp Studio
 - A trailblazer within the glass industry, which has been manufacturing specialty and decorative glass products since 1996. The company has completed remarkable projects across the country. Many installations across the country showcase Pulp Studio's high-quality products, which have been recognized as superior glass products compared to those by other manufacturers.

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

The website provides the following information for promoted marketed for target industries:

- Long history of diverse business base
- Close proximity to the freeways, ports of Los Angeles and Long Beach, and Los Angeles International Airport make Gardena a very attractive destination
- Having been home to several corporate companies 7 prominent firms listed
- Advanced Manufacturing
 - Strong history of being an innovation and manufacturing center
 - As the aerospace and Japanese automotive companies landed throughout the South Bay they pursued having facilities in Gardena due to the close proximity it created to the ports, airport, and other businesses that supported their industries.
- Hospitality Development
 - o Gardena is at the heart of Los Angeles's tourism boom
 - Los Angeles Rams make their glorious return to Los Angeles, Inglewood's Los Angeles
 Stadium at Hollywood Park complex is going to draw visitors from all over.
- The Economic Development Department is targeting new industries and developments to continue supporting a diverse business base.

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Inglewood

A. BUSINESS SUPPORT

N/A

B. MARKETING (GENERAL)

The website provides the following information for marketing:

- Economic & Community Development Mission
 - Drive economic growth with a diverse mix of businesses that serve residents and visitors, and complement the existing City
 - Reinforce the Citywide brands of "Sports, Entertainment, Recreation and Culture" and Class A Office Business
 - Preserve high quality of life for residents
 - Encourage business and neighborhood compatibility
- City Project Pipeline
 - Destinations
 - Hotels
 - Housing
- Major Projects in Inglewood
- Opportunity Zones

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

The Inglewood Economic and Community Development Department website makes a definitive goal advocating for community preservation.

- Capitalize on the synergy and interdependence of the various division functions
 - Encourage through the regulatory process a balance of safe, attractive, and well-maintained residential communities
 - o Vibrant commercial centers, and
 - Varied manufacturing and employment opportunities for residents.

City of Long Beach

A. BUSINESS SUPPORT

Website references the following business support services:

• Accelerate Uptown

 Accelerate Uptown's Mission is to foster economic equity with a focus on women and minority owned businesses, through entrepreneurship, advancing careers in technology and supporting the transition of our reentry community from prison to life. We provide 1 on 1 business coaching and workshops at no cost to small businesses that qualify.

BizPort

• Whether you are launching a company or looking to expand an existing business, this on-line business portal is designed to help navigate the process.

Business Development Bureau

- The goal of the Business Development Bureau is to build a supportive economic ecosystem that creates reliable pathways for entrepreneurs to successfully start and grow.
- o Providing access to capital through our small business lending programs.
- Working with our local business improvement districts to ensure safe, attractive, and prosperous business districts across the city.
- Facilitating business startups by working directly with entrepreneurs at all levels to help them navigate the process of starting and growing their business.
- Making available key economic, demographic, and real estate information so that workers, investors, and entrepreneurs can make well-informed economic decisions.
- o Resources that are available to help you start and grow your business:
 - Small business license incentives
 - Small business loans
 - Façade improvement rebates
 - 10 business improvement districts
 - Site-selection support
 - Workforce training and recruitment
 - Free technical assistance

California Business Incentives Gateway

 The incentives detailed here include site selection services, targeted tax breaks, training grants, fee waivers, permit assistance, low-cost or tax-exempt financing, reduced utility rates, and many more. https://cbig.ca.gov

• Certified Blue Restaurant (CBR) Program

- The Long Beach Certified Blue Restaurant (CBR) Program supports and recognizes Long Beach restaurants that achieve exceptional water efficiency. Interested restaurants can enroll to receive a FREE on-site efficiency survey, free water-efficient devices (if eligible) and an assessment for rebate opportunities. Restaurants that become Certified Blue receive recognition from the Long Beach Water Department on social media and other marketing channels. http://register.lbwater.org/restaurants.
- Council of Business Associations

 The City of Long Beach Council of Business Associations is a unified voice for advocacy, acts as an effective communication conduit between business communities, and is a simplified business resource center. http://www.cobalb.com

• Green Business Program

- The Long Beach Green Business Program is a free program that supports and recognizes Long Beach businesses that follow guidelines for energy and water conservation, pollution prevention, waste management, toxics reduction, employee commute, and community education. Certified Green Businesses receive free marketing and promotion through City website and social media channels, free on-site green technical assistance, a certificate and window decal or sticker, and more. www.longbeach.gov/greenbusiness
- CSULB Institute for Innovation & Entrepreneurship
 - The primary objective of the Institute is to leverage all this energy and entrepreneurial capital into a driving force for economic development for the greater Long Beach community. http://www.csulb.edu/institute-innovation-entrepreneurship
- Kiva Loan Program
 - O The City of Long Beach has partnered with The Los Angeles Local Initiatives Support Corporation (LA LISC) to offer zero interest, no-fee loans to local business owners. Through Kiva, everyday residents can loan as little as \$25 to small businesses of their choice as part of a crowdfunded loan program. Loans are approved through "social underwriting," where trustworthiness is determined by friends and family lending a portion of the loan request and a by a Kiva-approved Trustee who will vouch for the borrower. LA LISC will match loan contributions made to borrowers who have been endorsed by a Trustee.
 - http://us.kiva.org/longbeach

Long Beach Accelerator

- The City of Long Beach is committed to helping the most promising entrepreneurs succeed and build great innovative companies in Long Beach. As part of the economic blueprint created in 2015, the City of Long Beach envisioned the infrastructure that supports innovation and technology startups to scale and grow. The Long Beach Accelerator provides companies accepted into its intensive, cohort-based business acceleration program with: coworking space in downtown Long Beach, access to operating capital, mentorship and coaching, access to an industry and investor network, and discounted service provider resources.
- For more information, visit the Long Beach Accelerator website at www.lbaccelerator.org.
- Long Beach Chamber of Commerce
 - Economic Development: Creating a Strong Local Economy
 - o Public Policy: Representing the Interest of Business with Government
 - Community Development: Promoting the Community
 - Membership Services: Providing Networking Opportunities
 - o Political Action: Endorsing Pro-Business Candidates for Office http://www.lbchamber.com
- Long Beach City College: College of Advancement & Economic Development
 - College Advancement & Economic Development (CAED) at LBCC is dedicated to bridging the gap between fulfilling business needs for a qualified workforce and providing education and training, including skill sets relevant to jobs in the 21st century. CAED offers several

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workforce development and business development programs at an affordable cost. https://www.lbcc.edu/college-advancement-economic-development

- Small Business Development Center Hosted by Long Beach City College
 - The Small Business Development Center (SBDC) helps small business owners succeed with low-cost training and no-cost one-on-one advising from experienced entrepreneurs and industry experts. http://longbeachsbdc.org
- Workforce Development Pacific Gateway Workforce Development Innovation Network (PGWIN)
 - Recruitment and Hiring
 - Youth Hiring and Internships
 - o Lay-Off Aversion
 - Customized Training

B. MARKETING (GENERAL)

The website provides the following information for marketing:

- Real Estate Development (<u>publicity mapping</u>)
 - Long Beach, California is booming with investment and development. Whether you are an
 investor, developer, or commercial real estate broker, Long Beach needs to be on your list of
 cities to watch. We have a growing population, quality and diverse neighborhoods, vibrant
 business corridors, top-notch educational systems, and an endless number of cultural
 amenities for you to take advantage of.
 - Our staff of real estate professionals stand ready to help you in identifying opportunity sites in one of the city's many great neighborhoods. We can provide customized reports with consumer spending, daytime employment, demographic, and traffic count information. And, we can assist you with whatever else you might need to make your next investment decision.
- Foreign Trade Zone Benefits
 - Foreign Trade Zones are designated areas within the United States where qualifying businesses are considered to be outside the country for customs purposes. Approved companies within a Foreign Trade Zone can defer, reduce or completely eliminate customs duties on imported products and materials.
 - Under the Port of Long Beach's program, any qualified business within the boundaries of FTZ-50, which includes Orange County, western San Bernardino County and most of Los Angeles County, can apply to have its existing building designated as an FTZ site. http://www.polb.com/economics/ftz
- Long Beach Convention and Visitors Bureau
 - The LBCVB is a private non-profit organization funded by city hotel bed tax and membership
 contributions from over 400 area businesses and community organizations. The mission of
 the Bureau is to contribute to economic development of the city of Long Beach by selling,
 marketing and promoting Long Beach as a destination for conventions, meetings,
 tradeshows and tourism. http://www.visitlongbeach.com
- Los Angeles Economic Development Corporation

- Special Events and Filming
 - The Office of Special Events and Filming is the bureau within the City Manager Department responsible for permitting all special events and film productions within the City of Long Beach. Staff strives to provide year-round events to cultivate civic pride, social awareness and cultural enrichment for residents and visitors by permitting special event activities such as, festivals, runs/walks, and citywide holiday celebrations. http://www.filmlongbeach.com
- Economic Insights Dashboard
- Opportunity Zones (Interactive Map)
 - o 19 census tracks in the City are identified as Opportunity Zones
 - This applies to over 2,300 acres
 - 5 census tracks overlap into the City of Long Beach's PD-30 and PD-6 areas, which provides additional benefits to potential developers

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

The City of Long Beach's website promotes economic resilience by listing two plans for economic inclusion. See points below for reference.

- Everyone In Economic Inclusion Implementation Plan
 - The City convened a 50-person Implementation Committee with local and regional crosssector partners to analyze data and community input to develop economic inclusion strategies for the Implementation Plan.
 - The City also engaged over 350 community members in meaningful dialogues to co-create and provide additional community input on the draft proposed economic inclusion strategies.
 - The Implementation Plan includes policy recommendations for small business and diverse entrepreneurship; local, inclusive procurement; workforce and youth development; connectedness (economic resiliency) and housing and homeownership.
- Economic Development Blueprint
 - In 2015, the Mayor and City Council requested the City's Economic Development
 Commission, with the assistance of staff, to prepare an Economic Development Blueprint to
 define priorities that will lead to creation of businesses, well-paying jobs, and increase the
 standards of living for our diverse residents.
 - The Blueprint, which is now available in Spanish, Khmer, and Mandarin Chinese, was adopted in 2017 and advances a 10-year vision of Long Beach as "the city of opportunity for workers, investors, and entrepreneurs."

- For the City of Long Beach and civic partners, this Blueprint serves as a catalyst to work together to proactively recognize and determinedly seek solutions to civic and socioeconomic challenges and opportunities.
- For workers, Long Beach will be a place where we come together to create more fulfilling higher-wage job opportunities, beyond meeting basic needs.
- For investors, Long Beach will foster a "can do" climate where they aggressively compete for the distinction to advance economic opportunities for business and community.
- For entrepreneurs, Long Beach will create an innovative ecosystem that lays a foundation for success from business start up to growth.
- For all residents, Long Beach will be a place where all can create, thrive, and positively impact where they live.
- The Blueprint has the following seven focus areas:
 - Engines of Growth
 - Economic Inclusion
 - Jobs and Workforce Development
 - Business Assistance
 - Development Environment
 - Quality of Life
 - Economic Leadership and Cooperation

City of Norwalk

A. BUSINESS SUPPORT

The website does not specifically mention in-house business support services, but refers to a list of partners that can assist startup businesses:

- Partners
 - Norwalk Chamber of Commerce
 - Kosmont Companies
 - Long Beach Small Business Development Center
 - SCORE
 - o SELACO
 - Cerritos College
 - Los Angeles Economic Development Center
 - o Governor's Office of Business and Economic Development

B. MARKETING (GENERAL)

The website provides a map hosting aerial views and details of sites showing ongoing development projects. Some of the featured development projects they list are included in the list below.

- Carmenita Warehouse
- Alondra Boulevard / Maidstone Avenue Development

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- Norwalk Transit Village
- Rosecrans Villa
- Rosecrans/Norwalk Commercial Building

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

The City of Norwalk's website provides several goals and an Economic Development Plan that assist in advocating for community preservation and investment. See list below for reference.

- Investing in Community driven-solutions serving our communities.
- "The Heart of Norwalk Plan invites the people of Norwalk to join together to prepare a clear and exciting, yet realistic vision for the future of San Antonio Village and the Firestone Corridor."
- Community Values Take pride in the very unique and attractive Norwalk.
- Community Knowledge Plan for the revitalization of the Heart of our City.
- Community Vision The future of <u>San Antonio Village</u> and the <u>Firestone Corridor</u>.
- Economic Development Plan In November 2018, the City Council adopted the Economic Development Opportunities Plan to direct city efforts. The Plan key areas to help focus attention and engagement with the business community.

City of Santa Clarita

A. BUSINESS SUPPORT

The website provides the following information for business support:

- Tax Incentives
 - o Industrial Development Authority
 - Recycling Market Development Zone (RMDZ)
 - o Tax Rebate Program
 - New Employment Tax Credit
- Business Resources
 - Guide to opening a small business in the city
 - Business Licenses
 - Expediting Permitting (Tenant Improvements)
 - One-Stop Permit Center
 - Small Business Development Center (SBDC)
 - Green Santa Clarita

Carson Economic Development Benchmark City ED Program Comparisons

 Several programs and resources to assist local businesses in sustaining a green-friendly commerce environment

B. MARKETING (GENERAL)

The website provides the following information for marketing:

- Where Successful Companies Do Business (Santa Clarita Business Minute)
 - Strong business infrastructure
 - High quality of life
 - o Community minded, and business driven
 - Variety of tax and incentive programs for companies of all sizes
 - o Close proximity to most Southern California business centers
- Santa Clarita Business Minute Marketing Videos 21 different topics that include companies
 presumably in the city, city assets, and other topics

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

The website provides the following information for currently marketed target industry assets:

- Industry Overview
 - Aerospace Manufacturing 4 prominent firms listed
 - o Bio-Medical 9 prominent firms listed
 - Entertainment 10 prominent firms listed

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

The website provides the following information for promoted/marketed target industries:

Technology – 3 prominent firms listed

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Santa Fe Springs

A. BUSINESS SUPPORT

The website provides the following information for business support:

- General assistance to new and growing businesses
- Draw upon regional partners for additional services
 - Financing
 - o Commercial Real Estate Services
 - Sustainability
 - Economic Data
 - Business Marketing

Carson Economic Development Benchmark City ED Program Comparisons

B. MARKETING (GENERAL)

The website provides the following information concerning marketing and branding:

- Selected as a "North American City of the Future," by Financial Times
- Over 80% of the City's nine square miles are zoned for retail, office, light and heavy industrial uses, and eight out of ten businesses have operated in the community for more than 15 years.
- Excellent location
 - Child development programs
 - Educational and recreational classes and activities
 - Family services
 - Senior services
 - City-sponsored trips to area attractions
 - o Farmer's Market
 - Free concerts in the park
 - Two free fitness centers
 - o Community health clinic
 - Free work shuttle
- Supportive government
- Thriving business community
- Active Chamber of Commerce
- Economic Profile of Santa Fe Springs
- Commercial Corridors (Map) and available sites for development (Map)

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Torrance

A. BUSINESS SUPPORT

The website provides the following information for business support:

- Services and Programs
 - o Centralized Permit Center at City Hall
 - o Plot Plan Review Meetings
 - Business Licensing

Carson Economic Development Benchmark City ED Program Comparisons

- Expedited Permitting and Streamlining
- o Ombudsman Program
- Online Project Status Tracking
- Trained Staff Specialists
- o Interactive Voice Response System
- Competitive Fees
- Grant/Loan Assistance and other Financing Options
- Police Department Business Watch Program
- Site Selection Assistance
- Workforce development
- Free online listing (on city website for business promotion)
- Commercial Rehabilitation Rebate Program
- California Green Business Network
- Business visitation program (brings city team and you together for face-to-face communication)
- Resources for Businesses
 - The South Bay Entrepreneurial Center (SBEC)
 - The Small Business Development Center (SBDC)
 - California Manufacturing Technology Consultants (CMTC)
 - Torrance Area Chamber of Commerce (TACC)
 - South Bay Workforce Investment Board (SBWIB)
 - Women in Advanced Manufacturing Career Exploration program
 - o California Governor's Office of Business and Economic Development (GO-Biz)
 - SCORE Long Beach/South Bay
 - Small Business Administration (SBA)
 - Recycling Marketing Development Zone (RMDZ)
 - Foreign Trade Zones (FTZ)
- Disadvantaged Business Enterprise (DBE) Resources

B. MARKETING (GENERAL)

The website provides the following information concerning marketing and branding:

- Strategic location
- Quality of Life
- Award winning schools
- Wayfinding Signage Plan
- Downtown Revitalization & Connectivity Plan
- #WhyTorrance (ArcGIS Story Map)
 - This site is designed for businesses looking to locate to Torrance, as well as for existing Torrance businesses that are looking to expand.
 - The information will provide a consolidated resource to City services, Economic Development tools, a visitor portal, and key demographic data.
- Business Visitation Program

- Business visits are conducted by the Economic Development Team on an annual basis to commercial, industrial and manufacturing businesses.
- The goal of these visits is to give each business a City contact and bring awareness of the resources available to assist them with their success.
- Assistance may include site selection, human resource solutions, permit streamlining, information and referral, marketing opportunities and financial incentives.
- o Additionally, the Mayor and City Council are invited to attend these outreach meetings.

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

Section 2: Organizational Structures of Peer City Economic Development Programs

Important organizational features of the peer cities' economic development programs are summarized on the following table, with additional narrative detail provided on the pages after the table.

The following organizational characteristics for each city are noted:

- Program positioning within City's overall organizational structure (i.e., in which City department is the ED program housed?)
- Total in-house staffing in terms of full-time equivalent (FTE) positions devoted (or partially devoted) to economic development activities
- Title of City's lead staff person for economic development
- Total annual budget for economic development-related functions
- Key external partnerships that support the City's in-housing economic development program

Since the level of resources (staffing, budget, etc.) is naturally influenced by the size of the city, the summary table provides population and employment data for each city for benchmarking purposes.

MATRIX OF BENCHMARK CITIES ADDITIONAL INFORMATION

Jurisdiction	Pop. 2022	Jobs 2019	Jobs 2020 ¹	ED Organization Structure	FTE	Program Manager	Budget	Other Partners
Downey	111,780	42,431	40,626	Economic Dev. and Housing Division is under Community Dev. Dept. that reports to the City Manager.	2.0 FTE	Economic Development and Housing Manager	\$1,700,708	 Community Benefit District Downey Chamber of Commerce Los Angeles County Economic Development Corporation (LAEDC)
El Segundo	16,995	71,075	69,443	In the past, the Economic Dev. Coordinator has reported directly to the City Manager. ²	0.0 FTE ³	Economic Development Coordinator	\$756,190	 El Segundo Economic Development Corporation (ESEDC)⁴ El Segundo Chamber of Commerce El Segundo Back to Business Roundtable LAEDC
Gardena	59,013	22,707	21,019	Economic Dev. Division/Manager is under the Community Dev. Dept. that reports to the City Manager.	1.0 FTE	Economic Development Manager	\$159,907	 Gardena Economic Development Advisory Committee/Task Force LAEDC Gardena Valley Chamber of Commerce (GVCC) North Gardena Business Association Southern California Edison (SCE) The USC Center for Planning & Development Advantage CDC California Employment Training Panel Small Business Administration – Glendale, CA Small Business Development Center (SBDC) – El Camino College California Manufacturing Technology Center (CMTC)
Inglewood	104,714	25,068	24,764	Economic and Community Dev. Dept. is a separate	3.0 FTE	Economic & Community	\$774,411	Inglewood Airport Area Chamber of CommerceLAEDC

Carson Economic Development Benchmark City ED Program Comparisons

Jurisdiction	Pop. 2022	Jobs 2019	Jobs 2020 ¹	ED Organization Structure	FTE	Program Manager	Budget	Other Partners
				department that reports to the City Manager		Development Director		
Long Beach	450,214	153,029	144,378	Economic Dev. is a separate department that reports to the City Manager	92.96 FTE	Economic Development Director	functions not comparable to Carson EDSP	 Long Beach Economic Partnership (LBEP) – Long Beach Accelerator Long Beach Chamber of Commerce
Norwalk	99,919	23,230	22,524	Although there is an adopted "Norwalk Economic Development Plan", the Community Dev. Dept. are the staff primary involved in Economic Dev. Partnerships appear to contribute to Economic Dev. for the City of Norwalk.	0.0 FTE	N/A	Economic Development Services \$100,000	 Norwalk Chamber of Commerce Kosmont Companies Long Beach SBDC California SCORE SELACO Cerritos College Norwalk-La Mirada Unified School District Los Angeles Economic Development Center League of California Cities Governor's Office of Business and Economic Development LAEDC
Santa Clarita	227,070	67,543	62,931	Economic Dev. Dept. is a separate department that reports to the City Manager	10.0 FTE	Director of Economic Development	\$41,924,019 (\$33,700,610 is for transit program)	 Santa Clarita Valley Chamber of Commerce Santa Clarita Valley Economic Development Corporation LAEDC Economic Development Division at College of the Canyons

Carson Economic Development Benchmark City ED Program Comparisons

Jurisdiction	Pop. 2022	Jobs 2019	Jobs 2020 ¹	ED Organization Structure	FTE	Program Manager	Budget	Other Partners
Santa Fe Springs	18,536	60,934 95,497	·	Economic Dev. Division is under the Planning & Dev. Dept. that reports to the City Manager Office of Economic Dev. is an	8.0 FTE allocated to the Planning & Dev. Dept.	Director of Planning and Community Development Economic		Santa Fe Springs Chamber of Commerce LAEDC
Torrance	143,001	95,497	,	office under the City Manager. ⁵	1.0	Development Manager	Not specific for ED, but for City Manager - \$6,053,337 General Fund	 Torrance Tech Committee The South Bay Entrepreneurial Center (SBEC) The Small Business Development Center (SBDC) – Hawthorne CMTC Torrance Area Chamber of Commerce (TACC) South Bay Workforce Investment Board (SBWIB) LAEDC Recycling Marketing Development Zone (RMDZ) California Governor's Office of Business and Economic Development (GO-Biz) Foreign Trade Zones (FTZ) SCORE Long Beach/South Bay

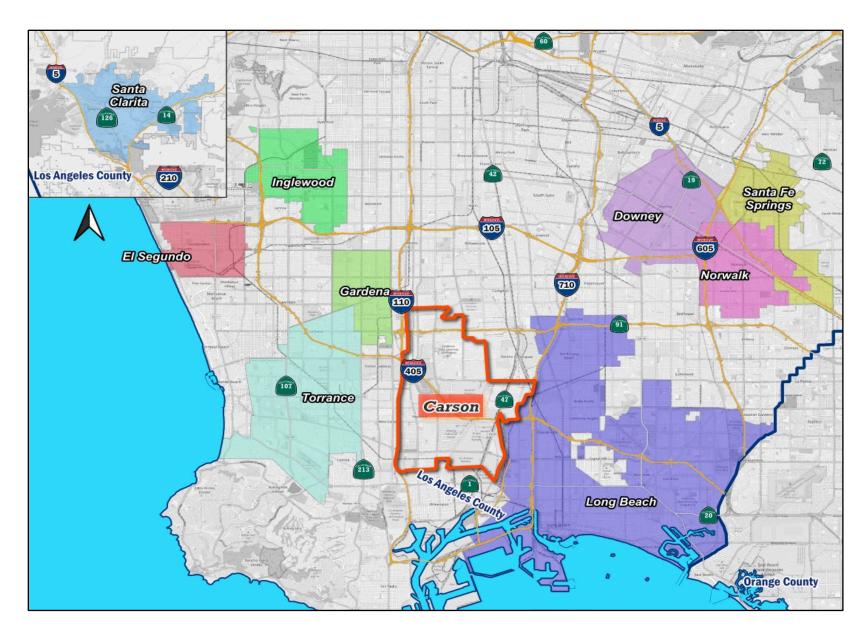
Notes

- 1. Total jobs for 2020 is noticeably lower in some cities, which might be attributed to the COVID-19 Pandemic. Jobs for 2019 have been included for reference.
- 2. Economic Development functions seem to be handled mainly by outside partners and within the city by the City Manager's Office.
- 3. The current budget does not include any FTEs for the Economic Development Coordinator.
- 4. The El Segundo Economic Development Corporation (ESEDC) has 3 leadership staff positions, 11 Board of Directors, and 11 Board of Governors.
- 5. The Torrance Economic Development Team includes professionals from various backgrounds that represent the full-service departments of the City, as well as external partners, to expand the level of communication and coordination with the business community to facilitate business attraction, retention, and expansion. There are 13.0 total FTEs that serve the team within the city.

Sources: U.S. Census Bureau, OnTheMap LEHD Program; CA DOF Table 1: E-5 City/County Population and Housing Estimates, 2022; TNDG.

MAP OF BENCHMARK CITIES

Carson Economic Development Benchmark City ED Program Comparisons



Carson Economic Development Benchmark City ED Program Comparisons

City of Downey

Organizational Structure

• Economic Development and Housing Division is under Community Development Department that reports to the City Manager.

Program FTE

• 2.0 FTE

Program Director

Economic Development and Housing Manager

Budget

• \$1,700,708

Population (2022) [CA DOF]

111,780

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 42,431

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 40,626

Other Partner Organizations

- Community Benefit District
- Downey Chamber of Commerce
- Los Angeles County Economic Development Corporation (LAEDC)

City of El Segundo

Organizational Structure

• In the past, the Economic Development Coordinator has reported directly to the City Manager. Economic Development functions seem to be handled mainly by outside partners and within the city by the City Manager's Office.

Program FTE

• The current budget does not include any FTEs for the Economic Development Coordinator.

Program Director

• Economic Development Coordinator

Budget

\$756,190

Population (2022) [CA DOF]

• 16,995

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

71,075

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 69,443

Other Partner Organizations

- El Segundo Economic Development Corporation (ESEDC) 3 staff on leadership, 11 on Board of Directors, and 11 on Board of Governors
- El Segundo Chamber of Commerce
- El Segundo Back to Business Roundtable
- Los Angeles County Economic Development Corporation (LAEDC)

City of Gardena

Organizational Structure

• Economic Development Division/Manager is under the Community Development Department that reports to the City Manager.

Program FTE

• 1.0 FTE

Program Director

• Economic Development Manager

Budget

\$159,907

Population (2022) [CA DOF]

• 59,013

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 22.707

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 21,019

Other Partner Organizations

- Gardena Economic Development Advisory Committee/Task Force
- Los Angeles County Economic Development Corporation (LAEDC)
- Gardena Valley Chamber of Commerce (GVCC)
- North Gardena Business Association
- Southern California Edison (SCE)
- The USC Center for Planning & Development
- Advantage CDC
- The California Employment Training Panel
- Small Business Administration Glendale, CA
- Small Business Development Center (SBDC) El Camino College
- California Manufacturing Technology Center (CMTC)

City of Inglewood

Organizational Structure

 Economic and Community Development Department is a separate department that reports to the City Manager

Program FTE

• 3.0 FTE

Program Director

• Economic & Community Development Director

Budget

• \$774,411

Population (2022) [CA DOF]

• 104,714

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 25,068

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 24,764

Other Partner Organizations

- Inglewood Airport Area Chamber of Commerce
- Los Angeles County Economic Development Corporation (LAEDC)

City of Long Beach

Organizational Structure

• Economic Development is a separate department that reports to the City Manager.

Program FTE

• 92.96 FTE

Program Director

• Economic Development Director

Budget

\$23,121,694

Population (2022) [CA DOF]

• 450,214

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 153,029

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

144,378

Other Partner Organizations

- Los Angeles County Economic Development Corporation (LAEDC)
- Long Beach Economic Partnership (LBEP) Long Beach Accelerator
- Long Beach Chamber of Commerce
- CSULB Institute for Innovation & Entrepreneurship

Carson Economic Development Benchmark City ED Program Comparisons

The Natelson Dale Group, Inc.

- Long Beach Convention and Visitors Bureau
- Office of Special Events and Filming
- Long Beach SBDC California

City of Norwalk

Organization Structure

Although there is an adopted "Norwalk Economic Development Plan", the Community
Development Department are the staff primary involved in Economic Development.
Partnerships appear to contribute to Economic Development for the City of Norwalk.

Program FTE

• 0.0

Program Director

• N/A

Budget

• Economic Development Services \$100,000

Population (2022) [CA DOF]

99,919

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 23,230

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 22,524

Other Partner Organizations

- Norwalk Chamber of Commerce
- Kosmont Companies
- Long Beach Small Business Development Center
- SCORE
- SELACO
- Cerritos College
- Norwalk-La Mirada Unified School District
- Los Angeles Economic Development Center
- League of California Cities
- Governor's Office of Business and Economic Development
- Los Angeles County Economic Development Corporation (LAEDC)

City of Santa Clarita

Organizational Structure

• Economic Development Department is a separate department that reports to the City Manager.

Program FTE

• 40.0 FTE

Program Director

• Director of Economic Development

Budget

• \$41,924,019

Population (2022) [CA DOF]

• 227,070

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

67.543

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 62,931

Other Partner Organizations

- Santa Clarita Valley Chamber of Commerce
- Santa Clarita Valley Economic Development Corporation
- Los Angeles County Economic Development Corporation (LAEDC)
- Economic Development Division at College of the Canyons

City of Santa Fe Springs

Organizational Structure

• Economic Development Division is under the Planning & Development Department that reports to the City Manager

Program FTE

- Not clear how many FTE for Economic Development
- 8.0 FTE for Planning & Development Department

Program Director

• Director of Planning and Community Development

Budget

• \$351,800

Population (2022) [CA DOF]

• 18,536

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

60.934

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 57,313

Partners

- Santa Fe Springs Chamber of Commerce
- Los Angeles County Economic Development Corporation (LAEDC)

City of Torrance

Organizational Structure

Office of Economic Development is an office under the City Manager. The Economic
Development Team includes professionals from various backgrounds that represent the fullservice departments of the City, as well as external partners, to expand the level of
communication and coordination with the business community to facilitate business attraction,
retention, and expansion.

Program FTE

- 1.0 FTE Economic Development Manager Office of the City Manager
- 13.0 FTE Total for ED Team that is representative of

Program Director

• Economic Development Manager

Budget

- Not specific for Economic Development, but for City Manager \$6,053,337 General Fund Population (2022) [CA DOF]
 - 143,001

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

95,497

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

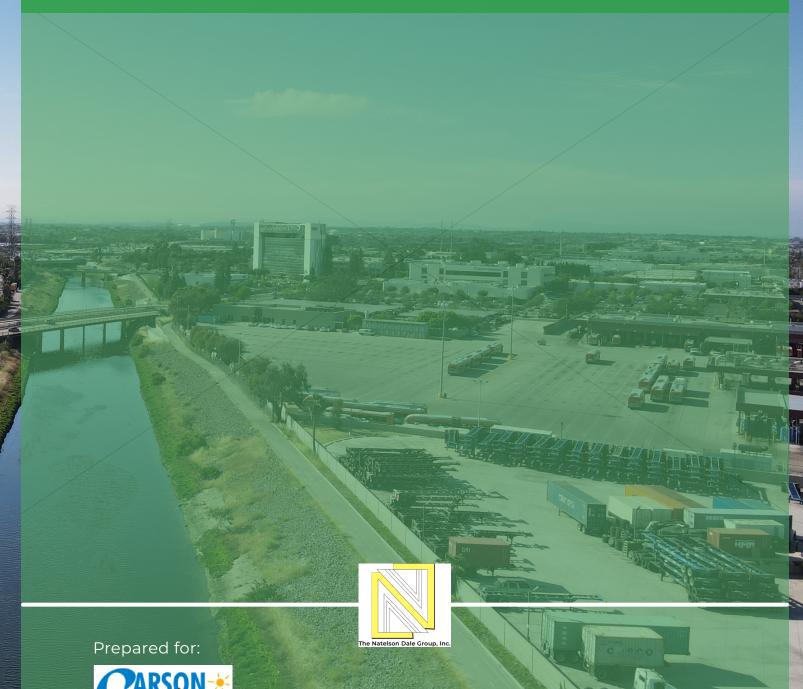
• 88,603

Listed Partners

- Torrance Tech Committee (Advisory Group)
- The South Bay Entrepreneurial Center (SBEC)
- The Small Business Development Center (SBDC) Hawthorne
- California Manufacturing Technology Consultants (CMTC)
- Torrance Area Chamber of Commerce (TACC)
- South Bay Workforce Investment Board (SBWIB)
- Los Angeles County Economic Development Corporation (LAEDC)
- Recycling Marketing Development Zone (RMDZ)
- California Governor's Office of Business and Economic Development (GO-Biz)
- Foreign Trade Zones (FTZ)
- SCORE Long Beach/South Bay

1

Industry Cluster Study





INDUSTRY CLUSTER (TARGET INDUSTRY) STUDY **FOR ECONOMIC DEVELOPMENT STRATEGIC PLAN**

Prepared for:

City of Carson

September 19, 2023

PREPARED BY:



THE NATELSON DALE GROUP, INC.
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Introduction

This document provides a summary of industry growth/retraction trends in Carson (and immediately surrounding peripheral areas), comparing the local economy's recent and longer-term performance to regional and national benchmarks.

The study evaluates the local economy in terms of industry "clusters." Clusters are groups of interrelated industry sectors whose growth potentials within a region tend to be closely aligned. The tendency of individual industries to co-locate in clusters reflects linkages through supply-chain relationships, as well as commonalities in terms of workforce requirements and infrastructure needs. The concept of industry clusters is an effective framework for economic development programming since it reflects a holistic understanding of the regional economic conditions driving the growth or retraction of individual sectors.

The target industry clusters have been identified on the basis of existing and recent historic strengths; they represent an "opportunity set" based on an in-depth evaluation of current and historic employment trends by industry, along with input that City staff and community stakeholders provided during the Economic Development Strategic Plan (EDSP) process. A typical industry targeting program has two important phases:

Phase 1 – Identify the <u>feasibility</u> of potential targets based on various market characteristics (including existing employment levels, local and regional concentrations of employment relative to national benchmarks, and historic growth/retraction trends).

Phase 2 – Assess the <u>desirability</u> of the potential clusters according to community preferences in the context of overall economic development priorities. This second phase can be thought of as a "screening" procedure whereby the list of feasible targets is prioritized and shortened based on criteria other than market feasibility. These "desirability" criteria include, for example, the following types of considerations:

- a. Whereas the data might indicate a particular cluster represents a strong target based purely on market trends, local community preferences could indicate that it is not a desired target based on potential negative externalities (e.g., increased road traffic associated with some distribution/logistics activities).
- b. Clusters with the potential to generate high wages could be prioritized over clusters associated with lower wages.
- c. Clusters in "traded" industries (as further defined below) could be prioritized based on the likelihood of high "multiplier" effects through supply chain relationships with other firms based in Carson.

It should be noted that this study primarily focuses on the types of businesses/jobs typically found in industrial and office space. Other target tenant types (e.g., retail, restaurant, and hotels) are addressed separately in other components of the EDSP.

Definitions and Focus of Cluster Study

The clusters analyzed in this study are based on definitions (i.e., industry groupings) from the U.S. Cluster Mapping Project (Cluster Mapping Project), an economic development initiative led by Harvard Business School's Institute for Strategy and Competitiveness.

In accordance with the North American Industry Classification System (NAICS), the U.S. economy includes a total of approximately 1,100 individual industry sectors. The U.S. Cluster Mapping Project assigns each of these sectors to unique clusters, which are based on linkages through supply-chain relationships, as well as commonalities in terms of workforce requirements and infrastructure needs. Nationally, the Cluster Mapping Project recognizes a total of 67 clusters, with 16 classified as "local" clusters and 51 classified as "traded" clusters.

Total current (2021) employment in the Carson area ("Carson") is estimated at 42,447 jobs¹. Of this total, 41,728 jobs are in industries that are included in either a "local" or "traded" cluster (as further defined below); the remaining 719 jobs are in miscellaneous industries not associated with specific clusters. The local clusters currently represent a total of 25,033 jobs in Carson, while the traded clusters account for 16,695 jobs.

Whereas local and traded clusters are both critically important components of a balanced economy, they have distinct roles and characteristics, and these distinctions can be helpful in terms of planning economic development programs. Some of these distinctions are summarized as follows:

- Local clusters typically form the core of a region's economy; they primarily provide goods and services for the local (resident) population. They tend to account for the majority of jobs in a region (in the case of Carson, local clusters represent about 59% of total jobs), and support a high quality of life by ensuring the availability of a diverse range of goods and services. In Carson, important local clusters include Local Logistical Services and Local Education and Training. These clusters account for about one-third (33%) of Carson's total jobs.
- Traded clusters are "export-oriented" in the sense that they include industries that are engaged in producing goods and services for end customers outside the region. Traded clusters represent close to 39% of the jobs in Carson and are especially important from an economic development perspective, given that they tend to have higher wages and higher "multiplier impacts" compared to local clusters. That is, they have a strong potential to inject new dollars into the local economy and thereby serve as "drivers" for broader economic growth. In Carson, important traded clusters include Distribution and Electronic Commerce and Education and Knowledge Creation. These two clusters account for more than one-half (56%) of Carson's total jobs in traded clusters.

¹ All employment data used in this analysis are from EMSI – a private data/modeling firm nationally regarded for its ability to provide detailed (6-digit NAICS code) industry employment estimates for small areas of geography (zip codes). For purposes of this analysis, the Carson area is defined by zip codes 90745, 90746, and 90747. See Appendix A for maps of all geographies evaluated in this study.

Existing Important Clusters in Carson, Carson Periphery, and Los Angeles County

Table 1, on page 4, lists all traded clusters that had 100 or more jobs in Carson in 2021, and provides the following information about each listed cluster:

- Total number of jobs in Carson in 2021 (the latest full year for which data are available)
- Location quotient (compared to U.S. benchmark) in 2021. The location quotient (LQ) measures how concentrated/important an industry cluster is in a region compared to national benchmarks. An LQ value greater than 1.0 indicates that a cluster is more concentrated in the region than it is nationally. This is generally regarded as an indication that the region has a comparative advantage relative to a particular cluster, although (especially for local clusters) an LQ below 1.0 can indicate a potential growth opportunity.
- Average annual wage for jobs in Carson²
- Change in the number of jobs for the most recent 10-year period, 2011-2021

Table 2, on page 5, provides the same data for local clusters that had more than 1,000 jobs in Carson in 2021. Tables 3 through 6 provide comparable data for the immediately surrounding Carson Periphery and Los Angeles County. Given that zip codes do not exactly correspond to city jurisdictional boundaries, this analysis also evaluates the nearby Carson Periphery, which is defined by zip codes that border the City of Carson and that cover a small portion of the City's incorporated boundaries³. Appendix A provides maps of the Carson Area, Carson Periphery, and Los Angeles County Geographies.

Tables 7 and 8 summarize cluster job growth/retraction performance in Carson, the Carson Periphery, and Los Angeles County compared to national trends. This part of the study is based on a "shift-share" analysis for each cluster that estimates an "expected" job change based on national trends. If Carson (or benchmark region) has higher job growth (or experiences less severe job losses) compared to the expected change, it indicates that the local area (or benchmark region) has performed better than national trends. Conversely, if Carson, the Carson Periphery, or Los Angeles County has less job growth (or experiences more severe job losses) compared to the expected change, it indicates that the specific region has performed worse than national trends.

² Wage data are for jobs (not residents) based in Carson.

³ The Carson Periphery includes zip codes 90220, 90247, 90248, 90502, 90710, 90744, 90810.

TABLE 1. SUMMARY CHARACTERISTICS AND TRENDS, CARSON'S LARGEST TRADED CLUSTERS (LIST INCLUDES ALL CLUSTERS WITH MORE THAN 100 JOBS IN 2021)

TRADED CLUSTER	JOBS	LQ	COUNTY LQ*	AVG ANN WAGE	10-YR JOB CHANGE
Distribution and Electronic Commerce	6,443	3.8	1.0	\$72,217	819
Education and Knowledge Creation	2,982	1.7	1.1	101,924	492
Transportation and Logistics	1,383	2.5	1.3	79,203	242
Business Services	1,368	0.5	0.9	103,596	278
Aerospace Vehicles and Defense	882	5.3	3.0	157,906	(184)
Furniture	812	8.0	0.9	55,262	(572)
Food Processing and Manufacturing	697	2.2	0.8	89,887	54
Performing Arts	265	1.9	3.8	128,743	66
Hospitality and Tourism	212	0.3	0.7	80,590	(97)
Downstream Chemical Products	185	2.5	1.1	111,483	(3)
Vulcanized and Fired Materials	173	2.7	0.5	64,866	9
Financial Services	150	0.3	0.8	249,540	(5)
Construction Products and Services	135	0.6	0.5	135,394	53
Marketing, Design, and Publishing	131	0.3	1.6	125,947	25
Insurance Services	116	0.3	0.7	131,354	32
GROUP TOTAL / AVG	15,933	1.53	1.15	\$90,231	1,208
CITY TOTAL	42,447	N/A	N/A	\$76,575	3,462

Note: LQ = Location Quotient; 10-year job change is from 2011 to 2021. *County LQ provided for comparison purposes. "—" = insufficient data.

TABLE 2. SUMMARY CHARACTERISTICS AND TRENDS, CARSON'S LARGEST LOCAL CLUSTERS (LIST INCLUDES ALL CLUSTERS WITH MORE THAN 1,000 JOBS IN 2021)

LOCAL CLUSTER	JOBS	LQ	COUNTY LQ*	AVG ANN WAGE	10-YR JOB CHANGE
	5 000	0.4	4.0	455.005	1.0.10
Local Logistical Services	5,093	6.4	1.2	\$55,025	1,349
Local Education and Training	3,163	1.4	0.9	81,882	54
Local Government	2,513	1.7	1.2	144,605	20
Local Commercial Services	2,155	0.9	1.2	69,257	93
Local Hospitality Establishments	1,908	0.6	0.9	32,847	(140)
Local Real Estate, Construction, and Dev.	1,893	0.6	0.9	63,637	402
Local Community and Civic Organizations	1,497	1.0	2.0	32,070	904
Local Health Services	1,403	0.3	0.9	67,222	273
GROUP TOTAL / AVG	19,625	0.99	1.06	\$70,185	2,955
CITY TOTAL	42,447	N/A	N/A	\$76,575	3,462

Note: LQ = Location Quotient; 10-year job change is from 2010 to 2021. *County LQ provided for comparison purposes

TABLE 3. SUMMARY CHARACTERISTICS AND TRENDS, CARSON PERIPHERY'S LARGEST TRADED CLUSTERS (LIST INCLUDES ALL CLUSTERS WITH MORE THAN 500 JOBS IN 2021)

TRADED CLUSTER	JOBS	LQ	COUNTY LQ*	AVG ANN WAGE	10-YR JOB CHANGE
Distribution and Electronic Commerce	12,493	2.3	1.0	81,011	1,105
Business Services	9,495	1.1	0.9	122,465	926
Transportation and Logistics	6,565	3.7	1.3	84,783	1,325
Education and Knowledge Creation	2,287	0.4	1.1	104,202	(652)
Apparel	2,044	18.7	5.8	63,011	(2,048)
Aerospace Vehicles and Defense	1,978	3.7	3.0	120,775	(263)
Marketing, Design, and Publishing	1,903	1.3	1.6	120,259	258
Oil and Gas Production and Transportation	1,811	4.2	0.4	259,705	431
Hospitality and Tourism	1,664	8.0	0.7	69,170	(1,157)
Water Transportation	1,531	6.1	1.9	174,597	376
Food Processing and Manufacturing	1,035	1.0	8.0	82,082	289
Downstream Chemical Products	886	3.8	1.1	96,729	(67)
Metalworking Technology	637	1.7	1.1	65,110	(82)
Lighting and Electrical Equipment	613	2.3	0.7	113,285	(335)
Construction Products and Services	521	0.7	0.5	111,737	80
Automotive	461	0.5	0.3	71,903	(111)
Plastics	460	8.0	0.6	83,080	(176)
Financial Services	450	0.2	0.8	240,920	10
Information Technology & Analytical Instruments	437	0.4	0.8	114,132	(73)
Downstream Metal Products	414	1.1	0.5	74,863	(177)
Printing Services	407	1.2	0.9	57,171	(123)
Production Technology and Heavy Machinery	404	0.5	0.4	104,794	(203)
GROUP TOTAL / AVG REGION TOTAL	48,497 136,814	1.62 N/A	1.14 N/A	\$104,859 \$81,604	526 7,302

Note: LQ = Location Quotient; 10-year job change is from 2011 to 2021. *County LQ provided for comparison purposes. "—" = insufficient data.

TABLE 4. SUMMARY CHARACTERISTICS AND TRENDS, CARSON PERIPHERY'S LARGES LOCAL CLUSTERS (LIST INCLUDES ALL CLUSTERS WITH MORE THAN 1,000 JOBS IN 2021)

LOCAL CLUSTER	JOBS	LQ	AVG ANN WAGE	10-YR JOB CHANGE
Local Commercial Services	9,537	1.2	1.2	60,643
Local Real Estate, Construction, and Development	9,141	8.0	0.9	76,489
Local Health Services	8,274	0.5	0.9	89,176
Local Logistical Services	7,137	2.8	1.2	68,192
Local Community and Civic Organizations	6,563	1.3	2.0	33,170
Local Education and Training	5,938	0.8	0.9	81,039
Local Hospitality Establishments	5,830	0.6	0.9	35,975
Local Motor Vehicle Products and Services	5,434	1.4	0.8	66,151
Local Government	5,116	1.1	1.2	146,520
Local Food and Beverage Processing and Distribution	4,726	1.2	1.0	48,847
Local Household Goods and Services	4,112	2.0	0.8	39,984
Local Commercial Services	9,537	1.2	1.2	60,643
Local Real Estate, Construction, and Development	9,141	8.0	0.9	76,489
Local Health Services	8,274	0.5	0.9	89,176
GROUP TOTAL / AVG REGION TOTAL	71,808 136,814	0.97 N/A	1.04 N/A	\$68,447 \$81,604

Table 5. Summary Characteristics and Trends, Los Angeles County's Largest Traded Clusters (list includes all clusters with more than 10,000 jobs in 2021)

TRADED CLUSTER	JOBS	LQ	AVG ANN WAGE	10-YR JOB CHANGE
Business Services	267,899	0.9	\$125,959	30,116
Education and Knowledge Creation	221,838	1.1	83,958	16,829
Distribution and Electronic Commerce	198,566	1.0	86,935	5,629
Video Production and Distribution	116,419	12.6	157,310	(12,534)
Marketing, Design, and Publishing	85,992	1.6	139,254	15,740
Transportation and Logistics	81,996	1.3	98,589	23,801
Performing Arts	62,269	3.8	149,449	11,784
Aerospace Vehicles and Defense	57,973	3.0	152,946	(1,684)
Hospitality and Tourism	54,219	0.7	74,244	(27,661)
Financial Services	49,871	8.0	247,430	(11,427)
Information Technology and Analytical Instruments	33,401	8.0	156,389	5,754
Insurance Services	31,251	0.7	127,464	2,721
Food Processing and Manufacturing	30,144	0.8	80,972	(110)
Apparel	22,653	5.8	63,781	(25,387)
Water Transportation	17,079	1.9	160,417	876
Metalworking Technology	14,468	1.1	71,475	(2,109)
Construction Products and Services	14,386	0.5	125,036	2,865
Production Technology and Heavy Machinery	12,422	0.4	102,237	(2,802)
Communications Equipment and Services	12,340	1.4	160,893	(2,044)
Plastics	11,556	0.6	82,284	(1,762)
Printing Services	11,489	0.9	63,362	(5,642)
Furniture	10,593	0.9	61,399	(2,365)
GROUP TOTAL / AVG	1,418,824	1.32	\$117,557	20,586
COUNTY TOTAL	4,893,484	N/A	\$83,905	379,368

Source: U.S. Cluster Mapping Project; EMSI; The Natelson Dale Group, Inc. (TNDG).

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TABLE 6. SUMMARY CHARACTERISTICS AND TRENDS, L.A. COUNTY'S LARGEST LOCAL CLUSTERS (LIST INCLUDES ALL CLUSTERS WITH MORE THAN 100,000 JOBS IN 2021)

LOCAL CLUSTER	JOBS	LQ	AVG ANN WAGE	10-YR JOB CHANGE
Local Health Services	520,313	0.9	\$87,542	82,285
Local Community and Civic Organizations	344,433	2.0	33,511	232,896
Local Commercial Services	342,046	1.2	81,001	34,608
Local Real Estate, Construction, and Development	340,932	0.9	75,509	69,196
Local Hospitality Establishments	325,661	0.9	32,642	(5,706)
Local Education and Training	246,965	0.9	81,387	3,242
Local Government	194,664	1.2	144,605	1,585
Local Food and Beverage Processing and Distribution	143,454	1.0	48,648	3,833
Local Personal Services (Non-Medical)	125,204	1.0	39,386	8,803
Local Retailing of Clothing and General Merchandise	122,833	0.9	42,439	(12,278)
Local Motor Vehicle Products and Services	114,962	8.0	63,795	(4,895)
Local Logistical Services	107,393	1.2	55,339	36,426
GROUP TOTAL / AVG	2,928,860	1.04	\$68,225	449,994
COUNTY TOTAL	4,893,484	N/A	\$83,905	379,368

TABLE 7. JOB GROWTH/RETRACTION PERFORMANCE COMPARED TO NATIONAL TRENDS FOR LARGEST TRADED CLUSTERS, CARSON, CARSON PERIPHERY, AND LOS ANGELES COUNTY

	2011-21 GROWTH PERFORMANCE BASED ON SHIFT SHARE ANALYSIS				
TRADED CLUSTER	CARSON	CARSON PERIPHERY	L.A. COUNTY		
Aerospace Vehicles and Defense	-	-	-		
Apparel	-	-	-		
Automotive	-	-	-		
Business Services	-	-	-		
Communications Equipment and Services	+	+	+		
Construction Products and Services	+	+	+		
Distribution and Electronic Commerce	-	-	-		
Downstream Chemical Products	-	-	-		
Downstream Metal Products	+	-	-		
Education and Knowledge Creation	+	-	+		
Financial Services	-	-	-		
Food Processing and Manufacturing	-	+	-		
Furniture	-	+	-		
Hospitality and Tourism	-	-	-		
Information Technology and Analytical Instruments	+	-	+		
Insurance Services	+	-	+		
Lighting and Electrical Equipment	n/a	-	-		
Marketing, Design, and Publishing	+	-	+		
Metalworking Technology	-	-	-		
Oil and Gas Production and Transportation	-	+	+		
Performing Arts	+	+	+		
Plastics	-	-	-		
Printing Services	-	-	-		
Production Technology and Heavy Machinery	+	-	-		
Transportation and Logistics	+	+	+		
Video Production and Distribution	-	+	-		
Vulcanized and Fired Materials	+	-	-		
Water Transportation	n/a	+	+		

Note: " + " = growth performance better than expected; " - " worse than expected. *Source*: U.S. Cluster Mapping Project; EMSI; The Natelson Dale Group, Inc. (TNDG).

TABLE 8. JOB GROWTH/RETRACTION PERFORMANCE COMPARED TO NATIONAL TRENDS FOR LARGEST LOCAL CLUSTERS, CARSON, CARSON PERIPHERY, AND LOS ANGELES COUNTY

	2011-21 GROWTH PERFORMANCE BASED ON SHIFT SHARE ANALYSIS					
TRADED CLUSTER	CARSON	CARSON PERIPHERY	L.A. COUNTY			
Local Commercial Services	-	+	+			
Local Community and Civic Organizations	+	+	+			
Local Education and Training	+	+	+			
Local Food and Beverage Processing and Distribution	-	-	-			
Local Government	+	+	+			
Local Health Services	+	-	+			
Local Hospitality Establishments	-	+	-			
Local Household Goods and Services	-	-	-			
Local Logistical Services	+	-	+			
Local Motor Vehicle Products and Services	-	-	-			
Local Personal Services (Non-Medical)	-	-	-			
Local Real Estate, Construction, and Development	+	-	-			
Local Retailing of Clothing and General Merchandise	+	+	-			

Note: " + " = growth performance better than expected; " - " worse than expected. *Source*: U.S. Cluster Mapping Project; EMSI; The Natelson Dale Group, Inc. (TNDG).

"Candidate" Clusters for Carson Target Industry Program

The following three tables (Tables 9 to 11) list important existing clusters for the three geographic areas evaluated in this analysis: Carson, Carson Periphery, and Los Angeles County. For each area, clusters are highlighted/shaded on the table if they are in the top 10 for the entire set of clusters (Traded and Local) for at least one of the three variables:

- 1. 2021 Location Quotient (LQ)
- 2. Number of jobs in 2021
- 3. Job growth between 2011 and 2021

For additional context, the tables also show the average annual wage associated with each cluster.

As an example, in Table 9 below, the *Furniture* Cluster has the highest LQ (8.0) of all clusters in Carson. The 10th highest LQ (2.2) is in the *Food Processing and Manufacturing* Cluster. The top 10 clusters in terms of LQs are shaded. The same shading pattern is also applied to the top 10 clusters in terms of total jobs and 10-year job change.

TABLE 9. TOP 10 CLUSTERS FOR KEY VARIABLES: LQ, JOBS, AND JOB GROWTH, CARSON

CLUSTER	LQ	JOBS	10-YR JOB CHANGE	AVG. ANN WAGE
Furniture	8.0	812	(572)	55,262
Local Logistical Services	6.4	5,093	1,349	55,025
Aerospace Vehicles and Defense	5.3	882	(184)	\$157,906
Distribution and Electronic Commerce	3.8	6,443	819	72,217
Jewelry and Precious Metals	3.4	23	4	60,070
Vulcanized and Fired Materials	2.7	173	9	64,866
Downstream Chemical Products	2.5	185	(3)	111,483
Transportation and Logistics	2.5	1,383	242	79,203
Environmental Services	2.4	84	(2)	74,561
Food Processing and Manufacturing	2.2	697	54	89,887
Performing Arts	1.9	265	66	128,743
Local Government	1.7	2,513	20	144,605
Education and Knowledge Creation	1.7	2,982	492	101,924
Local Education and Training	1.4	3,163	54	81,882
Local Community and Civic Organizations	1.0	1,497	904	32,070
Local Commercial Services	0.9	2,155	93	69,257
Local Hospitality Establishments	0.6	1,908	(140)	32,847
Local Real Estate, Construction, and Development	0.6	1,893	402	63,637
Business Services	0.5	1,368	278	103,596
Local Health Services	0.3	1,403	273	67,222

TABLE 10. TOP 10 CLUSTERS FOR KEY VARIABLES: LQ, JOBS, AND JOB GROWTH, CARSON PERIPHERY

CLUSTER	LQ	JOBS	10-YR JOB CHANGE	AVG. ANN WAGE
Apparel	18.7	2,044	(2,048)	63,011
Leather and Related Products	8.7	294	23	66,916
Water Transportation	6.1	1,531	376	174,597
Oil and Gas Production and Transportation	4.2	1,811	431	259,705
Downstream Chemical Products	3.8	886	(67)	96,729
Aerospace Vehicles and Defense	3.7	1,978	(263)	120,775
Transportation and Logistics	3.7	6,565	1,325	84,783
Footwear	3.2	43	(27)	57,167
Local Industrial Products and Services	2.8	1,301	(361)	77,009
Local Logistical Services	2.8	7,137	597	68,192
Distribution and Electronic Commerce	2.3	12,493	1,105	81,011
Local Community and Civic Organizations	1.3	6,563	4,347	33,170
Local Commercial Services	1.2	9,537	1,698	60,643
Business Services	1.1	9,495	926	122,465
Local Real Estate, Construction, and Development	0.8	9,141	1,784	76,489
Local Education and Training	0.8	5,938	524	81,039
Local Hospitality Establishments	0.6	5,830	797	35,975
Local Health Services	0.5	8,274	852	89,176

TABLE 11. TOP 10 CLUSTERS FOR KEY VARIABLES: LQ, JOBS, AND JOB GROWTH, LOS ANGELES COUNTY

CLUSTER	LQ	JOBS	10-YR JOB CHANGE	AVG. ANN WAGE
Video Production and Distribution	12.6	116,419	(12,534)	\$157,310
Apparel	5.8	22,653	(25,387)	63,781
Music and Sound Recording	5.7	6,222	1,413	95,802
Performing Arts	3.8	62,269	11,784	149,449
Aerospace Vehicles and Defense	3.0	57,973	(1,684)	152,946
Jewelry and Precious Metals	2.3	1,807	(94)	62,317
Local Community and Civic Organizations*	2.0	344,433	232,896	33,511
Leather and Related Products	1.9	2,321	(60)	59,600
Water Transportation	1.9	17,079	876	160,417
Marketing, Design, and Publishing	1.6	85,992	15,740	139,254
Transportation and Logistics	1.3	81,996	23,801	98,589
Local Commercial Services	1.2	342,046	34,608	81,001
Local Logistical Services	1.2	107,393	36,426	55,339
Local Government	1.2	194,664	1,585	144,605
Education and Knowledge Creation	1.1	221,838	16,829	83,958
Distribution and Electronic Commerce	1.0	198,566	5,629	86,935
Local Education and Training	0.9	246,965	3,242	81,387
Local Hospitality Establishments	0.9	325,661	(5,706)	32,642
Local Health Services	0.9	520,313	82,285	87,542
Local Real Estate, Construction, and Development	0.9	340,932	69,196	75,509
Business Services	0.9	267,899	30,116	125,959

^{*}Approximately 70% of cluster employment is in one component industry: NAICS 624120 (Services for the Elderly and Persons with Disabilities). In addition, a sizable portion of apparent employment growth in this industry results from the Bureau of Labor Statistics (BLS) reclassification of other industries' employment into this specific industry in 2013.

Table 12, on the following page, provides a list of candidate clusters for the City of Carson's industry targeting program (i.e., business retention, expansion and attraction). The candidate clusters are based on two strategic approaches to industry targeting:

- Build on Carson's existing core strengths. Carson's existing strengths were identified based on the employment-trend criteria (location quotient, total existing jobs, and 10-year job change) summarized in Table 9 and Table 10⁴. In addition, the analysis identifies potential "emerging" clusters that have experienced positive growth trends, as identified in the Shift-Share analysis summary on Tables 7 and 8.
- 2. Tap into dominant regional clusters that are not currently well represented in Carson. This strategic approach would seek to leverage Carson's competitive strengths to capture increasing shares of projected employment growth in Los Angeles County. This component of the City's business attraction/marketing program would focus on Carson's unique "selling points" relative to the larger regional economy (including the city's strategic location near several Los Angeles County area submarkets, along with a resident workforce that includes large numbers of commuters potentially eager to work closer to home). In developing the list of candidates for the second strategy, the consultant has focused on clusters meeting the following criteria:
 - a. Traded clusters (local clusters are addressed in the first strategic approach)
 - b. Clusters with a high specialization of employment in Los Angeles County
 - c. Clusters primarily oriented towards private business investment (in contrast to clusters that are substantially composed of government/nonprofit employment which are generally considered to have lower economic "spin-off" opportunities)

Following Table 12, Table 13, on page 18, provides a narrative description of the candidate clusters. In addition, the table provides key component industries within each cluster based on employment totals for each industry in the relevant geographies.

On page 21, Table 14 summarizes the key characteristics of the candidate clusters identified in Table 12. The characteristics include projected 10-year job growth and annual average wages (Los Angeles County and the State of California).

⁴ Although Table 9 would appear to indicate that the *Local Community and Civic Organizations* cluster should be included in the candidate list, we have excluded this cluster for the following reasons. First, 80% of the employment in this cluster is accounted for in one component industry: NAICS 624120 - Services for the Elderly and Persons with Disabilities; a sizable portion of apparent employment growth in this industry results from the Bureau of Labor Statistics (BLS) reclassification of other industries' employment into this specific industry in 2013. Second, the City average wage for this cluster (\$32,070) is well below the area average (\$76,575).

TABLE 12. LIST OF CANDIDATE CLUSTERS FOR CARSON'S INDUSTRY PROGRAM

STRATEGIC APPROACH	LOCAL-SERVING CLUSTERS	"TRADED" CLUSTERS
Build on Carson's* existing dominant strengths and emerging clusters	 Local Logistical Services Local Education and Training Local Household Goods and Services 	 Aerospace Vehicles and Defense Business Services Construction Products and Services Distribution and Electronic Commerce Downstream Chemical Products Education and Knowledge Creation Environmental Services Food Processing and Manufacturing Oil and Gas Production and Transportation Performing Arts Transportation and Logistics Vulcanized and Fired Materials
Tap into dominant/emerging regional clusters that are not currently well represented in Carson		 Information Technology and Analytical Instruments Insurance Services Marketing, Design, and Publishing Music and Sound Recording Video Production and Distribution

Source: The Natelson Dale Group, Inc. (TNDG).

^{*}Including the Carson area Carson Periphery geographies summarized on pages 2 and 3.

TABLE 13. NARRATIVE DESCRIPTIONS AND KEY COMPONENT INDUSTRIES FOR CANDIDATE CLUSTERS

CLUSTER	NARRATIVE DESCRIPTION	KEY COMPONENT INDUSTRIES						
Group 1 – Carson's	Group 1 – Carson's Existing Core and Emerging Strengths							
Local Logistical Services	Establishments that offer local passenger transportation and local transportation of freight and goods, including moving companies and couriers. This cluster also includes local storage facilities, truck and RV leasing, and passenger car rental services.	 Couriers and Express Delivery Services Bus and Other Motor Vehicle Transit Systems Specialized Freight (except Used Goods) Trucking, Local 						
Local Education and Training	Local educational institutions. These include schools for elementary and secondary education, technical and vocational training, fine arts instruction, as well as automobile driving.	Elementary and Secondary Schools (Local Government) Elementary and Secondary Schools						
Local Household Goods and Services	Local establishments and services designed to support individual households such as landscape services, electronics repair, as well as retail stores for appliances, hardware, gardening, and furniture. Establishments that manufacture aircraft, space	Landscaping ServicesFurniture Stores						
Aerospace Vehicles and Defense	vehicles, guided missiles, and related parts. This cluster also contains firms that manufacture the necessary search and navigation equipment used by these products.	 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing Aircraft Manufacturing 						
Business Services	Establishments and services primarily designed to support other aspects of a business or to assist unrelated companies. This includes corporate headquarters. Professional services such as consulting, legal services, facilities support services, computer services, engineering and architectural services, and placement services. All for-hire ground passenger transportation services are also present in this cluster.	 Corporate, Subsidiary, and Regional Managing Offices Administrative Management and General Management Consulting Services Custom Computer Programming Services Engineering Services 						
Construction Products and Services	Establishments that supply construction materials, components, products, and services. Construction materials and components include those made of sand, stone, gravel, asphalt, cement, concrete, and other earthen substances. Construction products include pipes and heat exchangers. Construction services include the construction of pipelines for water, sewers, oil and gas, power, and communication, as well as building services for homes and industrial buildings.	 Water Supply and Irrigation Systems Steam and Air-Conditioning Supply Other Heavy and Civil Engineering Construction 						
Distribution and Electronic Commerce	Traditional wholesalers as well as mail order houses and electronic merchants. The companies in this cluster mostly buy, hold, and distribute a wide range of products such as apparel, food, chemicals, gasses, minerals, farm materials, machinery, and other merchandise. The cluster also contains firms that support distribution and electronic commerce operations, including packaging, labeling, and equipment rental and leasing.	 Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers Industrial Machinery and Equipment Merchant Wholesalers Fresh Fruit and Vegetable Merchant Wholesalers 						
Downstream Chemical Products	Establishments that manufacture complex chemical products for end users. These products include adhesives, beauty products, soaps, cleaners, film	Adhesive Manufacturing						

CLUSTER	NARRATIVE DESCRIPTION	KEY COMPONENT INDUSTRIES
	processing chemicals, dyes, paints, explosives, and lubricating oils.	Toilet Preparation Manufacturing
Education and Knowledge Creation	All educational and training institutions, as well as related supporting establishments. It also includes research and development institutions in biotechnology, physical sciences, engineering, life sciences, and social sciences.	 Colleges, Universities, and Professional Schools (State Government) Colleges, Universities, and Professional Schools Research and Development in the Physical, Engineering, and Life Sciences (except
		Nanotechnology and Biotechnology)
Environmental Services	Establishments primarily engaged in collection, treatment, processing, and disposal of hazardous and non-hazardous waste.	 Materials Recovery Facilities Hazardous Waste Collection All Other Miscellaneous Waste Management Services
Food Processing and Manufacturing	Firms involved in the processing of raw food materials and the manufacturing of downstream food products for end users. This includes millers and refineries of rice, flour, corn, sugar, and oilseeds. These upstream products contribute in part to producing specialty foods, animal foods, baked goods, candies, teas, coffees, beers, wines, other beverages, meats, packaged fruits and vegetables, and processed dairy products.	 Perishable Prepared Food Manufacturing Flour Milling Soft Drink Manufacturing All Other Miscellaneous Food Manufacturing
Oil and Gas Production and Transportation	Firms involved in locating, extracting, refining, and transporting oil and gas. This includes companies that manufacture the equipment necessary to extract oil and gas, as well as companies that provide support services for oil and gas operations and pipeline transport.	Petroleum Refineries
Performing Arts	Services that produce, promote, and support live artistic performances. Live performances include those by theater companies, dance troupes, musicians, and independent artists.	 Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures Independent Artists, Writers, and Performers
Transportation and Logistics	All air, rail, bus, and freight transportation services. It also includes related operation services and support activities such as inspections,	Freight Transportation ArrangementGeneral Freight Trucking,
Vulcanized and Fired Materials	maintenance, repairs, security, and loading/unloading. Firms that manufacture construction and other materials out of earthen substances such as clay, sand, and rubber at extremely high temperatures. The production processes create goods made of tile, brick, ceramic, glass, and rubber (including refractories and tires).	 Long-Distance, Truckload Glass Product Manufacturing Made of Purchased Glass
Group 2 – Dominant/E	merging Regional Clusters	
Information Technology and Analytical Instruments	Information technology and analytical products such as computers, software, audio visual equipment, laboratory instruments, and medical apparatus. The cluster also includes the standard and precision electronics used by these products	 Software Publishers Electromedical and Electrotherapeutic Apparatus Manufacturing

CLUSTER	NARRATIVE DESCRIPTION	KEY COMPONENT INDUSTRIES
	(for example, circuit boards and semiconductor devices).	 Other Electronic Component Manufacturing Semiconductor and Related Device Manufacturing
Insurance Services	Firms providing a range of insurance types, as well as support services such as reinsurance and claims adjustment.	 Direct Health and Medical Insurance Carriers Direct Property and Casualty Insurance Carriers Claims Adjusting
Marketing, Design, and Publishing	Establishments involved in design services (physical and graphical), marketing (including advertising creation, marketing research, media buying, and public relations), and publishing (both in hard copy and on the internet).	 Advertising Agencies Marketing Consulting Services Internet Publishing and Broadcasting and Web Search Portals
Music and Sound Recording	Establishments primarily involved in the production and distribution of music and other sound recordings.	Sound Recording StudiosRecord Production and DistributionMusic Publishers
Video Production and Distribution	Establishments that are primarily involved with the production and distribution of motion pictures and other video. This includes specialized viewing venues such as drive-in theaters.	 Motion Picture and Video Production Teleproduction and Other Postproduction Services
Source: The Natelson Dale	Group, Inc. (TNDG): Cluster Mapping Project.	

TABLE 14. CHARACTERISTICS OF CANDIDATE CLUSTERS

		PROJECTED 10-YR JOB GROWTH ²		DOES THE CLUSTER LEVERAGE POTENTIAL STRATEGIC ADVANTAGES AND PRIORITIES?			
CANDIDATE CLUSTER	AVG ANN WAGE ¹	L.A. COUNTY	CA	MFG./R&D FOCUS	SUPPORTED BY REGIONAL INITIATIVES	"STRONG" REGIONAL CLUSTER	
Carson's Existing/Emergi	ng Clusters						
Local Logistical Services	\$55,339	21,242	70,115				
Local Education and Training	\$81,387	Job Losses	3,264				
Local Household Goods and Services	\$48,535	Job Losses	Job Losses				
Distribution and Electronic Commerce	\$86,935	Job Losses	23,907		√	✓	
Transportation and Logistics	\$98,589	10,283	24,051		√		
Aerospace Vehicles and Defense	\$152,946	723	Job Losses	✓	√	✓	
Business Services	\$125,959	8,895	180,536		√		
Environmental Services	\$84,676	159	1,333				
Food Processing and Manufacturing	\$80,972	Job Losses	232	✓	√		
Downstream Chemical Products	\$93,615	Job Losses	1,344	✓			
Construction Products and Services	\$125,036	396	1,893	✓			
Vulcanized and Fired Materials	\$64,462	Job Losses	Job Losses	✓			
Education and Knowledge Creation	\$83,958	18,154	85,763		√		

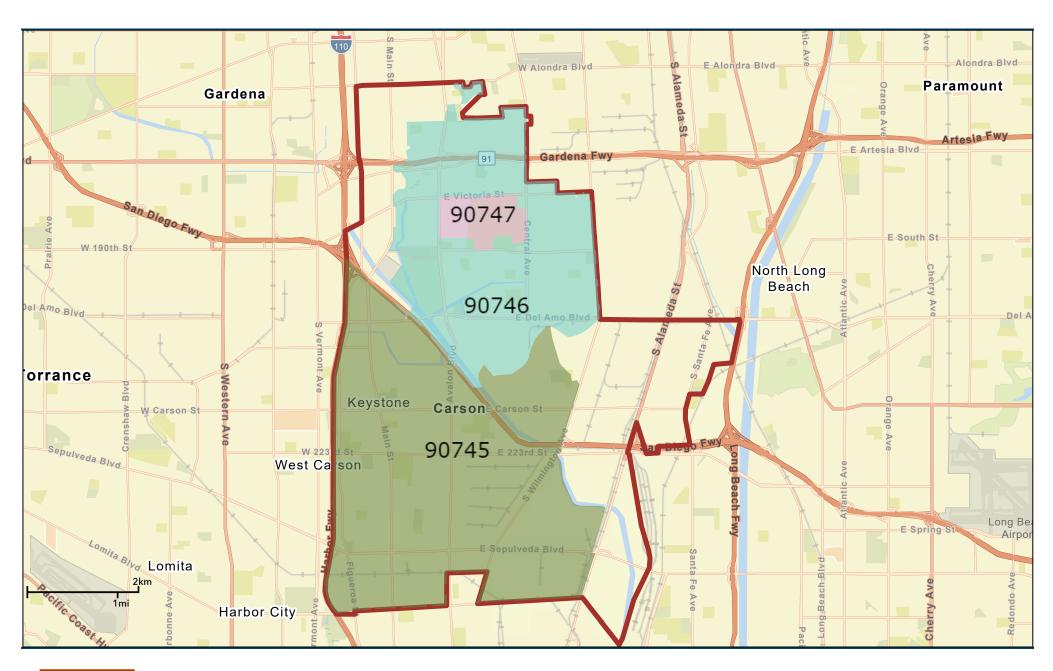
		PROJECTED 10-YR JOB GROWTH ²		DOES THE CLUSTER LEVERAGE POTENTIAL STRATEGIC ADVANTAGES AND PRIORITIES?			
CANDIDATE CLUSTER	AVG ANN WAGE ¹	L.A. COUNTY	CA	MFG./R&D FOCUS	SUPPORTED BY REGIONAL INITIATIVES	"STRONG" REGIONAL CLUSTER	
Oil and Gas Production and Transportation	\$259,705	724	Job Losses				
Performing Arts	\$149,449	15,138	21,705		√	✓	
Regional Clusters							
Marketing, Design, and Publishing	\$139,254	8,746	62,854		✓	✓	
Music and Sound Recording	\$95,802	1,076	1,804			√	
Video Production and Distribution	\$157,310	19,360	27,005		✓	√	
Information Technology and Analytical Instruments	\$156,389	1,059	35,816	✓	√	√	
Insurance Services	\$127,464	Job Losses	Job Losses				

Note: 1. Average compensation based on averages for Los Angeles County. 2. Net number of new jobs. *Source*: The Natelson Dale Group, Inc. (TNDG); Industry Clusters in Los Angeles County, 2020, LAEDC.

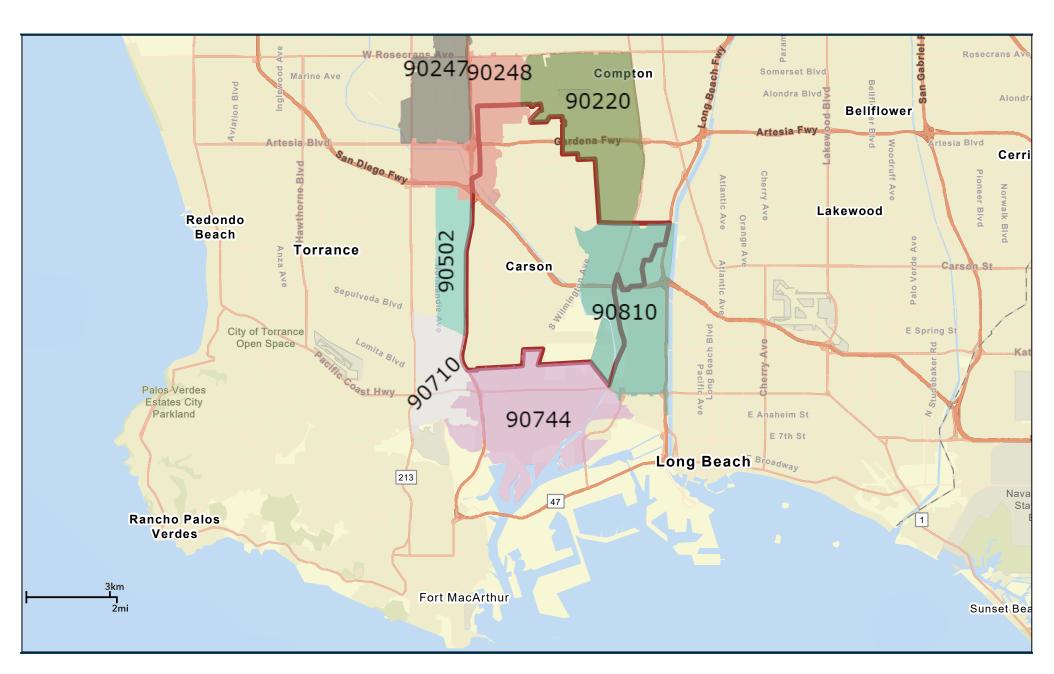
APPENDIX A

Maps of Study Geographic Areas

City of Carson Zip Codes



Carson Periphery Zip Codes and City of Carson



Los Angeles County



APPENDIX B

Cluster Employee Database by Region

Table B-1 Cluster Employment by Region, 2021

Cluster	Carson	Carson	L.A. County	CA	U.S.
		Region			
Aerospace Vehicles and Defense Agricultural Inputs and Services	882 0	1,978 28	57,973 5,366	105,400 441,835	621,885 1,916,145
Apparel	7	2,044	22,653	33,307	127,599
Automotive	14	461	8,939	45,080	981,982
Biopharmaceuticals	0	218	8,094 267.899	47,999	326,357
Business Services Coal Mining	1,368 0	9,495 0	267,899 4	1,311,381 18	10,163,355 41,174
Communications Equipment and Services	68	371	12,340	49,333	293,312
Construction Products and Services	135	521	14,386	67,425	920,195
Distribution and Electronic Commerce	6,443	12,493	198,566	788,301	6,392,249
Downstream Chemical Products Downstream Metal Products	185 12	886 414	9,184 7,566	25,906 29,084	275,919 455,485
Education and Knowledge Creation	2,982	2,287	221,838	851,778	6,672,206
Electric Power Generation and Transmission	0	40	5,325	17,753	168,812
Environmental Services	84	271	4,408	14,960	130,897
Financial Services	150 0	450 113	49,871 649	229,236 2,574	2,161,468
Fishing and Fishing Products Food Processing and Manufacturing	697	1,035	30,144	170,579	63,757 1,188,607
Footwear	0	43	412	1,141	15,518
Forestry	0	0	118	5,945	98,446
Furniture	812	189	10,593	30,463	381,594
Hospitality and Tourism Information Technology and Analytical Instruments	212 65	1,664 437	54,219 33,401	249,007 355,487	2,367,210 1,394,278
Insurance Services	116	164	31,251	117,609	1,553,586
Jewelry and Precious Metals	23	7	1,807	3,305	25,207
Leather and Related Products	7	294	2,321	4,468	39,493
Lighting and Electrical Equipment	0	613 0	6,294 4,457	26,439 22,182	310,605
Livestock Processing Marketing, Design, and Publishing	131	1,903	4,457 85,992	335,063	546,565 1,761,267
Medical Devices	16	331	7,598	52,043	300,953
Metal Mining	0	0	12	771	45,170
Metalworking Technology	83	637	14,468	40,104	439,097
Music and Sound Recording Nonmetal Mining	0	0 32	6,222 396	8,905 5,382	35,543 100,349
Oil and Gas Production and Transportation	14	1,811	6,671	24,142	501,888
Paper and Packaging	0	49	6,192	19,977	353,166
Performing Arts	265	298	62,269	110,355	530,723
Plastics Printing Services	7 89	460 407	11,556 11,489	40,981 36,067	648,919 396,237
Production Technology and Heavy Machinery	49	404	12,422	53,739	909,604
Recreational and Small Electric Goods	57	254	7,388	24,820	196,225
Textile Manufacturing	22	7	6,892	10,335	182,867
Tobacco	0	0	26 1.630	265	11,163
Trailers, Motor Homes, and Appliances Transportation and Logistics	1,383	6,565	1,629 81,996	4,621 198,378	160,490 2,075,402
Upstream Chemical Products	0	156	1,359	6,846	166,109
Upstream Metal Manufacturing	87	297	6,392	19,821	367,659
Video Production and Distribution	12	212	116,419	132,938	302,769
Vulcanized and Fired Materials Water Transportation	173 0	371 1,531	3,944 17,079	12,742 32,080	242,964 295,089
Wood Products	45	174	2,997	26,312	397,957
Local Commercial Services	2,155	9,537	342,046	1,246,854	9,491,457
Local Community and Civic Organizations	1,497	6,563	344,433	1,019,076	5,724,854
Local Education and Training	3,163	5,938	246,965	937,985	8,574,055
Local Entertainment and Media Local Federal Government	173 712	1,033 1,073	43,535 67,675	146,204 459,026	1,268,466 4,945,949
Local Financial Services	261	1,179	80,299	312,878	3,389,742
Local Food and Beverage Processing and Distribution	953	4,726	143,454	529,500	4,478,776
Local Government	2,513	5,116	194,664	713,061	5,512,137
Local Health Services Local Hospitality Establishments	1,403 1,908	8,274 5,830	520,313 325,661	1,892,011 1,269,872	18,307,316 11,363,869
Local Household Goods and Services	501	4,112	59,585	285,054	2,344,772
Local Industrial Products and Services	63	1,301	17,930	59,447	534,016
Local Logistical Services	5,093	7,137	107,393	371,993	3,007,398
Local Motor Vehicle Products and Services Local Personal Services (Non-Medical)	911 952	5,434 3,347	114,962 125 204	464,255 453,513	4,649,035
Local Real Estate, Construction, and Development	952 1,893	3,347 9,141	125,204 340,932	453,513 1,577,898	4,014,387 12,874,061
Local Retailing of Clothing and General Merchandise	671	3,169	122,833	467,809	4,365,004
Local State Government	154	302	16,362	229,229	2,249,750
Local Utilities	55 710	152	22,317	103,362	1,085,491
Non-Cluster	719	1,036	115,437	306,229	1,583,764
Grand Total Traded Total	42,447 16,695	136,814 52,414	4,893,484 1,541,484	19,089,939 6,244,683	159,819,820 50,055,519
Local Total	25,033	83,364	3,236,563	12,539,026	108,180,537

Table B-2 Cluster Location Quotients (LQs) by Region, 2021

Cluster	Carson	Carson Region	L.A. County	CA
Aerospace Vehicles and Defense	5.3	3.7	3.0	1.4
Agricultural Inputs and Services	0.0	0.0	0.1	1.9
Apparel	0.2	18.7	5.8	2.2
Automotive	0.1	0.5	0.3	0.4
Biopharmaceuticals Business Services	0.0 0.5	0.8 1.1	0.8 0.9	1.2 1.1
Coal Mining	0.0	0.0	0.9	0.0
Communications Equipment and Services	0.9	1.5	1.4	1.4
Construction Products and Services	0.6	0.7	0.5	0.6
Distribution and Electronic Commerce	3.8	2.3	1.0	1.0
Downstream Chemical Products	2.5	3.8	1.1	0.8
Downstream Metal Products	0.1	1.1	0.5	0.5
Education and Knowledge Creation Electric Power Generation and Transmission	1.7 0.0	0.4 0.3	1.1 1.0	1.1 0.9
Environmental Services	2.4	2.4	1.0	1.0
Financial Services	0.3	0.2	0.8	0.9
Fishing and Fishing Products	0.0	2.1	0.3	0.3
Food Processing and Manufacturing	2.2	1.0	0.8	1.2
Footwear	0.0	3.2	0.9	0.6
Forestry	0.0	0.0	0.0	0.5
Furniture	8.0	0.6	0.9	0.7
Hospitality and Tourism Information Technology and Analytical Instruments	0.3 0.2	0.8 0.4	0.7 0.8	0.9 2.1
Insurance Services	0.2	0.4	0.8	0.6
Jewelry and Precious Metals	3.4	0.3	2.3	1.1
Leather and Related Products	0.7	8.7	1.9	0.9
Lighting and Electrical Equipment	0.0	2.3	0.7	0.7
Livestock Processing	0.0	0.0	0.3	0.3
Marketing, Design, and Publishing	0.3	1.3	1.6	1.6
Medical Devices	0.2	1.3	0.8	1.4
Metal Mining Metalworking Technology	0.0 0.7	0.0 1.7	0.0 1.1	0.1 0.8
Music and Sound Recording	0.7	0.0	5.7	2.1
Nonmetal Mining	0.0	0.4	0.1	0.4
Oil and Gas Production and Transportation	0.1	4.2	0.4	0.4
Paper and Packaging	0.0	0.2	0.6	0.5
Performing Arts	1.9	0.7	3.8	1.7
Plastics	0.0	0.8	0.6	0.5
Printing Services	0.8	1.2	0.9	0.8
Production Technology and Heavy Machinery Recreational and Small Electric Goods	0.2 1.1	0.5 1.5	0.4 1.2	0.5 1.1
Textile Manufacturing	0.5	0.0	1.2	0.5
Tobacco	0.0	0.0	0.1	0.2
Trailers, Motor Homes, and Appliances	0.0	0.0	0.3	0.2
Transportation and Logistics	2.5	3.7	1.3	0.8
Upstream Chemical Products	0.0	1.1	0.3	0.3
Upstream Metal Manufacturing	0.9	0.9	0.6	0.5
Video Production and Distribution Vulcanized and Fired Materials	0.2 2.7	0.8 1.8	12.6 0.5	3.7 0.4
Water Transportation	0.0	6.1	1.9	0.4
Wood Products	0.4	0.5	0.2	0.6
Local Commercial Services	0.9	1.2	1.2	1.1
Local Community and Civic Organizations	1.0	1.3	2.0	1.5
Local Education and Training	1.4	0.8	0.9	0.9
Local Entertainment and Media	0.5	1.0	1.1	1.0
Local Federal Government	0.5	0.3	0.4	0.8
Local Financial Services Local Food and Beverage Processing and Distribution	0.3 0.8	0.4 1.2	0.8 1.0	0.8 1.0
Local Government	1.7	1.2	1.2	1.0
Local Health Services	0.3	0.5	0.9	0.9
Local Hospitality Establishments	0.6	0.6	0.9	0.9
Local Household Goods and Services	0.8	2.0	0.8	1.0
Local Industrial Products and Services	0.4	2.8	1.1	0.9
Local Logistical Services	6.4	2.8	1.2	1.0
Local Motor Vehicle Products and Services	0.7	1.4	0.8	0.8
Local Personal Services (Non-Medical)	0.9	1.0	1.0	0.9
Local Real Estate, Construction, and Development Local Retailing of Clothing and General Merchandise	0.6 0.6	0.8 0.8	0.9 0.9	1.0 0.9
Local State Government	0.8	0.6	0.9	0.9
Local Utilities	0.2	0.2	0.7	0.8
Non-Cluster	1.7	0.8	2.4	1.6
Traded Total Local Total	1.3 0.9	1.2 0.9	1.0 1.0	1.0 1.0
EVVIII I VIIII	0.0	0.5	1.0	1.0

Table B-3 Average Wages by Cluster by Region, 2021

Cluster	Carson	Carson Region	L.A. County	CA	U.S.
Aerospace Vehicles and Defense	157,906	120,775	152,946	145,826	133,979
Agricultural Inputs and Services		79,909	61,212	52,534	48,797
Automotivo		63,011	63,781	64,027	53,776
Automotive Biopharmaceuticals		71,903 159,165	90,744 101,240	139,006 203,354	84,170 161,780
Business Services	103,596	122,465	125,959	163,033	125,202
Coal Mining				152,866	108,190
Communications Equipment and Services	220,923	124,244	160,893	183,140	136,393
Construction Products and Services	135,394	111,737	125,036	118,472	96,444
Distribution and Electronic Commerce	72,217	81,011	86,935	95,692	92,896
Downstream Chemical Products Downstream Metal Products	111,483	96,729	93,615 75,104	99,374	103,746
Education and Knowledge Creation	72,389 101,924	74,863 104,202	75,104 83,958	80,902 110,569	75,915 78,276
Electric Power Generation and Transmission		211,999	209,834	220,200	189,165
Environmental Services	74,561	82,688	84,676	82,088	80,711
Financial Services	249,540	240,920	247,430	275,282	217,920
Fishing and Fishing Products		79,437	92,780	68,762	61,871
Food Processing and Manufacturing	89,887	82,082	80,972	78,761	72,673
Footwear		57,167	55,685	95,032	59,341
Forestry Furniture	55,262	64,250	71,372 61,399	81,317 63,756	64,009 58,415
Hospitality and Tourism	80,590	69,170	74,244	88,034	55,203
Information Technology and Analytical Instruments	90,993	114,132	156,389	282,980	191,485
Insurance Services	131,354	129,257	127,464	125,383	115,362
Jewelry and Precious Metals	60,070		62,317	59,882	67,564
Leather and Related Products		66,916	59,600	58,492	52,902
Lighting and Electrical Equipment		113,285	106,684	124,408	103,193
Livestock Processing Marketing, Design, and Publishing	 125,947	120,259	62,731 139,254	57,258 226,296	57,672 131,366
Medical Devices	160,133	130,515	131,458	148,253	114,863
Metal Mining				123,133	121,101
Metalworking Technology	66,826	65,110	71,475	74,331	75,086
Music and Sound Recording			95,802	84,674	78,623
Nonmetal Mining		121,739	112,493	108,858	93,739
Oil and Gas Production and Transportation		259,705	215,777	193,686	150,119
Paper and Packaging Performing Arts	 128,743	70,537 155,007	88,768 149,449	90,373 107,935	88,357 58,967
Plastics	120,743	83,080	82,284	79,692	77,204
Printing Services	60,122	57,171	63,362	64,518	63,600
Production Technology and Heavy Machinery	66,672	104,794	102,237	99,066	88,148
Recreational and Small Electric Goods	74,023	104,255	109,241	92,350	79,809
Textile Manufacturing	42,561		63,574	63,456	65,831
Tobacco			116,389	88,490 70,165	107,890
Trailers, Motor Homes, and Appliances Transportation and Logistics	79,203	 84,783	76,772 98,589	70,165 88,080	77,984 85,945
Upstream Chemical Products	19,203	118,454	127,387	123,790	138,444
Upstream Metal Manufacturing	88,598	87,344	83,939	88,915	88,346
Video Production and Distribution	178,922	148,335	157,310	149,887	119,297
Vulcanized and Fired Materials	64,866	66,602	64,462	71,805	73,775
Water Transportation		174,597	160,417	139,768	98,928
Wood Products	52,902	57,079	57,232	67,130	63,519
Local Commercial Services Local Community and Civic Organizations	69,257 32,070	60,643 33,170	81,001 33,511	75,325 34,725	67,996 36,779
Local Education and Training	81,882	81,039	81,387	84,529	70,500
Local Entertainment and Media	52,973	53,188	99,865	69,837	58,861
Local Federal Government	115,785	124,456	99,084	93,365	94,185
Local Financial Services	111,427	111,311	113,301	115,211	100,727
Local Food and Beverage Processing and Distribution	51,073	48,847	48,648	48,843	42,712
Local Government	144,605	146,520	144,605	128,386	87,623
Local Health Services	67,222 32,847	89,176 35,975	87,542 32,642	94,751 31,475	77,502 26,363
Local Hospitality Establishments Local Household Goods and Services	32,847 50,440	35,975 39,984	32,642 48,535	31,475 50,838	26,363 46,595
Local Industrial Products and Services	88,157	77,009	77,853	77,395	71,628
Local Logistical Services	55,025	68,192	55,339	67,180	59,704
Local Motor Vehicle Products and Services	70,374	66,151	63,795	64,933	57,127
Local Personal Services (Non-Medical)	37,183	38,279	39,386	39,554	35,160
Local Real Estate, Construction, and Development	63,637	76,489	75,509	80,743	70,711
Local Retailing of Clothing and General Merchandise	40,436	41,499	42,439	39,680	33,630
Local State Government Local Utilities	119,923 122,311	126,608 98,195	119,923 130,917	124,366 152,505	91,325 125,971
Non-Cluster	20,342	20,429	20,294	20,087	18,358
Avg Wage	\$76,575	\$81,604	\$83,905	\$93,212	\$75,539
Traded Avg	\$90,072	\$104,892	\$116,189	\$137,158	\$103,393
Local Avg	\$69,195	\$67,757	\$70,798	\$73,113	\$63,488

Table B-4 Cluster Employment by Region, 2011-21

Cluster	Carson	Carson Region	L.A. County	CA	U.S.
Aerospace Vehicles and Defense	(184)	(263)	(1,684)	(2,095)	(4,903)
Agricultural Inputs and Services	(7)	(20)	(1,048)	25,648	100,186
Apparel Automotive	(7) (6)	(2,048) (111)	(25,387) (478)	(28,067) 17,821	(55,601) 171,034
Biopharmaceuticals	0	(256)	1,344	4,708	54,009
Business Services	278	926	30,116	312,925	2,243,125
Coal Mining	0	0	4	(145)	(55,578)
Communications Equipment and Services	3	(50)	(2,044)	(21,663)	(114,012)
Construction Products and Services	53	80	2,865	13,234	136,003
Distribution and Electronic Commerce Downstream Chemical Products	819 (3)	1,105 (67)	5,629 (1,298)	152,526 3,460	1,132,902 13,994
Downstream Metal Products	4	(177)	(1,009)	413	48,641
Education and Knowledge Creation	492	(652)	16,829	74,904	219,081
Electric Power Generation and Transmission	0	` (9)	739	(2,574)	(21,571)
Environmental Services	(2)	60	(175)	1,339	21,439
Financial Services	(5)	10	(11,427)	7,806	109,550
Fishing and Fishing Products Food Processing and Manufacturing	0 54	(32) 289	143 (110)	(259) 22,925	(15,696) 208,661
Footwear	0	(27)	(311)	(189)	(3,800)
Forestry	ő	0	(18)	589	(3,810)
Furniture	(572)	34	(2,365)	(1,436)	17,200
Hospitality and Tourism	(97)	(1,157)	(27,661)	(106,526)	(593,879)
Information Technology and Analytical Instruments	15	(73)	5,754	87,069	236,279
Insurance Services	32	(5)	2,721	(8,695)	49,807
Jewelry and Precious Metals Leather and Related Products	4 0	(11) 23	(94) (60)	(276)	(8,371) (458)
Lighting and Electrical Equipment	0	(335)	(2,168)	(118) (724)	11,088
Livestock Processing	0	0	(570)	212	36,525
Marketing, Design, and Publishing	25	258	15,740	111,621	306,732
Medical Devices	5	(120)	204	4,362	13,985
Metal Mining	0	0	(4)	198	(136)
Metalworking Technology	(19)	(82)	(2,109)	(1,217)	(14,858)
Music and Sound Recording Nonmetal Mining	0	0 (1)	1,413 (57)	1,901 625	7,758 8,983
Oil and Gas Production and Transportation	(63)	431	(1,475)	(15,288)	(221,346)
Paper and Packaging	0	(16)	(1,192)	(2,303)	(36,469)
Performing Arts	66	99	11,784	9,187	(15,816)
Plastics	0	(176)	(1,762)	(369)	75,550
Printing Services	(33)	(123)	(5,642)	(11,862)	(117,539)
Production Technology and Heavy Machinery Recreational and Small Electric Goods	26 (13)	(203) (109)	(2,802)	(556) (2,786)	(3,430) 8,904
Textile Manufacturing	(2)	(109)	(706) (3,100)	(5,185)	(52,369)
Tobacco	0	0	22	216	(3,864)
Trailers, Motor Homes, and Appliances	0	0	92	861	41,261
Transportation and Logistics	242	1,325	23,801	42,528	162,263
Upstream Chemical Products	0	11	127	1,197	4,538
Upstream Metal Manufacturing	17	(142)	(1,810)	(4,743)	(36,039)
Video Production and Distribution Vulcanized and Fired Materials	(2) 9	24 (206)	(12,534) (279)	(11,824) (1,314)	18,332 (3,465)
Water Transportation	0	376	876	2,228	13,271
Wood Products	6	(25)	(432)	5,971	59,483
Local Commercial Services	93	1,698	34,608	183,472	934,318
Local Community and Civic Organizations	904	4,347	232,896	617,715	1,452,699
Local Education and Training	54	524	3,242	33,816	(104,768)
Local Entertainment and Media	(87)	(497)	(17,484)	(63,799)	(462,110)
Local Federal Government Local Financial Services	23 19	(20) 52	340 4,029	(17,427) 39,603	(74,606) 533,138
Local Food and Beverage Processing and Distribution	(23)	40	3,833	38,773	364,218
Local Government	20	42	1,585	15,752	(422)
Local Health Services	273	852	82,285	331,321	1,980,540
Local Hospitality Establishments	(140)	797	(5,706)	1,521	267,865
Local Household Goods and Services	(50)	(354)	(3,767)	13,504	176,288
Local Industrial Products and Services	(13)	(361)	(5,306)	(13,109)	(67,446)
Local Logistical Services Local Motor Vehicle Products and Services	1,349 20	597 (24)	36,426 (4,895)	126,216 28,704	774,483 427,168
Local Personal Services (Non-Medical)	(13)	(24) 123	(4,895) 8,803	28,704 36,867	345,779
Local Real Estate, Construction, and Development	402	1,784	69,196	400,066	2,634,931
Local Retailing of Clothing and General Merchandise	(16)	37	(12,278)	(45,340)	(421,158)
Local State Government	25	48	2,692	14,967	(70,498)
Local Utilities	(61)	(58)	(7,094)	(13,878)	(115,469)
Non-Cluster	(452)	(882)	(52,427)	(98,019)	(305,024)
Grand Total	3,462	7,302	379,368	2,306,986	12,417,493
Traded Total Local Total	1,135 2,780	(1,442) 9,626	8,392 423,403	676,260 1,728,745	4,147,567 8,574,950
Local Total	2,700	3,020	423,403	1,120,140	0,014,500

Table B-5 Cluster Employment by Region (%), 2011-21

Cluster	Carson	Carson Region	L.A. County	CA	U.S.
Aerospace Vehicles and Defense	-17.3%	-11.7%	-2.8%	-1.9%	-0.8%
Agricultural Inputs and Services	-100.0%	-42.1%	-16.3%	6.2%	5.5%
Apparel	-49.1%	-50.0%	-52.8%	-45.7%	-30.4%
Automotive	-29.5%	-19.4%	-5.1%	65.4%	21.1%
Biopharmaceuticals		-54.1%	19.9%	10.9%	19.8%
Business Services Coal Mining	25.5%	10.8%	12.7% UND	31.3% -89.0%	28.3% -57.4%
Communications Equipment and Services	4.7%	-11.9%	-14.2%	-30.5%	-28.0%
Construction Products and Services	63.5%	18.2%	24.9%	24.4%	17.3%
Distribution and Electronic Commerce	14.6%	9.7%	2.9%	24.0%	21.5%
Downstream Chemical Products	-1.8%	-7.0%	-12.4%	15.4%	5.3%
Downstream Metal Products	62.7%	-30.0%	-11.8%	1.4%	12.0%
Education and Knowledge Creation Electric Power Generation and Transmission	19.8%	-22.2% -18.3%	8.2% 16.1%	9.6% -12.7%	3.4% -11.3%
Environmental Services	-2.0%	28.3%	-3.8%	9.8%	19.6%
Financial Services	-3.3%	2.2%	-18.6%	3.5%	5.3%
Fishing and Fishing Products		-21.8%	28.3%	-9.1%	-19.8%
Food Processing and Manufacturing	8.4%	38.8%	-0.4%	15.5%	21.3%
Footwear		-39.0%	-43.0%	-14.2%	-19.7%
Forestry	-41.3%	22.0%	-12.9%	11.0% -4.5%	-3.7% 4.7%
Furniture Hospitality and Tourism	-41.3% -31.3%	-41.0%	-18.3% -33.8%	-4.5% -30.0%	-20.1%
Information Technology and Analytical Instruments	29.6%	-14.4%	20.8%	32.4%	20.4%
Insurance Services	38.6%	-2.8%	9.5%	-6.9%	3.3%
Jewelry and Precious Metals	24.6%	-59.5%	-4.9%	-7.7%	-24.9%
Leather and Related Products	1.9%	8.4%	-2.5%	-2.6%	-1.1%
Lighting and Electrical Equipment		-35.3%	-25.6%	-2.7%	3.7%
Livestock Processing Marketing, Design, and Publishing	23.9%	 15.7%	-11.3% 22.4%	1.0% 50.0%	7.2% 21.1%
Medical Devices	43.2%	-26.5%	2.8%	9.1%	4.9%
Metal Mining			-22.9%	34.5%	-0.3%
Metalworking Technology	-18.4%	-11.5%	-12.7%	-2.9%	-3.3%
Music and Sound Recording			29.4%	27.1%	27.9%
Nonmetal Mining		-2.4%	-12.6%	13.1%	9.8%
Oil and Gas Production and Transportation	-81.5%	31.2% -24.4%	-18.1% -16.1%	-38.8% -10.3%	-30.6% -9.4%
Paper and Packaging Performing Arts	33.0%	-24.4% 49.9%	-16.1% 23.3%	-10.3% 9.1%	-9.4% -2.9%
Plastics	1.9%	-27.7%	-13.2%	-0.9%	13.2%
Printing Services	-27.2%	-23.2%	-32.9%	-24.7%	-22.9%
Production Technology and Heavy Machinery	116.9%	-33.5%	-18.4%	-1.0%	-0.4%
Recreational and Small Electric Goods	-18.3%	-30.1%	-8.7%	-10.1%	4.8%
Textile Manufacturing	-9.5%	11.6%	-31.0%	-33.4%	-22.3% -25.7%
Tobacco Trailers, Motor Homes, and Appliances			652.5% 6.0%	435.2% 22.9%	-25.7% 34.6%
Transportation and Logistics	21.2%	25.3%	40.9%	27.3%	8.5%
Upstream Chemical Products		7.7%	10.3%	21.2%	2.8%
Upstream Metal Manufacturing	24.8%	-32.3%	-22.1%	-19.3%	-8.9%
Video Production and Distribution	-13.3%	12.5%	-9.7%	-8.2%	6.4%
Vulcanized and Fired Materials	5.4%	-35.7%	-6.6%	-9.4%	-1.4%
Water Transportation Wood Products	 16.0%	32.6% -12.7%	5.4% -12.6%	7.5% 29.4%	4.7% 17.6%
Local Commercial Services	4.5%	21.7%	11.3%	17.3%	10.9%
Local Community and Civic Organizations	152.7%	196.1%	208.8%	153.9%	34.0%
Local Education and Training	1.7%	9.7%	1.3%	3.7%	-1.2%
Local Entertainment and Media	-33.5%	-32.5%	-28.7%	-30.4%	-26.7%
Local Federal Government	3.3%	-1.8%	0.5%	-3.7%	-1.5%
Local Financial Services	7.7%	4.6%	5.3%	14.5%	18.7%
Local Food and Beverage Processing and Distribution Local Government	-2.3% 0.8%	0.9% 0.8%	2.7% 0.8%	7.9% 2.3%	8.9% 0.0%
Local Health Services	24.1%	11.5%	18.8%	2.3% 21.2%	12.1%
Local Hospitality Establishments	-6.8%	15.8%	-1.7%	0.1%	2.4%
Local Household Goods and Services	-9.1%	-7.9%	-5.9%	5.0%	8.1%
Local Industrial Products and Services	-17.1%	-21.7%	-22.8%	-18.1%	-11.2%
Local Logistical Services	36.0%	9.1%	51.3%	51.4%	34.7%
Local Motor Vehicle Products and Services Local Personal Services (Non-Medical)	2.3%	-0.4% 3.8%	-4.1% 7.6%	6.6%	10.1%
Local Personal Services (Non-Medical) Local Real Estate, Construction, and Development	-1.4% 27.0%	3.8% 24.2%	7.6% 25.5%	8.8% 34.0%	9.4% 25.7%
Local Real Estate, Construction, and Development Local Retailing of Clothing and General Merchandise	-2.4%	1.2%	-9.1%	-8.8%	-8.8%
Local State Government	19.6%	18.7%	19.7%	7.0%	-3.0%
Local Utilities	-52.3%	-27.5%	-24.1%	-11.8%	-9.6%
Non-Cluster	-38.6%	-46.0%	-31.2%	-24.2%	-16.1%
Grand Total	8.9%	5.6%	8.4%	13.7%	8.4%
Traded Total	7.3%	-2.7%	0.5%	12.1%	9.0%
Local Total	12.5%	13.1%	15.1%	16.0%	8.6%

Table B-6 Cluster Employment by Region, 2021-31

Cluster	Carson	Carson Region	L.A. County	CA	U.S.
Aerospace Vehicles and Defense	(83)	(408)	723	(1,158)	326
Agricultural Inputs and Services	0	(4.204)	(504)	17,540	120,392
Apparel Automotive	(7) (8)	(1,284) (205)	(15,904) (2,475)	(18,595) 9,247	(32,616) 56,245
Biopharmaceuticals	0	(119)	(43)	1,934	25,597
Business Services	184	385	8,895	180,536	1,330,715
Coal Mining	0	0	8	45	(496)
Communications Equipment and Services	2	(28)	(1,072)	(5,118)	(4,314)
Construction Products and Services	15	12	396	1,893	9,228
Distribution and Electronic Commerce Downstream Chemical Products	(900) (23)	(1,355) (159)	(19,084)	23,907 1,344	474,545 12,124
Downstream Metal Products	(5)	(116)	(1,575) (2,134)	(2,251)	34,781
Education and Knowledge Creation	325	(171)	18,154	85,763	532,013
Electric Power Generation and Transmission	0	`(14)	(730)	110	(21,192)
Environmental Services	(0)	3	159	1,333	24,022
Financial Services	(24)	(34)	(5,427)	9,425	119,229
Fishing and Fishing Products	0	26	194	230	(95)
Food Processing and Manufacturing Footwear	(96) 0	(20) (12)	(2,764)	232 42	91,031
Forestry	0	0	(177) 6	1,249	(2,952) 2,466
Furniture	(348)	(13)	(3,563)	(4,725)	4,077
Hospitality and Tourism	(93)	(790)	(22,036)	(42,496)	379,482
Information Technology and Analytical Instruments	7	(69)	1,059	35,816	115,264
Insurance Services	(11)	(21)	(2,681)	(3,365)	80,847
Jewelry and Precious Metals	(3)	(1)	(247)	(352)	(2,655)
Leather and Related Products	(0) 0	(52)	(591)	(893)	(387) 31.578
Lighting and Electrical Equipment Livestock Processing	0	(311)	(2,430) (614)	(2,033) (29)	12,151
Marketing, Design, and Publishing	7	78	8,746	62,854	235,639
Medical Devices	(0)	(44)	(100)	3,012	19,227
Metal Mining	0	0	25	483	12,301
Metalworking Technology	(14)	(131)	(2,921)	(2,491)	(336)
Music and Sound Recording	0	0	1,076	1,804	7,420
Nonmetal Mining Oil and Gas Production and Transportation	0 (2)	(3) 160	(41) 724	713 (371)	11,740 3,949
Paper and Packaging	0	(17)	(1,690)	(2,914)	(29,577)
Performing Arts	103	91	15,138	21,705	135,611
Plastics	(7)	(244)	(2,962)	(5,411)	(27,502)
Printing Services	(45)	(186)	(5,899)	(12,094)	(77,523)
Production Technology and Heavy Machinery	18	(200)	(2,247)	399	36,470
Recreational and Small Electric Goods	(15)	(68)	(1,740)	(2,718)	19,702
Textile Manufacturing Tobacco	(7) 0	(7) 0	(2,959) 5	(3,832) 69	(30,989) (3,958)
Trailers, Motor Homes, and Appliances	0	0	(516)	(701)	5,906
Transportation and Logistics	47	253	10,283	24,051	155,012
Upstream Chemical Products	0	(11)	(33)	756	4,539
Upstream Metal Manufacturing	(9)	(107)	(1,999)	(3,064)	(12,281)
Video Production and Distribution	8	50	19,360	27,005	111,608
Vulcanized and Fired Materials Water Transportation	(30) 0	(184) 476	(993)	(1,577)	(11,833)
Wood Products	(4)	(82)	4,070 (899)	3,960 1,737	(3,180) 24,967
Local Commercial Services	186	244	9,115	117,858	714,656
Local Community and Civic Organizations	501	2,292	125,860	360,379	1,303,925
Local Education and Training	(64)	93	(3,122)	3,264	472,027
Local Entertainment and Media	(57)	(292)	(8,896)	(23,744)	(96,692)
Local Federal Government	10	(27)	(283)	(8,405)	(23,503)
Local Financial Services	(5)	(53)	(3,552)	1,013	64,369
Local Food and Beverage Processing and Distribution Local Government	(78) 194	(328) 308	(9,222) 14,855	(16,977) 48,615	(132,366) 238,525
Local Health Services	274	799	70,736	290,811	2,030,229
Local Hospitality Establishments	(439)	200	(52,430)	(64,575)	1,765,744
Local Household Goods and Services	`(32)	(271)	(4,039)	(2,166)	37,983
Local Industrial Products and Services	(16)	(278)	(3,839)	(3,928)	4,029
Local Logistical Services	1,495	828	21,242	70,115	457,959
Local Motor Vehicle Products and Services	(67)	(480)	(15,474)	(23,557)	69,657
Local Personal Services (Non-Medical) Local Real Estate, Construction, and Development	16 133	45 305	3,129 17,596	16,340 101,193	561,207
Local Retailing of Clothing and General Merchandise	133 12	305 (159)	17,596 (5,915)	(22,996)	666,022 (211,506)
Local State Government	11	19	1,149	13,183	(53,723)
Local Utilities	(14)	(15)	(2,874)	(6,181)	(78,127)
Non-Cluster	(22)	(62)	(4,062)	2,579	40,704
Grand Total	1,022	(1,757)	129,945	1,255,828	11,809,439
Traded Total	(1,018)	(4,927)	(20,031)	403,007	3,978,319
Local Total	2,062	3,232	154,037	850,242	7,790,415

Table B-7 Cluster Employment by Region (%), 2021-31

Cluster	Carson	Carson Region	L.A. County	CA	U.S.
Aerospace Vehicles and Defense	-9.4%	-20.6%	1.2%	-1.1%	0.1%
Agricultural Inputs and Services		17.3%	-9.4%	4.0%	6.3%
Apparel	-100.0%	-62.8%	-70.2%	-55.8%	-25.6%
Automotive Biopharmaceuticals	-52.9%	-44.5% -54.6%	-27.7% -0.5%	20.5% 4.0%	5.7% 7.8%
Business Services	13.4%	4.1%	3.3%	13.8%	13.1%
Coal Mining			187.6%	250.2%	-1.2%
Communications Equipment and Services	3.0%	-7.6%	-8.7%	-10.4%	-1.5%
Construction Products and Services	11.2%	2.2%	2.8%	2.8%	1.0%
Distribution and Electronic Commerce	-14.0%	-10.8%	-9.6%	3.0%	7.4%
Downstream Chemical Products	-12.6%	-18.0%	-17.2%	5.2%	4.4%
Downstream Metal Products Education and Knowledge Creation	-41.0% 10.9%	-28.0% -7.5%	-28.2% 8.2%	-7.7% 10.1%	7.6% 8.0%
Electric Power Generation and Transmission	10.570	-34.7%	-13.7%	0.6%	-12.6%
Environmental Services	-0.3%	1.2%	3.6%	8.9%	18.4%
Financial Services	-16.3%	-7.6%	-10.9%	4.1%	5.5%
Fishing and Fishing Products		23.0%	29.8%	8.9%	-0.1%
Food Processing and Manufacturing	-13.7%	-1.9%	-9.2%	0.1%	7.7%
Footwear		-27.1%	-43.0%	3.7%	-19.0%
Forestry	40.00/		4.7%	21.0%	2.5%
Furniture Hospitality and Tourism	-42.8% -43.9%	-6.9% -47.5%	-33.6% -40.6%	-15.5% -17.1%	1.1% 16.0%
Information Technology and Analytical Instruments	10.3%	-47.5%	3.2%	10.1%	8.3%
Insurance Services	-9.2%	-13.0%	-8.6%	-2.9%	5.2%
Jewelry and Precious Metals	-11.9%	-9.2%	-13.6%	-10.7%	-10.5%
Leather and Related Products	-5.9%	-17.7%	-25.5%	-20.0%	-1.0%
Lighting and Electrical Equipment		-50.7%	-38.6%	-7.7%	10.2%
Livestock Processing			-13.8%	-0.1%	2.2%
Marketing, Design, and Publishing	5.0%	4.1%	10.2%	18.8%	13.4%
Medical Devices Metal Mining	-1.0%	-13.3%	-1.3%	5.8% 62.7%	6.4% 27.2%
Metalworking Technology	-16.7%	-20.6%	197.3% -20.2%	-6.2%	-0.1%
Music and Sound Recording	-10.770	-20.070	17.3%	20.3%	20.9%
Nonmetal Mining		-9.4%	-10.4%	13.2%	11.7%
Oil and Gas Production and Transportation	-15.5%	8.8%	10.9%	-1.5%	0.8%
Paper and Packaging		-34.2%	-27.3%	-14.6%	-8.4%
Performing Arts	38.9%	30.6%	24.3%	19.7%	25.6%
Plastics	-100.0%	-53.2%	-25.6%	-13.2%	-4.2%
Printing Services Production Technology and Heavy Machinery	-49.9% 37.6%	-45.7% -49.5%	-51.3% -18.1%	-33.5% 0.7%	-19.6% 4.0%
Recreational and Small Electric Goods	-26.5%	-49.3%	-23.6%	-11.0%	10.0%
Textile Manufacturing	-30.6%	-100.0%	-42.9%	-37.1%	-16.9%
Tobacco			19.5%	26.1%	-35.5%
Trailers, Motor Homes, and Appliances			-31.7%	-15.2%	3.7%
Transportation and Logistics	3.4%	3.9%	12.5%	12.1%	7.5%
Upstream Chemical Products		-7.0%	-2.4%	11.0%	2.7%
Upstream Metal Manufacturing	-9.8%	-36.2%	-31.3%	-15.5% 20.3%	-3.3%
Video Production and Distribution Vulcanized and Fired Materials	68.7% -17.3%	23.7% -49.6%	16.6% -25.2%	-12.4%	36.9% -4.9%
Water Transportation	-17.570	31.1%	23.8%	12.3%	-1.1%
Wood Products	-9.0%	-46.8%	-30.0%	6.6%	6.3%
Local Commercial Services	8.7%	2.6%	2.7%	9.5%	7.5%
Local Community and Civic Organizations	33.5%	34.9%	36.5%	35.4%	22.8%
Local Education and Training	-2.0%	1.6%	-1.3%	0.3%	5.5%
Local Entertainment and Media	-32.8%	-28.3%	-20.4%	-16.2%	-7.6%
Local Federal Government	1.4%	-2.5%	-0.4%	-1.8%	-0.5%
Local Financial Services Local Food and Beverage Processing and Distribution	-2.0% -8.2%	-4.5% -6.9%	-4.4% -6.4%	0.3% -3.2%	1.9% -3.0%
Local Government	-0.2% 7.7%	6.0%	7.6%	6.8%	4.3%
Local Health Services	19.6%	9.7%	13.6%	15.4%	11.1%
Local Hospitality Establishments	-23.0%	3.4%	-16.1%	-5.1%	15.5%
Local Household Goods and Services	-6.3%	-6.6%	-6.8%	-0.8%	1.6%
Local Industrial Products and Services	-25.1%	-21.4%	-21.4%	-6.6%	0.8%
Local Logistical Services	29.3%	11.6%	19.8%	18.8%	15.2%
Local Motor Vehicle Products and Services	-7.3%	-8.8%	-13.5%	-5.1%	1.5%
Local Personal Services (Non-Medical)	1.7% 7.0%	1.3%	2.5% 5.2%	3.6% 6.4%	14.0%
Local Real Estate, Construction, and Development Local Retailing of Clothing and General Merchandise	7.0% 1.7%	3.3% -5.0%	5.2% -4.8%	6.4% -4.9%	5.2% -4.8%
Local State Government	7.1%	6.3%	7.0%	5.8%	-2.4%
Local Utilities	-25.4%	-9.6%	-12.9%	-6.0%	-7.2%
Non-Cluster	-3.1%	-6.0%	-3.5%	0.8%	2.6%
Grand Total	2.4%	-1.3%	2.7%	6.6%	7.4%
Traded Total	-6.1%	-9.4%	-1.3%	6.5%	7.9%
Local Total	8.2%	3.9%	4.8%	6.8%	7.2%

Table B-8a Shift Share Analysis, 2011-2021 Carson Area

	Industrial	National Growth	Local	Actual
Cluster	Mix Effect	Effect	Share	Change
Aerospace Vehicles and Defense	(98)	90	(176)	(184)
Agricultural Inputs and Services	(0)	1	(7)	(7)
Apparel	(5) 3	1 2	(3) (10)	(7) (6)
Automotive Biopharmaceuticals	0	0	(10)	0
Business Services	217	92	(31)	278
Coal Mining	0	0	Ó	0
Communications Equipment and Services	(23)	5	21	3
Construction Products and Services	7	7	38	53
Distribution and Electronic Commerce	738	474	(393)	819
Downstream Metal Products	(6) 0	16 1	(13) 4	(3)
Downstream Metal Products Education and Knowledge Creation	(125)	210	408	492
Electric Power Generation and Transmission	0	0	0	0
Environmental Services	10	7	(19)	(2)
Financial Services	(5)	13	(13)	(5)
Fishing and Fishing Products	0	0	0	0
Food Processing and Manufacturing	83	54	(83)	54
Footwear Forestry	0	0 0	0	0
Furniture	(51)	117	(637)	(572)
Hospitality and Tourism	(88)	26	(35)	(97)
Information Technology and Analytical Instruments	` <u>6</u>	4	` ź	Ì 1Ś
Insurance Services	(4)	7	30	32
Jewelry and Precious Metals	(6)	2	9	4
Leather and Related Products	(1)	1	0	0
Lighting and Electrical Equipment	0 0	0	0	0
Livestock Processing Marketing, Design, and Publishing	13	9	3	25
Medical Devices	(0)	1	4	5
Metal Mining	Ó	0	0	0
Metalworking Technology	(12)	9	(15)	(19)
Music and Sound Recording	0	0	0	0
Nonmetal Mining	0	0	0	0
Oil and Gas Production and Transportation	(30)	7 0	(40) 0	(63) 0
Paper and Packaging Performing Arts	(23)	17	72	66
Plastics	0	1	(1)	0
Printing Services	(38)	10	(5)	(33)
Production Technology and Heavy Machinery	(2)	2	26	26
Recreational and Small Electric Goods	(3)	6	(16)	(13)
Textile Manufacturing	(8)	2	3	(2)
Tobacco Trailers, Motor Homes, and Appliances	0	0 0	0	0
Transportation and Logistics	1	96	145	242
Upstream Chemical Products	0	0	0	0
Upstream Metal Manufacturing	(12)	6	24	17
Video Production and Distribution	(0)	1	(3)	(2)
Vulcanized and Fired Materials	(16)	14	11	9
Water Transportation	0 4	0 3	0 (1)	0 6
Wood Products Local Commercial Services	51	3 174	(133)	93
Local Community and Civic Organizations	151	50	703	904
Local Education and Training	(299)	262	92	54
Local Entertainment and Media	(91)	22	(18)	(87)
Local Federal Government	(68)	58	33	23
Local Financial Services	25	20	(26)	19
Local Food and Beverage Processing and Distribution	(210)	82	(109)	(23)
Local Government Local Health Services	(210) 42	210 95	20 135	20 273
Local Hospitality Establishments	(123)	173	(189)	(140)
Local Household Goods and Services	(2)	46	(95)	(50)
Local Industrial Products and Services	(15)	6	(4)	(13)
Local Logistical Services	983	315	51	1,349
Local Motor Vehicle Products and Services	15	75	(70)	20
Local Personal Services (Non-Medical)	10	81 126	(104)	(13)
Local Real Estate, Construction, and Development Local Retailing of Clothing and General Merchandise	258 (118)	126 58	19 44	402 (16)
Local Retailing of Clothing and General Merchandise Local State Government	(118)	11	29	25
Local Utilities	(21)	10	(49)	(61)
Non-Cluster	(288)	99	(263)	(452)

Note: UND = Undefined

Table B-8b Shift Share Analysis, 2011-2021 Carson Periphery Area

	los al construit de	National	Lavel	A
Cluster	Industrial Mix Effect	Growth Effect	Local Share	Actual Change
Aerospace Vehicles and Defense	(206)	189	(245)	(263)
Agricultural Inputs and Services	(1)	4	(23)	(20)
Apparel	(1,586)	345	(806)	(2,048)
Automotive Biopharmaceuticals	72 54	48 40	(231) (350)	(111) (256)
Business Services	1,705	722	(1,500)	926
Coal Mining	0	0	0	0
Communications Equipment and Services	(153)	35	68	(50)
Construction Products and Services	39	37	4	80
Distribution and Electronic Commerce	1,494	959	(1,348)	1,105
Downstream Chemical Products	(29)	80	(118)	(67)
Downstream Metal Products Education and Knowledge Creation	21 (148)	50 248	(248) (751)	(177) (652)
Electric Power Generation and Transmission	(10)	4	(3)	(9)
Environmental Services	24	18	18	60
Financial Services	(14)	37	(14)	10
Fishing and Fishing Products	(41)	12	(3)	(32)
Food Processing and Manufacturing	96	63	131	289
Footwear	(20) 0	6 0	(14) 0	(27) 0
Forestry Furniture	(6)	13	27	34
Hospitality and Tourism	(804)	238	(591)	(1,157)
Information Technology and Analytical Instruments	61	43	(178)	(73)
Insurance Services	(9)	14	`(10)	`(5)
Jewelry and Precious Metals	(6)	1	(6)	(11)
Leather and Related Products	(26)	23	26	23
Lighting and Electrical Equipment	(45)	80	(370)	(335)
Livestock Processing Marketing, Design, and Publishing	0 208	0 139	0 (89)	0 258
Medical Devices	(16)	38	(142)	(120)
Metal Mining	0	0	0	0
Metalworking Technology	(84)	61	(59)	(82)
Music and Sound Recording	0	0	0	0
Nonmetal Mining	0	3	(4)	(1)
Oil and Gas Production and Transportation	(539)	116	854	431
Paper and Packaging	(12) (22)	5 17	(10) 105	(16) 99
Performing Arts Plastics	30	54	(260)	(176)
Printing Services	(166)	45	(2)	(123)
Production Technology and Heavy Machinery	(53)	51	(201)	(203)
Recreational and Small Electric Goods	(13)	31	(127)	(109)
Textile Manufacturing	(2)	1	2	1
Tobacco	0	0	0	0
Trailers, Motor Homes, and Appliances Transportation and Logistics	3	441	881	1,325
Upstream Chemical Products	(8)	12	7	11
Upstream Metal Manufacturing	(76)	37	(103)	(142)
Video Production and Distribution	(4)	16	11	24
Vulcanized and Fired Materials	(57)	49	(198)	(206)
Water Transportation	(43)	97	322	376
Wood Products	18 196	17 660	(60) 842	(25) 1,698
Local Commercial Services Local Community and Civic Organizations	567	187	3,593	4,347
Local Education and Training	(521)	456	589	524
Local Entertainment and Media	(538)	129	(89)	(497)
Local Federal Government	(108)	92	(4)	(20)
Local Financial Services	115	95	(158)	52
Local Food and Beverage Processing and Distribution	20	395	(375)	40
Local Government Local Health Services	(428) 275	427 625	42 (48)	42 852
Local Health Services Local Hospitality Establishments	(303)	424	675	797
Local Household Goods and Services	(13)	376	(717)	(354)
Local Industrial Products and Services	(326)	140	(174)	(361)
Local Logistical Services	1,718	551	(1,672)	597
Local Motor Vehicle Products and Services	92	460	(576)	(24)
Local Personal Services (Non-Medical)	32	272	(181)	123
Local Real Estate, Construction, and Development	1,274	620	(110)	1,784
Local Retailing of Clothing and General Merchandise Local State Government	(539)	264 21	313 55	37 48
Local Utilities	(29) (38)	18	(38)	(58)
Non-Cluster	(471)	162	(572)	(882)
	` '		(-)	(/

Note: UND = Undefined

Table B-9 Shift Share Analysis, 2011-2021 L.A. County

		National		
	Industrial	National Growth	Local	Actual
Cluster	Mix Effect	Effect	Share	Change
Aerospace Vehicles and Defense	(5,492)	5,026	(1,217)	(1,684)
Agricultural Inputs and Services	(186)	540	(1,401)	(1,048)
Apparel	(18,627)	4,047	(10,807)	(25,387)
Automotive	1,193 770	793 569	(2,464) 5	(478) 1,344
Biopharmaceuticals Business Services	47,312	20,031	(37,228)	30,116
Coal Mining	0	0	UND	4
Communications Equipment and Services	(5,238)	1,212	1,982	(2,044)
Construction Products and Services	1,028	971	866	2,865
Distribution and Electronic Commerce	25,307	16,253	(35,932)	5,629
Downstream Metal Products	(323) 303	883 722	(1,858)	(1,298)
Downstream Metal Products Education and Knowledge Creation	(10,310)	17.270	(2,034) 9,869	(1,009) 16,829
Electric Power Generation and Transmission	(906)	386	1,258	739
Environmental Services	· 512	386	(1,072)	(175)
Financial Services	(1,891)	5,164	(14,700)	(11,427)
Fishing and Fishing Products	(142)	43	243	143
Food Processing and Manufacturing	3,893	2,549 61	(6,552)	(110)
Footwear Forestry	(203) (16)	11	(169) (12)	(311) (18)
Furniture	(480)	1.092	(2,977)	(2,365)
Hospitality and Tourism	(23,320)	6,898	(11,239)	(27,661)
Information Technology and Analytical Instruments	3,312	2,329	113	5,754
Insurance Services	(1,458)	2,403	1,776	2,721
Jewelry and Precious Metals	(634)	160	380	(94)
Leather and Related Products Lighting and Electrical Equipment	(228) (400)	201 713	(33) (2,481)	(60) (2,168)
Livestock Processing	(63)	424	(930)	(570)
Marketing, Design, and Publishing	8,897	5,918	925	15,740
Medical Devices	(263)	623	(157)	204
Metal Mining	(1)	1	(4)	(4)
Metalworking Technology	(1,939)	1,396	(1,566)	(2,109)
Music and Sound Recording	938 6	405 38	70 (102)	1,413
Nonmetal Mining Oil and Gas Production and Transportation	(3,179)	686	1,018	(57) (1,475)
Paper and Packaging	(1,313)	622	(501)	(1,192)
Performing Arts	(5,714)	4,253	13,245	11,784
Plastics	633	1,122	(3,517)	(1,762)
Printing Services	(5,362)	1,443	(1,723)	(5,642)
Production Technology and Heavy Machinery Recreational and Small Electric Goods	(1,340)	1,283 682	(2,745)	(2,802) (706)
Textile Manufacturing	(297) (3,066)	842	(1,091) (876)	(3,100)
Tobacco	(1)	0	23	22
Trailers, Motor Homes, and Appliances	402	129	(440)	92
Transportation and Logistics	33	4,902	18,865	23,801
Upstream Chemical Products	(69)	104	92	127
Upstream Metal Manufacturing	(1,423)	691 10.863	(1,078)	(1,810)
Video Production and Distribution Vulcanized and Fired Materials	(2,552) (415)	356	(20,845) (219)	(12,534) (279)
Water Transportation	(602)	1,365	113	876
Wood Products	`314́	289	(1,035)	(432)
Local Commercial Services	7,669	25,899	1,040	34,608
Local Community and Civic Organizations	28,531	9,396	194,969	232,896
Local Education and Training	(23,474)	20,532	6,184 (1,191)	3,242
Local Entertainment and Media Local Federal Government	(21,434) (6,673)	5,140 5,672	1,341	(17,484) 340
Local Financial Services	7,809	6,425	(10,205)	4,029
Local Food and Beverage Processing and Distribution	597	11,762	(8,526)	3,833
Local Government	(16,280)	16,265	1,600	1,585
Local Health Services	16,235	36,900	29,150	82,285
Local Hospitality Establishments	(19,916)	27,915	(13,705)	(5,706)
Local Household Goods and Services Local Industrial Products and Services	(187) (4,563)	5,337 1,957	(8,918) (2,701)	(3,767) (5,306)
Local Industrial Products and Services Local Logistical Services	18,637	5,978	11,810	36,426
Local Motor Vehicle Products and Services	2,030	10,097	(17,023)	(4,895)
Local Personal Services (Non-Medical)	1,165	9,806	(2,168)	8,803
Local Real Estate, Construction, and Development	47,037	22,892	(733)	69,196
Local Retailing of Clothing and General Merchandise	(23,271)	11,382	(389)	(12,278)
Local State Government Local Utilities	(1,567) (5,306)	1,152 2,478	3,107 (4,266)	2,692 (7,094)
Non-Cluster	(41,250)	14,141	(25,318)	(52,427)
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Note: UND = Undefined

APPENDIX C Local Cluster Narrative Definitions

Appendix C – Descriptions of Local Clusters (from U.S. Cluster Mapping Project)

Local Commercial Services. This cluster contains local professional establishments that provide legal services, accounting services, temporary help, and office administrative activities. This cluster also contains building support and security services, commercial printing and signmaking, professional laundry services (including drycleaning), testing laboratories, and office supply stores.

Local Community and Civic Organizations. Establishments in this cluster primarily consist of local social service organizations such as community food and housing services and advocacy organizations. This cluster also contains grantmaking foundations, business associations, and political and religious organizations.

Local Education and Training. Establishments in this cluster include local educational institutions. These include schools for elementary and secondary education, technical and vocational training, fine arts instruction, as well as automobile driving.

Local Entertainment and Media. Establishments in this cluster primarily sell or otherwise distribute various media locally. The cluster includes newspaper publishers, radio and TV broadcasting stations, and movie theaters. It also contains local retail establishments that sell or rent books, music, movies, sport and hobby goods, and electronics.

Local Financial Services. This cluster contains local establishments that facilitate financial transactions for both businesses and individuals, such as deposit-taking institutions, third-party administrative services for pension and welfare funds, insurance agencies, tax preparation services, and payment collection agencies.

Local Food and Beverage Processing and Distribution. This cluster contains firms that sell food and beverages at the wholesale and retail levels. Products sold include meat, seafood, fruit and vegetables, general groceries, tobacco, alcoholic beverages, and specialty foods. The cluster also includes related distribution methods such as vending and direct selling.

Local Health Services. Firms in this cluster include local health care establishments and services such as hospitals, medical laboratories, home and residential care, and funeral services and crematories. This cluster also includes pharmacies and optical goods retail stores.

Local Hospitality Establishments. Establishments in this cluster primarily consist of local hospitality establishments that serve food and beverages (alcoholic and non-alcoholic), as well as recreational facilities including country clubs, fitness clubs, and bowling centers. This cluster also contains gift and souvenir retail stores.

Local Household Goods and Services. This cluster contains local establishments and services designed to support individual households such as landscape services, electronics repair, as well as retail stores for appliances, hardware, gardening, and furniture.

Local Industrial Products and Services. This cluster primarily consists of firms that provide maintenance, wholesaling, and distribution for local industrial goods and services. This cluster also includes consumer rental and leasing for electronics, appliances, and general equipment.

Local Logistical Services. This cluster primarily contains establishments that offer local passenger transportation and local transportation of freight and goods, including moving companies and couriers. This cluster also includes local storage facilities, truck and RV leasing, and passenger car rental services.

Local Motor Vehicle Products and Services. Establishments in this cluster consist of local motor vehicle wholesalers and dealers, as well as auto repair services, gas stations, parking lots, car washes, and vehicle towing.

Local Personal Services (Non-Medical). Establishments in this cluster provide local personal services including self-service laundry, hair care, photofinishing, repair services, and child care. This cluster also contains pet stores and retail stores for certain personal merchandise such as cosmetics.

Local Real Estate, Construction, and Development. Establishments in this cluster primarily provide local real estate services, general contracting, and specialty contracting for the building, purchasing, and renting of homes and related local infrastructure. This cluster also contains firms that support land development, concrete manufacturing, highway and street construction, as well as building equipment distribution.

Local Retailing of Clothing and General Merchandise. This cluster consists of local retail stores, department stores, and warehouse clubs that sell apparel, jewelry, luggage, sewing supplies, and general merchandise.

Local Utilities. Establishments in this cluster provide local communications services, energy distribution, as well as sanitary services for sewage and waste treatment.

APPENDIX D Traded Cluster Narrative Descriptions

Appendix D – Descriptions of Traded Clusters (from U.S. Cluster Mapping Project)

Aerospace Vehicles and Defense. Establishments in this cluster manufacture aircraft, space vehicles, guided missiles, and related parts. This cluster also contains firms that manufacture the necessary search and navigation equipment used by these products.

Agricultural Inputs and Services. This cluster includes establishments primarily engaged in farming and related services. Farming includes soil preparation, planting, cultivatation, harvest, fertilizer creation, and post- harvest activities. It also includes services that supply farm labor, support for animal production, and additional operations management.

Apparel. establishments in this cluster are focused on manufacturing clothing and fabric accessories (for example, hats, gloves, and neckties) for men, women, and children.

Automotive. This cluster includes establishments along the value chain that are necessary for manufacturing cars, trucks, and other motorized land-based transportation equipment (other than motorcycles). This includes metal mills and foundries, manufacturers of metal automotive parts, and manufacturers of completed automobiles.

Biopharmaceuticals. Establishments in this cluster produce complex chemical and biological substances used in medications, vaccines, diagnostic tests, and similar medical applications.

Business Services. Firms in this cluster include establishments and services primarily designed to support other aspects of a business or to assist unrelated companies. This includes corporate headquarters. Professional services such as consulting, legal services, facilities support services, computer services, engineering and architectural services, and placement services. All for-hire ground passenger transportation services are also present in this cluster.

Coal Mining. This cluster includes establishments that mine coal and provide services to support coal mining.

Communications Equipment and Services. This cluster involves goods and services used for communications. This includes cable, wireless, and satellite services, as well as telephone, broadcasting, and wireless communications equipment.

Construction Products and Services. The establishments in this cluster supply construction materials, components, products, and services. Construction materials and components include those made of sand, stone, gravel, asphalt, cement, concrete, and other earthen substances. Construction products include pipes and heat exchangers. Construction services include the construction of pipelines for water, sewers, oil and gas, power, and communication, as well as building services for homes and industrial buildings.

Distribution and Electronic Commerce. This cluster consists primarily of traditional wholesalers as well as mail order houses and electronic merchants. The companies in this cluster mostly buy, hold, and distribute a wide range of products such as apparel, food, chemicals, gasses, minerals, farm materials, machinery, and other merchandise. The cluster also contains firms that support distribution and electronic commerce operations, including packaging, labeling, and equipment rental and leasing.

Downstream Chemical Products. Establishments in this cluster manufacture complex chemical products for end users. These products include adhesives, beauty products, soaps, cleaners, film processing chemicals, dyes, paints, explosives, and lubricating oils.

Downstream Metal Products. This cluster contains establishments that manufacture metal containers, prefabricated metal structures, and end user metal products. These end user products include ammunition, kitchenware, hardware, metal bathroom fixtures, and similar metal products used in home finishing such as doors, windows and ornamentation.

Education and Knowledge Creation. This cluster contains all educational and training institutions, as well as related supporting establishments. It also includes research and development institutions in biotechnology, physical sciences, engineering, life sciences, and social sciences.

Electric Power Generation and Transmission. This cluster contains establishments primarily engaged in generating and distributing electric power. This includes power generated from alternative energy sources such as hydroelectric power, nuclear electric power, and solar and wind generated electric power.

Environmental Services. This cluster contains establishments primarily engaged in collection, treatment, processing, and disposal of hazardous and non-hazardous waste.

Financial Services. This cluster contains establishments involved in aiding the transaction and growth of financial assets for businesses and individuals. These firms include securities brokers, dealers, and exchanges; credit institutions; and financial investment support. Insurance firms are located in a separate Insurance cluster.

Fishing and Fishing Products. Establishments in this cluster are engaged primarily in catching fish and other seafood and processing the catch for consumption.

Food Processing and Manufacturing. This cluster includes firms involved in the processing of raw food materials and the manufacturing of downstream food products for end users. This includes millers and refineries of rice, flour, corn, sugar, and oilseeds. These upstream products contribute in part to producing specialty foods, animal foods, baked goods, candies, teas, coffees, beers, wines, other beverages, meats, packaged fruits and vegetables, and processed dairy products.

Footwear. Establishments in this cluster are those that manufacture men's and women's shoes, boots, slippers, and other footwear. This cluster also contains the upstream leather used in making footwear.

Forestry. Establishments in this cluster are those that involve growing and harvesting trees. It also includes support services for these activities.

Furniture. This cluster contains establishments that manufacture furniture, cabinets, and shelving for residential homes and offices. It also includes establishments that produce manufactured homes. The products in this cluster can be made of wood, metal, plastic, and/or textiles.

Hospitality and Tourism. This cluster contains establishments related to hospitality and tourism services and venues. This includes sport venues, casinos, museums, and other attractions. It also includes hotels and other accommodations, transportation, and services related to recreational travel such as reservation services and tour operators.

Information Technology and Analytical Instruments. This cluster consists of information technology and analytical products such as computers, software, audio visual equipment, laboratory instruments, and medical apparatus. The cluster also includes the standard and precision electronics used by these products (for example, circuit boards and semiconductor devices).

Insurance Services. This cluster consists of firms providing a range of insurance types, as well as support services such as reinsurance and claims adjustment.

Jewelry and Precious Metals. Establishments in this cluster manufacture jewelry, silverware, and fine tableware. This cluster also includes the upstream manufacture of jewelry parts and the processing of gemstones.

Leather and Related Products. This cluster consists of manufacturers of luggage and handbags made of leather and fabric. It also includes producers of personal and assorted other leather goods, as well as mills that produce textile bags and related products made from canvas.

Lighting and Electrical Equipment. This cluster contains firms involved in the manufacture of electrical equipment and electronic components. The companies in this cluster manufacture wire for communications, wiring devices, fiber optic cables, switchboards, lighting fixtures, motors, transformers, and related products.

Livestock Processing. This cluster contains establishments engaged in processing meat from livestock and livestock wholesaling.

Marketing, Design and Publishing. This cluster consists of establishments involved in design services (physical and graphical), marketing (including advertising creation, marketing research, media buying, and public relations), and publishing (both in hard copy and on the internet).

Medical Devices. Establishments in this cluster primarily manufacture surgical, medical, dental, optical, ophthalmic, and veterinary instruments and supplies.

Metal Mining. Establishments in this cluster mine various metals including iron, gold, silver, lead, copper, and uranium. It also includes firms involved in supporting metal mining activities.

Metalworking Technology. The establishments in this cluster manufacture machine tools and process metal for use in metal working. The cluster also contains the downstream manufacture of metal fasteners and hand tools.

Music and Sound Recording. Establishments in this cluster are primarily involved in the production and distribution of music and other sound recordings.

Nonmetal Mining. Establishments in this cluster mine earthen materials other than metals. This includes stone, granite, sand, clay, borate, and other minerals. The cluster also includes support for the nonmetal mining activities.

Oil and Gas Production and Transportation. This cluster includes firms involved in locating, extracting, refining, and transporting oil and gas. This includes companies that manufacture the equipment necessary to extract oil and gas, as well as companies that provide support services for oil and gas operations and pipeline transport.

Paper and Packaging. This cluster contains the paper mills and manufacturers of paper products used for shipping, packaging, containers, office supplies, personal products, and similar products.

Performing Arts. This cluster contains services that produce, promote, and support live artistic performances. Live performances include those by theater companies, dance troupes, musicians, and independent artists.

Plastics. Establishments in this cluster manufacture plastic materials, components, and products. The plastics and foams are manufactured for packaging, pipes, floor coverings, and related plastic products. The cluster also includes the upstream manufacturing of plastic materials and resins, as well as the industrial machines used to manufacture plastics.

Printing Services. Establishments in this cluster are primarily engaged in commercial printing, digital printing, and binding. The cluster includes upstream products and services necessary for printing (for example, ink and prepress services). It also includes end products such as books, greeting cards, business forms, and related goods.

Production Technology and Heavy Machinery. Establishments in this cluster primarily manufacture machines designed to produce parts and devices used in the production of downstream products. This cluster also includes end use heavy machinery such as air and material handling equipment. The machines are used for industrial, agricultural, construction, commercial industry, and related purposes.

Recreational and Small Electronics Goods. This cluster contains establishments that manufacture end use products for recreational and decorative purposes. These products include games, toys, bicycles, motorcycles, musical instruments, sporting goods, art supplies, office supplies, shades, and home accessories. This cluster also incorporates firms that produce small, simple electric goods like hairdryers, fans, and office machinery.

Textile Manufacturing. This cluster contains textile mills that primarily produce and finish fabrics for clothing, carpets, upholstery, and similar uses. The textiles include yarn, thread, fibers, hosiery, knits, and other specialty fabrics.

Tobacco. The establishments in this cluster manufacture cigarettes and other tobacco products. This also includes upstream tobacco leaf processing.

Trailers, Motor Homes and Appliances. This cluster includes establishments that manufacture trailers, campers, and motor homes, as well as major household appliances.

Transportation and Logistics. This cluster contains all air, rail, bus, and freight transportation services. It also includes related operation services and support activities such as inspections, maintenance, repairs, security, and loading/unloading.

Upstream Chemical Products. This cluster consists of firms that manufacture basic organic and inorganic chemicals and gases. The chemicals are usually separate elements that could be used as inputs for more complex downstream chemical products.

Upstream Metal Manufacturing. The establishments in this cluster manufacture upstream metal products such as pipes, tubes, metal closures, wires, springs, and related products. The cluster includes iron and steel mills and foundries, as well as related metal processing techniques.

Video Production and Distribution. The establishments in this cluster are primarily involved with the production and distribution of motion pictures and other video. This includes specialized viewing venues such as drive-in theaters.

Vulcanized and Fired Materials. This cluster contains firms that manufacture construction and other materials out of earthen substances such as clay, sand, and rubber at extremely high temperatures. The production processes create goods made of tile, brick, ceramic, glass, and rubber (including refractories and tires).

Water Transportation. This cluster contains all establishments involved in transporting people and goods over water. The cluster includes boat building, transportation, operations, and other support services.

Wood Products. The establishments in this cluster are primarily engaged in making upstream wood materials and manufacturing non-furniture wood products. Upstream establishments include sawmills, plywood and hardwood manufacturers, cut stock manufacturers, and wood preservation services. Downstream establishments produce windows, doors, flooring, wood containers, prefabricated wood buildings, and related products.

APPENDIX E Cluster NAICS Component Industries

Table E-1 Component Industries for Cluster U.S. Cluster Mapping Project

NAICS	Adj.		Traded vs	
2017		Label	Local	Cluster Name
111000	1	Crop Production	Traded	Agricultural Inputs and Services
112000	1	Animal Production and Aquaculture	Traded	Agricultural Inputs and Services
113110		Timber Tract Operations	Traded	Forestry
113210		Forest Nurseries and Gathering of Forest Products	Traded	Forestry
113310		Logging	Traded	Forestry
114111		Finfish Fishing	Traded	Fishing and Fishing Products
114112		Shellfish Fishing	Traded	Fishing and Fishing Products
114119		Other Marine Fishing	Traded	Fishing and Fishing Products
114210		Hunting and Trapping	Traded	Hospitality and Tourism
115111		Cotton Ginning	Traded	Agricultural Inputs and Services
115112		Soil Preparation, Planting, and Cultivating	Traded	Agricultural Inputs and Services
115113		Crop Harvesting, Primarily by Machine	Traded	Agricultural Inputs and Services
115114		Postharvest Crop Activities (except Cotton Ginning)	Traded	Agricultural Inputs and Services
115115		Farm Labor Contractors and Crew Leaders	Traded	Agricultural Inputs and Services
115116		Farm Management Services	Traded	Agricultural Inputs and Services
115210		Support Activities for Animal Production	Traded	Agricultural Inputs and Services
115310		Support Activities for Forestry	Traded	Forestry
211120	2	Crude Petroleum Extraction	Traded	Oil and Gas Production and Transportation
211130	2	Natural Gas Extraction	Traded	Oil and Gas Production and Transportation
212111		Bituminous Coal and Lignite Surface Mining	Traded	Coal Mining
212112		Bituminous Coal Underground Mining	Traded	Coal Mining
212113		Anthracite Mining	Traded	Coal Mining
212210		Iron Ore Mining	Traded	Metal Mining
212221		Gold Ore Mining	Traded	Metal Mining
212222		Silver Ore Mining	Traded	Metal Mining
212230	2	Copper, Nickel, Lead, and Zinc Mining	Traded	Metal Mining
212291		Uranium-Radium-Vanadium Ore Mining	Traded	Metal Mining
212299		All Other Metal Ore Mining	Traded	Metal Mining
212311		Dimension Stone Mining and Quarrying	Traded	Nonmetal Mining
212312		Crushed and Broken Limestone Mining and Quarrying	Traded	Nonmetal Mining
212313		Crushed and Broken Granite Mining and Quarrying	Traded	Nonmetal Mining
212319		Other Crushed and Broken Stone Mining and Quarrying	Traded	Nonmetal Mining
212321		Construction Sand and Gravel Mining	Traded	Nonmetal Mining
212322		Industrial Sand Mining	Traded	Nonmetal Mining
212324		Kaolin and Ball Clay Mining	Traded	Nonmetal Mining
212325		Clay and Ceramic and Refractory Minerals Mining	Traded	Nonmetal Mining
212391		Potash, Soda, and Borate Mineral Mining	Traded	Nonmetal Mining
212392		Phosphate Rock Mining	Traded	Nonmetal Mining
212393		Other Chemical and Fertilizer Mineral Mining	Traded	Nonmetal Mining
212399		All Other Nonmetallic Mineral Mining	Traded	Nonmetal Mining
213111		Drilling Oil and Gas Wells	Traded	Oil and Gas Production and Transportation
213112		Support Activities for Oil and Gas Operations	Traded	Oil and Gas Production and Transportation
213113		Support Activities for Coal Mining	Traded	Coal Mining

NAICS	Adj.		Traded vs	
2017		e Label	Local	Cluster Name
213114		Support Activities for Metal Mining	Traded	Metal Mining
213115		Support Activities for Nonmetallic Minerals (except Fuels) Mining	Traded	Nonmetal Mining
221111		Hydroelectric Power Generation	Traded	Electric Power Generation and Transmission
221112		Fossil Fuel Electric Power Generation	Traded	Electric Power Generation and Transmission
221113		Nuclear Electric Power Generation	Traded	Electric Power Generation and Transmission
221114		Solar Electric Power Generation	Traded	Electric Power Generation and Transmission
221115		Wind Electric Power Generation	Traded	Electric Power Generation and Transmission
221116		Geothermal Electric Power Generation	Traded	Electric Power Generation and Transmission
221117		Biomass Electric Power Generation	Traded	Electric Power Generation and Transmission
221118		Other Electric Power Generation	Traded	Electric Power Generation and Transmission
221121		Electric Bulk Power Transmission and Control	Traded	Electric Power Generation and Transmission
221122		Electric Power Distribution	Local	Local Utilities
221210		Natural Gas Distribution	Local	Local Utilities
221310		Water Supply and Irrigation Systems	Traded	Construction Products and Services
221320		Sewage Treatment Facilities	Local	Local Utilities
221330		Steam and Air-Conditioning Supply	Traded	Construction Products and Services
236115		New Single-Family Housing Construction (except For-Sale Builders)	Local	Local Real Estate, Construction, and Development
236116		New Multifamily Housing Construction (except For-Sale Builders)	Local	Local Real Estate, Construction, and Development
236117		, , , , , , , , , , , , , , , , , , , ,	Local	· · · · · · · · · · · · · · · · · · ·
236117		New Housing For-Sale Builders Residential Remodelers	Local	Local Real Estate, Construction, and Development
			Traded	Local Real Estate, Construction, and Development Construction Products and Services
236210 236220		Industrial Building Construction		
		Commercial and Institutional Building Construction	Local	Local Real Estate, Construction, and Development
237110		Water and Sewer Line and Related Structures Construction	Local	Local Real Estate, Construction, and Development
237120		Oil and Gas Pipeline and Related Structures Construction	Traded	Construction Products and Services
237130		Power and Communication Line and Related Structures Construction	Traded	Construction Products and Services
237210		Land Subdivision	Local	Local Real Estate, Construction, and Development
237310		Highway, Street, and Bridge Construction	Local	Local Real Estate, Construction, and Development
237990		Other Heavy and Civil Engineering Construction	Traded	Construction Products and Services
238110		Poured Concrete Foundation and Structure Contractors	Local	Local Real Estate, Construction, and Development
238120		Structural Steel and Precast Concrete Contractors	Local	Local Real Estate, Construction, and Development
238130		Framing Contractors	Local	Local Real Estate, Construction, and Development
238140		Masonry Contractors	Local	Local Real Estate, Construction, and Development
238150		Glass and Glazing Contractors	Local	Local Real Estate, Construction, and Development
238160	_	Roofing Contractors	Local	Local Real Estate, Construction, and Development
238170	2	Siding Contractors	Local	Local Real Estate, Construction, and Development
238190		Other Foundation, Structure, and Building Exterior Contractors	Local	Local Real Estate, Construction, and Development
238210		Electrical Contractors and Other Wiring Installation Contractors	Local	Local Real Estate, Construction, and Development
238220		Plumbing, Heating, and Air-Conditioning Contractors	Local	Local Real Estate, Construction, and Development
238290		Other Building Equipment Contractors	Local	Local Real Estate, Construction, and Development
238310		Drywall and Insulation Contractors	Local	Local Real Estate, Construction, and Development
238320		Painting and Wall Covering Contractors	Local	Local Real Estate, Construction, and Development
238330		Flooring Contractors	Local	Local Real Estate, Construction, and Development
238340		Tile and Terrazzo Contractors	Local	Local Real Estate, Construction, and Development
238350		Finish Carpentry Contractors	Local	Local Real Estate, Construction, and Development
238390		Other Building Finishing Contractors	Local	Local Real Estate, Construction, and Development
238910		Site Preparation Contractors	Local	Local Real Estate, Construction, and Development
238990		All Other Specialty Trade Contractors	Local	Local Real Estate, Construction, and Development
311111		Dog and Cat Food Manufacturing	Traded	Food Processing and Manufacturing

NAICS	Adj.	Traded vs	
2017	Code Label	Local	Cluster Name
311119	Other Animal Food Manufacturing	Traded	Food Processing and Manufacturing
311211	Flour Milling	Traded	
311211	Rice Milling	Traded	Food Processing and Manufacturing Food Processing and Manufacturing
311213	•	Traded	
	Malt Manufacturing		Food Processing and Manufacturing
311221	Wet Corn Milling	Traded	Food Processing and Manufacturing
311224	Soybean and Other Oilseed Processing	Traded	Food Processing and Manufacturing
311225	Fats and Oils Refining and Blending	Traded	Food Processing and Manufacturing
311230	Breakfast Cereal Manufacturing	Traded	Food Processing and Manufacturing
311313	Beet Sugar Manufacturing	Traded	Food Processing and Manufacturing
311314	Cane Sugar Manufacturing	Traded	Food Processing and Manufacturing
311340	Nonchocolate Confectionery Manufacturing	Traded	Food Processing and Manufacturing
311351	Chocolate and Confectionery Manufacturing from Cacao Beans	Traded	Food Processing and Manufacturing
311352	Confectionery Manufacturing from Purchased Chocolate	Traded	Food Processing and Manufacturing
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	Traded	Food Processing and Manufacturing
311412	Frozen Specialty Food Manufacturing	Traded	Food Processing and Manufacturing
311421	Fruit and Vegetable Canning	Traded	Food Processing and Manufacturing
311422	Specialty Canning	Traded	Food Processing and Manufacturing
311423	Dried and Dehydrated Food Manufacturing	Traded	Food Processing and Manufacturing
311511	Fluid Milk Manufacturing	Traded	Food Processing and Manufacturing
311512	Creamery Butter Manufacturing	Traded	Food Processing and Manufacturing
311513	Cheese Manufacturing	Traded	Food Processing and Manufacturing
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	Traded	Food Processing and Manufacturing
311520	Ice Cream and Frozen Dessert Manufacturing	Traded	Food Processing and Manufacturing
311611	Animal (except Poultry) Slaughtering	Traded	Livestock Processing
311612	Meat Processed from Carcasses	Traded	Livestock Processing
311613	Rendering and Meat Byproduct Processing	Traded	Livestock Processing
311615	Poultry Processing	Traded	Livestock Processing
311710	Seafood Product Preparation and Packaging	Traded	Fishing and Fishing Products
311811	Retail Bakeries	Local	Local Food and Beverage Processing and Distribution
311812	Commercial Bakeries	Local	Local Food and Beverage Processing and Distribution
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	Traded	Food Processing and Manufacturing
311821	Cookie and Cracker Manufacturing	Traded	Food Processing and Manufacturing
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	Traded	Food Processing and Manufacturing
311830	Tortilla Manufacturing	Traded	Food Processing and Manufacturing
311911	Roasted Nuts and Peanut Butter Manufacturing	Traded	Food Processing and Manufacturing
311919	Other Snack Food Manufacturing	Traded	Food Processing and Manufacturing
311920	Coffee and Tea Manufacturing	Traded	Food Processing and Manufacturing
311930	Flavoring Syrup and Concentrate Manufacturing	Traded	Food Processing and Manufacturing
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	Traded	Food Processing and Manufacturing
311942	Spice and Extract Manufacturing	Traded	Food Processing and Manufacturing
311991	Perishable Prepared Food Manufacturing	Traded	Food Processing and Manufacturing
311999	All Other Miscellaneous Food Manufacturing	Traded	Food Processing and Manufacturing
312111	Soft Drink Manufacturing	Traded	Food Processing and Manufacturing
312112	Bottled Water Manufacturing	Traded	Food Processing and Manufacturing
312113	Ice Manufacturing	Traded	Food Processing and Manufacturing
312110	Breweries	Traded	Food Processing and Manufacturing
312130	Wineries	Traded	Food Processing and Manufacturing
312140	Distilleries	Traded	
312140	Distriction	rraueu	Food Processing and Manufacturing

NAICS	Adj.	Traded vs	
2017	Code Label	Local	Cluster Name
312230	Tobacco Manufacturing	Traded	Tobacco
313110	Fiber, Yarn, and Thread Mills	Traded	Textile Manufacturing
313210	Broadwoven Fabric Mills	Traded	Textile Manufacturing
313220	Narrow Fabric Mills and Schiffli Machine Embroidery	Traded	Textile Manufacturing
313230	Nonwoven Fabric Mills	Traded	Textile Manufacturing
313240	Knit Fabric Mills	Traded	Textile Manufacturing
313310	Textile and Fabric Finishing Mills	Traded	Textile Manufacturing
313320	Fabric Coating Mills	Traded	Textile Manufacturing
314110	Carpet and Rug Mills	Traded	Textile Manufacturing
314120	Curtain and Linen Mills	Traded	Textile Manufacturing
314910	Textile Bag and Canvas Mills	Traded	Leather and Related Products
314994	Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	Traded	Textile Manufacturing
314999	All Other Miscellaneous Textile Product Mills	Traded	Apparel
315110	Hosiery and Sock Mills	Traded	Textile Manufacturing
315190	Other Apparel Knitting Mills	Traded	Textile Manufacturing
315210	Cut and Sew Apparel Contractors	Traded	Apparel
315220	Men's and Boys' Cut and Sew Apparel Manufacturing	Traded	Apparel
315240	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing	Traded	Apparel
315280	Other Cut and Sew Apparel Manufacturing	Traded	Apparel
315990	Apparel Accessories and Other Apparel Manufacturing	Traded	Apparel
316110	Leather and Hide Tanning and Finishing	Traded	Footwear
316210	Footwear Manufacturing	Traded	Footwear
316992	Women's Handbag and Purse Manufacturing	Traded	Leather and Related Products
316998	All Other Leather Good and Allied Product Manufacturing	Traded	Leather and Related Products
321113	Sawmills	Traded	Wood Products
321114	Wood Preservation	Traded	Wood Products
321211	Hardwood Veneer and Plywood Manufacturing	Traded	Wood Products
321212	Softwood Veneer and Plywood Manufacturing	Traded	Wood Products
321213	Engineered Wood Member (except Truss) Manufacturing	Traded	Wood Products
321214	Truss Manufacturing	Traded	Wood Products
321219	Reconstituted Wood Product Manufacturing	Traded	Wood Products
321911	Wood Window and Door Manufacturing	Traded	Wood Products
321912	Cut Stock, Resawing Lumber, and Planing	Traded	Wood Products
321918	Other Millwork (including Flooring)	Traded	Wood Products
321920	Wood Container and Pallet Manufacturing	Traded	Wood Products
321991	Manufactured Home (Mobile Home) Manufacturing	Traded	Furniture
321992	Prefabricated Wood Building Manufacturing	Traded	Wood Products
321999	All Other Miscellaneous Wood Product Manufacturing	Traded	Wood Products
322110	Pulp Mills	Traded	Paper and Packaging
322121	Paper (except Newsprint) Mills	Traded	Paper and Packaging
322122	Newsprint Mills	Traded	Paper and Packaging
322130	Paperboard Mills	Traded	Paper and Packaging
322211	Corrugated and Solid Fiber Box Manufacturing	Traded	Paper and Packaging
322212	Folding Paperboard Box Manufacturing	Traded	Paper and Packaging
322219	Other Paperboard Container Manufacturing	Traded	Paper and Packaging
322220	Paper Bag and Coated and Treated Paper Manufacturing	Traded	Paper and Packaging
322230	Stationery Product Manufacturing	Traded	Paper and Packaging
322291	Sanitary Paper Product Manufacturing	Traded	Paper and Packaging

NAICS	Adj.	Traded vs	
2017	Code Label	Local	Cluster Name
322299	All Other Converted Paper Product Manufacturing	Traded	Paper and Packaging
323111	Commercial Printing (except Screen and Books)	Traded	Printing Services
323113	Commercial Screen Printing	Traded	Printing Services
323117	Books Printing	Traded	Printing Services
323120	Support Activities for Printing	Traded	Printing Services
324110	Petroleum Refineries	Traded	Oil and Gas Production and Transportation
324121	Asphalt Paving Mixture and Block Manufacturing	Traded	Construction Products and Services
324122	Asphalt Shingle and Coating Materials Manufacturing	Traded	Construction Products and Services
324191	Petroleum Lubricating Oil and Grease Manufacturing	Traded	Downstream Chemical Products
324199	All Other Petroleum and Coal Products Manufacturing	Traded	Oil and Gas Production and Transportation
325110	Petrochemical Manufacturing	Traded	Upstream Chemical Products
325120	Industrial Gas Manufacturing	Traded	Upstream Chemical Products
325120	Synthetic Dye and Pigment Manufacturing	Traded	Downstream Chemical Products
325180	· · · · · · · · · · · · · · · · · · ·	Traded	
325160 325193	Other Basic Inorganic Chemical Manufacturing Ethyl Alcohol Manufacturing	Traded	Upstream Chemical Products Upstream Chemical Products
325193	Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing	Traded	•
325194		Traded	Upstream Chemical Products
	All Other Basic Organic Chemical Manufacturing		Upstream Chemical Products
325211	Plastics Material and Resin Manufacturing	Traded	Plastics
325212	Synthetic Rubber Manufacturing	Traded	Upstream Chemical Products
325220	Artificial and Synthetic Fibers and Filaments Manufacturing	Traded	Textile Manufacturing
325311	Nitrogenous Fertilizer Manufacturing	Traded	Agricultural Inputs and Services
325312	Phosphatic Fertilizer Manufacturing	Traded	Upstream Chemical Products
325314	Fertilizer (Mixing Only) Manufacturing	Traded	Agricultural Inputs and Services
325320	Pesticide and Other Agricultural Chemical Manufacturing	Traded	Upstream Chemical Products
325411	Medicinal and Botanical Manufacturing	Traded	Biopharmaceuticals
325412	Pharmaceutical Preparation Manufacturing	Traded	Biopharmaceuticals
325413	In-Vitro Diagnostic Substance Manufacturing	Traded	Biopharmaceuticals
325414	Biological Product (except Diagnostic) Manufacturing	Traded	Biopharmaceuticals
325510	Paint and Coating Manufacturing	Traded	Downstream Chemical Products
325520	Adhesive Manufacturing	Traded	Downstream Chemical Products
325611	Soap and Other Detergent Manufacturing	Traded	Downstream Chemical Products
325612	Polish and Other Sanitation Good Manufacturing	Traded	Downstream Chemical Products
325613	Surface Active Agent Manufacturing	Traded	Downstream Chemical Products
325620	Toilet Preparation Manufacturing	Traded	Downstream Chemical Products
325910	Printing Ink Manufacturing	Traded	Printing Services
325920	Explosives Manufacturing	Traded	Downstream Chemical Products
325991	Custom Compounding of Purchased Resins	Traded	Downstream Chemical Products
325992	Photographic Film, Paper, Plate, and Chemical Manufacturing	Traded	Downstream Chemical Products
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	Traded	Downstream Chemical Products
326111	Plastics Bag and Pouch Manufacturing	Traded	Plastics
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing	Traded	Plastics
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	Traded	Plastics
326121	Unlaminated Plastics Profile Shape Manufacturing	Traded	Plastics
326122	Plastics Pipe and Pipe Fitting Manufacturing	Traded	Plastics
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	Traded	Plastics
326140	Polystyrene Foam Product Manufacturing	Traded	Plastics
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	Traded	Plastics
	Plastics Bottle Manufacturing	Traded	Plastics

NAICS	Adj.	Traded vs	
2017	Auj. Code Label	Local	Cluster Name
326191	Plastics Plumbing Fixture Manufacturing	Traded	Plastics
326199	All Other Plastics Product Manufacturing	Traded	Plastics
326211	Tire Manufacturing (except Retreading)	Traded	Vulcanized and Fired Materials
326212	Tire Retreading	Traded	Vulcanized and Fired Materials
326220	Rubber and Plastics Hoses and Belting Manufacturing	Traded	Vulcanized and Fired Materials
326291	Rubber Product Manufacturing for Mechanical Use	Traded	Vulcanized and Fired Materials
326299	All Other Rubber Product Manufacturing	Traded	Vulcanized and Fired Materials
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing	Traded	Vulcanized and Fired Materials
327120	Clay Building Material and Refractories Manufacturing	Traded	Vulcanized and Fired Materials
327211	Flat Glass Manufacturing	Traded	Vulcanized and Fired Materials
327212	Other Pressed and Blown Glass and Glassware Manufacturing	Traded	Vulcanized and Fired Materials
327213	Glass Container Manufacturing	Traded	Food Processing and Manufacturing
327215	Glass Product Manufacturing Made of Purchased Glass	Traded	Vulcanized and Fired Materials
327310	Cement Manufacturing	Traded	Construction Products and Services
327320	Ready-Mix Concrete Manufacturing	Local	Local Real Estate, Construction, and Development
327331	Concrete Block and Brick Manufacturing	Traded	Construction Products and Services
327332	Concrete Pipe Manufacturing	Traded	Construction Products and Services
327390	Other Concrete Product Manufacturing	Local	Local Real Estate, Construction, and Development
327410	Lime Manufacturing	Traded	Construction Products and Services
327420	Gypsum Product Manufacturing	Traded	Construction Products and Services
327910	Abrasive Product Manufacturing	Traded	Metalworking Technology
327991	Cut Stone and Stone Product Manufacturing	Traded	Construction Products and Services
327992	Ground or Treated Mineral and Earth Manufacturing	Traded	Vulcanized and Fired Materials
327993	Mineral Wool Manufacturing	Traded	Construction Products and Services
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing	Traded	Construction Products and Services
331110	Iron and Steel Mills and Ferroalloy Manufacturing	Traded	Upstream Metal Manufacturing
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	Traded	Upstream Metal Manufacturing
331221	Rolled Steel Shape Manufacturing	Traded	Upstream Metal Manufacturing
331222	Steel Wire Drawing	Traded	Upstream Metal Manufacturing
331313	Alumina Refining and Primary Aluminum Production	Traded	Upstream Metal Manufacturing
331314	Secondary Smelting and Alloying of Aluminum	Traded	Upstream Metal Manufacturing
331315	Aluminum Sheet, Plate, and Foil Manufacturing	Traded	Upstream Metal Manufacturing
331318	Other Aluminum Rolling, Drawing, and Extruding	Traded	Upstream Metal Manufacturing
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	Traded	Upstream Metal Manufacturing
331420	Copper Rolling, Drawing, Extruding, and Alloying	Traded	Upstream Metal Manufacturing
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding	Traded	Upstream Metal Manufacturing
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and A		Upstream Metal Manufacturing
331511	Iron Foundries	Traded	Automotive
331512	Steel Investment Foundries	Traded	Automotive
331513	Steel Foundries (except Investment)	Traded	Automotive
331523	Nonferrous Metal Die-Casting Foundries	Traded	Automotive
331524	Aluminum Foundries (except Die-Casting)	Traded	Automotive
331529	Other Nonferrous Metal Foundries (except Die-Casting)	Traded	Automotive
332111	Iron and Steel Forging	Traded	Upstream Metal Manufacturing
332112	Nonferrous Forging	Traded	Upstream Metal Manufacturing
332114	Custom Roll Forming	Traded	Automotive
332117	Powder Metallurgy Part Manufacturing	Traded	Upstream Metal Manufacturing
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)	Traded	Upstream Metal Manufacturing
332113	wickar Grown, Glosure, and Other wickar Stamping (except Automotive)	Hautu	opatroam Metal Manulacturing

NAICS	Adj.	Traded vs	
2017	Code Label	Local	Cluster Name
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	Traded	Downstream Metal Products
332216	Saw Blade and Handtool Manufacturing	Traded	Downstream Metal Products
332311	Prefabricated Metal Building and Component Manufacturing	Traded	Downstream Metal Products
332312	Fabricated Structural Metal Manufacturing	Traded	Downstream Metal Products
332313	Plate Work Manufacturing	Traded	Metalworking Technology
332321	Metal Window and Door Manufacturing	Traded	Downstream Metal Products
332322	Sheet Metal Work Manufacturing	Local	Local Real Estate, Construction, and Development
332323	Ornamental and Architectural Metal Work Manufacturing	Traded	Downstream Metal Products
332410	Power Boiler and Heat Exchanger Manufacturing	Traded	Construction Products and Services
332420	Metal Tank (Heavy Gauge) Manufacturing	Traded	Construction Products and Services
332431	Metal Can Manufacturing	Traded	Downstream Metal Products
332439	Other Metal Container Manufacturing	Traded	Downstream Metal Products
332510	Hardware Manufacturing	Traded	Downstream Metal Products
332613	Spring Manufacturing	Traded	Upstream Metal Manufacturing
332618	Other Fabricated Wire Product Manufacturing	Traded	Upstream Metal Manufacturing
332710	Machine Shops	Local	Local Industrial Products and Services
332721	Precision Turned Product Manufacturing	Traded	Metalworking Technology
332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing	Traded	Metalworking Technology
332811	Metal Heat Treating	Traded	Metalworking Technology
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacture.		Metalworking Technology
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	Traded	Metalworking Technology
332911	Industrial Valve Manufacturing	Traded	Production Technology and Heavy Machinery
332912	Fluid Power Valve and Hose Fitting Manufacturing	Traded	Production Technology and Heavy Machinery
332913	Plumbing Fixture Fitting and Trim Manufacturing	Traded	Construction Products and Services
332919	Other Metal Valve and Pipe Fitting Manufacturing	Traded	Production Technology and Heavy Machinery
332991	Ball and Roller Bearing Manufacturing	Traded	Production Technology and Heavy Machinery
332992	Small Arms Ammunition Manufacturing	Traded	Downstream Metal Products
332993	Ammunition (except Small Arms) Manufacturing	Traded	Downstream Metal Products
332994	Small Arms, Ordnance, and Ordnance Accessories Manufacturing	Traded	Downstream Metal Products
332996	Fabricated Pipe and Pipe Fitting Manufacturing	Traded	Construction Products and Services
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	Traded	Downstream Metal Products
333111	Farm Machinery and Equipment Manufacturing	Traded	Production Technology and Heavy Machinery
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	Traded	Production Technology and Heavy Machinery Production Technology and Heavy Machinery
333120	Construction Machinery Manufacturing	Traded	Production Technology and Heavy Machinery Production Technology and Heavy Machinery
333131	Mining Machinery and Equipment Manufacturing	Traded	Production Technology and Heavy Machinery Production Technology and Heavy Machinery
333132	Oil and Gas Field Machinery and Equipment Manufacturing	Traded	Oil and Gas Production and Transportation
333241	Food Product Machinery Manufacturing	Traded	Production Technology and Heavy Machinery
333242	Semiconductor Machinery Manufacturing	Traded	Information Technology and Analytical Instruments
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing	Traded	Production Technology and Heavy Machinery
333244	Printing Machinery and Equipment Manufacturing	Traded	Production Technology and Heavy Machinery Production Technology and Heavy Machinery
333249	Other Industrial Machinery Manufacturing	Traded	Production Technology and Heavy Machinery Production Technology and Heavy Machinery
333314	Optical Instrument and Lens Manufacturing	Traded	Medical Devices
333316	Photographic and Photocopying Equipment Manufacturing	Traded	Information Technology and Analytical Instruments
333318		Traded	Production Technology and Heavy Machinery
333413	Other Commercial and Service Industry Machinery Manufacturing		, ,
333414	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	Traded	Production Technology and Heavy Machinery
333415	Heating Equipment (except Warm Air Furnaces) Manufacturing Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrige		Production Technology and Heavy Machinery
333511	Industrial Mold Manufacturing	Traded	Production Technology and Heavy Machinery
333311	maustriai word inandracturing	rraueu	Metalworking Technology

NAICS	Adj.		Traded vs	
2017		Label	Local	Cluster Name
333514		Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	Traded	Metalworking Technology
333515		Cutting Tool and Machine Tool Accessory Manufacturing	Traded	Metalworking Technology
333517		Machine Tool Manufacturing	Traded	Metalworking Technology
333519		Rolling Mill and Other Metalworking Machinery Manufacturing	Traded	Metalworking Technology
333611		Turbine and Turbine Generator Set Units Manufacturing	Traded	Production Technology and Heavy Machinery
333612		Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	Traded	Production Technology and Heavy Machinery
333613		Mechanical Power Transmission Equipment Manufacturing	Traded	Production Technology and Heavy Machinery
333618		Other Engine Equipment Manufacturing	Traded	Production Technology and Heavy Machinery
333912		Air and Gas Compressor Manufacturing	Traded	Production Technology and Heavy Machinery
333914	2	Measuring, Dispensing, and Other Pumping Equipment Manufacturing	Traded	Production Technology and Heavy Machinery
333921		Elevator and Moving Stairway Manufacturing	Traded	Production Technology and Heavy Machinery
333922		Conveyor and Conveying Equipment Manufacturing	Traded	Production Technology and Heavy Machinery
333923		Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	Traded	Production Technology and Heavy Machinery
333924		Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	Traded	Production Technology and Heavy Machinery
333991		Power-Driven Handtool Manufacturing	Traded	Metalworking Technology
333992		Welding and Soldering Equipment Manufacturing	Traded	Metalworking Technology
333993		Packaging Machinery Manufacturing	Traded	Production Technology and Heavy Machinery
333994		Industrial Process Furnace and Oven Manufacturing	Traded	Production Technology and Heavy Machinery
333995		Fluid Power Cylinder and Actuator Manufacturing	Traded	Production Technology and Heavy Machinery
333996		Fluid Power Pump and Motor Manufacturing	Traded	Production Technology and Heavy Machinery
333997		Scale and Balance Manufacturing	Traded	Production Technology and Heavy Machinery
333999		All Other Miscellaneous General Purpose Machinery Manufacturing	Traded	Production Technology and Heavy Machinery
334111		Electronic Computer Manufacturing	Traded	Information Technology and Analytical Instruments
334112		Computer Storage Device Manufacturing	Traded	Information Technology and Analytical Instruments
334118		Computer Terminal and Other Computer Peripheral Equipment Manufacturing	Traded	Information Technology and Analytical Instruments
334210		Telephone Apparatus Manufacturing	Traded	Communications Equipment and Services
334220		Radio and Television Broadcasting and Wireless Communications Equipment Manufact	ur Traded	Communications Equipment and Services
334290		Other Communications Equipment Manufacturing	Traded	Communications Equipment and Services
334310		Audio and Video Equipment Manufacturing	Traded	Information Technology and Analytical Instruments
334412		Bare Printed Circuit Board Manufacturing	Traded	Information Technology and Analytical Instruments
334413		Semiconductor and Related Device Manufacturing	Traded	Information Technology and Analytical Instruments
334416		Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing	Traded	Information Technology and Analytical Instruments
334417		Electronic Connector Manufacturing	Traded	Information Technology and Analytical Instruments
334418		Printed Circuit Assembly (Electronic Assembly) Manufacturing	Traded	Information Technology and Analytical Instruments
334419		Other Electronic Component Manufacturing	Traded	Information Technology and Analytical Instruments
334510		Electromedical and Electrotherapeutic Apparatus Manufacturing	Traded	Information Technology and Analytical Instruments
334511		Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instru	m _' Traded	Aerospace Vehicles and Defense
334512		Automatic Environmental Control Manufacturing for Residential, Commercial, and Applia	an Traded	Information Technology and Analytical Instruments
334513		Instruments and Related Products Manufacturing for Measuring, Displaying, and Contro	lliı Traded	Information Technology and Analytical Instruments
334514		Totalizing Fluid Meter and Counting Device Manufacturing	Traded	Information Technology and Analytical Instruments
334515		Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	Traded	Information Technology and Analytical Instruments
334516		Analytical Laboratory Instrument Manufacturing	Traded	Information Technology and Analytical Instruments
334517		Irradiation Apparatus Manufacturing	Traded	Information Technology and Analytical Instruments
334519		Other Measuring and Controlling Device Manufacturing	Traded	Information Technology and Analytical Instruments
334613		Blank Magnetic and Optical Recording Media Manufacturing	Traded	Information Technology and Analytical Instruments
334614		Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing	Traded	Information Technology and Analytical Instruments
335110		Electric Lamp Bulb and Part Manufacturing	Traded	Lighting and Electrical Equipment
335121		Residential Electric Lighting Fixture Manufacturing	Traded	Lighting and Electrical Equipment

NAICS	Adj.		Traded vs	
2017		Label	Local	Cluster Name
335122		Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	Traded	Lighting and Electrical Equipment
335129		Other Lighting Equipment Manufacturing	Traded	Lighting and Electrical Equipment
335210		Small Electrical Appliance Manufacturing	Traded	Recreational and Small Electric Goods
335220	2	Major Household Appliance Manufacturing	Traded	Trailers, Motor Homes, and Appliances
335311	2	Power, Distribution, and Specialty Transformer Manufacturing	Traded	Lighting and Electrical Equipment
335311		Motor and Generator Manufacturing	Traded	Lighting and Electrical Equipment
335313		Switchgear and Switchboard Apparatus Manufacturing	Traded	Lighting and Electrical Equipment
335314		Relay and Industrial Control Manufacturing	Traded	Lighting and Electrical Equipment
335911		,	Traded	Lighting and Electrical Equipment
335912		Primary Battery Manufacturing	Traded	Communications Equipment and Services
335921		, ,	Traded	Lighting and Electrical Equipment
335929		Other Communication and Energy Wire Manufacturing	Traded	Lighting and Electrical Equipment
335931		Current-Carrying Wiring Device Manufacturing	Traded	Lighting and Electrical Equipment
335931		Noncurrent-Carrying Wiring Device Manufacturing	Traded	Lighting and Electrical Equipment
335991		Carbon and Graphite Product Manufacturing	Traded	Lighting and Electrical Equipment
335999		All Other Miscellaneous Electrical Equipment and Component Manufacturing	Traded	Lighting and Electrical Equipment
336111			Traded	Automotive
336112		Automobile Manufacturing	Traded	
336120		Light Truck and Utility Vehicle Manufacturing	Traded	Automotive
336211		Heavy Duty Truck Manufacturing	Traded	Automotive
		, ,		Automotive
336212		Truck Trailer Manufacturing	Traded	Trailers, Motor Homes, and Appliances
336213		ŭ	Traded	Trailers, Motor Homes, and Appliances
336214		Travel Trailer and Camper Manufacturing	Traded Traded	Trailers, Motor Homes, and Appliances
336310		Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	Traded	Automotive
336320		Motor Vehicle Electrical and Electronic Equipment Manufacturing		Automotive
336330		Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	Traded	Automotive
336340		Motor Vehicle Brake System Manufacturing	Traded	Automotive
336350		Motor Vehicle Transmission and Power Train Parts Manufacturing	Traded	Automotive
336360		Motor Vehicle Seating and Interior Trim Manufacturing	Traded	Automotive
336370		Motor Vehicle Metal Stamping	Traded	Automotive
336390		3	Traded	Automotive
336411		Aircraft Manufacturing	Traded	Aerospace Vehicles and Defense
336412		Aircraft Engine and Engine Parts Manufacturing	Traded	Aerospace Vehicles and Defense
336413		Other Aircraft Parts and Auxiliary Equipment Manufacturing	Traded	Aerospace Vehicles and Defense
336414		Guided Missile and Space Vehicle Manufacturing	Traded	Aerospace Vehicles and Defense
336415		Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturin		Aerospace Vehicles and Defense
336419		Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	Traded	Aerospace Vehicles and Defense
336510		Railroad Rolling Stock Manufacturing	Traded	Production Technology and Heavy Machinery
336611		Ship Building and Repairing	Traded	Water Transportation
336612		Boat Building	Traded	Water Transportation
336991		Motorcycle, Bicycle, and Parts Manufacturing	Traded	Recreational and Small Electric Goods
336992		, , ,	Traded	Automotive
336999		All Other Transportation Equipment Manufacturing	Traded	Automotive
337110		3	Traded	Furniture
337121		Upholstered Household Furniture Manufacturing	Traded	Furniture
337122		Nonupholstered Wood Household Furniture Manufacturing	Traded	Furniture
337124		Metal Household Furniture Manufacturing	Traded	Furniture
337125		Household Furniture (except Wood and Metal) Manufacturing	Traded	Furniture

NAICS	Adi.	Traded vs	
2017	Code Label	Local	Cluster Name
337127	Institutional Furniture Manufacturing	Traded	Furniture
337211	Wood Office Furniture Manufacturing	Traded	Furniture
337212	Custom Architectural Woodwork and Millwork Manufacturing	Local	Local Real Estate, Construction, and Development
337214	Office Furniture (except Wood) Manufacturing	Traded	Furniture
337215	Showcase, Partition, Shelving, and Locker Manufacturing	Traded	Furniture
337910	Mattress Manufacturing	Traded	Furniture
337920	Blind and Shade Manufacturing	Traded	Recreational and Small Electric Goods
339112	Surgical and Medical Instrument Manufacturing	Traded	Medical Devices
339113	Surgical Appliance and Supplies Manufacturing	Traded	Medical Devices
339114	Dental Equipment and Supplies Manufacturing	Traded	Medical Devices Medical Devices
339115	Ophthalmic Goods Manufacturing	Traded	Medical Devices Medical Devices
339116	· ·	Local	
339910	Dental Laboratories	Traded	Local Health Services
	Jewelry and Silverware Manufacturing		Jewelry and Precious Metals
339920	Sporting and Athletic Goods Manufacturing	Traded	Recreational and Small Electric Goods
339930	Doll, Toy, and Game Manufacturing	Traded	Recreational and Small Electric Goods
339940	Office Supplies (except Paper) Manufacturing	Traded	Recreational and Small Electric Goods
339950	Sign Manufacturing	Local	Local Commercial Services
339991	Gasket, Packing, and Sealing Device Manufacturing	Traded	Production Technology and Heavy Machinery
339992	Musical Instrument Manufacturing	Traded	Recreational and Small Electric Goods
339993	Fastener, Button, Needle, and Pin Manufacturing	Traded	Recreational and Small Electric Goods
339994	Broom, Brush, and Mop Manufacturing	Traded	Plastics
339995	Burial Casket Manufacturing	Traded	Trailers, Motor Homes, and Appliances
339999	All Other Miscellaneous Manufacturing	Traded	Recreational and Small Electric Goods
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	Local	Local Motor Vehicle Products and Services
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	Local	Local Motor Vehicle Products and Services
423130	Tire and Tube Merchant Wholesalers	Local	Local Motor Vehicle Products and Services
423140	Motor Vehicle Parts (Used) Merchant Wholesalers	Local	Local Motor Vehicle Products and Services
423210	Furniture Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423220	Home Furnishing Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	Local	Local Real Estate, Construction, and Development
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	Local	Local Real Estate, Construction, and Development
423330	Roofing, Siding, and Insulation Material Merchant Wholesalers	Local	Local Real Estate, Construction, and Development
423390	Other Construction Material Merchant Wholesalers	Local	Local Real Estate, Construction, and Development
423410	Photographic Equipment and Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423420	Office Equipment Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423440	Other Commercial Equipment Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423460	Ophthalmic Goods Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423490	Other Professional Equipment and Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423510	Metal Service Centers and Other Metal Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423520	Coal and Other Mineral and Ore Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant	V Traded	Distribution and Electronic Commerce
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Whole		Distribution and Electronic Commerce
423690	Other Electronic Parts and Equipment Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423710	Hardware Merchant Wholesalers	Local	Local Household Goods and Services
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	Local	Local Real Estate, Construction, and Development
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	Local	Local Real Estate, Construction, and Development

NAICS	Adi.	Traded vs	
2017	Code Label	Local	Cluster Name
423740	Refrigeration Equipment and Supplies Merchant Wholesalers	Local	Local Real Estate, Construction, and Development
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesale		Distribution and Electronic Commerce
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423830	Industrial Machinery and Equipment Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423840	Industrial Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423930	Recyclable Material Merchant Wholesalers	Local	Local Industrial Products and Services
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	Traded	Distribution and Electronic Commerce
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	Local	Local Industrial Products and Services
424110	Printing and Writing Paper Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424120	Stationery and Office Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424130	Industrial and Personal Service Paper Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424210	Drugs and Druggists' Sundries Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424340	Footwear Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424410	General Line Grocery Merchant Wholesalers	Local	Local Food and Beverage Processing and Distribution
424420	Packaged Frozen Food Merchant Wholesalers	Local	Local Food and Beverage Processing and Distribution
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	Local	Local Food and Beverage Processing and Distribution
424440	Poultry and Poultry Product Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424450	Confectionery Merchant Wholesalers	Local	Local Food and Beverage Processing and Distribution
424460	Fish and Seafood Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424470	Meat and Meat Product Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424480	Fresh Fruit and Vegetable Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424490	Other Grocery and Related Products Merchant Wholesalers	Local	Local Food and Beverage Processing and Distribution
424510	Grain and Field Bean Merchant Wholesalers	Traded	Food Processing and Manufacturing
424520	Livestock Merchant Wholesalers	Traded	Livestock Processing
424590	Other Farm Product Raw Material Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424690	Other Chemical and Allied Products Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424710	Petroleum Bulk Stations and Terminals	Traded	Distribution and Electronic Commerce
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Ter	r Traded	Distribution and Electronic Commerce
424810	Beer and Ale Merchant Wholesalers	Local	Local Food and Beverage Processing and Distribution
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424910	Farm Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424920	Book, Periodical, and Newspaper Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424940	Tobacco and Tobacco Product Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424950	Paint, Varnish, and Supplies Merchant Wholesalers	Traded	Distribution and Electronic Commerce
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	Traded	Distribution and Electronic Commerce
425110	Business to Business Electronic Markets	Traded	Distribution and Electronic Commerce
425120	Wholesale Trade Agents and Brokers	Traded	Distribution and Electronic Commerce
441110	New Car Dealers	Local	Local Motor Vehicle Products and Services
441120	Used Car Dealers	Local	Local Motor Vehicle Products and Services
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VAICS	Adj.	Traded vs	<u></u>
2017	Code Label	Local	Cluster Name
141210	Recreational Vehicle Dealers	Local	Local Motor Vehicle Products and Services
141222	Boat Dealers	Local	Local Motor Vehicle Products and Services
141228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	Local	Local Motor Vehicle Products and Services
41310	Automotive Parts and Accessories Stores	Local	Local Motor Vehicle Products and Services
41320	Tire Dealers	Local	Local Motor Vehicle Products and Services
42110	Furniture Stores	Local	Local Household Goods and Services
42210	Floor Covering Stores	Local	Local Household Goods and Services
42291	Window Treatment Stores	Local	Local Household Goods and Services
42299	All Other Home Furnishings Stores	Local	Local Household Goods and Services
43141	Household Appliance Stores	Local	Local Household Goods and Services
43142	Electronics Stores	Local	Local Entertainment and Media
44110	Home Centers	Local	Local Real Estate, Construction, and Development
44120	Paint and Wallpaper Stores	Local	Local Real Estate, Construction, and Development
44130	Hardware Stores	Local	Local Household Goods and Services
44190	Other Building Material Dealers	Local	Local Real Estate, Construction, and Development
44210	•	Local	· · · · · · · · · · · · · · · · · · ·
	Outdoor Power Equipment Stores		Local Household Goods and Services
44220	Nursery, Garden Center, and Farm Supply Stores	Local	Local Household Goods and Services
45110 45120	Supermarkets and Other Grocery (except Convenience) Stores	Local	Local Food and Beverage Processing and Distribution
45120 45040	Convenience Stores	Local	Local Food and Beverage Processing and Distribution
45210 45000	Meat Markets	Local	Local Food and Beverage Processing and Distributio
15220	Fish and Seafood Markets	Local	Local Food and Beverage Processing and Distributio
45230	Fruit and Vegetable Markets	Local	Local Food and Beverage Processing and Distributio
45291	Baked Goods Stores	Local	Local Food and Beverage Processing and Distributio
45292	Confectionery and Nut Stores	Local	Local Food and Beverage Processing and Distributio
45299	All Other Specialty Food Stores	Local	Local Food and Beverage Processing and Distributio
45310	Beer, Wine, and Liquor Stores	Local	Local Food and Beverage Processing and Distributio
46110	Pharmacies and Drug Stores	Local	Local Health Services
46120	Cosmetics, Beauty Supplies, and Perfume Stores	Local	Local Personal Services (Non-Medical)
46130	Optical Goods Stores	Local	Local Health Services
46191	Food (Health) Supplement Stores	Local	Local Food and Beverage Processing and Distribution
46199	All Other Health and Personal Care Stores	Local	Local Personal Services (Non-Medical)
47110	Gasoline Stations with Convenience Stores	Local	Local Motor Vehicle Products and Services
47190	Other Gasoline Stations	Local	Local Motor Vehicle Products and Services
48110	Men's Clothing Stores	Local	Local Retailing of Clothing and General Merchandise
48120	Women's Clothing Stores	Local	Local Retailing of Clothing and General Merchandise
48130	Children's and Infants' Clothing Stores	Local	Local Retailing of Clothing and General Merchandise
48140	Family Clothing Stores	Local	Local Retailing of Clothing and General Merchandise
48150	Clothing Accessories Stores	Local	Local Retailing of Clothing and General Merchandise
48190	Other Clothing Stores	Local	Local Retailing of Clothing and General Merchandise
48210	Shoe Stores	Local	Local Retailing of Clothing and General Merchandise
18310	Jewelry Stores	Local	Local Retailing of Clothing and General Merchandise
48320	Luggage and Leather Goods Stores	Local	Local Retailing of Clothing and General Merchandise
51110	Sporting Goods Stores	Local	Local Entertainment and Media
51120	Hobby, Toy, and Game Stores	Local	Local Entertainment and Media
51130	Sewing, Needlework, and Piece Goods Stores	Local	Local Retailing of Clothing and General Merchandise
51140	Musical Instrument and Supplies Stores	Local	Local Entertainment and Media
51211	Book Stores	Local	Local Entertainment and Media
51212	News Dealers and Newsstands	Local	Local Entertainment and Media

NAICS	Adj.		Traded vs	
2017		Label	Local	Cluster Name
452210	2	Department Stores	Local	Local Retailing of Clothing and General Merchandise
452311	2	Warehouse Clubs and Supercenters	Local	Local Retailing of Clothing and General Merchandise
452319	2	All Other General Merchandise Stores	Local	Local Retailing of Clothing and General Merchandise
453110		Florists	Local	Local Household Goods and Services
453210		Office Supplies and Stationery Stores	Local	Local Commercial Services
453220		Gift, Novelty, and Souvenir Stores	Local	Local Hospitality Establishments
453310		Used Merchandise Stores	Local	Local Retailing of Clothing and General Merchandise
453910		Pet and Pet Supplies Stores	Local	Local Personal Services (Non-Medical)
453920		Art Dealers	Traded	Hospitality and Tourism
453930		Manufactured (Mobile) Home Dealers	Local	Local Motor Vehicle Products and Services
453991		Tobacco Stores	Local	Local Food and Beverage Processing and Distribution
453998		All Other Miscellaneous Store Retailers (except Tobacco Stores)	Local	Local Personal Services (Non-Medical)
454110	2	Electronic Shopping and Mail-Order Houses	Traded	Distribution and Electronic Commerce
454210	2	Vending Machine Operators	Local	Local Food and Beverage Processing and Distribution
454310		Fuel Dealers	Local	Local Utilities
454390		Other Direct Selling Establishments	Local	Local Food and Beverage Processing and Distribution
481111		Scheduled Passenger Air Transportation	Traded	Transportation and Logistics
481112		·		,
		Scheduled Freight Air Transportation	Traded	Transportation and Logistics
481211		Nonscheduled Chartered Passenger Air Transportation	Traded	Transportation and Logistics
481212		Nonscheduled Chartered Freight Air Transportation	Traded	Transportation and Logistics
481219		Other Nonscheduled Air Transportation	Traded	Transportation and Logistics
482110	1	Rail Transportation	Traded	Transportation and Logistics
483111		Deep Sea Freight Transportation	Traded	Water Transportation
483112		Deep Sea Passenger Transportation	Traded	Water Transportation
483113		Coastal and Great Lakes Freight Transportation	Traded	Water Transportation
483114		Coastal and Great Lakes Passenger Transportation	Traded	Water Transportation
483211		Inland Water Freight Transportation	Traded	Water Transportation
483212		Inland Water Passenger Transportation	Traded	Water Transportation
484110		General Freight Trucking, Local	Local	Local Logistical Services
484121		General Freight Trucking, Long-Distance, Truckload	Traded	Transportation and Logistics
484122		General Freight Trucking, Long-Distance, Less Than Truckload	Local	Local Logistical Services
484210		Used Household and Office Goods Moving	Local	Local Logistical Services
484220		Specialized Freight (except Used Goods) Trucking, Local	Local	Local Logistical Services
484230		Specialized Freight (except Used Goods) Trucking, Long-Distance	Traded	Transportation and Logistics
485111		Mixed Mode Transit Systems	Local	Local Logistical Services
485112		Commuter Rail Systems	Local	Local Logistical Services
485113		Bus and Other Motor Vehicle Transit Systems	Local	Local Logistical Services
485119		Other Urban Transit Systems	Local	Local Logistical Services
485210		Interurban and Rural Bus Transportation	Traded	Transportation and Logistics
485310		Taxi Service	Traded	Business Services
485320		Limousine Service	Traded	Business Services
485410		School and Employee Bus Transportation	Local	Local Logistical Services
485510		Charter Bus Industry	Traded	Transportation and Logistics
485991		Special Needs Transportation	Local	Local Logistical Services
485999		All Other Transit and Ground Passenger Transportation	Traded	Business Services
486110		Pipeline Transportation of Crude Oil	Traded	Oil and Gas Production and Transportation
486210		Pipeline Transportation of Natural Gas	Traded	Oil and Gas Production and Transportation
486910		Pipeline Transportation of Refined Petroleum Products	Traded	Oil and Gas Production and Transportation

NAICS	Adj.		Traded vs	
2017		Label	Local	Cluster Name
486990		All Other Pipeline Transportation	Traded	Oil and Gas Production and Transportation
487110		Scenic and Sightseeing Transportation, Land	Traded	Hospitality and Tourism
487210		Scenic and Sightseeing Transportation, Water	Traded	Hospitality and Tourism
487990		Scenic and Sightseeing Transportation, Other	Traded	Hospitality and Tourism
488111		Air Traffic Control	Traded	Transportation and Logistics
488119		Other Airport Operations	Traded	Transportation and Logistics
488190		Other Support Activities for Air Transportation	Traded	Transportation and Logistics
488210		Support Activities for Rail Transportation	Traded	Transportation and Logistics
488310		Port and Harbor Operations	Traded	Water Transportation
488320		Marine Cargo Handling	Traded	Water Transportation
488330		Navigational Services to Shipping	Traded	Water Transportation
488390		Other Support Activities for Water Transportation	Traded	Water Transportation
488410		Motor Vehicle Towing	Local	Local Motor Vehicle Products and Services
488490		Other Support Activities for Road Transportation	Traded	Transportation and Logistics
488510		Freight Transportation Arrangement	Traded	Transportation and Logistics
488991		Packing and Crating	Traded	Transportation and Logistics Transportation and Logistics
488999		All Other Support Activities for Transportation	Traded	Transportation and Logistics Transportation and Logistics
491110	1	Postal Service (Contractors)	Traded	
492110	'	Couriers and Express Delivery Services	Local	Transportation and Logistics
492110		·	Local	Local Logistical Services
492210		Local Messengers and Local Delivery	Traded	Local Logistical Services
		General Warehousing and Storage		Distribution and Electronic Commerce
493120		Refrigerated Warehousing and Storage	Traded	Distribution and Electronic Commerce
493130		Farm Product Warehousing and Storage	Traded	Distribution and Electronic Commerce
493190		Other Warehousing and Storage	Traded	Distribution and Electronic Commerce
511110		Newspaper Publishers	Local	Local Entertainment and Media
511120		Periodical Publishers	Traded	Marketing, Design, and Publishing
511130		Book Publishers	Traded	Marketing, Design, and Publishing
511140		Directory and Mailing List Publishers	Traded	Marketing, Design, and Publishing
511191		Greeting Card Publishers	Traded	Printing Services
511199		All Other Publishers	Traded	Marketing, Design, and Publishing
511210		Software Publishers	Traded	Information Technology and Analytical Instruments
512110		Motion Picture and Video Production	Traded	Video Production and Distribution
512120		Motion Picture and Video Distribution	Traded	Video Production and Distribution
512131		Motion Picture Theaters (except Drive-Ins)	Local	Local Entertainment and Media
512132		Drive-In Motion Picture Theaters	Traded	Video Production and Distribution
512191		Teleproduction and Other Postproduction Services	Traded	Video Production and Distribution
512199		Other Motion Picture and Video Industries	Traded	Video Production and Distribution
512250	2	Record Production and Distribution	Traded	Music and Sound Recording
512230		Music Publishers	Traded	Music and Sound Recording
512240		Sound Recording Studios	Traded	Music and Sound Recording
512290		Other Sound Recording Industries	Traded	Music and Sound Recording
515111		Radio Networks	Local	Local Entertainment and Media
515112		Radio Stations	Local	Local Entertainment and Media
515120		Television Broadcasting	Local	Local Entertainment and Media
515210		Cable and Other Subscription Programming	Traded	Communications Equipment and Services
517311	2	Wired Telecommunications Carriers	Local	Local Utilities
517312	2	Wireless Telecommunications Carriers (except Satellite)	Traded	Communications Equipment and Services
517410		Satellite Telecommunications	Traded	Communications Equipment and Services

NAICS	Adj.		Traded vs	
2017		le Label	Local	Cluster Name
517911		Telecommunications Resellers	Local	Local Utilities
517919		All Other Telecommunications	Traded	Communications Equipment and Services
518210		Data Processing, Hosting, and Related Services	Traded	Business Services
519110		News Syndicates	Traded	Marketing, Design, and Publishing
519120		Libraries and Archives	Traded	Marketing, Design, and Publishing
519130		Internet Publishing and Broadcasting and Web Search Portals	Traded	Marketing, Design, and Publishing
519190		All Other Information Services	Traded	Marketing, Design, and Publishing
521110		Monetary Authorities-Central Bank	Traded	Financial Services
522110		·	Local	Local Financial Services
		Commercial Banking		
522120		Savings Institutions	Traded	Financial Services
522130		Credit Unions	Local	Local Financial Services
522190		Other Depository Credit Intermediation	Traded	Financial Services
522210		Credit Card Issuing	Traded	Financial Services
522220		Sales Financing	Traded	Financial Services
522291		Consumer Lending	Traded	Financial Services
522292		Real Estate Credit	Traded	Financial Services
522293		International Trade Financing	Traded	Financial Services
522294		Secondary Market Financing	Traded	Financial Services
522298		All Other Nondepository Credit Intermediation	Traded	Financial Services
522310		Mortgage and Nonmortgage Loan Brokers	Traded	Financial Services
522320		Financial Transactions Processing, Reserve, and Clearinghouse Activities	Traded	Financial Services
522390		Other Activities Related to Credit Intermediation	Traded	Financial Services
523110		Investment Banking and Securities Dealing	Traded	Financial Services
523120		Securities Brokerage	Traded	Financial Services
523130		Commodity Contracts Dealing	Traded	Financial Services
523140		Commodity Contracts Brokerage	Traded	Financial Services
523210		Securities and Commodity Exchanges	Traded	Financial Services
523910		Miscellaneous Intermediation	Traded	Financial Services
523920		Portfolio Management	Traded	Financial Services
523930		Investment Advice	Traded	Financial Services
523991		Trust, Fiduciary, and Custody Activities	Traded	Financial Services
523999		Miscellaneous Financial Investment Activities	Traded	Financial Services
524113		Direct Life Insurance Carriers	Traded	Insurance Services
524114		Direct Health and Medical Insurance Carriers	Traded	Insurance Services
524126		Direct Property and Casualty Insurance Carriers	Traded	Insurance Services
524127		Direct Title Insurance Carriers	Traded	Insurance Services
524128		Other Direct Insurance (except Life, Health, and Medical) Carriers	Traded	Insurance Services
524130		Reinsurance Carriers	Traded	Insurance Services
524210		Insurance Agencies and Brokerages	Local	Local Financial Services
524291		Claims Adjusting	Traded	Insurance Services
524292		Third Party Administration of Insurance and Pension Funds	Local	Local Financial Services
524298		All Other Insurance Related Activities	Traded	Insurance Services
525110	1	Pension Funds	Traded	Insurance Services
525110	1	Health and Welfare Funds	Traded	Insurance Services
525120	1	Other Insurance Funds	Traded	Insurance Services
525190	1	Trusts, Estates, and Agency Accounts	Traded	Insurance Services
525920	ı		Traded	Financial Services
		Open-End Investment Funds		
525990		Other Financial Vehicles	Traded	Financial Services

NAICC	A al:		Tue de d ve	
NAICS	Adj.	Labol	Traded vs	Cluster Name
2017	Code	Label	Local	Cluster Name
531110		Lessors of Residential Buildings and Dwellings	Local	Local Real Estate, Construction, and Development
531120		Lessors of Nonresidential Buildings (except Miniwarehouses)	Local	Local Real Estate, Construction, and Development
531130		Lessors of Miniwarehouses and Self-Storage Units	Local	Local Logistical Services
531190		Lessors of Other Real Estate Property	Local	Local Real Estate, Construction, and Development
531210		Offices of Real Estate Agents and Brokers	Local	Local Real Estate, Construction, and Development
531311		Residential Property Managers	Local	Local Real Estate, Construction, and Development
531312		Nonresidential Property Managers	Local	Local Real Estate, Construction, and Development
531320		Offices of Real Estate Appraisers	Local	Local Real Estate, Construction, and Development
531390		Other Activities Related to Real Estate	Local	Local Real Estate, Construction, and Development
532111		Passenger Car Rental	Local	Local Logistical Services
532112		Passenger Car Leasing	Traded	Business Services
532120		Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	Local	Local Logistical Services
532210		Consumer Electronics and Appliances Rental	Local	Local Industrial Products and Services
532281	2	Formal Wear and Costume Rental	Local	Local Personal Services (Non-Medical)
532282	2	Video Tape and Disc Rental	Local	Local Entertainment and Media
532283	2	Home Health Equipment Rental	Local	Local Health Services
532284	2	Recreational Goods Rental	Traded	Hospitality and Tourism
532289	2	All Other Consumer Goods Rental	Local	Local Personal Services (Non-Medical)
532310	_	General Rental Centers	Local	Local Industrial Products and Services
532411		Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing	Traded	Distribution and Electronic Commerce
532412		Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	Traded	Distribution and Electronic Commerce
532420		Office Machinery and Equipment Rental and Leasing	Traded	Distribution and Electronic Commerce
532490		Other Commercial and Industrial Machinery and Equipment Rental and Leasing	Traded	Distribution and Electronic Commerce
533110		Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	Traded	Business Services
541110		Offices of Lawyers	Local	Local Commercial Services
541110		Title Abstract and Settlement Offices	Local	Local Real Estate, Construction, and Development
541199		All Other Legal Services	Traded	Business Services
541211		Offices of Certified Public Accountants	Local	Local Commercial Services
541211		Tax Preparation Services	Local	Local Financial Services
		•		
541214		Payroll Services	Traded	Business Services
541219		Other Accounting Services	Local	Local Commercial Services
541310		Architectural Services	Traded Traded	Business Services
541320		Landscape Architectural Services		Business Services
541330		Engineering Services	Traded	Business Services
541340		Drafting Services	Traded	Business Services
541350		Building Inspection Services	Local	Local Commercial Services
541360		Geophysical Surveying and Mapping Services	Traded	Oil and Gas Production and Transportation
541370		Surveying and Mapping (except Geophysical) Services	Local	Local Real Estate, Construction, and Development
541380		Testing Laboratories	Local	Local Commercial Services
541410		Interior Design Services	Traded	Marketing, Design, and Publishing
541420		Industrial Design Services	Traded	Marketing, Design, and Publishing
541430		Graphic Design Services	Traded	Marketing, Design, and Publishing
541490		Other Specialized Design Services	Traded	Marketing, Design, and Publishing
541511		Custom Computer Programming Services	Traded	Business Services
541512		Computer Systems Design Services	Traded	Business Services
541513		Computer Facilities Management Services	Traded	Business Services
541519		Other Computer Related Services	Traded	Business Services
541611		Administrative Management and General Management Consulting Services	Traded	Business Services

NAICS	Adj.		Traded vs	
2017		Label	Local	Cluster Name
541612		Human Resources Consulting Services	Traded	Business Services
541613		Marketing Consulting Services	Traded	Marketing, Design, and Publishing
541614		Process, Physical Distribution, and Logistics Consulting Services	Traded	Business Services
541618		Other Management Consulting Services	Traded	Business Services
541620		Environmental Consulting Services	Local	Local Commercial Services
541690		Other Scientific and Technical Consulting Services	Traded	Business Services
541713	2	<u>*</u>	Traded	
	2	Research and Development in Nanotechnology		Education and Knowledge Creation
541714	2 2	Research and Development in Biotechnology (except Nanobiotechnology)	Traded	Education and Knowledge Creation
541715	2	Research and Development in the Physical, Engineering, and Life Sciences (except Nat		Education and Knowledge Creation
541720		Research and Development in the Social Sciences and Humanities	Traded	Education and Knowledge Creation
541810		Advertising Agencies	Traded	Marketing, Design, and Publishing
541820		Public Relations Agencies	Traded	Marketing, Design, and Publishing
541830		Media Buying Agencies	Traded	Marketing, Design, and Publishing
541840		Media Representatives	Traded	Marketing, Design, and Publishing
541850		Outdoor Advertising	Traded	Marketing, Design, and Publishing
541860		Direct Mail Advertising	Traded	Marketing, Design, and Publishing
541870		Advertising Material Distribution Services	Traded	Marketing, Design, and Publishing
541890		Other Services Related to Advertising	Traded	Marketing, Design, and Publishing
541910		Marketing Research and Public Opinion Polling	Traded	Marketing, Design, and Publishing
41921		Photography Studios, Portrait	Local	Local Personal Services (Non-Medical)
41922		Commercial Photography	Local	Local Commercial Services
541930		Translation and Interpretation Services	Traded	Business Services
541940		Veterinary Services	Local	Local Personal Services (Non-Medical)
541990		All Other Professional, Scientific, and Technical Services	Traded	Business Services
551111		Offices of Bank Holding Companies	Traded	Business Services
551112		Offices of Other Holding Companies	Traded	Business Services
551114		Corporate, Subsidiary, and Regional Managing Offices	Traded	Business Services
561110		Office Administrative Services	Local	Local Commercial Services
561210		Facilities Support Services	Traded	Business Services
		• • • • • • • • • • • • • • • • • • • •	Traded	
61311		Employment Placement Agencies		Business Services
61312		Executive Search Services	Traded	Business Services
61320		Temporary Help Services	Local	Local Commercial Services
61330		Professional Employer Organizations	Traded	Business Services
61410		Document Preparation Services	Local	Local Commercial Services
61421		Telephone Answering Services	Traded	Business Services
61422		Telemarketing Bureaus and Other Contact Centers	Traded	Business Services
61431		Private Mail Centers	Local	Local Commercial Services
61439		Other Business Service Centers (including Copy Shops)	Local	Local Commercial Services
61440		Collection Agencies	Local	Local Financial Services
61450		Credit Bureaus	Traded	Financial Services
61491		Repossession Services	Local	Local Commercial Services
61492		Court Reporting and Stenotype Services	Local	Local Commercial Services
61499		All Other Business Support Services	Traded	Distribution and Electronic Commerce
61510		Travel Agencies	Traded	Hospitality and Tourism
61520		Tour Operators	Traded	Hospitality and Tourism
561591		Convention and Visitors Bureaus	Traded	Hospitality and Tourism
561599			Traded	Hospitality and Tourism
		All Other Travel Arrangement and Reservation Services		
61611		Investigation Services	Local	Local Commercial Services

NAICS Adj. Traded vs				
2017	Code Label	Local	Cluster Name	
561612	Security Guards and Patrol Services	Local	Local Commercial Services	
561613	Armored Car Services	Local	Local Commercial Services	
561621	Security Systems Services (except Locksmiths)	Local	Local Commercial Services	
561622	Locksmiths	Local	Local Commercial Services	
561710	Exterminating and Pest Control Services	Local	Local Commercial Services	
561710	Janitorial Services	Local	Local Commercial Services	
561730	Landscaping Services	Local	Local Household Goods and Services	
561740	Carpet and Upholstery Cleaning Services	Local	Local Household Goods and Services	
561790	Other Services to Buildings and Dwellings	Local	Local Commercial Services	
561910	Packaging and Labeling Services	Traded	Distribution and Electronic Commerce	
561920	Convention and Trade Show Organizers	Traded	Business Services	
561990	All Other Support Services	Local	Local Commercial Services	
562111	Solid Waste Collection	Local	Local Logistical Services	
562112	Hazardous Waste Collection	Traded	Environmental Services	
562119	Other Waste Collection	Traded	Environmental Services	
562211	Hazardous Waste Treatment and Disposal	Traded	Environmental Services	
562212	Solid Waste Landfill	Local	Local Utilities	
562213	Solid Waste Combustors and Incinerators	Traded	Environmental Services	
562219	Other Nonhazardous Waste Treatment and Disposal	Traded	Environmental Services	
562910	Remediation Services	Local	Local Utilities	
562920	Materials Recovery Facilities	Traded	Environmental Services	
562991	Septic Tank and Related Services	Local	Local Real Estate, Construction, and Development	
562998	All Other Miscellaneous Waste Management Services	Traded	Environmental Services	
611110	Elementary and Secondary Schools	Local	Local Education and Training	
611210	Junior Colleges	Traded	Education and Knowledge Creation	
611310	Colleges, Universities, and Professional Schools	Traded	Education and Knowledge Creation	
611410	Business and Secretarial Schools	Traded	Education and Knowledge Creation	
611420	Computer Training	Traded	Education and Knowledge Creation	
611430	Professional and Management Development Training	Traded	Education and Knowledge Creation	
611511	Cosmetology and Barber Schools	Local	Local Personal Services (Non-Medical)	
611512	Flight Training	Traded	Education and Knowledge Creation	
611513	Apprenticeship Training	Traded	Education and Knowledge Creation	
611519	Other Technical and Trade Schools	Local	Local Education and Training	
611610	Fine Arts Schools	Local	Local Education and Training	
611620	Sports and Recreation Instruction	Local	Local Hospitality Establishments	
611630	Language Schools	Traded	Education and Knowledge Creation	
611691	Exam Preparation and Tutoring	Traded	Education and Knowledge Creation	
611692	Automobile Driving Schools	Local	Local Education and Training	
611699	All Other Miscellaneous Schools and Instruction	Traded	Education and Knowledge Creation	
611710	Educational Support Services	Traded	Education and Knowledge Creation	
621111	Offices of Physicians (except Mental Health Specialists)	Local	Local Health Services	
621112	Offices of Physicians, Mental Health Specialists	Local	Local Health Services	
621210	Offices of Dentists	Local	Local Health Services	
621310	Offices of Chiropractors	Local	Local Health Services	
621320	Offices of Optometrists	Local	Local Health Services	
621330	Offices of Mental Health Practitioners (except Physicians)	Local	Local Health Services	
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists	Local	Local Health Services	
621391	Offices of Podiatrists	Local	Local Health Services	

NAICS Adj. Traded vs				
2017	Code Label	Local	Cluster Name	
621399	Offices of All Other Miscellaneous Health Practitioners	Local	Local Health Services	
621410	Family Planning Centers	Local	Local Health Services	
621420	Outpatient Mental Health and Substance Abuse Centers	Local	Local Health Services	
621491	HMO Medical Centers	Local	Local Health Services	
621491				
	Kidney Dialysis Centers	Local	Local Health Services	
621493 621498	Freestanding Ambulatory Surgical and Emergency Centers	Local	Local Health Services	
	All Other Outpatient Care Centers	Local	Local Health Services	
621511	Medical Laboratories	Local	Local Health Services	
621512	Diagnostic Imaging Centers	Local	Local Health Services	
621610	Home Health Care Services	Local	Local Health Services	
621910	Ambulance Services	Local	Local Logistical Services	
621991	Blood and Organ Banks	Local	Local Health Services	
621999	All Other Miscellaneous Ambulatory Health Care Services	Local	Local Health Services	
622110	General Medical and Surgical Hospitals	Local	Local Health Services	
622210	Psychiatric and Substance Abuse Hospitals	Local	Local Health Services	
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals	Local	Local Health Services	
623110	Nursing Care Facilities (Skilled Nursing Facilities)	Local	Local Health Services	
623210	Residential Intellectual and Developmental Disability Facilities	Local	Local Health Services	
623220	Residential Mental Health and Substance Abuse Facilities	Local	Local Health Services	
623311	Continuing Care Retirement Communities	Local	Local Health Services	
623312	Assisted Living Facilities for the Elderly	Local	Local Health Services	
623990	Other Residential Care Facilities	Local	Local Health Services	
624110	Child and Youth Services	Local	Local Community and Civic Organizations	
624120	Services for the Elderly and Persons with Disabilities	Local	Local Community and Civic Organizations	
624190	Other Individual and Family Services	Local	Local Community and Civic Organizations	
624210	Community Food Services	Local	Local Community and Civic Organizations	
624221	Temporary Shelters	Local	Local Community and Civic Organizations	
624229	Other Community Housing Services	Local	Local Community and Civic Organizations	
624230	Emergency and Other Relief Services	Local	Local Community and Civic Organizations	
624310	Vocational Rehabilitation Services	Local	Local Education and Training	
624410	Child Day Care Services	Local	Local Personal Services (Non-Medical)	
711110	Theater Companies and Dinner Theaters	Traded	Performing Arts	
711120	Dance Companies	Traded	Performing Arts	
711130	Musical Groups and Artists	Traded	Performing Arts	
711190	Other Performing Arts Companies	Traded	Performing Arts	
711211	Sports Teams and Clubs	Traded	Hospitality and Tourism	
711212	Racetracks	Traded	Hospitality and Tourism	
711219	Other Spectator Sports	Traded	Hospitality and Tourism	
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	Traded	Performing Arts	
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	Traded	Performing Arts	
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	Traded	Performing Arts	
711510	Independent Artists, Writers, and Performers	Traded	Performing Arts	
712110	Museums	Traded	Hospitality and Tourism	
712120	Historical Sites	Traded	Hospitality and Tourism	
712130	Zoos and Botanical Gardens	Traded	Hospitality and Tourism	
712190	Nature Parks and Other Similar Institutions	Traded	Hospitality and Tourism	
713110	Amusement and Theme Parks	Traded	Hospitality and Tourism	
713120	Amusement Arcades	Traded	Hospitality and Tourism	

NAICS	Adj.	Traded vs	
2017	Code Label	Local	Cluster Name
713210	Casinos (except Casino Hotels)	Traded	Hospitality and Tourism
713290	Other Gambling Industries	Traded	Hospitality and Tourism
713910	Golf Courses and Country Clubs	Local	Local Hospitality Establishments
713920	Skiing Facilities	Traded	Hospitality and Tourism
713930	Marinas	Traded	Hospitality and Tourism
713940	Fitness and Recreational Sports Centers	Local	Local Hospitality Establishments
713950	Bowling Centers	Local	Local Hospitality Establishments
713990	All Other Amusement and Recreation Industries	Traded	Hospitality and Tourism
721110	Hotels (except Casino Hotels) and Motels	Traded	Hospitality and Tourism
721110	Casino Hotels	Traded	Hospitality and Tourism
721120	Bed-and-Breakfast Inns	Traded	Hospitality and Tourism
721191	All Other Traveler Accommodation	Traded	• •
721199		Traded	Hospitality and Tourism
	RV (Recreational Vehicle) Parks and Campgrounds		Hospitality and Tourism
721214	Recreational and Vacation Camps (except Campgrounds)	Traded	Hospitality and Tourism
721310	Rooming and Boarding Houses	Traded	Hospitality and Tourism
722310	Food Service Contractors	Local	Local Hospitality Establishments
722320	Caterers	Local	Local Hospitality Establishments
722330	Mobile Food Services	Local	Local Food and Beverage Processing and Distribution
722410	Drinking Places (Alcoholic Beverages)	Local	Local Hospitality Establishments
722511	Full-Service Restaurants	Local	Local Hospitality Establishments
722513	Limited-Service Restaurants	Local	Local Hospitality Establishments
722514	Cafeterias, Grill Buffets, and Buffets	Local	Local Hospitality Establishments
722515	Snack and Nonalcoholic Beverage Bars	Local	Local Hospitality Establishments
811111	General Automotive Repair	Local	Local Motor Vehicle Products and Services
811112	Automotive Exhaust System Repair	Local	Local Motor Vehicle Products and Services
811113	Automotive Transmission Repair	Local	Local Motor Vehicle Products and Services
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	Local	Local Motor Vehicle Products and Services
811121	Automotive Body, Paint, and Interior Repair and Maintenance	Local	Local Motor Vehicle Products and Services
811122	Automotive Glass Replacement Shops	Local	Local Motor Vehicle Products and Services
811191	Automotive Oil Change and Lubrication Shops	Local	Local Motor Vehicle Products and Services
811192	Car Washes	Local	Local Motor Vehicle Products and Services
811198	All Other Automotive Repair and Maintenance	Local	Local Motor Vehicle Products and Services
811211	Consumer Electronics Repair and Maintenance	Local	Local Household Goods and Services
811212	Computer and Office Machine Repair and Maintenance	Local	Local Commercial Services
811213	Communication Equipment Repair and Maintenance	Local	Local Household Goods and Services
811219	Other Electronic and Precision Equipment Repair and Maintenance	Local	Local Industrial Products and Services
811310	· · · · ·		Local Commercial Services
811411	Home and Garden Equipment Repair and Maintenance	Local	Local Commercial Services
811412	Appliance Repair and Maintenance	Local	Local Commercial Services
811420	Reupholstery and Furniture Repair	Local	Local Household Goods and Services
811430	Footwear and Leather Goods Repair	Local	Local Personal Services (Non-Medical)
811490	Other Personal and Household Goods Repair and Maintenance	Local	Local Personal Services (Non-Medical)
812111	Barber Shops	Local	Local Personal Services (Non-Medical)
812111	Beauty Salons	Local	Local Personal Services (Non-Medical)
812113	Nail Salons	Local	,
			Local Personal Services (Non-Medical)
812191	Diet and Weight Reducing Centers	Local	Local Personal Services (Non-Medical)
812199	Other Personal Care Services	Local	Local Personal Services (Non-Medical)
812210	Funeral Homes and Funeral Services	Local	Local Health Services

NAICS	Adj. Traded vs			
2017	Code	e Label	Local	Cluster Name
812220		Cemeteries and Crematories	Local	Local Health Services
812310		Coin-Operated Laundries and Drycleaners	Local	Local Personal Services (Non-Medical)
812320		Drycleaning and Laundry Services (except Coin-Operated)	Local	Local Commercial Services
812331		Linen Supply	Local	Local Commercial Services
812332		Industrial Launderers	Local	Local Commercial Services
812910		Pet Care (except Veterinary) Services	Local	Local Personal Services (Non-Medical)
812921		Photofinishing Laboratories (except One-Hour)	Local	Local Personal Services (Non-Medical)
812922		One-Hour Photofinishing	Local	Local Personal Services (Non-Medical)
812930		Parking Lots and Garages	Local	Local Motor Vehicle Products and Services
812990		All Other Personal Services	Local	Local Personal Services (Non-Medical)
813110		Religious Organizations	Local	Local Community and Civic Organizations
813211		Grantmaking Foundations	Local	Local Community and Civic Organizations
813212		Voluntary Health Organizations	Local	Local Community and Civic Organizations
813219		Other Grantmaking and Giving Services	Local	Local Community and Civic Organizations
813311		Human Rights Organizations	Local	Local Community and Civic Organizations
813312		Environment, Conservation and Wildlife Organizations	Local	Local Community and Civic Organizations
813319		Other Social Advocacy Organizations	Local	Local Community and Civic Organizations
813410		Civic and Social Organizations	Local	Local Community and Civic Organizations
813910		Business Associations	Local	Local Community and Civic Organizations
813920		Professional Organizations	Traded	Education and Knowledge Creation
813930		Labor Unions and Similar Labor Organizations	Local	Local Community and Civic Organizations
813940		Political Organizations	Local	Local Community and Civic Organizations
813990		Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)		Local Community and Civic Organizations
902611	1	Elementary and Secondary Schools (State Government)	Local	Local Education and Training
903611	1	Elementary and Secondary Schools (Local Government)	Local	Local Education and Training
902612	1	Colleges, Universities, and Professional Schools (State Government)	Traded	Education and Knowledge Creation
902619	1	All Other Schools and Educational Support Services (State Government)	Traded	Education and Knowledge Creation
903612	1	Colleges, Universities, and Professional Schools (Local Government)	Traded	Education and Knowledge Creation
903619	1	All Other Schools and Educational Support Services (Local Government)	Traded	Education and Knowledge Creation
902622	1	Hospitals (State Government)	Local	Local Health Services
903622	1	Hospitals (Local Government)	Local	Local Health Services
901149	3	US Postal Service	Local	Local Federal Government
901199	3	Federal Government, Civilian, Excluding Postal Service	Local	Local Federal Government
901200	3	Federal Government, Military	Local	Local Federal Government
902999	3	State Government, Excluding Education and Hospitals	Local	Local State Government
903999	3	Local Government, Excluding Education and Hospitals	Local	Local Government

Notes: 1. Added industry to cluster group 2. 2012 to 2017 NAICS change

3. New created cluster

Source: Delgado, M., M.E. Porter, and S. Stern (2014), "Defining Clusters of Related Industries."; EMSI; TNDG

APPENDIX F EMSI Cluster Adjustments by Industry

Added 2 industries to the Agricultural Inputs and Services cluster:

- 111000: Crop Production
- 112000: Animal Production and Aquaculture

Added 2 industries to the Transportation and Logistics cluster.

- · 482110: Rail Transportation
- 491110: Postal Service (Contractors)

Added 4 industries to the Insurance Services cluster:

- · 525110: Pension Funds
- · 525120: Health and Welfare Funds
- 525190: Other Insurance Funds
- 525920: Trusts, Estates, and Agency Accounts

Added 4 industries to the Local Education and Training cluster:

- 902611: Elementary and Secondary Schools (State Government)
- 903611: Elementary and Secondary Schools (Local Government)

Added 4 industries to the Education and Knowledge Creation cluster:

- · 902612: Colleges, Universities, and Professional Schools (State Government)
- 902619: All Other Schools and Educational Support Services (State Government)
- · 903612: Colleges, Universities, and Professional Schools (Local Government)
- 903619: All Other Schools and Educational Support Services (Local Government)

Added 2 industries to the Local Health Services cluster:

- 902622: Hospitals (State Government)
- 903622: Hospitals (Local Government)

Created Federal Government Services cluster to house 3 industries:

- 901149: US Postal Service
- 901199: Federal Government, Civilian, Excluding Postal Service
- 901200: Federal Government, Military

Created State Government Services cluster to house 1 industry:

 902999: State Government, Excluding Education and Hospitals

Created Local Government Services cluster to house 1 industry:

 903999: Local Government, Excluding Education and Hospitals



COMMERCIAL/INDUSTRIAL REAL ESTATE MARKET ANALYSIS FOR CARSON ECONOMIC DEVELOPMENT STRATEGIC PLAN

Prepared for: **City of Carson**

September 19, 2023

PREPARED BY:



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1. Introduction

This report summarizes real estate demand studies completed by The Natelson Dale Group, Inc. (TNDG) in support of the City of Carson's Economic Development Strategic Plan (EDSP). The following land uses are addressed:

- Industrial
- Office
- Retail/restaurant

Potential demand for new hotel development in Carson is evaluated in a separate report prepared by HVS.

Building Definitions – Industrial and Office

TNDG's real estate market analysis considers the following sub-categories of industrial and office buildings (definitions are from CoStar¹):

<u>Industrial</u>

- Logistics, including warehouse and distribution space. Warehouse buildings are typically 25,000 square feet or greater in size, box shape, with one loading dock for every 15,000 square feet of rentable building area (RBA). Up to 20% office area with clear heights of 22 feet or greater. Site coverage is typically up to 50%. Distribution buildings, both single and multi-tenant, are used for the warehousing and distribution of inventory. Buildings are typically 200,000 square feet or more, with clear heights of 28 feet or greater, up to 5% office space with the balance being warehouse/storage space. Distribution buildings typically have one loading door for every 10,000 square feet of RBA and site coverage up to 40%. These buildings are often cross-docked with trailer parking.
- Flex space Building(s) designed to be versatile; may be used in combination with office
 (corporate headquarters), research and development, quasi-retail sales, and including but not
 limited to industrial, warehouse, and distribution uses. At least half of the rentable area of the
 building must be used as office space. Flex buildings typically have ceiling heights under 18 feet,
 with light industrial zoning. Flex buildings have also been called Incubator, Tech, and Showroom
 buildings.
- Specialized industrial All other industrial building types (including manufacturing space).

¹ CoStar is a leading provider of information, analytics and marketing services to the commercial property industry in the United States, Canada, the United Kingdom, France, Germany, and Spain.

Office

- Class A Extremely desirable investment-grade properties with the highest quality construction
 and workmanship, materials and systems, significant architectural features, the highest
 quality/expensive finish and trim, abundant amenities, first rate maintenance and management;
 usually occupied by prestigious tenants with above average rental rates; excellent locations with
 exceptional accessibility.
- **Class B** More utilitarian space without special attractions; it will typically have ordinary architectural design and structural features, with average interior finish, systems, and floor plans, adequate systems, and overall condition.
- Class C No-frills, older buildings that offer basic space; below-average maintenance and management, mixed or low tenant prestige, and inferior elevators and mechanical/electrical systems.

2. Executive Summary

Industrial Development Demand. Summary Table A beginning on page 5 provides an overview of TNDG's industrial demand analysis. Key findings are as follows:

Existing/Recent Industrial Market Conditions

- Carson has an existing industrial building inventory of 39 million square feet.
- The existing industrial inventory for Los Angeles County overall stands at 947 million square feet.
- About 83% of Carson's industrial space is currently classified as logistics space (compared to 67% countywide).
- Industrial vacancy rates are very low in Los Angeles County (2.7%) and even lower in Carson (1.7%).
- Reflecting the low vacancy rates, average industrial rents in Carson have increased dramatically over the past 10 years (from \$0.60 per square foot in 2012 to \$1.49 per square foot in 2022).
 Rents are projected to continue growing over the next five years (to \$1.93 per square foot in 2027).
 Rents and rent growth in Carson are comparable to the overall averages for Los Angeles County.
- In contrast to other Southern California industrial markets (including Orange County and the Inland Empire) where the pandemic (and the associated increase in e-commerce) created a huge surge in demand for logistics facilities, absorption of logistics space in Los Angeles County actually declined during the pandemic. For the seven years leading up to the pandemic (2013-2019), absorption of logistics space averaged 3.8 MSF per year countywide; for the most recent 3-year period (2020-2022), average annual absorption was still strong but declined to 2.9 MSF per year. It is likely that the decrease in absorption was largely caused by a lack of available land for industrial buildings (whereas neighboring counties with more development capacity were in a better position to capture the strong industrial demand during this period).
- In the "specialized" and "flex" industrial categories, countywide absorption (for the two categories combined) averaged approximately 600,000 square feet per year between 2013 and 2019; for the most recent 3-year period (2020-2023), absorption was *negative* by nearly 1.4 MSF per year. In other words, the net positive absorption achieved during the first seven years (2013-2019) was fully reversed in just three years. This loss of occupied industrial space reflects an ongoing trend of net reduction in manufacturing firms and employment in Los Angeles County.

Future Industrial Development Opportunities

• The extremely low industrial vacancy rates in Los Angeles County create a strong starting point that can fuel new construction demand for several years – even in the absence of new firms locating in the region. For purposes of this analysis, TNDG has assumed that a "healthy" industrial market has a stabilized vacancy rate of 3.5%. The current vacancy rate of 2.7% is well

below this benchmark and creates tight market conditions that constrain regional economic growth. The difference between the benchmark vacancy rate and the actual vacancy rate (3.5% minus 2.7%) represents pent-up demand. Countywide this pent-up demand equates to about 7.5 million square feet (MSF) of new industrial space that could be added to the existing supply without creating a glut of vacant space. In theory, this pent-up demand represents an immediate development opportunity in the county.

- In addition to the space supportable by pent-up demand, Los Angeles County is expected to generate additional industrial demand based on growth in industries occupying industrial buildings. Total countywide demand for new industrial buildings over the next 10 years is projected to range between 13.5 MSF and 17.5 MSF (including the existing pent-up demand).
- For planning purposes, TNDG forecasts that Carson can potentially capture up to 10% of countywide industrial demand, translating into <u>demand for up to 1.75 MSF of new industrial space over the next 10 years.</u>
- Based purely on current market trends, industrial space absorption in the next 5-10 years is expected (by TNDG and other market analysts such as CoStar) to continue to be dominated by demand for logistics facilities. Logistics facilities are expected to sustain low vacancy rates (increasing to only 3.1% by 2027) and achieve strong rent growth (increasing by 29% from \$1.53/SF in 2022 to \$1.97/SF in 2027, according to CoStar).
- Flex and specialized industrial space are also expected to achieve rent growth over the next five
 years 29% for specialized space and 27% for flex space), but are not expected to generate
 substantial demand for new building construction. (CoStar is projecting that the total inventory
 of specialized industrial space (i.e., manufacturing) will actually shrink by 3.8 MSF countywide
 over the next five years, and the inventory of flex space is projected to shrink by 700,000 square
 feet).
- Given the relatively small capacity for additional industrial growth in Carson (with total demand over the next 10 years projected at 1.75 MSF or less), TNDG believes that Carson can potentially capture flex/manufacturing/R&D uses despite the unfavorable demand conditions in Los Angeles County overall. However, this will largely depend on two factors: 1) an aggressive marketing/economic development effort by the City to attract targeted business types, and 2) the ability to offer new competitive industrial building product attractive to these firms.

SUMMARY TABLE A OVERVIEW OF INDUSTRIAL MARKET CONDITIONS AND PROJECTED DEVELOPMENT OPPORTUNITIES CARSON AND LOS ANGELES COUNTY

Existing Conditions	Los Angeles County	Carson	
Total Industrial Building Inventory	947.3 million square feet (67% logistics)	39.3 million square feet (83% logistics)	
Average rent	\$1.55/SF/month	\$1.50/SF/month	
Vacancy rate	2.7%	1.7%	
Recent Demand/ Absorption Trends	Average industrial absorption of 1.5 million square feet per year over the past 3 years (100% of net absorption was logistics space) For the prior 7 years (2012-2019), industrial absorption averaged 4.4 million square feet per year (88% logistics)	Average industrial absorption of 27,000 square feet per year over the past 3 years (100% of net absorption was logistics space) For the prior 7 years (2012-2019), industrial absorption averaged 84,000 square feet per year (49% logistics)	
Market Tailwinds (Favorable Factors)	 The pandemic-induced surge in demand for logistics facilities is expected to remain strong in Southern California but will gradually taper-off over the next five years. The extremely low existing vacancy rate for industrial space in Los Angeles County (2.7% overall, 2.8% for logistics space) represents significant "pent up" demand which translates into immediate development opportunities – even in the absence of new firms moving into the region. 		
Market Headwinds (Constraining Factors)	 Absorption rates for "specialized" industrial space (including manufacturing facilities) have been negative in 5 of the last 7 years, reflecting an ongoing trend of a net reduction in manufacturing firms and employment. According to various forecasts reviewed by TNDG, these trends are expected to continue. Although absorption of "flex" space (hybrid space combining office and production areas) totaled 700,000 square feet countywide between over the past 10 years, absorption has been mostly negative since 2017 and is expected to remain negative for at least the next five years. In contrast to logistics, firms occupying flex space were more likely to adopt workfrom-home practices during the pandemic and this trend is expected to have a continuing impact on space demand. 		
Projected Development Demand (Los Angeles County)			
Projected Development Demand (Carson)	For planning purposes, TNDG forecasts that Carson can potentially capture up to 10% of countywide industrial demand, translating into demand for up to 1.75 million square feet of new industrial space over the next 10 years.		

Existing Conditions	Los Angeles County	Carson	
	City, TNDG believes that Carson can permanufacturing/R&D uses despite the cangeles County overall. However, this an aggressive marketing/economic de	ely small capacity for additional industrial growth in the ves that Carson can potentially capture flex/ R&D uses despite the unfavorable demand conditions in Los overall. However, this will largely depend on two factors: 1) arketing/economic development effort by the City to business types, and 2) the ability to offer new competitive	

Office Development Demand. Summary Table B beginning on page 8 provides an overview of TNDG's office demand analysis. Key findings are as follows:

Existing/Recent Office Market Conditions

- Carson has an existing office building inventory of 1.25 million square feet.
- The existing office inventory for Los Angeles County overall stands at 434 million square feet.
- Only 10% of Carson's office space is currently classified as Class A space (compared to 40% countywide).
- Office vacancy rates currently stand at 2.7% in Carson and 14.6% countywide. For Los Angeles County overall, vacancy rates are currently especially high (20.5%) in Class A buildings.
- Countywide, office vacancies increased significantly during the pandemic due to the impacts of remote work. The countywide vacancy rate increased from 10.3% in 2019 to 14.5% in 2022. The increased vacancy rate was especially pronounced in Class A buildings, with vacancies rising from 14.3% in 2019 to 20.5% currently. Carson's limited inventory of office space (especially in the most-vulnerable Class A category) appears to have insulated the community from the significant impacts that the pandemic had on larger/more prominent office markets.
- Despite the spike in vacancy rates, average office rents in Los Angeles County have remained relatively constant over the past three years (\$3.50/SF currently compared to \$3.47/SF in 2019).
- The sharp increase in remote work during the pandemic and the associated spike in office vacancy rates resulted in negative absorption of office space for Los Angeles County. Over the past three years (2020, 2021 and 2022), Los Angeles County had *negative* absorption of 13.7 MSF of office space (an average of nearly 4.6 MSF <u>per year</u>). For the prior seven years (2013-2019), countywide office absorption was *positive* by an average of 1.3 million square feet per year (with Class A buildings accounting for 77% of this demand).²

² Due to the small size of Carson's existing office market, detailed absorption data are not available at the city level.

Future Office Development Opportunities

- The current office vacancy rate of 14.5% countywide represents an oversupply of space that will need to be absorbed before there will be net demand for new office construction. Based on assumed "equilibrium" vacancy levels (19.5% for Class A, 12.0% for Class B, and 7.5% for Class C), TNDG estimates a current oversupply of 2.5 MSF of office space countywide (1.8 MSF of Class A space, 500,000 SF of Class B space and 200,000 SF of Class C space).
- In spite of the currently challenging office market conditions, Los Angeles County is expected to generate additional office demand in the coming years based on employment growth in industries that typically occupy office space. TNDG forecasts that countywide growth in office-based employment will range between 65,000 and 71,000 jobs over the next 10 years. However, a higher-than-historic proportion of "office workers" will be remote or hybrid workers. As such the growth in jobs will generate less demand for office space than in previous growth cycles. Historically in Los Angeles County the average office worker generated demand for as much as 250 square feet of office space per worker. For forecasting purposes, TNDG has applied a reduced factor of 125 square feet per new office-based job.
- Consistent with forecasts from CoStar (and observable market trends), TNDG projects that most new office development in Los Angeles County over the next 10 years will be Class A buildings.
 Based on the above factors, TNDG projects that gross demand for Class A office space over the next 10 years (2022-2032) will range from 8.1 MSF to 8.9 MSF countywide. After adjusting for the 1.8 MSF of current "excess" Class A space, TNDG projects that net demand for new Class A office space in Los Angeles County will range from 6.3 MSF to 7.1 MSF over the next 10 years.
- For planning purposes, TNDG forecasts that Carson can potentially capture up to 2% of countywide office demand, translating into <u>demand for up to 142,000 square feet of new office</u> space over the next 10 years.
- As noted in the industrial discussion above, Carson's ability to fully participate in the highly competitive office market in the coming decade will largely depend on two factors: 1) an aggressive marketing/economic development effort by the City to attract targeted business types, and 2) the ability to offer new competitive office building product attractive to these firms.

SUMMARY TABLE B OVERVIEW OF OFFICE MARKET CONDITIONS AND PROJECTED DEVELOPMENT OPPORTUNITIES CARSON BUSINESS PARK SPECIFIC PLAN

Existing Conditions	Los Angeles County	Carson		
Total Office Building Inventory	434.4 million square feet (40% Class A)	1.25 million square feet (10% Class A)		
Average rent	\$3.50/SF/month	\$2.38/SF/month		
Vacancy rate	14.5%	2.7%		
Recent Demand/ Absorption Trends	Average office absorption of NEGATIVE 4.6 million square feet per year over the past 3 years For the prior 7 years (2012-2019), office absorption was positive by an average of 1.3 million square feet per year	N/A – City level data not available		
Market Tailwinds (Favorable Factors)	sectors that typically occupy office employment is projected to grow b next 10 years. (However, as noted proportion of "office workers" will b the growth in jobs will generate les previous growth cycles). Notwithstanding the currently very A office space, market observers s most new office space in Los Ange be in the Class A category. In effect	Los Angeles County is projected to have strong growth in business sectors that typically occupy office space. Countywide office-based employment is projected to grow by as many as 71,000 jobs over the next 10 years. (However, as noted below, a higher-than-historic proportion of "office workers" will be remote or hybrid workers. As such the growth in jobs will generate less demand for office space than in previous growth cycles). Notwithstanding the currently very high vacancy rates (20.5%) for Class A office space, market observers such as CoStar are projecting that most new office space in Los Angeles County over the next 10 years will be in the Class A category. In effect, older Class B and Class C buildings are likely to be replaced with new Class A facilities.		
Market Headwinds (Constraining Factors)	 The current vacancy rate of 14.5% countywide represents an oversupply of space that will need to be absorbed before there will be net demand for new office construction. Whereas job growth in office-oriented industries is expected to be strong over the next 10 years, the "new realities" represented by remote workers will result in less new demand for office space. Historically in Los Angeles County the average office worker generated demand for as much as 250 square feet of office space. For forecasting purposes, TNDG has applied a reduced factor of 125 square feet per office-based job. 			
Projected Development Demand (Los Angeles County)				

Existing Conditions	Los Angeles County	Carson
	For planning purposes, TNDC foreses	to that Caroon any notantially conture
Projected Development Demand (Carson)	For planning purposes, TNDG forecas up to 2% of countywide office demand 142,000 square feet of new industria	, translating into demand for up to

Retail/Restaurant Development Demand. Summary Table C provides an overview of TNDG's retail demand analysis. Key findings are as follows:

The modeling assumptions used to derive the figures in Table 13 in the Retail section of this report indicate that developing an additional 900,000 square feet by 2025 is within the realm of possibility. Accomplishing this would involve focused efforts in retailer recruitment, along with other strategies to enhance existing shopping centers.

Beyond 2025, a combination of increased population in the market areas and assumptions about the counteracting effects of reduced sales due to growth in e-commerce will tend to have a stabilizing effect on supportable retail space in the City.

SUMMARY TABLE C
OVERVIEW OF RETAIL MARKET CONDITIONS AND PROJECTED DEVELOPMENT OPPORTUNITIES IN CARSON

Existing Conditions	Carson
Market Tailwinds (Favorable Factors)	Projected ongoing population growth in Carson and the surrounding market area will continue to increase overall demand for retail space in Carson. Expanding, and possibly diversifying, retail offerings can potentially leverage the capture of other stores not found or well represented within Carson, as the community becomes more attractive in general for retailers. These benefits of growth would be augmented through implementing strategies in this EDSP addressing improvements to shopping centers that could make them both more efficient and attractive.
Market Headwinds (Constraining Factors)	E-commerce as a proportion of all retail trade is expected to expand, which will erode demand for physical space, particularly in certain categories, as shown in this report. Aging shopping centers will need ongoing reinvestment, and some cases involving repurposing of existing uses, for them to remain attractive and otherwise viable. Other communities in the region will be attempting to some extent to help their own shopping centers remain competitive.
Projected Development Demand (Carson)	For planning purposes, TNDG forecasts that Carson can potentially capture demand for up to 930,000 square feet of new retail space over the next 10 years (approximately 10% of which would be in the restaurant/bar category, which is relatively immune from e-commerce competition), based on the indicators summarized below.

SUMMARY TABLE D SUMMARY OF RETAIL SALES POTENTIAL AND SUPPORTABLE SPACE IN CARSON

Indicators of supportable retail sales in Carson (demand and sales figures in thousands of constant dollars)					
Estimates 2021 2025 2032					
Demand	\$1,942,804				
Sales	\$1,871,241				
Supportable sales, <u>above</u> 2021 estimated	\$71,563	\$421,649	\$529,162		
Supportable space (with allowances for e-commerce growth), square feet (SF)	165,545 SF	896,513 SF	930,757 SF		

3. Industrial and Office Demand Analysis

This chapter provides the background data and calculations for TNDG's projections of potential demand for industrial and office space within the City of Carson.

Table 1 summarizes existing industrial market conditions in Carson and Los Angeles County. Key conditions include the following:

- Carson has an existing industrial building inventory of 39 million square feet (MSF).
- The existing industrial inventory for Los Angeles County overall stands at 947 MSF.
- About 83% of Carson's industrial space is logistics space (compared to 67% countywide).
- Industrial vacancy rates are very low in Los Angeles County (2.7%) and even lower in Carson (1.7%).

TABLE 1. EXISTING INDUSTRIAL MARKET CONDITIONS (12/31/2022). CARSON AND LOS ANGELES COUNTY

	Existing Inventory (Square Feet)				
Area	Logistics	Specialty	Flex	Total	
Carson	32,586,041	5,764,203	982,526	39,332,770	
Los Angeles County	637,930,992	252,633,979	56,713,961	947,278,932	
Carson as % of County	5.1%	2.3%	1.7%	4.2%	

Area	M	Market Rents by Product Type				
Alea	Logistics	Specialty	Flex	Average		
Carson	\$1.53	\$1.28	\$1.69	\$1.50		
Los Angeles County	\$1.54	\$1.45	\$2.15	\$1.55		

Area	Existing Vacancy Rates by Product Type				
Alea	Logistics	Specialty	Flex	Average	
Carson	1.9%	0.1%	2.8%	1.7%	
Los Angeles County	2.8%	1.9%	5.3%	2.7%	

Source: CoStar; TNDG

Table 2 summarizes existing office market conditions in Carson, Los Angeles County, and neighboring Los Angeles County. Key conditions include the following:

- Carson's existing inventory of office space totals approximately 1.25 MSF.
- The existing office inventory for Los Angeles County overall stands at 434 MSF.
- Only 10% of Carson's office space is Class A space (compared to 40% countywide).
- Office vacancy rates currently stand at 2.7% in Carson and 14.5% countywide. For Los Angeles County as a whole, vacancy rates are currently especially high (20.5%) in Class A buildings.

TABLE 2. EXISTING OFFICE MARKET CONDITIONS (12/31/2022). CARSON AND LOS ANGELES COUNTY

Area	Existing Inventory (Square Feet)				
	Class A	Class B	Class C	Total	
Carson	127,894	842,775	277,810	1,248,479	
Los Angeles County	175,774,938	156,179,197	102,469,178	434,423,313	
Carson as % of County	0.1%	0.5%	0.3%	0.3%	

Area	Market Rents by Product Type				
	Class A	Class B	Class C	Average	
Carson	N/A	N/A	N/A	\$2.38	
Los Angeles County	\$3.98	\$3.33	\$2.93	\$3.50	

Aron	Existing	Existing Vacancy Rates by Product Type				
Area	Class A	Class B	Class C	Average		
Carson	N/A	N/A	N/A	2.7%		
Los Angeles County	20.5%	12.3%	7.7%	14.5%		

Source: CoStar; TNDG

Table 3A summarizes absorption rates for office industrial space in Los Angeles County over the past 10 years (absorption is defined as the net change in occupied space). Key observations include the following:

- In contrast to other Southern California industrial markets (including Orange County and the Inland Empire) where the pandemic (and the associated increase in e-commerce) created a huge surge in demand for logistics facilities, absorption of logistics space in Los Angeles County actually declined during the pandemic. For the seven years leading up to the pandemic (2013-2019), absorption of logistics space averaged 3.8 MSF per year countywide; for the most recent 3-year period (2020-2022), average annual absorption was still strong but declined to 2.9 MSF per year. It is likely that the decrease in absorption was largely caused by a lack of available land for industrial buildings (whereas neighboring counties with more development capacity were in a better position to capture the strong industrial demand during this period).
- In the "specialized" and "flex" industrial categories, countywide absorption (for the two categories combined) averaged approximately 600,000 square feet per year between 2013 and 2019; for the most recent 3-year period (2020-2023), absorption was *negative* by nearly 1.4 MSF per year. In other words, the net positive absorption achieved during the first seven years (2013-2019) was fully reversed in just three years. This loss of occupied industrial space reflects an ongoing trend of net reduction in manufacturing firms and employment in Los Angeles County.
- The sharp increase in remote work during the pandemic and the associated spike in office vacancy rates resulted in negative absorption of office space for Los Angeles County. Over the

past three years (2020, 2021 and 2022), Los Angeles County had *negative* absorption of 13.7 MSF of office space (an average of nearly 4.6 MSF <u>per year</u>). For the prior seven years (2013-2019), countywide office absorption was *positive* by an average of 1.3 million square feet per year (with Class A buildings accounting for 77% of this demand).

TABLE 3. OFFICE AND INDUSTRIAL ABSORPTION RATES BY TIME PERIOD. LOS ANGELES COUNTY, 2013-2022

	Net Absorption (Square Feet)					
	Total Chang	e by Period	Average ANN	IUAL Change		
Land Use	2013-2019	2020-2022	2013-2019	2020-2022		
Category	(7-year trend)	(3-year trend)	(7-year trend)	(3-year trend)		
Office						
Class A	6,908,491	-6,477,054	986,927	-2,159,018		
Class B	4,778,509	-5,456,909	682,644	-1,818,970		
Class C	-2,663,860	-1,796,846	-380,551	-598,949		
Total	9,023,140	-13,730,809	1,289,020	-4,576,936		
Industrial						
Logistics	26,836,000	8,602,000	3,833,714	2,867,333		
Flex/Specialty	4,195,000	-4,166,000	599,286	-1,388,667		
Total	31,031,000	4,436,000	4,433,000	1,478,667		

Source: CoStar; TNDG

Table 4 provides industrial absorption data for the City of Carson. (Detailed office absorption data are not available at the city level due to the relatively small size of Carson's office market).

TABLE 4. INDUSTRIAL ABSORPTION RATES BY TIME PERIOD. CARSON, 2013-2022

	Net Absorption (Square Feet)						
	Total Chang	e by Period	Average ANN	UAL Change			
Land Use	2013-2019	2020-2022	2013-2019	2020-2022			
Category	(7-year trend)	(3-year trend)	(7-year trend)	(3-year trend)			
Industrial							
Logistics	287,000	281,000	41,000	93,667			
Flex/Specialty	302,000	-200,000	43,143	-66,667			
Total	589,000	81,000	84,143	27,000			

Source: CoStar; TNDG

One commonly accepted methodology for projecting future demand for industrial and office space is to calculate the need for new space based on employment growth in industry sectors that utilize industrial and office facilities. In order develop customized employment projections for this study, TNDG reviewed county level forecasts from three different sources: Emsi, Oxford Economics, and the Southern California

Association of Governments (SCAG). Table 5 below summarizes the various projections of total employment, industrial-space employment and office-based employment.

TABLE 5. TOTAL EMPLOYMENT, INDUSTRIAL EMPLOYMENT, AND OFFICE EMPLOYMENT BY YEAR,

LOS ANGELES COUNTY

Total Employment	2012	2019	2022	2032	Average Annual Jobs Growth 2022-2032
Data Source					
Emsi	5,215,159	5,775,767	5,634,550	5,880,207	24,566
SCAG	4,246,600	4,608,363	4,713,901	4,979,530	26,563
Oxford Economics	4,062,810	4,583,794	4,591,212	4,817,621	22,641
Employment in Relevant I Baseline Projection (Emsi		ories:			
Logistics	299,509	352,594	342,472	344,633	216
Other Industrial	591,733	579,443	559,879	535,995	-2,388
Office	1,657,569	1,770,800	1,782,030	1,846,842	6,481
Aggressive Projections (T	NDG)				
Logistics	299,509	352,594	342,472	345,897	342
Other Industrial	591,733	579,443	559,879	562,679	280
Office	1,657,569	1,770,800	1,782,030	1,853,311	7,128

Sources: Emsi; Southern California Association of Governments; Oxford Economics; TNDG.

Tables 6, 7, 8 and 9 on the next several pages provide the sequence of calculations for TNDG's projections of employment by industry and land use.

Table 6 shows historic and projected employment growth by major industry for Los Angeles County. These projections are based on Emsi data. As it relates to potential demand for industrial buildings, it is important to note that the baseline employment forecasts from Emsi indicate job *losses* in key sectors that typically utilize industrial space. Between 2022 and 2032:

- Manufacturing employment in Los Angeles County is projected to decrease by 18% or about 58,000 jobs.
- Wholesale Trade employment is projected to decrease by 13% or about 26,000 jobs.
- These job losses are projected to be offset to some extent by the other sector that is a major industrial space user: employment in Transportation and Warehousing is projected to grow by 11% or nearly 30,000 jobs.

The baseline employment projections for 2022 to 2032 are positive for the following sectors typically associated with office space demand:

- Employment in Health Care and Social Assistance is projected to grow by 21% or 184,000 jobs.
- Professional, Scientific and Technical Services is projected to grow by 8% or about 40,000 jobs.
- Information is projected to grow by 12% or 31,000 jobs.

- Administrative and Support and Waste Management is projected to grow by 1% or about 14,000 jobs.
- Real Estate and Rental and Leasing is projected to grow by 2% or about 2,500 jobs.

The baseline employment projections for 2022 to 2032 are *negative* for the following office-oriented sectors:

- Finance and Insurance is projected to lose about 14,000 jobs.
- Other Services (only a portion of which would typically be located in office buildings) is projected to lose about 6,000 jobs.
- Management of Companies and Enterprises is projected to lose about 2,000 jobs.

Two other sectors are projected to gain substantial numbers of jobs over the next ten years:

- Educational Services is projected to add about 31,000 jobs.
- Government is projected to add about 11,000 jobs.

However, Education and Government jobs tend to be mostly located in public/institutional buildings and therefore do not generate substantial demand for office and industrial development.

Note that Table 6 also includes several other sectors that are not directly relevant to this analysis (since they are not predominantly based in office/industrial buildings):

- Agriculture, Forestry, Fishing and Hunting (projected to lose about 400 jobs)
- Mining, Quarrying, and Oil and Gas Extraction (projected to essentially remain constant)
- Utilities (projected to lose about 1,300 jobs)
- Construction (projected to gain 7,0000 jobs)
- Retail Trade (projected to lose nearly 27,000 jobs)
- Arts, Entertainment and Recreation (projected to gain 16,000 jobs)
- Accommodation and Food Services (projected to gain nearly 24,000 jobs)

TABLE 6. HISTORIC AND PROJECTED EMPLOYMENT BY MAJOR INDUSTRY GROUP, LOS ANGELES COUNTY

Major Industry Group	2012	2019	2022	2032	% Change 2022-2032
Agriculture, Forestry, Fishing and Hunting	6,659	5,090	5,244	4,852	-7%
Mining, Quarrying, and Oil and Gas Extraction	4,523	2,009	1,630	1,613	-1%
Utilities	12,644	12,708	12,060	10,738	-11%
Construction	154,289	191,498	193,624	200,159	3%
Manufacturing	393,872	369,196	332,163	273,695	-18%
Wholesale Trade	235,257	237,863	211,148	184,716	-13%
Retail Trade	500,401	498,320	483,676	457,353	-5%
Transportation and Warehousing	173,674	247,238	258,632	288,143	11%
Information	229,208	243,079	248,889	279,602	12%
Finance and Insurance	169,206	163,807	157,439	143,930	-9%
Real Estate and Rental and Leasing	123,579	144,287	142,656	145,151	2%
Professional, Scientific, and Technical Services	446,330	459,228	519,706	558,950	8%
Management of Companies and Enterprises	56,579	62,759	61,807	59,912	-3%
Administrative and Support and Waste Management and Remediation Services	372,972	406,877	388,574	392,954	1%
Educational Services	174,808	205,363	220,845	251,922	14%
Health Care and Social Assistance	610,514	826,205	869,178	1,053,448	21%
Arts, Entertainment, and Recreation	147,857	170,720	146,287	162,917	11%
Accommodation and Food Services	357,981	491,090	403,074	426,595	6%
Other Services (except Public Administration)	464,904	417,142	387,454	381,682	-1%
Government	579,903	621,290	590,466	601,874	2%
Total/Overall	5,215,159	5,775,767	5,634,550	5,880,207	4%

Source: Emsi; TNDG.

For the purpose of projecting demand for new industrial and office buildings, it is necessary to translate the industry-level employment projections into projections of the numbers of jobs associated with each <u>land use</u> category. In particular, the industry data are grouped in terms of the three land use categories relevant to this study:

- Office-based jobs
- Logistics related jobs
- Other jobs based in industrial buildings

Table 7 on the next page shows the correspondence between each major industry group and the relevant land use categories). These percentages have been derived by TNDG based on many years of studying this topic and have been calibrated to current conditions in Los Angeles County based on Emsi employment data and CoStar real estate data. As an example of how Table 6 is applied in the analysis: there are currently approximately 332,000 manufacturing jobs in Los Angeles County. Per Table 6, the analysis estimates that 25% of these jobs (or 83,000 workers) are based in office buildings and 75% (or 249,000 workers) are based in industrial buildings (specifically in the "other"/non-logistics sub-category of industrial space).

Based on the various data sources reviewed for this study, TNDG developed two customized employment growth scenarios for the 10-year forecast horizon (2022-2032): 1) a "baseline" scenario derived from the industry-by-industry Emsi forecasts for Los Angeles County (shown on Table 6 above), and 2) an "aggressive" scenario in which growth in Los Angeles County is expected to more closely mirror statewide trends.

Table 8 shows the percentage growth rates (derived from Emsi) associated with the "baseline" forecast scenario. (The percentage growth rates for the Los Angeles County column are the same as shown on Table 7.) The growth rates for Los Angeles County, California, and the United States are provided for comparison purposes.

TABLE 7. LAND USE - INDUSTRY CORRESPONDENCE MATRIX (SHOWS PERCENTAGES OF JOBS IN EACH INDUSTRY THAT ARE ASSOCIATED WITH EACH MAJOR LAND USE CATEGORY)

Major Industry Group	Office	Logistics	Other Industrial ¹	Other Land Uses ²	Total
Agriculture, Forestry, Fishing and Hunting	0%	0%	0%	100%	100%
Mining, Quarrying, and Oil and Gas Extraction	0%	0%	0%	100%	100%
Utilities	5%	0%	5%	90%	100%
Construction	5%	0%	5%	90%	100%
Manufacturing	25%	0%	75%	0%	100%
Wholesale Trade	35%	65%	0%	0%	100%
Retail Trade	5%	5%	0%	90%	100%
Transportation and Warehousing	5%	70%	0%	25%	100%
Information	60%	0%	40%	0%	100%
Finance and Insurance	100%	0%	0%	0%	100%
Real Estate and Rental and Leasing	100%	0%	0%	0%	100%
Professional, Scientific, and Technical Services	80%	0%	20%	0%	100%
Management of Companies and Enterprises	100%	0%	0%	0%	100%
Administrative and Support and Waste Management and Remediation Services	80%	0%	10%	10%	100%
Educational Services	5%	0%	0%	95%	100%
Health Care and Social Assistance	25%	0%	0%	75%	100%
Arts, Entertainment, and Recreation	10%	0%	0%	90%	100%
Accommodation and Food Services	0%	0%	0%	100%	100%
Other Services (except Public Administration)	25%	0%	15%	60%	100%
Government	0%	0%	0%	100%	100%

^{1.} Includes manufacturing, flex, and misc. industrial space (other than distribution/warehousing).

Source: TNDG (calibrated based on Emsi and CoStar data)

^{2.} Includes retail, hospitality, recreational, and institutional land uses; also includes employment not associated with specific commercial/industrial buildings (e.g., construction workers on job sites, farmworkers, work-from-home employees, etc.).

TABLE 8. PROJECTED EMPLOYMENT GROWTH BY MAJOR INDUSTRY GROUP. LOS ANGELES COUNTY, CALIFORNIA, UNITED STATES

	Change in Jobs, 2022-2032:				
Major Industry Group	Los Angeles County	California	United States		
Agriculture, Forestry,					
Fishing and Hunting	-7%	4%	7%		
Mining, Quarrying, and Oil and Gas Extraction	-1%	8%	15%		
Utilities	-11%	-1%	-2%		
Construction	3%	6%	7%		
Manufacturing	-18%	-3%	3%		
Wholesale Trade	-13%	-6%	4%		
Retail Trade	-5%	-5%	-1%		
Transportation and Warehousing	11%	16%	14%		
Information	12%	14%	12%		
Finance and Insurance	-9%	0%	5%		
Real Estate and Rental and Leasing	2%	2%	7%		
Professional, Scientific, and Technical Services	8%	10%	14%		
Management of Companies and Enterprises	-3%	-2%	4%		
Administrative and Support and Waste Management and Remediation Services	1%	10%	10%		
Educational Services	14%	14%	16%		
Health Care and Social Assistance	21%	22%	17%		
Arts, Entertainment, and Recreation	11%	8%	29%		
Accommodation and Food Services	6%	9%	19%		
Other Services (except Public Administration)	-1%	5%	12%		
Government	2%	3%	5%		
Total/Overall	4%	7%	9%		

Table 9 summarizes the projected employment growth rates by <u>land use</u> category. The baseline forecasts (derived from Emsi data) are shown for the following geographic areas: Los Angeles County, California, and United States. Whereas the baseline forecasts for Los Angeles County indicate negative employment growth for job categories associated with industrial space, TNDG has developed a more aggressive scenario (shown on the bottom line of Table 8) in which growth in Los Angeles County is expected to more closely mirror statewide trends (for California as a whole, employment is projected to grow in all sectors using industrial space). The aggressive scenario is intended to depict opportunities that would exist based on proactive economic development programming in Los Angeles County jurisdictions (including initiatives to expand the land/zoning capacity for office and industrial land uses), allowing the local economy to capture a larger share of statewide growth.

TABLE 9. PROJECTED EMPLOYMENT GROWTH BY LAND USE CATEGORY, 2022-2032. LOS ANGELES COUNTY, LOS ANGELES COUNTY, CALIFORNIA, AND U.S.

Geographic Area	Office	Logistics	Other Industrial	Total Industrial
Los Angeles County	3.6%	0.6%	-4.3%	-2.4%
California	7.9%	9.1%	0.5%	3.5%
United States	9.8%	10.0%	6.0%	7.4%
TNDG projection for aggressive scenario:	4.0%	1.0%	0.5%	

Tables 10 through 12 provide TNDG's forecasts of industrial and office building demand for Los Angeles County and Carson. Two distinct forecasting methodologies are applied, allowing for the demand projections to be expressed in terms of a range (rather than a single forecast number for each land use):

Method 1 (Recent Historic Absorption Trends). For industrial buildings, this methodology forecasts demand based on a continuation of the strong industrial absorption rate that has been in evidence throughout the region over the past ten years. The absorption-based methodology is <u>not</u> used for the office demand projections (since the recent absorption trend is strongly negative).

Method 2 (Projected Employment Growth) – This methodology forecasts future space demand based on projected employment growth in industry sectors that utilize industrial and office buildings (as summarized in Tables 6 through 9 above).

Table 10 shows TNDG's 10-year projection of industrial building demand in Los Angeles County based on projection Method 1 (continuation of recent historic absorption trends). Whereas Los Angeles County absorbed industrial space at an average rate of nearly 1.5 million square feet per year between 2019 and 2022, TNDG believes this trend is not sustainable (partly due to the constrained supply developable land). TDNG believes a future absorption rate of 900,000 per year (or 9.0 MSF for the 10-year forecast period) is sustainable. In addition, the existing extremely low industrial vacancy rates in Los Angeles County represent "pent up" demand that can support new construction over and above the new demand indicated for the forecast period. Thus, as shown on Table 10 below, the total potential industrial building opportunity in Los Angeles County over the next 10 years is projected at 13.5 MSF (including 9.0 MSF of new demand and 4.5 MSF of existing pent-up demand).

As noted on the table, the historic absorption rate methodology is <u>not</u> applied to the office demand forecasts (due to the strong negative absorption rates over the past several years and the existing "glut" of office supply represented by existing high vacancy rates).

TABLE 10. LA COUNTY, PROJECTION OF DEMAND FOR NEW OFFICE AND INDUSTRIAL SPACE.

METHODOLOGY 1: RECENT HISTORIC ABSORPTION TREND (SF)

Building Category	Average Annual 2013-19	Average Annual 2020-22	Projected Annual Demand	Applied to 10-yr Forecast	Adjustment for Current Undersupply	Construction Demand
Industrial						
Logistics Space	3,833,714	2,867,333	900,000	9,000,000	4,500,000	13,500,000
Flex/Specialty	599,286	-1,388,667	0	0	0	0
Total	4,433,000	1,478,667	900,000	9,000,000	4,500,000	13,500,000
Office						
Class A	986,927	-2,159,018	N/A	N/A	N/A	N/A
Class B	682,644	-1,818,970	N/A	N/A	N/A	N/A
Class C	-380,551	-598,949	N/A	N/A	N/A	N/A
Total	1,289,020	-4,576,936	N/A	N/A	N/A	N/A

Source: TNDG

Table 11 shows TNDG's projections of industrial and office space demand in Los Angeles County using Method 2 (demand projected based on anticipated employment growth in relevant industries).

For the baseline scenario (see discussion of Tables 6 through 9 above), growth in logistics-related sectors is projected to be modest (just 2,161 new jobs countywide over ten years) and growth in other industrial sectors is projected to be negative (loss of nearly 24,000 jobs over ten years). For the aggressive scenario, industrial employment is expected to grow by about 3,400 jobs in the logistics category and 2,800 jobs in other industrial categories. As shown on the table, TNDG has used standard employment density factors to translate these numbers of jobs into demand for new space.

For Method 2, countywide demand for new industrial building construction between 2022 and 2032 is projected at just under 1.0 MSF for the baseline scenario and nearly 17.5 MSF for the aggressive scenario. These projections include new demand associated with job growth and pent-up demand associated with the existing very low vacancy rates.

Table 10 also projects office demand in Los Angeles County based on 10-year growth in office employment (64,800 jobs for the baseline scenario and 71,300 jobs for the aggressive scenario). Total office demand between 2022 and 2032 is projected at 8.1 MSF for the baseline scenario and 8.9 MSF for the aggressive scenario. However, much of this demand would be fulfilled in existing vacant office space. After adjusting for the current oversupply (estimated at 1.8 MSF countywide), the net demand for new office construction countywide is projected at 6.3 MSF for the baseline scenario and 7.1 MSF for the aggressive scenario.

TABLE 11. LA COUNTY, PROJECTION OF DEMAND FOR NEW OFFICE AND INDUSTRIAL SPACE.

METHODOLOGY 2: PROJECTED EMPLOYMENT GROWTH

Projection Scenario	New Jobs 2022-32	Square Feet per New Job	Absorption Demand (SF)	Adjustment for Current Undersupply (Oversupply) (SF)	Construction Demand (SF)
Baseline Projection					
Logistics	2,161	2,500	5,402,910	4,500,000	9,902,910
Other Industrial	-23,884	500	-11,942,126	3,000,000	-8,942,126
Industrial Total				-	960,784
Office (Class A)	64,813	125	8,101,564	(1,800,000)	6,301,564
Aggressive Projection	า				
Logistics	3,425	2,500	8,561,795	4,500,000	13,061,795
Other Industrial	2,799	500	1,399,698	3,000,000	4,399,698
Industrial Total				-	17,461,493
Office (Class A)	71,281	125	8,910,149	(1,800,000)	7,110,149
Source: TNDG					

Table 12 projects the share of countywide demand that could potentially be captured by new office and industrial development in Carson. For planning purposes, TNDG has projected that Carson can achieve a capture rate of 2% of Los Angeles County office demand and 10% of countywide industrial demand. These capture rates are aggressive compared to historic trends (Carson currently accounts for 0.3% of Los Angeles County's office space and 4.2% of Los Angeles County's industrial space). The projected increase in Carson's capture rate of countywide demand is premised on the expectation that Carson's competitive position will be enhanced by two factors: 1) proactive land use planning to expand development capacity in an otherwise built out environment, and 2) aggressive economic development marketing to attract targeted tenant types.

TABLE 12. PROJECTION OF DEMAND FOR NEW OFFICE AND INDUSTRIAL SPACE, 2022-2032. POTENTIAL CARSON CAPTURE RATES OF LOS ANGELES COUNTY DEMAND (SF)

Land Use	Los Angeles County Demand	City of Carson Share	Potential Carson Demand
Office Space			
Scenario 1 (Historic Absorption Trend) Scenario 2a (Conservative Employment Growth) Scenario 2b (Aggressive Employment Growth)	N/A 6,301,564 7,110,149	N/A 2% 2%	N/A 126,031 142,203
Industrial Space			
Scenario 1 (Historic Absorption Trend) Scenario 2a (Conservative Employment Growth) Scenario 2b (Aggressive Employment Growth)	13,500,000 960,784 17,461,493	10% 10% 10%	1,350,000 96,078 1,746,149

Source: TNDG

4. Retail Demand Analysis

Estimates of retail *demand* are generated using a combination of four key variables: existing and projected population in Primary and Secondary Market Areas (in this case based on a combination of Esri figures and SCAG growth rates), income levels (from Esri), and the portion of income allocated toward retail expenditures, in total and by category (based on analysis of Consumer Expenditure Survey data, US Census Bureau, including variations in income allocated to retail spending according to total income). The *supply* of retail activity in a community can be estimated using taxable sales data from the California Department of Tax and Fee Administration (CDTFA). Retail demand estimates also include factors anticipating increases in e-commerce activity into the future.

The Primary Market Area (PMA) consists of the City of Carson. The Secondary Market Area (SMA) is a 10-mile radius circle surrounding Carson. The two market areas are shown on Figure 1.

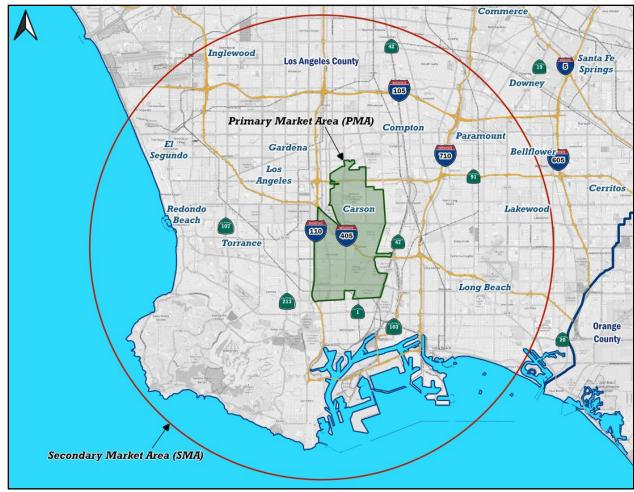


FIGURE 1. CARSON MARKET AREAS

Source: ESRI; TNDG

The results of the retail demand modeling process are shown, for projected retail space needs by category through 2032, on Table 13. The figures include adjustments for projected growth of ecommerce sales over the analysis period, which affect only the four GAFO³ categories. Note that with these adjustments, supportable space within the GAFO categories actually declines (for all but the Furnishings and Appliances category) from 2025 levels to 2032. Demand for other types of retail space (non-GAFO) is higher in later years, so that, overall, supportable space increases moderately through 2032.

TABLE 13. CARSON RETAIL TRADE AREA, NET SUPPORTABLE RETAIL SPACE BY CATEGORY (SF), AS OF THE YEAR SHOWN, ADJUSTED FOR E-COMMERCE

Retail Category	Sales Per SF	2025	2030	2032
Clothing and Clothing Accessories	\$500	205,498	192,058	183,609
General Merchandise	\$500	102,848	101,336	98,754
Home Furnishings and Appliances	\$500	40,533	46,251	47,260
Specialty/Other	\$500	219,031	211,393	204,499
Subtotal, GAFO		567,910	551,037	534,122
Food and Beverage (grocery stores)	\$575	70,961	83,928	89,114
Food Services and Drinking (restaurants/bars)	\$600	72,336	87,012	92,936
Bldg. Matrl. and Garden Equip. and Supplies	\$600	1,002	10,620	14,499
Auto Parts ¹	\$425	5,001	11,342	13,935
Services Space @ 20% of Total	\$300	179,303	185,985	186,151
GRAND TOTAL		896,513	929,925	930,757

^{1.} Assumes that automotive parts stores account for 9.5% of sales in overall Auto group category (based on statewide average as reported by the CDTFA).

Source: TNDG.

Supportable retail space as indicated in the model results is likely to be fulfilled through a combination of new construction and higher occupancy levels in existing space. In some cases, current vacant retail space will be repurposed to non-retail uses that represent a better or suitable alternative use for that particular location.

Retail Leakage Analysis

The retail demand model summarized above considers a trade area that extends beyond the city and forecasts the portion of theoretical demand that Carson can retain/capture given the existing market shares of competing (external) shopping facilities. The assumed "capture rates" of maximum/theoretical demand reflect the reality that a community the size of Carson (which lacks true regional-scale shopping facilities) is likely to experience a significant degree of permanent demand leakage.

As an alternative approach to quantifying opportunities for retail tenant recruitment in Carson, TNDG prepared a separate version of the retail model that provides a "gross leakage" calculation (i.e., total demand compared to total existing sales, without applying capture rates to reduce theoretical demand). Note that the "PMA" consists of the city of Carson only. This is consistent with the concept that the leakage analysis is a gross comparison of actual sales to potential sales, for just the city itself.

³ GAFO is a retail industry acronym for the types of retail stores typically found in community and regional-scale shopping centers: <u>General Merchandise</u>, <u>Apparel</u>, <u>Furniture</u>, and <u>Other/Specialty</u>.

The patterns of retail leakage in Carson are shown below (Table 14) in an excerpt from the version of TNDG's retail demand model described above. This model version reflects a theoretical 100% capture in the Primary Market Area (Carson) and 0% in the Secondary Market Area. The table compares estimated 2021 total demand within the City with estimated 2021 sales, based on taxable sales data from CDTFA.

The table shows leakage in only a few categories, with Clothing and Clothing Accessories having the greatest extent (in actual dollars and, more so, proportionately). Other leakage categories, in order of the highest level of leakage, include Food and Beverage, and Specialty/Other. Sales *exceeded* demand by the greatest amounts (proportionately) in Motor Vehicle and Parts Dealers, and Home Furnishings and Appliances. Gasoline stations' sales were also much greater than local demand.

It should be noted that the sales leakage figures shown on the table represent theoretical maximums based on the unrealistic assumption of 100% retention of resident demand. The capture-rate adjusted projections in TNDG's main analysis (as summarized on Table 13 above and detailed in Appendix A) provide a more realistic depiction of future retail development potentials in Carson.

TABLE 14. COMPARISON OF POTENTIAL RETAIL DEMAND WITH ESTIMATED SALES,
CARSON RETAIL TRADE AREA – PMA (CARSON ONLY) IN THOUSANDS OF CONSTANT DOLLARS

Retail Category	2021 Demand	2021 Est. sales	Expected Less Actual	Percent Actual/ Expected
Shopper Goods:				
Clothing and Clothing Accessories	\$112,028	\$52,889	\$59,139	47.2%
General Merchandise	\$118,252	\$119,197	(\$945)	100.8%
Home Furnishings & Appliances	\$68,462	\$180,274	(\$111,813)	263.3%
Specialty/Other	\$199,161	\$175,302	\$23,859	88.0%
Subtotal	\$497,903	\$527,662	(\$29,759)	106.0%
Convenience Goods:				
Food and Beverage (grocery stores)	\$199,161	\$144,407	\$54,754	72.5%
Food Service and Drinking (restaurants/bars)	\$168,042	\$207,194	(\$39,151)	123.3%
Subtotal	\$367,204	\$351,601	\$15,603	95.8%
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	\$87,133	\$114,379	(\$27,246)	131.3%
Motor Vehicle and Parts Dealers	\$192,937	\$659,530	(\$466,592)	341.8%
Gasoline Stations	\$99,581	\$218,069	(\$118,489)	219.0%
Subtotal	\$379,651	\$991,978	(\$612,327)	261.3%
Total	\$1,244,758	\$1,871,241	(\$626,483)	150.3%

Source: CDTFA; TNDG.

Carson Retail Analysis Summary

If Carson could recover sales now lost through retail leakage to neighboring communities, this alone would generate support for close to 3 million SF of additional retail space. While achieving this complete recapture of sales leakage is not feasible due to prevailing locational/competitive market conditions in and around Carson, the modeling assumptions used to derive the figures in Table 13 in this report indicate that developing an additional 165,000 SF of space in the near-term and 900,000 SF by 2025 is

within the realm of possibility.⁴ See Table 15. Accomplishing this would involve focused efforts in retailer recruitment, along with other strategies to enhance existing shopping centers.

Beyond 2025, a combination of increased population in the market areas and assumptions about the counteracting effects of reduced sales due to growth in e-commerce will tend to have a stabilizing effect on supportable retail space in the City.

TABLE 15. INDICATORS OF SUPPORTABLE RETAIL SALES IN CARSON (DEMAND AND SALES FIGURES IN THOUSANDS OF CONSTANT DOLLARS)

Estimates	2021	2025	2032
Demand	\$1,942,804		
Sales	\$1,871,241		
Supportable sales, <u>above</u> 2021 estimated	\$71,563	\$421,649	\$529,162
Supportable space (with allowances for e-commerce growth), square feet	165,545	896,513	930,757
Demand with 100% local capture, no SMA contribution	\$1,244,758		
Theoretical supportable space, square feet	2,879,463		

⁴ These observations are based on an assessment of development potential for planning purposes; this is not a feasibility study.

APPENDIX A

Retail Demand Model

Table A-1
Population Projections
Carson Retail Trade Area

Area	2021	2025	2030	2032
Primary Market Area (PMA)	95.841	99.030	103.017	104,611
Secondary Market Area (SMA)	2,117,484	2,164,472	2,224,675	2,249,426
Total Market Area	2,213,325	2,263,502	2,327,692	2,354,038

Source: ESRI: Southern California Association of Governments (SCAG), 6th Cycle RHNA.

Table A-2
Per Capita Income Projections
Carson Retail Trade Area
In 2022 constant dollars

	2021
	<u> </u>
PMA	\$59,191
SMA	\$62,342
Annual Increase Factor ¹	0.00%

Area	2021	2025	2030	2032
PMA	\$59,191	\$59,191	\$59,191	\$59,191
SMA	\$62,342	\$62,342	\$62,342	\$62,342

^{1.} A conservative assumption, deemed most appropriate for this analysis.

Source: ESRI; U.S. Census Bureau; TNDG.

Table A-3

Total Income and Potential Retail Sales Projections
Carson Retail Trade Area
In thousands of constant dollars

Percent of Income Spent on Retail Goods	PMA 21.9%	SMA 22.6%		
Area	2021	2025	2030	2032
Total Income:				
PMA	\$5,672,925	\$5,861,698	\$6,097,665	\$6,192,052
SMA	\$132,008,188	\$134,937,493	\$138,690,702	\$140,233,743
Total	\$137,681,112	\$140,799,191	\$144,788,367	\$146,425,795
Potential Retail Sales:				
PMA	\$1,244,758	\$1,286,179	\$1,337,955	\$1,358,665
SMA	\$29,853,850	\$30,516,317	\$31,365,111	\$31,714,072
Total	\$31,098,608	\$31,802,496	\$32,703,066	\$33,072,737

Source: TNDG, Consumer Expenditure Survey, U.S. Census Bureau.

Table A-4
Distribution of Retail Sales by Retail Category
Carson Retail Trade Area

Retail Category	%Distribution 2021	%Distribution 2025	%Distribution 2030	%Distribution 2032
Shopper Goods:				
Clothing and Clothing Accessories	9.0%	9.0%	9.0%	9.0%
General Merchandise	9.5%	9.5%	9.5%	9.5%
Home Furnishings and Appliances	5.5%	5.5%	5.5%	5.5%
Specialty/Other	16.0%	16.0%	16.0%	16.0%
Subtotal	40.0%	40.0%	40.0%	40.0%
Convenience Goods:				
Food and Beverage	16.0%	16.0%	16.0%	16.0%
Food Service and Drinking	13.5%	13.5%	13.5%	13.5%
Subtotal	29.5%	29.5%	29.5%	29.5%
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	7.0%	7.0%	7.0%	7.0%
Motor Vehicle/Other Vehicle Dealers	15.5%	15.5%	15.5%	15.5%
Gasoline Stations	8.0%	8.0%	8.0%	8.0%
Subtotal	30.5%	30.5%	30.5%	30.5%
Total	100.0%	100.0%	100.0%	100.0%

Source: TNDG, based on historical taxable sales trends for Los Angeles County.

Table A-5
Projected Demand for Retail Sales by Major Retail Category
Carson Retail Trade Area - PMA
In thousands of constant dollars

Retail Category	2021	2025	2030	2032
Shopper Goods:				
Clothing and Clothing Accessories	\$112,028	\$115,756	\$120,416	\$122,280
General Merchandise	118,252	122,187	127,106	129,073
Home Furnishings and Appliances	68,462	70,740	73,588	74,727
Specialty/Other	199,161	205,789	214,073	217,386
Subtotal -	\$497,903	\$514,471	\$535,182	\$543,466
Convenience Goods:				
Food and Beverage	\$199,161	\$205,789	\$214,073	\$217,386
Food Service and Drinking	168,042	173,634	180,624	183,420
Subtotal -	\$367,204	\$379,423	\$394,697	\$400,806
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	\$87,133	\$90,032	\$93,657	\$95,107
Motor Vehicle/Other Vehicle Dealers	192,937	199,358	207,383	210,593
Gasoline Stations	99,581	102,894	107,036	108,693
Subtotal	\$379,651	\$392,284	\$408,076	\$414,393
Total -	\$1,244,758	\$1,286,179	\$1,337,955	\$1,358,665

Table A-6
Projected Demand for Retail Sales by Major Retail Category
Carson Retail Trade Area - SMA
In thousands of constant dollars

Retail Category	2021	2025	2030	2032
Shopper Goods:				
Clothing and Clothing Accessories	\$2,686,847	\$2,746,469	\$2,822,860	\$2,854,267
General Merchandise	2,836,116	2,899,050	2,979,686	3,012,837
Home Furnishings and Appliances	1,641,962	1,678,397	1,725,081	1,744,274
Specialty/Other	4,776,616	4,882,611	5,018,418	5,074,252
Subtotal	\$11,941,540	\$12,206,527	\$12,546,044	\$12,685,629
Convenience Goods:				
Food and Beverage	\$4,776,616	\$4,882,611	\$5,018,418	\$5,074,252
Food Service and Drinking	4,030,270	4,119,703	4,234,290	4,281,400
Subtotal	\$8,806,886	\$9,002,314	\$9,252,708	\$9,355,651
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	\$2,089,770	\$2,136,142	\$2,195,558	\$2,219,985
Motor Vehicle/Other Vehicle Dealers	4,627,347	4,730,029	4,861,592	4,915,681
Gasoline Stations	2,388,308	2,441,305	2,509,209	2,537,126
Subtotal	\$9,105,424	\$9,307,477	\$9,566,359	\$9,672,792
Total	\$29,853,850	\$30,516,317	\$31,365,111	\$31,714,072

Table A-7
Potential Capture of Market Area Demand for Retail Sales Expressed in Percentages
Carson Retail Trade Area - PMA

Retail Category	2021	2025	2030	2032
Shopper Goods:			_	
Clothing and Clothing Accessories	80.0%	85.0%	85.0%	85.0%
General Merchandise	80.0%	85.0%	85.0%	85.0%
Home Furnishings and Appliances	80.0%	85.0%	85.0%	85.0%
Specialty/Other	80.0%	85.0%	85.0%	85.0%
Convenience Goods:				
Food and Beverage	90.0%	90.0%	90.0%	90.0%
Food Service and Drinking	80.0%	85.0%	85.0%	85.0%
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	80.0%	80.0%	80.0%	80.0%
Motor Vehicle/Other Vehicle Dealers	50.0%	50.0%	50.0%	50.0%
Gasoline Stations	80.0%	80.0%	80.0%	80.0%

Table A-8
Potential Capture of Market Area Demand for Retail Sales Expressed in Percentages
Carson Retail Trade Area - SMA

Retail Category	2021	2025	2030	2032
Shopper Goods:				
Clothing and Clothing Accessories	0.0%	2.5%	2.5%	2.5%
General Merchandise	0.9%	2.5%	2.5%	2.5%
Home Furnishings and Appliances	7.6%	8.5%	8.5%	8.5%
Specialty/Other	0.3%	2.5%	2.5%	2.5%
Convenience Goods:				
Food and Beverage	0.0%	0.0%	0.0%	0.0%
Food Service and Drinking	1.8%	2.5%	2.5%	2.5%
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	2.1%	2.0%	2.0%	2.0%
Motor Vehicle/Other Vehicle Dealers	12.2%	12.2%	12.2%	12.2%
Gasoline Stations	5.8%	5.8%	5.8%	5.8%

Table A-9
Potential Capture of Market Area Demand for Retail Sales
Carson Retail Trade Area - PMA
In thousands of constant dollars

Retail Category	2021	2025	2030	2032
Shopper Goods:				
Clothing and Clothing Accessories	\$89,623	\$98,393	\$102,354	\$103,938
General Merchandise	94,602	103,859	108,040	109,712
Home Furnishings and Appliances	54,769	60,129	62,549	63,518
Specialty/Other	159,409	174,920	181,962	184,778
Subtotal	\$398,402	\$437,301	\$454,905	\$461,946
Convenience Goods:				
Food and Beverage	\$179,245	\$185,210	\$192,665	\$195,648
Food Service and Drinking	134,434	147,589	153,530	155,907
Subtotal	\$313,679	\$332,799	\$346,196	\$351,555
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	\$69,706	\$72,026	\$74,925	\$76,085
Motor Vehicle/Other Vehicle Dealers	96,469	99,679	103,691	105,297
Gasoline Stations	79,664	82,315	85,629	86,955
Subtotal	\$245,840	\$254,020	\$264,246	\$268,336
Total –	\$957,921	\$1,024,120	\$1,065,346	\$1,081,837

Table A-10
Potential Capture of Market Area Demand for Retail Sales
Carson Retail Trade Area - SMA
In thousands of constant dollars

Retail Category	2021	2025	2030	2032
Shopper Goods:				
Clothing and Clothing Accessories	\$0	\$68,662	\$70,572	\$71,357
General Merchandise	24,617	72,476	74,492	75,321
Home Furnishings and Appliances	125,446	142,664	146,632	148,263
Specialty/Other	15,906	122,065	125,460	126,856
Subtotal	\$165,969	\$405,867	\$417,156	\$421,797
Convenience Goods:				
Food and Beverage	\$0	\$0	\$0	\$0
Food Service and Drinking	72,746	102,993	105,857	107,035
Subtotal	\$72,746	\$102,993	\$105,857	\$107,035
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	\$44,617	\$42,723	\$43,911	\$44,400
Motor Vehicle/Other Vehicle Dealers	563,148	575,645	591,656	598,238
Gasoline Stations	138,402	141,474	145,409	147,026
Subtotal	\$746,167	\$759,841	\$780,976	\$789,665
Total _	\$984,883	\$1,268,701	\$1,303,989	\$1,318,497

Table A-11

Potential Capture of Market Area Demand for Retail Sales
Carson Retail Trade Area - PMA and SMA Combined
In thousands of constant dollars

Retail Category	2021	2025	2030	2032
Shopper Goods:				
Clothing and Clothing Accessories	\$89,623	\$167,054	\$172,925	\$175,295
General Merchandise	119,219	176,335	182,532	185,033
Home Furnishings and Appliances	180,215	202,793	209,181	211,781
Specialty/Other	175,315	296,986	307,422	311,635
Subtotal	\$564,372	\$843,168	\$872,061	\$883,743
Convenience Goods:				
Food and Beverage	\$179,245	\$185,210	\$192,665	\$195,648
Food Service and Drinking	207,180	250,582	259,388	262,942
Subtotal	\$386,425	\$435,791	\$452,053	\$458,590
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	\$114,323	\$114,749	\$118,837	\$120,485
Motor Vehicle/Other Vehicle Dealers	659,617	675,323	695,347	703,535
Gasoline Stations	218,067	223,789	231,038	233,981
Subtotal	\$992,007	\$1,013,861	\$1,045,222	\$1,058,001
Total -	\$1,942,804	\$2,292,820	\$2,369,335	\$2,400,334

Table A-12

Comparison of Potential Retail Demand with Estimated Sales

Carson Retail Trade Area - PMA

In thousands of constant dollars

2021 **Retail Category** 2021 **Estimated Expected Less** Percent Sales Est. actual/Demand Demand **Actual** Shopper Goods: Clothing and Clothing Accessories \$89,623 \$52,889 \$36,734 59.0% General Merchandise 119,219 119,197 22 100.0% Home Furnishings and Appliances 180,215 180,274 (59)100.0% Specialty/Other 175,315 175,302 13 100.0% 93.5% Subtotal \$564,372 \$527,662 \$36,709 Convenience Goods: Food and Beverage \$179,245 \$144,407 \$34,838 80.6% Food Service and Drinking 100.0% 207,180 207,194 (14)Subtotal \$386,425 \$351,601 \$34,825 91.0% Heavy Commercial Goods: Bldg. Matrl. and Garden Equip. and Supplies \$114,323 \$114,379 (\$56) 100.0% \$659,530 Motor Vehicle/Other Vehicle Dealers 659,617 87 100.0% **Gasoline Stations** 218,067 218,069 (2) 100.0% 100.0% Subtotal \$992,007 \$991,978 \$29 Total \$1,942,804 \$1,871,241 \$71,563 96.3%

Source: CDTFA; TNDG.

Table A-13

Net Supportable Retail Sales
City of Carson
In thousands of constant dollars

Retail Category	2021	2025	2030	2032
Shopper Goods:				
Clothing and Clothing Accessories	\$36,734	\$114,166	\$120,036	\$122,406
General Merchandise	22	57,138	63,335	65,836
Home Furnishings and Appliances	0	22,518	28,907	31,507
Specialty/Other	13	121,684	132,120	136,333
Subtotal	\$36,769	\$315,506	\$344,398	\$356,081
Convenience Goods:				
Food and Beverage	\$34,838	\$40,803	\$48,259	\$51,241
Food Service and Drinking	0	43,401	52,207	55,762
Subtotal	\$34,838	\$84,204	\$100,466	\$107,002
Heavy Commercial Goods:				
Bldg. Matrl. and Garden Equip. and Supplies	\$0	\$426	\$4,514	\$6,162
Motor Vehicle/Other Vehicle Dealers	87	15,794	35,818	44,005
Gasoline Stations	0	5,720	12,968	15,912
Subtotal	\$87	\$21,939	\$53,300	\$66,079
Total _	\$71,694	\$421,649	\$498,164	\$529,162

Table A-14

Net Supportable Retail Space by Category
City of Carson

Expressed in Square Feet

Retail Category	Sales Per Square Foot	2025	2030	2032
Clothing and Clothing Accessories	\$500	228,331	240,072	244,811
General Merchandise	\$500	114,276	126,670	131,672
Home Furnishings and Appliances	\$500	45,037	57,814	63,013
Specialty/Other	\$500	243,367	264,241	272,666
Subtotal, GAFO		631,011	688,797	712,162
Food and Beverage	\$575	70,961	83,928	89,114
Food Services and Drinking	\$600	72,336	87,012	92,936
Bldg. Matrl. and Garden Equip. and Supplies	\$425	1,002	10,620	14,499
Auto Parts ¹	\$300	5,001	11,342	13,935
Services Space @ 20% of total		195,078	220,425	230,662
GRAND TOTAL		975,389	1,102,124	1,153,308

^{1.} Assumes that automotive parts stores account for 9.5% of sales in overall Auto group category (based on statewide average as reported by the CDTFA).

Source: TNDG

Table A-15

Potential Reduction in Demand due to Growth in E-commerce Sales
Carson Retail Trade Area

Expressed as Percentage Reduction Factors

Retail Category	2025	2030	2032
GAFO	10%	20%	25%
Food and Beverage	0%	0%	0%
Food Services and Drinking	0%	0%	0%
Bldg. Matrl. and Garden Equip. and Supplies	0%	0%	0%
Auto Parts	0%	0%	0%

Source: CBRE; TNDG

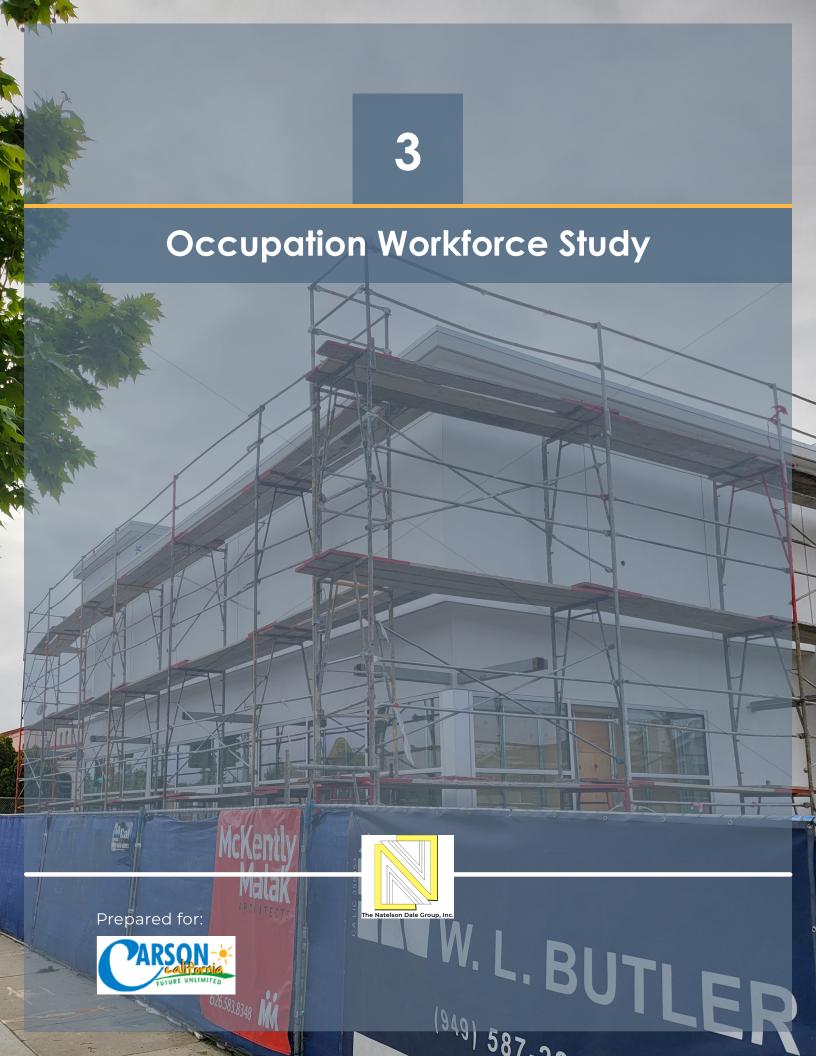
Table A-16

Net Supportable Retail Space by Category (Accounting for E-commerce Sales)
City of Carson

Expressed in Square Feet

Retail Category	Sales Per Square Foot	2025	2030	2032
Clothing and Clothing Accessories	\$500	205,498	192,058	183,609
General Merchandise	\$500	102,848	101,336	98,754
Home Furnishings and Appliances	\$500	40,533	46,251	47,260
Specialty/Other	\$500	219,031	211,393	204,499
Subtotal, GAFO		567,910	551,037	534,122
Food and Beverage	\$575	70,961	83,928	89,114
Food Services and Drinking	\$600	72,336	87,012	92,936
Bldg. Matrl. and Garden Equip. and Supplies	\$425	1,002	10,620	14,499
Auto Parts ¹	\$300	5,001	11,342	13,935
Services Space @ 20% of total		179,303	185,985	186,151
GRAND TOTAL		896,513	929,925	930,757

^{1.} Assumes that automotive parts stores account for 9.5% of sales in overall Auto group category (based on statewide average as reported by the CDTFA).



WORKFORCE AND EDUCATIONAL INSTITUTION ANALYSIS FOR ECONOMIC DEVELOPMENT STRATEGIC PLAN

Prepared for:

City of Carson

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PREPARED BY:



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APPENDIX: "EDUCATION SNAPSHOTS" FOR TARGET CLUSTERS

Introduction

This document provides a summary of labor force and employment data to identify key trends, needs and opportunities related to Carson's local and regional workforces. In particular, the report profiles the occupational mixes and associated educational/training requirements for each of the target industry clusters identified in the City of Carson's Economic Development Strategic Plan (EDSP). The data compiled for this report are intended to guide Carson's programmatic initiatives to ensure a competitive workforce suitable for the needs of the City's targeted industries.

The report is organized as follows:

The first chapter - *Overview of the Local Labor Market* – provides a summary of the City of Carson's local labor force by major occupational group. The data are from the U.S. Census Bureau's American Community Survey (ACS) program and are provided for the last five years, 2017-2021. Along with the City, data are provided for Los Angeles County to provide a comparison to a regional benchmark.

The Second chapter - Labor Force Needs of Carson's Target Industry Clusters — provides a summary of workforce data related to the targeted clusters identified in the Industry Cluster Study as part of the EDSP. This chapter summarizes industry-occupation staffing patterns to identify the occupations most prevalent in each target cluster's key component industries. It also profiles the wage, education and training characteristics of these occupations.

The third chapter - Educational Institution Analysis – provides a summary of academic programs in Los Angeles County with data related to completions, openings, earnings, jobs, and more for occupations identified in the target clusters.

Given the nature of this analysis, much of the potential value of this work product is embodied in the detailed databases from which the summaries are extracted. While the report provides a summary of high-level trends, the actual databases are also provided electronically for the City's use. In addition, the EDSP provides guidance on how best to utilize the data within the EDSP implementation process.

Overview of the Local Labor Market

Table 1 provides a summary of the local labor force (total number of employees) by major occupational group for the City and County in 2021 (the latest year for which these data are available). The occupation data are for workers who live in the respective geographies (regardless of where their jobs are located).

Table 1. Occupation Employment for Local Labor Force, City of Carson and Los Angeles County, 2021.

	Reg	ion
Occupation	Carson	L.A.
Civilian employed population 16 years and over	45,204	4,885,032
Management, business, science, and arts occupations:	14,906	1,929,372
Management, business, and financial occupations:	5,394	771,951
Management occupations	3,455	501,857
Business and financial operations occupations	1,939	270,094
Computer, engineering, and science occupations:	2,022	259,923
Computer and mathematical occupations	864	125,929
Architecture and engineering occupations	863	90,862
Life, physical, and social science occupations	295	43,132
Education, legal, community service, arts, and media occupations:	4,129	653,640
Community and social service occupations	1,298	84,808
Legal occupations	259	73,793
Educational instruction, and library occupations	1,749	258,119
Arts, design, entertainment, sports, and media occupations	823	236,920
Healthcare practitioners and technical occupations:	3,361	243,858
Health diagnosing and treating practitioners and other technical occupations	2,048	164,692
Health technologists and technicians	1,313	79,166
Service occupations:	8,734	896,616
Healthcare support occupations	3,051	191,533
Protective service occupations:	1,018	92,506
Firefighting & prevention, & other protective service workers incl. supervisors	637	64,996
Law enforcement workers including supervisors	381	27,510
Food preparation and serving related occupations	2,230	268,750
Building and grounds cleaning and maintenance occupations	1,320	203,884
Personal care and service occupations	1,115	139,943
Sales and office occupations:	10,459	1,041,922
Sales and related occupations	3,638	478,587
Office and administrative support occupations	6,821	563,335
Natural resources, construction, and maintenance occupations:	3,680	373,136
Farming, fishing, and forestry occupations	136	14,266
Construction and extraction occupations	2,189	239,414
Installation, maintenance, and repair occupations	1,355	119,456
Production, transportation, and material moving occupations:	7,425	643,986
Production occupations	2,490	262,506
Transportation occupations	2,677	192,764
Material moving occupations	2,258	188,716

Source: U.S. Census Bureau, American Community Survey, S2401, 2021 5-year Subject Tables.

Table 2 provides a summary of the local labor force (distribution of employees) by major occupation group for the City and County in 2021. The occupation data are for workers who live in the respective geographies.

Table 2. Distribution of Occupation Employment for Local Labor Force, City of Carson and Los Angeles County, 2021.

	Reg	ion
Occupation	Carson	L.A.
Civilian employed population 16 years and over	100%	100%
Management, business, science, and arts occupations:	33%	39%
Management, business, and financial occupations:	12%	16%
Management occupations	8%	10%
Business and financial operations occupations	4%	6%
Computer, engineering, and science occupations:	4%	5%
Computer and mathematical occupations	2%	3%
Architecture and engineering occupations	2%	2%
Life, physical, and social science occupations	1%	1%
Education, legal, community service, arts, and media occupations:	9%	13%
Community and social service occupations	3%	2%
Legal occupations	1%	2%
Educational instruction, and library occupations	4%	5%
Arts, design, entertainment, sports, and media occupations	2%	5%
Healthcare practitioners and technical occupations:	7%	5%
Health diagnosing and treating practitioners and other technical occupations	5%	3%
Health technologists and technicians	3%	2%
Service occupations:	19%	18%
Healthcare support occupations	7%	4%
Protective service occupations:	2%	2%
Firefighting & prevention, & other protective service workers incl. supervisors	1%	1%
Law enforcement workers including supervisors	1%	1%
Food preparation and serving related occupations	5%	6%
Building and grounds cleaning and maintenance occupations	3%	4%
Personal care and service occupations	2%	3%
Sales and office occupations:	23%	21%
Sales and related occupations	8%	10%
Office and administrative support occupations	15%	12%
Natural resources, construction, and maintenance occupations:	8%	8%
Farming, fishing, and forestry occupations	0%	0%
Construction and extraction occupations	5%	5%
Installation, maintenance, and repair occupations	3%	2%
Production, transportation, and material moving occupations:	16%	13%
Production occupations	6%	5%
Transportation occupations	6%	4%
Material moving occupations	5%	4%

Source: U.S. Census Bureau, American Community Survey, S2401, 2021 5-year Subject Tables; TNDG.

Table 3 provides Location Quotients (LQs) for occupations for the City and County in 2021. The LQ measures how concentrated/important an occupation group is in a region compared to national benchmarks. An LQ value greater than 1.0 indicates that an occupation group is more concentrated in the region than it is nationally. This is generally regarded as an indication that the region has a comparative advantage relative to a particular occupation group. Occupations are highlighted/shaded on the table if they are in the top 10.

Table 3. Location Quotient (LQ) by Occupation for Local Labor Force, City of Carson and Los Angeles County, 2021.

	Regio	on
Occupation	Carson	L.A.
Civilian employed population 16 years and over		
Management, business, science, and arts occupations:	0.8	1.0
Management, business, and financial occupations:	0.7	1.0
Management occupations	0.7	1.0
Business and financial operations occupations	0.8 0.7	1.0
Computer, engineering, and science occupations: Computer and mathematical occupations	0.7	0.8 0.8
Architecture and engineering occupations	0.9	0.9
Life, physical, and social science occupations	0.6	0.8
Education, legal, community service, arts, and media occupations:	0.8	1.2
Community and social service occupations	1.6	1.0
Legal occupations Educational instruction, and library occupations	0.5 0.6	1.3 0.9
Arts, design, entertainment, sports, and media occupations	0.0	2.4
Healthcare practitioners and technical occupations:	1.2	0.8
Health diagnosing and treating practitioners and other technical occupations	1.1	0.8
Health technologists and technicians	1.5	8.0
Service occupations:	1.1	1.1
Healthcare support occupations	2.1	1.2
Protective service occupations:	1.0	0.9
Firefighting & prevention, & other protective service workers incl. supervisors	1.2	1.1
Law enforcement workers including supervisors Food preparation and serving related occupations	0.9 0.9	0.6 1.0
Building and grounds cleaning and maintenance occupations	0.8	1.2
Personal care and service occupations	0.9	1.1
Sales and office occupations:	1.1	1.0
Sales and related occupations	0.8	1.0
Office and administrative support occupations	1.4	1.0
Natural resources, construction, and maintenance occupations:	0.9	0.9
Farming, fishing, and forestry occupations	0.5	0.5
Construction and extraction occupations	1.0	1.0
Installation, maintenance, and repair occupations	1.0	8.0
Production, transportation, and material moving occupations:	1.3	1.0
Production occupations	1.0	1.0
Transportation occupations	1.6	1.0
Material moving occupations	1.3	1.0

Source: U.S. Census Bureau, American Community Survey, S2401, 2021 5-year Subject Tables; TNDG.

Table 4 provides the percentage in growth in occupations between 2017 and 2021 for the City and County. Occupations are highlighted/shaded on the table if they are in the top 10 in terms of percentage growth during this time period.

Table 4. Percentage Change in Employment by Occupation, City of Carson and Los Angeles County, 2017-2021

	Reg	
Occupation	Carson	L.A.
Civilian employed population 16 years and over	3.3%	1.6%
Management, business, science, and arts occupations:	6.1%	10.3%
Management, business, and financial occupations:	4.2%	10.8%
Management occupations	7.3%	7.8%
Business and financial operations occupations	-0.8%	16.7%
Computer, engineering, and science occupations:	21.9%	17.1%
Computer and mathematical occupations	24.1%	16.6%
Architecture and engineering occupations	26.5%	17.7%
Life, physical, and social science occupations	5.0%	17.4%
Education, legal, community service, arts, and media occupations:	14.5%	8.1%
Community and social service occupations	57.9%	14.0%
Legal occupations	-34.9%	8.4%
Educational instruction, and library occupations	-7.0%	6.4%
Arts, design, entertainment, sports, and media occupations	62.3%	7.7%
Healthcare practitioners and technical occupations:	-6.9%	7.9%
Health diagnosing and treating practitioners and other technical occupations	-9.0%	6.7%
Health technologists and technicians	-3.6%	10.3%
Service occupations:	13.7%	-1.8%
Healthcare support occupations	221.2%	113.4%
Protective service occupations:	-0.2%	3.8%
Firefighting & prevention, & other protective service workers incl. supervisors	-11.3%	2.2%
Law enforcement workers including supervisors	26.2%	7.8%
Food preparation and serving related occupations	-0.3%	-3.6%
Building and grounds cleaning and maintenance occupations	-1.0%	-6.0%
Personal care and service occupations	-47.9%	-41.3%
Sales and office occupations:	-11.4%	-10.2%
Sales and related occupations	-14.0%	-7.6%
Office and administrative support occupations	-9.9%	-12.3%
Natural resources, construction, and maintenance occupations:	22.1%	1.7%
Farming, fishing, and forestry occupations	-38.5%	-11.4%
Construction and extraction occupations	24.3%	3.8%
Installation, maintenance, and repair occupations	31.2%	-0.7%
Production, transportation, and material moving occupations:	3.0%	4.6%
Production occupations	-30.5%	-10.1%
Transportation occupations	53.6%	9.1%
Material moving occupations	19.9%	28.3%

Source: U.S. Census Bureau, American Community Survey, S2401, 2017-2021 5-year Subject Tables; TNDG.

Table 5 provides a summary of a "shift-share" analysis for each occupation that estimates an "expected" change based on national trends. For the 2017-2021 period, If the "Local Share" variable is positive, this indicates Carson performed better than national trends for the respective occupation.

Table 5. Shift Share Summary by Occupation, City of Carson, 2017-2021.

Occupation	Occ Mix Effect	National Growth Effect	Local Share	Actual Change
Civilian employed population 16 years and over				
Management, business, science, and arts occupations: Management, business, and financial occupations: Management occupations Business and financial operations occupations Computer, engineering, and science occupations: Computer and mathematical occupations Architecture and engineering occupations Life, physical, and social science occupations Education, legal, community service, arts, and media Community and social service occupations	1,119	645	(911)	853
	476	238	(495)	219
	179	148	(93)	234
	329	90	(434)	(15)
	279	76	8	363
	129	32	7	168
	87	31	63	181
	55	13	(54)	14
	106	166	250	522
	40	38	399	476
Legal occupations Educational instruction, and library occupations Arts, design, entertainment, sports, and media occupations Healthcare practitioners and technical occupations: Health diagnosing and treating practitioners and other technical Health technologists and technicians	13	18	(170)	(139)
	40	86	(258)	(131)
	18	23	274	316
	202	166	(619)	(251)
	144	103	(450)	(202)
	53	63	(164)	(49)
Service occupations: Healthcare support occupations Protective service occupations: Firefighting & prevention, & other protective service workers Law enforcement workers including supervisors Food preparation and serving related occupations Building and grounds cleaning and maintenance occupations Personal care and service occupations	(420)	353	1,120	1,053
	369	44	1,688	2,101
	(4)	47	(45)	(2)
	(5)	33	(109)	(81)
	(0)	14	65	79
	(169)	103	59	(7)
	(111)	61	36	(14)
	(656)	98	(468)	(1,025)
Sales and office occupations: Sales and related occupations Office and administrative support occupations	(1,400)	<i>542</i>	(482)	(1,340)
	(326)	194	(462)	(594)
	(1,154)	347	60	(746)
Natural resources, construction, and maintenance occupations: Farming, fishing, and forestry occupations Construction and extraction occupations Installation, maintenance, and repair occupations	(60)	138	587	665
	(29)	10	(66)	(85)
	(5)	81	352	428
	(23)	47	298	322
Production, transportation, and material moving occupations: Production occupations Transportation occupations Material moving occupations	574	331	(687)	218
	(223)	164	(1,033)	(1,091)
	70	80	784	934
	852	86	(563)	375

Source: U.S. Census Bureau, American Community Survey, S2401, 2017-2021 5-year Subject Tables; TNDG.

Labor Force Needs of Carson's Target Industry Clusters

This chapter provides a summary of staffing patterns (by occupation) for the key component industries in each of the City's target industry clusters. For each cluster, the occupational breakdown is provided for the key component industries (as identified in the EDSP Industry Cluster Study). The threshold (in terms of total existing jobs) for included occupations varies based on the size of specific clusters. Along with the existing employment totals for occupations in the target clusters, the second table for each cluster provides the following data for each key occupation: median hourly earnings, typical entry-level education, work experience required, and typical on-the-job training requirements.

As fully detailed in the Industry Cluster Study, two broad groups of target clusters have been identified for the EDSP. The first set of target clusters – "Carson's Existing/Emerging Clusters" – represent clusters that already have a sizeable presence (or notable recent growth trend) within Carson. The second set of target clusters – "Dominant/Emerging Regional Clusters" – are industries that while not currently well established in Carson, are very strong in the surrounding (Los Angeles County) region, and thus represent appropriate "aspirational targets" for Carson.

The following tables provide workforce/occupational profiles for each of Carson's target clusters. As noted on the tables, the geographic areas covered by the data are different for the two groups of clusters. For the existing/emerging clusters (which are already present in Carson), city-level data are provided. For the regional clusters (which are not significantly present in Carson), county-level data is provided.

Carson's Existing/Emerging Clusters

Local Logistical Services

Table 6A. Occupations with 10 or more Existing Employees in Carson Local Logistical Services

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
53-7062 Laborers and Freight, Stock, and Material Movers,		
Hand	512	32.4%
53-3033 Light Truck Drivers	404	25.5%
43-5021 Couriers and Messengers	220	13.9%
53-3032 Heavy and Tractor-Trailer Truck Drivers	141	8.9%
53-1047 First-Line Supervisors of Transportation and Material		
Moving Workers, Except Aircraft Cargo Handling Supervisors	48	3.0%
43-5071 Shipping, Receiving, and Inventory Clerks	37	2.3%
53-7011 Conveyor Operators and Tenders	15	1.0%
43-4051 Customer Service Representatives	12	0.8%
43-5011 Cargo and Freight Agents	11	0.7%

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
11-3071 Transportation, Storage, and Distribution Managers	11	0.7%
11-1021 General and Operations Managers	11	0.7%

Table 6B. Wage, Education and Training Characteristics for Key Occupations Local Logistical Services

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training
53-3033 Light Truck Drivers	\$18.55	High school diploma or equivalent	None	Short-term on- the-job training
43-5021 Couriers and Messengers	\$14.60	High school diploma or equivalent	None	Short-term on- the-job training
53-3032 Heavy and Tractor-Trailer Truck Drivers	\$23.05	Postsecondary nondegree award	None	Short-term on- the-job training
53-1047 First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$25.02	High school diploma or equivalent	Less than 5 years	None
43-5071 Shipping, Receiving, and Inventory Clerks	\$17.88	High school diploma or equivalent	None	Short-term on- the-job training
53-7011 Conveyor Operators and Tenders	\$15.20	No formal educational credential	None	Short-term on- the-job training
43-4051 Customer Service Representatives	\$18.39	High school diploma or equivalent	None	Short-term on- the-job training
43-5011 Cargo and Freight Agents	\$22.82	High school diploma or equivalent	None	Short-term on- the-job training
11-3071 Transportation, Storage, and Distribution Managers	\$45.12	High school diploma or equivalent	5 years or more	None
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None

Local Education and Training

Table 7A. Occupations with 50 or more employees in Carson Local Education and Training

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
25-2021 Elementary School Teachers, Except Special Education	528	17.7%
25-9045 Teaching Assistants, Except Postsecondary	398	13.3%
25-2031 Secondary School Teachers, Except Special and Career/Technical Education	296	9.9%
25-3031 Substitute Teachers, Short-Term	199	6.7%
25-2022 Middle School Teachers, Except Special and Career/Technical Education	149	5.0%
37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners	101	3.4%
11-9032 Education Administrators, Kindergarten through Secondary	84	2.8%
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	79	2.6%
25-9099 Educational Instruction and Library Workers, All Other	68	2.3%
25-2052 Special Education Teachers, Kindergarten and Elementary School	62	2.1%
21-1012 Educational, Guidance, and Career Counselors and Advisors	52	1.7%

Table 7B. Wage, Education and Training Characteristics for Key Occupations Local Education and Training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
25-2021 Elementary School Teachers, Except Special Education	\$46.73	Bachelor's degree	None	None
25-9045 Teaching Assistants, Except Postsecondary	\$18.37	Some college, no degree	None	None
25-2031 Secondary School Teachers, Except Special and Career/Technical Education	\$46.33	Bachelor's degree	None	None
25-3031 Substitute Teachers, Short-Term	\$18.69	Bachelor's degree	None	None
25-2022 Middle School Teachers, Except Special and Career/Technical Education	\$47.89	Bachelor's degree	None	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$15.69	No formal educational credential	None	Short-term on- the-job training
11-9032 Education Administrators, Kindergarten through Secondary	\$61.81	Master's degree	5 years or more	None
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$22.19	High school diploma or equivalent	None	Short-term on- the-job training
25-9099 Educational Instruction and Library Workers, All Other	\$23.54	Bachelor's degree	None	None
25-2052 Special Education Teachers, Kindergarten and Elementary School	\$37.71	Bachelor's degree	None	None
21-1012 Educational, Guidance, and Career Counselors and Advisors	\$35.07	Master's degree	None	None

Local Household Goods and Services

Table 8A. Occupations with 20 or more employees in Carson Local Household Goods and Services

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
37-3011 Landscaping and Groundskeeping Workers	400	39.5%
41-2031 Retail Salespersons	116	11.5%
37-1012 First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	58	5.7%
41-2011 Cashiers	40	3.9%
41-1011 First-Line Supervisors of Retail Sales Workers	35	3.5%
37-3013 Tree Trimmers and Pruners	34	3.4%
53-7062 Laborers and Freight, Stock, and Material Movers,		
Hand	25	2.5%
11-1021 General and Operations Managers	24	2.4%
53-7065 Stockers and Order Fillers	21	2.0%

Table 8B. Wage, Education and Training Characteristics for Key Occupations Local Household Goods and Services

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
37-3011 Landscaping and Groundskeeping Workers	\$16.98	No formal educational credential	None	Short-term on- the-job training
41-2031 Retail Salespersons	\$14.87	No formal educational credential	None	Short-term on- the-job training
37-1012 First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	\$21.80	High school diploma or equivalent	Less than 5 years	None
41-2011 Cashiers	\$14.50	No formal educational credential	None	Short-term on- the-job training
41-1011 First-Line Supervisors of Retail Sales Workers	\$20.07	High school diploma or equivalent	Less than 5 years	None
37-3013 Tree Trimmers and Pruners	\$23.50	High school diploma or equivalent	None	Short-term on- the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None
53-7065 Stockers and Order Fillers	\$15.92	High school diploma or equivalent	None	Short-term on- the-job training

Aerospace Vehicles and Defense

Table 9A. Occupations with 10 or more employees Aerospace Vehicles and Defense

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
51-2028 Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	63	8.4%
15-1252 Software Developers	48	6.4%
51-2098 Miscellaneous Assemblers and Fabricators	34	4.5%
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	26	3.5%
17-2071 Electrical Engineers	25	3.3%
17-2141 Mechanical Engineers	19	2.6%
17-2011 Aerospace Engineers	19	2.6%
17-2112 Industrial Engineers	19	2.5%
11-9041 Architectural and Engineering Managers	18	2.4%
51-4041 Machinists	17	2.3%
17-2199 Engineers, All Other	16	2.1%
13-1028 Buyers and Purchasing Agents	14	1.9%
43-5061 Production, Planning, and Expediting Clerks	14	1.8%
13-1199 Business Operations Specialists, All Other	13	1.7%
11-1021 General and Operations Managers	13	1.7%
17-2072 Electronics Engineers, Except Computer	13	1.7%
51-1011 First-Line Supervisors of Production and Operating Workers	12	1.6%
17-3023 Electrical and Electronic Engineering Technologists and Technicians	11	1.4%
43-5071 Shipping, Receiving, and Inventory Clerks	10	1.4%

Table 9B. Wage, Education and Training Characteristics for Key Occupations Aerospace Vehicles and Defense

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
51-2028 Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	\$17.26	High school diploma or equivalent	None	Moderate-term on-the-job training
15-1252 Software Developers	\$61.57	Bachelor's degree	None	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
51-2098 Miscellaneous Assemblers and Fabricators	\$17.18	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	\$18.72	High school diploma or equivalent	None	Moderate-term on-the-job training
17-2071 Electrical Engineers	\$58.36	Bachelor's degree	None	None
17-2141 Mechanical Engineers	\$48.10	Bachelor's degree	None	None
17-2011 Aerospace Engineers	\$62.85	Bachelor's degree	None	None
17-2112 Industrial Engineers	\$47.80	Bachelor's degree	None	None
11-9041 Architectural and Engineering Managers	\$78.26	Bachelor's degree	5 years or more	None
51-4041 Machinists	\$22.64	High school diploma or equivalent	None	Long-term on- the-job training
17-2199 Engineers, All Other	\$49.24	Bachelor's degree	None	None
13-1028 Buyers and Purchasing Agents	\$30.51	Bachelor's degree	None	Moderate-term on-the-job training
43-5061 Production, Planning, and Expediting Clerks	\$23.06	High school diploma or equivalent	None	Moderate-term on-the-job training
13-1199 Business Operations Specialists, All Other	\$31.80	Bachelor's degree	None	None
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None
17-2072 Electronics Engineers, Except Computer	\$55.30	Bachelor's degree	None	None
51-1011 First-Line Supervisors of Production and Operating Workers	\$29.12	High school diploma or equivalent	Less than 5 years	None
17-3023 Electrical and Electronic Engineering Technologists and Technicians	\$29.94	Associate's degree	None	None
43-5071 Shipping, Receiving, and Inventory Clerks	\$17.88	High school diploma or equivalent	None	Short-term on- the-job training

Business Services

Table 10A. Occupations with 20 or more employees in Carson Region¹ Business Services

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
13-1111 Management Analysts	732	17.6%
13-1161 Market Research Analysts and Marketing Specialists	163	3.9%
11-9199 Managers, All Other	152	3.6%
15-1252 Software Developers	137	3.3%
17-2051 Civil Engineers	123	2.9%
13-1199 Business Operations Specialists, All Other	118	2.8%
11-1021 General and Operations Managers	98	2.4%
13-1082 Project Management Specialists	83	2.0%
13-2011 Accountants and Auditors	82	2.0%
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	69	1.6%
11-3031 Financial Managers	65	1.6%
11-3021 Computer and Information Systems Managers	64	1.5%
11-2021 Marketing Managers	64	1.5%
15-1211 Computer Systems Analysts	62	1.5%
43-3031 Bookkeeping, Accounting, and Auditing Clerks	61	1.5%
15-1299 Computer Occupations, All Other	59	1.4%
43-4051 Customer Service Representatives	56	1.3%
11-1011 Chief Executives	52	1.2%
13-1071 Human Resources Specialists	51	1.2%

Table 10B. Wage, Education and Training Characteristics for Key Occupations Business Services

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
13-1111 Management Analysts	\$46.07	Bachelor's degree	Less than 5 years	None
13-1161 Market Research Analysts and Marketing Specialists	\$32.96	Bachelor's degree	None	None

¹ The Carson region is defined by zip codes that border the City of Carson and that cover a small portion of the City's incorporated boundaries. The Carson Region includes zip codes 90220, 90247, 90248, 90502, 90710, 90744, and 90810.

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-9199 Managers, All Other	\$35.33	Bachelor's degree	Less than 5 years	None
15-1252 Software Developers	\$61.39	Bachelor's degree	None	None
17-2051 Civil Engineers	\$47.84	Bachelor's degree	None	None
13-1199 Business Operations Specialists, All Other	\$31.78	Bachelor's degree	None	None
11-1021 General and Operations Managers	\$51.23	Bachelor's degree	5 years or more	None
13-1082 Project Management Specialists	\$46.47	Bachelor's degree	None	None
13-2011 Accountants and Auditors	\$38.78	Bachelor's degree	None	None
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$29.43	High school diploma or equivalent	None	Moderate-term on-the-job training
11-3031 Financial Managers	\$72.44	Bachelor's degree	5 years or more	None
11-3021 Computer and Information Systems Managers	\$78.64	Bachelor's degree	5 years or more	None
11-2021 Marketing Managers	\$65.01	Bachelor's degree	5 years or more	None
15-1211 Computer Systems Analysts	\$50.03	Bachelor's degree	None	None
43-3031 Bookkeeping, Accounting, and Auditing Clerks	\$23.03	Some college, no degree	None	Moderate-term on-the-job training
15-1299 Computer Occupations, All Other	\$38.19	Bachelor's degree	None	None
43-4051 Customer Service Representatives	\$18.40	High school diploma or equivalent	None	Short-term on- the-job training
11-1011 Chief Executives	\$76.26	Bachelor's degree	5 years or more	None
13-1071 Human Resources Specialists	\$36.00	Bachelor's degree	None	None

Construction Products and Services

Table 11A. Occupations with 2% or more of total jobs in industry groups in Carson Construction Products and Services

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
11-9199 Managers, All Other	<10	20.5%
47-2152 Plumbers, Pipefitters, and Steamfitters	<10	10.0%
47-2061 Construction Laborers	<10	6.2%
11-9021 Construction Managers	<10	3.3%
47-2031 Carpenters	<10	3.3%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	<10	3.2%
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	<10	2.9%
51-8031 Water and Wastewater Treatment Plant and System Operators	<10	2.6%
49-3041 Farm Equipment Mechanics and Service Technicians	<10	2.5%
11-1011 Chief Executives	<10	2.3%

Table 11B. Wage, Education and Training Characteristics for Key Occupations Construction Products and Services

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-9199 Managers, All Other	\$41.29	Bachelor's degree	Less than 5 years	None
47-2152 Plumbers, Pipefitters, and Steamfitters	\$27.63	High school diploma or equivalent	None	Apprenticeship
47-2061 Construction Laborers	\$20.96	No formal educational credential	None	Short-term on- the-job training
11-9021 Construction Managers	\$38.47	Bachelor's degree	None	Moderate-term on-the-job training
47-2031 Carpenters	\$26.28	High school diploma or equivalent	None	Apprenticeship
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$29.42	High school diploma or equivalent	None	Moderate-term on-the-job training
51-8031 Water and Wastewater Treatment Plant and System Operators	\$36.91	High school diploma or equivalent	None	Long-term on- the-job training
49-3041 Farm Equipment Mechanics and Service Technicians	\$22.76	High school diploma or equivalent	None	Long-term on- the-job training
11-1011 Chief Executives	\$83.54	Bachelor's degree	5 years or more	None

Distribution and Electronic Commerce

Table 12A. Occupations with 10 or more employees in Carson Distribution and Electronic Commerce

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	57	14.5%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	27	6.7%
53-7065 Stockers and Order Fillers	18	4.6%
53-3032 Heavy and Tractor-Trailer Truck Drivers	13	3.4%
11-1021 General and Operations Managers	11	2.9%
11-2022 Sales Managers	11	2.8%
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	10	2.6%

Table 12B. Wage, Education and Training Characteristics for Key Occupations
Distribution and Electronic Commerce

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$29.05	High school diploma or equivalent	None	Moderate-term on-the-job training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training
53-7065 Stockers and Order Fillers	\$15.92	High school diploma or equivalent	None	Short-term on- the-job training
53-3032 Heavy and Tractor-Trailer Truck Drivers	\$23.05	Postsecondary nondegree award	None	Short-term on- the-job training
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None
11-2022 Sales Managers	\$58.76	Bachelor's degree	Less than 5 years	None
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$38.85	Bachelor's degree	None	Moderate-term on-the-job training

Downstream Chemical Products

Table 13A. Occupations with 2% or more of total jobs in industry groups in Carson Downstream Chemical Products

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
51-9111 Packaging and Filling Machine Operators and Tenders	13	11.1%
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	<10	8.3%
51-9011 Chemical Equipment Operators and Tenders	<10	5.4%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	<10	4.6%
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	<10	4.4%
43-5071 Shipping, Receiving, and Inventory Clerks	<10	3.3%
51-1011 First-Line Supervisors of Production and Operating Workers	<10	3.2%
51-2098 Miscellaneous Assemblers and Fabricators	<10	2.9%
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	<10	2.9%
11-9199 Managers, All Other	<10	2.6%
11-1021 General and Operations Managers	<10	2.2%
19-2031 Chemists	<10	2.1%
51-9199 Production Workers, All Other	<10	2.0%

Table 13B. Wage, Education and Training Characteristics for Key Occupations Downstream Chemical Products

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
51-9111 Packaging and Filling Machine Operators and Tenders	\$17.70	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	\$18.57	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9011 Chemical Equipment Operators and Tenders	\$22.93	High school diploma or equivalent	None	Moderate-term on-the-job training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$29.05	High school diploma or equivalent	None	Moderate-term on-the-job training
43-5071 Shipping, Receiving, and Inventory Clerks	\$17.88	High school diploma or equivalent	None	Short-term on- the-job training
51-1011 First-Line Supervisors of Production and Operating Workers	\$29.12	High school diploma or equivalent	Less than 5 years	None
51-2098 Miscellaneous Assemblers and Fabricators	\$17.18	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	\$18.72	High school diploma or equivalent	None	Moderate-term on-the-job training
11-9199 Managers, All Other	\$41.29	Bachelor's degree	Less than 5 years	None
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None
19-2031 Chemists	\$35.74	Bachelor's degree	None	None
51-9199 Production Workers, All Other	\$17.61	High school diploma or equivalent	None	Moderate-term on-the-job training

Education and Knowledge Creation

Table 14A. Occupations with 20 or more employees Education and Knowledge Creation

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
25-1099 Postsecondary Teachers	400	27.1%
43-9061 Office Clerks, General	67	4.6%
25-9044 Teaching Assistants, Postsecondary	64	4.3%
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	56	3.8%
25-9099 Educational Instruction and Library Workers, All Other	55	3.7%
11-9033 Education Administrators, Postsecondary	47	3.2%
37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners	39	2.6%
13-1199 Business Operations Specialists, All Other	36	2.4%
25-3099 Teachers and Instructors, All Other	26	1.8%
21-1012 Educational, Guidance, and Career Counselors and Advisors	25	1.7%
49-9071 Maintenance and Repair Workers, General	21	1.4%
25-3041 Tutors	20	1.4%
43-9199 Office and Administrative Support Workers, All Other	20	1.3%

Table 14B. Wage, Education and Training Characteristics for Key Occupations Education and Knowledge Creation

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
25-1099 Postsecondary Teachers	\$46.59	Doctoral or professional degree	None	None
43-9061 Office Clerks, General	\$18.44	High school diploma or equivalent	None	Short-term on- the-job training
25-9044 Teaching Assistants, Postsecondary	\$16.92	Bachelor's degree	None	None
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$22.19	High school diploma or equivalent	None	Short-term on- the-job training
25-9099 Educational Instruction and Library Workers, All Other	\$23.54	Bachelor's degree	None	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-9033 Education Administrators, Postsecondary	\$57.73	Master's degree	Less than 5 years	None
37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$15.69	No formal educational credential	None	Short-term on- the-job training
13-1199 Business Operations Specialists, All Other	\$31.80	Bachelor's degree	None	None
25-3099 Teachers and Instructors, All Other	\$26.69	Bachelor's degree	None	None
21-1012 Educational, Guidance, and Career Counselors and Advisors	\$35.07	Master's degree	None	None
49-9071 Maintenance and Repair Workers, General	\$22.43	High school diploma or equivalent	None	Moderate-term on-the-job training
25-3041 Tutors	\$18.42	Bachelor's degree	None	None
43-9199 Office and Administrative Support Workers, All Other	\$22.97	High school diploma or equivalent	None	Short-term on- the-job training

Environmental Services

Table 15A. Occupations with 2% of total jobs in industry groups in Carson Environmental Services

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
53-7081 Refuse and Recyclable Material Collectors	22	24.0%
53-3032 Heavy and Tractor-Trailer Truck Drivers	17	18.4%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	<10	8.4%
47-4041 Hazardous Materials Removal Workers	<10	5.4%
43-9061 Office Clerks, General	<10	3.6%
53-1047 First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	<10	3.2%
11-1021 General and Operations Managers	<10	2.7%
49-3031 Bus and Truck Mechanics and Diesel Engine Specialists	<10	2.3%

Table 15B. Wage, Education and Training Characteristics for Key Occupations Environmental Services

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-7081 Refuse and Recyclable Material Collectors	\$29.07	No formal educational credential	None	Short-term on- the-job training
53-3032 Heavy and Tractor-Trailer Truck Drivers	\$23.05	Postsecondary nondegree award	None	Short-term on- the-job training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training
47-4041 Hazardous Materials Removal Workers	\$22.50	High school diploma or equivalent	None	Moderate-term on-the-job training
43-9061 Office Clerks, General	\$18.44	High school diploma or equivalent	None	Short-term on- the-job training
53-1047 First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$25.02	High school diploma or equivalent	Less than 5 years	None
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
49-3031 Bus and Truck Mechanics and Diesel Engine Specialists	\$28.47	High school diploma or equivalent	None	Long-term on- the-job training

Food Processing and Manufacturing

Table 16A. Occupations with 10 or more employees in Carson Food Processing and Manufacturing

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
53-3032 Heavy and Tractor-Trailer Truck Drivers	53	9.5%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	30	5.3%
51-9111 Packaging and Filling Machine Operators and Tenders	25	4.4%
51-9195 Molders, Shapers, and Casters, Except Metal and Plastic	23	4.2%
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	21	3.7%
51-2098 Miscellaneous Assemblers and Fabricators	20	3.6%
51-1011 First-Line Supervisors of Production and Operating Workers	13	2.3%
35-3011 Bartenders	13	2.3%
53-7051 Industrial Truck and Tractor Operators	12	2.2%
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	11	2.0%
51-9041 Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	11	2.0%
11-1021 General and Operations Managers	11	2.0%
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	10	1.8%

Table 16B. Wage, Education and Training Characteristics for Key Occupations Food Processing and Manufacturing

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-3032 Heavy and Tractor-Trailer Truck Drivers	\$23.05	Postsecondary nondegree award	None	Short-term on- the-job training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training
51-9111 Packaging and Filling Machine Operators and Tenders	\$17.70	High school diploma or equivalent	None	Moderate-term on-the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
51-9195 Molders, Shapers, and Casters, Except Metal and Plastic	\$17.91	High school diploma or equivalent	None	Long-term on- the-job training
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$29.05	High school diploma or equivalent	None	Moderate-term on-the-job training
51-2098 Miscellaneous Assemblers and Fabricators	\$17.18	High school diploma or equivalent	None	Moderate-term on-the-job training
51-1011 First-Line Supervisors of Production and Operating Workers	\$29.12	High school diploma or equivalent	Less than 5 years	None
35-3011 Bartenders	\$15.01	No formal educational credential	None	Short-term on- the-job training
53-7051 Industrial Truck and Tractor Operators	\$18.43	No formal educational credential	None	Short-term on- the-job training
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	\$18.72	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9041 Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	\$17.47	High school diploma or equivalent	None	Moderate-term on-the-job training
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	\$18.57	High school diploma or equivalent	None	Moderate-term on-the-job training

Oil & Gas Production & Transportation

Table 17A. Occupations with 20 or more employees in Carson Region Oil & Gas Production & Transportation

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
51-8093 Petroleum Pump System Operators, Refinery Operators, and Gaugers	177	14.4%
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	58	4.7%
51-1011 First-Line Supervisors of Production and Operating Workers	52	4.2%
51-9199 Production Workers, All Other	40	3.2%
49-9041 Industrial Machinery Mechanics	37	3.0%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	35	2.9%
53-3032 Heavy and Tractor-Trailer Truck Drivers	30	2.4%
53-7051 Industrial Truck and Tractor Operators	25	2.1%
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	25	2.1%
11-3051 Industrial Production Managers	23	1.9%
13-1199 Business Operations Specialists, All Other	21	1.7%
19-4031 Chemical Technicians	20	1.6%

Table 17B. Wage, Education and Training Characteristics for Key Occupations
Oil & Gas Production & Transportation

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
51-8093 Petroleum Pump System Operators, Refinery Operators, and Gaugers	\$46.95	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	\$18.57	High school diploma or equivalent	None	Moderate-term on-the-job training
51-1011 First-Line Supervisors of Production and Operating Workers	\$29.07	High school diploma or equivalent	Less than 5 years	None
51-9199 Production Workers, All Other	\$17.71	High school diploma or equivalent	None	Moderate-term on-the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
49-9041 Industrial Machinery Mechanics	\$28.75	High school diploma or equivalent	None	Long-term on- the-job training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.51	No formal educational credential	None	Short-term on- the-job training
53-3032 Heavy and Tractor-Trailer Truck Drivers	\$23.15	Postsecondary nondegree award	None	Short-term on- the-job training
53-7051 Industrial Truck and Tractor Operators	\$18.45	No formal educational credential	None	Short-term on- the-job training
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	\$18.73	High school diploma or equivalent	None	Moderate-term on-the-job training
11-3051 Industrial Production Managers	\$47.83	Bachelor's degree	5 years or more	None
13-1199 Business Operations Specialists, All Other	\$31.78	Bachelor's degree	None	None
19-4031 Chemical Technicians	\$22.83	Associate's degree	None	Moderate-term on-the-job training

Performing Arts Environmental Services

Table 18A. Occupations with 2% of total jobs in industry groups in Carson Performing Arts Environmental Services

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
13-1011 Agents and Business Managers of Artists, Performers, and Athletes	57	24.4%
27-3043 Writers and Authors	21	9.1%
27-1013 Fine Artists, Including Painters, Sculptors, and Illustrators	16	7.0%
27-2042 Musicians and Singers	14	6.1%
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	14	6.0%
27-2012 Producers and Directors	<10	3.3%
27-1012 Craft Artists	<10	3.1%
11-1021 General and Operations Managers	<10	2.6%
43-9061 Office Clerks, General	<10	2.6%
27-2011 Actors	<10	2.1%

Table 18B. Wage, Education and Training Characteristics for Key Occupations Performing Arts Environmental Services

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
13-1011 Agents and Business Managers of Artists, Performers, and Athletes	\$47.01	Bachelor's degree	Less than 5 years	None
27-3043 Writers and Authors	\$34.13	Bachelor's degree	None	Long-term on- the-job training
27-1013 Fine Artists, Including Painters, Sculptors, and Illustrators	\$12.55	Bachelor's degree	None	Long-term on- the-job training
27-2042 Musicians and Singers	\$32.80	No formal educational credential	None	Long-term on- the-job training
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$22.19	High school diploma or equivalent	None	Short-term on- the-job training
27-2012 Producers and Directors	\$56.50	Bachelor's degree	Less than 5 years	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
27-1012 Craft Artists	\$6.62	No formal educational credential	None	Long-term on- the-job training
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None
43-9061 Office Clerks, General	\$18.44	High school diploma or equivalent	None	Short-term on- the-job training
27-2011 Actors	\$29.67	Some college, no degree	None	Long-term on- the-job training

Transportation and Logistics

Table 19A. Occupations with 20 or more employees in Carson Transportation and Logistics

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
53-3032 Heavy and Tractor-Trailer Truck Drivers	520	38.0%
43-5011 Cargo and Freight Agents	145	10.6%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	89	6.5%
53-3033 Light Truck Drivers	47	3.4%
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	47	3.4%
11-9199 Managers, All Other	39	2.8%
11-1021 General and Operations Managers	28	2.0%
43-5032 Dispatchers, Except Police, Fire, and Ambulance	28	2.0%
43-1011 First-Line Supervisors of Office and Administrative Support Workers	25	1.8%
43-3031 Bookkeeping, Accounting, and Auditing Clerks	24	1.8%
43-4051 Customer Service Representatives	23	1.7%
43-9061 Office Clerks, General	22	1.6%
53-1047 First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	21	1.6%

Table 19B. Wage, Education and Training Characteristics for Key Occupations Transportation and Logistics

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-3032 Heavy and Tractor-Trailer Truck Drivers	\$23.05	Postsecondary nondegree award	None	Short-term on- the-job training
43-5011 Cargo and Freight Agents	\$22.82	High school diploma or equivalent	None	Short-term on- the-job training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training
53-3033 Light Truck Drivers	\$18.55	High school diploma or equivalent	None	Short-term on- the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$29.42	High school diploma or equivalent	None	Moderate-term on-the-job training
11-9199 Managers, All Other	\$41.29	Bachelor's degree	Less than 5 years	None
11-1021 General and Operations Managers	\$51.38	Bachelor's degree	5 years or more	None
43-5032 Dispatchers, Except Police, Fire, and Ambulance	\$22.03	High school diploma or equivalent	None	Moderate-term on-the-job training
43-1011 First-Line Supervisors of Office and Administrative Support Workers	\$29.96	High school diploma or equivalent	Less than 5 years	None
43-3031 Bookkeeping, Accounting, and Auditing Clerks	\$23.02	Some college, no degree	None	Moderate-term on-the-job training
43-4051 Customer Service Representatives	\$18.39	High school diploma or equivalent	None	Short-term on- the-job training
43-9061 Office Clerks, General	\$18.44	High school diploma or equivalent	None	Short-term on- the-job training
53-1047 First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$25.02	High school diploma or equivalent	Less than 5 years	None

Vulcanized and Fired Materials

Table 20A. Occupations with 2% of total jobs in industry groups in Carson Vulcanized and Fired Materials

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
53-3032 Heavy and Tractor-Trailer Truck Drivers	11	12.4%
51-9195 Molders, Shapers, and Casters, Except Metal and Plastic	<10	7.0%
51-2098 Miscellaneous Assemblers and Fabricators	<10	5.2%
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	<10	4.5%
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	<10	3.0%
51-9041 Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	<10	2.7%
27-1012 Craft Artists	<10	2.6%
51-1011 First-Line Supervisors of Production and Operating Workers	<10	2.6%
51-9032 Cutting and Slicing Machine Setters, Operators, and Tenders	<10	2.5%
51-9199 Production Workers, All Other	<10	2.4%
11-9199 Managers, All Other	<10	2.3%
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	<10	2.3%
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	<10	2.1%

Table 20B. Wage, Education and Training Characteristics for Key Occupations Vulcanized and Fired Materials

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-3032 Heavy and Tractor-Trailer Truck Drivers	\$23.05	Postsecondary nondegree award	None	Short-term on- the-job training
51-9195 Molders, Shapers, and Casters, Except Metal and Plastic	\$17.91	High school diploma or equivalent	None	Long-term on- the-job training
51-2098 Miscellaneous Assemblers and Fabricators	\$17.18	High school diploma or equivalent	None	Moderate-term on-the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	\$17.50	No formal educational credential	None	Short-term on- the-job training
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$29.05	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9041 Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	\$17.47	High school diploma or equivalent	None	Moderate-term on-the-job training
27-1012 Craft Artists	\$6.62	No formal educational credential	None	Long-term on- the-job training
51-1011 First-Line Supervisors of Production and Operating Workers	\$29.12	High school diploma or equivalent	Less than 5 years	None
51-9032 Cutting and Slicing Machine Setters, Operators, and Tenders	\$17.51	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9199 Production Workers, All Other	\$17.61	High school diploma or equivalent	None	Moderate-term on-the-job training
11-9199 Managers, All Other	\$41.29	Bachelor's degree	Less than 5 years	None
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	\$18.57	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	\$18.72	High school diploma or equivalent	None	Moderate-term on-the-job training

Dominant/Emerging Regional Clusters

Marketing, Design, and Publishing

Table 21A. Occupations with 2% of total jobs in industry groups in Los Angeles County Marketing, Design, and Publishing

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
13-1111 Management Analysts	10,628	12.6%
27-1024 Graphic Designers	7,171	8.5%
13-1161 Market Research Analysts and Marketing Specialists	4,406	5.2%
11-9199 Managers, All Other	3,391	4.0%
27-1025 Interior Designers	3,373	4.0%
27-1029 Designers, All Other	2,216	2.6%
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	2,171	2.6%
27-1011 Art Directors	2,094	2.5%
11-1021 General and Operations Managers	2,053	2.4%
15-1252 Software Developers	2,053	2.4%
41-3011 Advertising Sales Agents	1,770	2.1%

Table 21B. Wage, Education and Training Characteristics for Key Occupations Marketing, Design, and Publishing

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
13-1111 Management Analysts	\$46.47	Bachelor's degree	Less than 5 years	None
27-1024 Graphic Designers	\$27.79	Bachelor's degree	None	None
13-1161 Market Research Analysts and Marketing Specialists	\$33.21	Bachelor's degree	None	None
11-9199 Managers, All Other	\$39.52	Bachelor's degree	Less than 5 years	None
27-1025 Interior Designers	\$29.17	Bachelor's degree	None	None
27-1029 Designers, All Other	\$27.50	Bachelor's degree	None	None
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$29.44	High school diploma or equivalent	None	Moderate-term on-the-job training
27-1011 Art Directors	\$39.07	Bachelor's degree	5 years or more	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-1021 General and Operations Managers	\$51.26	Bachelor's degree	5 years or more	None
15-1252 Software Developers	\$61.13	Bachelor's degree	None	None
41-3011 Advertising Sales Agents	\$29.89	High school diploma or equivalent	None	Moderate-term on-the-job training

Music and Sound Recording

Table 22A. Occupations with 100 or more employees in Los Angeles County Music and Sound Recording

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
27-4014 Sound Engineering Technicians	2,196	26.3%
27-2041 Music Directors and Composers	1,061	12.7%
27-2012 Producers and Directors	645	7.7%
11-9199 Managers, All Other	582	7.0%
27-2042 Musicians and Singers	356	4.3%
27-4011 Audio and Video Technicians	282	3.4%
13-1161 Market Research Analysts and Marketing Specialists	178	2.1%
11-1021 General and Operations Managers	165	2.0%
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	150	1.00/
,	158	1.9%
13-1199 Business Operations Specialists, All Other	112	1.3%
27-3041 Editors	112	1.3%
13-2011 Accountants and Auditors	100	1.2%

Table 22B. Wage, Education and Training Characteristics for Key Occupations Music and Sound Recording

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
27-4014 Sound Engineering Technicians	\$30.85	Postsecondary nondegree award	None	Short-term on- the-job training
27-2041 Music Directors and Composers	\$25.94	Bachelor's degree	Less than 5 years	None
27-2012 Producers and Directors	\$56.17	Bachelor's degree	Less than 5 years	None
11-9199 Managers, All Other	\$39.52	Bachelor's degree	Less than 5 years	None
27-2042 Musicians and Singers	\$26.50	No formal educational credential	None	Long-term on- the-job training
27-4011 Audio and Video Technicians	\$28.48	Postsecondary nondegree award	None	Short-term on- the-job training
13-1161 Market Research Analysts and Marketing Specialists	\$33.21	Bachelor's degree	None	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-1021 General and Operations Managers	\$51.26	Bachelor's degree	5 years or more	None
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$29.44	High school diploma or equivalent	None	Moderate-term on-the-job training
13-1199 Business Operations Specialists, All Other	\$31.84	Bachelor's degree	None	None
27-3041 Editors	\$31.66	Bachelor's degree	Less than 5 years	None
13-2011 Accountants and Auditors	\$38.78	Bachelor's degree	None	None

Video Production and Distribution

Table 23A. Occupations with 2,000 or more employees in Los Angeles County Video Production and Distribution

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
27-2012 Producers and Directors	35,319	22.6%
27-4032 Film and Video Editors	13,371	8.5%
27-2011 Actors	6,954	4.4%
27-4031 Camera Operators, Television, Video, and Film	5,512	3.5%
27-4099 Media and Communication Equipment Workers, All Other	4,891	3.1%
11-1021 General and Operations Managers	4,788	3.1%
27-1014 Special Effects Artists and Animators	4,527	2.9%
27-4011 Audio and Video Technicians	4,218	2.7%
27-3043 Writers and Authors	3,425	2.2%
13-2011 Accountants and Auditors	3,416	2.2%
27-3099 Media and Communication Workers, All Other	2,736	1.7%
43-5061 Production, Planning, and Expediting Clerks	2,583	1.6%
27-3041 Editors	2,575	1.6%
11-9199 Managers, All Other	2,408	1.5%
13-1161 Market Research Analysts and Marketing Specialists	2,345	1.5%
11-2021 Marketing Managers	2,285	1.5%
13-1082 Project Management Specialists	2,268	1.4%
27-1011 Art Directors	2,117	1.4%

Table 23B. Wage, Education and Training Characteristics for Key Occupations Video Production and Distribution

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
27-2012 Producers and Directors	\$56.17			
27-4032 Film and Video Editors	\$30.29	Bachelor's degree	Less than 5 years	None
27-2011 Actors	\$30.00	Bachelor's degree	None	None
27-4031 Camera Operators, Television, Video, and Film	\$23.99	Some college, no degree	None	Long-term on- the-job training
27-4099 Media and Communication Equipment Workers, All Other	\$23.37	Bachelor's degree	None	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-1021 General and Operations Managers	\$51.26	High school diploma or equivalent	None	Short-term on- the-job training
27-1014 Special Effects Artists and Animators	\$34.14	Bachelor's degree	5 years or more	None
27-4011 Audio and Video Technicians	\$28.48	Bachelor's degree	None	None
27-3043 Writers and Authors	\$37.18	Postsecondary nondegree award	None	Short-term on- the-job training
13-2011 Accountants and Auditors	\$38.78	Bachelor's degree	None	Long-term on- the-job training
27-3099 Media and Communication Workers, All Other	\$23.52	Bachelor's degree	None	None
43-5061 Production, Planning, and Expediting Clerks	\$23.00	High school diploma or equivalent	None	Short-term on- the-job training
27-3041 Editors	\$31.66	High school diploma or equivalent	None	Moderate-term on-the-job training
11-9199 Managers, All Other	\$39.52	Bachelor's degree	Less than 5 years	None
13-1161 Market Research Analysts and Marketing Specialists	\$33.21	Bachelor's degree	Less than 5 years	None
11-2021 Marketing Managers	\$66.62	Bachelor's degree	None	None
13-1082 Project Management Specialists	\$46.46	Bachelor's degree	5 years or more	None
27-1011 Art Directors	\$39.07	Bachelor's degree	None	None

Information Technology and Analytical Instruments

Table 24A. Occupations with 300 or more employees in Los Angeles County Information Technology and Analytical Instruments

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
15-1252 Software Developers	3,199	15.2%
51-2028 Electrical, Electronic, and Electromechanical		
Assemblers, Except Coil Winders, Tapers, and Finishers	911	4.3%
15-1232 Computer User Support Specialists	780	3.7%
11-3021 Computer and Information Systems Managers	772	3.7%
13-1161 Market Research Analysts and Marketing Specialists	663	3.1%
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	585	2.8%
43-4051 Customer Service Representatives	526	2.5%
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	509	2.4%
11-2022 Sales Managers	486	2.3%
11-1021 General and Operations Managers	482	2.3%
15-1299 Computer Occupations, All Other	460	2.2%
15-1253 Software Quality Assurance Analysts and Testers	443	2.1%
13-1199 Business Operations Specialists, All Other	345	1.6%
13-1111 Management Analysts	324	1.5%
13-1082 Project Management Specialists	323	1.5%
51-2098 Miscellaneous Assemblers and Fabricators	318	1.5%
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	313	1.5%
15-1211 Computer Systems Analysts	300	1.4%

Table 24B. Wage, Education and Training Characteristics for Key Occupations Information Technology and Analytical Instruments

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
15-1252 Software Developers	\$61.13	Bachelor's degree	None	None
51-2028 Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	\$17.26	High school diploma or equivalent	None	Moderate-term on-the-job training
15-1232 Computer User Support Specialists	\$29.34	Some college, no degree	None	None

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-3021 Computer and Information Systems Managers	\$78.54	Bachelor's degree	5 years or more	None
13-1161 Market Research Analysts and Marketing Specialists	\$33.21	Bachelor's degree	None	None
41-3091 Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$29.44	High school diploma or equivalent	None	Moderate-term on-the-job training
43-4051 Customer Service Representatives	\$18.38	High school diploma or equivalent	None	Short-term on- the-job training
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$38.80	Bachelor's degree	None	Moderate-term on-the-job training
11-2022 Sales Managers	\$58.46	Bachelor's degree	Less than 5 years	None
11-1021 General and Operations Managers	\$51.26	Bachelor's degree	5 years or more	None
15-1299 Computer Occupations, All Other	\$38.03	Bachelor's degree	None	None
15-1253 Software Quality Assurance Analysts and Testers	\$48.23	Bachelor's degree	None	None
13-1199 Business Operations Specialists, All Other	\$31.84	Bachelor's degree	None	None
13-1111 Management Analysts	\$46.47	Bachelor's degree	Less than 5 years	None
13-1082 Project Management Specialists	\$46.46	Bachelor's degree	None	None
51-2098 Miscellaneous Assemblers and Fabricators	\$17.17	High school diploma or equivalent	None	Moderate-term on-the-job training
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	\$18.76	High school diploma or equivalent	None	Moderate-term on-the-job training
15-1211 Computer Systems Analysts	\$49.88	Bachelor's degree	None	None

Insurance Services

Table 25A. Occupations with 200 or more employees in Los Angeles County Insurance Services

Occupations	Employment in Industry Groups	% of Total Jobs in Industry Groups
41-3021 Insurance Sales Agents	2,353	11.2%
13-1031 Claims Adjusters, Examiners, and Investigators	2,222	10.6%
43-4051 Customer Service Representatives	1,653	7.9%
43-9041 Insurance Claims and Policy Processing Clerks	1,628	7.8%
29-1141 Registered Nurses	791	3.8%
13-1199 Business Operations Specialists, All Other	715	3.4%
13-2053 Insurance Underwriters	604	2.9%
15-1252 Software Developers	571	2.7%
43-1011 First-Line Supervisors of Office and Administrative Support Workers	500	2.4%
13-1111 Management Analysts	495	2.4%
11-9199 Managers, All Other	489	2.3%
11-3031 Financial Managers	413	2.0%
15-1211 Computer Systems Analysts	369	1.8%
11-3021 Computer and Information Systems Managers	337	1.6%
11-1021 General and Operations Managers	310	1.5%
13-2011 Accountants and Auditors	293	1.4%
15-1299 Computer Occupations, All Other	267	1.3%
13-1041 Compliance Officers	265	1.3%
13-1161 Market Research Analysts and Marketing Specialists	264	1.3%
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	227	1.1%
43-9061 Office Clerks, General	220	1.1%
43-3031 Bookkeeping, Accounting, and Auditing Clerks	200	1.0%

Table 25B. Wage, Education and Training Characteristics for Key Occupations Insurance Services

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
41-3021 Insurance Sales Agents	\$29.33	•	None	Moderate-term on-the-job training
13-1031 Claims Adjusters, Examiners, and Investigators	\$38.19	High school diploma or equivalent	None	Long-term on- the-job training
43-4051 Customer Service Representatives	\$18.38	High school diploma or equivalent	None	Short-term on- the-job training
43-9041 Insurance Claims and Policy Processing Clerks	\$23.32	High school diploma or equivalent	None	Moderate-term on-the-job training
29-1141 Registered Nurses	\$58.06	Bachelor's degree	None	None
13-1199 Business Operations Specialists, All Other	\$31.84	Bachelor's degree	None	None
13-2053 Insurance Underwriters	\$38.74	Bachelor's degree	None	Moderate-term on-the-job training
15-1252 Software Developers	\$61.13	Bachelor's degree	None	None
43-1011 First-Line Supervisors of Office and Administrative Support Workers	\$29.94	High school diploma or equivalent	Less than 5 years	None
13-1111 Management Analysts	\$46.47	Bachelor's degree	Less than 5 years	None
11-9199 Managers, All Other	\$39.52	Bachelor's degree	Less than 5 years	None
11-3031 Financial Managers	\$72.21	Bachelor's degree	5 years or more	None
15-1211 Computer Systems Analysts	\$49.88	Bachelor's degree	None	None
11-3021 Computer and Information Systems Managers	\$78.54	Bachelor's degree	5 years or more	None
11-1021 General and Operations Managers	\$51.26	Bachelor's degree	5 years or more	None
13-2011 Accountants and Auditors	\$38.78	Bachelor's degree	None	None
15-1299 Computer Occupations, All Other	\$38.03	Bachelor's degree	None	None
13-1041 Compliance Officers	\$38.57	Bachelor's degree	None	Moderate-term on-the-job training

Occupations	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
13-1161 Market Research Analysts and Marketing Specialists	\$33.21	Bachelor's degree	None	None
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$22.17	High school diploma or equivalent	None	Short-term on- the-job training
43-9061 Office Clerks, General	\$18.46	High school diploma or equivalent	None	Short-term on- the-job training
43-3031 Bookkeeping, Accounting, and Auditing Clerks	\$23.02	Some college, no degree	None	Moderate-term on-the-job training

Educational Institution Analysis

For each target cluster summarized in the following section, the following "education snapshot" reports summarize academic programs in Los Angeles County with data related to completions by institution, subject programs, and type of degree programs.

Two example clusters are provided in the following "education snapshot" appendix for this study. The entire set of snapshots for all target clusters is provided electronically.

APPENDIX

"EDUCATION SNAPSHOTS" FOR TARGET CLUSTERS

Aerospace Vehicles and Defense

Education Snapshot

Lightcast Q2 2023 Data Set

June 2023

Educational Completions

127
Programs (2021)

73,237
Completions (2021)

CIP Code	Program	Completions (2017)	Completions (2018)	Completions (2019)	Completions (2020)	Completions (2021)
24.0101	Liberal Arts and Sciences/Liberal Studies	16,444	21,918	28,173	27,912	28,127
52.0201	Business Administration and Management, General	13,377	15,401	15,709	15,637	16,269
11.0701	Computer Science	2,411	2,659	2,814	3,155	3,495
43.0103	Criminal Justice/Law Enforcement Administration	47	70	79	2,561	2,285
14.1001	Electrical and Electronics Engineering	1,801	1,681	1,680	1,595	1,602
14.1901	Mechanical Engineering	1,439	1,503	1,457	1,427	1,429
43.0104	Criminal Justice/Safety Studies	546	665	941	1,104	1,344
52.1301	Management Science	81	81	90	1,091	1,269
13.0101	Education, General	1,376	1,507	1,705	1,301	1,136
30.9999	Multi-/Interdisciplinary Studies, Other	494	691	764	1,057	870
14.0801	Civil Engineering, General	795	776	798	873	851
44.0401	Public Administration	920	752	864	797	836
52.0101	Business/Commerce, General	752	741	809	758	666
52.0801	Finance, General	573	557	548	585	596
40.0501	Chemistry, General	490	580	591	504	583
11.0101	Computer and Information Sciences, General	235	320	368	460	544
26.0202	Biochemistry	484	489	447	484	493
04.0902	Architectural and Building Sciences/Technology	347	436	510	525	484

47.0201	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	51	105	327	468	445
14.0201	Aerospace, Aeronautical, and Astronautical/Space Engineering, General	343	402	428	446	442
14.0901	Computer Engineering, General	260	294	310	381	417
14.0501	Bioengineering and Biomedical Engineering	292	311	348	327	360
14.0701	Chemical Engineering	422	481	401	374	357
11.0103	Information Technology	363	400	401	446	327
52.1101	International Business/Trade/Commerce	265	289	297	328	323
52.0213	Organizational Leadership	458	432	444	346	312
52.0299	Business Administration, Management and Operations, Other	232	294	299	285	284
52.9999	Business, Management, Marketing, and Related Support Services, Other	239	212	242	261	272
52.1902	Fashion Merchandising	488	431	312	314	262
15.0000	Engineering Technologies/Technicians, General	155	215	232	240	259
03.0104	Environmental Science	209	206	246	245	256
52.0408	General Office Occupations and Clerical Services	199	208	176	174	254
11.0201	Computer Programming/Programmer, General	209	183	264	283	249
52.1801	Sales, Distribution, and Marketing Operations, General	142	173	184	150	218
52.0212	Retail Management	8	198	232	218	206
52.1399	Management Sciences and Quantitative Methods, Other	41	58	119	137	200
04.0301	City/Urban, Community, and Regional Planning	347	252	228	200	199

14.3501	Industrial Engineering	229	206	167	165	190
52.0211	Project Management	20	20	26	94	168
11.0104	Informatics	44	50	88	136	163
14.0102	Pre-Engineering	75	108	120	142	163
14.9999	Engineering, Other	128	140	180	228	162
40.0101	Physical Sciences, General	126	172	228	137	157
11.0199	Computer and Information Sciences, Other	165	183	150	138	156
48.0501	Machine Tool Technology/Machinist	367	340	358	230	148
04.0201	Architecture	370	251	179	145	139
14.1801	Materials Engineering	164	190	167	154	138
14.0101	Engineering, General	157	139	167	146	135
52.0703	Small Business Administration/Management	126	143	168	159	132
19.0905	Apparel and Textile Marketing Management	145	163	143	157	126
24.0199	Liberal Arts and Sciences, General Studies and Humanities, Other	283	322	204	174	123
52.0203	Logistics, Materials, and Supply Chain Management	119	189	195	106	114
15.1501	Engineering/Industrial Management	89	86	40	61	113
03.0103	Environmental Studies	62	97	80	91	109
26.1201	Biotechnology	44	56	74	83	109
19.0901	Apparel and Textiles, General	141	153	126	162	105
15.1599	Engineering-Related Fields, Other	50	103	86	95	101
50.0404	Industrial and Product Design	120	91	89	80	95
52.0206	Non-Profit/Public/Organizational Management	50	76	119	71	92
11.0401	Information Science/Studies	53	51	64	52	90

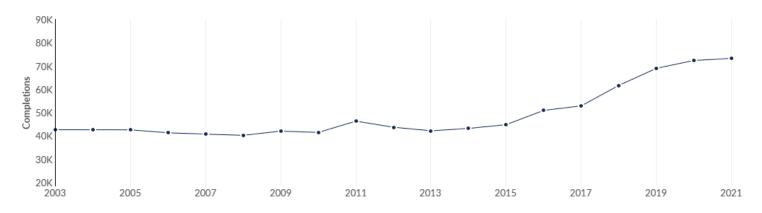
52.0799	Entrepreneurial and Small Business Operations, Other	74	82	114	103	85
43.0109	Security and Loss Prevention Services	98	95	91	131	83
24.0102	General Studies	83	110	96	80	80
52.1601	Taxation	136	120	132	116	74
11.0804	Modeling, Virtual Environments and Simulation	67	67	73	54	71
04.0601	Landscape Architecture	64	48	57	72	70
52.0701	Entrepreneurship/Entrepreneurial Studies	92	85	77	81	69
14.0803	Structural Engineering	112	107	94	81	63
14.3601	Manufacturing Engineering	113	66	64	69	63
14.1401	Environmental/Environmental Health Engineering	45	40	43	36	60
50.0411	Game and Interactive Media Design	134	118	67	70	57
15.0805	Mechanical/Mechanical Engineering Technology/Technician	165	131	124	34	54
14.2701	Systems Engineering	65	70	65	50	48
47.0614	Alternative Fuel Vehicle Technology/Technician	25	40	23	61	48
04.0501	Interior Architecture	70	34	24	20	45
15.0613	Manufacturing Engineering Technology/Technician	44	42	34	53	45
30.0000	Multi-/Interdisciplinary Studies, General	4	2	6	9	42
47.0303	Industrial Mechanics and Maintenance Technology/Technician	0	0	0	61	42
15.0702	Quality Control Technology/Technician	30	24	31	51	40
01.0000	Agriculture, General	12	13	15	10	38
11.0899	Computer Software and Media Applications, Other	59	41	32	56	33

14.1201	Engineering Physics/Applied Physics	36	31	26	38	33
15.0303	Electrical, Electronic, and Communications Engineering Technology/Technician	47	70	54	54	33
11.1099	Computer/Information Technology Services Administration and Management, Other	4	9	5	15	32
47.0105	Industrial Electronics Technology/Technician	0	1	0	33	32
26.1103	Bioinformatics	14	24	30	35	27
40.1001	Materials Science	30	25	26	29	26
01.0102	Agribusiness/Agricultural Business Operations	36	48	32	32	24
04.0401	Environmental Design/Architecture	13	21	27	16	23
14.2501	Petroleum Engineering	81	71	58	42	21
30.0601	Systems Science and Theory	6	17	18	13	21
15.1701	Energy Systems Technology/Technician	60	53	30	36	20
14.0804	Transportation and Highway Engineering	15	11	10	13	14
14.4701	Electrical and Computer Engineering	0	0	0	2	14
43.9999	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	67	295	63	27	14
15.0305	Telecommunications Technology/Technician	0	0	0	13	12
30.3301	Sustainability Studies	6	14	14	8	12
43.0301	Homeland Security	120	85	68	33	11
04.9999	Architecture and Related Services, Other	12	4	9	9	10
52.0208	E-Commerce/Electronic Commerce	1	4	4	9	10

52.1904	Apparel and Accessories Marketing Operations	7	12	8	10	10
52.0305	Accounting and Business/Management	7	9	8	11	9
11.0102	Artificial Intelligence	9	5	9	11	7
14.0903	Computer Software Engineering	9	8	6	12	7
14.1099	Electrical, Electronics, and Communications Engineering, Other	9	15	11	13	7
11.0501	Computer Systems Analysis/Analyst	8	6	2	5	6
15.1201	Computer Engineering Technology/Technician	13	11	11	4	6
11.9999	Computer and Information Sciences and Support Services, Other	13	12	26	15	5
31.0301	Parks, Recreation, and Leisure Facilities Management, General	1	5	0	3	5
49.0299	Ground Transportation, Other	0	15	3	5	5
14.0805	Water Resources Engineering	3	7	10	3	4
14.1101	Engineering Mechanics	3	3	1	3	4
14.0999	Computer Engineering, Other	7	9	3	3	3
03.0199	Natural Resources Conservation and Research, Other	4	6	5	5	2
15.1202	Computer/Computer Systems Technology/Technician	103	1	0	4	2
30.1202	Cultural Resource Management and Policy Analysis	0	0	0	0	2
48.0503	Machine Shop Technology/Assistant	0	12	3	8	2
14.0899	Civil Engineering, Other	0	2	6	1	1
14.3901	Geological/Geophysical Engineering	2	2	3	3	1
15.9999	Engineering/Engineering-Related Technologies/Technicians, Other	20	17	0	1	1

11.0299	Computer Programming, Other	1	0	0	0	0
14.0401	Architectural Engineering	3	1	0	0	0
14.1004	Telecommunications Engineering	55	28	17	0	0
15.0399	Electrical/Electronic Engineering Technologies/Technicians, Other	0	0	0	5	0
46.9999	Construction Trades, Other	20	11	27	0	0
48.0510	Computer Numerically Controlled (CNC) Machinist Technology/CNC Machinist	48	18	11	0	0
52.0399	Accounting and Related Services, Other	0	0	7	0	0

Completions Trend



Regional Completions by Award Level



Award Level	Completions (2021)	Percent	
Award of less than 1 academic year	3,703	5.1%	•
Award of at least 1 but less than 2 academic years	18,029	24.6%	_
Associate's Degree	18,307	25.0%	_
Award of at least 2 but less than 4 academic years	4	0.0%	I
Bachelor's Degree	20,836	28.5%	
Postbaccalaureate certificate	243	0.3%	I
Master's Degree	11,226	15.3%	-
Post-masters certificate	218	0.3%	I
Doctor's Degree	671	0.9%	1

Regional Completions by Institution

Institution	Certificates (2021)	Degrees (2021)	Total Completions (2021)
University of Southern California	177	6,721	6,898
California State Polytechnic University-Pomona	13	3,928	3,941
California State University-Long Beach	37	3,867	3,904
Santa Monica College	3,659	1,478	5,137
University of California-Los Angeles	0	3,608	3,608
California State University-Northridge	76	3,320	3,396
Pasadena City College	83	3,152	3,235
California State University-Los Angeles	30	2,405	2,435
East Los Angeles College	2,174	827	3,001
Long Beach City College	1,854	660	2,514
Citrus College	1,837	646	2,483
Cerritos College	1,783	847	2,630
California State University-Dominguez Hills	4	1,638	1,642
College of the Canyons	1,582	547	2,129
El Camino Community College District	131	1,218	1,349
University of the People	0	1,107	1,107
Rio Hondo College	944	1,061	2,005
Los Angeles Valley College	1,017	783	1,800
Los Angeles Harbor College	794	1,003	1,797
Los Angeles Pierce College	976	997	1,973
University of La Verne	0	983	983
Pepperdine University	0	952	952
Los Angeles City College	843	577	1,420
Los Angeles Southwest College	435	781	1,216
Antelope Valley Community College District	739	428	1,167
Mt San Antonio College	264	667	931

Los Angeles Mission College	523	622	1,145
Azusa Pacific University	34	609	643
Loyola Marymount University	1	599	600
West Los Angeles College	561	568	1,129
FIDM-Fashion Institute of Design & Merchandising-Los Angeles	0	555	555
Los Angeles Trade Technical College	400	238	638
California Institute of Technology	0	341	341
Glendale Community College	72	317	389
Biola University	0	262	262
Los Angeles Pacific University	0	234	234
Compton College	14	226	240
Claremont Graduate University	82	213	295
Marymount California University	0	209	209
United Education Institute-Huntington Park Campus	187	0	187
Woodbury University	0	184	184
United Education Institute-Encino	161	0	161
UEI College-Gardena	138	0	138
Southern California Institute of Architecture	0	137	137
Mount Saint Mary's University	1	126	127
NTMA Training Centers of Southern California	124	0	124
Art Center College of Design	0	119	119
Harvey Mudd College	0	115	115
Whittier College	0	115	115
ABCO Technology	106	0	106
Diversified Vocational College	102	0	102
The Master's University and Seminary	0	98	98
Claremont McKenna College	0	87	87

United Education Institute-West Covina	87	0	87
Occidental College	0	73	73
Pomona College	0	72	72
Claremont Lincoln University	0	69	69
Minerva University	0	55	55
Otis College of Art and Design	0	54	54
University of Antelope Valley	0	50	50
Antioch University-Los Angeles	0	45	45
Scripps College	4	41	45
Pitzer College	0	34	34
University of the West	6	32	38
California Institute of Advanced Management	0	32	32
Saybrook University	1	31	32
Fremont College	3	28	31
Keck Graduate Institute	0	28	28
Providence Christian College	0	28	28
Life Pacific University	0	25	25
The Chicago School of Professional Psychology at Los Angeles	0	24	24
Hacienda La Puente Adult Education	23	0	23
Capstone College	20	0	20
San Joaquin Valley College-Lancaster	20	2	22
Platt College-Los Angeles	1	18	19
World Mission University	0	17	17
Brand College	17	0	17
Pacific Oaks College	0	16	16
InterCoast Colleges-West Covina	16	1	17
New York Film Academy	0	12	12

Baldwin Park Adult & Community Education	11	0	11
Learnet Academy Inc	11	10	21
ABC Adult School	11	0	11
California Institute of the Arts	0	10	10
Angeles College	0	10	10
National Career College	0	9	9
University of West Los Angeles	0	9	9
American Jewish University	0	8	8
Pacific States University	0	8	8
America Evangelical University	0	8	8
Los Angeles Pacific College	5	0	5
Abraham Lincoln University	0	4	4
Pomona Unified School District Adult and Career Education	3	0	3
Pathways College	0	2	2
Abram Friedman Occupational Center	0	0	0
American InterContinental University	0	0	0
American Career College-Los Angeles	0	0	0
Associated Technical College-Los Angeles	0	0	0
Brooks College	0	0	0
Alliant International University	0	0	0

Appendix A - Data Sources and Calculations

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

State Data Sources

This report uses state data from the following agencies: California Employment Development Department

Business Services

Education Snapshot

Lightcast Q2 2023 Data Set

June 2023

216
Programs (2021)

104,194

Completions (2021)

CIP Code	Program	Completions (2017)	Completions (2018)	Completions (2019)	Completions (2020)	Completions (2021)
24.0101	Liberal Arts and Sciences/Liberal Studies	16,444	21,918	28,173	27,912	28,127
52.0201	Business Administration and Management, General	13,377	15,401	15,709	15,637	16,269
42.0101	Psychology, General	5,976	6,278	6,820	7,397	8,239
45.1101	Sociology, General	3,843	4,168	4,384	4,786	4,949
11.0701	Computer Science	2,411	2,659	2,814	3,155	3,495
45.0101	Social Sciences, General	2,397	2,585	2,712	2,682	2,853
45.1001	Political Science and Government, General	2,248	2,292	2,396	2,505	2,579
43.0103	Criminal Justice/Law Enforcement Administration	47	70	79	2,561	2,285
54.0101	History, General	1,310	1,333	1,434	1,407	1,422
45.0603	Econometrics and Quantitative Economics	3	274	307	1,280	1,416
43.0104	Criminal Justice/Safety Studies	546	665	941	1,104	1,344
52.0302	Accounting Technology/Technician and Bookkeeping	1,230	1,441	1,549	1,662	1,339
45.0601	Economics, General	1,770	1,709	1,736	1,426	1,312
52.1301	Management Science	81	81	90	1,091	1,269
13.0101	Education, General	1,376	1,507	1,705	1,301	1,136
51.2201	Public Health, General	665	844	823	911	927
30.9999	Multi-/Interdisciplinary Studies, Other	494	691	764	1,057	870
14.0801	Civil Engineering, General	795	776	798	873	851
52.0301	Accounting	1,049	1,065	1,000	914	848

44.0401	Public Administration	920	752	864	797	836
51.0701	Health/Health Care Administration/Management	872	902	876	797	822
45.0201	Anthropology, General	641	707	735	824	732
42.2801	Clinical Psychology	545	524	573	570	701
52.0101	Business/Commerce, General	752	741	809	758	666
52.1401	Marketing/Marketing Management, General	627	750	713	665	628
52.0801	Finance, General	573	557	548	585	596
11.0101	Computer and Information Sciences, General	235	320	368	460	544
38.0101	Philosophy	430	450	512	470	515
04.0902	Architectural and Building Sciences/Technology	347	436	510	525	484
47.0201	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	51	105	327	468	445
14.0201	Aerospace, Aeronautical, and Astronautical/Space Engineering, General	343	402	428	446	442
52.0901	Hospitality Administration/Management, General	518	546	495	478	438
42.2706	Behavioral Neuroscience	389	366	368	400	432
10.0304	Animation, Interactive Technology, Video Graphics, and Special Effects	291	330	387	507	417
14.0901	Computer Engineering, General	260	294	310	381	417
42.2814	Applied Behavior Analysis	138	156	202	275	386
52.1001	Human Resources Management/Personnel Administration, General	18	76	150	254	348
45.0901	International Relations and Affairs	322	335	368	347	342
11.0103	Information Technology	363	400	401	446	327

52.1101	International Business/Trade/Commerce	265	289	297	328	323
45.0701	Geography	314	350	316	352	317
52.0213	Organizational Leadership	458	432	444	346	312
30.2501	Cognitive Science, General	133	123	157	276	296
52.0299	Business Administration, Management and Operations, Other	232	294	299	285	284
52.9999	Business, Management, Marketing, and Related Support Services, Other	239	212	242	261	272
52.1902	Fashion Merchandising	488	431	312	314	262
03.0104	Environmental Science	209	206	246	245	256
52.0408	General Office Occupations and Clerical Services	199	208	176	174	254
11.0201	Computer Programming/Programmer, General	209	183	264	283	249
09.0100	Communication, General	70	76	36	120	243
52.1801	Sales, Distribution, and Marketing Operations, General	142	173	184	150	218
52.0212	Retail Management	8	198	232	218	206
52.1399	Management Sciences and Quantitative Methods, Other	41	58	119	137	200
09.0199	Communication and Media Studies, Other	230	227	259	272	198
42.2803	Counseling Psychology	164	198	154	193	188
51.2299	Public Health, Other	190	173	172	205	187
42.2813	Applied Psychology	125	163	158	169	181
52.0211	Project Management	20	20	26	94	168
11.0104	Informatics	44	50	88	136	163
14.0102	Pre-Engineering	75	108	120	142	163
30.2001	International/Globalization Studies	177	159	193	168	162

50.1001	Arts, Entertainment, and Media Management, General	130	134	169	135	161
04.0901	Architectural Technology/Technician	173	239	260	189	156
11.0199	Computer and Information Sciences, Other	165	183	150	138	156
50.0499	Design and Applied Arts, Other	120	143	141	136	155
11.0901	Computer Systems Networking and Telecommunications	281	193	263	186	152
52.1003	Organizational Behavior Studies	156	197	180	186	152
50.0102	Digital Arts	115	144	121	91	151
09.0702	Digital Communication and Media/Multimedia	83	81	79	103	147
45.0401	Criminology	56	44	77	84	147
11.1003	Computer and Information Systems Security/Auditing/Information Assurance	114	80	58	126	146
45.1201	Urban Studies/Affairs	39	44	44	73	144
40.0601	Geology/Earth Science, General	175	183	167	154	143
52.1302	Business Statistics	77	109	153	217	142
30.0801	Mathematics and Computer Science	00				
		32	27	55	66	137
14.0101	Engineering, General	157	139	55 167	146	137
14.0101 42.9999	Engineering, General Psychology, Other					
		157	139	167	146	135
42.9999	Psychology, Other Small Business	157 239	139 195	167 192	146 211	135 135
42.9999 52.0703	Psychology, Other Small Business Administration/Management Apparel and Textile Marketing	157 239 126	139 195 143	167 192 168	146 211 159	135 135 132
42.9999 52.0703 19.0905	Psychology, Other Small Business Administration/Management Apparel and Textile Marketing Management Liberal Arts and Sciences, General	157 239 126 145	139 195 143 163	167 192 168 143	146 211 159 157	135 135 132 126
42.9999 52.0703 19.0905 24.0199	Psychology, Other Small Business Administration/Management Apparel and Textile Marketing Management Liberal Arts and Sciences, General Studies and Humanities, Other Data Modeling/Warehousing and	157 239 126 145 283	139 195 143 163 322	167 192 168 143 204	146 211 159 157 174	135 135 132 126

52.0203	Logistics, Materials, and Supply Chain Management	119	189	195	106	114
15.1501	Engineering/Industrial Management	89	86	40	61	113
03.0103	Environmental Studies	62	97	80	91	109
19.0901	Apparel and Textiles, General	141	153	126	162	105
45.0702	Geographic Information Science and Cartography	94	105	116	108	102
11.1004	Web/Multimedia Management and Webmaster	32	59	73	76	101
42.2799	Research and Experimental Psychology, Other	12	12	16	63	96
42.2804	Industrial and Organizational Psychology	91	108	105	89	93
52.0206	Non-Profit/Public/Organizational Management	50	76	119	71	92
11.0401	Information Science/Studies	53	51	64	52	90
45.9999	Social Sciences, Other	94	99	101	95	90
05.0103	Asian Studies/Civilization	98	106	100	110	87
51.0707	Health Information/Medical Records Technology/Technician	119	77	77	50	87
52.0799	Entrepreneurial and Small Business Operations, Other	74	82	114	103	85
09.0999	Public Relations, Advertising, and Applied Communication, Other	44	53	72	64	83
43.0109	Security and Loss Prevention Services	98	95	91	131	83
24.0102	General Studies	83	110	96	80	80
45.0799	Geography, Other	112	113	92	69	74
52.1601	Taxation	136	120	132	116	74
52.1304	Actuarial Science	63	78	84	81	73
11.0803	Computer Graphics	61	68	75	51	72
11.0804	Modeling, Virtual Environments and Simulation	67	67	73	54	71

09.0900	Public Relations, Advertising, and Applied Communication	58	56	43	62	69
52.0701	Entrepreneurship/Entrepreneurial Studies	92	85	77	81	69
52.0999	Hospitality Administration/Management, Other	76	78	62	58	67
42.2812	Forensic Psychology	85	63	54	57	66
14.0803	Structural Engineering	112	107	94	81	63
09.0102	Mass Communication/Media Studies	76	73	75	68	61
09.0903	Advertising	50	52	42	49	60
54.0199	History, Other	31	41	31	43	60
05.0102	American/United States Studies/Civilization	79	62	60	59	57
50.0411	Game and Interactive Media Design	134	118	67	70	57
11.1001	Network and System Administration/Administrator	2	19	28	34	56
52.1201	Management Information Systems, General	11	13	18	5	52
52.0803	Banking and Financial Support Services	49	48	72	65	51
14.2701	Systems Engineering	65	70	65	50	48
42.2805	School Psychology	47	63	68	60	48
25.9999	Library Science, Other	61	42	53	54	47
30.1701	Behavioral Sciences	46	40	54	45	47
05.0107	Latin American Studies	48	61	52	62	46
15.0613	Manufacturing Engineering Technology/Technician	44	42	34	53	45
30.0000	Multi-/Interdisciplinary Studies, General	4	2	6	9	42
52.1499	Marketing, Other	40	46	43	33	42
05.0199	Area Studies, Other	24	23	51	33	41

52.1005	Human Resources Development	56	33	40	32	39
42.2704	Experimental Psychology	0	36	36	29	38
25.0101	Library and Information Science	26	19	56	56	36
11.0899	Computer Software and Media Applications, Other	59	41	32	56	33
43.0202	Fire Services Administration	40	37	40	46	33
11.1099	Computer/Information Technology Services Administration and Management, Other	4	9	5	15	32
45.0602	Applied Economics	44	45	68	43	32
11.1002	System, Networking, and LAN/WAN Management/Manager	10	7	9	20	31
45.0301	Archeology	10	16	9	8	31
30.0501	Peace Studies and Conflict Resolution	48	31	25	28	29
45.1004	Political Economy	13	17	21	20	29
26.1103	Bioinformatics	14	24	30	35	27
42.2806	Educational Psychology	14	27	22	19	26
05.0104	East Asian Studies	30	20	31	28	25
52.1804	Selling Skills and Sales Operations	16	16	24	19	25
04.0401	Environmental Design/Architecture	13	21	27	16	23
51.2211	Health Services Administration	19	30	23	17	22
30.0601	Systems Science and Theory	6	17	18	13	21
45.0699	Economics, Other	1	8	19	7	21
15.1701	Energy Systems Technology/Technician	60	53	30	36	20
11.0801	Web Page, Digital/Multimedia and Information Resources Design	108	37	19	17	17
50.1002	Fine and Studio Arts Management	22	11	14	14	17
05.0108	Near and Middle Eastern Studies	22	15	21	10	14

14.0804	Transportation and Highway Engineering	15	11	10	13	14
26.1104	Computational Biology	6	8	9	16	14
43.9999	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	67	295	63	27	14
52.0407	Business/Office Automation/Technology/Data Entry	27	28	0	4	14
11.0601	Data Entry/Microcomputer Applications, General	33	30	35	29	13
30.3301	Sustainability Studies	6	14	14	8	12
43.0301	Homeland Security	120	85	68	33	11
15.0508	Hazardous Materials Management and Waste Technology/Technician	18	29	42	16	10
42.2802	Community Psychology	1	4	3	3	10
52.0208	E-Commerce/Electronic Commerce	1	4	4	9	10
38.0001	Philosophy and Religious Studies, General	8	9	12	12	9
51.3201	Bioethics/Medical Ethics	8	8	5	8	9
52.0305	Accounting and Business/Management	7	9	8	11	9
51.0706	Health Information/Medical Records Administration/Administrator	0	12	6	2	8
09.0901	Organizational Communication, General	9	8	6	4	7
11.0102	Artificial Intelligence	9	5	9	11	7
14.0903	Computer Software Engineering	9	8	6	12	7
30.7101	Data Analytics, General	0	0	0	0	7
05.0126	Italian Studies	15	10	8	9	6
09.0799	Radio, Television, and Digital Communication, Other	3	5	7	9	6

11.0501	Computer Systems Analysis/Analyst	8	6	2	5	6
15.1201	Computer Engineering Technology/Technician	13	11	11	4	6
50.1004	Theatre/Theatre Arts Management	16	13	11	8	6
05.0124	French Studies	6	5	5	9	5
11.9999	Computer and Information Sciences and Support Services, Other	13	12	26	15	5
31.0301	Parks, Recreation, and Leisure Facilities Management, General	1	5	0	3	5
05.0110	Russian Studies	9	4	6	11	4
14.0805	Water Resources Engineering	3	7	10	3	4
46.0415	Building Construction Technology/Technician	8	10	15	20	4
52.0411	Customer Service Support/Call Center/Teleservice Operation	13	31	17	11	4
15.0703	Industrial Safety Technology/Technician	0	0	0	0	3
29.0203	Signal/Geospatial Intelligence	7	8	13	5	3
52.1701	Insurance	2	0	4	7	3
03.0199	Natural Resources Conservation and Research, Other	4	6	5	5	2
05.0106	European Studies/Civilization	13	6	10	6	2
05.0111	Scandinavian Studies	1	3	2	3	2
15.1202	Computer/Computer Systems Technology/Technician	103	1	0	4	2
30.1202	Cultural Resource Management and Policy Analysis	0	0	0	0	2
30.3101	Human Computer Interaction	0	0	0	4	2
45.0605	International Economics	0	0	0	1	2
03.0201	Environmental/Natural Resources Management and Policy, General	0	0	0	0	1
05.0101	African Studies	3	7	7	4	1

05.0127	Japanese Studies	0	0	0	0	1
14.0899	Civil Engineering, Other	0	2	6	1	1
43.0302	Crisis/Emergency/Disaster Management	0	0	0	1	1
45.0501	Demography and Population Studies	0	6	9	5	1
45.1099	Political Science and Government, Other	7	11	5	5	1
51.0799	Health and Medical Administrative Services, Other	10	7	8	1	1
51.2011	Pharmaceutical Marketing and Management	0	0	0	0	1
05.0105	Russian, Central European, East European and Eurasian Studies	0	2	1	1	0
05.0125	German Studies	2	1	1	1	0
05.0130	Spanish and Iberian Studies	0	0	0	1	0
11.0299	Computer Programming, Other	1	0	0	0	0
11.0301	Data Processing and Data Processing Technology/Technician	11	6	1	0	0
14.0401	Architectural Engineering	3	1	0	0	0
30.3201	Marine Sciences	1	1	0	0	0
38.0104	Applied and Professional Ethics	0	1	0	0	0
42.2701	Cognitive Psychology and Psycholinguistics	9	16	4	0	0
45.0102	Research Methodology and Quantitative Methods	0	0	1	0	0
45.0999	International Relations and National Security Studies, Other	1	1	0	0	0
46.9999	Construction Trades, Other	20	11	27	0	0
51.0719	Clinical Research Coordinator	0	2	0	0	0
52.0399	Accounting and Related Services, Other	0	0	7	0	0
52.0899	Finance and Financial Management Services, Other	18	17	16	0	0

52.1099	Human Resources Management and Services, Other	1	0	0	0	0
52.1299	Management Information Systems and Services, Other	12	2	1	1	0
52.1905	Tourism and Travel Services Marketing Operations	0	2	0	0	0

Completions Trend



Regional Completions by Award Level



	Award Level	Completions (2021)	Percent	
•	Award of less than 1 academic year	4,954	4.8%	•
	Award of at least 1 but less than 2 academic years	18,293	17.6%	_
	Associate's Degree	29,595	28.4%	
	Award of at least 2 but less than 4 academic years	6	0.0%	I
	Bachelor's Degree	35,506	34.1%	
•	Postbaccalaureate certificate	331	0.3%	I
	Master's Degree	14,254	13.7%	_
	Post-masters certificate	447	0.4%	I
	Doctor's Degree	808	0.8%	L

Regional Completions by Institution

University of California Los Angeles 310 7.879 8.189 University of California-Los Angeles 0 7.565 7.565 California State University-Northridge 125 6.331 6.456 California State University-Long Beach 30 5.318 5.348 California State Polytechnic University-Pomona 0 4,100 4,100 Santa Monica College 3.975 2,171 6,146 Pasadena City College 157 3,874 4,031 California State University-Los Angeles 44 3,445 3,489 East Los Angeles College 2,595 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,072 2,207 Mt San Antonio College 1,935 1,272 3,207 Citrus College 1,935 1,217 3,202 Citrus College 1,945 1,349 3,532 Citrus College 1,945 1,417 3,749 Citrus College 1,	Institution	Certificates (2021)	Degrees (2021)	Total Completions (2021)
California State University-Northridge 125 6,331 6,456 California State University-Long Beach 30 5,318 5,348 California State Polytechnic University-Pomona 0 4,100 4,100 Santa Monica College 3,975 2,171 6,146 Pasadena City College 157 3,874 4,031 California State University-Los Angeles 44 3,445 3,489 East Los Angeles College 2,535 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,794 1,287 3,083 El Camino Community College District 141 1,676 1,811 University of La Verne	University of Southern California	310	7,879	8,189
California State University-Long Beach 30 5,318 5,348 California State Polytechnic University-Pomona 0 4,100 4,100 Santa Monica College 3,975 2,171 6,146 Pasadena City College 157 3,874 4,031 California State University-Los Angeles 44 3,445 3,489 East Los Angeles College 2,535 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,763 1,817 3,832 El Camino Community College District 141 1,676 1,815 Rio Hondo College 959 1,411 2,376 Loyola Marymount University 12	University of California-Los Angeles	0	7,565	7,565
California State Polytechnic University-Pomona 0 4,100 4,100 Santa Monica College 3,975 2,171 6,146 Pasadena City College 157 3,874 4,031 California State University-Los Angeles 44 3,445 3,489 East Los Angeles College 2,535 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 9 1,411 2,370 Los Angeles Pierce College 9 1,411	California State University-Northridge	125	6,331	6,456
Santa Monica College 3,975 2,171 6,146 Pasadena City College 157 3,874 4,031 California State University-Los Angeles 44 3,445 3,489 East Los Angeles College 2,535 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254	California State University-Long Beach	30	5,318	5,348
Pasadena City College 157 3,874 4,031 California State University-Los Angeles 44 3,445 3,489 East Los Angeles College 2,535 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,277 University of the People 0 1,142	California State Polytechnic University-Pomona	0	4,100	4,100
California State University-Los Angeles 44 3,445 3,489 East Los Angeles College 2,535 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,277 University of the People 0 1,142 1,424 Azusa Pacific University 34 1,115 1,414 Los Angeles Harbor College 796 1,111	Santa Monica College	3,975	2,171	6,146
East Los Angeles College 2,535 2,692 5,227 California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,279 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149	Pasadena City College	157	3,874	4,031
California State University-Dominguez Hills 13 2,628 2,641 Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 96 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	California State University-Los Angeles	44	3,445	3,489
Pepperdine University 0 2,207 2,207 Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,492 Los Angeles Harbor College 796 1,111 1,907	East Los Angeles College	2,535	2,692	5,227
Mt San Antonio College 430 2,102 2,532 Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	California State University-Dominguez Hills	13	2,628	2,641
Long Beach City College 1,935 1,272 3,207 Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Pepperdine University	0	2,207	2,207
Citrus College 1,863 1,349 3,212 College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loy Ola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Mt San Antonio College	430	2,102	2,532
College of the Canyons 1,763 1,819 3,582 Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Long Beach City College	1,935	1,272	3,207
Cerritos College 1,796 1,287 3,083 El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Citrus College	1,863	1,349	3,212
El Camino Community College District 141 1,676 1,817 University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	College of the Canyons	1,763	1,819	3,582
University of La Verne 0 1,515 1,515 Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Cerritos College	1,796	1,287	3,083
Rio Hondo College 959 1,411 2,370 Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	El Camino Community College District	141	1,676	1,817
Los Angeles Pierce College 986 1,268 2,254 Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	University of La Verne	0	1,515	1,515
Loyola Marymount University 12 1,254 1,266 Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Rio Hondo College	959	1,411	2,370
Los Angeles Valley College 1,067 1,230 2,297 University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Los Angeles Pierce College	986	1,268	2,254
University of the People 0 1,142 1,142 Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Loyola Marymount University	12	1,254	1,266
Azusa Pacific University 34 1,115 1,149 Los Angeles Harbor College 796 1,111 1,907	Los Angeles Valley College	1,067	1,230	2,297
Los Angeles Harbor College 796 1,111 1,907	University of the People	0	1,142	1,142
	Azusa Pacific University	34	1,115	1,149
Antelope Valley Community College District 760 1,036 1,796	Los Angeles Harbor College	796	1,111	1,907
	Antelope Valley Community College District	760	1,036	1,796

Los Angeles Southwest College	438	876	1,314
Los Angeles City College	861	757	1,618
Los Angeles Mission College	546	813	1,359
West Los Angeles College	626	747	1,373
Glendale Community College	121	709	830
FIDM-Fashion Institute of Design & Merchandising-Los Angeles	0	565	565
The Chicago School of Professional Psychology at Los Angeles	69	547	616
Biola University	0	523	523
Claremont Graduate University	94	417	511
Los Angeles Trade Technical College	355	302	657
Claremont McKenna College	0	349	349
Mount Saint Mary's University	40	331	371
Los Angeles Pacific University	0	327	327
Occidental College	0	287	287
Compton College	14	282	296
Antioch University-Los Angeles	0	270	270
Marymount California University	0	255	255
ABCO Technology	232	0	232
Whittier College	0	222	222
Pomona College	0	213	213
Woodbury University	0	202	202
Minerva University	0	199	199
United Education Institute-Huntington Park Campus	187	0	187
Scripps College	4	174	178
United Education Institute-Encino	161	0	161
Los Angeles Film School	0	153	153
Pitzer College	0	152	152

Southern California Institute of Architecture	0	151	151
Harvey Mudd College	0	149	149
The Master's University and Seminary	0	138	138
UEI College-Gardena	138	0	138
California Institute of Technology	0	129	129
Diversified Vocational College	102	0	102
Art Center College of Design	0	92	92
United Education Institute-West Covina	87	0	87
Claremont Lincoln University	0	80	80
Otis College of Art and Design	0	79	79
University of Antelope Valley	0	77	77
Saybrook University	2	71	73
California Institute of the Arts	0	64	64
Life Pacific University	0	61	61
Columbia College Hollywood	0	54	54
Fuller Theological Seminary	0	45	45
University of the West	6	42	48
ABC Adult School	36	0	36
Platt College-Los Angeles	1	35	36
Fremont College	11	34	45
Brand College	34	0	34
California Institute of Advanced Management	0	32	32
Gnomon	0	31	31
Angeles College	0	29	29
Providence Christian College	0	28	28
Charles R Drew University of Medicine and Science	0	27	27
Pacific Oaks College	0	26	26

National Career College	0	26	26
Pardee RAND Graduate School	0	25	25
Learnet Academy Inc	15	24	39
Hacienda La Puente Adult Education	23	0	23
Capstone College	20	0	20
San Joaquin Valley College-Lancaster	20	2	22
American Jewish University	0	17	17
Los Angeles Pacific College	17	6	23
World Mission University	0	17	17
InterCoast Colleges-West Covina	17	1	18
New York Film Academy	6	16	22
Healthcare Career College	0	13	13
Baldwin Park Adult & Community Education	11	0	11
ATI College-Whittier	0	11	11
North-West College-West Covina	0	10	10
Claremont School of Theology	0	9	9
University of West Los Angeles	0	9	9
Pacific States University	0	8	8
America Evangelical University	0	8	8
Abraham Lincoln University	1	4	5

Appendix A - Data Sources and Calculations

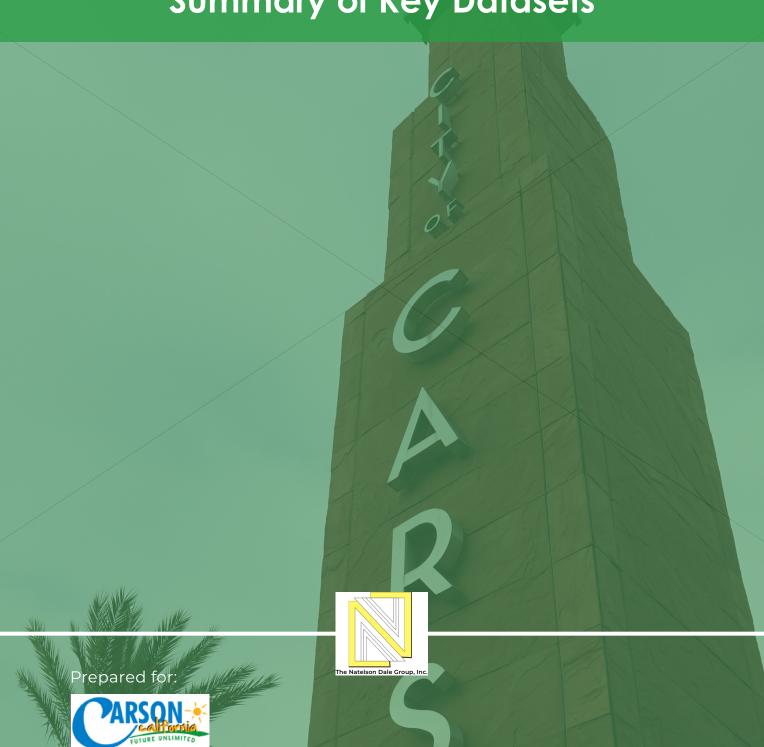
Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

State Data Sources

This report uses state data from the following agencies: California Employment Development Department





SUMMARY OF KEY DATASETS FOR CARSON ECONOMIC DEVELOPMENT STRATEGIC PLAN



Prepared for:

City of Carson

October 17, 2022

PREPARED BY:



THE NATELSON DALE GROUP, INC.

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I. Introduction

This document provides preliminary background information and data for the Economic Development Strategic Plan (EDSP) being prepared for the City of Carson. The EDSP is intended to guide the City's internal policies and priorities for economic development over the next five to ten years. As an initial step in this process, this preliminary data overview evaluates demographic and economic data at multiple levels of geography (as described further below) to allow for comparison of local conditions to reference-area benchmarks. Subsequent phases of the process will include additional analyses of conditions within specific Carson sub-areas (opportunity sites).

For purposes of this report, available data are compared for the following geographic areas:

- City of Carson
- Larger reference areas (Los Angeles County and California)
- Selected peer-group cities in the South Bay COG subregion (El Segundo, Inglewood, Redondo Beach, and Torrance)
- Selected peer-group cities in Gateway COG subregion (Cerritos, Commerce, Industry, Long Beach, and Santa Fe Springs)

The selection of the "peer group" cities reflects the fact that Carson is located in immediate proximity to two Los Angeles County subregions. While Carson is technically part of the South Bay subregion, it is also adjacent to (and shares important economic characteristics with) the Gateway subregion. The selected cities are intended to represent the competitive characteristics of the two subregion relative to Carson. In this regard, each of the peer group cities has notable economic development strengths of interest or relevance to Carson:

El Segundo – premier location for aerospace and technology firms

Inglewood - location of SoFi Stadium

Redondo Beach - visitor destination

Torrance – strong mix of retail, office and industrial uses

Cerritos – strong mix of retail, office and industrial uses

Commerce – strong industrial location

Industry - strong industrial location

Long Beach – largest of the peer-group cities and dominant across multiple economic sectors; also has a Cal State University campus

Santa Fe Springs – strong industrial location

This report is organized as follows:

Section II provides a market overview that summarizes the most recent demographic and economic data from the following sources:

- Data from the U.S. Census Bureau, American Community Survey (ACS) program. These data are grouped by the following categories: Income, Labor Force, Education, Ethnicity/Race, and Housing Units.
- Demographic and Employment forecasts from the Southern California Association of Governments (SCAG)¹.
- Labor force data, including unemployment rates provided by Bureau of Labor Statistics (BLS) and various other measures provided by the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program.
- Employment data, including the distribution by major industry groups and jobs by earnings and educational attainment ranges. These data are also provided by the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program and EMSI.

Section III provides data on assessed valuation, residential building permits, and taxable sales, also provided (where applicable) at the city, regional, and state levels of geography.

It should be emphasized that this report is intended to provide a *general and preliminary* overview of economic and demographic conditions in Carson relative to regional benchmarks. The final EDSP documents will provide much more detailed and in-depth analyses of economic development opportunities and challenges in Carson, based on primary research and direct input from local stakeholders.

¹ SCAG data referenced in this report are from the Connect SoCal Technical Report 9-3-2020.

II. Demographic and Economic Data/Forecasts

Census-Based Demographic and Economic Overview

The following data were obtained from the U.S. Census Bureau, American Community Survey (ACS) 5-year estimates (2016-20).² Data are provided for primarily the City of Carson; the select South Bay COG Cities of El Segundo, Inglewood, Redondo Beach, and Torrance; the select Gateway COG cities of Cerritos, Commerce, Industry, Long Beach, and Santa Fe Springs; Los Angeles County; and the State of California. Topics address current conditions related to households, housing units, and characteristics of the resident labor force (commute times, educational attainment, and race/ethnicity).

Table II-1 provides a summary of income and labor force-related data from the ACS. In terms of household income ranges, Carson's largest share of households (20.8%) in any one income category is in the \$100,000 to \$149,999 range. Median household income in Carson (\$86,040) exceeds the state (\$78,672) and Los Angeles County (\$71,358) median. Similarly, Carson's average (as distinct from the median) household income level (\$104,983) is also above the average for Los Angeles County (\$103,220), but below the average for the State (\$111,622).

The labor force data show that 62.7% of Carson's residents age 16 or older are in the labor force, which is slightly higher than Los Angeles County (64.8%) and the state's labor force participation rate of 63.7%. Within the core working age population (20 to 64 years), 78.4% of Carson's residents are in the labor force, a higher share than both Los Angeles County (77.9%) and State (77.3%). Carson's labor force participation rates by educational attainment exceed those of Los Angeles County for all attainment levels except Los Angeles County and California have slightly higher participation rates for Less Than High School Graduates. With that exception, Carson's labor force participation rates by educational attainment exceed those of California for all other attainment levels.

In terms of travel times to work, Carson's resident workers tend to have shorter commutes than their Los Angeles County counterparts. The percent of commuters traveling more than 45 minutes is lower for Carson (20.4) than for the County (25.4). Carson's percentage of long commuters is very similar to the statewide average (21.7%).

Table II-2 and Table II-3 show comparable data for the South Bay and Gateway COG cities, respectively (see also Figure II-1 for locations). The leading cities, for the South Beach and Gateway group, respectively, are Redondo Beach and Cerritos for income, and El Segundo and Industry for labor force participation.

² The ACS replaced the "long form" that historically produced demographic, housing, and socio-economic estimate for the nation as part of the once-a-decade census. The 5-year estimates include 60 months of collected data between January 1, 2016 and December 31, 2020 (the most recent 5-year data available at the time this report was prepared). Although the ACS also produces 1-year estimates, for smaller levels of geography (e.g., city-level), the 5-year estimates are generally preferred given the larger sample sizes and resulting lower margin of error for data estimates.

TABLE II-1. INCOME AND LABOR FORCE-RELATED CENSUS DATA — CARSON, LOS ANGELES COUNTY, AND CALIFORNIA

Census Variable	Carson	Los Angeles County	CA				
Household Income Data							
Less Than \$10,000	3.2%	5.5%	4.7%				
\$10,000 to \$14,999	3.3%	4.6%	3.9%				
\$15,000 to \$24,999	5.0%	7.8%	6.9%				
\$25,000 to \$34,999	6.5%	7.6%	7.1%				
\$35,000 to \$49,999	7.6%	10.7%	10.0%				
\$50,000 to \$74,999	16.0%	15.8%	15.3%				
\$75,000 to \$99,999	16.0%	12.3%	12.3%				
\$100,000 to \$149,999	20.8%	16.3%	17.1%				
\$150,000 to \$199,999	10.8%	8.2%	9.4%				
\$200,000 or More	10.9%	11.1%	13.3%				
Median Household Income	\$86,040	\$71,358	\$78,672				
Mean Household Income	\$104,983	\$103,220	\$111,622				
Per Capita Income	\$30,814	\$35,685	\$38,576				
Labor Force Participation Rate by Age Group							
Population 16 Years and Over	62.7%	64.8%	63.7%				
Population 20 to 64 Years	78.4%	77.9%	77.3%				
Male - 20 to 64 Years	80.8%	83.8%	83.1%				
Female - 20 to 64 Years	75.9%	71.9%	71.5%				
Labor Force Participation Rate by Educational Attainme	nt Level (for p	opulation 25 to	64 years)				
Less Than High School Graduate	63.8%	67.0%	65.3%				
High School Graduate (Includes Equiv.)	75.7%	74.3%	73.1%				
Some College or Associate's Degree	81.6%	80.2%	78.3%				
Bachelor's Degree or Higher	89.0%	86.9%	86.1%				
Travel Time to Work							
Less than 10 minutes	7.0%	6.6%	9.2%				
10 to 14 minutes	11.1%	10.1%	12.1%				
15 to 19 minutes	16.6%	13.4%	14.7%				
20 to 24 minutes	13.8%	13.4%	14.0%				
25 to 29 minutes	9.4%	5.5%	6.1%				
30 to 34 minutes	15.1%	17.6%	15.0%				
35 to 39 minutes	2.8%	2.9%	2.8%				
40 to 44 minutes	3.7%	5.2%	4.4%				
45 to 59 minutes	9.7%	10.8%	9.0%				
60 to 89 Minutes	8.5%	10.6%	8.4%				
90 or More Minutes	2.2%	4.0%	4.3%				

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates; TNDG.

TABLE II-2. INCOME AND LABOR FORCE-RELATED CENSUS DATA — CARSON, AND SELECT SOUTH BAY COG CITIES

Census Variable	Carson	El Segundo	Inglewood	Redondo Beach	Torrance
Household Income Data					
Less Than \$10,000	3.2%	1.1%	6.4%	2.0%	3.6%
\$10,000 to \$14,999	3.3%	0.9%	5.0%	2.1%	2.7%
\$15,000 to \$24,999	5.0%	5.1%	8.3%	2.6%	5.0%
\$25,000 to \$34,999	6.5%	6.0%	9.8%	4.0%	5.6%
\$35,000 to \$49,999	7.6%	6.4%	14.1%	5.3%	8.9%
\$50,000 to \$74,999	16.0%	14.4%	18.1%	12.8%	14.4%
\$75,000 to \$99,999	16.0%	9.7%	12.7%	13.4%	12.4%
\$100,000 to \$149,999	20.8%	20.3%	15.6%	20.2%	20.2%
\$150,000 to \$199,999	10.8%	14.9%	5.0%	12.9%	11.2%
\$200,000 or More	10.9%	21.2%	5.1%	24.6%	16.0%
Median Household Income	\$86,040	\$115,846	\$58,536	\$116,832	\$94,781
Mean Household Income	\$104,983	\$143,417	\$76,522	\$154,623	\$121,596
Per Capita Income	\$30,814	\$58,570	\$27,217	\$64,672	\$46,588
Labor Force Participation Rate by Age Group					
Population 16 Years and Over	62.7%	74.9%	67.0%	73.5%	64.1%
Population 20 to 64 Years	78.4%	86.6%	78.7%	85.9%	79.8%
Male - 20 to 64 Years	80.8%	90.9%	81.0%	90.6%	86.5%
Female - 20 to 64 Years	75.9%	82.1%	76.4%	81.1%	73.5%
Labor Force Participation Rate by Education	al Attainme	ent Level (for	population	25 to 64 ye	ars)
Less Than High School Graduate	63.8%	51.0%	70.2%	63.1%	56.4%
High School Graduate (Includes Equiv.)	75.7%	81.3%	74.3%	77.5%	75.2%
Some College or Associate's Degree	81.6%	86.4%	81.6%	83.4%	78.8%
Bachelor's Degree or Higher	89.0%	89.4%	88.0%	89.8%	84.3%
Travel Time to Work					
Less than 10 minutes	7.0%	15.9%	7.3%	7.2%	7.6%
10 to 14 minutes	11.1%	18.4%	9.6%	10.8%	14.5%
15 to 19 minutes	16.6%	15.0%	13.3%	19.3%	14.9%
20 to 24 minutes	13.8%	11.4%	13.6%	13.2%	13.0%
25 to 29 minutes	9.4%	4.3%	5.8%	7.6%	7.8%
30 to 34 minutes	15.1%	6.9%	15.6%	8.8%	12.9%
35 to 39 minutes	2.8%	2.6%	3.5%	2.4%	3.1%
40 to 44 minutes	3.7%	4.5%	6.3%	3.7%	3.7%
45 to 59 minutes	9.7%	10.3%	10.9%	11.6%	9.8%
60 to 89 Minutes	8.5%	8.6%	10.6%	12.5%	9.2%
90 or More Minutes	2.2%	2.2%	3.6%	2.8%	3.4%

TABLE II-3. INCOME AND LABOR FORCE-RELATED CENSUS DATA - CARSON, AND SELECT GATEWAY COG CITIES

TABLE II-3: INCOME AND LABOR TORCE-I	CEL TIED GEIT	200 2 71171	Criticolity raits					
Census Variable	Carson	Cerritos	Commerce	Industry	Long Beach	Santa Fe Springs		
Household Income Data								
Less Than \$10,000	3.2%	3.0%	7.2%	0.0%	5.4%	6.4%		
\$10,000 to \$14,999	3.3%	0.9%	7.1%	0.0%	4.7%	4.3%		
\$15,000 to \$24,999	5.0%	4.3%	6.5%	9.1%	7.7%	5.5%		
\$25,000 to \$34,999	6.5%	5.0%	9.1%	1.5%	8.4%	9.6%		
\$35,000 to \$49,999	7.6%	6.4%	14.8%	13.6%	11.5%	9.4%		
\$50,000 to \$74,999	16.0%	13.9%	17.4%	21.2%	17.1%	18.4%		
\$75,000 to \$99,999	16.0%	11.2%	10.5%	19.7%	13.7%	12.8%		
\$100,000 to \$149,999	20.8%	23.4%	19.6%	15.2%	15.8%	18.2%		
\$150,000 to \$199,999	10.8%	12.2%	4.5%	15.2%	7.4%	10.2%		
\$200,000 or More	10.9%	19.6%	3.3%	4.5%	8.4%	5.2%		
Median Household Income	\$86,040	\$109,229	\$54,639	\$87,727	\$66,410	\$69,922		
Mean Household Income	\$104,983	\$134,545	\$70,648	\$92,795	\$89,912	\$83,875		
Per Capita Income	\$30,814	\$43,487	\$21,074	\$23,975	\$33,607	\$26,390		
Labor Force Participation Rate by Age (Group							
Population 16 Years and Over	62.7%	58.4%	58.0%	75.8%	66.6%	61.4%		
Population 20 to 64 Years	78.4%	79.7%	75.9%	85.9%	78.5%	77.7%		
Male - 20 to 64 Years	80.8%	84.0%	80.4%	82.3%	83.4%	82.5%		
Female - 20 to 64 Years	75.9%	75.4%	71.6%	89.4%	73.7%	73.0%		
Labor Force Participation Rate by Educ	ational Att	ainment Le	evel (for pop	ulation 25	to 64 yea	rs)		
Less Than High School Graduate	63.8%	60.2%	64.9%	80.8%	65.0%	65.5%		
High School Graduate (Includes Equiv.)	75.7%	66.8%	64.4%	79.3%	75.7%	73.1%		
Some College or Associate's Degree	81.6%	78.6%	79.8%	79.4%	81.2%	84.6%		
Bachelor's Degree or Higher	89.0%	85.2%	96.0%	100.0%	89.3%	87.0%		
Travel Time to Work								
Less than 10 minutes	7.0%	6.3%	7.6%	13.9%	6.0%	7.8%		
10 to 14 minutes	11.1%	8.7%	9.0%	14.8%	10.4%	7.8%		
15 to 19 minutes	16.6%	11.5%	12.2%	9.3%	14.0%	13.2%		
20 to 24 minutes	13.8%	13.7%	19.0%	16.7%	15.4%	14.4%		
25 to 29 minutes	9.4%	6.2%	5.5%	0.0%	5.6%	10.1%		
30 to 34 minutes	15.1%	14.1%	21.1%	24.1%	17.6%	15.3%		
35 to 39 minutes	2.8%	3.4%	0.4%	0.0%	2.9%	2.4%		
40 to 44 minutes	3.7%	5.2%	5.3%	3.7%	4.9%	2.9%		
45 to 59 minutes	9.7%	14.1%	10.2%	3.7%	9.8%	13.1%		
60 to 89 Minutes	8.5%	12.2%	8.0%	9.3%	9.6%	10.1%		
90 or More Minutes	2.2%	4.5%	1.7%	4.6%	3.9%	3.0%		
Source: ILS Census Rureau, 2016-2020 American Community Survey 5-Vear Estimates: TNDG								

Table II-4 provides a summary of education-related and ethnicity/race-related data from the ACS. For residents 25 years and older, the percentage of persons in Carson achieving the status of Some College or Associate's Degree is considerably higher than for the County and State.

The table shows that 39% of Carson's population is of Hispanic or Latino origin, which is considerably lower than the shares for Los Angeles County (48.3%) and slightly below the State (39.1%). In terms of race, the "Asian alone" category share in Carson (25.7%) is far above that of Los Angeles County (14.8%) and the statewide average (also 14.8%).

Table II-5 and Table II-6 show comparable data for select South Bay and Gateway COG cities, respectively. The leading cities, for the South Bay and Gateway group, respectively, are Inglewood and Commerce for Hispanic/Latino populations (and Inglewood also has the highest percentage of population in the Black or African-American Alone category), and Torrance and Cerritos for Asian populations.

TABLE II-4. EDUCATION AND ETHNICITY/RACE RELATED CENSUS DATA - CARSON, LOS ANGELES COUNTY, AND CALIFORNIA

Census Variable	Carson	Los Angeles County	CA
Educational Attainment - Population 18 to 24 Years			
Less Than High School Graduate	9.5%	10.9%	10.3%
High School Graduate (Includes Equiv.)	22.4%	28.2%	31.3%
Some College or Associate's Degree	57.6%	48.6%	31.1%
Bachelor's Degree or Higher	10.5%	12.3%	11.5%
Educational Attainment - Population 25 Years and Over			
Less Than 9th Grade	9.3%	11.9%	8.9%
9th to 12th Grade, No Diploma	8.8%	8.3%	7.2%
High School Graduate (Includes Equiv.)	21.9%	20.4%	20.4%
Some College, No Degree	22.6%	18.9%	20.9%
Associate's Degree	8.5%	7.0%	8.0%
Bachelor's Degree	20.7%	21.8%	21.6%
Graduate or Professional Degree	8.1%	11.7%	13.1%
Hispanic or Latino Origin ³			
Not Hispanic or Latino	61.4%	51.7%	60.9%
Hispanic or Latino	38.6%	48.3%	39.1%
Race			
White Alone	26.1%	47.8%	56.1%
Black or African American Alone	24.0%	8.1%	5.7%
American Indian and Alaska Native Alone	0.4%	0.8%	0.8%
Asian Alone	25.7%	14.8%	14.8%
Native Hawaiian and Other Pacific Islander Alone	2.1%	0.2%	0.4%
Some Other Race Alone	13.3%	21.1%	14.3%
Two or More Races	8.3%	7.3%	7.9%

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates; TNDG.

³ According to U.S. Census Bureau definitions, "Hispanic or Latino" is an ethnic – not a racial – classification. Hispanic or Latino refers to refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. Thus, "Hispanic" is not listed as category on the "Race" portion of the table, since Hispanics can be members of any race.

Table II-5. Education and Ethnicity/Race Related Census Data – Carson and Select South Bay COG Cities

Census Variable		El Segundo	Inglewood	Redondo Beach	Torrance				
Educational Attainment - Population 18 to 24 Years									
Less Than High School Graduate	9.5%	13.9%	14.9%	7.9%	6.9%				
High School Graduate (Includes Equiv.)	22.4%	27.4%	28.4%	25.2%	29.5%				
Some College or Associate's Degree	57.6%	36.7%	48.7%	49.3%	48.6%				
Bachelor's Degree or Higher	10.5%	22.0%	8.0%	17.6%	15.0%				
Educational Attainment - Population 25 Ye	ars and O	ver							
Less Than 9th Grade	9.3%	1.2%	13.4%	1.4%	2.3%				
9th to 12th Grade, No Diploma	8.8%	1.7%	9.4%	1.6%	3.0%				
High School Graduate (Includes Equiv.)	21.9%	11.8%	22.2%	10.3%	16.1%				
Some College, No Degree	22.6%	23.3%	25.2%	16.4%	18.4%				
Associate's Degree	8.5%	6.1%	7.6%	7.9%	8.5%				
Bachelor's Degree	20.7%	33.9%	14.8%	39.3%	33.6%				
Graduate or Professional Degree	8.1%	21.9%	7.3%	23.1%	18.1%				
Hispanic or Latino Origin									
Not Hispanic or Latino	61.4%	84.1%	50.5%	84.6%	80.9%				
Hispanic or Latino	38.6%	15.9%	49.5%	15.4%	19.1%				
Race									
White Alone	26.1%	70.1%	24.4%	67.9%	42.9%				
Black or African American Alone	24.0%	4.8%	40.8%	3.8%	3.0%				
American Indian and Alaska Native Alone	0.4%	0.2%	1.2%	0.3%	0.5%				
Asian Alone	25.7%	9.9%	2.7%	14.5%	37.9%				
Native Hawaiian and Other Pacific Islander	2.1%	0.0%	0.6%	0.1%	0.3%				
Alone	2.1%	0.0%	0.6%	0.1%	0.5%				
Some Other Race Alone	13.3%	4.1%	22.6%	4.0%	6.8%				
Two or More Races	8.3%	10.9%	7.7%	9.5%	8.6%				

TABLE II-6. EDUCATION AND ETHNICITY/RACE RELATED CENSUS DATA — CARSON AND SELECT GATEWAY COG CITIES

Census Variable	Carson	Cerritos	Commerce	Industry	Long Beach	Santa Fe Springs
Educational Attainment - Population	n 18 to 2	4 Years				
Less Than High School Graduate	9.5%	7.7%	19.9%	15.0%	9.6%	8.5%
High School Graduate (Includes	22.4%	19.5%	28.2%	35.0%	26.5%	40.4%
Equiv.)				00.075		
Some College or Associate's	57.6%	51.5%	38.3%	50.0%	52.3%	44.1%
Degree						
Bachelor's Degree or Higher	10.5%	21.2%	13.6%	0.0%	11.6%	7.0%
Educational Attainment - Population				- I		
Less Than 9th Grade	9.3%	3.9%	21.6%	4.5%	12.1%	9.8%
9th to 12th Grade, No Diploma	8.8%	2.2%	16.1%	13.5%	7.6%	9.5%
High School Graduate (Includes	21.9%	13.9%	23.9%	34.8%	17.7%	26.7%
Equiv.)	21.570	13.570		34.070	17.770	20.770
Some College, No Degree	22.6%	17.7%	21.6%	23.2%	23.7%	24.3%
Associate's Degree	8.5%	8.7%	4.9%	1.3%	7.2%	9.9%
Bachelor's Degree	20.7%	35.1%	9.3%	17.4%	20.5%	14.2%
Graduate or Professional Degree	8.1%	18.5%	2.5%	5.2%	11.3%	5.7%
Hispanic or Latino Origin						
Not Hispanic or Latino	61.4%	85.8%	4.8%	38.6%	56.8%	26.7%
Hispanic or Latino	38.6%	14.2%	95.2%	61.4%	43.2%	73.3%
Race						
White Alone	26.1%	18.2%	55.7%	56.4%	49.4%	37.6%
Black or African American Alone	24.0%	8.2%	0.8%	0.8%	12.6%	5.4%
American Indian and Alaska Native	0.4%	0.1%	2.9%	0.0%	0.8%	1.2%
Alone	0.4%	0.1%	2.9%	0.0%	0.6%	1.270
Asian Alone	25.7%	59.8%	0.9%	5.7%	12.8%	7.6%
Native Hawaiian and Other Pacific	2.1%	0.6%	0.0%	0.00/	0.6%	0.10/
Is. Alone	2.1%	%0.0	0.0%	0.0%	0.0%	0.1%
Some Other Race Alone	13.3%	5.6%	33.4%	29.5%	17.2%	40.1%
Two or More Races	8.3%	7.4%	6.4%	7.6%	6.6%	8.1%

Table II-7 provides housing-related data from the ACS. Carson's housing units are occupied (96.0%), to a greater extent than either Los Angeles County and California (higher vacancies in other geographies may reflect higher levels of seasonal or recreational-use housing). Carson also has a higher share of owner-occupied housing units, 73.7% of the total, compared to Los Angeles County (46.0%) and the State (55.3%). A greater share of Carson's housing stock was produced in the 1960-1980 time period (45.6%) than the County (28.5%) and State (30.7%).

Table II-8 and Table II-9 show comparable data for select South Bay and Gateway COG cities, respectively. The leading cities, for the South Bay and Gateway group, respectively, are El Segundo and Santa Fe Springs for occupied housing (and Cerritos has the highest share of owner-occupied housing units), and Torrance and Cerritos for the highest shares of housing stock built between 1960-1980.

TABLE II-7. HOUSING-RELATED CENSUS DATA - CARSON, LOS ANGELES COUNTY, AND CALIFORNIA

Census Variable	Carson	Los Angeles County	CA
Occupancy Status - Housing Units			
Occupied	96.0%	93.6%	92.2%
Vacant	4.0%	6.4%	7.8%
Tenure - Occupied Housing Units			
Owner Occupied	73.7%	46.0%	55.3%
Renter Occupied	26.3%	54.0%	44.7%
Year Structure Built			
Built 2014 or Later	0.8%	1.7%	2.4%
Built 2010 to 2013	1.6%	1.3%	1.8%
Built 2000 to 2009	4.9%	5.3%	10.9%
Built 1990 to 1999	3.3%	6.5%	11.0%
Built 1980 to 1989	7.9%	11.7%	15.1%
Built 1970 to 1979	14.3%	13.8%	17.5%
Built 1960 to 1969	31.3%	14.7%	13.2%
Built 1950 to 1959	24.4%	20.3%	13.3%
Built 1940 to 1949	8.4%	10.1%	5.8%
Built 1939 or Earlier	3.0%	14.7%	9.0%

TABLE II-8. HOUSING-RELATED CENSUS DATA — CARSON, AND SELECT SOUTH BAY COG CITIES

Census Variable			Inglewood	Redondo Beach	Torrance					
Occupancy Status - Housing Units										
Occupied	96.0%	95.4%	94.2%	91.7%	92.5%					
Vacant	4.0%	4.6%	5.8%	8.3%	7.5%					
Tenure - Occupied Housing	Units									
Owner Occupied	73.7%	42.8%	36.1%	53.3%	54.6%					
Renter Occupied	26.3%	57.2%	63.9%	46.7%	45.4%					
Year Structure Built										
Built 2014 or Later	0.8%	0.2%	0.6%	2.0%	0.4%					
Built 2010 to 2013	1.6%	1.3%	1.0%	1.0%	0.4%					
Built 2000 to 2009	4.9%	3.8%	2.8%	6.6%	4.1%					
Built 1990 to 1999	3.3%	4.0%	4.5%	9.0%	3.9%					
Built 1980 to 1989	7.9%	12.6%	10.7%	15.8%	8.6%					
Built 1970 to 1979	14.3%	11.8%	12.3%	18.8%	12.3%					
Built 1960 to 1969	31.3%	17.8%	16.0%	17.4%	26.0%					
Built 1950 to 1959	24.4%	23.8%	19.6%	19.6%	35.8%					
Built 1940 to 1949	8.4%	16.2%	15.8%	5.6%	5.1%					
Built 1939 or Earlier	3.0%	8.4%	16.9%	4.2%	3.4%					

Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates; TNDG.

TABLE II-9. HOUSING-RELATED CENSUS DATA - CARSON, AND SELECT GATEWAY COG CITIES

				,		J 0111120					
Census Variable	Carson	Cerritos	Commerce	Industry	Long Beach	Santa Fe Springs					
Occupancy Status - Housing Units											
Occupied	96.0%	96.7%	97.0%	97.1%	94.6%	97.4%					
Vacant	4.0%	3.3%	3.0%	2.9%	5.4%	2.6%					
Tenure - Occupied Hou	sing Units										
Owner Occupied	73.7%	76.2%	55.2%	13.6%	40.2%	64.6%					
Renter Occupied	26.3%	23.8%	44.8%	86.4%	59.8%	35.4%					
Year Structure Built											
Built 2014 or Later	0.8%	1.9%	0.0%	0.0%	0.7%	2.0%					
Built 2010 to 2013	1.6%	0.5%	0.0%	0.0%	0.8%	6.3%					
Built 2000 to 2009	4.9%	1.3%	6.7%	2.9%	3.2%	2.9%					
Built 1990 to 1999	3.3%	3.2%	7.0%	4.4%	4.9%	5.7%					
Built 1980 to 1989	7.9%	7.7%	9.6%	11.8%	8.9%	7.3%					
Built 1970 to 1979	14.3%	51.5%	11.3%	7.4%	12.7%	11.5%					
Built 1960 to 1969	31.3%	28.9%	8.1%	5.9%	13.5%	8.8%					
Built 1950 to 1959	24.4%	3.4%	23.8%	32.4%	21.4%	48.3%					
Built 1940 to 1949	8.4%	0.7%	25.0%	7.4%	13.9%	5.7%					
Built 1939 or Earlier	3.0%	0.9%	8.6%	27.9%	20.0%	1.5%					

Demographic and Employment Forecasts

Table II-10 and Table II-11 below show the most recent Southern California Association of Governments (SCAG) demographic and employment estimates for Carson and cities included in the tables in this report (that are also connected with the South Bay and Gateway COGs), Los Angeles County, and the SCAG area. The forecasts by SCAG were provided in the Connect SoCal Demographics and Growth Forecast Technical Report, adopted September 3, 2020.

Figure II-1 shows the South Bay COG and Gateway COG cities in Los Angeles County in relation to the City of Carson boundaries.

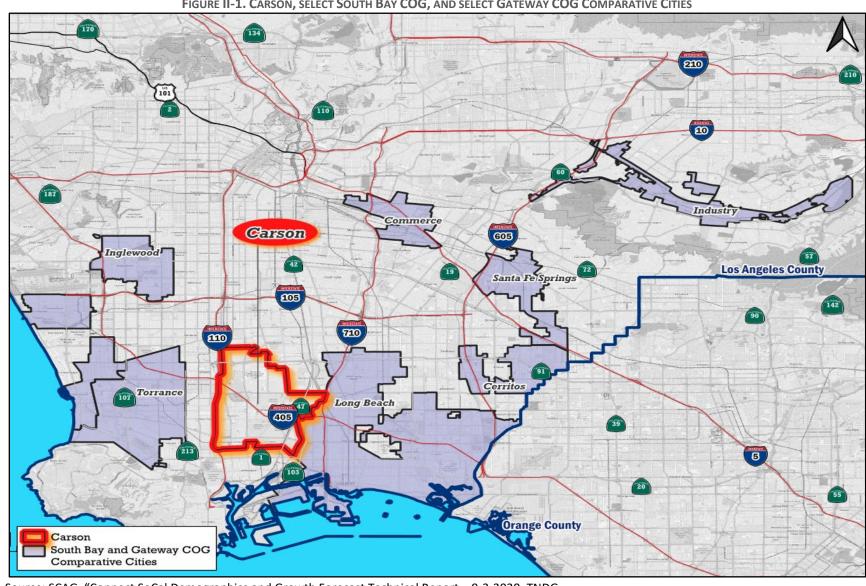


FIGURE II-1. CARSON, SELECT SOUTH BAY COG, AND SELECT GATEWAY COG COMPARATIVE CITIES

Source: SCAG, "Connect SoCal Demographics and Growth Forecast Technical Report – 9-3-2020; TNDG.

The tables and figures below provide growth rate projections for the time period of 2016-2045. SCAG's growth forecasts for jurisdictions' population, households, and employment reflected in the *Connect SoCal, 2020-2045 RTP/SCS Technical Report* only provide figures for the beginning and ending years of the forecast period. In that document, the latest jurisdictional existing land use and general plan land use data serve as the basis for future year population and household allocations. Household growth rates and household size are estimated based on historical trends and the developable capacity from each local jurisdiction's General Plan. Population projections are calculated based on household growth and household size. Future jurisdiction-level employment is estimated according to the share of each county's employment by sector.

Table II-10 shows that population and households in Carson are projected to grow at a relatively high rate, in comparison to the other cities in Los Angeles County during this time period, with only Inglewood in Santa Fe Springs having higher rates. Employment (Table II-10) is slated to have a slower rate of increase in Carson than population, and three other cities, Inglewood, Long Beach, and Redondo Beach, have higher rates of growth forecast than Carson.

TABLE II-10. SCAG POPULATION, HOUSEHOLD, AND EMPLOYMENT GROWTH FORECAST FOR CARSON, SELECT SOUTH BAY COG CITIES, SELECT GATEWAY COG CITIES, LOS ANGELES COUNTY, AND THE SCAG AREA

Geographic Area	Population 2016-45	Households 2016-45	Employment 2016-45
Carson	12.4%	20.4%	10.4%
Cerritos	0.8%	0.6%	0.5%
Commerce	5.3%	8.8%	4.9%
El Segundo	3.0%	4.3%	8.5%
Industry	0.0%	0.0%	0.0%
Inglewood	19.9%	27.2%	35.8%
Long Beach	4.0%	17.6%	18.9%
Redondo Beach	6.9%	6.5%	11.4%
Santa Fe Springs	16.4%	25.0%	7.0%
Torrance	4.1%	3.1%	5.7%
Los Angeles County	15.5%	24.1%	13.5%
SCAG Area	19.5%	27.0%	19.8%

Source: SCAG, Connect SoCal Demographics and Growth Forecast Technical Report – 9-3-2020; TNDG.

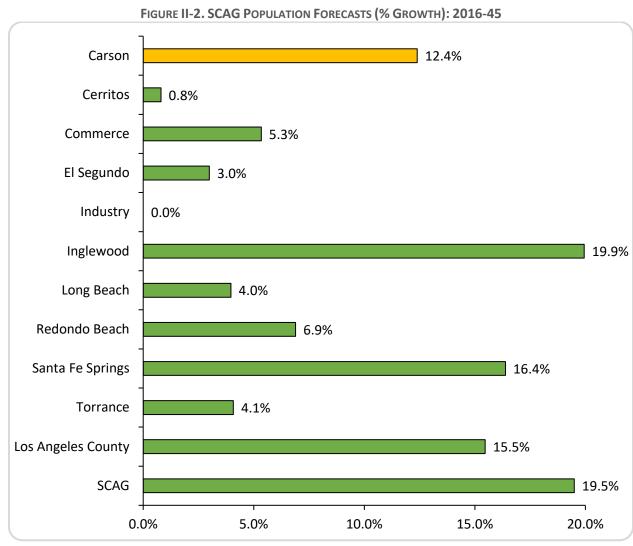
Table II-11, below, shows existing and projected jobs/housing ratios for Carson, cities within the South Bay COG, cities with the Gateway COG, Los Angeles County, and the overall SCAG region. The jobs-perhousing ratio provides a general indication of whether an area has enough housing for employees to have the opportunity to live near employment centers, and, likewise, sufficient jobs to serve the resident workforce. An imbalance in jobs and housing leads to the potential for longer commute times, more single-driver commutes, loss of job opportunities for workers without vehicles, traffic congestion, and related environmental impacts (e.g., poorer air quality). The table shows that Carson's existing and projected jobs/housing balance is relatively advantageous for the community, and also highlights the extreme "employment focus" of some communities in this group.

Table II-11. SCAG Growth Forecast for Jobs/Housing Ratio – Carson, select South Bay COG cities, select Gateway COG cities, Los Angeles County, and the SCAG Area

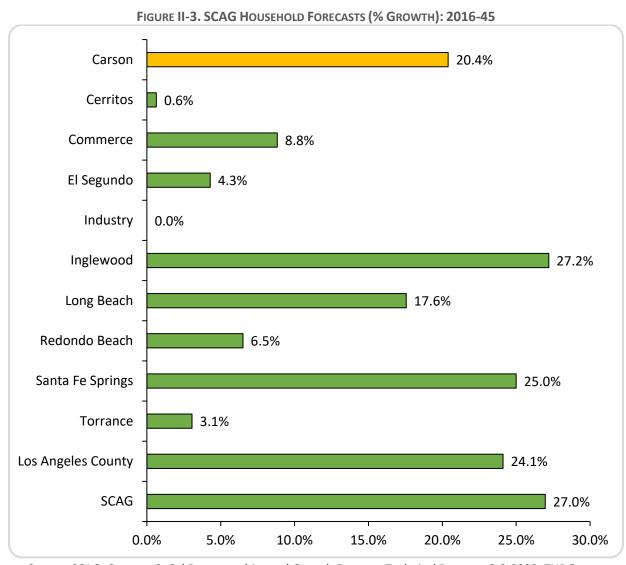
Geographic Area	Jobs / Ho	useholds
Geographic Area	2016	2045
Carson	2.49	2.28
Cerritos	2.52	2.51
Commerce	15.71	15.14
El Segundo	6.90	7.18
Industry	804.00	804.00
Inglewood	0.90	0.96
Long Beach	0.92	0.94
Redondo Beach	0.87	0.91
Santa Fe Springs	10.96	9.38
Torrance	2.28	2.34
Los Angeles County	1.43	1.31
SCAG Area	1.40	1.32

Source: SCAG, "Connect SoCal Demographics and Growth Forecast Technical Report – 9-3-2020; TNDG.

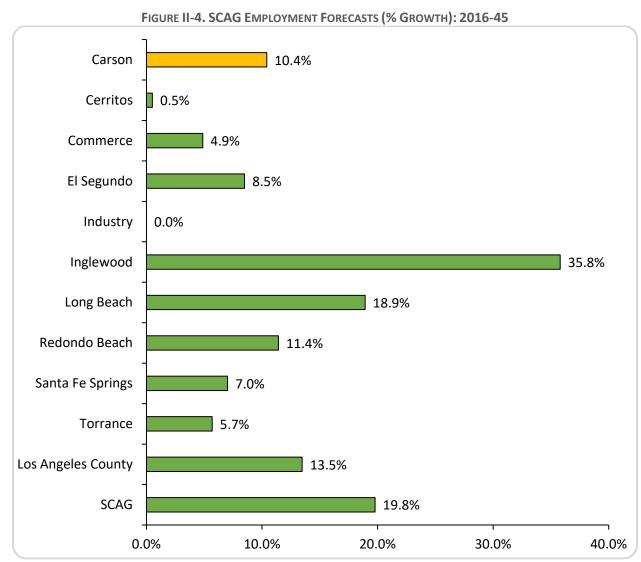
To provide additional context on the SCAG forecasts, the following three figures (Figure II-2 through Figure II-4) compare projected growth for the City of Carson – in population, households, and employment – to the selected cities in the South Bay COG, selected cities in the Gateway COG, Los Angeles County, and the overall SCAG region. The figures further illustrate that Carson is projected to have relatively high levels of growth compared to the other communities. Note that the differential rates in population and household growth (where household growth rates exceed those of population) are essentially a function of decreasing household size over time.



Source: SCAG, Connect SoCal Demographics and Growth Forecast Technical Report – 9-3-2020; TNDG.



 $Source: SCAG, Connect SoCal \ Demographics \ and \ Growth \ Forecast \ Technical \ Report-9-3-2020; TNDG.$



Source: SCAG, Connect SoCal Demographics and Growth Forecast Technical Report – 9-3-2020; TNDG.

The maps in Figure II-5 and Figure II-6 on the following pages provide additional visual context by showing the SCAG forecasts of population and employment change from 2016 to 2045 in Carson and other surrounding communities. The figures demonstrate that population growth in Carson is projected to increase at a relatively high rate compared to surrounding cities, while projected employment growth lags somewhat.

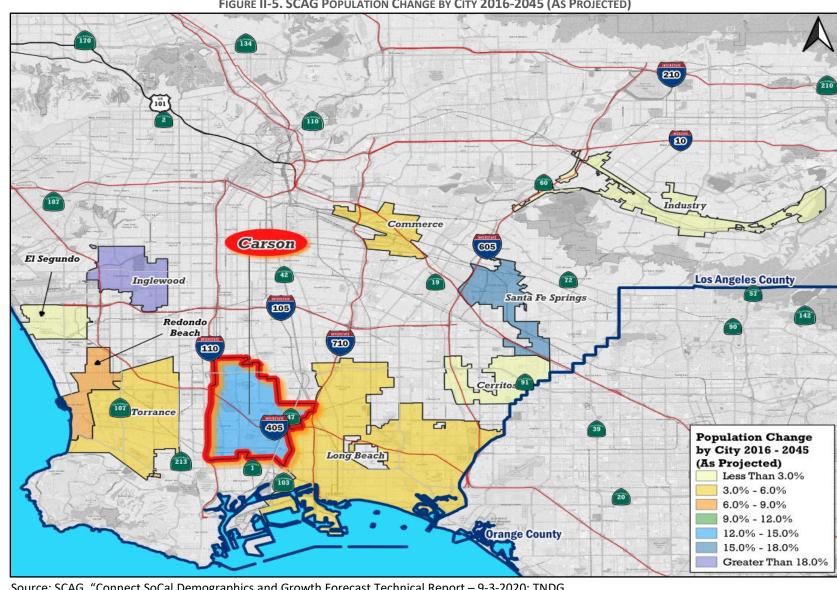
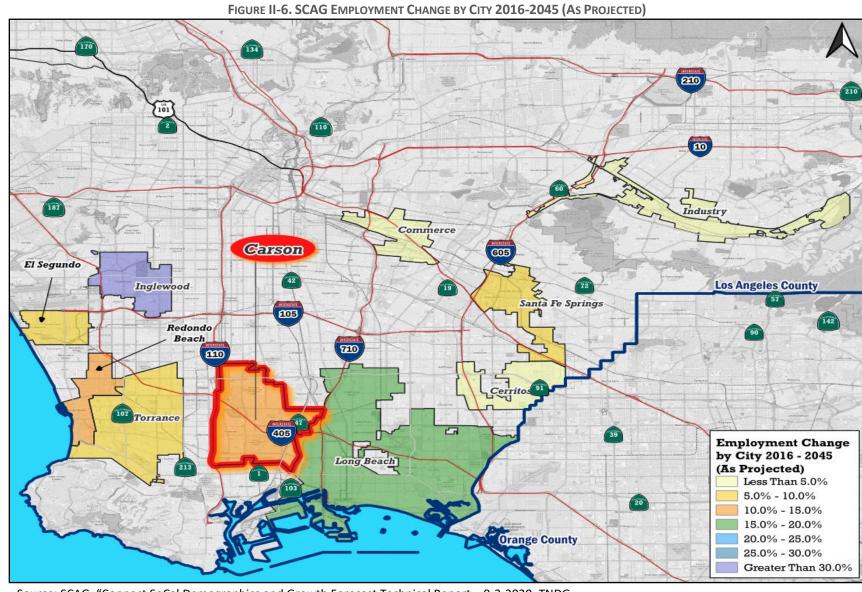


FIGURE II-5. SCAG POPULATION CHANGE BY CITY 2016-2045 (AS PROJECTED)

Source: SCAG, "Connect SoCal Demographics and Growth Forecast Technical Report – 9-3-2020; TNDG.



Source: SCAG, "Connect SoCal Demographics and Growth Forecast Technical Report – 9-3-2020; TNDG.

Labor Force Data

The federal Bureau of Labor Statistics (BLS) provides unemployment rate estimates through its Local Area Unemployment Statistics (LAUS) program. Figure II-7, below, provides annual average unemployment rate estimates for Carson, Los Angeles County, and California for the 11-year period from 2012 to 2022. The figure shows that during the recovery from the Great Recession (between 2012 and 2015), Carson's unemployment rates exceeded those of the county and state. By 2020 (i.e., during the peak of the COVID-19 pandemic), Carson and Los Angeles County were roughly the same, and Carson had a slightly lower rate than the County by 2022.

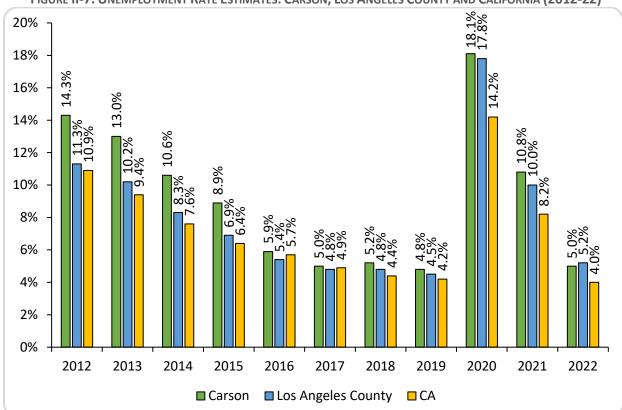


FIGURE II-7. UNEMPLOYMENT RATE ESTIMATES: CARSON, LOS ANGELES COUNTY AND CALIFORNIA (2012-22)

Source: CA EDD, Local Area Unemployment Statistics (LAUS) program; TNDG.

Figure II-8 and Figure II-9 show comparable data for the select South Bay and Gateway COG cities, respectively. The highest unemployment rates, for the South Beach and Gateway group, respectively, are Inglewood and Commerce (early in the time series, with Industry showing high numbers later in the series).

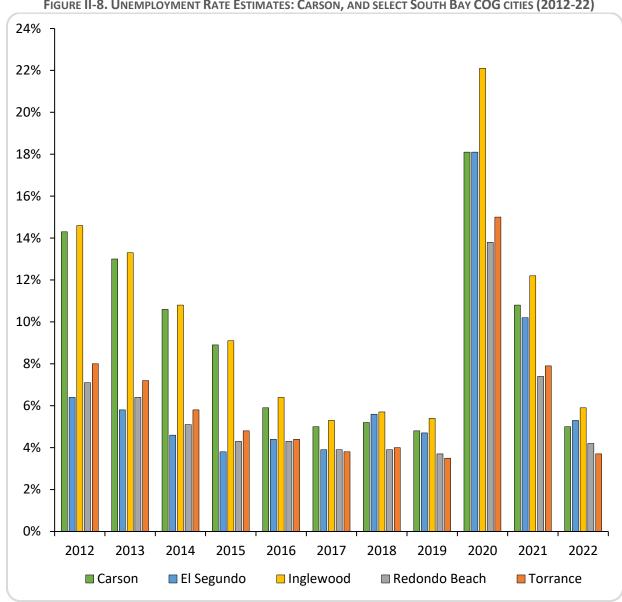


FIGURE II-8. UNEMPLOYMENT RATE ESTIMATES: CARSON, AND SELECT SOUTH BAY COG CITIES (2012-22)

Source: CA EDD, Local Area Unemployment Statistics (LAUS) program; TNDG.

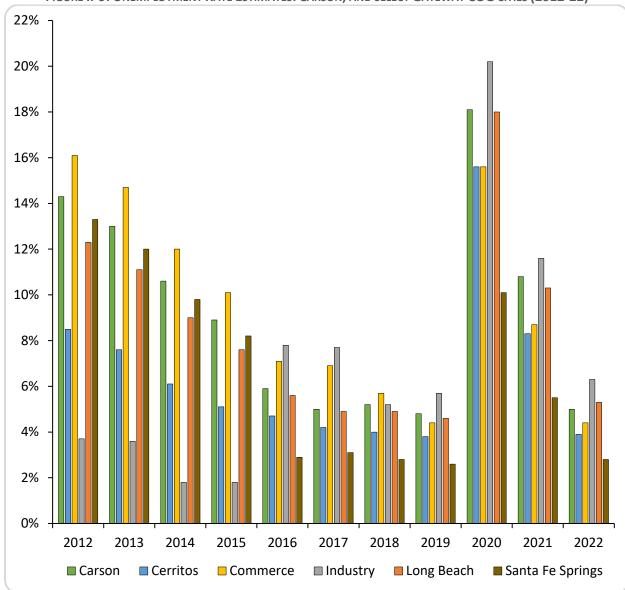


FIGURE II-9. UNEMPLOYMENT RATE ESTIMATES: CARSON, AND SELECT GATEWAY COG CITIES (2012-22)

Source: CA EDD, Local Area Unemployment Statistics (LAUS) program; TNDG.

Table II-12, below, shows the total labor force for the selected geographies for selected years during the 2012-2022 period. The table shows that during this overall 10-year period Carson's labor force declined, with some up and down fluctuations in the interim years. During the same period, both Los Angeles County and the state showed labor force increases. Available data suggest that Carson's labor force participation rates have been roughly in line with county-wide averages throughout this 10-year period; thus, the decline in the total workforce was not caused by a change in labor force participation. A possible (but not definitive) explanation is that Carson's total "working age" population (residents in the 18-64 age range), decreased by 1.2% between 2012 and 2020, whereas the working age population countywide grew slightly (by 0.3%) during this 10-year period. This topic will be further explored later in the EDSP process.

TABLE II-12. TOTAL RESIDENT LABOR FORCE: CARSON, SELECT SOUTH BAY COG CITIES, SELECT GATEWAY COG CITIES, LOS ANGELES COUNTY. AND CALIFORNIA (2012-22)

Area	2012	2014	2016	2018	2020	2022	Annual Growth Rate ¹ 2012-2022
Carson	46,500	46,500	45,500	46,200	44,300	44,300	-0.48%
Cerritos	23,700	24,100	24,800	25,400	23,600	24,100	0.17%
Commerce	5,600	5,600	5,600	5,900	5,600	5,700	0.18%
El Segundo	9,300	9,500	9,500	9,500	9,400	9,400	0.11%
Industry	100	100	100	200	100	100	0.00%
Inglewood	53,600	53,400	52,100	52,700	53,100	51,000	-0.50%
Long Beach	235,100	236,900	234,600	238,900	228,800	229,600	-0.24%
Redondo Beach	38,800	39,600	40,500	41,400	38,100	39,700	0.23%
Santa Fe Springs	7,400	7,700	7,800	8,200	7,700	8,200	1.03%
Torrance	74,900	76,400	77,200	78,300	73,200	74,900	0.00%
Los Angeles County	4,887,700	4,963,000	4,996,900	5,103,200	4,935,000	4,960,500	0.15%
CA	18,524,400	18,661,100	18,994,000	19,289,100	18,993,600	19,110,300	0.31%

^{1.} Compound Annual Growth Rate (CAGR)

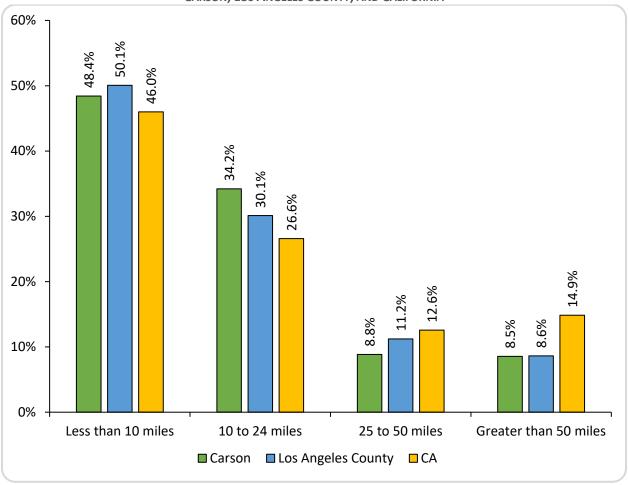
Source: CA EDD, Local Area Unemployment Statistics (LAUS) program; TNDG.

The four figures (Figure II-10 through Figure II-13) below provide additional workforce-related data for Carson. The data in these figures are from the U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) program. Figure II-10 provides travel distance ranges to work for the City's labor force relative to county and state benchmarks. The figure shows (according to this particular data source) that Carson's resident labor force tends to have shorter to intermediate-distance commutes relative to the overall labor force in Los Angeles County and in the state. For example, Carson's largest share (48.4%) of residents, travel distances of less than 10 miles to work, and another 34.2% of residents in Carson travel distances of 10 to 24 miles to work. In addition, the City has the smallest share (8.5%) of residents that have commute distances greater than 50 miles.

Figure II-11 and Figure II-12 show comparable data for the South Bay and Gateway COG cities, respectively. The leading cities, for the South Bay and Gateway group, respectively, are Inglewood and Commerce for the greatest share of shorter resident worker commuting distances less than 10 miles to work, and 10 to 24 miles to work as well as the smallest share of long-distance resident worker commutes that are greater than 50 miles.

⁴ The data compiled in Figure II-8, Figure II-9, and Figure II-10 provide the number of miles resident workers travel to their place of work and is gathered from the Census LEHD program. The data compiled in Table II-1, Table II-2, and Table II-3 provide the number of minutes spent traveling to work for resident workers and is reported in the Census ACS 2016-2020 5-Year Estimates.

FIGURE II-10. TRAVEL DISTANCES (MILE RANGES) TO WORK FOR RESIDENT WORKERS (2019): CARSON, LOS ANGELES COUNTY, AND CALIFORNIA



CARSON, AND SELECT SOUTH BAY COG CITIES 64.5% 61.3% 53.4% 49.7% 48.4% 23.5% 20.2% Less than 10 miles 10 to 24 miles 25 to 50 miles Greater than 50 miles ■ El Segundo ■ Redondo Beach Carson Inglewood ■ Torrance

FIGURE II-11. TRAVEL DISTANCES (MILE RANGES) TO WORK FOR RESIDENT WORKERS (2019):

CARSON, AND SELECT GATEWAY COG CITIES 58.7% 48.4% 44.9% 43.6% 40.3% 38.6% 37.0% 34.2% 26.7% Less than 10 miles 25 to 50 miles 10 to 24 miles Greater than 50 miles Carson ■ Cerritos □ Commerce ■ Industry ■ Long Beach ■ Santa Fe Springs

FIGURE II-12. TRAVEL DISTANCES (MILE RANGES) TO WORK FOR RESIDENT WORKERS (2019):

Figure II-13 shows the measure of in-area labor force efficiency – the percent of the City's labor force that both lives and works in the selected area – for Carson and the select cities in the South Bay COG as well as the Gateway COG. As shown in the figure, Carson's share of its labor force that lives and works in the City, at 7.0%, is lower than the average labor force efficiency measure for select cities in the South Bay COG and Gateway COG of 11.5%.

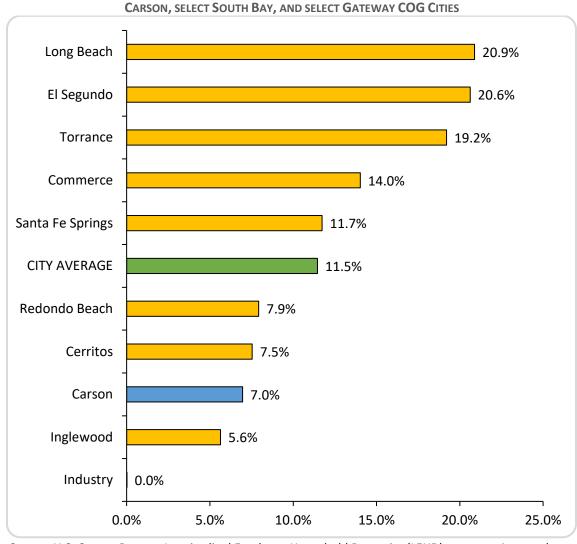


FIGURE II-13. IN-AREA LABOR FORCE EFFICIENCY: % LIVING AND EMPLOYED IN

Employment Overview

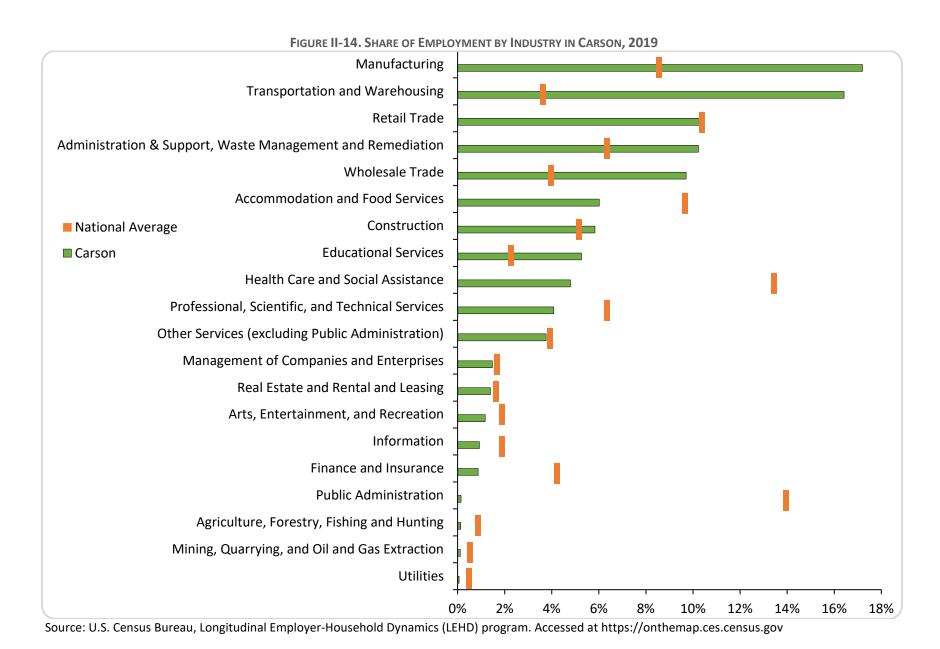
Along with the labor force measures presented in the previous section, the U.S. Census Bureau's LEHD program also provides employment data at various levels of geography, including at the city level. Figure II-14 provides the share of employment by industry for Carson-based jobs in 2019. The major industry groupings correspond to 2-digit NAICS⁵ codes industries. In addition, the national averages for these industry groupings are provided for a more detailed comparison. In terms of concentration of industry employment, Carson is heavily represented in the Manufacturing, Transportation and Warehousing,

⁵ NAICS = North American Industry Classification System.

Retail Trade, Administration & Support, Waste Management and Remediation, and Wholesale Trade industries, which account for close to two-thirds (63.9%) of total employment in the City.

For comparison purposes, Figure II-15 also shows the share of employment by industry for Los Angeles County and California in 2019. As shown in the figure, Carson had a considerably larger share of employment in Manufacturing, Transportation and Warehousing, Administration & Support, Waste Management and Remediation, and Wholesale Trade industries as well as a larger share of employment in Retail Trade industry compared to the two benchmark regions. Compared to Los Angeles County, Carson has a high share of employment in Manufacturing, Transportation and Warehousing, and Wholesale Trade.

Figure II-16 and Figure II-17 show comparable data for the select South Bay and Gateway COG cities, respectively. El Segundo is the standout city for Manufacturing, Information, and for Professional Scientific and Technical Services. For the Gateway COG cities, Industry leads in Manufacturing, and Long Beach in Healthcare/Social Assistance.



Summary of Key Datasets for Economic Development Strategic Plan (EDSP)

CARSON, LOS ANGELES COUNTY, AND CALIFORNIA Manufacturing Transportation and Warehousing **Retail Trade** Administration & Support, Waste Management and Remediation Wholesale Trade Accommodation and Food Services Construction **Educational Services** Health Care and Social Assistance Professional, Scientific, and Technical Services Other Services (excluding Public Administration) Management of Companies and Enterprises Real Estate and Rental and Leasing Arts, Entertainment, and Recreation Information Finance and Insurance **Public Administration** Agriculture, Forestry, Fishing and Hunting Mining, Quarrying, and Oil and Gas Extraction Utilities 2% 4% 8% 10% 12% 14% 16% 18% 6%

FIGURE II-15. SHARE OF EMPLOYMENT BY INDUSTRY BY AREA (2019):

■ Carson ■ Los Angeles County ■ CA

FIGURE II-16. SHARE OF EMPLOYMENT BY INDUSTRY BY AREA (2019):

CARSON AND SELECT SOUTH BAY COG CITIES

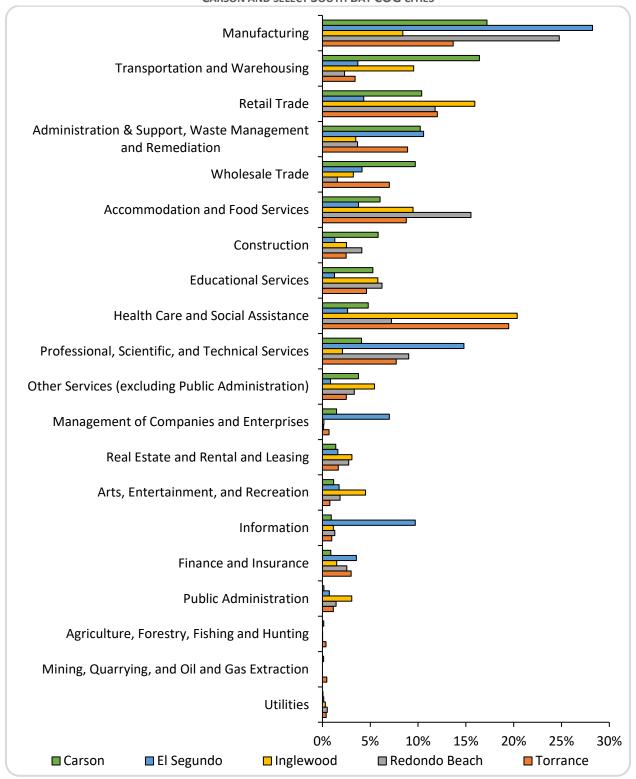
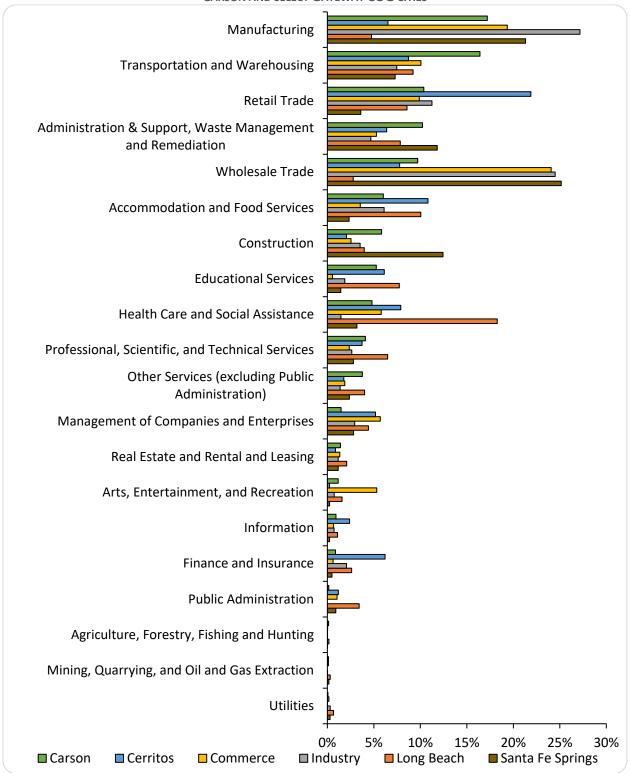


FIGURE II-17. SHARE OF EMPLOYMENT BY INDUSTRY BY AREA (2019):

CARSON AND SELECT GATEWAY COG CITIES



In addition to industry employment data, the Census Bureau's LEHD program also provides the number of jobs for three gross-earnings groups, as shown in Figure II-18. The figure shows that while Carson has a high proportion in the middle-earnings group compared to the other places, the three are generally balanced in this measure.

Figure II-19 and Figure II-20 show comparable data for the select South Bay and Gateway COG cities, respectively. Higher earnings are evident in Redondo Beach and Torrance, and Commerce lags the communities in its group.

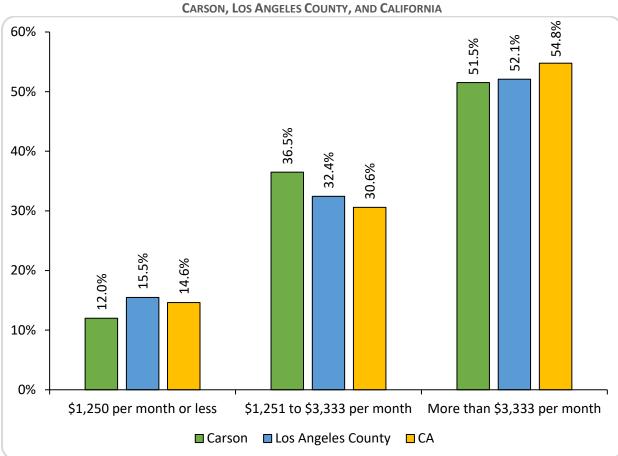


FIGURE II-18. DISTRIBUTION OF JOBS BY MONTHLY EARNINGS (GROSS) (2019):

CARSON, AND SELECT SOUTH BAY COG CITIES 70% 60% 52.7% 51.5% 44.2% 50% 42.6% 41.2% 40% 32.6% 28.8% 30% 14.0% 20% 10% 0% \$1,250 per month or less \$1,251 to \$3,333 per month More than \$3,333 per month ■ El Segundo ■ Inglewood ■ Redondo Beach ■ Carson ■ Torrance

FIGURE II-19. DISTRIBUTION OF JOBS BY MONTHLY EARNINGS (GROSS) (2019):

CARSON, AND SELECT SOLITH BAY COG CITIES

55.9% 60% 53.5% 53.0% 51.5% 50.5% 50% 44.2% 36.5% 36.8% 34.5% 40% 30% 15.0% 20% 12.0% 9.7% 10% 0% \$1,250 per month or less \$1,251 to \$3,333 per month More than \$3,333 per month ■ Carson ■ Cerritos ■ Commerce ■ Industry ■ Long Beach ■ Santa Fe Springs

FIGURE II-20. DISTRIBUTION OF JOBS BY MONTHLY EARNINGS (GROSS) (2019): CARSON, AND SELECT GATEWAY COG CITIES

Table II-13 and Table II-14 show data for employment by industry group, including location quotient (LQ) figures, for Carson, Los Angeles County, California and the selected cities from the two COGS represented in this report. The LQ section shows which cities have the strongest position in which industries, and which industries are strongest in any particular city. The figures show that Carson clearly is dominant in the Transportation and Warehousing sector, which is also strong in El Segundo and Inglewood (and Inglewood has a strength and Arts, Entertainment, and Recreation). El Segundo also has high LQ values in Information and in Professional Scientific and Technical Services. Torrance is the strongest among the South Bay group in Manufacturing. In the Gateway cities, Commerce is particularly strong in Wholesale Trade, and Industry in Manufacturing (along with Commerce and Santa Fe Springs). Santa Fe Springs has a particularly high LQ in Management of Companies and Enterprises.

TABLE II-13. EMPLOYMENT BY MAJOR INDUSTRY GROUP (2021):

CARSON, SELECT SOUTH BAY COG CITIES, LOS ANGELES COUNTY, AND CALIFORNIA

	CARSON, SELECT SOOTI	1 2 1 1 0 0	-					
NAICS	Industry Desc.	Carson	El	Inglewood	Redondo	Torrance	Los Angeles	California
Code	madery beser	our som	Segundo	mgrewood	Beach	Torrance	County	- Carrior III a
Numbe	er of Jobs							
11	Agriculture, Forestry, Fishing and Hunting	0	13	25	41	94	5,533	447,250
21	Mining, Quarrying, and Oil and Gas Extraction	15	< 10	0	< 10	0	1,702	17,046
22	Utilities	108	54	85	0	149	12,338	60,279
23	Construction	1,128	1,766	1,145	1,204	5,164	219,199	1,125,049
31	Manufacturing	3,402	5,746	1,740	1,439	16,122	323,213	1,305,224
42	Wholesale Trade	2,274	1,907	1,078	1,175	6,072	205,628	666,624
44	Retail Trade	3,326	4,540	4,646	2,986	12,061	425,081	1,684,300
48	Transportation and Warehousing	10,866	5,380	5,569	1,334	11,698	231,475	808,518
51	Information	156	3,352	456	632	1,214	208,551	573,092
52	Finance and Insurance	480	2,382	1,022	825	4,433	152,721	626,863
53	Real Estate and Rental and Leasing	440	548	1,216	901	3,478	110,444	377,229
54	Professional, Scientific, and Technical Services	2,006	7,930	1,819	3,180	11,872	363,620	1,591,082
55	Management of Companies and Enterprises	11	19	0	< 10	24	60,609	242,713
56	Administrative and Support and Waste	1,722	5,449	3,148	1,492	5,402	297,791	1,238,633
30	Management and Remediation Services	1,722	3,443	3,140	1,492	3,402	237,731	1,236,033
61	Educational Services	959	413	934	642	3,296	169,584	482,524
62	Health Care and Social Assistance	2,782	1,835	14,525	3,790	18,212	774,299	2,559,352
71	Arts, Entertainment, and Recreation	499	607	1,691	518	1,934	97,950	281,934
72	Accommodation and Food Services	1,857	2,490	2,914	3,457	7,290	328,951	1,289,401
81	Other Services (except Public Administration)	2,128	2,198	3,165	4,272	6,295	315,073	1,026,897
90	Government ¹	8,288	1,387	7,674	3,476	11,625	589,721	2,685,929
	Total Jobs	42,447	48,024	52,851	31,384	126,434	4,893,484	19,089,939
Distrib	ution of Jobs							
11	Agriculture, Forestry, Fishing and Hunting	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	2.3%
21	Mining, Quarrying, and Oil and Gas Extraction	0.0%	_	0.0%	-	0.0%	0.0%	0.1%
22	Utilities	0.3%	0.1%	0.2%	0.0%	0.1%	0.3%	0.3%
23	Construction	2.7%	3.7%	2.2%	3.8%	4.1%	4.5%	5.9%

NAICS Code	Industry Desc.	Carson	El Segundo	Inglewood	Redondo Beach	Torrance	Los Angeles County	California
31	Manufacturing	8.0%	12.0%	3.3%	4.6%	12.8%	6.6%	6.8%
42	Wholesale Trade	5.4%	4.0%	2.0%	3.7%	4.8%	4.2%	3.5%
44	Retail Trade	7.8%	9.5%	8.8%	9.5%	9.5%	8.7%	8.8%
48	Transportation and Warehousing	25.6%	11.2%	10.5%	4.2%	9.3%	4.7%	4.2%
51	Information	0.4%	7.0%	0.9%	2.0%	1.0%	4.3%	3.0%
52	Finance and Insurance	1.1%	5.0%	1.9%	2.6%	3.5%	3.1%	3.3%
53	Real Estate and Rental and Leasing	1.0%	1.1%	2.3%	2.9%	2.8%	2.3%	2.0%
54	Professional, Scientific, and Technical Services	4.7%	16.5%	3.4%	10.1%	9.4%	7.4%	8.3%
55	Management of Companies and Enterprises	0.0%	0.0%	0.0%	-	0.0%	1.2%	1.3%
56	Administrative and Support and Waste Management and Remediation Services	4.1%	11.3%	6.0%	4.8%	4.3%	6.1%	6.5%
61	Educational Services	2.3%	0.9%	1.8%	2.0%	2.6%	3.5%	2.5%
62	Health Care and Social Assistance	6.6%	3.8%	27.5%	12.1%	14.4%	15.8%	13.4%
71	Arts, Entertainment, and Recreation	1.2%	1.3%	3.2%	1.7%	1.5%	2.0%	1.5%
72	Accommodation and Food Services	4.4%	5.2%	5.5%	11.0%	5.8%	6.7%	6.8%
81	Other Services (except Public Administration)	5.0%	4.6%	6.0%	13.6%	5.0%	6.4%	5.4%
90	Government	19.5%	2.9%	14.5%	11.1%	9.2%	12.1%	14.1%
Locatio	on Quotient (LQ)							
11	Agriculture, Forestry, Fishing and Hunting	0.00	0.02	0.04	0.10	0.06	0.09	1.84
21	Mining, Quarrying, and Oil and Gas Extraction	0.11	0.04	0.00	0.08	0.00	0.11	0.28
22	Utilities	0.74	0.33	0.46	0.00	0.34	0.73	0.92
23	Construction	0.46	0.63	0.37	0.66	0.70	0.77	1.01
31	Manufacturing	1.03	1.54	0.42	0.59	1.64	0.85	0.88
42	Wholesale Trade	1.49	1.10	0.57	1.04	1.33	1.17	0.97
44	Retail Trade	0.79	0.95	0.88	0.95	0.96	0.87	0.89
48	Transportation and Warehousing	6.13	2.68	2.52	1.02	2.22	1.13	1.01
51	Information	0.20	3.86	0.48	1.11	0.53	2.35	1.66
52	Finance and Insurance	0.27	1.16	0.45	0.62	0.82	0.73	0.77
53	Real Estate and Rental and Leasing	0.60	0.66	1.33	1.66	1.59	1.31	1.14
54	Professional, Scientific, and Technical Services	0.68	2.37	0.49	1.45	1.35	1.07	1.20

NAICS Code	Industry Desc.	Carson	El Segundo	Inglewood	Redondo Beach	Torrance	Los Angeles County	California
55	Management of Companies and Enterprises	0.02	0.03	0.00	0.02	0.01	0.86	0.88
56	Administrative and Support and Waste Management and Remediation Services	0.67	1.86	0.98	0.78	0.70	1.00	1.07
61	Educational Services	0.86	0.33	0.67	0.78	1.00	1.32	0.96
62	Health Care and Social Assistance	0.50	0.29	2.11	0.93	1.11	1.21	1.03
71	Arts, Entertainment, and Recreation	0.84	0.90	2.28	1.18	1.09	1.43	1.05
72	Accommodation and Food Services	0.61	0.72	0.77	1.53	0.80	0.93	0.94
81	Other Services (except Public Administration)	0.98	0.89	1.17	2.66	0.97	1.26	1.05
90	Government	1.31	0.19	0.97	0.74	0.62	0.81	0.94

^{1.} Note that the number of jobs in "Government" differs from "Public Administration" in previous figures (II-14 through II-17) in that the compilation of data is derived from different sources. One of the primary differences between these two different datasets is that the data presented in this table groups jobs from Colleges, Universities, Professional Schools, Elementary, and Secondary Schools into the "Government" industry category.

Source: EMSI; TNDG.

TABLE II-14. EMPLOYMENT BY MAJOR INDUSTRY GROUP (2021):

CARSON, AND SELECT GATEWAY COG CITIES

	CARSON, AND SELECT GATEWAY COG CITIES									
NAICS Code	Industry Desc.	Carson	Cerritos	Commerce	Industry	Long Beach	Santa Fe Springs			
Numbe	Number of Jobs									
11	Agriculture, Forestry, Fishing and Hunting	0	< 10	34	0	146	194			
21	Mining, Quarrying, and Oil and Gas Extraction	15	< 10	0	0	122	95			
22	Utilities	108	48	20	0	323	92			
23	Construction	1,128	1,762	1,920	13	6,249	4,323			
31	Manufacturing	3,402	2,784	6,692	5,407	9,915	11,248			
42	Wholesale Trade	2,274	2,212	5,465	0	5,920	6,244			
44	Retail Trade	3,326	4,175	4,370	0	16,155	4,642			
48	Transportation and Warehousing	10,866	1,089	1,612	0	13,604	3,392			
51	Information	156	191	196	< 10	2,002	375			
52	Finance and Insurance	480	1,688	607	12	7,348	316			
53	Real Estate and Rental and Leasing	440	488	257	0	4,541	501			

NAICS Code	Industry Desc.	Carson	Cerritos	Commerce	Industry	Long Beach	Santa Fe Springs
54	Professional, Scientific, and Technical Services	2,006	1,960	1,513	< 10	15,487	2,834
55	Management of Companies and Enterprises	11	< 10	366	0	1,122	5,197
56	Administrative and Support and Waste Management and Remediation Services	1,722	2,026	1,042	45	8,135	2,455
61	Educational Services	959	878	110	0	8,793	327
62	Health Care and Social Assistance	2,782	2,819	2,553	0	33,365	3,642
71	Arts, Entertainment, and Recreation	499	279	372	0	2,427	269
72	Accommodation and Food Services	1,857	2,515	1,221	0	13,546	3,092
81	Other Services (except Public Administration)	2,128	1,651	695	< 10	15,433	1,314
90	Government ¹	8,288	3,549	646	45	27,584	1,257
Distrib	ution of Jobs						
	Total Jobs	42,447	30,139	29,691	5,543	192,217	51,810
11	Agriculture, Forestry, Fishing and Hunting	0.0%		0.1%	0.0%	0.1%	0.4%
21	Mining, Quarrying, and Oil and Gas Extraction	0.0%	_	0.0%	0.0%	0.1%	0.2%
22	Utilities	0.3%	0.2%	0.1%	0.0%	0.2%	0.2%
23	Construction	2.7%	5.8%	6.5%	0.2%	3.3%	8.3%
31	Manufacturing	8.0%	9.2%	22.5%	97.5%	5.2%	21.7%
42	Wholesale Trade	5.4%	7.3%	18.4%	0.0%	3.1%	12.1%
44	Retail Trade	7.8%	13.9%	14.7%	0.0%	8.4%	9.0%
48	Transportation and Warehousing	25.6%	3.6%	5.4%	0.0%	7.1%	6.5%
51	Information	0.4%	0.6%	0.7%		1.0%	0.7%
52	Finance and Insurance	1.1%	5.6%	2.0%	0.2%	3.8%	0.6%
53	Real Estate and Rental and Leasing	1.0%	1.6%	0.9%	0.0%	2.4%	1.0%
54	Professional, Scientific, and Technical Services	4.7%	6.5%	5.1%	_	8.1%	5.5%
55	Management of Companies and Enterprises	0.0%	_	1.2%	0.0%	0.6%	10.0%
56	Administrative and Support and Waste Management and Remediation Services	4.1%	6.7%	3.5%	0.8%	4.2%	4.7%
61	Educational Services	2.3%	2.9%	0.4%	0.0%	4.6%	0.6%
62	Health Care and Social Assistance	6.6%	9.4%	8.6%	0.0%	17.4%	7.0%
71	Arts, Entertainment, and Recreation	1.2%	0.9%	1.3%	0.0%	1.3%	0.5%

NAICS Code	Industry Desc.	Carson	Cerritos	Commerce	Industry	Long Beach	Santa Fe Springs	
72	Accommodation and Food Services	4.4%	8.3%	4.1%	0.0%	7.0%	6.0%	
81	Other Services (except Public Administration)	5.0%	5.5%	2.3%	-	8.0%	2.5%	
90	Government	19.5%	11.8%	2.2%	0.8%	14.4%	2.4%	
Locatio	Location Quotient (LQ)							
11	Agriculture, Forestry, Fishing and Hunting	0.00	0.03	0.09	0.00	0.06	0.29	
21	Mining, Quarrying, and Oil and Gas Extraction	0.11	0.07	0.00	0.00	0.20	0.57	
22	Utilities	0.74	0.46	0.19	0.00	0.49	0.52	
23	Construction	0.46	1.00	1.11	0.04	0.56	1.43	
31	Manufacturing	1.03	1.19	2.90	12.55	0.66	2.79	
42	Wholesale Trade	1.49	2.04	5.11	0.00	0.86	3.35	
44	Retail Trade	0.79	1.39	1.48	0.00	0.84	0.90	
48	Transportation and Warehousing	6.13	0.87	1.30	0.00	1.70	1.57	
51	Information	0.20	0.35	0.36	0.05	0.58	0.40	
52	Finance and Insurance	0.27	1.31	0.48	0.05	0.90	0.14	
53	Real Estate and Rental and Leasing	0.60	0.94	0.50	0.00	1.37	0.56	
54	Professional, Scientific, and Technical Services	0.68	0.93	0.73	0.02	1.16	0.78	
55	Management of Companies and Enterprises	0.02	0.02	0.85	0.00	0.40	6.93	
56	Administrative and Support and Waste Management and Remediation Services	0.67	1.10	0.58	0.13	0.70	0.78	
61	Educational Services	0.86	1.11	0.14	0.00	1.75	0.24	
62	Health Care and Social Assistance	0.50	0.72	0.66	0.00	1.33	0.54	
71	Arts, Entertainment, and Recreation	0.84	0.66	0.89	0.00	0.90	0.37	
72	Accommodation and Food Services	0.61	1.16	0.57	0.00	0.98	0.83	
81	Other Services (except Public Administration)	0.98	1.07	0.46	0.03	1.57	0.49	
90	Government	1.31	0.79	0.15	0.05	0.96	0.16	

^{1.} Note that the number of jobs in "Government" differs from "Public Administration" in previous figures (II-14 through II-17) in that the compilation of data is derived from different sources. One of the primary differences between these two different datasets is that the data presented in this table groups jobs from Colleges, Universities, Professional Schools, Elementary, and Secondary Schools into the "Government" industry category.

Source: EMSI; TNDG.

III. Assessed Valuation, Building Permit, and Taxable Sales Data

This section examines assessed valuation, building permit, and taxable sales data for the City of Carson compared to appropriate regional benchmarks. Assessed value data for Los Angeles County and select cities (South Bay COG Cities of El Segundo, Inglewood, Redondo Beach, and Torrance, and Gateway COG cities of Cerritos, Commerce, Industry, Long Beach, and Santa Fe Springs) are provided by the California State Controller's Open Data website. The U.S. Census Bureau provides city-level building permit data through its Place Level Residential Building Permit Statistics survey. For taxable sales data, this section evaluates data for Carson, Los Angeles County, and the State of California, as well as South Bay COG Cities of El Segundo, Inglewood, Redondo Beach, and Torrance, and Gateway COG cities of Cerritos, Commerce, Industry, Long Beach, Santa Fe Springs, as provided by the California Department of Tax and Fee Administration (CDTFA).

Assessed Valuation Data

Table III-1below, shows the net taxable assessed value for selected fiscal years (FY) for Carson, the select South Bay COG cites of El Segundo, Inglewood, Redondo Beach, and Torrance, and the select Gateway COG cities of Cerritos, Commerce, Industry, Long Beach, and Santa Fe Springs, and Los Angeles County. As shown in the table, net assessed valuation of property in Carson has increased by more than \$3.5 billion between FY 2011-12 and FY 2021-22. This represents a percentage increase of 27.7% over the base year total, which is considerably less the same-period percentage increase in for the South Bay and Gateway COG cities collectively in the County (55.7%). The \$705.3 billion increase for the entire County represented a 66.3% increase during this period. It should be noted that changes in total assessed valuation reflect the annual re-assessment of existing properties and the added assessed value associated with new development. Due to Proposition 13, the assessed valuation of existing properties in California can increase no more than 2.0% per year regardless of changes in market value (unless a property is sold during the year, in which case it is re-assessed at the sales price). Assuming that existing properties increased at the maximum rate of 2.0% per year (which is a somewhat aggressive assumption for this time period given the lingering effects of the financial crisis of 2007-2008), the total (compounded) increase in assessed valuation for the 10-year period would be 21.8%. Carson's actual 10year change in assessed valuation (27.7%) was only about 6 percentages points above the change that could be explained be re-assessment of existing properties, suggesting that – in comparison to the other cities - Carson had relatively little new development (or fewer sales triggering re-assessment to market value) during this period.

TABLE III-1. NET TAXABLE ASSESSED VALUE IN LOS ANGELES COUNTY, SELECTED FISCAL YEARS (FY):

CARSON, SELECT SOUTH BAY COG CITIES, AND SELECT GATEWAY COG CITIES

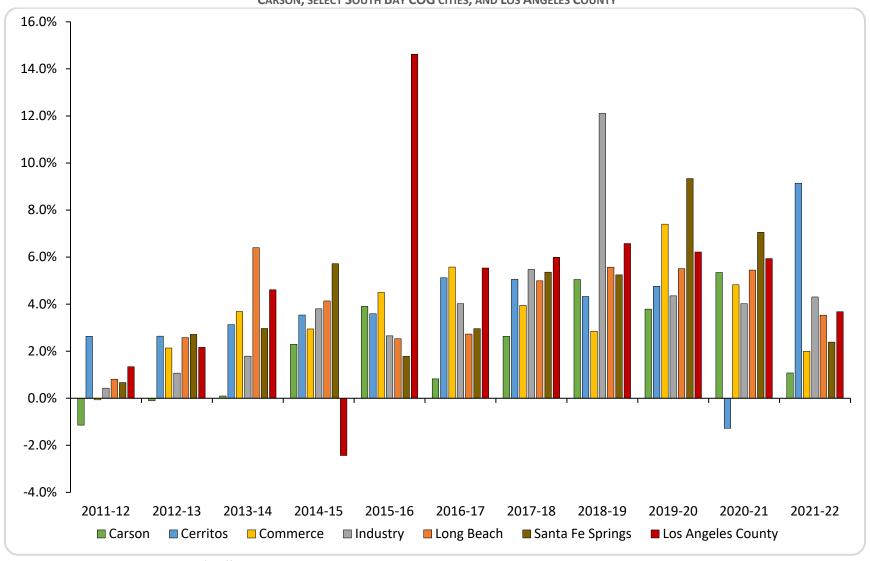
				% Chg (FY 11-
Area	FY 2011-12	FY 2016-17	FY 2021-22	12 – FY 21-22)
Carson	\$13,179,970,013	\$14,122,417,420	\$16,826,886,085	27.7%
Cerritos	\$7,366,467,970	\$8,792,316,184	\$10,877,281,939	47.7%
Commerce	\$4,206,659,273	\$5,059,632,808	\$6,210,852,946	47.6%
El Segundo	\$9,290,501,115	\$10,947,287,185	\$15,247,422,820	64.1%
Industry	\$6,597,612,028	\$7,522,824,378	\$10,072,037,682	52.7%
Inglewood	\$6,651,435,457	\$8,062,148,185	\$14,282,626,887	114.7%
Long Beach	\$42,995,966,099	\$51,474,283,162	\$65,718,159,385	52.8%
Redondo Beach	\$12,041,151,484	\$14,946,432,106	\$19,235,493,402	59.7%
Santa Fe Springs	\$6,038,805,087	\$7,075,767,586	\$9,403,113,727	55.7%
Torrance	\$23,901,730,843	\$27,593,192,502	\$34,425,578,580	44.0%
Los Angeles County	\$1,064,610,011,653	\$1,343,022,453,689	\$1,769,948,410,421	66.3%

Source: Los Angeles County Assessor's Office, Annual Assessment Rolls; TNDG

To further illustrate this trend, Figure III-1 and Figure III-2, on the following pages, show the annual percentage change in net taxable assessed value for all geographies analyzed during this period. As shown in these figures, net taxable assessed value in Carson increased at a higher rate through FY 2016, and then began to steadily decline for the remainder of the period shown on figure, with respect to most of the other select cities within the South Bay COG, Gateway COG, and Los Angeles County. Since the data used for this analysis aggregate assessed valuation increases for existing and new development, it is not possible to definitively explain the causes of year-to-year changes for individual cities (e.g., Carson's decline in total assessed valuation by about 1% in the initial year). As such, the total (10-year) changes shown on the preceding table are a more useful measure of overall conditions and trends.

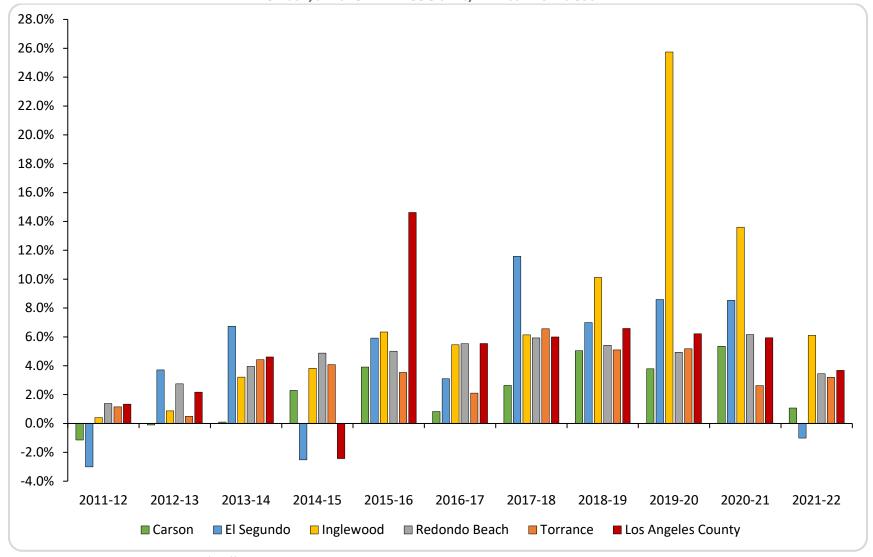
FIGURE III-1. YEAR-OVER YEAR PERCENTAGE INCREASE IN NET TAXABLE ASSESSED VALUE, FY 2011 TO 2021:

CARSON, SELECT SOUTH BAY COG CITIES, AND LOS ANGELES COUNTY



Source: Los Angeles County Assessor's Office, Annual Assessment Rolls; TNDG

FIGURE III-2. YEAR-OVER YEAR PERCENTAGE INCREASE IN NET TAXABLE ASSESSED VALUE, FY 2011 TO 2021: CARSON, SELECT GATEWAY COG CITIES, AND LOS ANGELES COUNTY



Source: Los Angeles County Assessor's Office, Annual Assessment Rolls; TNDG

Figure III-3 provides the distribution of net taxable assessed value among Carson, select South Bay COG cities, and select Gateway COG cities within Los Angeles County. As shown in the figure, Carson accounts for only about 1.0% of the incorporated city total for Los Angeles County (4th out of 10 total cities compared). The top three cities – Long Beach, Torrance, and Redondo Beach – account for over 50% of the geographies compared in this figure.

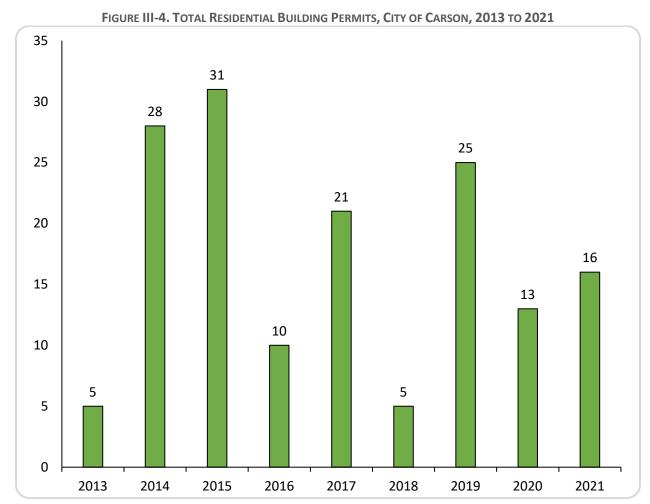
4.0% 3.7% 3.5% 3.0% 2.5% 1.9% 2.0% 1.5% 1.1% 1.0% 0.9% 0.8% 1.0% 0.6% 0.6% 0.5% 0.4% 0.5% Industry Commerce 0.0% cerit^{os}

FIGURE III-3. DISTRIBUTION OF TAXABLE ASSESSED VALUE IN CARSON, SELECT SOUTH BAY COG CITIES, AND SELECT GATE WAY COG CITIES, FY 2020-21

Source: Los Angeles County Assessor's Office, Annual Assessment Rolls; TNDG

Building Permit Data

To provide a snapshot of residential construction activity, this section provides a summary on building permit statistics for privately-owned residential construction in Carson, select South Bay COG cities, and select Gateway COG cities. These data are provided by the U.S. Census *Bureau's Place Level Residential Building Permit Statistics* survey. The data represent building permits for new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they do new housing units constructed; they have a larger increase from 2013 through 2015, but has generally decreased from 2015 through 2021. Residential building valuations were the greatest in 2019, but started to decline thereign units.



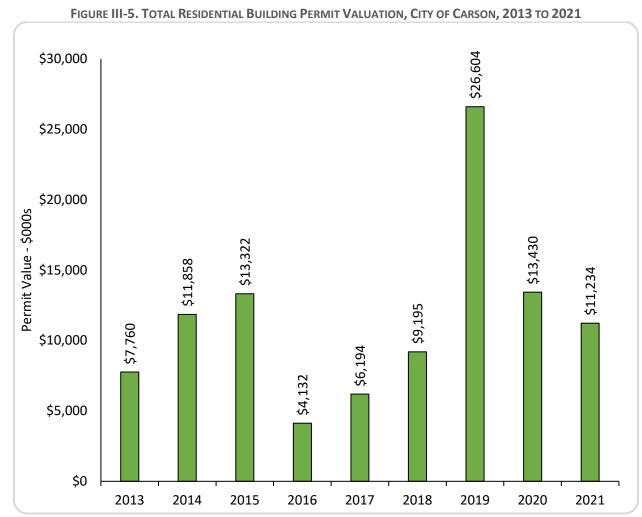


Figure III-6 and Figure III-7 show the distribution of private residential building permit total numbers and valuation, respectively, among Carson, select South Bay COG cities, and select Gateway COG cities in 2021 (the most recent year for which data are available). At 0.2%, Carson accounted for a relatively small share of residential building permits and building permit valuations among Los Angeles County cities. The leading cities, for the South Bay group were Inglewood for building permit activity and Redondo Beach for building permit valuations. In terms of the Gateway group, Long Beach lead in both building permit activity and building permit valuations.

FIGURE III-6. DISTRIBUTION OF PRIVATE RESIDENTIAL BUILDING PERMIT ACTIVITY IN CARSON, SELECT SOUTH BAY COG CITIES, AND SELECT GATEWAY COG CITIES, 2021

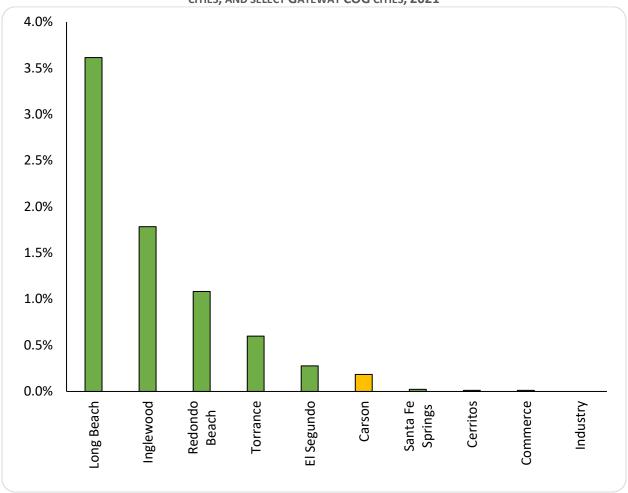
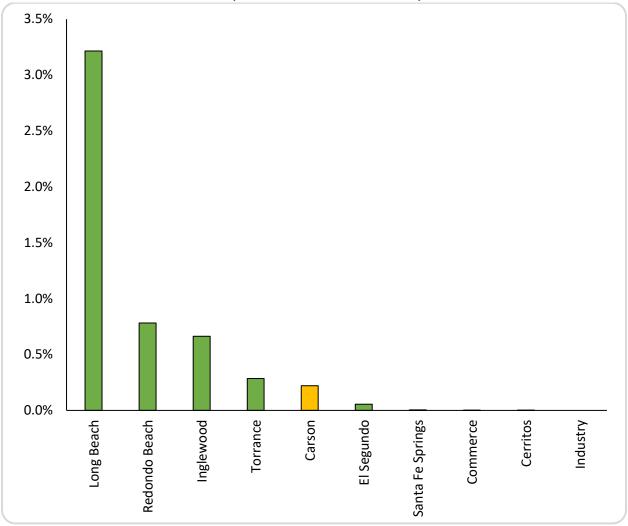


FIGURE III-7. DISTRIBUTION OF PRIVATE RESIDENTIAL BUILDING PERMIT VALUATION IN CARSON, SELECT SOUTH BAY COG CITIES, AND SELECT GATEWAY COG CITIES, 2021



Taxable Sales Data

Table III-2, below, provides retail taxable sales data, as provided by the CDFTA, for the City of Carson between 2015 and 2021 (the most recent year for which data are available). As shown in the table, Citywide taxable retail sales increased annually through 2018, decreased in 2019 and 2020 in keeping with pandemic trends, and made a substantial recovery in 2021.

TABLE III-2. TAXABLE RETAIL SALES, CITY OF CARSON, 2015-2021

Year	\$000s	% Change	
2021	\$1,769,645	23.0%	
2020	\$1,438,966	-10.0%	
2019	\$1,598,512	-3.8%	
2018	\$1,661,502	14.9%	
2017	\$1,445,934	1.9%	
2016	\$1,419,587	1.3%	
2015	\$1,401,134	N/A	

Source: CDFTA; TNDG.

Figure III-8, on the following page, compares Carson's taxable retail sales performance relative to Los Angeles County and California. The figure normalizes the base year sales data (2015 = 100) to provide relevant comparisons among the individual geographies for the 6-year period between 2015 and 2021. The 2021-year value of 126 for Carson implies that Carson's taxable retail sales in 2021 were 126% of the 2015 level (i.e., sales increased by 26% between 2015 and 2021, with no adjustment for inflation). In comparison, total taxable sales in Los Angeles County and the State also increased during this time period (by 27% and 37%, respectively).

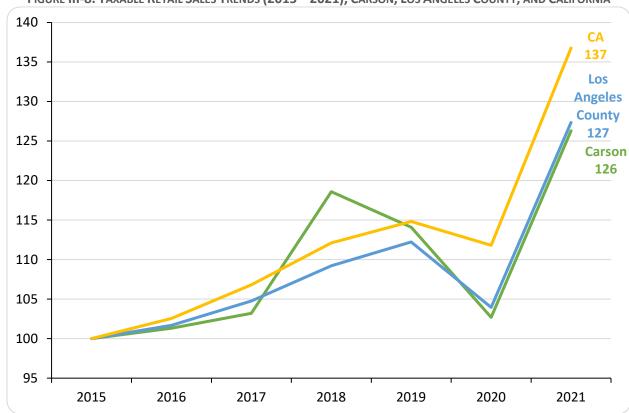


FIGURE III-8. TAXABLE RETAIL SALES TRENDS (2015 – 2021), CARSON, LOS ANGELES COUNTY, AND CALIFORNIA

Source: CDFTA; TNDG

The data in Figure III-9, on the following page, show that Carson has historically exceeded Los Angeles County and the State on a taxable-sales-per-household basis by a substantial margin. This metric provides a simple indicator of the degree to which Carson is a "net attractor" of retail demand (i.e., sales exceed levels that would be expected based on the City's resident population).

For the select South Bay and Gateway COGs cities (Figure III-11 and Figure III-11), respectively, El Segundo is a clear standout in taxable sales per household, along with Commerce and Industry. El Segundo's very high taxable sales on a per capita basis are largely a function of the fact that the city has relatively small resident population (the denominator in the per capita calculation) and a very large daytime/worker population. Not only does El Segundo have a large number of daytime workers but the job mix is heavily weighted towards relatively high paying (e.g., aerospace and tech). In addition, the city's immediate proximity to LAX likely generates some amount of visitor spending. Based on these unique non-resident demand sources, El Segundo supports much more retail space that its resident population alone would justify.

⁶ Census On The Map indicates a total of 73,832 jobs in El Segundo in 2019 (compared to a resident population of only 16,733 persons, per the California Department of Finance).

CARSON, LOS ANGELES COUNTY, AND CALIFORNIA \$25,000 \$20,000 \$15,793 \$14,046 _____\$15,391 \$11,902 ___\$12,650 \$15,000 \$10,972 3 \$11,476 \$11,693 \$11,430 \$11,128 \$10,000 \$5,000 \$0 2015 2016 2017 2018 2019 2020 2021

FIGURE III-9. TAXABLE RETAIL SALES/HOUSEHOLD POPULATION (2015-2021):

Source: CDFTA; CA DOF Table 1: E-5 City/County Population and Housing Estimates, 2015-2021; TNDG.

■ Carson Los Angeles County CA

CARSON AND SELECT SOUTH BAY COG CITIES \$41,022 \$45,000 \$38,685 \$36,706 \$36,049 \$35,874 \$40,000 \$32,806 \$35,000 \$26,103 \$30,000 \$22,930 \$22,862 \$22,181 \$22,187 \$21,253 \$25,000 \$19,944 \$19,483 \$18,196 \$17,584 \$15,793 \$15,859 \$15,514 \$20,000 \$15,312 \$12,917 \$8,469 \$11,847 \$9,218 _______\$11,411 \$15,000 \$8,325 \$8,7 8, \$10,000 \$5,000 \$0 2015 2016 2017 2018 2019 2020 2021 Carson ■ El Segundo Inglewood ■ Redondo Beach ■ Torrance

FIGURE III-10. TAXABLE RETAIL SALES/HOUSEHOLD POPULATION (2015-2021):

Source: CDFTA; CA DOF Table 1: E-5 City/County Population and Housing Estimates, 2015-2021; TNDG.

\$100,000 \$89,649 \$86,940 \$85,496 \$80,928 \$90,000 \$79,907 \$80,000 \$70,000 \$54,707 \$60,000 \$46,136 \$45,985 \$46,013 \$45,969 \$43,062 \$41,037 \$50,000 \$39,624 \$35,099 \$34,168 \$33,605 \$33,285 \$32,061 \$32,050 \$40,000 \$30,000 \$19,483 \$18,196 \$17,584 \$15,859 \$15,514 \$15,793 \$15,312 \$10,102 \$20,000 \$9,464 \$8,996 440 617 \$8,281 38 \$10,000 \$0 2015 2016 2017 2018 2019 2020 2021 Cerritos Commerce ■ Industry ■ Long Beach ■ Santa Fe Springs

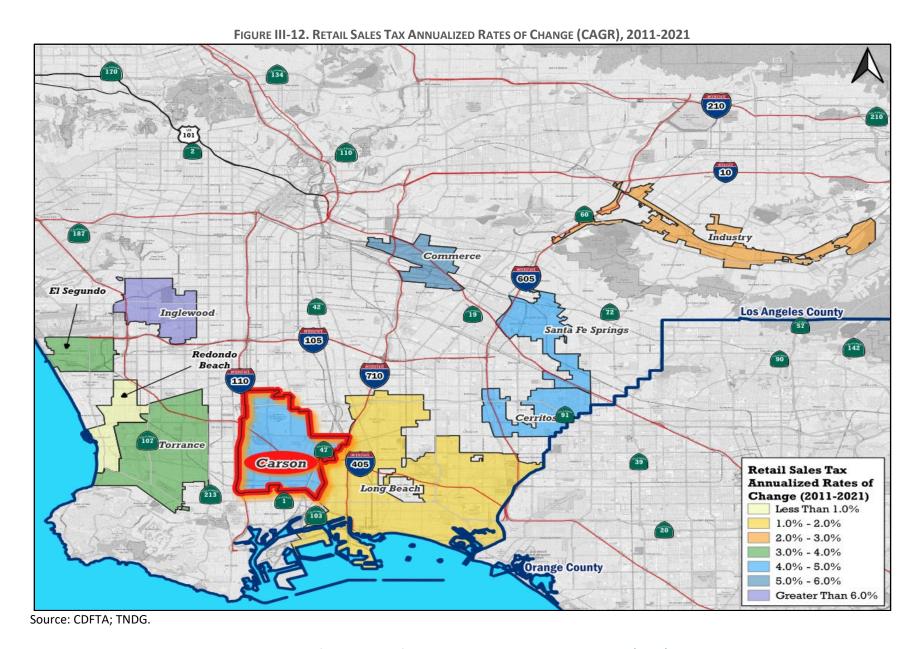
FIGURE III-11. TAXABLE RETAIL SALES/HOUSEHOLD POPULATION (2015-2021):

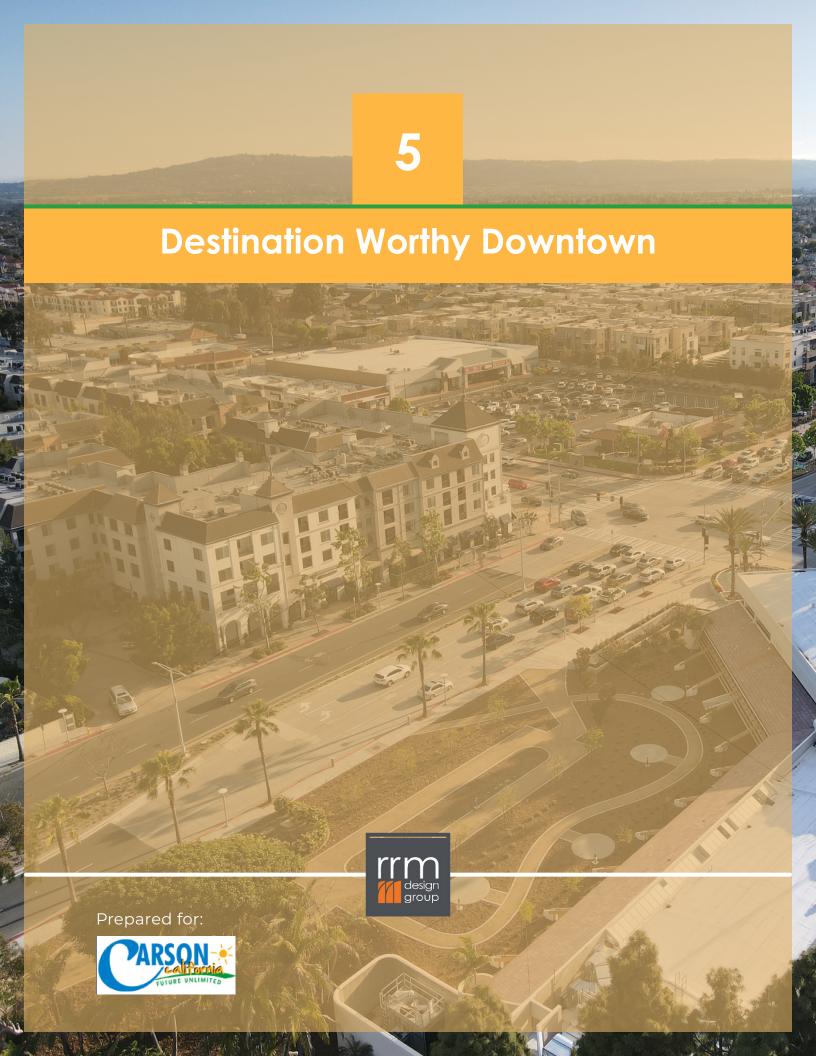
CARSON AND SELECT GATEWAY COG CITIES

Note: Figures for City of Industry are shown on the chart only for illustrative purposes. Figures exceed \$7,500,000 for every year analyzed.

Source: CDFTA; CA DOF Table 1: E-5 City/County Population and Housing Estimates, 2015-2021; TNDG.

The map provided in Figure III-12 on the following page shows the annualized growth of taxable retail sales for Carson and surrounding cities from 2011 to 2021, providing additional, localized insight into the pattern of sales tax activity. The annualized rates of change for retail sales taxes "normalize" the change over the 10-year period, in which year-to-year changes could have fluctuated in degree and in positive or negative directions. The annualized rates facilitate comparison among communities. Carson's total taxable retail sales grew at an annualized rate of 4.4% over this period, a rate exceeded only by Cerritos, Commerce, and Inglewood (with the highest rate, at 6.2%). Note that these figures do not account for inflation, which would reduce the apparent growth rates for all jurisdictions.







DESTINATION WORTHY DOWNTOWN MEMORANDUM

OVERVIEW

This memorandum looks at the opportunities and challenges that exist for furthering the City of Carson's vision for creating a downtown. It summarizes the existing policy documents that guide development within the area and builds on and refines the vision for downtown. It also includes recommendations for near-term implementable action items supporting this vision. While Carson does not have a traditional, walkable downtown, there is potential to create a future Downtown Core using the existing "bones."

Location of Downtown

In addition to the continued support of the development of a downtown, planning documents for the City of Carson have reaffirmed the desired location of downtown as the area along Carson Street west of I-405 to I-110 and along Avalon Boulevard from 223rd Street to I-405, shown in red outline in Figure 1. With the desire for a dynamic core around the intersection of Carson Street and Avalon Boulevard.

THE CURRENT CONTEXT

The future of Carson's downtown is dependent to a certain degree on the current context of the built environment and regulatory framework.

Existing Conditions: The Built Environment

The existing land uses, as well as the recently completed, approved, and proposed development projects inform the context of the downtown area.

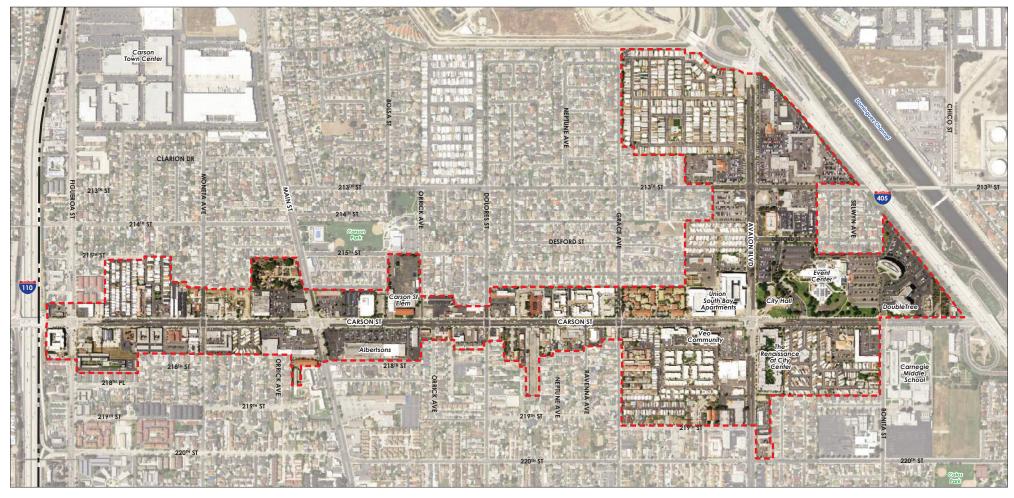
There are several existing uses that will continue as they currently function into the foreseeable future. Figure 2 shows the Civic Center, federal uses, county uses, elementary schools, the library, mobile home parks and recently constructed or approved development projects. The Civic Center is comprised of City Hall and the City owned Event Center and Community Center. The federal use is the United States Postal Service office, and the County Use is the LA County Sherriff's Station which includes a jail facility.

The built, as well as the unbuilt approved and proposed developments will, or have the potential to, increase activity and enliven the area. Housing will bring people to the downtown core of Carson and placemaking elements will anchor the core of downtown. Within a I-mile radius of the intersection of Carson Street & Avalon Boulevard there are proposals, in various states of review, for approximately 2,685 residential units, which if/when fully built out and occupied, have the potential of bringing anywhere from 2,650 to upwards of 5,000 people within a 20-minute walk or 10-minute bike ride of Carson Street & Avalon Boulevard. These potential developments are shown below in Table 1.

September 7, 2023 Page I of 34



Figure 1: Downtown Core



MAP FEATURES





Base data from Catalyst Environmental Solutions, 2022.1
 Agricul imposery from the NAIP, 2020.

NOTE: Maps and data are to be used for reference purposes only. Map feature approximate, and are not inacessably accurate to surveying or engineering standards City of Coston midates no waternally or guarantees as to the content, file source is often party), accuracy, limitatives, or competitions of any of the data provided, and as no legal responsibility for information continued on this map. Any use of this product.

See separate note for data sources. Direct all inquires to the City of Carson Plar Division at (xxx) xxxxxxxx or at (email address here). Drawn by: RRM Design Group; Cre-

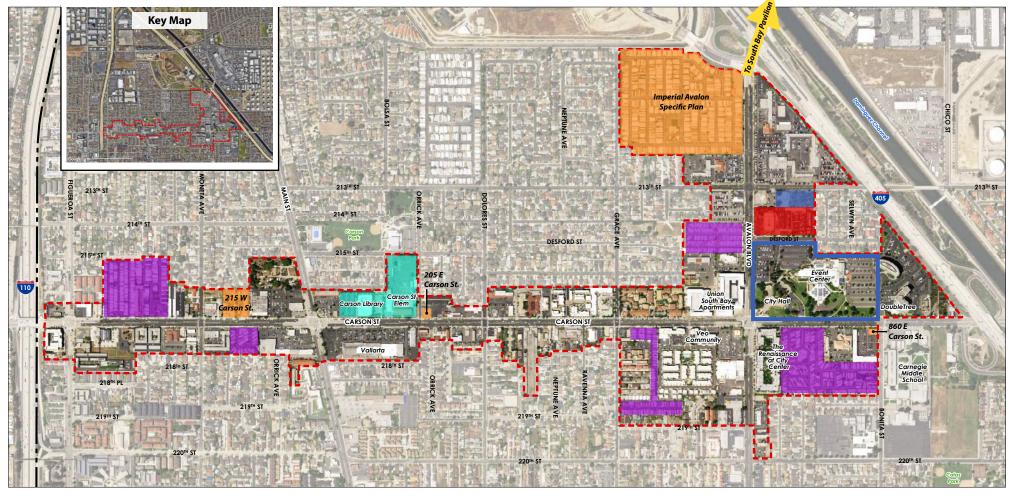








Figure 2: EXISTING USES



MAP FEATURES





<u>Development: Approved/Constructed</u>

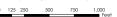
- 1. 215 W Carson St: 35 townhomes
- 2. 205 E Carson St: Rascal Teriyaki Grill
- Imperial Avalon Specific Plan: Apartments, detached and attached town homes (1,115 units) + restaurant and open space
- 4. 860 E Carson St: Starbucks

SOURCES:

Base data from Catalyst Environmental Solutions, 2022.10.
 Assict images from the NAIP, 2020.

NOTE: Maps and data are to be used for reference purposes only. Map features approximate, and are not necessarily accurate to surveying or engineering standards. I. City of Casnon makes no wemanty or opcorative as to the content the source is other in property of the content of property of the content of property of the content of respect to accuracy and precision into the the size responsibly of the use respect to accuracy and precision into the the size responsibly of the use.

See separate note for data sources. Direct all inquires to the City of Carson Plan Division at (xxx) xxxxxxxxx or at (email address here). Drawn by: RRM Design Group; Cre











In addition to the residential proposals, there is a development proposal at the northern end of Avalon Boulevard that includes several public amenities such as a dog park, a performance pavilion, a children's play area, a beer garden and restaurant/ retail space. If it is developed, it will provide an anchor of activity to the north of Carson Street & Avalon Boulevard intersection. If connectivity to Avalon Boulevard is required as a condition of development, and established, there could be continuity of activity between the two nodes.

Table 1: Proposed Development in Carson (July 2023)

Name & Location	Distance from Carson St & Avalon Blvd.	Description	Status
Imperial Avalon Specific Plan 20207 S. Avalon Blvd	0.2 miles	Park. Proposed: Imperial Avalon Mobile Home Park. Proposed: Imperial Avalon Specific Plan by Faring on 27.31 acres, 1,213 dwelling units (653 non-age-restricted multi- family units plus 180 age-restricted senior independent living units plus 380 townhouse units and two sit-down restaurants. The EIR and	Under Review EIR public review
Kott property at Avalon and 213 th St. 21140 S. Avalon Blvd	0.4 miles	Specific Plan are currently being drafted. Existing: automobile dealerships and vehicle storage. Proposed: New developer is proposing a mixed-use development on 20.7- acre project consisting of 1,320 total residential units including I,198 apartments, I04 townhomes, I8 single family units, 10,000 square foot of commercial/ restaurant space, 1.02 acres of park space and .69 acre of open space	The developer has filed an application. Staff awaiting submittal of complete plans. The applicant has submitted partial plans to the City to initiate the review process.
Anastasi Development 336 E Carson Street	0.4 miles	Existing: 90,000 SF (lot), formerly a collection of automotive repair businesses within two multi-tenant buildings measuring a total of 40,000 SF. Proposed: 50 Townhomes – two floors over parking; all 3 bedroom/ 2 bath units with common and private open spaces.	Under review
Cambria Court 427 E. 220 th Street		Existing: Single family residential Proposed: 35-unit condo project	Approved
Rascals Teriyaki Grill 205 E. Carson St.	0.7 miles	Existing: N/A Proposed: Restaurant	Under construction



Name & Location	Distance from Carson St & Avalon Blvd.	Description	Status
Vallarta Supermarket 110 E Carson St.	0.7 miles	Existing: Albertsons Proposed: Vallarta	Remodel Complete, opening set for Fall 2023
Olson Company 520 E. 228 th St.	1.0 mile	Existing: Carson Baptist Church. Proposed: 32 market rate attached townhouse condominiums consisting of multiple three-story buildings with at grade 2 car garages, associated open space, guest parking and private interior road.	Review completed for the pre-application and no formal submittal has been made
Maupin Development 215 W. Carson Street	1.0 miles	Existing : 64,500 SF (4 lots), comprised of 3 single-family homes, storage sheds and an unpaved empty lot. Proposed : 35 Townhomes – two floors over parking; 29 units/3 bedrooms; 6 units/2 bedrooms with common and private open space.	Under Review
Ken S. Chea Trust 21530 Martin St.	1.3 miles	Existing: Single Family Residence. Proposed: 4-unit residential subdivision.	Under Review
Birch Specific Plan 21809-21811 S. Figueroa St.	1.4 miles	Proposed : 4-story, 32-unit condominium development with public seating & public art	Extension of time request approved by PC – 2021, in Plan Check
Kim Family Trust 21240-50 Main St.	1.5 miles	Existing: Empty lot. Proposed: 19-unit market rate apartment consisting of two separate three-story buildings, at grade parking with associated common and private open space.	Approved In plan check
Golden State Alliance, LLC 138 W. 223 rd St.	1.7 miles	Existing: Single Family Residence. Proposed: 10 attached condominiums consisting of two separate buildings with all market rate units, at grade 2 car garages, guest parking and private driveway.	Under Review

SOURCE: City of Carson, current as of 7/5/23



Existing Conditions: Regulatory Framework

The City of Carson was part of Los Angeles County for longer than several of its neighboring communities who incorporated much earlier. This heavily influenced how land in Carson was used – as refuse dumps, landfills, and auto dismantling plants. With incorporation in 1968, Carson set about recovering from these original uses and the desire to become a more cohesive community became evident in planning documents. In the Land Use component of Carson's 1997 Vision, there are two key relevant guiding principles supporting this concept:

- "The City is committed to providing quality development which incorporates features such as integrated, walkable, and mixed-use neighborhoods."
- "The City of Carson is committed to creating an attractive environment for its citizens by developing, implementing and enforcing community design guidelines which will assure quality development and the maintenance and beautification of properties."

This desire for a downtown was carried forward in the 2006 Carson Street Mixed-Use District Master Plan which states: The vision of the Carson Street Mixed-Use Master Plan is "the creation of a distinct district along the Carson Street corridor with a 'main street' character, featuring a unique pedestrian friendly mixed-use environment." Supporting goals and objectives include:

- Create a vibrant "main street" that reflects the community's vision and embodies the identity of the City of Carson.
- Create a livable, pedestrian friendly downtown district near the civic core.

The recently adopted General Plan Update (2023) continues to build on this foundation. The General Plan Update states as its second Guiding Principle: "Promote vibrant, safe, and walkable mixed-use districts and neighborhoods, and revitalized corridors." The Land Use Revitalization Chapter of the General Plan Update carries this forward. In the Land Use Framework Section of Chapter 2 and Land Use Classification subsection, under Downtown Mixed Use (DMU), it states, "This designation is intended to promote a vibrant 'Main Street' like ambiance throughout the downtown Carson core, with mid-rise, mixed-use development."

In addition, the Economic Development Chapter, states as one of its seven Economic Development Objectives, "Develop Carson's Core as a destination for tourists, visitors, workers, and residents." The Chapter also lists one of its guiding principles as, "Create an identifiable Core centered at West Carson Street/Avalon Boulevard, with a supportive mix of civic, office, retail, entertainment, and residential uses. Promote vibrancy, authenticity, and cultural diversity and a variety of events in the Core."

The General Plan Update includes several strong guiding and implementing policies for the core:

- LUR-P-12 Support continued evolution of the West Carson Street (Carson's "main street"),
 with a vibrant mix of complementary commercial, residential, and civic uses. Do not permit new
 automobile-oriented establishments such as car washes, or drive-through uses with access
 directly from Carson Street.
- **LUR-P-13** Promote ground level commercial uses to foster pedestrian activity and visual engagement and provide commercial uses to serve residents of surrounding neighborhoods. [....]
- **LUR-P-14** Prohibit uses in the Core (as shown in Figure 2-3 of the GPU, *not shown here*) that do not add to a strong pedestrian character, such as warehouses, gas stations, drive-through

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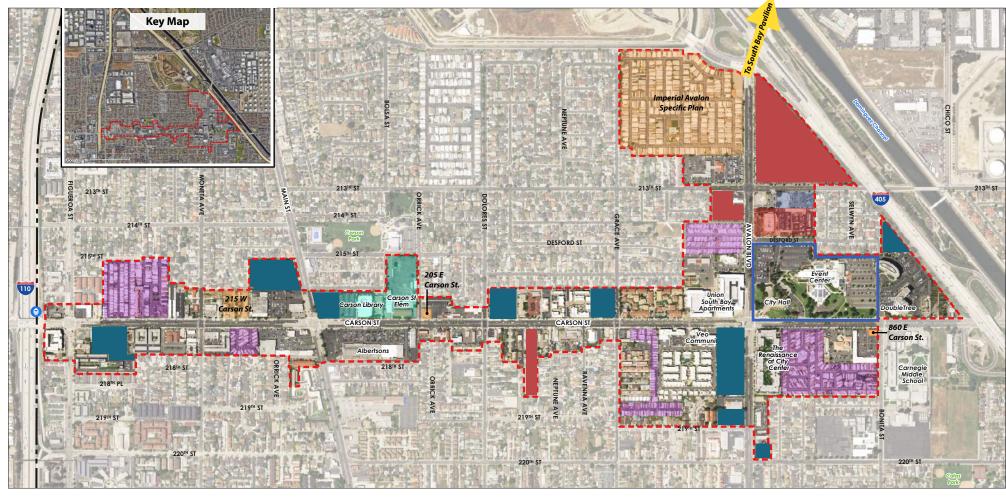
- establishments, industrial, and other new development whose design prioritizes automobile access.
- **LUR-P-15** Focus new residential, commercial and employment-generating land uses along Carson Street and Avalon Boulevard in order to support higher-frequency transit service. Provide adequate infrastructure, such as bus lanes or bus shelters at bus stops, to support transit service usage.

However, the General Plan Update also provides a policy that is challenging in terms of the creation of a true downtown. The City of Carson acknowledges Mobile Home Parks as a source of affordable housing for lower income households and seeks to preserve this affordable housing stock. The policy on Mobile Home Parks meets a need, however, it creates a challenge in terms of developing a true downtown because it ties up large parcels of land, making redevelopment of these sites so cumbersome that redevelopment will not occur. So, while this policy creates the desired result in terms of housing – preserving low-to-moderate-income housing – it creates an obstacle to developing a more urban core by removing parcels of land which are large enough for redevelopment and thereby prevents densification which is needed for a more walkable urban form.

The Housing Element was adopted by the City Council in September 2022, with State of California Housing and Community Development (HCD) changes incorporated in November 2022. HCD conditionally deemed Carson's Housing Element in compliance pending a re-zone. The Housing Element identified Housing Inventory Sites throughout the City of Carson, as well as in the downtown. **Figure 3** shows the Existing Uses and the Housing Element Inventory Sites in the downtown Core. Since these sites have been identified in the City's Housing Element, for discussion purposes they have been removed from the table as redevelopment opportunity sites.



Figure 3: Housing Element Inventory Sites



MAP FEATURES



Proposed Developments Mobile Home Parks Schools USPS (Federal Uses) County Uses

Housing Site Inventory by Income Levels

Very Low and Low Above Moderate

Development: Approved/Constructed

- 215 W Carson St: 35 townhomes
- 205 E Carson St: Rascal Teriyaki Grill
- Imperial Avalon Specific Plan: Apartments, detached and attached town homes (1,115 units) + restaurant and open
- 860 E Carson St: Starbucks









VISION & STRATEGY

The consistent vision over time is a "main street" styled, walkable downtown. Based on the discussion above, and existing conditions, an achievable near-term solution is to continue to incentivize development in-line with the vision and create a node of activity around Carson Street & Avalon Boulevard.

It is in this approach - continued development and the creation of a node of activity - that the goals of good urban planning and economic development meet. "Create a 'destination worthy' downtown" is not only the City's desire, but also one of the Economic Development Strategic Plans Gamechanger Initiatives. It's key programmatic elements - Reinvest in (and rebrand) Carson Events Center, Attract hotel development, Attract high-caliber urban housing, Link Downtown to larger Avalon corridor (potentially connected by trolly system) – are all integral pieces of the recommendations below.

A node of activity will be created through investment in events and activities, as well as an investment in development and redevelopment. It will take the full package of curating experiences, redeveloping, and revitalizing key opportunity sites including the Carson Events center, creating greater connectivity within the City of Carson, especially along the Avalon Boulevard corridor and creating a sense of place through placemaking strategies and streetscape beautification.

The sections below will address some identified specific opportunity sites, as well as near-term improvement opportunities that taken together will continue to establish a downtown.

Curating Experiences

Events

There needs to be a broad effort to enliven the downtown area and attract residents and visitors. While space is limited at the intersection of Carson Street and Avalon Boulevard, there are still opportunities for pop-up events in this area and around the Carson Event Center.

If the true focus is the intersection of Carson Street and Avalon Boulevard, the City can collaborate, or in some cases continue to collaborate, with the owners of Union South Bay, The Gateway, and Ralph's shopping center for community building events. Examples could include food and music festivals, that include food trucks in the public spaces of the Union South Bay and/or The Gateway properties and a small stage in a portion of the Ralph's parking lot or in front of City Hall, allowing people to spread out on the adjacent lawn.

To create more space, temporary parklets can also be set up by either taking a travel lane or on-street parking. Alternatively, community building events of this nature could be hosted in the parking lot behind City Hall, allowing the city to curate the event without partnership from the private sector. If an event is held in collaboration with the property owners, the City can help facilitate the event by waiving permit fees, developing the event traffic circulation plan in-house and advertising through the City's channels.

To leverage the events that have been taking place so they begin to build momentum and create energy around this intersection and the downtown area in general is to increase the frequency of events, and/or diversify the type of event and to include the nearby businesses. The frequency of events can be built up over time, for example, in the first year, there is an event the first Saturday of June, July and August. In the second year, that is increased to either the first Saturday of every month in May, June, July, August and September or two events take place the first and third Saturday of June, July and August.

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The crowd which is drawn to the area can also be diversified by changing the type of event to include things such as a food truck festival, live music, a car show like the City of Escondido's Crusin' Grand, to a "Walkabout" which is an evening in which every business is encouraged to have open doors with Food and Drink Specials, or merchandise discounts, to entice folks to walk about the neighborhood.

In addition to increasing the frequency of events and the diversity of events, is creating events that continue to take place over time. This would be a signature event like the City of La Mesa's Oktoberfest, which is a three-day event which takes place every fall and has for the last fifty years. For Carson this could be the Taste of Carson, a three-day food festival, or the Sound of Carson, a multiday music festival.

Arts

Along the Carson Street and Avalon Boulevard corridors, in the current vacant ground floor retail, the City can facilitate collaboration between artists and the property owners for Pop-Up Gallery Spaces by connecting artists with property owners of vacant storefronts. The basic concept is matching vacant retail space with artists. This gives an artist a month (or agreed upon timeframe) to display art in the vacant retail space, provides more interesting spaces for the community, and indirectly allows the property owner to showcase their spaces. The criteria should include that art is visible through the window to foot or car traffic outside of the space. Art pieces can be displayed with QR Codes and information so interested people can learn more about the artist and possibly purchase art. The artist could also be required to host an open studio at least once.

This concept is not limited to artists, but can include temporary shops, giving online retailers a chance at testing out a brick-and-mortar business. This can include artists who sell their maker goods on platforms such as Etsy or local artists who usually sell their goods at the Farmers Market one day a week or month. Again, this concept can be scaled, to include an event, on a Saturday or weeknight that includes activating the space with food and music or sidewalk chalk or real time mural painting on the utility box for example.

With time, this effort can be formalized and shored up through a Public Art Master Plan, which would formalize policies and processes around public art as well as identifying locations which would benefit from public art (murals, sculptures, memorials, community art, etc.). The Public Art Master Plan could also incorporate Carson's vibrant Cultural Arts program.

Redevelopment & Revitalization

Façade Improvement Program

The City of Carson has an established Façade Improvement Program with a fund-matching grant for property owners and tenants of commercial properties along several corridors within the city. For commercial properties and tenants along E. Carson Street between S. Harbor View Avenue and Santa Fe Avenue, there is no fund-matching requirement. The Façade Improvement Program is advertised through City channels such as the Carson Report and the Chamber of Commerce. A City staff inperson outreach event, scheduled for the Summer of 2023, will benefit the program with increased publicity. Through this EDSP effort, a brochure was created with façade improvement renderings to assist increasing utilization of the program. It can be viewed on the city website and can be printed and distributed at events, the Chamber office, and at City facilities.

Destination Worthy Downtown Memo Page 10 of 34



Opportunity Sites/ Infill Development

Infill development creates density by bringing people and things together in closer proximity. The April 2023 General Plan Update (GPU) designated the project area as Downtown Mixed Use (DMU), **Figure 4**. The Land Use Framework of GPU described the designation as, "This designation is intended to promote a vibrant 'Main Street' like ambiance throughout the downtown Carson core, with mid-rise, mixed-use development." (p. 2-13). It established a maximum FAR as 1.75, with the caveat that building area be devoted to active commercial uses at the ground level is exempt from FAR calculations, and a base building height of 65 feet with a maximum of 85 feet. The relevant information from Chapter 2 of the GPU is shown below in **Table 2**.

Table 2: DMU information from GPU Table 2-3 Preliminary Range of Building Heights

Land Use Classification	Base Building Heights	Heights with inclusion of Additional Active Commercial Space/Community Benefits
Downtown Mixed Use	65 feet, 6 stories	85 feet, 7-8 stories

The City's zoning code is currently being updated and re-written, however, the assumption is that the zoning code will implement the most recent GPU changes.

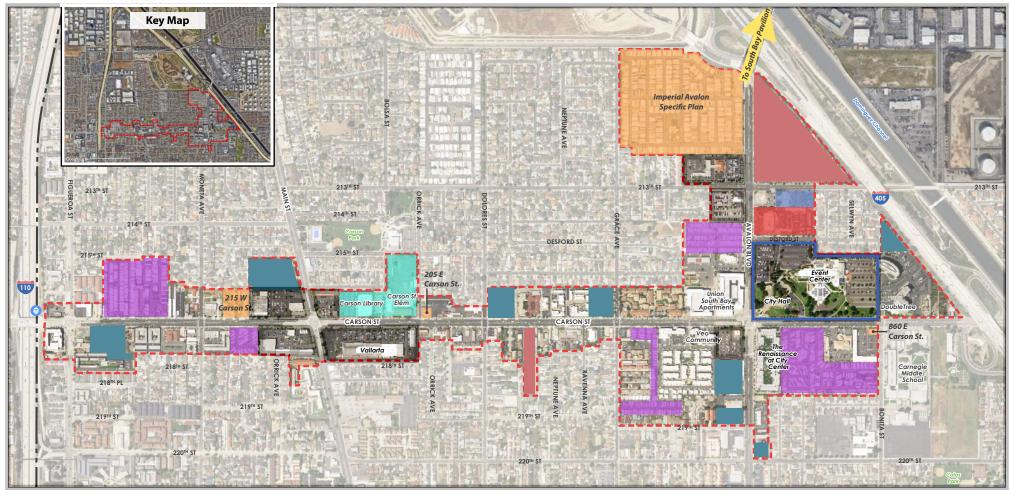
Given the existing built environment and the existing regulatory framework, the potential opportunity sites are shown in **Figure 5**. In theory these are opportunity sites, however, since they are in private ownership, the City can only offer incentives for redevelopment. **Table 3** shows examples of mixed-use buildings with ground floor retail within building heights allowed under the zoning code. These are also examples of high caliber housing, a key programmatic element of a "Gamechanger Initiative" included in the EDSP Implementation Plan.

While the aesthetics of high caliber housing may be subjective, usually they have a more modern look, include higher end finishes, including in-unit washer and dryer, and community amenities such as resident community room and outdoor gathering areas. Increasingly, in addition to secured parking, these buildings provide electric vehicle charging stations.

Figure 4: General Plan Land Use Diagram Business Residential Mixed Use Low Density Residential Existing Specific Plan Area EDONDO BEACH BLVD Corridor Mixed Use Heavy Industrial Potential Specific Plan Area Light Industrial General Commercial City of Carson 157TH ST Flex District Utilities Sphere of Influence High Density Residential Park/Open Space Medium Density Residential Channel Commercial Automotive Overlay District SANDHILL AVE WALNUT ST LAS HERMANAS S VICTORIA ST HARCOURT ST VICTORIA ST 184TH ST Dominguez Technology Cen 405 220TH ST

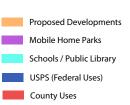


Figure 5: Downtown Opportunity Sites

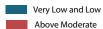


MAP FEATURES





Housing Site Inventory by income levels



Imperial Avalon Specific Plan: Apartments, detached and attached town homes (1,115 units) + restaurant and open space

4. 860 E Carson St: Starbucks

Development: Approved/Constructed

215 W Carson St: 35 townhomes

205 E Carson St: Rascal Teriyaki Grill

SOURCES:

Base data from Catalyst Environmental Solutions, 2022.10.
 Assign images from the NAIP, 2020.

NOTES Maps and data are to be used for reference purposes only. Map features approximate, and are not necessarily accurate to surveying or engineering standards CPy of Caron makes no warrowing or opcorative as to the octreter (the source is often in property of the control of the control

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Table 3: Examples of Mixed-Use Ground Floor Retail Redevelopment















Carson Event Center

Historically, the Carson Event Center has functioned as a community center and served as a youth center, senior center, and job placement center, and as a space for local groups to meet. As part of the Economic Development Strategic Plan process an Assessment and Hotel Market Study was conducted. HVS's findings in their Tourism Assessment and Hotel Market Study showed that the Carson Event Center draws the highest proportion of its attendance from local areas. In the last five years, the Carson Event center has attracted nearly 12,000 attendees. The Carson Event Center is currently in the process of rebranding and re-focusing its mission on generating meetings and events that draws attendees from a wider geographical area.

Independent of the Event Center rebranding effort, HVS's Study examines the potential of hotel development attached to the Carson Event Center. The opportunities of the Event Center site include a full-service property with meeting space to supplement the Carson Event Center or a select-service property (such as a Hilton Garden Inn or Courtyard by Marriott) whose meeting amenities are subsidized by the City. While this opportunity needs to be fully investigated and fleshed out to meet the City of Carson's economic development needs, a factor which needs to be kept in mind, is how to create opportunities for future patrons (if the hotel is actualized) to enter the surrounding area and spend money. In other words, to use the hotel development as a downtown core activator, instead of a detractor. The worst-case scenario is that people do not leave the site at all because they do not realize how close they are to downtown or due to other obstacles such as unpleasant walking environments.

In terms of the creation of downtown, the redevelopment/ revitalization of the Event Center will need to be done strategically so it in fact acts as a driver of revitalization and contributes to energizing the surrounding area by bringing people there from the Event Center.



Walking path and pocket park adjacent to City Hall along Carson Street.

This will be facilitated through the recently completed pleasant pedestrian walkways and could be furthered with wayfinding to take people downtown. The wayfinding can include the number of blocks or minutes it takes to walk, in addition to directional wayfinding. (Wayfinding in general is discussed in the Mobility and Connectivity section. Wayfinding specific to Carson Street and Avalon Boulevard is discussed in the Streetscape Section).

Accessory Dwelling Units (ADUs)

To enhance the vibrancy of a downtown, the distance between where people live and where people want to go, needs to be walkable. Currently single family residential is about one-block removed from Carson Street. By permitting lots in these areas to be split, or provide ADU's, more people will be within walking distance of goods and services creating a stronger customer base and greater economic viability to businesses. The City of Carson amended its zoning code to comply with California Senate

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Bill (SB) 9 which became effective January 1, 2022. SB 9 allows for the splitting of lots zoned as singlefamily so additional housing can be built. In effect, SB 9 requires cities to approve up to two primary dwelling units per parcel in single-family residential zones, where previously only one primary dwelling unit would have been permitted. The City of Carson also updated its Municipal Code regarding accessory dwelling units (ADU) and junior accessory dwelling units (JADU) (Article IX, Division 2). I/ADU's are approved through a ministerial process.

Both the SB 9 lot split development and the more generally permitted J/ADU development addresses residential infill. Brownfield redevelopment is a type of infill development discussed in greater detail in the Task 2.d Housing Memo. Greyfield Redevelopment refers to the redevelopment of underutilized properties, often this includes uses like malls. There are no malls in our project area, however, the South Bay Pavilion Mall borders the northern boundary of the project site.

MOBILITY AND CONNECTIVITY

Multi-Modal Connectivity

Connectivity, especially multimodal connectivity, within Carson is crucial. Vehicular connectivity is well established, however additional modes of travel can be challenging within the city. Streetscape improvements (described below) will help to create a pleasant walking experience for pedestrians and the current efforts to develop a Bicycle Master Plan will identify opportunities to develop robust and safe bicycle infrastructure within a one-mile radius of Carson Street and Avalon Boulevard, as well as bicycle connectivity along Avalon Boulevard to Dignity Health Sports Park and California State University, Dominguez Hills.

Important multi-modal connections are:

- From Carson Street to the transit station along the Harbor Freeway (110) (Carson Street
- From Avalon Boulevard and the planned Imperial Avalon Specific Plan area to the planned District at South Bay
- From Avalon Boulevard to the South Bay Pavilion
- From the project area to East Carson Street (east of the San Diego Freeway (405))
- From the project area along Avalon Boulevard to DHSP and CSUDH

Streetscape improvements for these connections will need to be prioritized to increase safety and create more pleasant experiences to encourage active travel. The Carson Street Metro Station is currently not a welcoming location. While access is spaced constrained, beautifying the entrance and ensuring adequate lighting are important.

Freeway Underpasses and Pedestrian Bridges

Currently, accessing both South Bay Pavilion and East Carson Street (east of the project area) require a pedestrian or a person on bike, to travel under the 405-freeway. Due to the on- and off-ramps, the bicycle infrastructure will need special consideration. Additionally, underpasses can be unpleasant environments for pedestrians especially women, youth, and members of minority groups, so coordination with Caltrans is recommended to improve lighting within these areas.

For a person on foot, the final 1/8-mile, when heading north to the South Bay Pavilion on Avalon Boulevard, is unpleasant, however, its even more challenging heading south. When heading north, after

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coming through the underpass, one must cross a wide freeway off ramp, and then cross the bridge over the Dominguez Channel on 5-foot sidewalk abutting three travel lanes on one side and the bridge railing on the other. The westbound direction across the Dominguez Channel does not have any pedestrian infrastructure. A pedestrian bridge across the Dominguez Channel could greatly improve the pedestrian environment.

Wayfinding



Directional arrows

of blocks

Wayfinding facilitates connectivity. Wayfinding educates visitors about their surroundings and allows them to familiarize themselves with the features and amenities of the location they find themselves in. By providing comprehensive wayfinding, visitors to DHSP, the Porsche Experience, The Links, CSUDH will be informed of their proximity to the downtown core, and possibly other locations such as South Bay Pavilion Mall.

Wayfinding for pedestrians and cyclists have specific considerations. For pedestrians, the wayfinding signage can include the number of blocks or minutes it takes to walk, in addition to directional wayfinding. Wayfinding for people on bicycles can include the same, as well as route information. One consideration for the City of Carson is a Citywide Wayfinding Plan. Wayfinding specific to Carson Street and Avalon Boulevard is discussed in the Streetscape Beautification Section.

Shuttle

A shuttle connection from Carson Street and Avalon Boulevard to Dignity Sports Health Pavilion and California State University, Dominguez Hills – in terms of creating a downtown – has catalytic potential. The key elements for making a shuttle service successful is for it to serve a designated area, to be branded, and to provide enough service to accommodate the fluctuation in volume of people such as at the end of sporting events.

There are examples such as FRAN (Free Rides Around the Neighborhood) in Anaheim and FRED (Free Rides Everywhere Downtown) in San Diego. These shuttles follow a designated route, though they can be hailed either via an app or in-person. FRAN and FRED are smaller, electric vehicles. The City of Coronado runs a free summer shuttle along a designated MTS bus Route (it does not replace the bus service, but rather uses the same route). The shuttle bus is branded and the size of a municipal bus.



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The high-level idea which should not get lost in the details is implementing reliable public transit along the Avalon Boulevard corridor that can take people from DHSP and CSUDH to Carson Street. Additionally, the public transit should be capable of being flexed to accommodate large volumes of people when a sport event concludes at DHSP. Some public transportation or shuttle system is a crucial component for the 2026 World Cup and the 2028 Olympics to accommodate spectators, and more importantly capture tourism dollars in the City of Carson.

PLACEMAKING

Placemaking is an umbrella term that encapsulates all the tools used to create places that transform public spaces to strengthen the connections between people and these places. In layperson words, placemaking refers to the creating of the "there." It's the creation of places where we want to be on a Saturday afternoon or Sunday morning. Most of these places have not come about organically, but rather through strategic investment and curation. This section includes several of those tools - some of which Carson already deploys - that if invested in could reinforce and foster a more cohesive downtown environment.

Gateway Features

One of the near-term action items is to increase the number of Gateway features within the downtown and potentially create a hierarchy of gateway features. Currently there are gateway features on the western and eastern ends of Carson Street. However, conversations with community members during the Economic Development Summit in January 2023 revealed that there is a desire for more gateway features. A few participants stated that they are not always sure if they are in the City of Carson, even though they live within the City limits and they feel that gateway features would help establish boundaries and a sense of place.





In the hierarchy of gateway, there could be another type, such as the one shown below in Figure 6, that is used to continue to create a sense of place and active the core of downtown.







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Decorative Crosswalks



Decorative Crosswalks can be a placemaking tool that creates community through the design and implementation of a non-standard crosswalk that celebrate the identity of a community. Examples include rainbow crosswalks to honor a city's LGBTQ community, surfboards to honor a community's beach culture or koi to establish a unique shopping street. However, it should be noted that crosswalks are considered a traffic control device by the California Manual on Uniform Traffic Control Devices (MUTCD) and the Federal Highway Administration (FHWA). The City of Sacramento adopted a comprehensive Criteria and Guidance for Creative Crosswalks to ensure that anything they implemented was compliant with state and federal rules. The City of Sacramento's guidelines are attached as Appendix I of this document.



The intersection of Carson Street & Avalon Boulevard could benefit from a decorative crosswalk treatment. This could help establish this location as the core of downtown. There are several themes from Carson's historical past that could be used to inspire crosswalk design, however, the Olympics are an easy point of reference – honoring the past and celebrating the future. The velodrome that is currently located in the city was built to accommodate the cycling races in 1984. Several Olympic events have been identified to take place in the City of Carson in 2028 when the Olympics officially come to Los Angeles. The symbology of the Olympics provide inspiration for creative ideas including Olympic torches, the colors of the five Olympic rings, the Olympic flags, or icons of the sports that have been hosted by Carson and are planned – Rugby, Moden Pentathlon, Tennis, Field Hockey, and Track Cycling.





Key Intersections

A set of nine intersections have been identified, as shown in **Figure 7**, as locations for implementation of some of the discussed placemaking tools.

The intersections are:

- Figueroa Street & Carson Street
- Moneta Avenue & Carson Street
- Main Street & Carson Street
- Grace Avenue & Carson Street
- Avalon Boulevard & Carson Street
- Bonita Street & Carson Street
- 220th Street & Avalon Boulevard
- 213th Street & Avalon Boulevard
- Avalon Boulevard just south of the 405 Freeway off ramp

The City of Carson has gateway features, and some of the intersections listed below already have existing gateway features. If the City decides to develop a hierarchy of gateway features, these locations, as entry points into the core of downtown, would qualify for the largest gateway features.

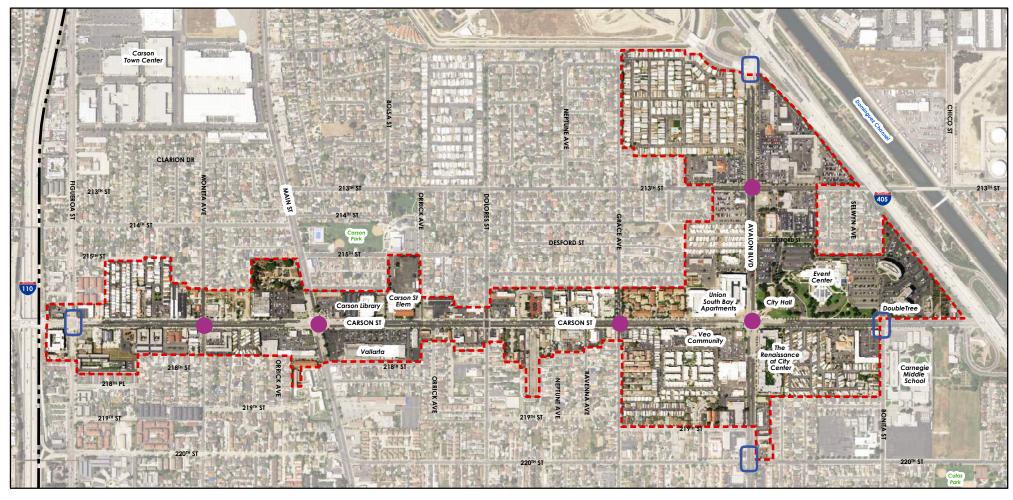
- Figueroa Street & Carson Street (existing gateway feature just east of the intersection)
- Bonita Street & Carson Street (existing gateway feature just west of the 405 Freeway off ramp on Carson Street)
- 220th Street & Avalon Boulevard
- Avalon Boulevard just south of the 405 Freeway off ramp

The following intersections have been identified as locations for enhanced crosswalks, either through pavement treatment or through decorative crosswalks:

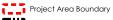
- Moneta Avenue & Carson Street
- Main Street & Carson Street
- Grace Avenue & Carson Street
- Avalon Boulevard & Carson Street
- 213th Street & Avalon Boulevard



Figure 7: Potential Gateway Locations



MAP FEATURES



City Boundary

Gateway

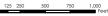
Crosswalk

SOURCES:

Base data from Catalyst Environmental Solutions, 2022.10.
 Aerial images from the NAIP 2020.

NOTEs: Maps and data are to be used for reference purposes only. Map features or approximate, and are not necessarily accounted to surveying or engineering shortacest. To City of Coston makes no warrowly or guarantee as to the confert file source is often in portly, accouncy, minimizes, or completeness of any of the data provided, and assum no legal responsibility for information continued on this map. Any suc of this product in

See separate note for data sources. Direct all inquires to the City of Carson Pla Division at [xxx] xxxxxxxx or at [email address here]. Drawn by: RRM Design Group; Cre pro: Dictriber & 2022. Archaron GIS. Vestion 10.8 Re





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STREETSCAPE BEAUTIFICATION: CARSON STREET & AVALON BOULEVARD

Carson Street and Avalon Boulevard provide an opportunity to unify the Downtown Core, create visual interest, beautify the area, and enhance the pedestrian environment. Several relevant streetscape design requirements reside in the 2006 Carson Street Mixed-Use District Master Plan (CSMP) and the Carson City Downtown Mixed-Use Zoning District Development Code (DMZD) which can be utilized to create a unique and welcoming sense of place and downtown atmosphere for the City of Carson. It is envisioned that the recommendations located within these documents continue to be implemented along Carson Street and incorporated along Avalon Boulevard as described below. Future improvements focused on the intersection of Carson Street and Avalon Boulevard, Carson Civic Hall, and Carson Events Center will support an active and vibrant atmosphere, spur redevelopment and investment and serve as a catalyst for growth, and reinforce a unique and distinctive downtown character.

Recommendations contained within these documents and supplemented with additional beautification elements identified within this document, once implemented, will provide a cohesive look for Carson Street and Avalon Boulevard, enhance the sense of place, and will contribute to the identify of a Downtown Core. In addition, new future residential uses are proposed along Carson Street and Avalon Boulevard and these streetscape recommendations are intended to create a node of pedestrian activity with enhanced outdoor gathering spaces and comfortable public amenities. These recommendations are intended for improvements within the public right-of-way and assume that the current road geometry will remain as existing. It does not include suggestions for land use, private signage, architectural design, or other private property elements.

Carson Street

While Carson Street has recently undergone streetscape improvements along the corridor, additional enhancements within a concentrated area, such as from Grace Avenue to the west and Bonita Street to the east, could enliven the area and strengthen its identity, as shown in **Figure 8**. The following five key design elements identified within the 2006 Carson Street Mixed-Use District Master Plan (CSMP) should be integrated with more intensity to the existing improvements on Carson Street to develop a more defined community core:

- · Streetscape furnishings, lighting, and paving
- Wayfinding elements
- Public art and focal points
- Streetscape planting
- Outdoor gathering areas



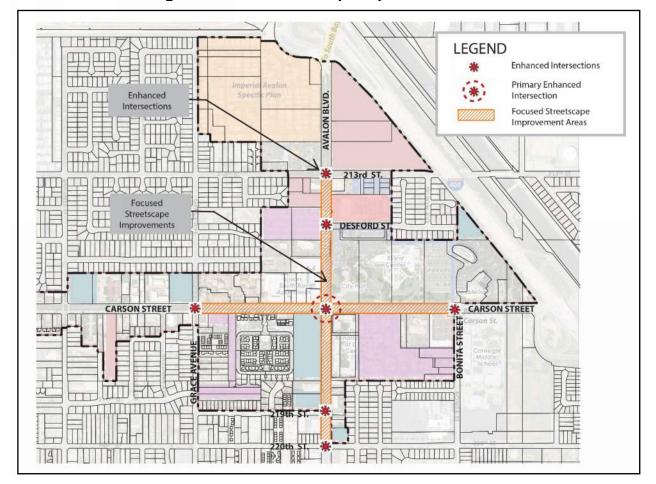


Figure 8 Focused Streetscape Improvement Area

Streetscape Furnishings, Lighting, and Paving

To create lively public spaces that are distinctive and inviting, utilize the existing family of streetscape furnishings in focused key locations such as intersections and highly traveled pedestrian areas. Consider including additional playful human scale elements to better define the central heart of the Downtown Core, such as decorative planters, accent lighting, and decorative paying. Look for opportunities to integrate shaded seating areas which are located to incentivize social interaction.

The following existing furnishing, lighting, and paving recommendations from the CSMP should be carried forward for these improvements to strengthen the identity of Carson Street:

- Pedestrian Amenities Provide pedestrian amenities and rest areas in clearly designated zones. These will include street furniture, fountains, lighting, trash receptacles and way-finding signage. Create small public rest area spaces such as bus stop plazas at key pedestrian crossing areas (CSMP, Chapter 3, Section 2, Implement Public Improvements).
- Site amenities such as benches, trash receptacles and potted plants introduce small-scale interest and rest stops along pedestrian routes (CSMP, Chapter 4, Downtown Retail District, Goals/ Principles).
- An average spacing of 2 benches, I bike rack, and I trash receptacle per 300 linear feet is recommended (CSMP, Chapter 5, Street Furniture, Master Plan Provisions).

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- Street furniture shall be placed so as to maintain a clear pedestrian walkway that is a minimum of 6 feet clear zone in width. Street furniture includes benches, trash receptacles, outdoor dining areas, and other pedestrian amenities (DMZD, Section H Streetscape (Div. 6.6.8) 2b, Streetscape).
- Lighting should be provided in a manner that clearly distinguishes pedestrian and vehicular space (CSMP, Chapter 2, Streetscape, Site Amenities).
- Low-scale, decorative lighting shall be used to accent architectural details, building entries, or signs. Additional pedestrian-scaled lighting shall be provided to illuminate sidewalks, enhancing security and extending hours of activity (DMZD, Section B, Lighting (Div 6.6.2) 2a, Exterior Lighting).
- Crosswalks: Changes in paying material at key locations are also recommended to create a more pedestrian-friendly environment (CSMP, Chapter 2, Streetscape).
- Install enhanced paving at crosswalks to make them more visible to motorists and to indicate that the street has a pedestrian orientation. A pattern unique to Carson Street should be developed, possibly by a professionally commissioned artist (CSMP, Chapter 5, Enhanced Crosswalk Paving, Master Plan Provisions).
- Special design of paving and planting at this Avalon Boulevard intersection is the heart of the district and provides a sense of arrival (CSMP, Chapter 4, Downtown Retail District, Goals/ Principles).

Wayfinding Elements

The use of environmental graphics depicted in the CSMP are recommended to enhance sense of identity for the Downtown Core and to provide wayfinding for visitors and residents. Banners are recommended on the median streetlights in a regular pattern to enhance a cohesive sense of place, and directional and identity signs are suggested at intersections and highly traveled pedestrian areas and should be provided at varying scales for motorist and pedestrian navigation. To create a distinctive and unique downtown environment, consider integrating accent lighting, enhanced paving, and key wayfinding signage locations to maximize visual interest. Locate benches with container plants and/or other amenities near pedestrian scale wayfinding signage to enhance the human scale and promote community gathering. Consider including the median sculptural elements shown on CSMP page 5-36 placed between the existing streetlights to create a more defined sense place on Carson Street between Grace Avenue and Bonita Street.

The following existing wayfinding recommendations from the CSMP should be carried forward for these focused streetscape improvements to strengthen the identity of Carson Street:

Environmental Graphics: The intention of the environmental graphics program is primarily to create a sense of identity and to provide way-finding throughout the corridor. Identity elements may include gateways, banners, signs and other components that are based on a defined color palette. Wayfinding elements may include monument, directional and informational signs at varying scales for motorists and pedestrians (CSMP, Chapter 3, Section 2, Implement Public Improvements).

Public Art and Focal Points

The use of vertically oriented focal points such as recirculating fountains and public art are recommended in key locations such as intersections, transit stops, and other highly traveled pedestrian areas where they will not obstruct motorist's views. Look for opportunities to highlight the history and culture of Carson to reinforce the community as a special place. Primary focal points should incorporate accent lighting and distinctive paving to enhance the human scale and consider utilizing trellises or other vertical elements for increased visual interest.

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The following existing public art and focal point recommendations should be carried forward for these improvements to strengthen the identity of Carson Street:

Provide fountains and/or civic art centrally located in designated open space areas for visual attraction, screening of traffic noise, and cooling effects (CSMP, Chapter 4, Downtown Retail District, Commercial/ Retail Development, CD-1 Site Design)

Streetscape Planting

Streetscape planting should be used to create a unified street scene, adding scale and comfort, and contribute to the Downtown Core's unique identity. Landscaping should be layered with a variety of shapes, textures, and colors and planting areas should use a combination of trees, shrubs, and ground covers. Intermix drought tolerant and low maintenance vegetation that includes large open branching canopy trees for shade and a sense of enclosure, dense long-lived screening shrubs to buffer blank walls and poor views, and accent species to highlight key elements and provide visual interest.

The CSMP depicts planters along the curb on Carson Street, but this has not been implemented in many locations along the corridor. Where feasible, incorporate planters along the street edges to provide additional shade trees and increased buffer and separation for pedestrians from vehicular traffic. Where this is not possible, consider adding large container plants and/or decorative bollards to create this buffer. It is also important that all streetscape plantings are cared for and maintained beyond implementation. Once streetscape planting is completed, there should be a system for ensuring that the newly planted areas become part of Public Works' Landscape and Maintenance responsibilities.

Carson Street currently contains a mix of street tree species and types, and many are smaller growing accent and palm trees. A more consistent pattern of alternating groupings of deciduous and evergreen trees is suggested to define the heart of the Downtown Core more clearly. The CSMP depicts tree spacing at approximately 22 feet on center in planted parkways (CSMP, Chapter 5, Providing the Right Conditions to Sustain Street Trees, Master Plan Provisions); however, the tree spacing and parkways shown on Figure 3 of the CSMP (not shown here) has not been implemented consistently along the corridor.

Look for opportunities to integrate additional tall evergreen street trees with dense canopies for shade and sized to step down the allowable building heights of future development along the corridor.

- Integrate additional street trees located closely together to develop a strong pattern and create a sense of unity along the street.
- Recommend a minimum installation size of 36" Box and selection of fast-growing street tree species to create a more immediate visual impact.
- Street trees should be sized to at least 75 percent of the adjacent allowable building heights and must be sized to fit the planter area utilize a species selected to minimize root damage potential.

Many of the existing parkways and medians are effectively using grasses and aloe; however, most would benefit from infill planting and the use of dense long-lived and hardy evergreen shrubs as a backbone and cohesive landscaping feature. Additionally, the enhancement of key primary driveway entrances is recommended with accent planting in the parkways and the integration of container plants.

- Shrubs and groundcovers should be located according to their shade and sun tolerance.
- Shrubs located adjacent to pedestrian and parking areas may not contain sharp thorns or spines.
- Shrubs and groundcovers must be located to not obstruct the view of motorists.
- Recommended infill planting should contain large shrubs and should be installed at a minimum 5gallon size to quickly provide a mature and established streetscape environment.

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- Consider integrating seating areas and/or public art in large parkways that are currently void of planting, particularly where adjacent to commercial or restaurant uses, and integrate enhanced landscaping in the remaining planter areas around this seating to accentuate these elements.
- Consider the use of a consistent and unique decorative mulch, rock and/or cobble in the parkways and/ or medians to establish a cohesive and distinguished look to the corridor.

The use of container plants is suggested along the corridor where parkways are not feasible. There are containers available that contain irrigation reservoirs that allow for watering without modifications to the existing irrigation system and they provide fast and effective method of developing a cohesive and unified statement for the Downtown Core. The containers should be selected from a cohesive family of styles and colors and located to provide accent planting in key areas, define the street edge, and provide screening of unsightly elements.

The following existing low water use trees and shrubs are recommended to be carried forward from the CSMP (Items in grey font are included for additional tree information to assist with selection and placement):

• STREET TREE:

- Koelreuteria bipinnata (Chinese Flame), a flowering tree with a spreading canopy, is deciduous from about March through May, was the first choice of community members.
 - Deciduous tree, can grow to 40' high x 30' wide, yellow flowers fall or summer, prefers part shade to full sun, tolerates most soils
 - Low root damage potential and dry fruit litter issues

GATEWAY ACCENT TREE:

- Phoenix dactliyfera (Date Palm) should be intermixed with the selected canopy tree in the first few blocks of each freeway as the gateway tree and in a double row with canopy trees at bus stops or other long curb extensions.
 - Evergreen tree, can grows to 100' high x 40' wide, prefers part shade to full sun, and loamy or sandy soils
 - Moderate root damage potential, with dry fruit and leaf litter issues

• MEDIAN TREES:

- Lemon Bottlebrush (Callistemon citrinus)
 - Evergreen tree, can grow to 25' high x 25' wide, fragrant red flowers in spring or summer, prefers part shade to full sun, and tolerates most soils
 - Low root damage potential and dry flower litter issues
- Canary Island Pine (Pinus canariensis)
 - Evergreen tree, can grow to 80' high x 35' wide, has brown pinecones in winter, prefers part shade to full sun, and loamy or sandy soil
 - Moderate root damage potential, and dry fruit litter issues
- Lemon Gum (Eucalyptus citriodora)
 - Evergreen tree, can grow to 80' high x 100' wide, fragrant white flowers in spring, prefers part shade to full sun, and loamy or sandy soil
 - Moderate root damage potential, with dry fruit litter, bark and twig litter issues

MEDIAN SHRUBS AND GROUNDCOVERS:

Indian Hawthorne (Rhaphiolepsis indica)



If existing irrigation is already in place for moderate watering, the following trees and shrubs from the CSMP are recommended:

STREET TREES:

- Platanus acerifolia 'Columbia' (Plane Tree), which is a relative of the native California Sycamore, was the second choice of community members.
 - Deciduous tree, can grow to 80' high x 40' wide, prefers part shade to full sun, and tolerates most soils
 - Moderate root damage potential, and dry fruit litter issues
- Platanus 27exicana (Mexican Sycamore) may be substituted where a narrower canopy or shorter deciduous period is desirable, subject to City approval.
 - Deciduous tree, can grow to 50' high x 30' wide, prefers part shade to full sun, and tolerates most soils
 - Moderate root damage potential, and dry fruit litter, leaves and twig litter issues
- o Tabebuia impetiginosa (Pink Trumpet Tree) is suggested for intersections.
 - Deciduous tree, can grow to 30' high x 25' wide, showy pink or purple flowers in winter or spring, prefers full sun, and tolerates most soils
 - Low root damage potential, and dry flower litter issues
- Cupaniopsis anacardioides (Carrotwood) existing street tree
 - Evergreen tree, can grow to 40' high x 30' wide, white flowers in winter, prefers part shade to full sun, and tolerates most soils
 - Moderate root damage potential, and dry fruit litter issues
- Ficus nitida (Indian Laurel Fig) existing street tree
 - Evergreen tree, can grow to 40' high x 40' wide, prefers part shade to full sun, and loamy or sandy soil
 - Moderate root damage potential, and dry fruit litter issues
- MEDIAN SHRUBS AND GROUNDCOVERS:
 - Hemerocallis species (Day Lily)
 - Agapanthus africanus (Lily of the Nile)

The following existing streetscape planting recommendations should be carried forward from the CSMP to strengthen the identity of Carson Street:

- Trees New vertical palm trees provide visibility for new development while creating a strong colonnade
 marking the district. Shade trees provide a pedestrian scale canopy and a consistent tree type along the
 length of the street. Renovated median plantings add a strong attractive element to the district and
 reduce the apparent width of the street (CSMP, Chapter 4, Downtown Retail District, Goals/ Principles).
- Planting Plant the trees in continuous parkways 5 feet wide or in tree wells 5 feet wide by 8 to 12 feet long, which are set back 1'-2" from the back of curb to provide a "landing zone" for motorists exiting their cars. Parkways should be used adjacent to all no-parking zones, except bus stops. Where possible parkways adjacent to no parking zones should be planted with groundcover or perennials that achieve a mature height of less than 30 inches. The landscaping provides a buffer between pedestrians and vehicles, as well as an attractive edge condition. (CSMP, Chapter 5, Providing the Right Conditions to Sustain Street Trees, Master Plan Provisions).
- Landscape Buffer A 5 foot planting zone should be established behind the perimeter wall at mobile home parks to allow for screening of the residential developments. Planting in the buffer zone should be a minimum of 10 feet tall (CSMP, Chapter 4, Fence/ Wall Program, Design Guidelines).



Accent Planting – Accent planting should be used at all driveways and pedestrian entries to the property marking appropriate entry areas. Accent planting should consist of low groundcover and flowering plants, and not obscure visibility (CSMP, Chapter 4, Fence/ Wall Program, Design Guidelines).

Outdoor Gathering Areas

Provide a network of interconnected gathering areas that provide a range of sizes and functions, such as plazas, pocket parks, courtyards, and public seating areas. The outdoor spaces should provide a variety of shaded seating options for individuals and larger groups and be enhanced by accent landscaping, decorative

paving, site furnishings, and public art. The recommendations apply to the public right-of-way and future private development adjacent to the corridor. These suggestions are included to maximize the people spaces and gathering opportunities in the Downtown Core, create a sense of openness along the right-of-way, and develop a cohesive pattern of gathering areas with a mix of active social spaces.

DMZD has sidewalk vendor standards in Section I. Street and Sidewalk Vending (Div. 6.6.9). Vendors are recommended to be included in the Downtown Core to attract visitors and residents and enliven and activate the street with changing and interactive elements; however, the narrow sidewalk widths existing along Carson Street and Avalon Boulevard make placement of sidewalk vendors difficult. Therefore, vendors are suggested in larger gathering areas, such as a plaza area and on private properties, so they will not interrupt foot traffic on the sidewalk.







Example of Food Truck using parking lot space to activate the area without encroaching on sidewalk space. South Park, San Diego, CA

Look for opportunities to locate vendors and outdoor gathering areas in adjacent existing parking areas on Carson Street. Consider temporarily closing parking areas to allow for vendors, such as when businesses are closed on weekends or evenings and look for opportunities to accentuate these areas with decorative paving, removable bollards, and/or planters. These parking areas should be considered for outdoor dining uses for future restaurants and cafés, and they do not have to be associated with a business and could also function as public outdoor gathering spaces. Additionally, consider allowing new restaurants and bars in primary Downtown locations to permanently relocate on-street parking spaces and place dining and gathering areas in the right-of-way directly adjacent to the building, with the

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sidewalk shifted out towards the street. Or to allow seating associated with a restaurant use to close the on-street parking for a parklet.





South Park Neighborhood, San Diego, CA

North Park Neighborhood, San Diego, CA

The following existing outdoor gathering area recommendations should be carried forward for these improvements to strengthen the identity of Carson Street.

- DMZD, Section E, Outdoor Gathering Spaces/Community Amenities (Div. 6.6.5): 1. Intent
 - To establish a series of safe and inviting outdoor gathering spaces where Downtown residents, employees, and visitors may gather, interact, rest, shop, and eat.
 - To create an attractive public realm and vibrant pedestrian environment within Downtown's most urban character areas.
 - To encourage the incorporation of public art, urban recreation spaces, and other community amenities into the design of outdoor gathering space.
- DMZD, Section E, Outdoor Gathering Spaces/Community Amenities (Div. 6.6.5) 2b, Provision of On-Site Amenities:
 - (1) Development on sites 50,000 square feet or less shall incorporate at least one of the following onsite outdoor gathering spaces or community amenities, and developments on sites larger than 50,000 square feet shall incorporate at least two of the following outdoor gathering spaces or community amenities and one additional amenity for each 25,000 square feet above 50,000 square feet of area, as highly-visible, easily-accessible, focal points:
 - a. Patio or plaza with a minimum depth and width of 10-feet, and a minimum total area of 150 square feet.
 - b. Landscaped mini-parks or squares provided such park or green has a minimum depth and width of 10-feet and a minimum total area of 250 square feet.
 - c. Protected pedestrian walkways; arcades; recessed corner entries with a minimum area of 100 square feet; or easily identifiable building pass-throughs containing window displays and intended for general public access.
 - d. Outdoor public art, as approved by the City, in an area that is:
 - i. Visible from an adjacent public sidewalk or street, and
 - ii. Easily accessed for viewing by pedestrians
 - e. Similar feature as approved by the Director or designee.

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- (2) Outdoor gathering spaces provided in accordance with the above standard shall incorporate a variety of pedestrian amenities to promote regular use. Pedestrian amenities may include, but are not limited to, seating, lighting, special paving, landscaping, food and flower vendors, artwork, and/or special urban recreational features.
- DMZD, Section E, Outdoor Gathering Spaces/Community Amenities (Div. 6.6.5) 2c, Buildings Adjacent to Outdoor Gathering Spaces/Community Amenities:
 - (1) To ensure the visibility and security of outdoor gathering spaces and community amenities, buildings located adjacent to an existing or planned pedestrian plaza, patio, or urban park shall provide at least two of the following elements along the building wall abutting the outdoor gathering space or community amenities:
 - a. A building entry,
 - b. Windows meeting the street frontage standards facing onto the outdoor amenity,
 - c. Arcades along the edges of the outdoor amenity,
 - d. Outdoor seating areas or cafes, or
 - e. A similar feature that the Director finds will, to at least the equivalent degree, bolster security and encourage pedestrian use of the outdoor amenity.

Avalon Boulevard

The recommendations for Avalon Boulevard encourage elegant design that is similar to Carson Street but with a unique identity through the use of complementary design elements, such as varying the street trees, a variation in the pedestrian scale lighting, and change of crosswalk paving along Avalon Boulevard. The applicable recommendations for Carson Street above should be implemented as focused improvements along Avalon Boulevard from 213th Street (on the northern end) to 219th Street (on the southern end). These improvements could be phased with areas added along the corridor as it is developed, and the improvements could be continued to the 405 Freeway with gateway elements added to provide a welcoming entrance to Carson's Downtown Core.

As new development is implemented in the focused streetscape improvement area, the integration of three key streetscape design elements are suggested along Avalon Boulevard to create a more defined central community core:

- Emphasize Human Scale
- Maximize Texture and Interest
- Create People Places

Emphasize Human Scale

Look for opportunities to integrate a unique light feature and street tree species for Avalon Boulevard to step down the allowable building heights and provide streetscape elements that focus attention on the street level and cater to the pedestrians, such as the integration of decorative paving, tables with umbrellas and shaded seating areas, low entry walls, large container planters, wayfinding signs, and/or decorative bollards. Consider incorporating accent lighting in key areas such as string lights, uplighting in trees, hanging lighting, and/or changeable seasonal lighting to enhance the outdoor space to activate the downtown in the evening.

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Maximize Texture and Interest

Decorative paving should be utilized to provide texture and interest at the pedestrian level and located to develop a recognizable sense of place. Decorative paving should be combined with other streetscape elements to maximize the visibility and impact of key focal areas in the Downtown Core. Consider incorporating decorative paving in crosswalks, the center of primary intersections, parking lanes, and/ or as an edge band along the outside edges of sidewalk at the curb.

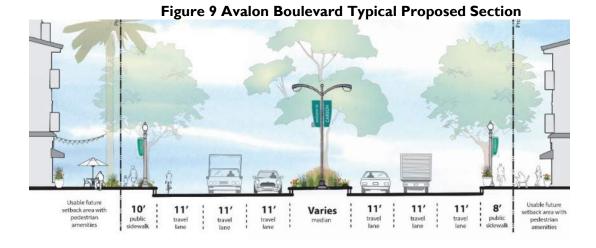
Another suggested method of increasing texture is to provide decorative tree grates and accent planting, such as ornamental flowering species and vegetation that exhibits contrasting foliage, color, and texture. Additionally, landscape screening or container plants should be located to provide screening of existing blank walls and tall fencing, and unsightly elements such as trash enclosures, backflow devices, transformers, and parking areas along the public right-of-way.

Public art is another suggested element to incorporate to provide interest and texture. Look for opportunities to incorporate local artists to develop unexpected details along the streetscape, such as paving insets, utility box painting, sculptures, and murals.

Create People Places

Look for opportunities to provide areas for temporary outdoor public pedestrian gathering areas within the Downtown Core to establish a sense of community and serve a variety of users with many interests. These people places should provide areas for a range of flexible spaces designed to support activities such as outdoor concerts and events, movies in the park, outdoor vendors, socializing, playing, and celebrating with friends and neighbors. The people places should provide comfortable seating options for a variety of group sizes, and allow for flexible seating options such as bermed lawn areas, low seating walls, steps that can double as seating, etc. In addition, decorative lighting, accent planting, umbrellas, and/or shade structure elements should be incorporated in key locations.

The intersection of Carson Street and Avalon Boulevard contains existing plaza areas and outdoor dining areas with integrated focal points and pedestrian amenities. To further accentuate this primary intersection, consider providing additional shaded seating areas in the Civic Center Plaza, and pursue the integration cohesive streetscape elements such as large container plants, decorative bollards, public art, accent lighting, and/ or decorative paving to foster a sense of unity and cohesion and provide increased vibrancy and human scale. Ideas shown in **Figure 9**.



Destination Worthy Downtown Memo Page **31** of **34**



PUTTING THE PIECES TOGETHER

The City of Carson is a story of transformation, transforming from a part of the County to an incorporated city, transforming from dumps, landfills, and auto dismantling plants to residential neighborhoods, parks, and a University. The first part of the story was one of becoming – becoming a city. The second part of the story is one of thriving – becoming a destination.

The Vision for the entire Economic Development Strategic Plan, of which this memorandum is a part, is: Carson - Where creativity comes to live, work, and play. For the residents that currently live here, Carson is already where they want to be on a Saturday afternoon or Sunday morning. That has been exceptionally clear. The current residents of Carson have an exceptional pride of place. They love living here so much that they have called Carson home for thirty, forty, and fifty years. This pride should be celebrated through the branding and marketing initiative associated with the EDSP. It should be communicated to the future residents – those that will live in the approximately 2,700 units that will be built in the near future.

The pride of place can also be reflected in the gateway features – celebrating and clearly demarcating the boundaries of the core of downtown, as well as those of the City, to let those who come to "play" know where they are.

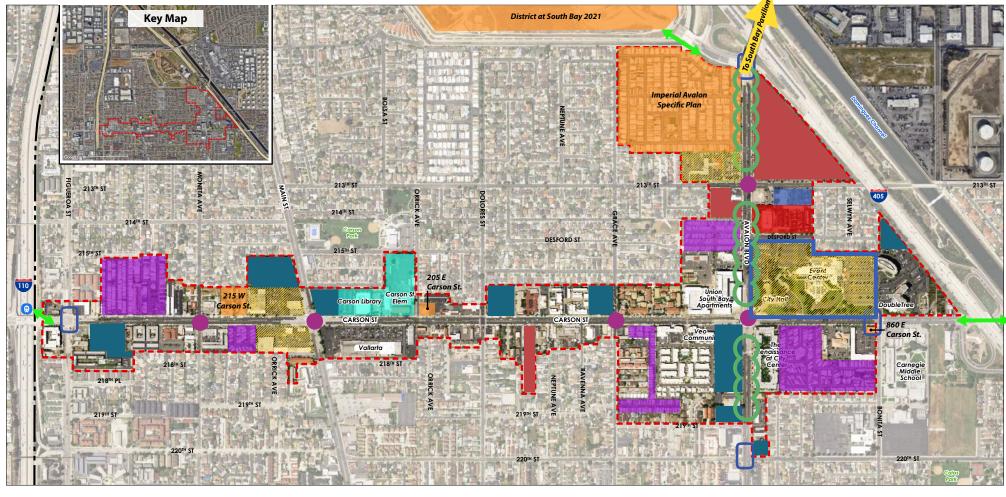
Becoming a destination will require continued dedication of resources and time. This memo contains a kit of parts to move the City of Carson closer to having a Destination Worthy Downtown. These are implementable as resources – staff time and money – become available.

As the English playwright, John Heywood wrote, "Rome wasn't built in a day, but they were laying bricks every hour." While the City of Carson has not been laying literal bricks since its incorporation, it has remained committed to its vision of a downtown. It is this commitment to itself that is inspiring, hopefully armed with a quiver of tools, it can continue to implement the parts and pieces that will build a great place over the years to come.

The locations for applying some of the above tools and implementing some of the action items are shown below in **Figure 10**.



Figure 10: Proposed Action Items



MAP FEATURES



Bus Rapid Transit



Crosswalk



Schools / Public Libraries

USPS (Federal Uses)

County Uses

by income levels **Key Opportunity Sites**

Very Low and Low Above Moderate

Housing Site Inventory

Development: Approved/Constructed

- 215 W Carson St: 35 townhomes
- 205 E Carson St: Rascal Teriyaki Grill
- Imperial Avalon Specific Plan: Apartments, detached and attached town homes (1,115 units) + restaurant and open space
- 860 E Carson St: Starbucks







Appendix I: City of Sacramento Department of Public Works Criteria and Guidance for Creative Crosswalks



Criteria and Guidance for Creative Crosswalks

INTRODUCTION

Background

Standard crosswalk design at stop-controlled locations requires two white horizontal bars that cross the street, with the space between the white bars void of any surface treatment. This void area is merely the black asphalt-pavement surface.

Purpose of Setting Criteria and Guidance for Creative Crosswalks

To establish creative crosswalk criteria and guidelines that conform to current state and federal guidance and rules (see

That the permittee relinquishes all intellectual-property rights and moral rights (*droit moral*) in the creative crosswalk, including but not limited to all such rights under the California Art Preservation Act; under the federal Visual Artists Rights Act of 1991; or under any other local, state, federal, or international laws that confer such rights, whether in effect on the date the permit is issued or enacted thereafter.

Relevant State and Federal Rules

The relevant state and federal rules below for details) and a permitting process for the installation of creative crosswalks.

This document sets forth design guidelines and criteria for creative crosswalks that will enhance the visual quality of the City's streetscapes. Because the sole purpose of such crosswalks is aesthetic, this criteria and guidance prohibits creative crosswalks that communicate messages of any kind. Accordingly, by establishing this process, the City is not and does not intend to designate creative crosswalks as public forums. To the extent a creative crosswalk is determined to be communicative, it is to be understood as the City's speech rather than the permittee's speech.

The City Manager or their designee has the authority to make further changes or updates to these Criteria and Guidance for Creative Crosswalks.

Review Process

Eligible Applicant

An applicant must be an organization, such as a business or neighborhood association that accepts responsibility for design, installation, maintenance, removal of a creative crosswalk, and is able to secure a permit for the creative crosswalk (encroachment permit and revocable permit). Applications submitted by individuals shall not be accepted. Applicants must agree to comply with all permit requirements, including maintaining

liability insurance as evidenced by an acceptable certificate of insurance. Applicants are encouraged to have community support for proposed projects.

Location Requirements

- The proposed creative crosswalk must be:
 - 1. At a location where there is an existing marked crosswalk; or
 - 2. At an unmarked crosswalk location that meets the City of Sacramento's standards for installation of a marked crosswalk. If the proposed location is an unmarked crosswalk, the applicant may request installation of a marked crosswalk.

If the City determines the location is appropriate for a marked crosswalk, the City will install the marked crosswalk in accordance with the City's standards, with the applicant responsible for the costs to install the marked crosswalk. If the City considers the location appropriate for a marked crosswalk and the location is within an Environmental Justice area, the City will pay for the installation of only the marked crosswalk. The City of Sacramento is not responsible for the installation or repair of creative crosswalks. The applicant is responsible for creative crosswalk installation and/or repair of creative crosswalks.

- The proposed creative crosswalk must be at a location where a vehicle is currently required, by a stop sign or traffic signal, to stop.
- The proposed creative crosswalk must be at a location that has a posted speed limit not exceeding 30 mph and has a maximum of two through lanes.
- Creative crosswalks are prohibited on multilane one-way streets due to "multiple threat" crash risk.
- The surface of the location of the proposed creative crosswalk must be asphalt rather than concrete. (Materials will not bond or be as durable when placed on concrete.) The location's existing asphalt pavement must be in good condition as materials will not bond if the pavement is in poor condition. Public Works Department shall inspect the pavement condition for adequacy of a thermoplastic paint or street-grade paint used in creative crosswalk artwork (See Materials and Paint Type). If the Public Works Department finds the pavement in poor condition, the department will work with the applicant to find a different location that meets requirements of the criteria, guidance, and permitting process and has pavement in good condition. The City's Traffic Engineer shall review each creative crosswalk location to determine if it is on a corridor scheduled for near-term street maintenance (slurry, overlay, etc.). Proposed creative crosswalks at locations scheduled for near-term street maintenance may be held in abeyance until maintenance is completed.
- Approval of the location of a creative crosswalk is at the discretion of the City's Traffic Engineer.

Design Standards

- Crosswalks must contain two white transverse (horizontal) lines and comply with the
 most-current California Manual on Uniform Traffic Control Devices (CA MUTCD)
 crosswalk standards (<u>Section 3B.18</u> Crosswalk Markings). Creative crosswalks must be
 within the two horizontal lines.
- Transverse crosswalk lines must be white except in school zones, where they must be yellow. See Materials and Paint Type below for allowable materials.

- Creative crosswalks must not impair the visibility of the transverse crosswalk lines and must not be reflective.
- The design of creative crosswalks must be solely for aesthetic purposes. Creative crosswalks must not convey any political, religious, commercial, or other messages. In addition, designs must not contain logos, text, advertising, offensive symbols, three-dimensional graphics, or geometric shapes (such as triangles and octagons) that could be confused with a standard traffic-control device or legend.
- Designs that could potentially distract a driver or could be confused with traffic signs or traffic-pavement legends are prohibited.
- The design shall contribute to the visual quality of the streetscape—for example, by
 using a limited palette of colors and simple graphic images to avoid visual clutter,
 taking into account the needs of persons with color deficiencies or partial sight (see,
 for example, <u>United States Access Board</u>'s website for further information).
- If more than one crosswalk at an intersection is proposed as a creative crosswalk, the design of all such crosswalks must create a unified aesthetic at the intersection.
- Creative crosswalks must not extend to sidewalks, curbs, or gutters.
- Examples of acceptable creative-crosswalk designs and materials include brick lattice patterns, paving bricks, paving stones, setts, cobbles, and other resources designed to simulate such paving (<u>MUTCD Official Ruling 3(09)-24(I) – Application of Colored Pavement</u>).
- All elements of pattern and color for creative crosswalks must be uniform, consistent, repetitive, and expected so as not to be a source of distraction. (MUTCD Official Ruling 3(09)-24(I) – Application of Colored Pavement).

Materials and Paint Type

- Creative crosswalks must use a non-reflective street-grade or thermoplastic paint, which provides a non-slip surface for pedestrians, bicyclists, and those who use wheelchairs or other assistive-mobility devices.
- Street-grade paint is typically an acrylic water-based emulsion pavement color coating. Typically, during application of acrylic asphalt paint and for a period of at least 24 hours after application, temperatures must be above 50°F or higher and should not be applied in rain or when rain is in the forecast. Thermoplastic paint is a durable heat-applied material often used for pavement markings. Typically, during application of thermoplastic paint, the surface temperature must be 50°F or higher and the surface must be clean, dry, and free of debris.
- Creative crosswalks must be installed in warm weather conditions in order to achieve appropriate pavement adherence.
- Materials must be reviewed and approved by the City's Traffic Engineer prior to permittee installation of the creative crosswalk.

Permitting Requirements

Each applicant must submit a completed application for a Minor Encroachment Permit and a Revocable Permit. These applications can be found online here. An application for a permit may, at the City's Traffic Engineer's discretion, be forwarded to the City Council for approval.

After receiving a completed application, the City's Traffic Engineer shall determine
whether a proposed creative crosswalk complies with requirements of the criteria,
guidance, and permitting process, the California Manual on Uniform Traffic Control

Devices (CA MUTCD), and applicable standards promulgated by the Federal Highway Administration (FHWA). After this determination, the City's Office of Art and Culture shall provide a Clearance Letter, if requested and warranted, to the applicant during the permit-application process. After receipt of the Clearance letter, the Public Works Department shall review the application. If approved, the applicant becomes the permittee.

- For City-funded creative-crosswalk projects, the permittee must present the creative-crosswalk design to the Arts, Culture, and Creative Economy Commission (ACCE).
 However, because of limitations in the CA MUTCD and the FHWA standards, the City Traffic Engineer will have final approval over the creative-crosswalk design and colors.
- Creative-crosswalk installation and maintenance are not typical City services. Each
 applicant is responsible for all costs associated with the permit-application process.
 Each permittee is responsible for all costs of materials, permits, maintenance related
 to the creative crosswalk and, when the permit for the creative crosswalk expires or is
 terminated, for all costs of removing the creative crosswalk and restoring the affected
 pavement.

Waiver of Artist's Rights

- A creative crosswalk installed under this policy is not intended to be and is not public art under Sacramento City Code chapter 2.84; a work of fine art under the California Art Preservation Act (Civil Code § 987); or a work of visual art under the federal Visual Artists Rights Act of 1991 (17 U.S.C. §§ 106A & 113(d)).
- The City will not issue a creative-crosswalk permit to an applicant until the applicant
 has obtained from each individual who will design or install the creative crosswalk, and
 has submitted to the City, a signed writing, addressed to the City, in which the
 individual—
 - waives all intellectual-property rights or moral rights (droit moral) the individual might have in the creative crosswalk, including but not limited to all such rights (a) under the California Art Preservation Act; (b) under the federal Visual Artists Rights Act of 1991; or (c) under any other local, state, federal, or international laws that confer such rights, whether in effect on the date the permit is issued or enacted thereafter; and
 - 2. agrees that the City, in its sole discretion and without providing any notice or compensation to the individual, may remove the creative crosswalk if:
 - a. the permittee fails to remove the creative crosswalk as this policy requires when the permit expires or is revoked;
 - b. state or federal law requires removal;
 - c. the City must remove the creative crosswalk to perform maintenance on the street; or
 - d. the City's Traffic Engineer determines that the creative crosswalk constitutes a hazard to pedestrian or vehicular traffic.

Maintenance

 Each permittee must maintain liability insurance that names the City as an additional insured so long as the creative crosswalk is in place and must provide the City with an acceptable certificate of insurance before installation of the creative crosswalk and before performing maintenance on the creative crosswalk.

- Each permittee must have a plan, approved by the City's Traffic Engineer, that provides for the continued maintenance of the creative crosswalk, including periodic paint touch-ups, and repainting.
- Each permittee must agree to the following in a signed writing approved as to form by the City Attorney:
 - That the City will maintain transverse crosswalk lines and other traffic-control devices but assumes no responsibility for maintaining the creative crosswalk.
 - 2. That the City, telecommunication companies, utility companies, Underground Service Alert, and other entities that work within the public right-of-way on roadways are not responsible for damage to, or alteration of, the creative crosswalk and are not responsible for repairing damage to the creative crosswalk.
 - 3. That the City performs maintenance on its streets, such as overlays and slurry seals; that such maintenance may require the removal or covering of a creative crosswalk; and that the City will not reinstall the creative crosswalk, although the permittee may reinstall the creative crosswalk at permittee's cost.
 - 4. That the City may revoke the creative-crosswalk permit at any time by written notice to the permittee.
 - 5. That the permittee must promptly remove the creative crosswalk and restore the crosswalk to its condition before installation of the creative crosswalk, all at no cost to the City, upon receiving a revocation notice or the City's written request for removal, or when the creative-crosswalk permit expires.
 - 6. That the permittee relinquishes all intellectual-property rights and moral rights (*droit moral*) in the creative crosswalk, including but not limited to all such rights under the California Art Preservation Act; under the federal Visual Artists Rights Act of 1991; or under any other local, state, federal, or international laws that confer such rights, whether in effect on the date the permit is issued or enacted thereafter.

Relevant State and Federal Rules

The relevant state and federal rules as of the date of this policy are set out below. But these rules are subject to change without notice. Applicants should refer to the state and federal rules in effect at the time of application, and a permittee should refer to the state and federal rules in effect while the creative crosswalk is in place.

California Manual on Uniform Traffic Control Devices (CA MUTCD) 2014, Revision 5 (available here)

Relevant sections:

- Section 3B.18 Crosswalk Markings Paragraph 01: Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.
- Section 3B.18 Crosswalk Markings Paragraph 08: Crosswalk lines should not be used indiscriminately.
- Section 3B.18 Crosswalk Markings Paragraph 17: Crosswalk markings should be located so that the curb ramps are within the extension of the crosswalk markings.

- Section 3B.18 Crosswalk Markings Paragraph 21: In general, crosswalks should not be marked at intersections unless they are intended to channelize pedestrians. Emphasis is placed on the use of marked crosswalks as a channelization device.
- Section 3G.01 Colored Pavements Paragraph 02: If non-retroreflective colored
 pavement, including bricks and other types of patterned surfaces, is used as a purely
 aesthetic treatment and is not intended to communicate a regulatory, warning, or
 guidance message to road users, the colored pavement is not considered to be a
 traffic control device, even if it is located between the lines of a crosswalk.
- Section 3G.01 Colored Pavements Paragraph 6: Colored pavement located between crosswalk lines should not use colors or patterns that degrade the contrast of white crosswalk lines or that might be mistaken by road users as a traffic control application.

FHWA Interpretation Letter 3(09)-24(I) – Application of Colored Pavement Treatment in Crosswalks, August 15, 2013 (available here) Excerpts Relevant to Creative Crosswalks:

Colored Pavement in Crosswalks

In the late 1990s, the marketplace introduced and promoted aesthetic treatments for urban streetscape environments that included the opportunity to install a range of colors and a multitude of patterns. The most popular opportunity to implement these treatments was between the legally marked transverse lines of crosswalks. This was typically done as part of larger efforts by cities to enhance the aesthetics of an area . . .

The FHWA's position has always been and continues to be that subdued-colored aesthetic treatments between the legally marked transverse crosswalk lines are permissible provided that they are devoid of retroreflective properties and that they do not diminish the effectiveness of the legally required white transverse pavement markings used to establish the crosswalk. Examples of acceptable treatments include brick lattice patterns, paving bricks, paving stones, setts, cobbles, or other resources designed to simulate such paving. Acceptable colors for these materials would be red, rust, brown, burgundy, clay, tan or similar earth tone equivalents. All elements of pattern and color for these treatments are to be uniform, consistent, repetitive, and expected so as not to be a source of distraction. No element of the aesthetic interior treatment is to be random or unsystematic. No element of the aesthetic interior treatment can implement pictographs, symbols, multiple color arrangements, etc., or can otherwise attempt to communicate with any roadway user. Patterns or colors that degrade the contrast of the white transverse pavement markinas establishina the crosswalk are to be avoided. Attempts to intensify this contrast by increasing or thickening the width of the transverse pavement markings have been observed in the field. These attempts to increase contrast are perceived to be efforts to circumvent the contrast prerequisite so that an intentional noncompliant alternative of an aesthetic interior pattern or color can be used. Further techniques to install an empty buffer space between an aesthetic treatment and the interior edge of the white transverse crosswalk markings have also been observed in the field. This strategy is also perceived to be an attempt to circumvent FHWA's prior position on contrast. However, an empty buffer space between a subdued-colored, uniform-patterned aesthetic treatment can be implemented to enhance contrast

between the aesthetic treatment and the white transverse pavement markings. When used properly, buffer spaces can be an effective tool to disseminate a necessary contrast in order to visually enhance an otherwise difficult to discern white transverse crosswalk marking, provided that the aesthetic treatment conforms to the conditions in the preceding paragraph...

Conclusion

Chapter 3G of the 2009 MUTCD contains provisions regarding the use of colored pavements. If colored pavement is used to regulate, warn, or guide traffic or otherwise attempts to communicate with the roadway user, the colored pavement constitutes a traffic control device. Agencies cannot intentionally exclude elements of retroreflectivity as part of a systematic process to classify the color pavement as a purely aesthetic treatment in order to circumvent the provisions of Chapter 3G. Paragraph 3 of Section 3G.01 in the MUTCD limits the use of colored pavement used as a traffic control device to the colors yellow and white. Interim Approval IA-14 permits the use of green colored pavement for marked bicycle lanes. All other colors for use on highway pavement in the right-of-way are either disallowed or are experimental as described above unless the colored pavement is a purely aesthetic treatment and makes no discernible attempt to communicate with a roadway user.

Definitions

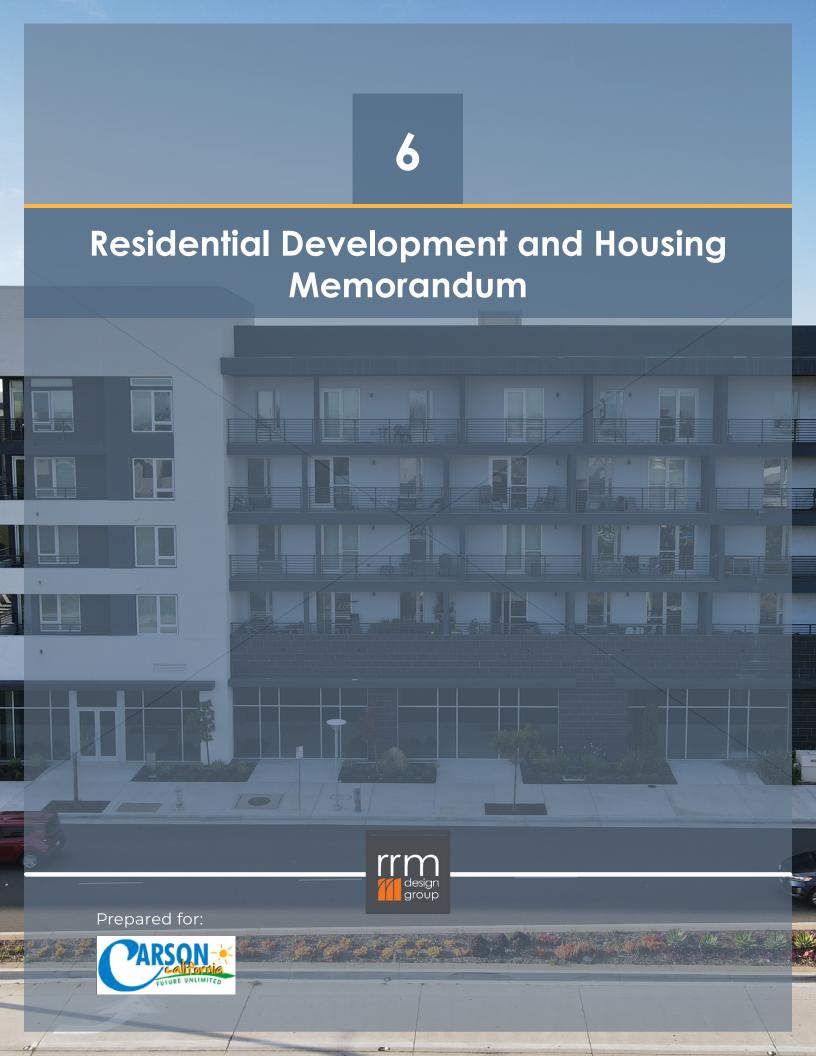
Applicant: The entity that applies for a creative-crosswalk permit in accordance with this policy.

Creative Crosswalk: The colors and design installed in compliance with this policy between the transverse white lines of a crosswalk.

Multiple Threat Crash Risk: A type of crash that occurs when a driver stops in one lane of a multilane road to permit pedestrians to cross and an oncoming vehicle (in the same direction) strikes the pedestrian who is crossing in front of the stopped vehicle.

Permittee: An entity that is granted a creative-crosswalk permit in accordance with this policy.

Traffic Engineer: The City's Traffic Engineer or their designee.





OVERVIEW

Housing is a key component to economic development. If a city has housing for all income levels of the workforce, it can attract talent and thereby employers and create a stronger economy. This memorandum is intended to gather relevant information regarding housing sites for the development of all types of housing – market rate, affordable, supportive/transitional – into one location.

At the time RRM Design Group and the City of Carson entered into scope of work negotiations, neither the Housing Element, nor the General Plan update had been adopted by the City. In the meantime, both significant, direction-setting policy documents have been adopted by the City Council. The City of Carson Housing Element was adopted by the City Council in September 2022, with State of California Housing and Community Development (HCD) changes incorporated in November 2022. HCD conditionally deemed Carson's Housing Element in compliance pending a re-zone per Program 5. The City Council adopted the updated general plan, Carson General Plan 2040, in April 2023.

First, this memorandum summarizes research and data collection prepared to address the housing market and specifically market rate housing in the City of Carson. In addition, policies and programs within the adopted Housing Element and the General Plan Update are summarized to identify City policies as to sites where affordable housing can be developed. Strategies for the preservation and protection of mobile home parks are also summarized. Next, a few case studies are identified that provide planning and zoning approaches for additional opportunities in largely built-out cities in the nearby region. Lastly, a supplemental analysis section identifies brownfield opportunities in Carson where housing may be considered, and corresponding Appendix A provides a resource from the United States Environmental Protection Agency that provides initial guidance on the brownfield redevelopment process.

THE HOUSING MARKET

The Natelson Dale Group, Inc. (TNDG) assessed the demand for market-rate housing development in Carson, projecting absorption in future years in terms of estimated volume, timing, tenancy, and density of this development. The projections are based on the following:



- Population estimates and projections from SCAG (unofficial figures currently under review), including TNDG's interpretations of the continuous "growth curve" through future years based on the SCAG numbers given for specific points in time (which take the form of an exponential, nonlinear progression in which the rate of growth decreases over time).
- Data on new homes for sale and new multifamily rental communities under development, from the City's database of projects as summarized on Table 2, below, and other sources. Projects in this development pipeline were then used to recalibrate the SCAG household projections for the period through 2035, accepting the assumption that these projects would all be developed and absorbed by that time. Adopting this approach meant increasing the expected number of households in Carson, by 2035, by approximately 2,500, or a 23% increase from 2019 households instead of a 13% increase as forecasted by SCAG.
- Household income data from the Census Bureau.
- Translation of income data to corresponding purchase prices and monthly rental costs that households could theoretically afford.
- Delineation of a primary market area (Carson) and secondary market area based on the
 pattern of in-commuters to Carson from the surrounding cities, generally within an 8mile radius. The analysis model incorporates the assumption that not all housing unit
 growth will be "native" to Carson, but will be a combination of buyers/renters from
 inside and outside (in limited amounts) the City, as households adjust to what is
 available in the market and other factors. See Figure 1.



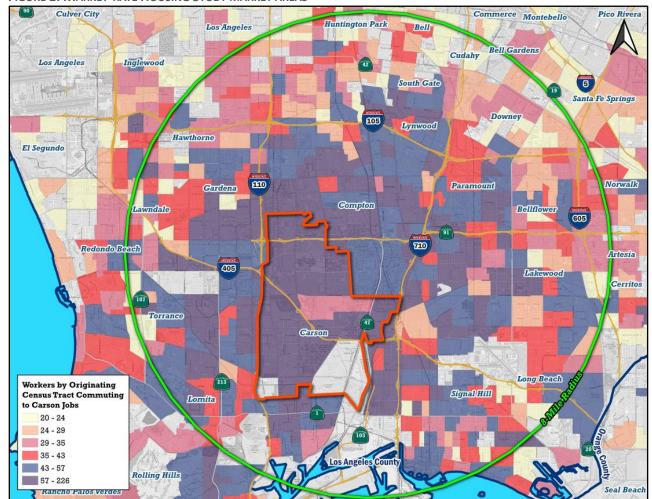


FIGURE 1. MARKET-RATE HOUSING STUDY MARKET AREAS

Source: TNDG.

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 Assumptions that new housing by density category will reflect anticipated development by density as shown in the Housing Element.

Table 1 summarizes results of the projection model, which shows that approximately 1,180 market-rate purchased homes and 2,590 rental units, for a total of 3,770 units, could be absorbed through 2050, with considerable variation in units absorbed within each five-year period. For example, 86% of the units would be absorbed by 2035 according to the model's assumptions as described above.



TABLE 1. SUMMARY OF PROJECTED ABSORPTION

Unit Type / Year	2030	2035	2040	2045	2050
For-sale units	687	321	102	47	20
Cumulative		1,008	1,110	1,157	1,177
Rental units	1,514	702	228	104	44
Cumulative		2,216	2,444	2,548	2,592
Total units	2,201	1,024	330	151	64
Cumulative		3,225	3,554	3,705	3,769

Source: Table 4

Table 2 summarizes market-rate housing development in Carson that is in-process or in various states of approval, as reflected in the City's document referenced on the table. Interestingly, the percentage of units that are being developed as for-sale units (29%) versus apartment units (71%) is roughly opposite the current mix of owned versus rental housing in Carson (73% and 27%, respectively). (Of course, these two indicators are not directly comparable, as units generally built for sale can also become rental units.)1

According to the notes in the City's database, very few of these potential units are in the Affordable category. Pricing information for the market-rate projects is limited. According to Livabl.com, condominium units in the Brandywine Carson Landing project are priced at \$655,000 to \$776,000 (and with current market conditions, could be expected to change).

The 2,905 units in total shown on **Table 2** represent 90% of the absorption projected by the model through 2035. (TNDG recognizes that this margin between what is currently in the development pipeline and what is projected is relatively slim; however, as discussed above, TNDG has recalibrated the projected household growth for purposes of this analysis to a figure over 70% above the original SCAG projections. While other market-rate housing projects may come online in ensuing years, any given project in the Review stage, at whatever point in the present or future, may not come to fruition as planned.)

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¹ Figures do not include 9 ADUs shown in the City's database.



TABLE 2. CITY OF CARSON PROJECTS FROM THE "COMMUNITY DEVELOPMENT PROJECT STATUS REPORT 7-5-23 CITY COUNCIL"

7-5-25 CITY COUNCIL									
Project Name	For-Sale			Apartments		Total	Total Total	Total	
	SFR	Condo	TH	General	Senior	For- Sale Apts		Resid- ential	Status
Imperial Avalon SP	0		380	653	180	380	833	1,213	Review
Kott Property Avalon/213th	18		104	1,198		122	1,198	1,320	Review
Olson Co. – (E 228th St)	0		32			32	0	32	Review
304 Kenmore Avenue, LLC		5				6	0	6	Review
Kim Family Trust (Main)				19		0	19	19	Appr.
Santiago De Leon (20926 Jamison St)	2					2	0	2	Appr.
Ken S. Chea Trust (21530 Martin St)	4					4	0	4	Review
Golden State Alliance (138 W 223rd)		10				10	0	10	Appr., PC
Maupin Dev. (W Carson St)			35			35	0	35	Review
Anastasi Dev. (E Carson St)			50			50	0	50	Review
PAR 1675-22 (S Bolsa)	8					8	0	8	Review
Brandywine Carson Landing		175				175	0	175	U/C
Birch SP (S Figueroa St)		32				32	0	32	Review
Total	32	222	601	1,870	180	855	2,050	2,905	
As % of total						29%	71%		

Notes: Market-rate units only, where determinable.

Source: City of Carson; TNDG.

Table 3 shows the trend of recent growth in Carson. Annual rates of change are modest, less than 1% and generally less than 0.5%, for all years except 2019 to 2020. Given that 2020 would have been a "recalibration" year based on that being a decennial census year, what appears to have been a high-growth year is most likely an anomaly of the data updating process. After 2020, annual growth in housing units ranged from a low of 12 to a high of 225. In the analysis model (see Table 4, Households section), the projected annual increase in households ranges from approximately 375 to 390 through 2035, well above the recent historic past. Household growth decreases thereafter to an annual low of 23 by 2050. Although recalibrated by TNDG to show higher numbers by 2035, as described above, the model essentially follows the *pattern* of the SCAG projections, with TNDG interpolating for years not provided by SCAG.



TABLE 3. CHANGE IN HOUSING UNITS FOR THE CITY OF CARSON, JANUARY 2018-2023

Year	Estimates ¹	Difference	Year to Year % Change	
2018	26,289			
2019	26,362	73	0.3%	
2020	27,699	1,337	5.1%	
2021	27,924	225	0.8%	
2022	27,936	12	0.0%	
2023	27,953	17	0.1%	
Annual average over period	er 2018-2023	333	1.3%	
Annual average over period	er 2020-2023	85	0.31%	

Notes:

1. Total housing count estimates.

Source: CA DOF Table 2: E-5 City/County Population and Housing Estimates, January, Years 2018 - 2023; TNDG.

Model details are shown in **Table 4**. In general, the model reflects a combination of data elements: existing conditions and trends (including conditions related to population growth and anticipated housing stock), incomes within Carson and the surrounding region, the current "development pipeline" in Carson, and projected growth patterns according to SCAG. The model is structured so that the overall housing unit absorption pattern matches that of the SCAG projections (i.e., up to 2050). The intent of this approach is to help sensitize the housing development estimates to these distant planning horizons, given that SCAG projects the growth rates to decrease markedly after 2035.

The "percent of capture in Carson" lines in the model reflect the following: The model assumes that houses will be purchased by some people allocated to Carson by SCAG, and some by people allocated elsewhere by SCAG, and this is approach is intended to reflect a practical reality, and also differences in the demographic makeup of the two populations. The model also assumes that home purchasers tend to maximize their ability to pay for a home, and the \$1 million+homes are therefore a reflection of household income distribution in the City and region, which is then related to home-purchasing ability. Homebuilders presumably will adjust to this reality and make homes available in this price range.

In the model, the proportion of housing assigned to the "market rate" category was based on a combination of data in the City's Housing Needs Assessment and the household income data



used in the model. In Table 2-33 of the City of Carson Regional Housing Needs Assessment, 47.8% of units are anticipated to be for very-low-income and low-income households. This figure is generally consistent with what the household income data (from Census tables) show in terms of households that can afford the kinds of projects being built in and around Carson, currently and recently.

The market-rate segment is the allocation of anticipated growth in households to those who could afford new market-rate housing. The model assumes that the proportion of market-rate housing will increase over time. The rest of households are not addressed in this report.

This projected development would require a total of 81 acres through 2050, again with most of the land taken up by 2035.

TABLE 4. ESTIMATED MARKET-RATE HOUSING ABSORPTION IN CARSON THROUGH 2050

D WARKET-KA	IEF						
		2019	2030	2035	2040	2045	2050
		26,897					33,938
	_						113
							23
				71%	73%	75%	80%
			2,905	1,387	411	197	90
			56.9%	56.9%	56.9%	56.9%	56.9%
			1652	788	234	112	51
		544,246	598,034	621,086	630,493	634,292	635,558
			53,788	23,052	9,407	3,799	1,266
			2.5%	2.5%	2.5%	2.5%	2.5%
			1,345	576	235	95	32
			40.8%	40.8%	40.8%	40.8%	40.8%
			549	235	96	39	13
ndary area			2,201	1,024	330	151	64
narket rate			1,949	929	233	112	48
			47.0%	47.6%	41.4%	42.6%	43.0%
category							
\$749,995			198	92	29	14	6
\$999,995			142	66	21	10	4
\$1,375,000	+		347	163	51	24	10
			687	321	102	47	20
			31.2%	31.4%	30.8%	31.1%	31.6%
tegory							
\$2,500			478	221	73	33	14
\$3,750			637	295	96	44	18
\$5,000			278	129	42	19	8
\$6,875			122	57	18	8	4
			1,514	702	228	104	44
Density							
8			5	2	1	0	0
16			30	14	5	2	1
28			150	70	22	10	4
52			1,978	920	296	136	58
32			39		6	3	1
			2,202	1,024	330	151	64
			0.63	0.25	0.13	0.00	0.00
			1.88	0.88	0.31	0.13	0.06
			5.36	2.50			0.14
							1.12
							0.03
							1.35
	ndary area narket rate sategory \$749,995 \$999,995 \$1,375,000 \$3,750 \$5,000 \$6,875 Density 8 16 28 52	ndary area narket rate sategory \$749,995 \$999,995 \$1,375,000 \$3,750 \$5,000 \$6,875 Density 8 16 28 52	2019 26,897 26,897 544,246 544,246 anarket rate category \$749,995 \$999,995 \$1,375,000 \$3,750 \$5,000 \$6,875 Density 8 16 28 52	2019 2030	2019 2030 2035 26,897 31,047 33,000 4,150 1,953 377 391 70% 71% 2,905 1,387 56.9% 56.9% 1652 788 544,246 598,034 621,086 53,788 23,052 2.5% 2.5% 1,345 576 40.8% 40.8% 40.8% 40.8% 549 235 235 47.0% 47.6% 47.0% 47.6% 549 235 40.8% 40.8% 549 235 40.8% 40.8% 549 235 40.8% 40.8% 549 235 40.8% 40.8% 549 235 40.8% 40.8% 549 235 40.8% 40.8% 549 235 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 47.6% 47.6% 47.6% 48 221 57 58 5 2 57 59 1,514 702 Density 8 5 2 1,514 702 Density 8 5 2 1,978 920 32 39 18 2,202 1,024 47.6% 48 5.36 2.50 48 6.88 5.36 2.50 38.04 17.69 1.22 0.56	2019 2030 2035 2040 26,897 31,047 33,000 33,563 4,150 1,953 563 377 391 113 70% 71% 73% 2,905 1,387 411 56,9% 56,9% 56,9% 56,9% 1652 788 234 544,246 598,034 621,086 630,493 53,788 23,052 9,407 2,5% 2,5% 2,5% 2,5% 1,345 576 235 40.8% 40.8% 40.8% 40.8% 640,8% 40.8% 40.8% 40.8% 640,8% 40.8% 40.8% 40.8% 640,8% 47,0% 47,6% 41,4% 640,8% 47,0% 47,6% 41,4% 640,8% 47,0% 47,6% 41,4% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,8% 40,8% 40,8% 40,8% 640,	26,897 31,047 33,000 33,563 33,825 4,150 1,953 563 263 377 391 113 53 70% 71% 73% 75% 2,905 1,387 411 197 566,9% 56,9% 56,9% 56,9% 56,9% 566,9% 566,9% 56,9% 56,9% 56,9% 566,9% 566,9% 56,9% 56,9% 56,9% 544,246 598,034 621,086 630,493 634,292 53,788 23,052 9,407 3,799 2.5% 2.5% 2.5% 2.5% 2.5% 2.5% 1,345 576 235 95 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 40.8% 549 235 96 39 60 39 60 39 60 39 60 39 60 39 60 39 60 39 60 30 60 30 112 60 21 60 21 60 21 60 21 60 31 60



HOUSING ELEMENT

The City of Carson's Housing Element was adopted by the City Council and deemed conditionally in compliance by the California Department of Housing and Community Development (HCD) pending rezoning pursuant to Program 5. The Carson Housing Element has 17 programs that address a range of housing needs and opportunities:

- Program 1 Residential Rehabilitation Program (Neighborhood Pride Program)
- Program 2: Home Owner-Occupied Rehabilitation Program
- Program 3: Foreclosure Registration Program
- Program 4: Affordable Housing Strategy
- Program 5: Zoning Ordinance Update
- Program 6: Streamlined Development Standards
- Program 7: Density Bonus
- Program 8: Accessory Dwelling Units
- Program 9: Adequate Residential Sites and No Net Loss
- Program 10: Preservation of At-Risk Affordable Housing Units
- Program 11: Mobile Home Park Maintenance and Preservation
- Program 12: Rental Assistance
- Program 13: Special Needs Housing
- Program 14: Affirmatively Furthering Fair Housing
- Program 15: Energy Conservation
- Program 16: Commercial to Residential Conversions
- Program 17: Neighborhood Retail and Grocery Stores

Of the total programs, the following five programs relate directly to housing sites and developing affordable and transitional/supportive housing types that are focus of this task. These programs include:

- Program 4: Affordable Housing Strategy
 - Sub-bullet: City- and Other Publicly- Owned Land
 - "Carson encourages the use of publicly-owned land for the construction of affordable housing. [....] The City will also comply with State law, AB 1486 and AB 1255, to connect developers with surplus or excess land." (p. 155 report/ p.163 of pdf)
- Program 5: Zoning Ordinance Update
 - o Sub-bullet: Multifamily Development Standards
 - "The City currently (2021) requires a Conditional Use Permit (CUP) for all multifamily development, including residential condominiums. ...the City shall permit by right development of multifamily, transitional, and supportive housing in all zones where multifamily is permitted in the



General Plan – including the RM, MU-CS, and MU-SB zones as well as MUR overlay." (p. 157 report/ p. 165 pdf)

- o Sub-bullet: Residential Condominiums
 - "The City currently maintains development standards for residential condominiums ... which differ from the standards required for other types of multifamily development. The City will simplify its zoning standards and ensure equivalent standards for multifamily developments during the update to the Planning and Zoning Code" (p. 157 report/ p. 165 pdf)
- Program 9: Adequate Residential Sites and No Net Loss
 - In order to meet the City's assigned Regional Housing Needs Allocation (RHNA), the City increased the maximum permitted residential densities in several land use designations through the comprehensive update to the General Plan.
 - "The City will continue to maintain and monitor the sites inventory. The City will develop and implement a formal ongoing (project-by-project) evaluation of procedure pursuant to "No Net Loss" provisions set forth in Government Code Section 65863." (p. 161 report/ p. 169 pdf)
- Program 13: Special Needs Housing
 - "The City has assisted in the development of a number of senior housing units and allows for the development of all types of special needs housing in at least one zone." (p. 167 of the report, p. 174 of pdf)
 - "Further, the City maintains a reasonable accommodation procedure in Section 9172.27 of the Planning and Zoning Code. The City will prioritize the development of special needs housing, provide development assistance where feasible, and remove any constraints." (p. 167 of the report, p. 174 of pdf)
 - Sub-bullet: Transitional and Supportive Housing
 - "The City currently permits transitional and supportive housing in all residential and mixed-use zones, and such housing is subject to the same standards as other residential uses." (p. 168 report, p. 175 pdf)
 - "Following adoption of the 2040 General Plan, the City will amend the Planning and Zoning Code to continue to permit transitional and supportive housing development in identified zones and remove any constraints identified for residential developments, including clarifying language related to SROs and the requirement of a CUP for all multifamily projects as outlined in Program 3." (p. 168 report, p. 175 pdf)

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- Sub-bullet: Low Barrier Navigation Centers
 - "The City will update the Planning and Zoning Code to permit the development of Low Barrier Navigation Centers by right in all mixed-use and non-residential zones permitting multifamily uses, consistent with AB 101." (p. 169 report, p. 176 of pdf)
- Sub-bullet: Extremely-Low-Income Housing
 - The City will continue to partner with organizations ... to engage in proactive outreach on an annual basis and provide assistance for non-profit service providers and developers, prioritize some Carson Housing Authority funding for extremely-low-income units, and offer incentives to encourage the development of housing affordable to extremely-low-income persons (including persons experiencing homelessness). (p. 169 of report/ p. 176 of pdf)
- Program 16: Commercial to Residential Conversions
 - "The City will continue to encourage and assist in the conversion of underutilized commercial or other nonvacant properties to residential uses. As discussed in Appendix C, the City has a significant track record of facilitating such conversions, many of which had produced a number of affordable units." (p. 172 report, p. 179 of pdf) (HE Appendix C is referenced in original document and is not re-attached here).

There are several additional efforts included in the other programs that will help with the development of housing, such as reviewing parking standards to ensure parking requirements are not an undue constraint to development (Program 5), implementing streamlined development and review standards (Program 6), providing density bonus in areas with specific land use designations (Program 7) and the implementation of strategies to encourage ADUs (Program 8).

PRESERVATION AND PROTECTION OF MOBILE HOME PARKS

The City of Carson acknowledges Mobile Home Parks as a source of affordable housing for lower income households and seeks to preserve this affordable housing stock. This issue is addressed in the Housing Element and addressed in the General Plan update as an overlay as discussed below.

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Housing Element

Program 11 in the Housing Element is dedicated to the Maintenance and Preservation of Mobile Home Parks. Program 11 provides four approaches to preserving and maintaining mobile home parks:

- Mobile Home Maintenance
- Mobile Home Park Preservation
- Mobile Home Park Overlay District
- Mitigation of Mobile Home Park Closures

Mobile Home Maintenance

The City maintains the Mobilehome Space Rent Control Ordinance to protect the affordability of mobile home units. Mobile home rehabilitations are available through Program 1 of the Housing Element, Neighborhood Pride Program.

Mobile Home Park Preservation

In April 2022, the City adopted an ordinance declaring that mobile homes that are subject to the City's Mobile Home Space Rent Control Ordinance or are occupied by low or very low income households, are "protected units" under SB 330. Now, under Senate Bill 330, the City may not approve a housing development project requiring demolition of these protected units unless the project will replace the demolished units with affordable units. (p. 172 of pdf/ p. 165 of report).

Mobile Home Park Overlay District

The City will incorporate a Mobilehome Park Overlay District (MHD) as part of the General Plan update, and the MHD Overlay Zone will also be established and detailed under the City's Zoning Ordinance via a separate Zoning Ordinance amendment. The zoning regulations shall collectively ensure that existing mobile home parks shall not be redeveloped with another permitted use unless, as part of the new development, a discretionary zone change approval is granted (in addition to any other applicable land use entitlements) and comparable units at affordable housing rates are provided and made available to residents of the existing mobile home park. (p. 165-166 of report/ p. 172-173 of pdf)

Mitigation of Mobile Home Park Closures

While the City acknowledges that it has limited authority to preserve mobile home parks since they are all privately-owned, the removal of a mobile home park is subject to discretionary review. The City requires that property owners mitigate the impacts of a park closure pursuant to State law. The City requires a relocation impact report (RIR) in order to approve such a closure. RIRs are required to mitigate the adverse impacts of a mobile home park's closure, including identifying suitable replacement spaces. Recent State law, including Assembly

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Bill 2782, have increased the allowable relocation benefits that park residents may receive in connection with park closures.

The City prepared an ordinance amending Carson Municipal Code Section 9128.21 (the City's existing ordinance establishing an application and permit process for approval of Relocation Impact Reports for mobilehome park closures) to bring it up to date with State law as amended by AB 2782. This ordinance amendment will update and carry forward detailed requirements for preparation of Relocation Impact Reports and payment of required relocation impact mitigation measures to mobile home park residents. (p. 166 of report/ p. 173 of pdf)

On July 5, 2023 City Council voted on an Ordinance to adopt changes to the City's Municipal Code regarding the process and requirements for Relocation Impact Report applications and decisions. The ordinance with slight modifications was passed unanimously by City Council. The modified Ordinance is included in Appendix B.

General Plan Update

The Carson General Plan update has several supportive policies for the protection of mobile home parks, as well as a discussion surrounding the Mobilehome Park Overlay which will be included in the forthcoming Zoning Code update.

Chapter 2 Land Use and Revitalization Guiding Policies

LUR-G-5 Provide opportunities for new residential development in a variety of settings, including in high resource/higher-income areas and through infill and redevelopment, without impacting existing neighborhoods or creating conflicts with industrial operations, while conserving mobile homes as much as possible, which provide more affordable housing.

Implementing Policies: Residential Development

■ LUR-P-7 Support retention of existing mobile home parks as a form of affordable housing when feasible. When retention of existing mobile home parks is not feasible, require at minimum a one-to-one replacement of mobile home units with affordable housing units within the new development and undertake efforts to relocate existing residents to within the community in compliance with State requirements and local regulations.

Chapter 2 of the General Plan 2040 also includes a reference to and description of the Mobilehome Park Overlay District (MHD). Though details of the MHD will be contained in Zoning Ordinance, the MHD applies to all existing mobile home parks within the City except for those

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that had, at the time of the adoption of the General Plan 2040, already put into place valid actions for the closure of the mobile home park. (page 2-13 of Ch 2 GP).

HOUSING DEVELOPMENT CASE STUDIES

This section of the memorandum provides three examples of implemented projects portraying well-designed housing product types that could be successful in Carson due to similar urban context and development regulations. The selected examples are similar in height and scale as what is allowed in Carson and are also similar in the approach of repurposing underperforming commercial sites and providing compatibility with lower profile existing development in the surrounding setting.

These case studies portray relevant approaches in housing development and include Flora Walk (townhomes), Cabrillo Family Apartments (podium), and Avalon (wrap). Each example includes information regarding the scope of the development, location, primary zoning regulations, and summary of pertinent development information for ease of reference. In addition, the case studies represent a range of affordability: market rate, affordable, and a blend of market rate and affordable units.

FLORA WALK



(source: florawalk.com)



Product Type: Townhome (3-stories)

Location: 1063 W. 223rd Street, Torrance, CA

Acreage: 1.6 acres

Number of Units: 40 units

Unit Sizes: 1,350 sq. ft. (2 bdrm) – 1,880 sq. ft. (4 bdrm)

Unit Price: \$544,990 - \$644,990

The Flora Walk project features 40 attached townhomes in a compact community of 5 buildings featuring a Spanish-inspired architectural style. The Olson Company offers 12 different floor plans with a large variety of unit sizes, as well as the ability to add an additional work/loft flex space. Each unit has a 2-car garage which is arranged in a tandem configuration for a majority of the townhouse units. The community

shares an outdoor lounge and play area, and each unit has a small private outdoor deck.

This project falls under the jurisdiction of the County of Los Angeles. It is located within the County's West Carson Transit-Oriented Development Specific Plan (adopted 2019), which seeks to leverage the LA Metro Carson Station to create a more engaging and vibrant built environment, connect important community uses and activities (such as the Harbor-UCLA Medical Center), and attract future investment. The West Carson TOD Specific Plan area is well-situated, in close proximity to the Harbor Gateway Transit Center, and several freeways – a convenient location for commuting within Los Angeles County or to employment centers in Long Beach and Orange County.

The property is zoned for "Unlimited Commercial" which encourages a range of retail, personal, and professional services, as well as multi-family residential uses in a walkable environment. The Unlimited Commercial Zone establishes a density of 30 dwelling units per acre; a maximum floor area ratio of 0.5; and a maximum building height of 40 feet (3 stories).

CABRILLO FAMILY APARTMENTS



(source: metahousing.com)



Product Type: Podium - Mixed-Use (3-4 stories) **Location:** 1640 Cabrillo Avenue, Torrance, CA

Acreage: 0.8 acres

Number of Units: 44 units

Unit Sizes: 700 sq. ft. (1 bdrm) – 1,030 sq. ft. (3 bdrm) **Unit Rates:** \$442/mo (1 bdrm) – \$1,255/mo (3 bdrm)

Commercial: 3,700 sq. ft. ground-floor retail

Completed in 2015, this affordable housing project is located within the City of Torrance, in the heart of Old Torrance and within the Border Avenue Study Area. The mixed-use building, designed in a contemporary architectural style, replaced an existing, vacant commercial structure. The units offered are compact and offer a range of sizes to accommodate

different family and living arrangements. All units have private balconies, and share a large courtyard, community room, and recreational deck.

This development offers below-market rents to low-income tenants making no more than 30 to 60 percent of the average median income in the City. As an affordable housing project, the Cabrillo Family Apartments had several funding sources, including the City of the Torrance, the Synergy Community Development Corporation, Bank of America, the California Community Reinvestment Corporation, and the California Tax Credit Allocation Committee. Meta Housing Corporation reports that at the project's opening, the waiting list had 500 names of would-be residents.

The property land use designation is Commercial Center (C-CTR), with a maximum floor area ratio of 1.0. The zoning designation is Retail Commercial (C-I), which allows for a range of commercial/retail uses and conditionally allows for residential uses; and maximum building height for projects including residential at 50 feet.

Of additional note is the 78 West project at Carson Street between Gramercy Avenue and Andreo Avenue, only one block away from the Cabrillo Family Apartments. This project also features a podium construction, indicating further market support for podium housing products.

AVALON IRVINE



(source: avaloncommunities.com



Housing Type: Wrap Apartment (5-stories) **Location:** 2777 Alton Parkway, Irvine, CA

Acreage: 8.7 acres

Number of Units: 458 units

Unit Sizes: 615 sq. ft. (1 bdrm) – 1,384 sq. ft. (2 bdrm) **Unit Rates:** \$2,580/mo (1 bdrm) – \$3,785/mo (2 bdrm)

This 458-unit apartment complex was built in the City of Irvine in 2009. Community amenities include a pool and lounge, fitness center, and playground area. The on-site parking garage provides 6 stories of controlled-access parking. I to 2 parking spaces are included with the rental price of each apartment, in tandem or side-by-side spaces. This development also offers some units at below-market rents to low-

income tenants making no more than 60 to 120 percent of the average median income in the City of Irvine.

The housing development is well-situated, in close proximity to Irvine's Central Business District and major shopping venues at The District, Tustin Marketplace, and Diamond Jamboree. It is also blocks away from several freeways – a convenient location for commuting to employment centers within Orange County.

The property is designated with two zones – Irvine Business Complex Mixed-Use and Irvine Business Complex Residential. These zones provide for the orderly transition from exclusively industrial and office employment areas into pedestrian-oriented districts that accommodate a mixture of retail, office, and residential uses. These zones establish a density of 30-52 dwelling units per acre; a building height limit of 75 feet; a maximum site coverage of 75 percent; as well as additional lighting, screening, and setback standards.



SUPPLEMENTAL ANALYSIS FOR BROWNFIELD REDEVELOPMENT

To supplement the strategies and policies provided earlier in this memorandum, this section identifies brownfield opportunities in Carson where housing may be considered. Brownfields exist in many locations throughout Carson and provide opportunities for redevelopment for a range of future uses, including housing. To help inform the discussion related to potential housing opportunities, **Figure 2** overlays the housing sites identified in the Housing Element Sites Inventory with the locations of all brownfield sites located in Carson. This includes the following six sites: Central Avenue & Victoria Street, University Drive & Avalon Boulevard, Del Amo Boulevard & Main Street, Torrance Boulevard & Main Street, 213th Street & Avalon Boulevard (a parcel which appears <u>not</u> to be part of the Avalon Specific Plan Site), and Delores Drive and Main Street.

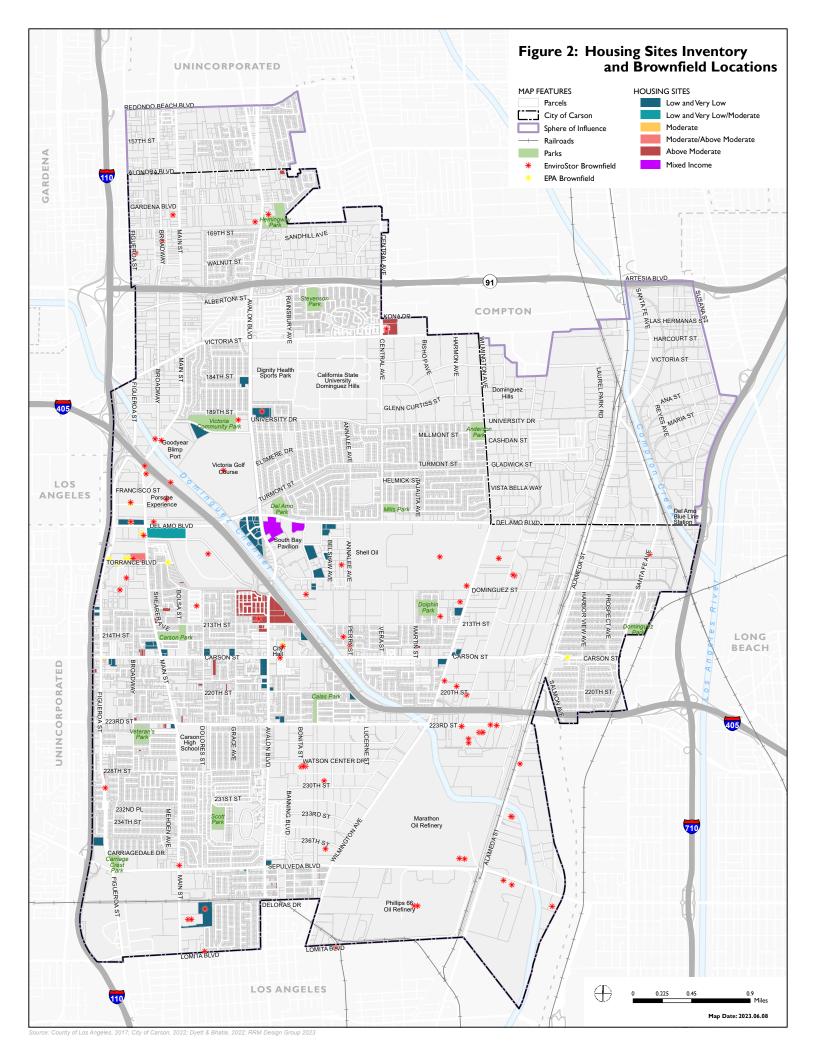
Brownfield remediation background and strategies more specific to Carson have been developed by Catalyst Environmental Solutions and are captured in a memorandum (Appendix A) and summarized here.

A high-level overview of the process of remediation for brownfield sites to accommodate housing development is more generally summarized by the United States Environmental Protection Agency and included as Attachment B - Anatomy of Brownfields Development.

Development Process

Opening up industrial lands for other economic uses would require that any residual contamination at a brownfield site is protective of the proposed future use. The environmental liability and potential remediation costs are frequently borne by developers but could be facilitated through public-private partnership with the City, and as such allow furthering the City's goal to provide post-industrial lands for non-industrial businesses or residences.

Brownfield redevelopment can follow many different pathways, but the unifying theme is the assessment, risk assessment, and remediation of contaminated properties to a level that supports the proposed redevelopment. This process does not necessarily achieve cleanup levels for the highest use of residential. Developers can and often do independently acquire brownfield properties, work with the cleanup agencies on the remedy, and then develop the property. Generally, a brownfield property is undeveloped or supports a relatively low value use because of the residual contamination. The developer typically acquires the site at a discount, and then pays for the cleanup to support a higher value use.





The typical process for redevelopment of any brownfield, large or small, is as follows.

- 1. A developer identifies a property that is likely to be contaminated, but with cleanup or protections in place could be redeveloped to serve higher value future uses.
- 2. A Phase 1 Environmental Site Assessment (ESA) is completed for the property. A Phase 1 ESA reviews available records relevant to contamination for a property, a
- 3. knowledgeable person inspects the property for recognized or potential contamination issues, and the person also interviews people with the site's history and operations. Often brownfield properties have had Phase 1 ESA's completed in the past as part of opportunities that were not successful. While these can be informative, most lenders and insurers require an independent Phase 1 ESA rather than relying fully on an earlier one commissioned by the landowner.
- 4. If there are recognized or potential environmental contamination issues identified in the Phase 1 ESA, then a site investigation to collect soil, soil vapor, and groundwater samples may be conducted to confirm the nature and extent of site contamination. This assessment is known as a Phase 2 ESA.
- 5. If the Phase 2 ESA identifies contamination above the standards that are required to support the developer's planned land uses, then oftentimes a Human Health Risk Assessment (HHRA) is conducted. The purpose of the HHRA is to answer the question: "although the site has contamination above regulatory thresholds, are there site-specific considerations, either with the potential for exposure of future tenants or residents, or with mitigation measures that could be applied, that would still render the proposed land use to be safe?"
- 6. If the Phase 2 ESA and HHRA indicate that cleanup is required to support the future land use, then a Remedial Action Plan is developed to specify the nature and extent of cleanup required, and a Soil Management Plan is developed to specify actions to be taken during construction if there is unanticipated areas of contamination are encountered.

The California Department of Toxic Substances Control is the lead oversight agency for brownfield redevelopment. Also, DTSC's or the developer's discretion, DTSC can serve as the lead cleanup agency for a less complex property, although DTSC often delegates authority to a local agency under the Certified Uniform Program Agency (CUPA) process. DTSC or the CUPA agency works with property developers and local government, to apply their own risk

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assessment and remediation experience to craft the solution. DTSC also has grant and loan programs, and mechanisms to provide limitations of liability to developers.

The process with DTSC is a more specific example of the general process itemized at the start of this section, and consists of the following steps:

- Apply to DTSC: Submit required application and agree to reimburse agency costs during the process.
- Coordinate: As per the 2005 Memorandum of Agreement between DTSC, the State Water Resources Control Board and the Regional Water Quality Control Boards the agencies will work together to determine the lead regulatory agency.
- Negotiate: When DTSC is the Lead Agency, an agreement is developed, which includes site-specific details, a scope of work, and an estimate of DTSC's charges. An opportunity to review the draft agreement is provided.
- Sign: Once the agreement is signed, your environmental consultant will work with DTSC's team of professionals to ensure the future development is safe.
- Pay: An advance payment is required when the Agreement is executed.
- Meet: The DTSC Project Manager reviews property information, and holds a scoping meeting to discuss schedule, tasks, regulatory requirements, and goals.
- Technical Work: DTSC technical experts review documents provided by your consultant, provide oversight of field work, perform public engagement activities, and coordinate other tasks as needed. Activities will vary from property to property.
- Invoice: DTSC's accounting office sends invoices of DTSC's charges quarterly.

DTSC also oversees the California Land Reuse and Revitalization Act (CLRRA) liability reduction program. CLRRA was enacted to promote cleanup and redevelopment of otherwise blighted contaminated properties through the provision of immunity from third party liability for the property developer. The law establishes a process for eligible property owners to obtain immunities, conduct a site assessment, and implement a response action as necessary, to ensure that the property can be reused or redeveloped. Immunities begin when a party enters into a CLRRA agreement.

The process also expedites the DTSC review process. CLRRA was first effective January 1, 2005. The sunset date for the original CLRRA bill has been extended multiple times. The current sunset date is January 1, 2027.

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Areas for Potential Residential Development

The process for redevelopment of brownfield sties to residential land use is the same as described in the section above. However, the cleanup standards to support residential land use are the highest compared to any non-residential land use (most amount of cleanup required). For the properties considered in this section and in the earlier Catalyst report provided in Appendix 1, the data indicated the type of environmental database that indicated potential contamination. To advance the analysis, Phase 1 ESAs, as described above, would be required.

In very general terms, sites that are contaminated by metals or non-solvent and petroleum contamination tend to require less cleanup for residential use, because these compounds are less mobile in the environment and can be readily excavated and property disposed of as part of the redevelopment. Sites contaminated with solvents (including older dry cleaners) or petroleum contaminants require more cleanup because these compounds more readily contaminate groundwater, or have associated vapors that can migrate into structures. If the site contamination includes soil vapors, then a specific foundation design or vapor barrier system is sometimes required.

Figure 3 of this report identifies the known brownfield sites in Carson. Figures 7 and 8 of the Catalyst Technical Memorandum (inserted below) show potential brownfield sites that could be converted to residential land uses. The maps indicate several different data sources for the brownfield identification. Post-closure sites have received regulatory approval for redevelopment, the approval though is typically not for residential development and further cleanup is likely to be required. These sites are still the highest likelihood for redevelopment identified in the analysis, however, because there has been a sufficient level of site investigation and risk assessment to support the closure decision. For the other designations identified on the map, there is insufficient information at this time to support a determination that residential land use would be acceptable to DTSC.

In the development of the Catalyst Technical Memorandum, preliminarily five properties were identified as brownfields that could add to the housing stock, shown in Figure 8All of these sites would require further site investigation to determine whether they would currently support residential land use, or whether site cleanup would be required by DTSC.

The full Carson Brownfield Redevelopment Roadmap Memo is included in Appendix B.



Figure 3

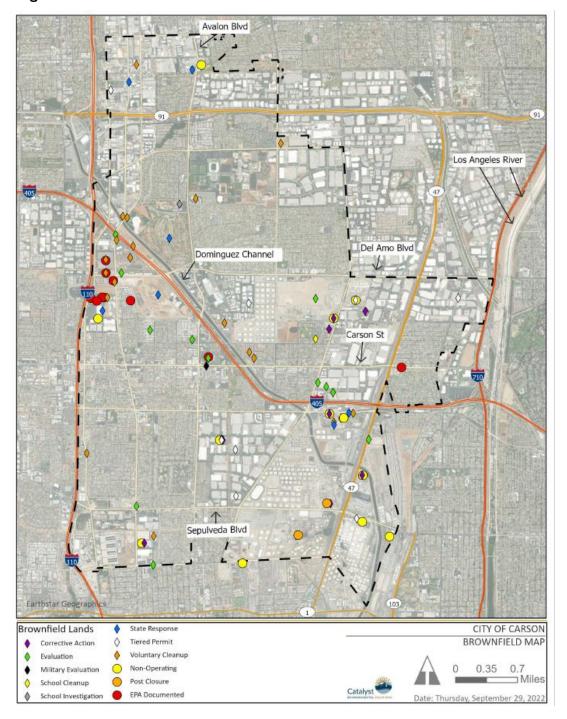




Figure 7

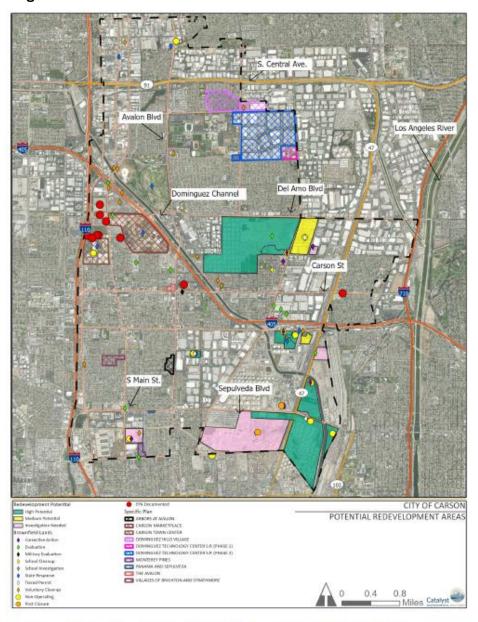


Figure 7: Redevelopment opportunities. Brownfield land, city zoning, and areas designated for specific plans were used to highlight redevelopment potential. Pink areas labelled "investigation needed" need further review due to pending permits, property selling, or lack of information regarding their brownfield status.



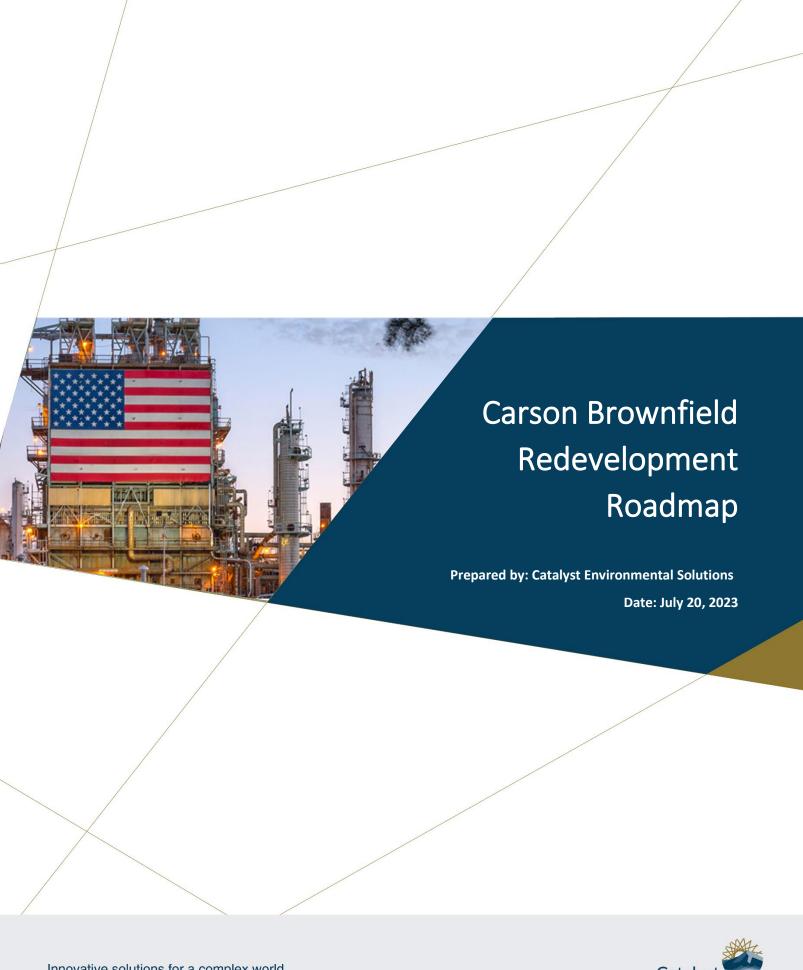
Figure 8



Figure 8: Redevelopment areas within Carson, CA: (A) a building undergoing closure, (B) an area in the center of town with redevelopment potential, (C) a cluster of land with redevelopment potential, (D) a large area of redevelopment potential in the southeast of Carson, and (E) an area adjacent to residential zoning undergoing monitoring. Like Fig.7, brownfield land, city zoning, and areas designated for specific plans were used to identify redevelopment potential.



<u>Appendix A:</u> Carson Brownfield Redevelopment Roadmap, Catalyst Environmental Solutions <u>Appendix B:</u> Anatomy of Brownfields Redevelopment





Introduction and Summary of Previous Catalyst Work

1.1 Introduction

The City of Carson is at an inflection point. With robust industrial and logistics economies, the City is looking towards the future, through enhancing the local community through strategic economic development. There is a need to balance established economic sectors with a variety of emerging businesses and community initiatives: all to provide goods and services to Carson residents and attract new residents to the City. Geographically positioned as an inland port that is located close to the Port of Los Angeles and Long Beach, the City of Carson is a densely developed, land locked city and proximate to, major interstate highways, rail lines, and airports. While these factors frame Carson as an ideal hub for logistics, warehousing, and industry, the human side of things, people who live and work in Carson, can become underserved within this industrial ecosystem. In many ways Carson's past sets the stage for its future, with the development goals of the Economic Development Strategy to set the City on a path towards an activated community, while maintaining a strong economic base in the industries that have led Carson to present day.

Brownfields offer a distinctive opportunity to the City in this course correction. By turning contaminated or underused properties into community assets, the City can achieve a multitude of goals. A brownfield site is one where the expansion, redevelopment, or reuse of the site may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant 1. Cleaning up and reinvesting in these properties protects the environment, improves visual character, and takes development pressures off greenspaces and working lands. The US Environmental Protection Agency estimates that there are more than 450,000 brownfields in the U.S. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth and utilizes existing infrastructure. These efforts also take development pressures off undeveloped and open land, effectively both improving and protecting the environment.

One objective of Carson's Economic Development Strategic Plan is the evaluation of former landfill and industrial lands for potential reuse, including a zoning designation as a brownfield property. Opening up industrial lands for other economic uses would require that any residual contamination at a brownfield site is protective of the proposed future use. The environmental liability and potential remediation costs are frequently borne by developers but could be facilitated through public-private partnership with the City, and as such allow furthering the City's goal to provide post-industrial lands for non-industrial businesses or residences.

¹ The definition is found in Public Law 107-118 (H.R. 2869), the "Small Business Liability Relief and Brownfields Revitalization Act", signed into law January 11, 2002.



1.2 Summary of Previous Catalyst Work

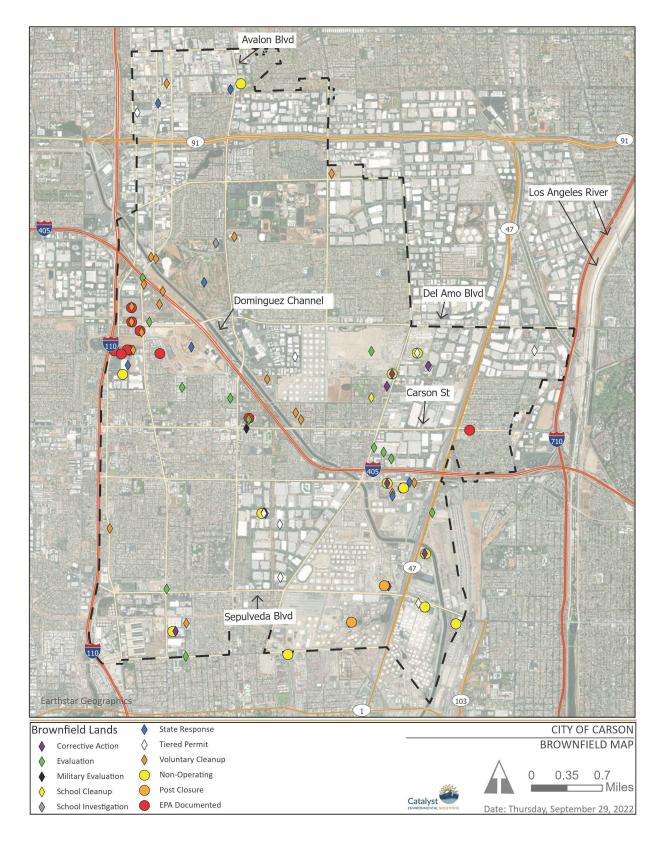
As part of Catalyst's work on this Economic Development Strategy2, we used a geographic information system (GIS) quantitative database to map properties within Carson that could be considered for brownfield redevelopment (Figure 1). As part of this work, all major infrastructure (i.e., city zoning, transportation, green infrastructure, public infrastructure, the energy grid, brownfield sites, etc.) was mapped, over-laid in the GIS system, and synthesized into a map set. The summary map of brownfield opportunities is provided here as Figure 1. The prior work also presented a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to clarify the City's existing public, economic, and green infrastructure assets, resources, and opportunities. This exercise allowed for the identification of redevelopment trends in the City (i.e., areas of dense manufacturing, public infrastructure concentration, brownfield sites, etc.), and highlighted areas for potential redevelopment.

This work revealed that a third of brownfields in Carson are categorized as voluntary cleanup sites, and more than half of these fall into the categories of evaluation, corrective action, state response, and tiered permit. Voluntary cleanup sites are initiated by a landowner, not by a regulatory requirement. The status indicates that the work to clean them up is ongoing. Twelve are listed at non-operating sites and two are at post closure sites.

Brownfield locations in Carson are concentrated along the Dominguez Channel and run northwest to southeast, splitting the city roughly in half. The remaining brownfield sites are in northern and southern Carson. There is a high concentration of brownfields around the Interstate 405/110 intersection near Del Amo Blvd. This area is zoned for light and heavy manufacturing, regional center commercial, and a variety of residential housing. This trend holds true moving southeast along the Dominguez Channel. Between Del Amo Blvd. to the north and Sepulveda Blvd. to the south is another heavy concentration of brownfields. Brownfields in this part of Carson are not active: they are at post closure and non-operating sites in areas zoned for heavy and light manufacturing. Post closure means that the sites have received regulatory approval for no further cleanup required, but the level of remaining contamination supports heavy and light manufacturing.

² City of Carson Economic Development Strategic Plan: Green and Economic Infrastructure Assessment. Catalyst Environmental Solutions Technical Memorandum and Map Set, November 11, 2021. Provided as Appendix 1 to this report.







SECTION 2 Brownfield Development Process and **Carson Opportunities**

2.1 Development Process

Brownfield redevelopment can follow many different pathways, but the unifying theme is the assessment, risk assessment, and remediation of contaminated properties to a level that supports the proposed redevelopment. This process does not necessarily achieve cleanup levels for the highest use of residential. Developers can and often do independently acquire brownfield properties, work with the cleanup agencies on the remedy, and then develop the property. Generally, a brownfield property is undeveloped or supports a relatively low value use because of the residual contamination. The developer typically acquires the site at a discount, and then pays for the cleanup to support a higher value use.

The typical process for redevelopment of any brownfield, large or small, is as follows.

- A developer identifies a property that is likely to be contaminated, but with cleanup or protections in place could be redeveloped to serve higher value future uses.
- 2. A Phase 1 Environmental Site Assessment (ESA) is completed for the property. A Phase 1 ESA reviews available records relevant to contamination for a property, a knowledgeable person inspects the property for recognized or potential contamination issues, and the person also interviews people with the site's history and operations. Often brownfield properties have had Phase 1 ESAs completed in the past as part of opportunities that were not successful. While these can be informative, most lenders and insurers require an independent Phase 1 ESA rather than relying fully on an earlier one commissioned by the landowner.
- 3. If there are recognized or potential environmental contamination issues identified in the Phase 1 ESA, then a site investigation to collect soil, soil vapor, and groundwater samples may be conducted to confirm the nature and extent of site contamination. This assessment is known as a Phase 2 ESA.
- 4. If the Phase 2 ESA identifies contamination above the standards that are required to support the developer's planned land uses, then oftentimes a Human Health Risk Assessment (HHRA) is conducted. The purpose of the HHRA is to answer the question: "although the site has contamination above regulatory thresholds, are there site-specific considerations, either with the potential for exposure of future tenants or residents, or with mitigation measures that could be applied, that would still render the proposed land use to be safe?"
- 5. If the Phase 2 ESA and HHRA indicate that cleanup is required to support the future land use, then a Remedial Action Plan is developed to specify the nature and extent of cleanup required, and a Soil Management Plan is developed to specify actions to be taken during construction if there are unanticipated areas of contamination are encountered.



The California Department of Toxic Substances Control is the lead oversight agency for brownfield redevelopment. Also, DTSC's or the developer's discretion, DTSC can serve as the lead cleanup agency for a less complex property, although DTSC often delegates authority to a local agency under the Certified Uniform Program Agency (CUPA) process. DTSC or the CUPA agency works with property developers and local government, to apply their own risk assessment and remediation experience to craft the solution. DTSC also has grant and loan programs, and mechanisms to provide limitations of liability to developers.

The process with DTSC is a more specific example of the general process itemized at the start of this section, and consists of the following steps:

- Apply to DTSC: Submit required application and agree to reimburse agency costs during the
- Coordinate: As per the 2005 Memorandum of Agreement between DTSC, the State Water Resources Control Board and the Regional Water Quality Control Boards the agencies will work together to determine the lead regulatory agency.
- Negotiate: When DTSC is the Lead Agency, an agreement is developed, which includes sitespecific details, a scope of work, and an estimate of DTSC's charges. An opportunity to review the draft agreement is provided.
- Sign: Once the agreement is signed, your environmental consultant will work with DTSC's team of professionals to ensure the future development is safe.
- Pay: An advance payment is required when the Agreement is executed.
- Meet: The DTSC Project Manager reviews property information, and holds a scoping meeting to discuss schedule, tasks, regulatory requirements, and goals.
- Technical Work: DTSC technical experts review documents provided by your consultant, provide oversight of field work, perform public engagement activities, and coordinate other tasks as needed. Activities will vary from property to property.
- Invoice: DTSC's accounting office sends invoices of DTSC's charges quarterly.

DTSC also oversees the California Land Reuse and Revitalization Act (CLRRA) liability reduction program. CLRRA was enacted to promote cleanup and redevelopment of otherwise-blighted, contaminated properties through the provision of immunity from third party liability for the property developer. The law establishes a process for eligible property owners to obtain immunities, conduct a site assessment, and implement a response action as necessary, to ensure that the property can be reused or redeveloped. Immunities begin when a party enters into a CLRRA agreement.

The process also expedites the DTSC review process but does not lessen the degree of environmental protection from site contaminants that DTSC typically requires. CLRRA was first effective January 1, 2005. The sunset date for the original CLRRA bill has been extended multiple times. The current sunset date is January 1, 2027.

The remainder of this Sections presents the status and opportunities of the largest known brownfield redevelopment opportunities in the City. These provide partially worked examples of the brownfield redevelopment process. For the largest known sites in the City, there is information available to describe next steps in the development process. For the consideration of brownfield sites with potential for residential development, there was less information available. In order to progress the analysis of areas



for potential residential process, the general process itemized at the start of this section would be followed, beginning with a Phase 1 ESA.

2.2 Known Carson Opportunities

Carson has experienced the assessment, cleanup, developer interest, and litigation that can sometimes accompany the several large, prominent brownfield properties within the City. In addition, there are a host of relatively new brownfield development types that are growing rapidly in southern California. Although brownfield redevelopment can include several different lead cleanup agencies, the California Department of Toxic Substances Control (DTSC) oversees the brownfield redevelopment program in the state, provides grants for brownfield redevelopment, and oversees risk assessment and site cleanups. DTSC may also delegate authority to a local CUPA agency. DTSC also offers certain limits to liability for developers of brownfield sites. The financial programs are described in Section 3 of this memorandum.

DTSC and the City of Carson have previously worked together in Carson on the redevelopment of the of a contaminated landfill that had hosted the Dominguez Golf Course, into the Porsche Experience Center. This section describes remaining, known, prominent brownfield redevelopment opportunities.

In addition to considering the four largest brownfield properties in the City, this section also provides consideration of two other types of brownfield redevelopment: the first for residential developments, and the second for a fast-growing reuse for brownfields in urban areas: electric vehicle charging.

2.3 157-acre Former Cal Compact Landfill

This site received extensive interest during the race for a new NFL stadium between the Rams and the Chargers. The Carson stadium was to be a \$1.7 billion development, but the teams selected SoFi Stadium in Inglewood. Carson acquired the property, with an intention that five of the parcels on the landfill at Del Amo Boulevard and the 405 Freeway could be redeveloped.

The Department of Toxic Substances Control (DTSC) has overseen cleanup of the former Cal Compact Landfill since 1988 at a cost of \$41 million. From 1959 to 1965, the site was used as a landfill that collected both liquid and solid waste until it was covered and closed. It has remained vacant since 1965. When DTSC became the lead cleanup agency, site assessment indicated that the landfill contained carcinogenic chemicals such as benzene, chlorinated solvents, and other contaminants. There has been extensive cleanup, although it is not complete. A groundwater extraction and treatment system was operated, and a landfill gas removal and treatment system has been installed. Other parts of the site have been covered with a landfill cap. The additional work required includes at a minimum an expansion of the landfill gas extraction and treatment system.

Further cleanup work would be required for any of the redevelopment ideas advanced so far (e.g. parking lot, stadium, industrial, commercial, recreational, or residential uses). For example, had the stadium been developed, the parking areas would have been placed over formerly capped areas of the landfill, while additional remediation would have been required for the stadium structure. If a reuse that includes commercial or residential development were proposed, then higher levels of cleanup would be required for the more sensitive land uses. In some cases, placing residential development on upper floors with commercial development on the first floor, can reduce the amount of cleanup required to that supportive of commercial, rather than residential, land uses.



The current status of this property is that in May 2023 the City approved a specific plan amendment for this site. And the project is called District at South Bay 2021. The developer, Carson Goose Owner LLC, is proposing 1,567,090 sf of light industrial and 33,800 SQFT of restaurant/retail space on Planning Area 3 (cells 3, 4 and 5.) The site also includes a 22,740-sf dog park, a 3,343-sf performance pavilion, 25,400 sf children's plan area, 19,400 sf botanic garden, a 19,490 sf bioretention garden, a 1,800 sf beer garden, a 2,975-sf sculpture garden, a 4,425 sf water feature and iconic element, a 35,210 sf flex event lawn area, 50,774 sf of planted open spaces, and 52,159 sf of planted buffer areas for a total of 273,906 sf (6.29 acres) of programmed spaces, and open space / amenity areas. There is also a 0.62-acre linear park to the west of the light industrial uses. The total site area is 96 gross acres (85.55 net acres.) Staff has initiated the CEQA process for the project along with the specific plan amendment. The Draft Environmental Impact Report and associated 45-day public review period have concluded and response to comments are being prepared.

This example illustrates the tradeoffs typical of brownfield redevelopment: residual contamination is acceptable, under the condition that it be cleaned to a level that supports the proposed use. The more sensitive the land use, the more cost to clean the property.

2.4 Former BKK Landfill/Victory Golf Course (150 acres)

DTSC approved the 2016 Remedial Action Plan for the northern portion of the BKK landfill, which includes the public Victory Golf Course. The levels of cleanup required for this brownfield use was based on recreational land uses.

In 2021, a proposal to redevelop 94-acres of the southern portion of the golf course into a commercial and recreational facility with multiple venues was considered by DTSC. DTSC's analysis determined that the proposed site redevelopment included "Significant Changes" to the plan developed for the golf course. After further review, DTSC determined concluded that the Site's land-use remains recreational as previously established, and the proposed remedies in the remediation designed proposed for the new commercial and recreational facility complied with the California Code of Regulations Title 27 for Solid Waste.

If a residential development were proposed for this site, then this would constitute a "significant change" to DTSC's analysis of the risks of residual contamination. The developer would engage with DTSC to evaluate the proposed development, and the differences between residents and users of recreational facilities. It is likely that more cleanup would then be required to support residential development.

2.5 400-acre Shell Terminal

Carson has a 100-year petroleum history, including former oil fields, 12 refineries (including the large Marathon Refinery, the oldest on the west coast), tank farms, and pipeline facilities. The 400-acre Shell terminal has been discussed as a possible redevelopment opportunity, although our analysis did not confirm its availability. The Shell Terminal was originally built in 1924 as a refinery. In 1992, the refinery was decommissioned and dismantled, and currently operates as a distribution facility for receiving and distributing fuels throughout the Southern California region via pipeline and truck delivery. The Carson complex is connected to satellite terminals which include Mormon Island Marine Terminal at the Los



Angeles Port, Van Nuys Terminal and Signal Hill Terminal. Additionally, the Carson Terminal serves as the largest ethanol hub on the West Coast.

This potential opportunity highlights a challenge to brownfield redevelopment: community mistrust of the former owner.

A Shell oil and gas development area had been redeveloped for residential land use, known as the Carousel Tract. During installation of a new cable line in 2008, significant amounts of residual oil contamination was discovered. The Los Angeles Regional Water Quality Control Board is the lead agency overseeing Shell in the environmental investigation and cleanup of the Carousel Tract. The Water Board has initiated the environmental investigation as a result of potentially significant and harmful contamination in the soils and groundwater underlying the Carousel Tract. Residents in the 285-home community sued Shell, and the City of Carson joined the suit, alleging health hazards from widespread contamination in their Carousel tract neighborhood, and that Shell created a public nuisance by leaving contaminants at the site. This action was very prominent both in the community and at the Los Angeles Regional Water Quality Control Board and could complicate redevelopment of the Shell Terminal if residential land uses are contemplated.

Areas for Potential Residential Development 2.6

The process for redevelopment of brownfield sites to residential land use is the same as described in Section 2.1 and illustrated with the four major brownfield sites in the City. However, the cleanup standards to support residential land use are the highest compared to any non-residential land use (most amount of cleanup required). For the properties considered in this section and in the earlier Catalyst report provided in Appendix 1, the data indicated the type of environmental database that indicated potential contamination. To advance the analysis, Phase 1 ESAs, as described in Section 2.1, would be required.

In very general terms, sites that are contaminated by metals or non-solvent and petroleum contamination tend to require less cleanup for residential use, because these compounds are less mobile in the environment and can be readily excavated and property disposed of as part of the redevelopment. Sites contaminated with solvents (including older dry cleaners) or petroleum contaminants require more cleanup because these compounds more readily contaminate groundwater, or have associated vapors that can migrate into structures. If the site contamination includes soil vapors, then a specific foundation design or vapor barrier system is sometimes required.

Figure 1 of this report identifies the known brownfield sites in Carson. Figures 7 and 8 of the Catalyst Technical Memorandum provided as Appendix A to this report³ provides maps of potential brownfield sites that could be converted to residential land uses. The maps indicate several different data sources for the brownfield identification. Post-closure sites have received regulatory approval for redevelopment, but as illustrated for the Victory Golf Course (Section 2.4), the approval is typically not for residential development and further cleanup is likely to be required. These sites are still the highest likelihood for redevelopment identified in the analysis, however, because there has been a sufficient

³ City of Carson Economic Development Strategic Plan: Green and Economic Infrastructure Assessment. Catalyst Environmental Solutions Technical Memorandum and Map Set, November 11, 2021. Provided as Appendix 1 to this report.



level of site investigation and risk assessment to support the closure decision. For the other designations identified on the map, there is insufficient information at this time to support a determination that residential land use would be acceptable to DTSC/CUPA.

In the development of the Economic Development Strategy, five properties were identified as brownfields that could add to the housing stock. All of these sites would require further site investigation to determine whether they would currently support residential land use, or whether site cleanup would be required by DTSC/CUPA.

New Use for Brownfield Properties: EV Charging 2.7

This section has focused on the most prominent brownfield properties in the City, both to focus on the opportunities, and to provide examples of the issues that surround such redevelopment. With the state's goals to electrify as much of the transportation sector as feasible, there has been a growing wave of electric vehicle charging stations. These are a good use of 0.5 to 1 acre brownfield sites because the land use can tolerate residual levels of contamination, and such sites are frequently within infill development areas for which potential users do not have access to at-home charging. These come in several types:

Fleet charging, such as the types of fast charging installations that may be considered by the City for its vehicle fleet as it electrifies. Fleet charging tends to be on the owned property of the fleet owner but can include acquisition and redevelopment of new parcels. Brownfields are ideal for this application because they are good targets for infill development where land prices are high, and they can tolerate higher levels of residual contamination than a commercial or residential redevelopment.

Public charging. To electrify the private auto sector, widespread public charging stations will be required. While homeowners with garages may be able to charge their vehicles overnight, residents in apartments and condominiums typically cannot. They rely on either public charging stations in garages or parking spots, or on commercially developed public charging stations. Tesla and EVgo are actively acquiring brownfield properties for this type of infill development, and many of the brownfields identified in Figure 1 would be suitable for this use because they are proximate to areas that may not have home charging available.

Drayage charging. Drayage is truck transport from ports (such as the Ports of Long Beach and Los Angeles) to rail connections. This vital link is being actively pursued for electrification, and drayage charging is a fast-growing sector of the electric vehicle charging market. Carson is ideally located to support drayage transport, and the associated electric truck charging installations required for this use. The size of a drayage charging facility varies based on several factors, including the number of stations and access requirements for the trucks. Typically, a drayage charging facility ranges from a few to 10 acres.



SECTION 3 Brownfield Redevelopment Funding Opportunities

State and federal grant and loan funding opportunities were investigated. The California Department of Toxic Substances Control (DTSC), and the U.S. Environmental Protection Agency (EPA) both have loan and grant opportunities, in addition to other grants available to the public for environmental cleanup. Data sources and supporting information for this section are provided in Appendix 2.

3.1 Department of Toxic Substances Control

3.1.1 Overview

The Department of Toxic Substances Control (DTSC) provides many funding opportunities to assist with environmental investigations and cleanup of properties throughout California. They lead the brownfields program in California.

3.1.2 Grants

Site Mitigation & Restoration Program (SMRP)

The SMRP is responsible for overseeing the evaluation and cleanup of contaminated properties throughout the state of California, including brownfields and voluntary agreements, State Superfund, military facilities, school construction and expansion projects, and corrective action and tiered permitted facilities. The City of Carson is in DTSC Region 4, with the regional office in Cypress, California.

Overseen by the SMRP is the Cleanup in Vulnerable Communities Initiative (CVCI). The CVCI was signed into legislation by Governor Gavin Newsom and sets aside \$500 million dollars for a multi-year investment in communities that suffer from multiple sources of contamination. The DTSC will provide \$250 million dollars to incentivize cleanup and investment in disadvantaged communities under the CVCI. Cleanup in Vulnerable Communities Initiative programs include the Equitable Community Revitalization Grant (ECRG), Discovery and Enforcement, Workforce Development, Technical Assistance Grants, Community Benefits Agreements, and Orphan Sites funding. Table 1 provides a list of available grants through DTSC, their amount, purpose, link to available information, and application timelines.

Currently, the DTSC is hosting the ECRGenius Webinar Series to prepare ECRG applicants for the Round 2 ECRG application opening. The ECRD Round 2 application opens Monday August 14, 2023, and will close October 9, 2023. The City of Carson was a recipient of an ECRD Grant in 2022 for an Environmental Investigation at the 20151 Main Street (Sywest Development) site. The Sywest Development site will be reused for commercial, retail, or industrial purposes. The City of Carson was awarded \$315,000 for this effort.



Table 1. DTSC Grant Opportunities

Grant	Amount	Purpose	Relevant Link	Application Timeline
Equitable Community Revitalization Grant (ECRG)	\$85 Million (M)	*For cleanup and beneficial reuse of contaminated properties, with priority given to properties in historically vulnerable and disadvantaged communities	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14, 2023 – October 9, 2023 \$85 million Available
**Community- wide Assessment Grant	\$350k	First step assessments (e.g., Phase I Environmental Site Assessments (ESA); Phase II ESA; Preliminary Endangerment Assessments (PEA))	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14,2023 – October 9,2023 \$85 million Available
**Site-specific Investigation Grant	\$150k to \$7M	And/or cleanup planning at a site for reuse. All Appropriate Inquiries (AAI) or Phase I ESA, Phase II ESA, PEA	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14,2023 – October 9,2023 \$85 million Available
**Site-specific Cleanup Grant	\$150k to \$7M	Planning, implementation and reporting costs for cleanup, pilot tests and sampling/analysis to design the cleanup, public engagement and cleanup-related California Environmental Quality Act (CEQA) activities	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14,2023 – October 9,2023 \$85 million Available
*Discovery and Enforcement	More than \$152M	Fund investigation into a prevalent and ubiquitous potential source of contamination: from up to 7,500 current or former dry cleaners	https://dtsc. ca.gov/petiti on/	Public Petition Process
*Workforce Development	More than \$4M	Provide education, training, and certification to community members for employment in cleanups	N/A	N/A
*Technical Assistance Grants	\$3.5M	Funds will be used for technical advisors and community science, with the goal of effectively communicating technical information to communities and encouraging involvement though community science	https://dtsc. ca.gov/tag/ Mailing list link: https://lp.co nstantconta	Contact for more information



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Community Benefits Agreements	\$800k	Agreements between Responsible Parties of cleanup sites and impacted communities affected by high cumulative environmental burdens to promote benefits beyond the traditional scope of site mitigation and restoration	https://dtsc. ca.gov/clean up-in- vulnerable- communitie s-initiative- cvci/cba/	Contact for more information
Revolving Loan Fund Grant Program	Cleanup grants up to \$350k; Assessment grants up to \$200k	Grants to local governments, tribal entities, and nonprofits that are not potentially liable under CERCLA section 107 to assess or clean up two types of brownfield sites – hazardous substances or mixed contaminant sites and petroleum sites.	https://dtsc. ca.gov/revol ving-loan- fund-rlf- program/	DTSC reviews applications and issues grant awards on an ongoing basis, subject to funding availability

^{*} Cleanup in Vulnerable Communities Initiative (CVCI), Gavin Newsom Legislation; \$250-million dollars available for disadvantaged communities; ** Under the ECRG; N/A; Information not available or not accessible at the time of this memorandum

3.1.3 <u>Loans</u>

In addition to various grants provided by the DTSC, DTSC offers two low-interest loans. Under SMRP, DTSC offers the Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program and the Investigating Site Contamination Program (ISCP). Loans through CLEAN and ISCP can be used for the cleanup of hazardous materials at abandoned or underutilized urban sites, and initial site investigations, respectively. Loans are granted after a two-phase application process. Once in phase two the applicant must submit a \$1,500 loan non-refundable application fee. Details on the application process can be found using the links provided in Table 2, DTSC Loan Opportunities.

Table 2. DTSC Loan Opportunities

Loan	Amount	Purpose	Relevant Link	Application Timeline
Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program	Up to \$250M	Low-interest loans for hazardous materials cleanup where redevelopment of abandoned and underutilized urban properties is likely to have a beneficial impact on the property values, economic viability, and quality of life of a community.	https://dtsc.ca.go v/clean-and-iscp- programs/	Two phase application process, apply as needed



Investigating Site Contamination Program (ISCP)	Up to \$100k	To conduct preliminary endangerment assessments of underutilized urban properties. If redevelopment of property is determined not economically feasible, up to 75 percent of the loan amount may be waived.	https://dtsc.ca.go v/clean-and-iscp- programs/	Two phase application process, apply as needed
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3.2 U.S. Environmental Protection Agency

3.2.1 Overview

The U.S. Environmental Protection Agency (EPA) oversees the brownfield program nationally and offers a variety of grant and loan programs and technical assistance to help communities assess and clean up brownfields and prepare them for redevelopment.

3.2.2 Grants and Loans

Grants and loans offered by the EPA Brownfields Program may be used to address sites contaminated by hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum) and petroleum. The Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, environmental job training, technical assistance, training, and research. The EPA works with state agencies to identify funding that can be used for brownfield activities. Grants and loans available through the Brownfields Program include the following: Assessment Grants, Revolving Loan Fund (RLF) Grants, Cleanup Grants, Multipurpose (MP) Grants, Job Training (JT) Grants, and State and Tribal Response Program Grants. Table 3 provides information on grant and loan amounts, purpose, relevant links, and application timelines. Many of the funding sources under the EPA Brownfield Program have closed solicitations for fiscal year (FY) 2023 but have an anticipated open period for FY24 in September 2023.

Table 3. EPA Grant and Loan Opportunities

Grant	Amount	Purpose	Relevant Link	Application Timeline
*Community- wide Assessment Grants	Up to \$500k	for communities that are beginning to address their brownfield challenges, as well as for communities that have ongoing efforts to bring sites into productive reuse	https://ww w.epa.gov/b rownfields/b rownfields- assessment- grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
*Assessment Coalition Grants	Up to \$1M	**Designed for one "lead" eligible entity to partner with two to four eligible entities that do not have the	https://ww w.epa.gov/b rownfields/b	Closed for Fiscal Year (FY) 2023



		capacity to apply for and manage their own EPA cooperative agreement and otherwise would not have access to Brownfields Grant resources.	rownfields- assessment- grants	Upcoming Solicitations for FY24 (anticipated September 2023)
* Community- wide Assessment Grants for States and Tribes (CWAGST)	Up to \$2M	Only available to states, tribes, and eligible native corporations in Alaska to address brownfield sites throughout their entire jurisdiction.	https://ww w.epa.gov/b rownfields/b rownfields- assessment- grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
Revolving Loan Fund (RLF) Grants	Up to \$1M	Provide funding for a grant recipient to capitalize a revolving loan fund and to provide loans and subgrants to carry out cleanup activities at brownfield sites	https://www.epa.gov/brownfields/brownfields-revolving-loan-fund-rlf-grants	EPA will not run an RLF Grant competition in FY24
Cleanup Grants	Up to \$500k for one site; Up to \$1M for multiple sites; Up to \$2M for multiple sites	Provide funding for eligible entities to carry out cleanup activities at brownfield sites. An applicant must own the site for which it is requesting funding.	https://ww w.epa.gov/b rownfields/b rownfields- cleanup- grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
Multipurpose (MP) Grants	Up to \$1M	Grant is appropriate for communities that have identified, through community engagement efforts, a discrete area (such as a neighborhood, a number of neighboring towns, a district, a corridor, a shared planning area or a census tract) with one or more brownfield sites who wish to carry out a range of eligible assessment and cleanup activities, including planning and additional community engagement activities.	https://ww w.epa.gov/b rownfields/b rownfields- multipurpos e-grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
Brownfields Job Training (JT) Grants		F nonprofits, local governments, and other organizations to recruit, train, and place unemployed and underemployed residents of areas affected by the presence of brownfield sites.	https://ww w.epa.gov/b rownfields/b rownfields-	FY24 Currently Soliciting Applications Closes August 2, 2023



			job-training- jt-grants	
* Under the Brownfields Assessment Grants; ** Lead and non-lead eligibilities apply				

3.3 Other Funding Sources

Both the DTSC and the EPA host webinars to assist applicants looking for funding outside of available programs. The goal of these webinars is to share information about other state and federal funding sources. Table 4 provides links to websites designed to assist with acquiring funding for brownfield activities.

Table 4. Additional Funding Opportunities

Organization	Focus Area	Purpose	Website
EPA	Brownfields	Provides relevant information regarding brownfields, funding, cleanup efforts	https://www.epa.gov/brow nfields
EPA	EPA Grants	Provides information on EPA grants, technical assistance, webinars series, and the application process.	https://www.epa.gov/grant
EPA	Brownfield Grants	Website for open solicitations for EPA grants, as well as future solicitations	https://www.epa.gov/brow nfields/solicitations- brownfield-grants
Grants.gov	Grant Funding Sources	A search engine for funding opportunities throughout the country. Can search by focus area (i.e., environment).	https://www.grants.gov/web/grants/search-grants.html
DTSC	Brownfields	Informational website regarding brownfields regulated by DTSC. Provides links to funding opportunities and advertises available informational sessions (webinars).	https://dtsc.ca.gov/brownfi elds/



Appendix 1: Previous Catalyst Tech Memo Supporting This Report



Friday, November 11, 2021

City of Carson Economic Development Strategic Plan *Green and Economic Infrastructure Assessment*

Introduction

The City of Carson is a densely developed, urban, land locked city, which is geographically positioned as an inland port that is located closely to the Port of LA, major interstate highways, rail line, and airports. These factors frame Carson as an ideal hub for logistics, warehousing, and industry. Over time, Carson has become densely developed with businesses that specialize in these sectors. While providing a firm economic foundation, the City of Carson is looking to balance these existing economic uses with more community-focused uses that also provide economic diversification and green infrastructure opportunities. To identify these potential opportunities, the City of Carson is preparing an Economic Development Strategic Plan which will consider this review of the City's green and economic infrastructure.

To understand redevelopment opportunities in Carson, all major infrastructure (i.e., city zoning, transportation, green infrastructure, public infrastructure, the energy grid, brownfield sites, etc.) was mapped, over-laid, and synthesized (Attachment 1 – Map Set). A Strengths, Weaknesses, Opportunities, and Threats (SWOT) was performed on these base findings to clarify the City's existing public, economic, and green infrastructure assets, resources, and opportunities. This exercise allows for the identification of redevelopment trends in the City (i.e., areas of dense manufacturing, public infrastructure concentration, brownfield sites, etc.), and highlight areas for potential redevelopment. This memorandum reviews this technical approach and its findings, culminating in a set of recommendations accompanied by a map of proposed redevelopment areas by level of potential.

GIS Analysis

This section provides narratives that discuss the key findings of each map developed for the assessment (Attachment 1).

Green Infrastructure

The green infrastructure map is the coalescence of green and open space, farms, and water resources in and around the city of Carson, CA (**Figure 1**). Green space is a catch all term that includes parks, open space (i.e., zoned as such, undeveloped lands, area around channels, etc.), playgrounds, pervious pavement (e.g., pavement that allows water to seep into the soil below), green medians (e.g., road medians that are vegetated), and bioretention curb extensions (e.g., curbs that are engineered to have vegetation for water retention purposes). Water resources include freshwater ponds, channels, wetlands, and rivers in and around Carson.

Almost all green space is west of Wilmington Avenue except for Dominguez Park, which is east of State Highway 47. Most green space in Carson comes from parks and open spaces.

Water resources in Carson include freshwater emergent wetlands (e.g., at parks, heavy manufacturing facilities, undeveloped areas, etc.), freshwater ponds, creeks, and rivers. The major waterway crossing Carson is the Dominguez Channel flowing northwest to southeast. The Dominguez Channel transitions from a riverine to estuarine marine deep-water environment. Outside of Carson is the Compton Creek and Los Angeles River. Most water resources in Carson are near areas zoned for manufacturing.

Zoning

The zoning use map displays zoning within the city of Carson, CA (**Figure 2**). Heavy and light manufacturing represent 36 and 12 percent of the zoned area in Carson, respectively. Various residential zoning makes up 30 percent of the zoned area.

Manufacturing zones are concentrated in the north and southeast of Carson. Along State Highway 91, west of Avalon Blvd, and north of Del Amo Blvd. This continues south of Del Amo Blvd. and east of Avalon Blvd. Residentially zoned areas are located southwest and northeast of the Dominguez Channel, with one area of residential zoning east of State Highway 47 and north of Interstate 405. The remainder of the city is a patch work of mixed use, special use, commercial, and open space zoning. Open space makes up six percent of the zoning in Carson.

10 areas in Carson have been set aside for specific development projects. These projects are throughout the city and are concentrated in residential areas, except for California State University, Dominguez Hills which has three developmental plans surrounding it. The focus of the projects is a mix of housing and commercial development.

Public Infrastructure

The public infrastructure map displays public assets and the agencies that run them in the city of Carson, CA (**Figure 3**). Highlighted in this map are major assets, or areas of high asset concentration. The five highlighted areas are not all encompassing but attempt to showcase the variety of public assets in Carson. Most public assets sit between Main St. and Avalon Blvd. or are in close proximity to these major roads.

<u>Box A:</u> is in the southwest of Carson near Interstate 110, along W. 223rd St and Main St. This area has a high concentration of LAUSD schools. Between the three school clusters is Fire Station 36. Unsurprising, the area is zoned for mixed residential housing.

<u>Box B</u>: highlights California State University, Dominguez Hills (CSUDH). The university is one of 23 CSUs in California. CSUDH is in the northeast of Carson and in the middle of residential housing and three areas slotted for specific development plans (the Dominguez Hills Village, Dominguez Technology Center S.P. (Phase 1), and Dominguez Technology Center S.P. (Phase 2)). North across the street of CSUDH is Fire Station 116, one of four fire stations in Carson.

<u>Box C</u>: is a cluster of civic buildings. The Carson City Hall, Post Office, and Sheriff's office are in the center of Carson, west of Interstate 405 on the corner of Carson St. and Avalon Blvd. The buildings are governed by LA County and the Carson municipality. Southeast of City Hall is a Los Angeles Unified School District (LAUSD) school. This area is zoned for commercial, green space and residential uses.

<u>Box D</u>: displays a hospital in the south of Carson. There are four buildings in Carson described as hospitals. In the north of Carson there is another hospital located on the corner of S. Broadway and W. Gardena Blvd.

<u>Box E:</u> is in the southwest corner of Carson, bordered by Intestate 110 and Sepulveda Blvd. This is the sanitation district for the region and has a Long Beach City office on site. The surrounding area is zoned for heavy manufacturing.

Brownfields

The brownfields map displays brownfield locations in the city of Carson, CA, sourced from the California Department of Toxic Substances Control EnviroStor online data management system and U.S. Environmental Protection Agency Geospatial Data Download Service (**Figure 4**). About a third of brownfields in Carson are

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categorized as voluntary cleanup and more than half fall into the categories of evaluation, corrective action, state response, and tiered permit. Twelve are listed at non-operating sties and two at post closure sites.

Brownfield locations in Carson are concentrated along the Dominguez Channel and runs northwest to southeast, splitting the city roughly in half. The remaining brownfield sites are in northern and southern Carson.

There is a high concentration of brownfields around the Interstate 405 110 intersection near Del Amo Blvd. This area is zoned for light and heavy manufacturing, regional center commercial, and a variety of residential housing. This trend holds true as you move southeast along the Dominguez Channel.

Between Del Amo Blvd. to the north and Sepulveda Blvd. to the south is another heavy concentration of brownfields. Brownfields in this part of Carson are at post closure and non-operating sites in areas zoned for heavy and light manufacturing.

Energy Infrastructure

The energy infrastructure map displays overhead electrical transmission and natural gas lines in and around the city of Carson, CA, and a substation within the city limits (**Figure 5**). Transmission lines that run through Carson are owned and operated by the Los Angeles Department of Water and Power (LADWP) and Southern California Edison (SCE) (an investor-owned public utility and subsidiary of Edison International).

Most transmission lines in Carson are 115 kilovolts and owned by LADWP. The higher kilovolt lines are owned by SCE and are found in the north and east of Carson along the city's periphery, except for LADWP's 138 kilovolt line south of Carson. The only substation identified is in the north of Carson near the corner of Central Ave. and Greenleaf St. The highest voltage transmission lines are near manufacturing hubs.

Natural gas distribution covers much of Carson but there is a gap in coverage southwest of Interstate 405 and west of Wilmington Ave. This area of Carson is zoned for a variety of purposes but dominated by mixed residential and heavy manufacturing.

Transportation

The transportation infrastructure map displays all major roads within and surrounding the city of Carson, CA (**Figure 6**). In addition, it highlights transportation infrastructure important to industry and the population of Carson.

Carson has three interstates, and two state highways that define its boundaries. State Highway 91 is located in the north of the city running east west and State Highway 47 runs north south and is located in the east of Carson. Both state highways cut through zoned areas dominated by manufacturing. Interstates 110 and 710 make up the west and east borders of Carson, respectively. These interstates go through manufacturing and residential zones. Interstate 405 runs east west diagonally through the heart of Carson, paralleling the Dominguez Channel before intersecting Interstate 710. Interstate 405 runs through residential, manufacturing, and open space areas. Within the city there are numerous boulevards, collector and residential streets.

Outside of Carson's western boundary south of the Interstate 405 110 intersection is an Amtrak Bus station. The Amtrak bus route goes around Carson and follows Interstate 710 on the east of town but lacks a bus station. Despite this, there is a thorough municipal bus network throughout Carson's residential and commercial zones, with some gaps in areas dominated by manufacturing.

The rail network runs through manufacturing zones in the east and south of Carson. The railway parallels State Highway 47 in the east and Sepulveda Blvd. in the south. In the southeast of Carson along the railway is a

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freight intermodal facility. This facility is instrumental for the movement of goods in and around the state of California.

North of Carson is the Compton Woodley Airport. Compton Woodley Airport is owned and operated by the County of Los Angeles. This is a general aviation hub and not a commercial airport. The airport houses private planes, an aviation museum, and aviation-related businesses.

Potential Redevelopment Opportunities

The redevelopment map identifies potential sites in Carson for redevelopment (**Figure 7**). These sites were picked based on manufacturing zones, brownfield sites, and proximity to residential areas. Along with the areas we selected for redevelopment potential are locations already identified by the City of Carson as specific plan areas (e.g., locations the city plans to redevelop for various purposes).

Most sites we identified for redevelopment potential lie east of Avalon Blvd. which cuts Carson in rough halves. We labelled redevelopment potential in three-tiers, high, medium, and investigation needed. There is 784, 85.36, and 306.67 acres of high, medium, and investigation needed potential redevelopment, respectively. These calculations are rough estimates based on our parcelling of the brownfield sites and information gathered from the California Department of Toxic Substances Control EnviroStor online data management system.

High potential areas are those sites near residential areas with brownfield designations, and or, are non-operating or post closure. Areas identified as medium potential for redevelopment are post closure sites, are undergoing permit reviews, or are potentially being sold. The third tier, investigation needed, are sites where property sales are ongoing, or we could not find enough information to put them into the high or medium tiers. All designations were established using information sourced from the California Department of Toxic Substances Control EnviroStor online data management system.

The redevelopment areas map displays a zoomed in look at the areas we identified in the redevelopment map (**Figure 8**). All sites identified have brownfield designations.

<u>Box A:</u> is the northern most identified site for potential redevelopment in Carson near the corner of Gardena and Avalon Blvd. This site was put in the medium tier because it is undergoing closure. It is located west of a residential area and zoned for heavy manufacturing

<u>Box B:</u> highlights sites from all three tiers. These sites are located between Del Amo Blvd. and Wilmington Ave. and are zoned for light manufacturing. These locations border two residentially zoned areas to the north and south, and manufacturing to the east and west.

The high potential site is a large area with proximity to residential neighbourhoods, the medium potential site is a brownfield site that is non-operating and undergoing administrative closure, and the investigation needed site was labelled as such due to a lack of information available.

<u>Box C</u>: is in the east of Carson and again highlights all three tiers. The area is near the corner of S. Alameda St. and E. 223rd St. The area is zoned for heavy manufacturing.

The high potential sites are closed and have undergone some remediation work. The site in the medium tier has a land restriction, and the site in the third tier lacked information to put it into either other category. However, it is a former landfill site.

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<u>Box D</u>: displays a large area in the southeast of Carson with brownfield sites listed as non-operating or post closure. The sites run along the corner of S. Alameda St. and E. Sepulveda Blvd. This areas is zoned for heavy manufacturing.

The high potential sites have been closed for some time and the investigation needed site is going through post-closure but still operating.

<u>Box E</u>: is south of Sepulveda Blvd. along S. Main St. in the southwest corner of Carson. This area is zoned for heavy manufacturing and is adjacent to a residential neighborhood. We labeled this site as investigation needed because it was sold in 2017.

SWOT Analysis

A SWOT analysis was performed on the green and economic infrastructure of Carson (**Attachment 2 – SWOT Analysis**). The spatial analysis we performed helped guide our SWOT results. This exercise was done to help identify strengths in Carson's green and economic infrastructure, barriers to further development of them, and provide information that may assist in their enhancement. The SWOT analyses are not all encompassing and should serve as a tool to provide useful information regarding Carson's potential enhancement opportunities.

The economic infrastructure SWOT analysis was performed using public, transportation, and energy infrastructure synthesized from our spatial analysis. Similarly, the green infrastructure SWOT analysis utilized open and green spaces, zoning, and water features.

Strengths identified in the SWOT analyses include a strong public transportation network, potential for high walkability, easy mobility due to state highways and Interstates, great location near the Port of LA, and residential areas near greenspace.

Weaknesses recognized from the green infrastructure SWOT analysis include a very low percent of green and open space, land zoning that is dominated by manufacturing, and a lack of a trail system in Carson. The economic infrastructure SWOT also identified zoning as a potential weakness, as well as no central gathering place in the city, few opportunities for residents to switch out of the manufacturing industries, and no commercial airport near Carson.

Economic opportunities we identified come from rezoning sections of Carson, redeveloping brownfield sites, using the existing power grid to transition to alternative energy sources, and tapping into funding coming from future Olympic games. Green opportunities also highlight the need for rezoning to move away from industrial manufacturing, using brownfield sites to increase green and open space, tapping into money from the EPA, as well as local brownfield clean-up grants, and adding a bikeway through Carson.

Some threats we identified include loss of greenspace expansion to commercial or residential development, threats from climate change on the energy grid and urban heat island effect, and push back from long-term city partners. We also recognize the impact to locals who may face gentrification and loss of income due to a changing Carson.

Attachment A Green and Economic Infrastructure Map Set





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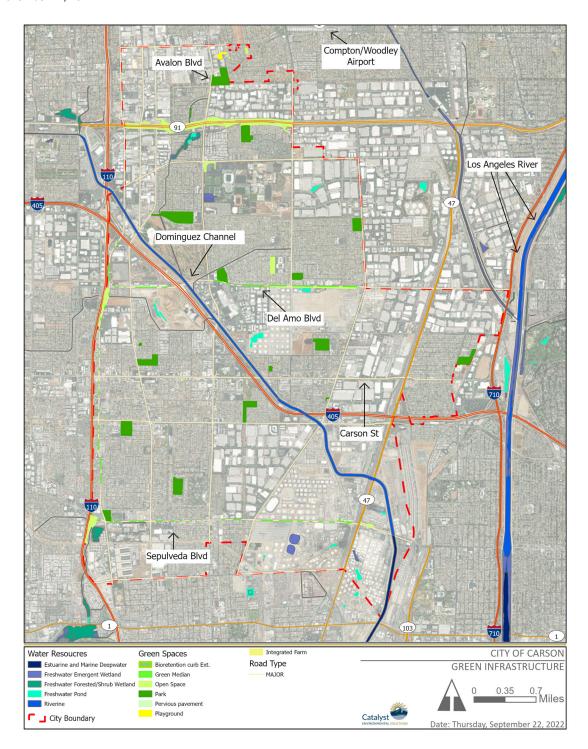


Figure 1: Green infrastructure within Carson, CA. This map showcases parks, open spaces, green-medians, and water features in and around Carson, CA. Eastern and south-eastern Carson have limited green space.

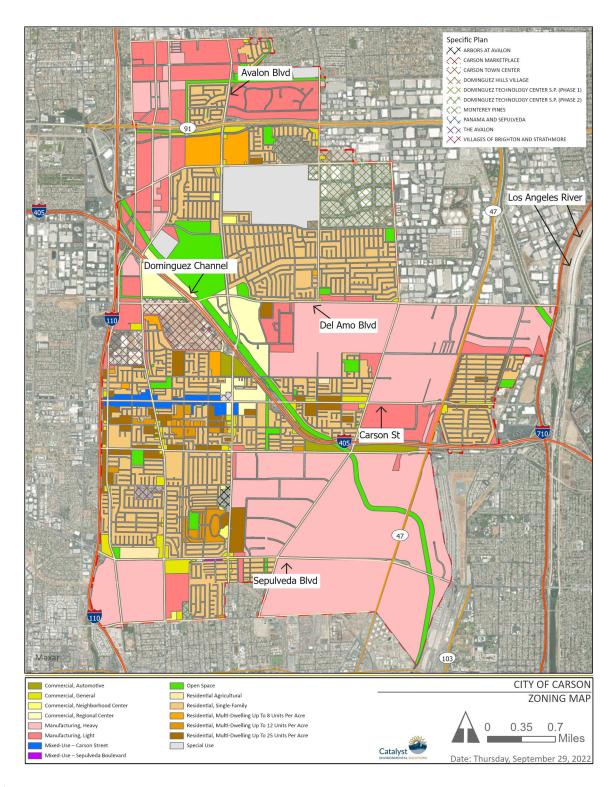


Figure 2: Carson, CA zoning. Zoning in Carson is dominated by residential (single family and mixed family units) and manufacturing (both light and heavy). There are 10 areas in Carson zoned as "Specific Plan," these areas have been set aside for housing development, commerce, and city improvements.

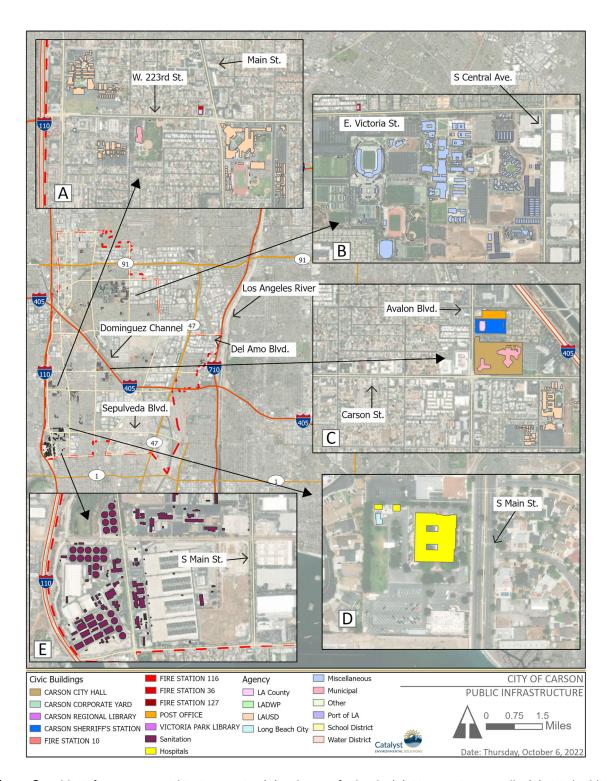


Figure 3: Public infrastructure within Carson, CA: (A) a cluster of schools, (B) CSU Dominguez Hills, (C) civic buildings (i.e., City Hall, post office, sheriff's office, etc.), (D) a hospital in the south of Carson, and (E) the sanitation district. The map also depicts regional agencies and their assets found in Carson. The map is not all encompassing but highlights a variety of public infrastructure in the city.

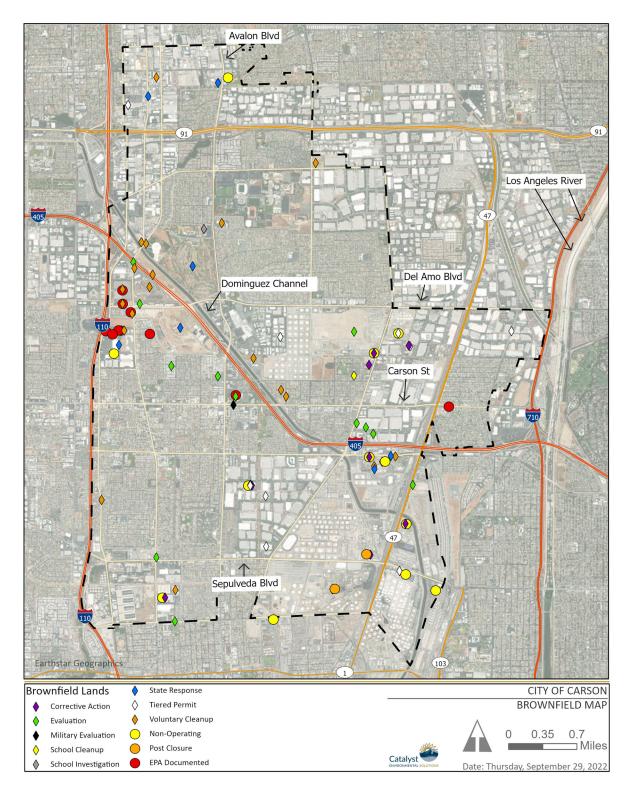


Figure 4: Brownfield land within Carson, CA. Brownfield land in Carson is predominately located in areas zoned for manufacturing, but some do border areas zoned for residential housing.

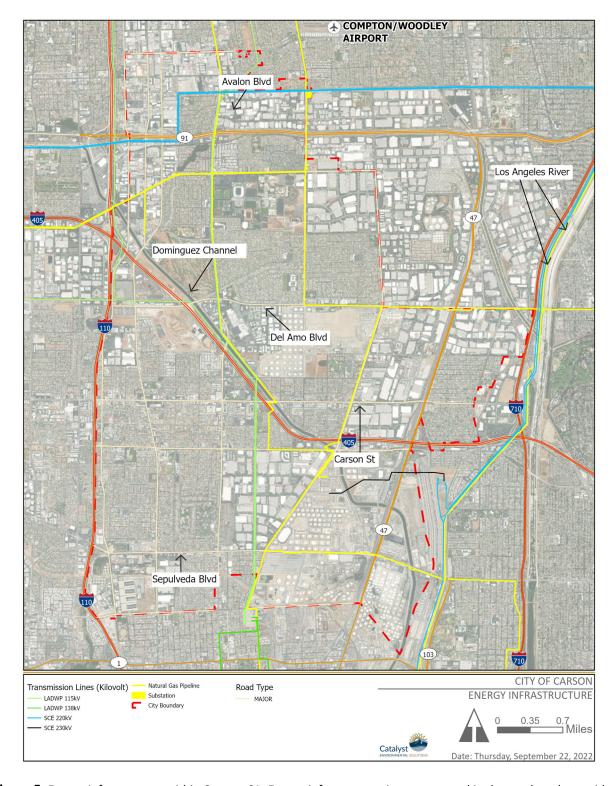


Figure 5: Energy infrastructure within Carson, CA. Energy infrastructure is concentrated in the north and east side of the city.

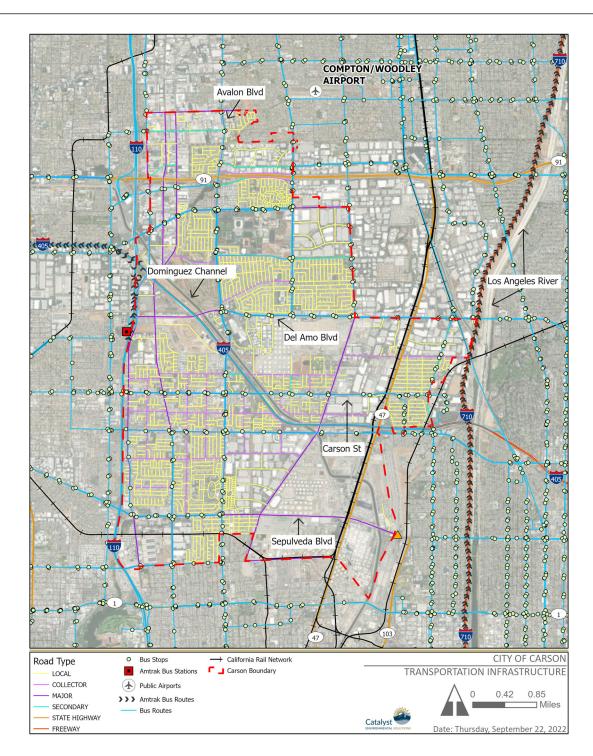


Figure 6: Transportation infrastructure within Carson, CA. Carson supports many transportation options (i.e., highways, municipal bus routes, Amtrak bus station, and rail).

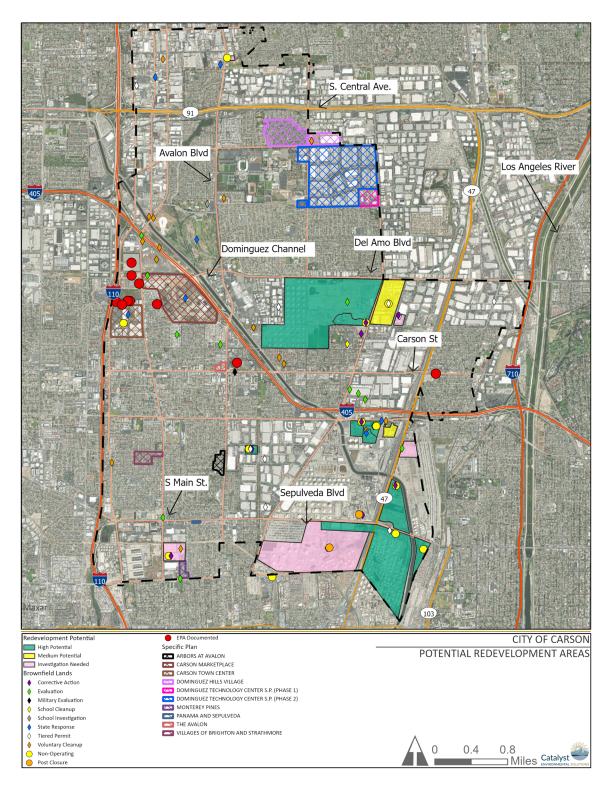


Figure 7: Redevelopment opportunities. Brownfield land, city zoning, and areas designated for specific plans were used to highlight redevelopment potential. Pink areas labelled "investigation needed" need further review due to pending permits, property selling, or lack of information regarding their brownfield status.



Figure 8: Redevelopment areas within Carson, CA: (A) a building undergoing closure, (B) an area in the center of town with redevelopment potential, (C) a cluster of land with redevelopment potential, (D) a large area of redevelopment potential in the southeast of Carson, and (E) an area adjacent to residential zoning undergoing monitoring. Like Fig.7, brownfield land, city zoning, and areas designated for specific plans were used to identify redevelopment potential.

Attachment B Green and Economic Infrastructure SWOT Analysis



Innovative solutions for a complex world



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Green Infrastructure SWOT

Strengths

- Residential areas near open spaces/ parks.
- Freshwater ponds in manufacturing areas (presumed biofiltration)
- Proximity to water (Dominguez Channel/ LA River)
- Dispersed green medians on primary city streets.
- Dispersed use of pervious pavements and bioretention curbs along some roadways.

Weaknesses

- Six percent open and green space.
- Not a lot of current available space to convert.
- Not a lot of green space in east and southeast.
- Lack of designated bikeways or bike trails that can serve as local thoroughfare for commuting and local trips, as well as a community vein through city core (main street zone).
- Land Use zoning is dominated by manufacturing.
- Lack of pervious space across City.

Opportunities

- Turn available open space into greenways.
- Non-operating brownfield locations can be repurposed for City beautification and create public greenspace.
- Can increase green roofs/ solar roofs
- Grant / loan funding through the EPA (cleanup, job training, state, and tribal response)
- California brownfield program
- Reduce Urban heat island with greening
- Dominguez Channel bikeway or trail system.
- Tap funding available from Olympics for City beautification (tree plantings, greenspace/parks, community gathering space/town square/park/BBQ).
- Reduce industrial viewshed with greenwalls (tree walls, arborvitae).

Threats

- Greenspace might get repurposed for housing or commercial development.
- Climate change and demand on power grid, water supply, sea level issues
 - Types of plants that can be used for greening need to be resilient to climate change.
 - Climate change will continue to raise ambient temperatures and densely developed nature of the city will amplify that effect.
- Retiring industrial properties that may require remediation before reuse/re-purposing.
 - Will take a lot of money to improve this (a lot of remediation).

Innovative solutions for a complex world



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Opportunities continued.

- Create a city bikeway/ bike trail system to reduce traffic and create local public asset to promote exercise, beautification, and city core (main street zone).
- City assets and buildings are centralized on the central-west side. This
 cluster lends itself to using Avalon Avenue and/or Carson Street as a
 core zone to beautify and "green-up". Near primary residential zones;
 traverses entire city north-to-south (Avalon) and east-to-west (Carson
 St); provides access to majority of City parks and greenspace; provides
 extensive bike-and-ride opportunities to public transportation network
 and commercial core on central-west side near Dominguez Channel
 (zoning map).
- Adjust city zoning to deter expanding industrial use/re-use. Introduce more mixed use near residential zones to promote walkability.
- Expand green medians to other main streets in City (Avalon, Carson, Del Amo, Main, Wilmington).
- Expand City-wide tree planting to promote urban canopy as a heat shield and carbon capture resource. Change City code to require tree plantings in addition to securing potential grant money.
- Improve City stormwater capture and re-use/reclamation facilities to improve local water supply for beautification

Economic Infrastructure SWOT

Strengths

- Extensive public transportation network, especially bus routes.
 - Potential for high walkability.
- Public Infrastructure between Main Street and Avalon Blvd.
- Public University could be a partner for changing industries in the city.
- Transportation three major highways provide shipping and transportation resources in I-405; I-710; and I-110. Also available rail network in south of City.
- Specific planned projects for Carson residential areas on former brownfield sites.
- Available network of natural gas pipelines and electrical transmission lines.
 - Electrical grid has high voltage hubs.
- Community Development Block Grant (CDBG) funding from US Department of Housing and Urban Development.
- Prime location near Port of LA.
- Scheduled broadband fiber optic line.

Opportunities

- Good grid for potential renewable energies.
- Reuse of brownfields to diversify City economy. Use for mixed use or commercial use.
 - Private-Public partnerships
 - Equitable Community Revitalization Grant (ECRG)
 - Brownfields Revolving Loan Fund (RLF) Grant Program
 - Clean-up Loans and Environmental Assistance to Neighbourhoods (CLEAN) Program
 - Investigating Site Contamination Program (ISCP)
 - Webinars available for other funding sources
- Nat. Gas to the southwest of the city

Weaknesses

- No commercial airport near the city.
- Few Amtrak bus stations.
- Excessive manufacturing and few commercial areas.
- Few opportunities for career switching for industry employees.
- Lack of central gathering place in City. Lack of city core/main street for community gathering.
- Zoning is dominated by manufacturing, which exposes the City's economy to economic/commodity swings.

Threats

- The industrial market City location and market economics make Carson an attractive spot for industrial uses and logistics businesses.
 This demand will continue to compete for industrial property and reuse.
 - Industry and threat to partnerships.
- Loss of resident's income due to revitalization of the city.
- Other government influence (i.e., LA County, Long Beach City, Municipality, Sanitation Dist., etc.).
- Potential for gentrification and displacing lifelong residents.

Opportunities continued.

- Can add a city center between Main Street and Avalon Blvd.
- Rezoning in areas of heavy manufacturing.
- Some closed or post-closure brownfields that can be redeveloped.
- Introduce more mixed use and commercial zoning near residential areas to create more local community assets and improve walkability of City.
- Tap funding available from Olympics for redevelopment of retiring/abandoned industrial facilities into a community asset (community center, training center).



Appendix B: Technical Resources for Section 3



Technical Resources: Section 3 of This Report

Department of Toxic Substances Control:

- 1. Cleanup in Vulnerable Communities Initiative (CVCI). https://dtsc.ca.gov/cleanup-in-vulnerablecommunities-initiative-cvci/
- 2. Community Benefits Agreement Program. https://dtsc.ca.gov/cleanup-in-vulnerable-communitiesinitiative-cvci/cba/
- 3. Discovery and Enforcement Program. https://dtsc.ca.gov/discovery-and-enforcement/
- 4. Equitable Community Revitalization Grant. https://dtsc.ca.gov/ecrg/
- 5. Loans and Grants. https://dtsc.ca.gov/brownfields/loans-and-grants/
- 6. Site Mitigation & Restoration Program. https://dtsc.ca.gov/site-mitigation/
- 7. Technical Assistance Grant. https://dtsc.ca.gov/tag/

Environmental Protection Agency:

- 1. Brownfields Assessment Grants. https://www.epa.gov/brownfields/brownfields-assessment-grants
- 2. Brownfields Cleanup Grants. https://www.epa.gov/brownfields/brownfields-cleanup-grants
- 3. Brownfields Job Training (JT) Grants. https://www.epa.gov/brownfields/brownfields-job-training-jtgrants
- 4. Brownfields Multipurpose Grants. https://www.epa.gov/brownfields/brownfields-multipurpose-
- 5. Brownfields Revolving Loan Fund (RLF) Grants. https://www.epa.gov/brownfields/brownfieldsrevolving-loan-fund-rlf-grants
- 6. Solicitations for Brownfield Grants. https://www.epa.gov/brownfields/solicitations-brownfield-grants
- 7. State and Tribal Response Program Grants. https://www.epa.gov/brownfields/state-and-tribalresponse-program-grants
- 8. Types of EPA Brownfield Grant Funding. https://www.epa.gov/brownfields/types-epa-brownfieldgrant-funding

Other:

1. Grants.gov. https://www.grants.gov/web/grants/search-grants.html

<u>Brownfields</u> are properties that are or may be contaminated with hazardous substances, pollutants, petroleum, or other contaminants. These contaminants pose a barrier to redevelopment.

Brownfields often are in struggling neighborhoods and areas with blight, deteriorated infrastructure, or other challenges. These properties often are eyesores as well as potential health and safety concerns for the community.

Cleaning up and redeveloping a brownfield property enables infill development, increases the tax base, spurs job creation and often kick-starts revitalization activities within a neighborhood.

Depending on the location and characteristics of the property and market factors, a brownfield site often can be redeveloped for uses ranging from housing, retail, industrial, or mixed-use to public and non-profit uses such as parks, recreational areas and municipal facilities. Brownfields redevelopment offers benefits over greenfield development, such as:

- reducing blight and improving the local environment by cleaning up contamination,
- moving abandoned or underused sites into beneficial reuses, and
- reducing sprawl and preserving greenspace.

Brownfields can be redeveloped by private developers, local governments or through public-private partnerships.

Opportunities and Risks Specific to Brownfields Redevelopment

Opportunity and risk are inherent in every real estate transaction. Developers must invest their resources to evaluate whether the development opportunity outweighs the risk.

In a brownfields redevelopment, a developer must consider the additional risk that the property is or may be contaminated. This means that a brownfields developer must invest their resources to evaluate whether the real estate opportunity outweighs **both brownfield-specific** and real estate risks.

Opportunities often present when redeveloping brownfields include:

- *Prime Locations* An opportunity to acquire and develop a property in a highly desirable location where there may be few or no other properties available.
- Reduced Purchase Price Due to potential contamination, brownfield properties often can be acquired at a reduced cost—which could potentially increase profit.



 Existing Infrastructure – An opportunity to save money, because brownfield properties often have existing infrastructure and are in locations accessible to roads, rail lines, ports and public transportation.

Risks or challenges unique to brownfields real estate transactions include:

- Liability Concerns over who is responsible for the environmental contamination often plague brownfield properties. Potential developers must evaluate: Who will pay for the environmental cleanup-- a responsible party or the developer?
- Cleanup and Timing Environmental assessments and cleanup can complicate brownfield redevelopment projects because exact timelines and costs are often difficult to determine. Developers must ask themselves if the environmental cleanup and the subsequent type of development make sense from an economic perspective.
- Financing Typical financing may not be available to brownfields real estate transactions because lenders may not be comfortable with the unknowns associated with contaminated properties.
- Weak Demand Brownfields are not always located in thriving areas where real estate markets are strong. As a result, alternative analyses may be necessary to kick-start the redevelopment process. (See box on page 7, Brownfields in Weak Real Estate Market Areas.)

Brownfields Redevelopment Opportunities for Communities

Communities often experience several benefits from brownfield site redevelopment, regardless of how the site is reused. Benefits include:

- Environmental By addressing the environmental conditions of a brownfield, the project can reduce or eliminate exposure to environmental contamination and enhance the health and safety of the community.
- Sustainability Brownfields real estate transactions provide an opportunity to integrate environmental cleanup with sustainable reuse of a property. Coupling these two activities can ensure site cleanup and address environmental risk.
- Community Involvement When a brownfield site is in a weak market, local stakeholders may be more likely to become involved. As a result, the community often is much more invested in the project and its results.
- Goodwill Redeveloping a brownfield site provides an opportunity to create new or improve community amenities nearby.



Brownfields Redevelopment Scenarios

Generally, brownfields redevelopment is conducted under one of the following scenarios:

Private-Led Brownfields Redevelopment: Private development most often occurs when a property is in an area with favorable development potential, when there is a healthy market demand for redevelopment in one or more sectors and where the developer anticipates making profit and an acceptable return on their investment.

In a privately driven redevelopment scenario, a developer is responsible for the redevelopment process. Typically, the developer:

- usually needs private financing through debt or equity to complete the project,
- may require some limited public investment to assess the contamination onsite, and
- completes all environmental cleanup activities, meeting the state's voluntary cleanup program requirements and other applicable federal or state regulations.

Public-Led Brownfields Redevelopment: Public development most often occurs when there is little private-sector interest in a property because of market factors, or when environmental conditions, parcel size, parcel configuration or other factors limit potential development options.

In a public redevelopment scenario, a municipality takes responsibility for the entire assessment and cleanup process. Typically, the municipality:

- takes ownership of the property by voluntary purchase, foreclosure, or eminent domain,
- conducts environmental site assessment and cleanup activities, and
- either:
 - prepares the remediated property for construction activities, and redevelop site into a public use (such as a park, school, or municipal building)
 OR
 - sells the site to a developer.

Public-Private Partnership Brownfields Redevelopment: A public-private partnership redevelopment project occurs when there is an agreement between at least one public-sector entity and one private-sector organization to combine resources and efforts to accomplish a common goal.

In public-private partnerships for brownfield redevelopment, typically:

- the public entity sponsors the project and provides some initial funding, often for environmental site assessments and for infrastructure to support development, and
- a private-sector developer then funds and manages the pre-development and construction process.

Public-private partnerships often are successful because initial public investments provide the necessary incentives for private-sector development and operation. These collaborations reduce the financial burden on the public sector while accelerating property cleanup, redevelopment, and community revitalization.

Understanding the Three Stages of Brownfields Redevelopment Process

The three stages of the brownfield redevelopment process are pre-development, development, and management. Each stage requires specific actions, funding and/or financing.

Integrating cleanup and redevelopment activities as appropriate at each stage is the key to cost-effective, sustainable brownfields redevelopment.

Activities at Each Stage of the Brownfields Redevelopment Process

Generally, the activities outlined here for each stage are undertaken by developers.

Communities and municipalities undertaking brownfield redevelopment projects or forming public-private partnerships can use this information to better understand how a developer approaches a brownfield redevelopment opportunity.

Pre-Development Development Management Conduct Due Diligence. Obtain Permits and Necessary Hold the Property. Approvals. Developer/owner assumes O&M Conduct Analyses. responsibilities. Conduct Environmental Cleanup Determine any Fatal Flaws. and Site Preparation Activities. OR Develop the ProForma and Conduct Marketing and Pre-leasing Sell the Property. **Agreement for Purchase of** Activities. Buyer assumes O&M responsibilities. Property. **Complete Construction and Open** Use the Proforma to Refine the Project. the Site Design. Prepare a Redevelopment Plan. Identify Sources of Funding. **Acquire Environmental** Insurance.

Pre-Development Phase

Pre-development activities lay the foundation for a successful brownfield redevelopment project.

The developer (or local government, for a publicly funded project) conducts several analyses, assesses the feasibility of a project and decides whether the project should move forward. This is the riskiest phase for potential private developers because they are investing money upfront without a quarantee of any return.

During this phase, the developer usually does the following:

Conducts Due Diligence. Due diligence involves a variety of activities in advance of purchasing a property and activities specific to the environmental components of the redevelopment. These activities typically include:

- Conducting property and environmental assessments.
- Researching land and building titles for the property.
- Continuing communications with key stakeholders about the planned redevelopment.

Conducts Various Analyses. These may include:

 An analysis to evaluate the physical and regulatory development potential of the property.

If purchasing the brownfield property, the developer must conduct all appropriate inquiry (AAI) before acquiring the property and comply with continuing obligations after acquiring the property.

- AAI is the process of evaluating a property's environmental conditions and assessing potential liability for any contamination.
- Performing AAI and complying with continuing obligations provides the developer with a defense to liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

- An initial feasibility analysis that usually consists of quick, back-of-the-envelope calculations.
- A feasibility analysis to evaluate and understand different types of project risk, including financial and environmental risk.
- A <u>market assessment</u> to identify reuse options. (See box on page 6, *Brownfields in Weak Real Estate Market Areas*.)

Determines Any Fatal Flaws. Once the due diligence and various analyses are complete, the developer will determine if there are any obvious fatal flaws.

Develops the Proforma and an Agreement for Purchase of Property. If proceeding with the project, the developer will move forward with an in-depth financial proforma and negotiate their contract terms to purchase the site.

- These negotiations are a method of risk management and address key issues, such as liability, financial risk, environmental covenants, institutional controls, and regulatory assurances.
- These negotiations lead to an agreement to purchase the property from the seller (i.e., a letter of intent or Purchase and Sale Agreement).

Uses the Proforma to Refine Site Design and Maximize Profit. The proforma can be used to guide the site design process by calculating estimated costs and profit derived from different buildable square footage and site constraint inputs. A potential developer

Back of the envelope calculations are a quick and basic way to evaluate a transaction, using only high-level costs and income. This does not substitute for a pro forma.

A **pro forma** is a spreadsheet that provides a clear, numeric representation of future costs and income, and calculates the projected return on the investment. A pro forma usually contains:

- Operating or cash flow statement.
- Income and expense analysis.
- Annual property operating data.
- Loan information, including the repayment schedule.

will likely explore several redevelopment concepts during this phase to ensure that the project is feasible financially and from an environmental standpoint.

Prepares a Redevelopment Plan. If a decision is made to go forward, the developer will begin redevelopment planning for the site, based on the information gathered and the market assessment.

A sustainable <u>redevelopment plan</u> will integrate site assets and limitations, incorporate neighborhood features, address community concerns, and satisfy market demand. A redevelopment plan generally includes:

- A Community Engagement Plan that is implemented early in the process to build public and regulatory support for the project. Creating community buy-in for the intended reuse can facilitate entitlements, reduce delays, and minimize risks.
- A Site Reuse Vision, which is a visual representation of the redevelopment plan that is used to communicate with stakeholders, regulatory officials, economic development leaders, and the real estate market.

Early determination of the property's reuse will ensure that cleanup efforts complement the reuse goal and that stakeholders are invested in the redevelopment process.

- In a <u>private-led</u> redevelopment scenario, the developer typically generates and refines the redevelopment idea.
- In the <u>public-led</u> or <u>public-private partnership</u> redevelopment scenario, community input drives the redevelopment idea.
- A Redevelopment Implementation Strategy, which is a step-by-step strategy for obtaining regulatory approvals, community support, and implementing the redevelopment plan.
- <u>A Resource Roadmap</u>, which identifies public incentives that may be available and needed to help finance the development, and potential funding sources for making infrastructure improvements to attract tenants and end users. This may be particularly important for developments located within a weak market.

For a publicly funded redevelopment or a public-private partnership effort, a municipality or community often will conduct <u>planning activities</u> to:

- ensure that the community's site reuse goals align with local economic, infrastructure, social and environmental conditions, and
- help determine which reuses are feasible for the site.

Identifies Sources of Funding or Financing. A combination of private and public sector funds may be used to pay for assessment, remediation, purchase, and redevelopment activities.

Funding or Financing Options Available for the Pre-Development Phase

For **pre-development** activities, several types of funds may be available:

- Buyer or equity partner cash
- Local, state or federal government programs that offer tax credits, loans, incentives or abatements, bonds, subsidies or grants.
- Local tax increment finance (TIF) or special assessment (SA) districts.
- In-kind contributions (non-monetary contributions, such as donated design services or sweat equity of developers)

Acquires Environmental Insurance. The developer may decide to purchase an environmental insurance policy, such as Pollution Legal Liability (PLL). PLL insurance can provide coverage for pre-existing contamination that may be unknown, onsite and offsite third-party bodily injury and property damage, and regulatory reopeners of a completed remedial action.

PLL is the primary environmental insurance used in brownfields redevelopment.

Remediation Cost Cap, once used to pay for remediation cost overruns, is generally not available except in very special circumstances.

The term of the policy and the coverage amount can vary based on the insurer and the environmental condition of the site. Insurers will generally require a comprehensive understanding of the environmental condition of a site typically developed through comprehensive site characterizations. In some cases, an approved remedial action plan may be necessary before the insurance will take effect.

In the case of a property transfer, PLL insurance can provide protection to both the buyer and the seller.

The Development Phase

This phase includes permitting, environmental cleanup, construction, financing, and marketing activities that culminate with completion of the project and a formal opening.

During the development phase, the developer usually does the following:

Obtains Necessary Permitting and Approvals. This includes local and state land use approvals and construction permits.

Conducts Environmental Cleanup and Completes Construction. Based on assessment activities, planned cleanup actions, and stakeholder input, developers are typically able to integrate and streamline cleanup and construction activities and ensure all issues are resolved so that the redevelopment process runs smoothly. This phase is extremely time sensitive. Any delays result in higher costs and may make the project financially unfeasible.



Brownfields in Weak Real Estate Market Areas

What is a weak real estate market or a weak economy?

A weak market is a market in which sellers far outnumber buyers and prices are in a general state of decline, or where there is little demand for a property. A market can be weak for one or more sectors (commercial, retail, housing, industrial, etc.), or for all sectors.

Are brownfield sites found in weak market areas?

Brownfield sites often—but by no means always—are found in "weak market" areas. This adds to the complexity of the redevelopment. For some brownfield real estate transactions, the market may be weak for any type of development, rather than only for specific sectors (e.g., commercial, retail, warehouse, residential).

In weak markets, the community's desire for redevelopment, or a specific type of development, may precede an identified developer. As a result, the reuse vision may come before a developer is identified and the community may need to conduct an alternative analysis to focus on how to generate demand.

When the entire market is weak, there is no "tried and true" method to kick-start demand for a brownfield site. An alternative analysis is needed to find the unique aspects of each city, neighborhood, or community that can generate demand for the site. This alternative analysis will be conducted by a private developer that is considering undertaking a redevelopment, or by a community undertaking its own publicly funded redevelopment or seeking to form a public-private partnership. "Asset mapping" is a commonly-used term to describe this type of alternative analysis.

The analysis generally includes the following steps:

- Identify potential users, partners, and institutions.
- Focus on key strengths to develop demand.
- Target existing assets (e.g., waterfront, transportation infrastructure, etc.)
- Identify available public incentives.

Conducts Marketing and Pre-leasing Activities to Attract Potential Buyers or Tenants. Leasing begins when the construction schedule is determined. After construction is complete, the property may or may not be sold. A commercial property may be sold or leased for long-term management. However, in most cases the property is leased first.

Completes Construction and Opens the Project. A brownfields project may be considered successfully redeveloped after construction is complete, ownership and leasing transactions are finalized, and the property is occupied and operating as its planned reuse.

Funding or Financing Options Available for the Development Phase

For activities during the development phase, several types of funds are typically used:

- Private Equity
 - Hedge or investment funds
 - High net-worth individuals
- Construction Financing
 - Private bank loans
 - Grants
 - Public sector loans
 - Public infrastructure investments

- Permanent Financing
 - Mortgage (e.g., insurance companies, pension funds)
 - Tax increment financing (TIF) districts, special assessment districts
 - Tax credits
 - Industrial revenue bonds

The Management Phase

During the management (or operational) phase, the developer decides whether to:

- hold the property for the long-term and assume responsibility for operation and maintenance (O&M),
 OR
- sell the property to another entity that will take over long-term responsibility for O&M.

If the developer chooses to sell the property, the developer must ensure that ongoing maintenance required under the remedial action plans and any institutional controls are transferred to the new buyer. Many brownfield properties incorporate **engineering** and/or **institutional controls** in their remedial plans that restrict property access or use.

- Engineering controls such as asphalt caps and fencing should be inspected on a regular basis to ensure they remain protective of human health and the environment.
- Institutional controls often take the form of deed restrictions or easements. Property owners must be aware of these restrictions and ensure they transfer to the new owner if the property is sold.

Funding or Financing Options Available for the Management Phase

During the management phase, three types of funding generally are available to the developer:

- Operating income (e.g., rents).
- Tax abatements.
- Workforce or economic development incentives.

Types of Funding (Public vs. Private Sector)

Funding for pre-development, development and management activities comes from the following sources:

Private Sector

- Developer and equity investors.
- Construction lenders (e.g., banks).
- Permanent lenders (e.g., insurance companies, pensions, hedge and sovereign funds).
- Public markets (e.g., Real Estate Investment Trusts, Commercial Mortgage Backed Securities, crowd funding).

Public Sector

- Land and Infrastructure.
- Economic development incentives.
- Tax increment financing/abatements.
- Federal and state grants, loans.

Local Institutions

- Non-profit (e.g., universities, hospitals).
- Foundations or other organizations .

Paying for Brownfield Redevelopment

A combination of private- and public-sector funding may be used to fund or finance brownfield site purchase and pay for site assessment, site cleanup and other brownfield redevelopment activities.

Sound initial investments of local funds in brownfields revitalization can attract the support of outside investors and lead to additional funding.

EPA offers competitive grants to support brownfields assessment, planning and cleanup activities. Local governments, nonprofit organizations, states, and tribes are generally eligible to receive these grants, but grant demand far outpaces resources available. Consequently, local communities often lack adequate resources to complete brownfields revitalization projects due to substantial cleanup costs, expensive but necessary infrastructure upgrades, design, engineering, and redevelopment costs.

EPA offers several helpful resources, including:



The Brownfields Federal Programs
Guide has information about grants,
loans and tax incentives available from
the federal government for activities
undertaken at each phase of a brownfields redevelopment project.



Community Actions that Drive Brownfields Redevelopment explains how communities can position themselves for success by understanding development opportunities and constraints and creating the conditions necessary to attract private or public investment to a brownfield site.



redevelopment.

Additional fundir



Under State Response Programs -

Additional funding often is available through state brownfields voluntary cleanup programs, which are described in EPA's Cleaning Up Brownfields Under State Response Programs:

Getting to "No Further Action."

Setting the Stage for Leveraging for Brownfields Redevelopment is a guide

to assembling packages of funding

from numerous sources for brownfields

Critical Players in Brownfields Real Estate Development

Brownfield redevelopment often relies on strong coordination among many stakeholders. Successful development of brownfields can accelerate when these stakeholders work together to assess and clean up the property and pursue common redevelopment goals.

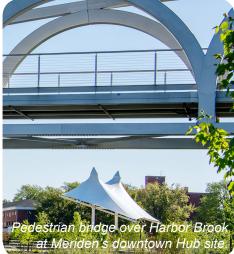
Participant(s)	Role	Interest
Property Owner	Offers the property for sale or attracts a developer to invest in the property.	Maximize sale price or income from the property.
Developer/ Developer Team	People or entities that contribute value to a project: Investors who provide equity (cash) Those who offer control of the site	Maximize return on investment and complete the deal in the shortest time possible. Reduce risk, often by employing experts who evaluate and help finalize the deal by:
	 Financers The three key types of developers who buy brownfields generally are: Land developers – prepare the property and obtain entitlements for development. Vertical developers – construct new buildings for sale or long-term ownership and management. Redevelopment developers – renovate or revitalize existing developments for sale or long-term ownership and management. 	 Performing Opportunity Evaluations (public agencies, real estate brokers) Conducting Feasibility Analysis (appraisers, market analysts, engineers and environmental consultants) Securing the Deal (attorneys and lenders/mortgage brokers) Securing Entitlements (engineers, architects, attorneys and land use consultants)
Equity Investor (fund or a wealthy investor)	Provide the money or equity for the brownfield real estate transaction.	Provide larger amounts of capital for a return based on amount of risk. Some equity investors provide early capital at a high rate of return, while others provide larger investments later at a lower return.
Potential Buyers	Typical brownfield real estate purchasers fall into six categories: Liability transfer companies Private equity groups Environmental contracting partnerships Specialty development companies Local industrial developers Conversion specialists	Maximize profits through re-selling the property or long-term ownership and management.
Public Sector Stakeholders Private Sector	 Local or regional governments Neighborhood or community groups Nonprofit organizations Investors 	 Revitalize blighted properties and generate economic or community growth. May want the successful property cleanup and reuse to enhance the community's image. See the project succeed by revitalizing blight-
Stakeholders	LendersDevelopersInsurers	 ed properties and generating economic or community growth. Earn an appropriate return on investment. May want to tie the property redevelopment into a larger redevelopment plan for the neighborhood or community.
Regulators and Other Parties	AttorneysEnvironmental consultantsState and federal regulators	 Ensure that the property is cleaned up and safe for appropriate levels of use and/or reuse. Alleviate future environmental concerns on the property.

HUB SITE | MERIDEN, CONNECTICUT

Advancing a rare opportunity to bring high-quality, private investment in a "weak" market area







Meriden created a development opportunity in a "weak market" area for a significant brownfield in the heart of its downtown. The city completed redevelopment planning, remediated the site, and prepared parts of the site for future development.

By repurposing the abandoned site, the city created new opportunities for private investment, new public open space and recreational opportunities.

Future private development on the site will provide needed tax revenue and private investment in the downtown area.

The Meriden Hub is a 14-acre brownfield in downtown Meriden, a city of 60,000 people in central Connecticut. The site housed industrial operations beginning in the 1860s and retail and manufacturing uses through the 1990s. Major flooding in the 1990s prompted the city to explore repurposing the site as part of a city-wide greenway and flood control project. Because Meriden is a distressed city, the HUB site was in a weak market area with limited options for private financing.

Remediation and redevelopment of the Meriden Hub site was a **public-led brownfields redevelopment project. Private development** is slated for the second phase of the project.

Pre-Development Phase

- The City performed due diligence with an EPA targeted brownfields assessment (TBA) of the site in 2003-2004.
 The environmental site assessments revealed the soil contamination from historical industrial uses.
- The City acquired the site through condemnation in 2005.
- Meriden convened a Hub Site Reuse Committee, composed of local stakeholders and city staff, to complete
 a site reuse analysis and to develop several site reuse concept plans.
- The HUB Site Reuse Committee identified key goals for the site, including remediation, implementing flood water detention, creating public open space, and enabling future development.

- The City addressed these barriers to redevelopment:
 - The site is an abandoned, 14-acre former industrial property bisected by a waterway, and is in a 100-year floodplain.
 - The site redevelopment area is part of a larger flood control and greenway plan, which made private development unlikely.
 - Remediation costs were high and could constitute a financial "fatal flaw."
- The city worked with the Hub Site Reuse Committee to develop a redevelopment plan for the site.
- The city identified sources of funding for construction costs totaling \$14 million:
 - \$12.9 million provided by state bond funds
 - \$1.1 million by local capital improvement bond funds
 - Meriden received more than \$700,000 in EPA brownfields assessment and cleanup grants.

Development Phase

- The final environmental cleanup included removal of hazardous soils, onsite soil management, and the installation of an engineered cap.
- Final construction included creation of a new park, called Meriden Green, with an amphitheater and stage, a pedestrian bridge spanning the daylighted Harbor Brook, and several miles of walkways. The park opened in 2016.
- The site is zoned for high-density development under the Transit Oriented Development (TOD) Zoning District regulations. Future development rights on three acres of the site were granted to a private developer under a master development agreement with the city.
- Further feasibility analyses will determine if the proposed market-rate, mixed-use development can be financed in a weak market area.
- The site is in a federally designated Opportunity Zone and a state-designated Enterprise Zone, which could provide significant financial incentives for new construction.

Management Phase

- The site is operated and maintained by the City of Meriden.
- The city will maintain the park using budgeted funds and funds from the sale of city-owned properties in the TOD Zoning District.
- Proceeds from the sale or lease of the future development on the three acres will be set aside for long-term park maintenance.

SLOANS PROJECT | DENVER, COLORADO

Amenities abound for two neighborhoods surrounding former hospital site







Sloans is a high-quality retail and residential development that is spurring new employment opportunities and economic development in two Denver neighborhoods near a light rail transit line. The project won LEED-Neighborhood Development Gold certification and demonstrates how private development of an environmentally challenged site can make them assets to the surrounding neighborhood.

St. Anthony's Hospital operated from the late 1880s until 2005, when it decided to relocate from its long-time home on the western edge of Denver to a much larger facility further west. The hospital's closure presented an opportunity for redevelopment of the 19-acre site, which now serves as a catalyst for revitalization efforts in Denver's surrounding West Colfax and Sloan's Lake neighborhoods.

Pre-Development Phase

- In 2013, a private developer purchased the "Sloans" site and prepared the site for private development by:
 - Referencing the City's 2008 West Colfax Corridor Plan, which provided a **master plan** and a set of **guiding principles** and **design standards** for the area.
 - Readying the property for parcels to be sold off for vertical development. Importantly, the developer arranged parcels so that new streets would tie seamlessly into the surrounding community's existing grid pattern. Residential parcels were sized to allow sufficient density to facilitate retail and other commercial uses.
- Using input from over 70 stakeholder meetings, the developer identified reuse concepts and key goals for the project:
 - Create a pedestrian-friendly area with a mix of uses.
 - Residential density at a level that would support retail development.
 - A street network that would integrate with the surrounding grid pattern.
 - A design aesthetic to complement the existing character of the adjacent neighborhoods.
- Through a process that relies on partnerships with private entities, the City created an Urban Renewal Area. This special designation allowed for collection of tax increment financing (TIF) funds and creation of two Metropolitan Districts (i.e., special tax districts in Colorado) to help finance and maintain public improvements on the site.

Development Phase

The developer took the following site preparation and redevelopment actions:

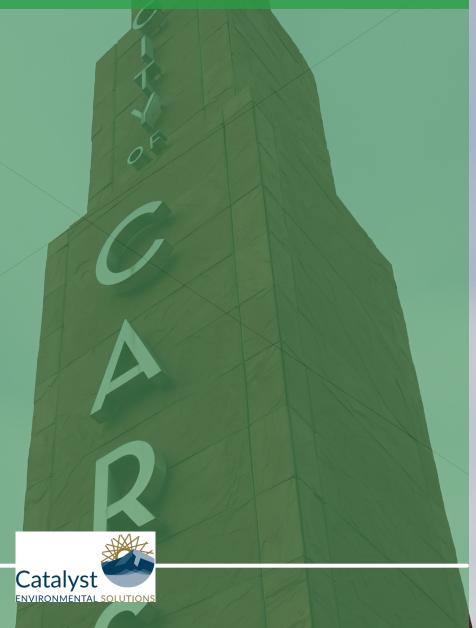
- Demolished about one million square feet of structures.
- Obtained the necessary approvals from local, state, and federal authorities.
- Completed environmental cleanup.
- Installed new infrastructure throughout the site:
 - New roads, sidewalks, water and sewer lines.
 - A regional green stormwater management system that includes the use of porous landscape detention one of the first of its kind in Denver.
- Incorporated sustainable development and construction techniques; project won LEED-Neighborhood Development Gold certification.

Management Phase

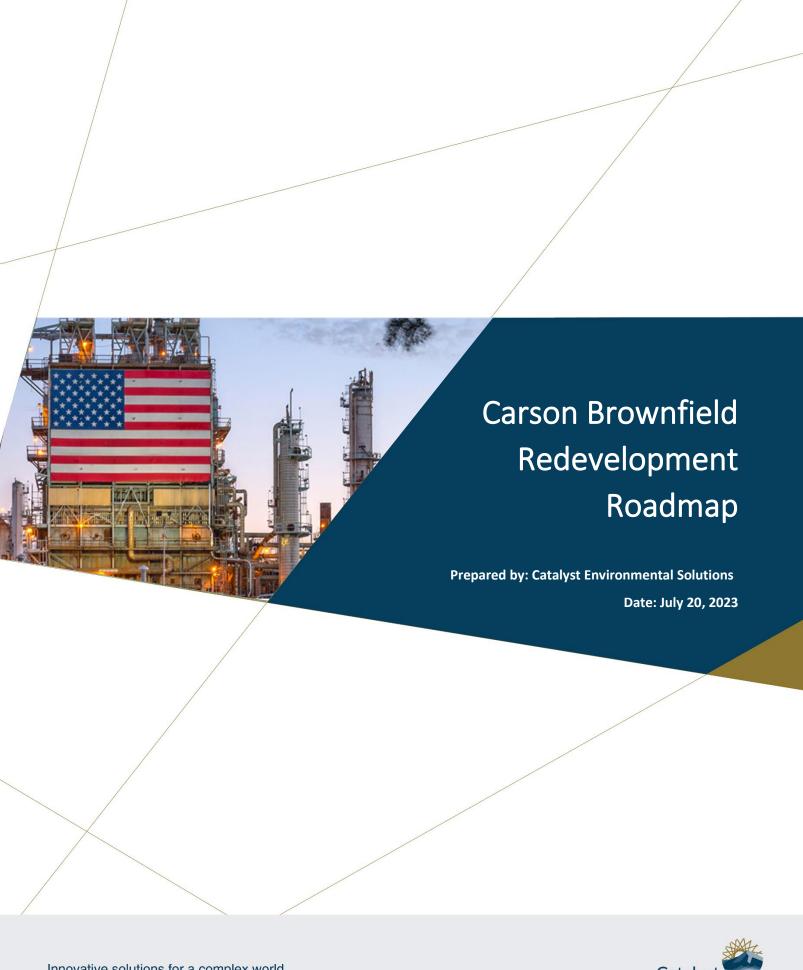
- The developer retained certain buildings for future use, including a parking garage, a 1930s-era chapel (a focal point in the public plaza); and a nurses' dormitory that will be reused for workforce housing and a brewery.
- Additional vertical mixed-use development is underway by other parties that purchased parcels from developer.
 - This includes a mix of over 1,000 rental and for-sale housing units, 20 percent of which are designated as affordable workforce and senior housing.
 - Only a limited amount of the total 120,000 square feet of retail and office space remains vacant or available for future development.



Brownfield Redevelopment Roadmap Companion Study









Introduction and Summary of Previous Catalyst Work

1.1 Introduction

The City of Carson is at an inflection point. With robust industrial and logistics economies, the City is looking towards the future, through enhancing the local community through strategic economic development. There is a need to balance established economic sectors with a variety of emerging businesses and community initiatives: all to provide goods and services to Carson residents and attract new residents to the City. Geographically positioned as an inland port that is located close to the Port of Los Angeles and Long Beach, the City of Carson is a densely developed, land locked city and proximate to, major interstate highways, rail lines, and airports. While these factors frame Carson as an ideal hub for logistics, warehousing, and industry, the human side of things, people who live and work in Carson, can become underserved within this industrial ecosystem. In many ways Carson's past sets the stage for its future, with the development goals of the Economic Development Strategy to set the City on a path towards an activated community, while maintaining a strong economic base in the industries that have led Carson to present day.

Brownfields offer a distinctive opportunity to the City in this course correction. By turning contaminated or underused properties into community assets, the City can achieve a multitude of goals. A brownfield site is one where the expansion, redevelopment, or reuse of the site may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant 1. Cleaning up and reinvesting in these properties protects the environment, improves visual character, and takes development pressures off greenspaces and working lands. The US Environmental Protection Agency estimates that there are more than 450,000 brownfields in the U.S. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth and utilizes existing infrastructure. These efforts also take development pressures off undeveloped and open land, effectively both improving and protecting the environment.

One objective of Carson's Economic Development Strategic Plan is the evaluation of former landfill and industrial lands for potential reuse, including a zoning designation as a brownfield property. Opening up industrial lands for other economic uses would require that any residual contamination at a brownfield site is protective of the proposed future use. The environmental liability and potential remediation costs are frequently borne by developers but could be facilitated through public-private partnership with the City, and as such allow furthering the City's goal to provide post-industrial lands for non-industrial businesses or residences.

¹ The definition is found in Public Law 107-118 (H.R. 2869), the "Small Business Liability Relief and Brownfields Revitalization Act", signed into law January 11, 2002.



1.2 Summary of Previous Catalyst Work

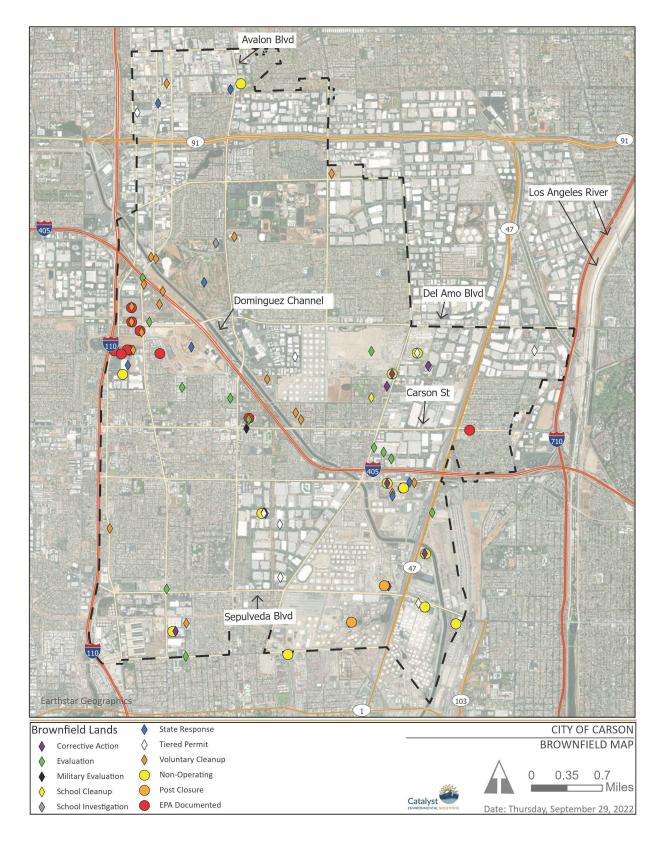
As part of Catalyst's work on this Economic Development Strategy2, we used a geographic information system (GIS) quantitative database to map properties within Carson that could be considered for brownfield redevelopment (Figure 1). As part of this work, all major infrastructure (i.e., city zoning, transportation, green infrastructure, public infrastructure, the energy grid, brownfield sites, etc.) was mapped, over-laid in the GIS system, and synthesized into a map set. The summary map of brownfield opportunities is provided here as Figure 1. The prior work also presented a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to clarify the City's existing public, economic, and green infrastructure assets, resources, and opportunities. This exercise allowed for the identification of redevelopment trends in the City (i.e., areas of dense manufacturing, public infrastructure concentration, brownfield sites, etc.), and highlighted areas for potential redevelopment.

This work revealed that a third of brownfields in Carson are categorized as voluntary cleanup sites, and more than half of these fall into the categories of evaluation, corrective action, state response, and tiered permit. Voluntary cleanup sites are initiated by a landowner, not by a regulatory requirement. The status indicates that the work to clean them up is ongoing. Twelve are listed at non-operating sites and two are at post closure sites.

Brownfield locations in Carson are concentrated along the Dominguez Channel and run northwest to southeast, splitting the city roughly in half. The remaining brownfield sites are in northern and southern Carson. There is a high concentration of brownfields around the Interstate 405/110 intersection near Del Amo Blvd. This area is zoned for light and heavy manufacturing, regional center commercial, and a variety of residential housing. This trend holds true moving southeast along the Dominguez Channel. Between Del Amo Blvd. to the north and Sepulveda Blvd. to the south is another heavy concentration of brownfields. Brownfields in this part of Carson are not active: they are at post closure and non-operating sites in areas zoned for heavy and light manufacturing. Post closure means that the sites have received regulatory approval for no further cleanup required, but the level of remaining contamination supports heavy and light manufacturing.

² City of Carson Economic Development Strategic Plan: Green and Economic Infrastructure Assessment. Catalyst Environmental Solutions Technical Memorandum and Map Set, November 11, 2021. Provided as Appendix 1 to this report.







SECTION 2 Brownfield Development Process and **Carson Opportunities**

2.1 Development Process

Brownfield redevelopment can follow many different pathways, but the unifying theme is the assessment, risk assessment, and remediation of contaminated properties to a level that supports the proposed redevelopment. This process does not necessarily achieve cleanup levels for the highest use of residential. Developers can and often do independently acquire brownfield properties, work with the cleanup agencies on the remedy, and then develop the property. Generally, a brownfield property is undeveloped or supports a relatively low value use because of the residual contamination. The developer typically acquires the site at a discount, and then pays for the cleanup to support a higher value use.

The typical process for redevelopment of any brownfield, large or small, is as follows.

- A developer identifies a property that is likely to be contaminated, but with cleanup or protections in place could be redeveloped to serve higher value future uses.
- 2. A Phase 1 Environmental Site Assessment (ESA) is completed for the property. A Phase 1 ESA reviews available records relevant to contamination for a property, a knowledgeable person inspects the property for recognized or potential contamination issues, and the person also interviews people with the site's history and operations. Often brownfield properties have had Phase 1 ESAs completed in the past as part of opportunities that were not successful. While these can be informative, most lenders and insurers require an independent Phase 1 ESA rather than relying fully on an earlier one commissioned by the landowner.
- 3. If there are recognized or potential environmental contamination issues identified in the Phase 1 ESA, then a site investigation to collect soil, soil vapor, and groundwater samples may be conducted to confirm the nature and extent of site contamination. This assessment is known as a Phase 2 ESA.
- 4. If the Phase 2 ESA identifies contamination above the standards that are required to support the developer's planned land uses, then oftentimes a Human Health Risk Assessment (HHRA) is conducted. The purpose of the HHRA is to answer the question: "although the site has contamination above regulatory thresholds, are there site-specific considerations, either with the potential for exposure of future tenants or residents, or with mitigation measures that could be applied, that would still render the proposed land use to be safe?"
- 5. If the Phase 2 ESA and HHRA indicate that cleanup is required to support the future land use, then a Remedial Action Plan is developed to specify the nature and extent of cleanup required, and a Soil Management Plan is developed to specify actions to be taken during construction if there are unanticipated areas of contamination are encountered.



The California Department of Toxic Substances Control is the lead oversight agency for brownfield redevelopment. Also, DTSC's or the developer's discretion, DTSC can serve as the lead cleanup agency for a less complex property, although DTSC often delegates authority to a local agency under the Certified Uniform Program Agency (CUPA) process. DTSC or the CUPA agency works with property developers and local government, to apply their own risk assessment and remediation experience to craft the solution. DTSC also has grant and loan programs, and mechanisms to provide limitations of liability to developers.

The process with DTSC is a more specific example of the general process itemized at the start of this section, and consists of the following steps:

- Apply to DTSC: Submit required application and agree to reimburse agency costs during the
- Coordinate: As per the 2005 Memorandum of Agreement between DTSC, the State Water Resources Control Board and the Regional Water Quality Control Boards the agencies will work together to determine the lead regulatory agency.
- Negotiate: When DTSC is the Lead Agency, an agreement is developed, which includes sitespecific details, a scope of work, and an estimate of DTSC's charges. An opportunity to review the draft agreement is provided.
- Sign: Once the agreement is signed, your environmental consultant will work with DTSC's team of professionals to ensure the future development is safe.
- Pay: An advance payment is required when the Agreement is executed.
- Meet: The DTSC Project Manager reviews property information, and holds a scoping meeting to discuss schedule, tasks, regulatory requirements, and goals.
- Technical Work: DTSC technical experts review documents provided by your consultant, provide oversight of field work, perform public engagement activities, and coordinate other tasks as needed. Activities will vary from property to property.
- Invoice: DTSC's accounting office sends invoices of DTSC's charges quarterly.

DTSC also oversees the California Land Reuse and Revitalization Act (CLRRA) liability reduction program. CLRRA was enacted to promote cleanup and redevelopment of otherwise-blighted, contaminated properties through the provision of immunity from third party liability for the property developer. The law establishes a process for eligible property owners to obtain immunities, conduct a site assessment, and implement a response action as necessary, to ensure that the property can be reused or redeveloped. Immunities begin when a party enters into a CLRRA agreement.

The process also expedites the DTSC review process but does not lessen the degree of environmental protection from site contaminants that DTSC typically requires. CLRRA was first effective January 1, 2005. The sunset date for the original CLRRA bill has been extended multiple times. The current sunset date is January 1, 2027.

The remainder of this Sections presents the status and opportunities of the largest known brownfield redevelopment opportunities in the City. These provide partially worked examples of the brownfield redevelopment process. For the largest known sites in the City, there is information available to describe next steps in the development process. For the consideration of brownfield sites with potential for residential development, there was less information available. In order to progress the analysis of areas



for potential residential process, the general process itemized at the start of this section would be followed, beginning with a Phase 1 ESA.

2.2 Known Carson Opportunities

Carson has experienced the assessment, cleanup, developer interest, and litigation that can sometimes accompany the several large, prominent brownfield properties within the City. In addition, there are a host of relatively new brownfield development types that are growing rapidly in southern California. Although brownfield redevelopment can include several different lead cleanup agencies, the California Department of Toxic Substances Control (DTSC) oversees the brownfield redevelopment program in the state, provides grants for brownfield redevelopment, and oversees risk assessment and site cleanups. DTSC may also delegate authority to a local CUPA agency. DTSC also offers certain limits to liability for developers of brownfield sites. The financial programs are described in Section 3 of this memorandum.

DTSC and the City of Carson have previously worked together in Carson on the redevelopment of the of a contaminated landfill that had hosted the Dominguez Golf Course, into the Porsche Experience Center. This section describes remaining, known, prominent brownfield redevelopment opportunities.

In addition to considering the four largest brownfield properties in the City, this section also provides consideration of two other types of brownfield redevelopment: the first for residential developments, and the second for a fast-growing reuse for brownfields in urban areas: electric vehicle charging.

2.3 157-acre Former Cal Compact Landfill

This site received extensive interest during the race for a new NFL stadium between the Rams and the Chargers. The Carson stadium was to be a \$1.7 billion development, but the teams selected SoFi Stadium in Inglewood. Carson acquired the property, with an intention that five of the parcels on the landfill at Del Amo Boulevard and the 405 Freeway could be redeveloped.

The Department of Toxic Substances Control (DTSC) has overseen cleanup of the former Cal Compact Landfill since 1988 at a cost of \$41 million. From 1959 to 1965, the site was used as a landfill that collected both liquid and solid waste until it was covered and closed. It has remained vacant since 1965. When DTSC became the lead cleanup agency, site assessment indicated that the landfill contained carcinogenic chemicals such as benzene, chlorinated solvents, and other contaminants. There has been extensive cleanup, although it is not complete. A groundwater extraction and treatment system was operated, and a landfill gas removal and treatment system has been installed. Other parts of the site have been covered with a landfill cap. The additional work required includes at a minimum an expansion of the landfill gas extraction and treatment system.

Further cleanup work would be required for any of the redevelopment ideas advanced so far (e.g. parking lot, stadium, industrial, commercial, recreational, or residential uses). For example, had the stadium been developed, the parking areas would have been placed over formerly capped areas of the landfill, while additional remediation would have been required for the stadium structure. If a reuse that includes commercial or residential development were proposed, then higher levels of cleanup would be required for the more sensitive land uses. In some cases, placing residential development on upper floors with commercial development on the first floor, can reduce the amount of cleanup required to that supportive of commercial, rather than residential, land uses.



The current status of this property is that in May 2023 the City approved a specific plan amendment for this site. And the project is called District at South Bay 2021. The developer, Carson Goose Owner LLC, is proposing 1,567,090 sf of light industrial and 33,800 SQFT of restaurant/retail space on Planning Area 3 (cells 3, 4 and 5.) The site also includes a 22,740-sf dog park, a 3,343-sf performance pavilion, 25,400 sf children's plan area, 19,400 sf botanic garden, a 19,490 sf bioretention garden, a 1,800 sf beer garden, a 2,975-sf sculpture garden, a 4,425 sf water feature and iconic element, a 35,210 sf flex event lawn area, 50,774 sf of planted open spaces, and 52,159 sf of planted buffer areas for a total of 273,906 sf (6.29 acres) of programmed spaces, and open space / amenity areas. There is also a 0.62-acre linear park to the west of the light industrial uses. The total site area is 96 gross acres (85.55 net acres.) Staff has initiated the CEQA process for the project along with the specific plan amendment. The Draft Environmental Impact Report and associated 45-day public review period have concluded and response to comments are being prepared.

This example illustrates the tradeoffs typical of brownfield redevelopment: residual contamination is acceptable, under the condition that it be cleaned to a level that supports the proposed use. The more sensitive the land use, the more cost to clean the property.

2.4 Former BKK Landfill/Victory Golf Course (150 acres)

DTSC approved the 2016 Remedial Action Plan for the northern portion of the BKK landfill, which includes the public Victory Golf Course. The levels of cleanup required for this brownfield use was based on recreational land uses.

In 2021, a proposal to redevelop 94-acres of the southern portion of the golf course into a commercial and recreational facility with multiple venues was considered by DTSC. DTSC's analysis determined that the proposed site redevelopment included "Significant Changes" to the plan developed for the golf course. After further review, DTSC determined concluded that the Site's land-use remains recreational as previously established, and the proposed remedies in the remediation designed proposed for the new commercial and recreational facility complied with the California Code of Regulations Title 27 for Solid Waste.

If a residential development were proposed for this site, then this would constitute a "significant change" to DTSC's analysis of the risks of residual contamination. The developer would engage with DTSC to evaluate the proposed development, and the differences between residents and users of recreational facilities. It is likely that more cleanup would then be required to support residential development.

2.5 400-acre Shell Terminal

Carson has a 100-year petroleum history, including former oil fields, 12 refineries (including the large Marathon Refinery, the oldest on the west coast), tank farms, and pipeline facilities. The 400-acre Shell terminal has been discussed as a possible redevelopment opportunity, although our analysis did not confirm its availability. The Shell Terminal was originally built in 1924 as a refinery. In 1992, the refinery was decommissioned and dismantled, and currently operates as a distribution facility for receiving and distributing fuels throughout the Southern California region via pipeline and truck delivery. The Carson complex is connected to satellite terminals which include Mormon Island Marine Terminal at the Los



Angeles Port, Van Nuys Terminal and Signal Hill Terminal. Additionally, the Carson Terminal serves as the largest ethanol hub on the West Coast.

This potential opportunity highlights a challenge to brownfield redevelopment: community mistrust of the former owner.

A Shell oil and gas development area had been redeveloped for residential land use, known as the Carousel Tract. During installation of a new cable line in 2008, significant amounts of residual oil contamination was discovered. The Los Angeles Regional Water Quality Control Board is the lead agency overseeing Shell in the environmental investigation and cleanup of the Carousel Tract. The Water Board has initiated the environmental investigation as a result of potentially significant and harmful contamination in the soils and groundwater underlying the Carousel Tract. Residents in the 285-home community sued Shell, and the City of Carson joined the suit, alleging health hazards from widespread contamination in their Carousel tract neighborhood, and that Shell created a public nuisance by leaving contaminants at the site. This action was very prominent both in the community and at the Los Angeles Regional Water Quality Control Board and could complicate redevelopment of the Shell Terminal if residential land uses are contemplated.

Areas for Potential Residential Development 2.6

The process for redevelopment of brownfield sites to residential land use is the same as described in Section 2.1 and illustrated with the four major brownfield sites in the City. However, the cleanup standards to support residential land use are the highest compared to any non-residential land use (most amount of cleanup required). For the properties considered in this section and in the earlier Catalyst report provided in Appendix 1, the data indicated the type of environmental database that indicated potential contamination. To advance the analysis, Phase 1 ESAs, as described in Section 2.1, would be required.

In very general terms, sites that are contaminated by metals or non-solvent and petroleum contamination tend to require less cleanup for residential use, because these compounds are less mobile in the environment and can be readily excavated and property disposed of as part of the redevelopment. Sites contaminated with solvents (including older dry cleaners) or petroleum contaminants require more cleanup because these compounds more readily contaminate groundwater, or have associated vapors that can migrate into structures. If the site contamination includes soil vapors, then a specific foundation design or vapor barrier system is sometimes required.

Figure 1 of this report identifies the known brownfield sites in Carson. Figures 7 and 8 of the Catalyst Technical Memorandum provided as Appendix A to this report³ provides maps of potential brownfield sites that could be converted to residential land uses. The maps indicate several different data sources for the brownfield identification. Post-closure sites have received regulatory approval for redevelopment, but as illustrated for the Victory Golf Course (Section 2.4), the approval is typically not for residential development and further cleanup is likely to be required. These sites are still the highest likelihood for redevelopment identified in the analysis, however, because there has been a sufficient

³ City of Carson Economic Development Strategic Plan: Green and Economic Infrastructure Assessment. Catalyst Environmental Solutions Technical Memorandum and Map Set, November 11, 2021. Provided as Appendix 1 to this report.



level of site investigation and risk assessment to support the closure decision. For the other designations identified on the map, there is insufficient information at this time to support a determination that residential land use would be acceptable to DTSC/CUPA.

In the development of the Economic Development Strategy, five properties were identified as brownfields that could add to the housing stock. All of these sites would require further site investigation to determine whether they would currently support residential land use, or whether site cleanup would be required by DTSC/CUPA.

New Use for Brownfield Properties: EV Charging 2.7

This section has focused on the most prominent brownfield properties in the City, both to focus on the opportunities, and to provide examples of the issues that surround such redevelopment. With the state's goals to electrify as much of the transportation sector as feasible, there has been a growing wave of electric vehicle charging stations. These are a good use of 0.5 to 1 acre brownfield sites because the land use can tolerate residual levels of contamination, and such sites are frequently within infill development areas for which potential users do not have access to at-home charging. These come in several types:

Fleet charging, such as the types of fast charging installations that may be considered by the City for its vehicle fleet as it electrifies. Fleet charging tends to be on the owned property of the fleet owner but can include acquisition and redevelopment of new parcels. Brownfields are ideal for this application because they are good targets for infill development where land prices are high, and they can tolerate higher levels of residual contamination than a commercial or residential redevelopment.

Public charging. To electrify the private auto sector, widespread public charging stations will be required. While homeowners with garages may be able to charge their vehicles overnight, residents in apartments and condominiums typically cannot. They rely on either public charging stations in garages or parking spots, or on commercially developed public charging stations. Tesla and EVgo are actively acquiring brownfield properties for this type of infill development, and many of the brownfields identified in Figure 1 would be suitable for this use because they are proximate to areas that may not have home charging available.

Drayage charging. Drayage is truck transport from ports (such as the Ports of Long Beach and Los Angeles) to rail connections. This vital link is being actively pursued for electrification, and drayage charging is a fast-growing sector of the electric vehicle charging market. Carson is ideally located to support drayage transport, and the associated electric truck charging installations required for this use. The size of a drayage charging facility varies based on several factors, including the number of stations and access requirements for the trucks. Typically, a drayage charging facility ranges from a few to 10 acres.



SECTION 3 Brownfield Redevelopment Funding Opportunities

State and federal grant and loan funding opportunities were investigated. The California Department of Toxic Substances Control (DTSC), and the U.S. Environmental Protection Agency (EPA) both have loan and grant opportunities, in addition to other grants available to the public for environmental cleanup. Data sources and supporting information for this section are provided in Appendix 2.

3.1 Department of Toxic Substances Control

3.1.1 Overview

The Department of Toxic Substances Control (DTSC) provides many funding opportunities to assist with environmental investigations and cleanup of properties throughout California. They lead the brownfields program in California.

3.1.2 Grants

Site Mitigation & Restoration Program (SMRP)

The SMRP is responsible for overseeing the evaluation and cleanup of contaminated properties throughout the state of California, including brownfields and voluntary agreements, State Superfund, military facilities, school construction and expansion projects, and corrective action and tiered permitted facilities. The City of Carson is in DTSC Region 4, with the regional office in Cypress, California.

Overseen by the SMRP is the Cleanup in Vulnerable Communities Initiative (CVCI). The CVCI was signed into legislation by Governor Gavin Newsom and sets aside \$500 million dollars for a multi-year investment in communities that suffer from multiple sources of contamination. The DTSC will provide \$250 million dollars to incentivize cleanup and investment in disadvantaged communities under the CVCI. Cleanup in Vulnerable Communities Initiative programs include the Equitable Community Revitalization Grant (ECRG), Discovery and Enforcement, Workforce Development, Technical Assistance Grants, Community Benefits Agreements, and Orphan Sites funding. Table 1 provides a list of available grants through DTSC, their amount, purpose, link to available information, and application timelines.

Currently, the DTSC is hosting the ECRGenius Webinar Series to prepare ECRG applicants for the Round 2 ECRG application opening. The ECRD Round 2 application opens Monday August 14, 2023, and will close October 9, 2023. The City of Carson was a recipient of an ECRD Grant in 2022 for an Environmental Investigation at the 20151 Main Street (Sywest Development) site. The Sywest Development site will be reused for commercial, retail, or industrial purposes. The City of Carson was awarded \$315,000 for this effort.



Table 1. DTSC Grant Opportunities

Grant	Amount	Purpose	Relevant Link	Application Timeline
Equitable Community Revitalization Grant (ECRG)	\$85 Million (M)	*For cleanup and beneficial reuse of contaminated properties, with priority given to properties in historically vulnerable and disadvantaged communities	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14, 2023 – October 9, 2023 \$85 million Available
**Community- wide Assessment Grant	\$350k	First step assessments (e.g., Phase I Environmental Site Assessments (ESA); Phase II ESA; Preliminary Endangerment Assessments (PEA))	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14,2023 – October 9,2023 \$85 million Available
**Site-specific Investigation Grant	\$150k to \$7M	And/or cleanup planning at a site for reuse. All Appropriate Inquiries (AAI) or Phase I ESA, Phase II ESA, PEA	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14,2023 – October 9,2023 \$85 million Available
**Site-specific Cleanup Grant	\$150k to \$7M	Planning, implementation and reporting costs for cleanup, pilot tests and sampling/analysis to design the cleanup, public engagement and cleanup-related California Environmental Quality Act (CEQA) activities	https://dtsc. ca.gov/ecrg/	Round 2 Open August 14,2023 – October 9,2023 \$85 million Available
*Discovery and Enforcement	More than \$152M	Fund investigation into a prevalent and ubiquitous potential source of contamination: from up to 7,500 current or former dry cleaners	https://dtsc. ca.gov/petiti on/	Public Petition Process
*Workforce Development	More than \$4M	Provide education, training, and certification to community members for employment in cleanups	N/A	N/A
*Technical Assistance Grants	\$3.5M	Funds will be used for technical advisors and community science, with the goal of effectively communicating technical information to communities and encouraging involvement though community science	https://dtsc. ca.gov/tag/ Mailing list link: https://lp.co nstantconta	Contact for more information



			ctpages.com /su/cmq4Al o/cvcitag	
Community Benefits Agreements	\$800k	Agreements between Responsible Parties of cleanup sites and impacted communities affected by high cumulative environmental burdens to promote benefits beyond the traditional scope of site mitigation and restoration	https://dtsc. ca.gov/clean up-in- vulnerable- communitie s-initiative- cvci/cba/	Contact for more information
Revolving Loan Fund Grant Program	Cleanup grants up to \$350k; Assessment grants up to \$200k	Grants to local governments, tribal entities, and nonprofits that are not potentially liable under CERCLA section 107 to assess or clean up two types of brownfield sites – hazardous substances or mixed contaminant sites and petroleum sites.	https://dtsc. ca.gov/revol ving-loan- fund-rlf- program/	DTSC reviews applications and issues grant awards on an ongoing basis, subject to funding availability

^{*} Cleanup in Vulnerable Communities Initiative (CVCI), Gavin Newsom Legislation; \$250-million dollars available for disadvantaged communities; ** Under the ECRG; N/A; Information not available or not accessible at the time of this memorandum

3.1.3 <u>Loans</u>

In addition to various grants provided by the DTSC, DTSC offers two low-interest loans. Under SMRP, DTSC offers the Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program and the Investigating Site Contamination Program (ISCP). Loans through CLEAN and ISCP can be used for the cleanup of hazardous materials at abandoned or underutilized urban sites, and initial site investigations, respectively. Loans are granted after a two-phase application process. Once in phase two the applicant must submit a \$1,500 loan non-refundable application fee. Details on the application process can be found using the links provided in Table 2, DTSC Loan Opportunities.

Table 2. DTSC Loan Opportunities

Loan	Amount	Purpose	Relevant Link	Application Timeline
Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program	Up to \$250M	Low-interest loans for hazardous materials cleanup where redevelopment of abandoned and underutilized urban properties is likely to have a beneficial impact on the property values, economic viability, and quality of life of a community.	https://dtsc.ca.go v/clean-and-iscp- programs/	Two phase application process, apply as needed



Investigating Site Contamination Program (ISCP)	Up to \$100k	To conduct preliminary endangerment assessments of underutilized urban properties. If redevelopment of property is determined not economically feasible, up to 75 percent of the loan amount may be waived.	https://dtsc.ca.go v/clean-and-iscp- programs/	Two phase application process, apply as needed
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3.2 U.S. Environmental Protection Agency

3.2.1 Overview

The U.S. Environmental Protection Agency (EPA) oversees the brownfield program nationally and offers a variety of grant and loan programs and technical assistance to help communities assess and clean up brownfields and prepare them for redevelopment.

3.2.2 Grants and Loans

Grants and loans offered by the EPA Brownfields Program may be used to address sites contaminated by hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum) and petroleum. The Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, environmental job training, technical assistance, training, and research. The EPA works with state agencies to identify funding that can be used for brownfield activities. Grants and loans available through the Brownfields Program include the following: Assessment Grants, Revolving Loan Fund (RLF) Grants, Cleanup Grants, Multipurpose (MP) Grants, Job Training (JT) Grants, and State and Tribal Response Program Grants. Table 3 provides information on grant and loan amounts, purpose, relevant links, and application timelines. Many of the funding sources under the EPA Brownfield Program have closed solicitations for fiscal year (FY) 2023 but have an anticipated open period for FY24 in September 2023.

Table 3. EPA Grant and Loan Opportunities

Grant	Amount	Purpose	Relevant Link	Application Timeline
*Community- wide Assessment Grants	Up to \$500k	for communities that are beginning to address their brownfield challenges, as well as for communities that have ongoing efforts to bring sites into productive reuse	https://ww w.epa.gov/b rownfields/b rownfields- assessment- grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
*Assessment Coalition Grants	Up to \$1M	**Designed for one "lead" eligible entity to partner with two to four eligible entities that do not have the	https://ww w.epa.gov/b rownfields/b	Closed for Fiscal Year (FY) 2023



		capacity to apply for and manage their own EPA cooperative agreement and otherwise would not have access to Brownfields Grant resources.	rownfields- assessment- grants	Upcoming Solicitations for FY24 (anticipated September 2023)
* Community- wide Assessment Grants for States and Tribes (CWAGST)	Up to \$2M	Only available to states, tribes, and eligible native corporations in Alaska to address brownfield sites throughout their entire jurisdiction.	https://ww w.epa.gov/b rownfields/b rownfields- assessment- grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
Revolving Loan Fund (RLF) Grants	Up to \$1M	Provide funding for a grant recipient to capitalize a revolving loan fund and to provide loans and subgrants to carry out cleanup activities at brownfield sites	https://www.epa.gov/brownfields/brownfields-revolving-loan-fund-rlf-grants	EPA will not run an RLF Grant competition in FY24
Cleanup Grants	Up to \$500k for one site; Up to \$1M for multiple sites; Up to \$2M for multiple sites	Provide funding for eligible entities to carry out cleanup activities at brownfield sites. An applicant must own the site for which it is requesting funding.	https://ww w.epa.gov/b rownfields/b rownfields- cleanup- grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
Multipurpose (MP) Grants	Up to \$1M	Grant is appropriate for communities that have identified, through community engagement efforts, a discrete area (such as a neighborhood, a number of neighboring towns, a district, a corridor, a shared planning area or a census tract) with one or more brownfield sites who wish to carry out a range of eligible assessment and cleanup activities, including planning and additional community engagement activities.	https://ww w.epa.gov/b rownfields/b rownfields- multipurpos e-grants	Closed for Fiscal Year (FY) 2023 Upcoming Solicitations for FY24 (anticipated September 2023)
Brownfields Job Training (JT) Grants		F nonprofits, local governments, and other organizations to recruit, train, and place unemployed and underemployed residents of areas affected by the presence of brownfield sites.	https://www.epa.gov/brownfields/brownfields-	FY24 Currently Soliciting Applications Closes August 2, 2023



			job-training- jt-grants		
* Under the	* Under the Brownfields Assessment Grants; ** Lead and non-lead eligibilities apply				

3.3 Other Funding Sources

Both the DTSC and the EPA host webinars to assist applicants looking for funding outside of available programs. The goal of these webinars is to share information about other state and federal funding sources. Table 4 provides links to websites designed to assist with acquiring funding for brownfield activities.

Table 4. Additional Funding Opportunities

Organization	Focus Area	Purpose	Website
EPA	Brownfields	Provides relevant information regarding brownfields, funding, cleanup efforts	https://www.epa.gov/brow nfields
EPA	EPA Grants	Provides information on EPA grants, technical assistance, webinars series, and the application process.	https://www.epa.gov/grant
EPA	Brownfield Grants	Website for open solicitations for EPA grants, as well as future solicitations	https://www.epa.gov/brow nfields/solicitations- brownfield-grants
Grants.gov	Grant Funding Sources	A search engine for funding opportunities throughout the country. Can search by focus area (i.e., environment).	https://www.grants.gov/web/grants/search-grants.html
DTSC	Brownfields	Informational website regarding brownfields regulated by DTSC. Provides links to funding opportunities and advertises available informational sessions (webinars).	https://dtsc.ca.gov/brownfi elds/



Appendix 1: Previous Catalyst Tech Memo Supporting This Report



Friday, November 11, 2021

City of Carson Economic Development Strategic Plan *Green and Economic Infrastructure Assessment*

Introduction

The City of Carson is a densely developed, urban, land locked city, which is geographically positioned as an inland port that is located closely to the Port of LA, major interstate highways, rail line, and airports. These factors frame Carson as an ideal hub for logistics, warehousing, and industry. Over time, Carson has become densely developed with businesses that specialize in these sectors. While providing a firm economic foundation, the City of Carson is looking to balance these existing economic uses with more community-focused uses that also provide economic diversification and green infrastructure opportunities. To identify these potential opportunities, the City of Carson is preparing an Economic Development Strategic Plan which will consider this review of the City's green and economic infrastructure.

To understand redevelopment opportunities in Carson, all major infrastructure (i.e., city zoning, transportation, green infrastructure, public infrastructure, the energy grid, brownfield sites, etc.) was mapped, over-laid, and synthesized (Attachment 1 – Map Set). A Strengths, Weaknesses, Opportunities, and Threats (SWOT) was performed on these base findings to clarify the City's existing public, economic, and green infrastructure assets, resources, and opportunities. This exercise allows for the identification of redevelopment trends in the City (i.e., areas of dense manufacturing, public infrastructure concentration, brownfield sites, etc.), and highlight areas for potential redevelopment. This memorandum reviews this technical approach and its findings, culminating in a set of recommendations accompanied by a map of proposed redevelopment areas by level of potential.

GIS Analysis

This section provides narratives that discuss the key findings of each map developed for the assessment (Attachment 1).

Green Infrastructure

The green infrastructure map is the coalescence of green and open space, farms, and water resources in and around the city of Carson, CA (**Figure 1**). Green space is a catch all term that includes parks, open space (i.e., zoned as such, undeveloped lands, area around channels, etc.), playgrounds, pervious pavement (e.g., pavement that allows water to seep into the soil below), green medians (e.g., road medians that are vegetated), and bioretention curb extensions (e.g., curbs that are engineered to have vegetation for water retention purposes). Water resources include freshwater ponds, channels, wetlands, and rivers in and around Carson.

Almost all green space is west of Wilmington Avenue except for Dominguez Park, which is east of State Highway 47. Most green space in Carson comes from parks and open spaces.

Water resources in Carson include freshwater emergent wetlands (e.g., at parks, heavy manufacturing facilities, undeveloped areas, etc.), freshwater ponds, creeks, and rivers. The major waterway crossing Carson is the Dominguez Channel flowing northwest to southeast. The Dominguez Channel transitions from a riverine to estuarine marine deep-water environment. Outside of Carson is the Compton Creek and Los Angeles River. Most water resources in Carson are near areas zoned for manufacturing.

Zoning

The zoning use map displays zoning within the city of Carson, CA (**Figure 2**). Heavy and light manufacturing represent 36 and 12 percent of the zoned area in Carson, respectively. Various residential zoning makes up 30 percent of the zoned area.

Manufacturing zones are concentrated in the north and southeast of Carson. Along State Highway 91, west of Avalon Blvd, and north of Del Amo Blvd. This continues south of Del Amo Blvd. and east of Avalon Blvd. Residentially zoned areas are located southwest and northeast of the Dominguez Channel, with one area of residential zoning east of State Highway 47 and north of Interstate 405. The remainder of the city is a patch work of mixed use, special use, commercial, and open space zoning. Open space makes up six percent of the zoning in Carson.

10 areas in Carson have been set aside for specific development projects. These projects are throughout the city and are concentrated in residential areas, except for California State University, Dominguez Hills which has three developmental plans surrounding it. The focus of the projects is a mix of housing and commercial development.

Public Infrastructure

The public infrastructure map displays public assets and the agencies that run them in the city of Carson, CA (**Figure 3**). Highlighted in this map are major assets, or areas of high asset concentration. The five highlighted areas are not all encompassing but attempt to showcase the variety of public assets in Carson. Most public assets sit between Main St. and Avalon Blvd. or are in close proximity to these major roads.

<u>Box A:</u> is in the southwest of Carson near Interstate 110, along W. 223rd St and Main St. This area has a high concentration of LAUSD schools. Between the three school clusters is Fire Station 36. Unsurprising, the area is zoned for mixed residential housing.

<u>Box B</u>: highlights California State University, Dominguez Hills (CSUDH). The university is one of 23 CSUs in California. CSUDH is in the northeast of Carson and in the middle of residential housing and three areas slotted for specific development plans (the Dominguez Hills Village, Dominguez Technology Center S.P. (Phase 1), and Dominguez Technology Center S.P. (Phase 2)). North across the street of CSUDH is Fire Station 116, one of four fire stations in Carson.

<u>Box C</u>: is a cluster of civic buildings. The Carson City Hall, Post Office, and Sheriff's office are in the center of Carson, west of Interstate 405 on the corner of Carson St. and Avalon Blvd. The buildings are governed by LA County and the Carson municipality. Southeast of City Hall is a Los Angeles Unified School District (LAUSD) school. This area is zoned for commercial, green space and residential uses.

<u>Box D</u>: displays a hospital in the south of Carson. There are four buildings in Carson described as hospitals. In the north of Carson there is another hospital located on the corner of S. Broadway and W. Gardena Blvd.

<u>Box E:</u> is in the southwest corner of Carson, bordered by Intestate 110 and Sepulveda Blvd. This is the sanitation district for the region and has a Long Beach City office on site. The surrounding area is zoned for heavy manufacturing.

Brownfields

The brownfields map displays brownfield locations in the city of Carson, CA, sourced from the California Department of Toxic Substances Control EnviroStor online data management system and U.S. Environmental Protection Agency Geospatial Data Download Service (**Figure 4**). About a third of brownfields in Carson are

categorized as voluntary cleanup and more than half fall into the categories of evaluation, corrective action, state response, and tiered permit. Twelve are listed at non-operating sties and two at post closure sites.

Brownfield locations in Carson are concentrated along the Dominguez Channel and runs northwest to southeast, splitting the city roughly in half. The remaining brownfield sites are in northern and southern Carson.

There is a high concentration of brownfields around the Interstate 405 110 intersection near Del Amo Blvd. This area is zoned for light and heavy manufacturing, regional center commercial, and a variety of residential housing. This trend holds true as you move southeast along the Dominguez Channel.

Between Del Amo Blvd. to the north and Sepulveda Blvd. to the south is another heavy concentration of brownfields. Brownfields in this part of Carson are at post closure and non-operating sites in areas zoned for heavy and light manufacturing.

Energy Infrastructure

The energy infrastructure map displays overhead electrical transmission and natural gas lines in and around the city of Carson, CA, and a substation within the city limits (**Figure 5**). Transmission lines that run through Carson are owned and operated by the Los Angeles Department of Water and Power (LADWP) and Southern California Edison (SCE) (an investor-owned public utility and subsidiary of Edison International).

Most transmission lines in Carson are 115 kilovolts and owned by LADWP. The higher kilovolt lines are owned by SCE and are found in the north and east of Carson along the city's periphery, except for LADWP's 138 kilovolt line south of Carson. The only substation identified is in the north of Carson near the corner of Central Ave. and Greenleaf St. The highest voltage transmission lines are near manufacturing hubs.

Natural gas distribution covers much of Carson but there is a gap in coverage southwest of Interstate 405 and west of Wilmington Ave. This area of Carson is zoned for a variety of purposes but dominated by mixed residential and heavy manufacturing.

Transportation

The transportation infrastructure map displays all major roads within and surrounding the city of Carson, CA (**Figure 6**). In addition, it highlights transportation infrastructure important to industry and the population of Carson.

Carson has three interstates, and two state highways that define its boundaries. State Highway 91 is located in the north of the city running east west and State Highway 47 runs north south and is located in the east of Carson. Both state highways cut through zoned areas dominated by manufacturing. Interstates 110 and 710 make up the west and east borders of Carson, respectively. These interstates go through manufacturing and residential zones. Interstate 405 runs east west diagonally through the heart of Carson, paralleling the Dominguez Channel before intersecting Interstate 710. Interstate 405 runs through residential, manufacturing, and open space areas. Within the city there are numerous boulevards, collector and residential streets.

Outside of Carson's western boundary south of the Interstate 405 110 intersection is an Amtrak Bus station. The Amtrak bus route goes around Carson and follows Interstate 710 on the east of town but lacks a bus station. Despite this, there is a thorough municipal bus network throughout Carson's residential and commercial zones, with some gaps in areas dominated by manufacturing.

The rail network runs through manufacturing zones in the east and south of Carson. The railway parallels State Highway 47 in the east and Sepulveda Blvd. in the south. In the southeast of Carson along the railway is a

freight intermodal facility. This facility is instrumental for the movement of goods in and around the state of California.

North of Carson is the Compton Woodley Airport. Compton Woodley Airport is owned and operated by the County of Los Angeles. This is a general aviation hub and not a commercial airport. The airport houses private planes, an aviation museum, and aviation-related businesses.

Potential Redevelopment Opportunities

The redevelopment map identifies potential sites in Carson for redevelopment (**Figure 7**). These sites were picked based on manufacturing zones, brownfield sites, and proximity to residential areas. Along with the areas we selected for redevelopment potential are locations already identified by the City of Carson as specific plan areas (e.g., locations the city plans to redevelop for various purposes).

Most sites we identified for redevelopment potential lie east of Avalon Blvd. which cuts Carson in rough halves. We labelled redevelopment potential in three-tiers, high, medium, and investigation needed. There is 784, 85.36, and 306.67 acres of high, medium, and investigation needed potential redevelopment, respectively. These calculations are rough estimates based on our parcelling of the brownfield sites and information gathered from the California Department of Toxic Substances Control EnviroStor online data management system.

High potential areas are those sites near residential areas with brownfield designations, and or, are non-operating or post closure. Areas identified as medium potential for redevelopment are post closure sites, are undergoing permit reviews, or are potentially being sold. The third tier, investigation needed, are sites where property sales are ongoing, or we could not find enough information to put them into the high or medium tiers. All designations were established using information sourced from the California Department of Toxic Substances Control EnviroStor online data management system.

The redevelopment areas map displays a zoomed in look at the areas we identified in the redevelopment map (**Figure 8**). All sites identified have brownfield designations.

<u>Box A:</u> is the northern most identified site for potential redevelopment in Carson near the corner of Gardena and Avalon Blvd. This site was put in the medium tier because it is undergoing closure. It is located west of a residential area and zoned for heavy manufacturing

<u>Box B:</u> highlights sites from all three tiers. These sites are located between Del Amo Blvd. and Wilmington Ave. and are zoned for light manufacturing. These locations border two residentially zoned areas to the north and south, and manufacturing to the east and west.

The high potential site is a large area with proximity to residential neighbourhoods, the medium potential site is a brownfield site that is non-operating and undergoing administrative closure, and the investigation needed site was labelled as such due to a lack of information available.

<u>Box C</u>: is in the east of Carson and again highlights all three tiers. The area is near the corner of S. Alameda St. and E. 223rd St. The area is zoned for heavy manufacturing.

The high potential sites are closed and have undergone some remediation work. The site in the medium tier has a land restriction, and the site in the third tier lacked information to put it into either other category. However, it is a former landfill site.

<u>Box D</u>: displays a large area in the southeast of Carson with brownfield sites listed as non-operating or post closure. The sites run along the corner of S. Alameda St. and E. Sepulveda Blvd. This areas is zoned for heavy manufacturing.

The high potential sites have been closed for some time and the investigation needed site is going through post-closure but still operating.

<u>Box E</u>: is south of Sepulveda Blvd. along S. Main St. in the southwest corner of Carson. This area is zoned for heavy manufacturing and is adjacent to a residential neighborhood. We labeled this site as investigation needed because it was sold in 2017.

SWOT Analysis

A SWOT analysis was performed on the green and economic infrastructure of Carson (**Attachment 2 – SWOT Analysis**). The spatial analysis we performed helped guide our SWOT results. This exercise was done to help identify strengths in Carson's green and economic infrastructure, barriers to further development of them, and provide information that may assist in their enhancement. The SWOT analyses are not all encompassing and should serve as a tool to provide useful information regarding Carson's potential enhancement opportunities.

The economic infrastructure SWOT analysis was performed using public, transportation, and energy infrastructure synthesized from our spatial analysis. Similarly, the green infrastructure SWOT analysis utilized open and green spaces, zoning, and water features.

Strengths identified in the SWOT analyses include a strong public transportation network, potential for high walkability, easy mobility due to state highways and Interstates, great location near the Port of LA, and residential areas near greenspace.

Weaknesses recognized from the green infrastructure SWOT analysis include a very low percent of green and open space, land zoning that is dominated by manufacturing, and a lack of a trail system in Carson. The economic infrastructure SWOT also identified zoning as a potential weakness, as well as no central gathering place in the city, few opportunities for residents to switch out of the manufacturing industries, and no commercial airport near Carson.

Economic opportunities we identified come from rezoning sections of Carson, redeveloping brownfield sites, using the existing power grid to transition to alternative energy sources, and tapping into funding coming from future Olympic games. Green opportunities also highlight the need for rezoning to move away from industrial manufacturing, using brownfield sites to increase green and open space, tapping into money from the EPA, as well as local brownfield clean-up grants, and adding a bikeway through Carson.

Some threats we identified include loss of greenspace expansion to commercial or residential development, threats from climate change on the energy grid and urban heat island effect, and push back from long-term city partners. We also recognize the impact to locals who may face gentrification and loss of income due to a changing Carson.

Attachment A Green and Economic Infrastructure Map Set





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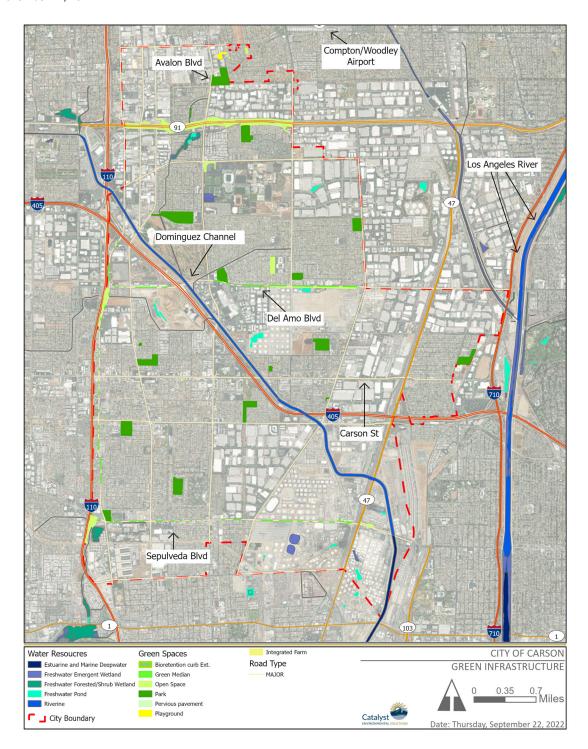


Figure 1: Green infrastructure within Carson, CA. This map showcases parks, open spaces, green-medians, and water features in and around Carson, CA. Eastern and south-eastern Carson have limited green space.

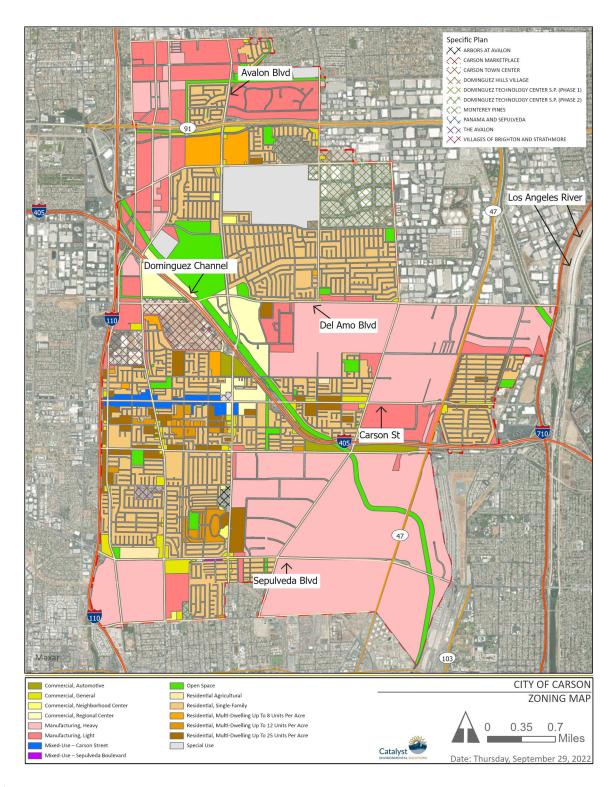


Figure 2: Carson, CA zoning. Zoning in Carson is dominated by residential (single family and mixed family units) and manufacturing (both light and heavy). There are 10 areas in Carson zoned as "Specific Plan," these areas have been set aside for housing development, commerce, and city improvements.

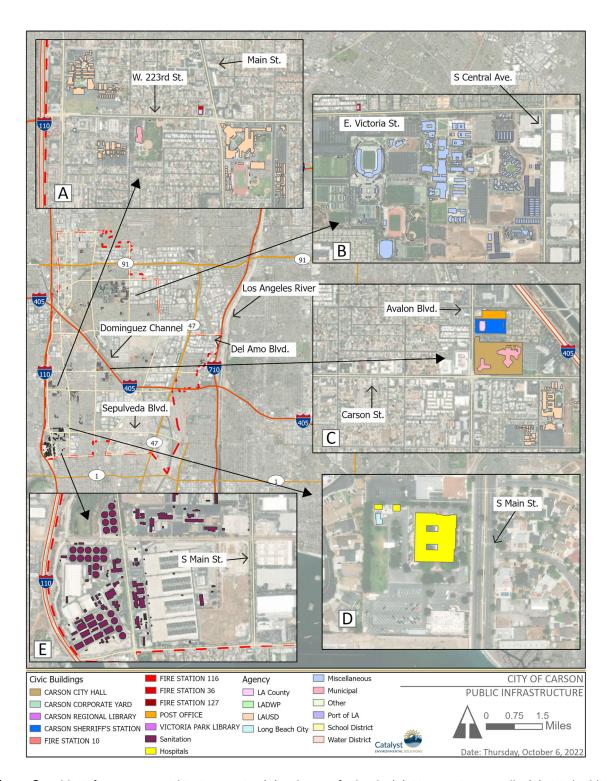


Figure 3: Public infrastructure within Carson, CA: (A) a cluster of schools, (B) CSU Dominguez Hills, (C) civic buildings (i.e., City Hall, post office, sheriff's office, etc.), (D) a hospital in the south of Carson, and (E) the sanitation district. The map also depicts regional agencies and their assets found in Carson. The map is not all encompassing but highlights a variety of public infrastructure in the city.

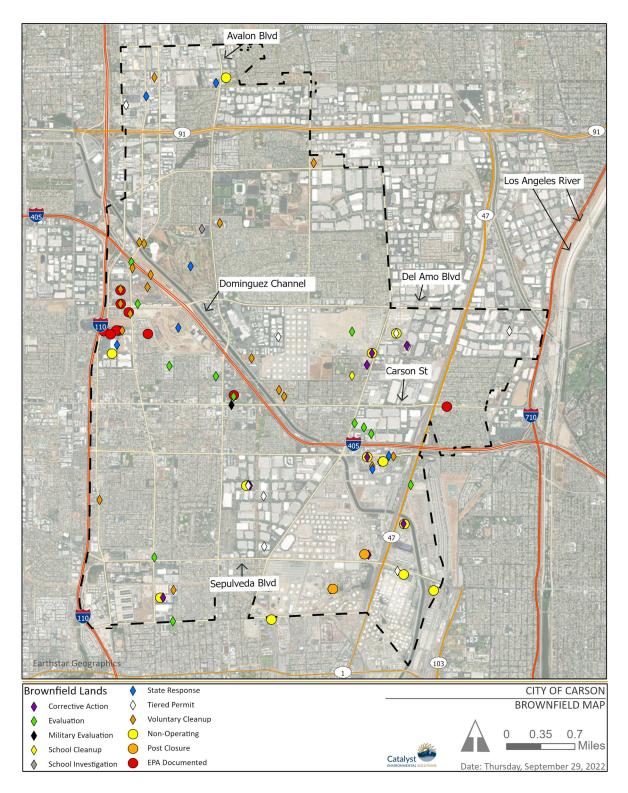


Figure 4: Brownfield land within Carson, CA. Brownfield land in Carson is predominately located in areas zoned for manufacturing, but some do border areas zoned for residential housing.

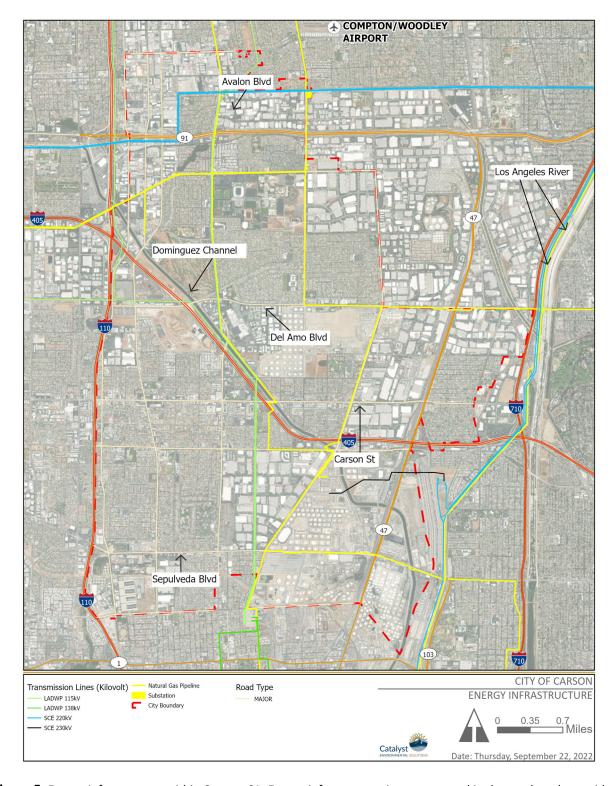


Figure 5: Energy infrastructure within Carson, CA. Energy infrastructure is concentrated in the north and east side of the city.

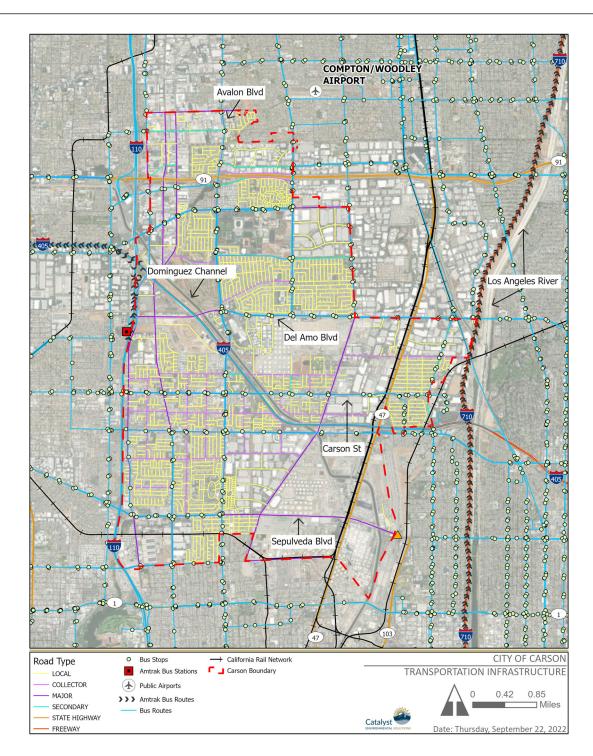


Figure 6: Transportation infrastructure within Carson, CA. Carson supports many transportation options (i.e., highways, municipal bus routes, Amtrak bus station, and rail).

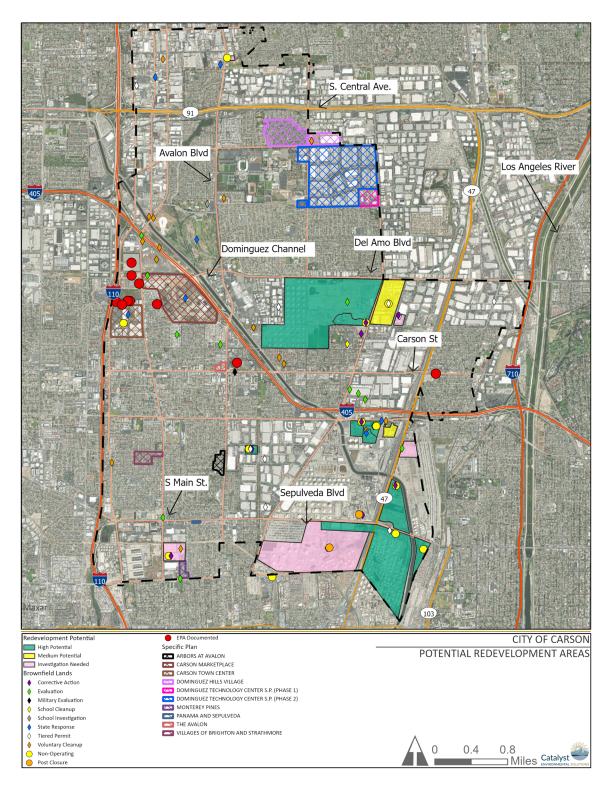


Figure 7: Redevelopment opportunities. Brownfield land, city zoning, and areas designated for specific plans were used to highlight redevelopment potential. Pink areas labelled "investigation needed" need further review due to pending permits, property selling, or lack of information regarding their brownfield status.



Figure 8: Redevelopment areas within Carson, CA: (A) a building undergoing closure, (B) an area in the center of town with redevelopment potential, (C) a cluster of land with redevelopment potential, (D) a large area of redevelopment potential in the southeast of Carson, and (E) an area adjacent to residential zoning undergoing monitoring. Like Fig.7, brownfield land, city zoning, and areas designated for specific plans were used to identify redevelopment potential.

Attachment B Green and Economic Infrastructure SWOT Analysis



Innovative solutions for a complex world



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Green Infrastructure SWOT

Strengths

- Residential areas near open spaces/ parks.
- Freshwater ponds in manufacturing areas (presumed biofiltration)
- Proximity to water (Dominguez Channel/ LA River)
- Dispersed green medians on primary city streets.
- Dispersed use of pervious pavements and bioretention curbs along some roadways.

Weaknesses

- Six percent open and green space.
- Not a lot of current available space to convert.
- Not a lot of green space in east and southeast.
- Lack of designated bikeways or bike trails that can serve as local thoroughfare for commuting and local trips, as well as a community vein through city core (main street zone).
- Land Use zoning is dominated by manufacturing.
- Lack of pervious space across City.

Opportunities

- Turn available open space into greenways.
- Non-operating brownfield locations can be repurposed for City beautification and create public greenspace.
- Can increase green roofs/ solar roofs
- Grant / loan funding through the EPA (cleanup, job training, state, and tribal response)
- California brownfield program
- Reduce Urban heat island with greening
- Dominguez Channel bikeway or trail system.
- Tap funding available from Olympics for City beautification (tree plantings, greenspace/parks, community gathering space/town square/park/BBQ).
- Reduce industrial viewshed with greenwalls (tree walls, arborvitae).

Threats

- Greenspace might get repurposed for housing or commercial development.
- Climate change and demand on power grid, water supply, sea level issues
 - Types of plants that can be used for greening need to be resilient to climate change.
 - Climate change will continue to raise ambient temperatures and densely developed nature of the city will amplify that effect.
- Retiring industrial properties that may require remediation before reuse/re-purposing.
 - Will take a lot of money to improve this (a lot of remediation).

Innovative solutions for a complex world



Friday, November 11, 2021

Opportunities continued.

- Create a city bikeway/ bike trail system to reduce traffic and create local public asset to promote exercise, beautification, and city core (main street zone).
- City assets and buildings are centralized on the central-west side. This
 cluster lends itself to using Avalon Avenue and/or Carson Street as a
 core zone to beautify and "green-up". Near primary residential zones;
 traverses entire city north-to-south (Avalon) and east-to-west (Carson
 St); provides access to majority of City parks and greenspace; provides
 extensive bike-and-ride opportunities to public transportation network
 and commercial core on central-west side near Dominguez Channel
 (zoning map).
- Adjust city zoning to deter expanding industrial use/re-use. Introduce more mixed use near residential zones to promote walkability.
- Expand green medians to other main streets in City (Avalon, Carson, Del Amo, Main, Wilmington).
- Expand City-wide tree planting to promote urban canopy as a heat shield and carbon capture resource. Change City code to require tree plantings in addition to securing potential grant money.
- Improve City stormwater capture and re-use/reclamation facilities to improve local water supply for beautification

Economic Infrastructure SWOT

Strengths

- Extensive public transportation network, especially bus routes.
 - Potential for high walkability.
- Public Infrastructure between Main Street and Avalon Blvd.
- Public University could be a partner for changing industries in the city.
- Transportation three major highways provide shipping and transportation resources in I-405; I-710; and I-110. Also available rail network in south of City.
- Specific planned projects for Carson residential areas on former brownfield sites.
- Available network of natural gas pipelines and electrical transmission lines.
 - Electrical grid has high voltage hubs.
- Community Development Block Grant (CDBG) funding from US Department of Housing and Urban Development.
- Prime location near Port of LA.
- Scheduled broadband fiber optic line.

Opportunities

- Good grid for potential renewable energies.
- Reuse of brownfields to diversify City economy. Use for mixed use or commercial use.
 - Private-Public partnerships
 - Equitable Community Revitalization Grant (ECRG)
 - Brownfields Revolving Loan Fund (RLF) Grant Program
 - Clean-up Loans and Environmental Assistance to Neighbourhoods (CLEAN) Program
 - Investigating Site Contamination Program (ISCP)
 - Webinars available for other funding sources
- Nat. Gas to the southwest of the city

Weaknesses

- No commercial airport near the city.
- Few Amtrak bus stations.
- Excessive manufacturing and few commercial areas.
- Few opportunities for career switching for industry employees.
- Lack of central gathering place in City. Lack of city core/main street for community gathering.
- Zoning is dominated by manufacturing, which exposes the City's economy to economic/commodity swings.

Threats

- The industrial market City location and market economics make Carson an attractive spot for industrial uses and logistics businesses.
 This demand will continue to compete for industrial property and reuse.
 - Industry and threat to partnerships.
- Loss of resident's income due to revitalization of the city.
- Other government influence (i.e., LA County, Long Beach City, Municipality, Sanitation Dist., etc.).
- Potential for gentrification and displacing lifelong residents.

Opportunities continued.

- Can add a city center between Main Street and Avalon Blvd.
- Rezoning in areas of heavy manufacturing.
- Some closed or post-closure brownfields that can be redeveloped.
- Introduce more mixed use and commercial zoning near residential areas to create more local community assets and improve walkability of City.
- Tap funding available from Olympics for redevelopment of retiring/abandoned industrial facilities into a community asset (community center, training center).



Appendix B: Technical Resources for Section 3



Technical Resources: Section 3 of This Report

Department of Toxic Substances Control:

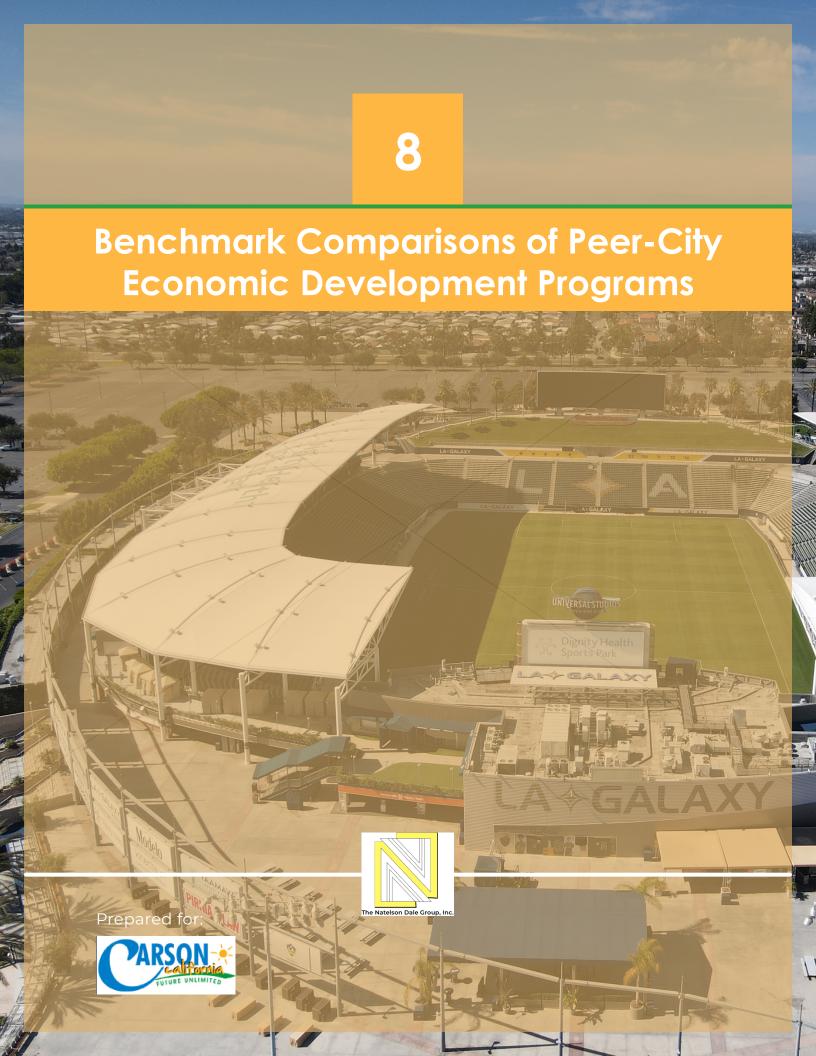
- 1. Cleanup in Vulnerable Communities Initiative (CVCI). https://dtsc.ca.gov/cleanup-in-vulnerablecommunities-initiative-cvci/
- 2. Community Benefits Agreement Program. https://dtsc.ca.gov/cleanup-in-vulnerable-communitiesinitiative-cvci/cba/
- 3. Discovery and Enforcement Program. https://dtsc.ca.gov/discovery-and-enforcement/
- 4. Equitable Community Revitalization Grant. https://dtsc.ca.gov/ecrg/
- 5. Loans and Grants. https://dtsc.ca.gov/brownfields/loans-and-grants/
- 6. Site Mitigation & Restoration Program. https://dtsc.ca.gov/site-mitigation/
- 7. Technical Assistance Grant. https://dtsc.ca.gov/tag/

Environmental Protection Agency:

- 1. Brownfields Assessment Grants. https://www.epa.gov/brownfields/brownfields-assessment-grants
- 2. Brownfields Cleanup Grants. https://www.epa.gov/brownfields/brownfields-cleanup-grants
- 3. Brownfields Job Training (JT) Grants. https://www.epa.gov/brownfields/brownfields-job-training-jtgrants
- 4. Brownfields Multipurpose Grants. https://www.epa.gov/brownfields/brownfields-multipurpose-
- 5. Brownfields Revolving Loan Fund (RLF) Grants. https://www.epa.gov/brownfields/brownfieldsrevolving-loan-fund-rlf-grants
- 6. Solicitations for Brownfield Grants. https://www.epa.gov/brownfields/solicitations-brownfield-grants
- 7. State and Tribal Response Program Grants. https://www.epa.gov/brownfields/state-and-tribalresponse-program-grants
- 8. Types of EPA Brownfield Grant Funding. https://www.epa.gov/brownfields/types-epa-brownfieldgrant-funding

Other:

1. Grants.gov. https://www.grants.gov/web/grants/search-grants.html



DRAFT

BENCHMARK COMPARISONS OF PEER-CITY ECONOMIC DEVELOPMENT PROGRAMS FOR CARSON ECONOMIC DEVELOPMENT STRATEGIC PLAN



Prepared for:

City of Carson

April 10, 2023

PREPARED BY:



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Introduction

The cities listed below have been selected, in consultation with City of Carson staff, as potential aspirational models and/or competitors for Carson's economic development program:

- 1. Downey
- 2. El Segundo
- 3. Gardena
- 4. Inglewood
- 5. Long Beach
- 6. Norwalk
- 7. Santa Clarita
- 8. Santa Fe Springs
- 9. Torrance

This report profiles the peer-city economic development programs for comparison and benchmarking purposes. Later in Carson's EDSP process, important features for the other cities' programs will serve as one basis for recommending a future organizational structure to implement Carson's economic development initiatives. The report is organized in two sections:

Section 1: Peer City Market Positioning (how they describe/market themselves online); and

Section 2: Organizational Structures (budgets, staffing, etc.) of Peer City Economic Development Programs

Section 1: Market Positioning of Peer City Economic Development Programs

Market positioning and program characteristics for the comparison cities are organized under the following five headings, as applicable:

- A. Business support programs, including:
 - Entrepreneurial development and business startup assistance
 - Workforce development initiatives/partnerships
- B. Marketing (general), including:
 - General (not industry-specific) site selection marketing
 - Existing business retention and expansion outreach
 - Media/public relations programs
- C. Prominent industries (currently marketed as assets)
- D. Target clusters/industries (specifically promoted/targeted in marketing)
- E. Economic resilience and community preservation initiatives

In many cases, descriptive language is reproduced verbatim from the other cities' web pages, to retain a sense of the spirit as well as technical accuracy, where summarization might not suffice.

The table on the next page indicates key economic development functions within each peer city.

COMMON ECONOMIC DEVELOPMENT FUNCTIONS FOR BENCHMARK CITIES

	Business Support		Marl	ceting (Gene	eral)			Econ.
City	Bus. startup /Entre.	Workforce Dev.	Site Selection / Focus Areas	Retention & Expansion	Media / PR	Prominent Ind./Asset Marketing	Targeted Ind. Marketing	Resil./ Comm. Pres. ¹
Downey		X (SELACO)	Χ					
El Segundo ²	Х	X (SBWIB)	Χ	Χ	Χ	X	Х	
Gardena		X (SBWIB)	Χ	Χ	Χ		Х	
Inglewood			Χ	Χ				Χ
Long Beach	Х	X (PGWIN)	Х	Х	Χ			Χ
Norwalk	X (Long Beach SBDC)	X (SELACO)	X					х
Santa Clarita	Х		Χ	Χ	Χ	X	X	
Santa Fe Springs	Х		Х	Х				
Torrance	Χ	X (SBWIB)	Χ	Χ	X			

Notes

- 1. The full title of this category is "Economic Resilience / Community Preservation".
- 2. El Segundo also makes mention of the "Creative Economy" as part of their marketing and target industry promoted marketing strategies.

Sources: TNDG.

Additional market positioning details for each city's economic development programs are summarized below.

City of Downey

A. BUSINESS SUPPORT

Website references the Southeast Los Angeles County Workforce Development Board (SELACO) for Workforce Development, but does not specifically mention other business support services.

B. MARKETING (GENERAL)

Website references Opportunity Sites, Downey Redevelopment Project, and Specific Areas for development opportunities.

- Opportunity Sites
- Specific Areas for development opportunities
 - o Firestone Boulevard Area
 - o Downtown Area
 - o Imperial Highway Area
 - Woodruff Industrial Project

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of El Segundo

A. BUSINESS SUPPORT

Website references the following business support services:

- How to get a Business License
 - Business Taxes
 - Streamlined Permitting
 - Appointment Plan Check This process involves scheduling an appointment to review plans with the City's development team made up of representatives of all the City departments involved in the development review process.
 - Accelerated Plan Check This offers customers an optional expedited plan check service. The process is conducted by staff after regular business hours and requires additional fees. With accelerated plan check, staff from each of the departments complete their plan checks usually within 2 to 3 weeks.
- First Year Business License Tax Credit
- South Bay Workforce Investment Board (SBWIB)

B. MARKETING (GENERAL)

The website showcases various companies and highlights important features that contribute to the branding of the city.

- Named "Most Business-Friendly City" in LA County for the third time
- Competitive tax rates
- Highly-skilled workforce
- Excellent infrastructure
- Range of corporate and creative commercial office space
- Experienced ED staff
- Centrally located and minutes away for LAX, 105 and 405 Freeways, MTA bus depot, and three Metro Line rail stations
- Less than 30 minutes from Downtown Los Angeles, Long Beach, Torrance, and Santa Monica
- "Entrepreneurial Spirit"

- Unique mix of industries
- Local entrepreneurial spirit
- Abundance of highly skilled labor accounts for the business
- "The Champions of Business Celebration" Annual event hosted by the City of El Segundo and its Economic Development Advisory Council.
- Downtown (Destination Marketing)
- Shopping (Destination Marketing)
- Dining (Destination Marketing)
- Smoky Hollow (Destination Marketing for businesses)
 - Explore properties
- El Segundo Back to Business Roundtable
- Available properties (Loopnet)
- New developments (Map points)
- Schedule a Tour of the city via email
 - Request a city tour with City Manager
 - o Inquire about expanding or relocating your business in El Segundo
 - Inquire about an available property
- "Made in El Segundo"
 - A tradition that includes everything from satellites, planes, semi-conductors, energy, and toys.
 - A city with roots in refinery, aerospace, and innovation that's evolved into a technology hub
 of world-class businesses involving high-tech engineering, advanced information technology,
 data systems, and digital media.
 - Strong infrastructure, fiber optic network, and skilled workforce make it an ideal setting for leading engineering and tech firms.
- Great place to start a business
- World class talent
- Lower lease rates

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

The City's website provides the following information for currently marketed target industry assets:

- Aerospace and Defense (Aerospace Capital of The World) 7 prominent firms listed
- Other Industries (well represented)
 - Creative Services
 - Sports
 - o Media
 - Financial and Professional Service

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

The website provides the following information for promoted marketing for target industries:

• "Increasingly the location of choice" for bioscience R+D and manufacturing facilities

Carson Economic Development Benchmark City ED Program Comparisons

- o Increased infrastructure caters to the growing demand from creative office users that require large internet bandwidth as well as cloud applications.
- Showcasing office and flex space
 - Continental Park, a 100-acre business center defining the South Bay's Rosecrans Corridor, developed and owned by Continental Development Corporation, is home to dozens of national and regionally and locally prominent firms, spanning the entire economic spectrum, and is one of the largest office parks in the Metropolitan Los Angeles area.
 - Pacific Corporate Towers Pacific Corporate Towers, is a 1.5 million square foot, 10-acre complex that anchors the Tower District.
 - Elevon elevon, at campus El Segundo, is a \$100 million executive office complex featuring
 210,000 square feet of office space complemented by 13,500 square feet of high-end retail.
 - Other Data Centers
 - Equinix
 - T-5 Data
 - Digital Realty

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Gardena

A. BUSINESS SUPPORT

Website references the economic profile, the planning process for starting a new business in the city, a map showing various development projects going on in the city, market analytics, Downey Redevelopment Project, and Specific Areas for development opportunities.

- Economic Profile
 - Market Profile
 - Demographics
 - o Other data
- Business Programs
- Specific Areas for development opportunities
 - o Firestone Boulevard Area
 - Downtown Area
 - o Imperial Highway Area
 - Woodruff Industrial Project
- Online Services (Gardena Direct)
 - Business License
 - Permit Inspection Requests
- South Bay Workforce Investment Board Gardena One-Stop Center
 - New hire and job placement resources
 - Publicizing Positions

Carson Economic Development Benchmark City ED Program Comparisons

- Broadcasting Available Jobs to Candidates
- Targeting Recruitments
- Job Fairs
- Hiring Support
 - Screening/Assessment
 - Job Matching
 - Work Readiness Support
 - Skills Testing
 - Reference Checks
 - Referrals
 - Apprenticeships
 - Custom Services
- Business Support & Services:
 - Rapid Response & Lay-Off Aversion Services
 - Information on Business Incentives
 - Customized Training
 - No Cost Workshops
 - Incumbent Worker Training

B. MARKETING (GENERAL)

The website provides several resources for businesses looking to relocate to Gardena

- Community Profile
- Market Analytics
- Sites and Properties (Commercial properties and sites available in Gardena)
- Gardena Project Development Map
- Master Planned Communities
- Opportunity Zones
- "Most Business-Friendly City"
 - Offers exciting new opportunities for business relocations and new development
 - o Centrally located and holds the keys to the Los Angeles freeway system
 - The City's staff take a pro-business approach to real estate development, always challenging itself to solve for "yes"
 - Foundation was built on the strength of its business industry and continues to thrive under the current leadership
 - Excellent location, diverse and strong business community, and supportive government make Gardena a very business-friendly city in Los Angeles County
 - Gardena has been named "Most Business Friendly City" in Los Angeles County by the Los Angeles County Economic Development Corporation (LAEDC)
 - The Eddy Awards recognized Gardena for doing the most to encourage job creation, facilitate ease-of-doing-business, and cutting through red tape
- Discover Gardena (Profiles)
 - The Pan (Restaurant)

- Rosecrans Place (Townhome Development)
- Hustler and Lucky Lady Casino
- Gardena Supermarket
- Oh My Burger (Restaurant)
- The website showcases several success stories of recent developments
 - o Best Western Plus
 - Brand-new establishment that offers contemporary accommodations, deluxe amenities, and an unbeatable location near the I-105 and I-405 freeways.
 - State Brewery Company
 - A craft brewery located in the South Bay of Los Angeles that is working to bring consumers a variety of high-quality craft beers inspired by L.A. history.
 - o Pulp Studio
 - A trailblazer within the glass industry, which has been manufacturing specialty and decorative glass products since 1996. The company has completed remarkable projects across the country. Many installations across the country showcase Pulp Studio's high-quality products, which have been recognized as superior glass products compared to those by other manufacturers.

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

The website provides the following information for promoted marketed for target industries:

- Long history of diverse business base
- Close proximity to the freeways, ports of Los Angeles and Long Beach, and Los Angeles International Airport make Gardena a very attractive destination
- Having been home to several corporate companies 7 prominent firms listed
- Advanced Manufacturing
 - Strong history of being an innovation and manufacturing center
 - As the aerospace and Japanese automotive companies landed throughout the South Bay they pursued having facilities in Gardena due to the close proximity it created to the ports, airport, and other businesses that supported their industries.
- Hospitality Development
 - o Gardena is at the heart of Los Angeles's tourism boom
 - Los Angeles Rams make their glorious return to Los Angeles, Inglewood's Los Angeles
 Stadium at Hollywood Park complex is going to draw visitors from all over.
- The Economic Development Department is targeting new industries and developments to continue supporting a diverse business base.

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Inglewood

A. BUSINESS SUPPORT

N/A

B. MARKETING (GENERAL)

The website provides the following information for marketing:

- Economic & Community Development Mission
 - Drive economic growth with a diverse mix of businesses that serve residents and visitors, and complement the existing City
 - Reinforce the Citywide brands of "Sports, Entertainment, Recreation and Culture" and Class A Office Business
 - Preserve high quality of life for residents
 - Encourage business and neighborhood compatibility
- City Project Pipeline
 - Destinations
 - Hotels
 - Housing
- Major Projects in Inglewood
- Opportunity Zones

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

The Inglewood Economic and Community Development Department website makes a definitive goal advocating for community preservation.

- Capitalize on the synergy and interdependence of the various division functions
 - Encourage through the regulatory process a balance of safe, attractive, and well-maintained residential communities
 - o Vibrant commercial centers, and
 - Varied manufacturing and employment opportunities for residents.

City of Long Beach

A. BUSINESS SUPPORT

Website references the following business support services:

• Accelerate Uptown

 Accelerate Uptown's Mission is to foster economic equity with a focus on women and minority owned businesses, through entrepreneurship, advancing careers in technology and supporting the transition of our reentry community from prison to life. We provide 1 on 1 business coaching and workshops at no cost to small businesses that qualify.

BizPort

• Whether you are launching a company or looking to expand an existing business, this on-line business portal is designed to help navigate the process.

Business Development Bureau

- The goal of the Business Development Bureau is to build a supportive economic ecosystem that creates reliable pathways for entrepreneurs to successfully start and grow.
- o Providing access to capital through our small business lending programs.
- Working with our local business improvement districts to ensure safe, attractive, and prosperous business districts across the city.
- Facilitating business startups by working directly with entrepreneurs at all levels to help them navigate the process of starting and growing their business.
- Making available key economic, demographic, and real estate information so that workers, investors, and entrepreneurs can make well-informed economic decisions.
- o Resources that are available to help you start and grow your business:
 - Small business license incentives
 - Small business loans
 - Façade improvement rebates
 - 10 business improvement districts
 - Site-selection support
 - Workforce training and recruitment
 - Free technical assistance

California Business Incentives Gateway

 The incentives detailed here include site selection services, targeted tax breaks, training grants, fee waivers, permit assistance, low-cost or tax-exempt financing, reduced utility rates, and many more. https://cbig.ca.gov

• Certified Blue Restaurant (CBR) Program

- The Long Beach Certified Blue Restaurant (CBR) Program supports and recognizes Long Beach restaurants that achieve exceptional water efficiency. Interested restaurants can enroll to receive a FREE on-site efficiency survey, free water-efficient devices (if eligible) and an assessment for rebate opportunities. Restaurants that become Certified Blue receive recognition from the Long Beach Water Department on social media and other marketing channels. http://register.lbwater.org/restaurants.
- Council of Business Associations

 The City of Long Beach Council of Business Associations is a unified voice for advocacy, acts as an effective communication conduit between business communities, and is a simplified business resource center. http://www.cobalb.com

• Green Business Program

- The Long Beach Green Business Program is a free program that supports and recognizes Long Beach businesses that follow guidelines for energy and water conservation, pollution prevention, waste management, toxics reduction, employee commute, and community education. Certified Green Businesses receive free marketing and promotion through City website and social media channels, free on-site green technical assistance, a certificate and window decal or sticker, and more. www.longbeach.gov/greenbusiness
- CSULB Institute for Innovation & Entrepreneurship
 - The primary objective of the Institute is to leverage all this energy and entrepreneurial capital into a driving force for economic development for the greater Long Beach community. http://www.csulb.edu/institute-innovation-entrepreneurship
- Kiva Loan Program
 - The City of Long Beach has partnered with The Los Angeles Local Initiatives Support Corporation (LA LISC) to offer zero interest, no-fee loans to local business owners. Through Kiva, everyday residents can loan as little as \$25 to small businesses of their choice as part of a crowdfunded loan program. Loans are approved through "social underwriting," where trustworthiness is determined by friends and family lending a portion of the loan request and a by a Kiva-approved Trustee who will vouch for the borrower. LA LISC will match loan contributions made to borrowers who have been endorsed by a Trustee. http://us.kiva.org/longbeach

Long Beach Accelerator

- The City of Long Beach is committed to helping the most promising entrepreneurs succeed and build great innovative companies in Long Beach. As part of the economic blueprint created in 2015, the City of Long Beach envisioned the infrastructure that supports innovation and technology startups to scale and grow. The Long Beach Accelerator provides companies accepted into its intensive, cohort-based business acceleration program with: coworking space in downtown Long Beach, access to operating capital, mentorship and coaching, access to an industry and investor network, and discounted service provider resources.
- For more information, visit the Long Beach Accelerator website at www.lbaccelerator.org.
- Long Beach Chamber of Commerce
 - Economic Development: Creating a Strong Local Economy
 - o Public Policy: Representing the Interest of Business with Government
 - Community Development: Promoting the Community
 - Membership Services: Providing Networking Opportunities
 - o Political Action: Endorsing Pro-Business Candidates for Office http://www.lbchamber.com
- Long Beach City College: College of Advancement & Economic Development
 - College Advancement & Economic Development (CAED) at LBCC is dedicated to bridging the gap between fulfilling business needs for a qualified workforce and providing education and training, including skill sets relevant to jobs in the 21st century. CAED offers several

Carson Economic Development Benchmark City ED Program Comparisons

workforce development and business development programs at an affordable cost. https://www.lbcc.edu/college-advancement-economic-development

- Small Business Development Center Hosted by Long Beach City College
 - The Small Business Development Center (SBDC) helps small business owners succeed with low-cost training and no-cost one-on-one advising from experienced entrepreneurs and industry experts. http://longbeachsbdc.org
- Workforce Development Pacific Gateway Workforce Development Innovation Network (PGWIN)
 - o Recruitment and Hiring
 - Youth Hiring and Internships
 - o Lay-Off Aversion
 - Customized Training

B. MARKETING (GENERAL)

The website provides the following information for marketing:

- Real Estate Development (<u>publicity mapping</u>)
 - Long Beach, California is booming with investment and development. Whether you are an
 investor, developer, or commercial real estate broker, Long Beach needs to be on your list of
 cities to watch. We have a growing population, quality and diverse neighborhoods, vibrant
 business corridors, top-notch educational systems, and an endless number of cultural
 amenities for you to take advantage of.
 - Our staff of real estate professionals stand ready to help you in identifying opportunity sites in one of the city's many great neighborhoods. We can provide customized reports with consumer spending, daytime employment, demographic, and traffic count information. And, we can assist you with whatever else you might need to make your next investment decision.
- Foreign Trade Zone Benefits
 - Foreign Trade Zones are designated areas within the United States where qualifying businesses are considered to be outside the country for customs purposes. Approved companies within a Foreign Trade Zone can defer, reduce or completely eliminate customs duties on imported products and materials.
 - Under the Port of Long Beach's program, any qualified business within the boundaries of FTZ-50, which includes Orange County, western San Bernardino County and most of Los Angeles County, can apply to have its existing building designated as an FTZ site. http://www.polb.com/economics/ftz
- Long Beach Convention and Visitors Bureau
 - The LBCVB is a private non-profit organization funded by city hotel bed tax and membership contributions from over 400 area businesses and community organizations. The mission of the Bureau is to contribute to economic development of the city of Long Beach by selling, marketing and promoting Long Beach as a destination for conventions, meetings, tradeshows and tourism. http://www.visitlongbeach.com
- Los Angeles Economic Development Corporation

- Special Events and Filming
 - The Office of Special Events and Filming is the bureau within the City Manager Department responsible for permitting all special events and film productions within the City of Long Beach. Staff strives to provide year-round events to cultivate civic pride, social awareness and cultural enrichment for residents and visitors by permitting special event activities such as, festivals, runs/walks, and citywide holiday celebrations. http://www.filmlongbeach.com
- Economic Insights Dashboard
- Opportunity Zones (Interactive Map)
 - o 19 census tracks in the City are identified as Opportunity Zones
 - This applies to over 2,300 acres
 - 5 census tracks overlap into the City of Long Beach's PD-30 and PD-6 areas, which provides additional benefits to potential developers

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

The City of Long Beach's website promotes economic resilience by listing two plans for economic inclusion. See points below for reference.

- Everyone In Economic Inclusion Implementation Plan
 - The City convened a 50-person Implementation Committee with local and regional crosssector partners to analyze data and community input to develop economic inclusion strategies for the Implementation Plan.
 - The City also engaged over 350 community members in meaningful dialogues to co-create and provide additional community input on the draft proposed economic inclusion strategies.
 - The Implementation Plan includes policy recommendations for small business and diverse entrepreneurship; local, inclusive procurement; workforce and youth development; connectedness (economic resiliency) and housing and homeownership.
- Economic Development Blueprint
 - In 2015, the Mayor and City Council requested the City's Economic Development
 Commission, with the assistance of staff, to prepare an Economic Development Blueprint to
 define priorities that will lead to creation of businesses, well-paying jobs, and increase the
 standards of living for our diverse residents.
 - The Blueprint, which is now available in Spanish, Khmer, and Mandarin Chinese, was adopted in 2017 and advances a 10-year vision of Long Beach as "the city of opportunity for workers, investors, and entrepreneurs."

- For the City of Long Beach and civic partners, this Blueprint serves as a catalyst to work together to proactively recognize and determinedly seek solutions to civic and socioeconomic challenges and opportunities.
- For workers, Long Beach will be a place where we come together to create more fulfilling higher-wage job opportunities, beyond meeting basic needs.
- For investors, Long Beach will foster a "can do" climate where they aggressively compete for the distinction to advance economic opportunities for business and community.
- For entrepreneurs, Long Beach will create an innovative ecosystem that lays a foundation for success from business start up to growth.
- For all residents, Long Beach will be a place where all can create, thrive, and positively impact where they live.
- The Blueprint has the following seven focus areas:
 - Engines of Growth
 - Economic Inclusion
 - Jobs and Workforce Development
 - Business Assistance
 - Development Environment
 - Quality of Life
 - Economic Leadership and Cooperation

City of Norwalk

A. BUSINESS SUPPORT

The website does not specifically mention in-house business support services, but refers to a list of partners that can assist startup businesses:

- Partners
 - Norwalk Chamber of Commerce
 - Kosmont Companies
 - Long Beach Small Business Development Center
 - SCORE
 - o SELACO
 - Cerritos College
 - o Los Angeles Economic Development Center
 - o Governor's Office of Business and Economic Development

B. MARKETING (GENERAL)

The website provides a map hosting aerial views and details of sites showing ongoing development projects. Some of the featured development projects they list are included in the list below.

- Carmenita Warehouse
- Alondra Boulevard / Maidstone Avenue Development

Carson Economic Development Benchmark City ED Program Comparisons

- Norwalk Transit Village
- Rosecrans Villa
- Rosecrans/Norwalk Commercial Building

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

The City of Norwalk's website provides several goals and an Economic Development Plan that assist in advocating for community preservation and investment. See list below for reference.

- Investing in Community driven-solutions serving our communities.
- "The Heart of Norwalk Plan invites the people of Norwalk to join together to prepare a clear and exciting, yet realistic vision for the future of San Antonio Village and the Firestone Corridor."
- Community Values Take pride in the very unique and attractive Norwalk.
- Community Knowledge Plan for the revitalization of the Heart of our City.
- Community Vision The future of <u>San Antonio Village</u> and the <u>Firestone Corridor</u>.
- Economic Development Plan In November 2018, the City Council adopted the Economic Development Opportunities Plan to direct city efforts. The Plan key areas to help focus attention and engagement with the business community.

City of Santa Clarita

A. BUSINESS SUPPORT

The website provides the following information for business support:

- Tax Incentives
 - o Industrial Development Authority
 - Recycling Market Development Zone (RMDZ)
 - o Tax Rebate Program
 - New Employment Tax Credit
- Business Resources
 - Guide to opening a small business in the city
 - Business Licenses
 - Expediting Permitting (Tenant Improvements)
 - One-Stop Permit Center
 - Small Business Development Center (SBDC)
 - Green Santa Clarita

Carson Economic Development Benchmark City ED Program Comparisons

 Several programs and resources to assist local businesses in sustaining a green-friendly commerce environment

B. MARKETING (GENERAL)

The website provides the following information for marketing:

- Where Successful Companies Do Business (Santa Clarita Business Minute)
 - Strong business infrastructure
 - High quality of life
 - o Community minded, and business driven
 - o Variety of tax and incentive programs for companies of all sizes
 - o Close proximity to most Southern California business centers
- Santa Clarita Business Minute Marketing Videos 21 different topics that include companies
 presumably in the city, city assets, and other topics

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

The website provides the following information for currently marketed target industry assets:

- Industry Overview
 - Aerospace Manufacturing 4 prominent firms listed
 - o Bio-Medical 9 prominent firms listed
 - Entertainment 10 prominent firms listed

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

The website provides the following information for promoted/marketed target industries:

Technology – 3 prominent firms listed

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Santa Fe Springs

A. BUSINESS SUPPORT

The website provides the following information for business support:

- General assistance to new and growing businesses
- Draw upon regional partners for additional services
 - Financing
 - o Commercial Real Estate Services
 - Sustainability
 - Economic Data
 - Business Marketing

Carson Economic Development Benchmark City ED Program Comparisons

B. MARKETING (GENERAL)

The website provides the following information concerning marketing and branding:

- Selected as a "North American City of the Future," by Financial Times
- Over 80% of the City's nine square miles are zoned for retail, office, light and heavy industrial uses, and eight out of ten businesses have operated in the community for more than 15 years.
- Excellent location
 - Child development programs
 - Educational and recreational classes and activities
 - Family services
 - Senior services
 - City-sponsored trips to area attractions
 - o Farmer's Market
 - o Free concerts in the park
 - Two free fitness centers
 - o Community health clinic
 - Free work shuttle
- Supportive government
- Thriving business community
- Active Chamber of Commerce
- Economic Profile of Santa Fe Springs
- Commercial Corridors (Map) and available sites for development (Map)

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

City of Torrance

A. BUSINESS SUPPORT

The website provides the following information for business support:

- Services and Programs
 - o Centralized Permit Center at City Hall
 - o Plot Plan Review Meetings
 - Business Licensing

Carson Economic Development Benchmark City ED Program Comparisons

- Expedited Permitting and Streamlining
- o Ombudsman Program
- Online Project Status Tracking
- Trained Staff Specialists
- o Interactive Voice Response System
- Competitive Fees
- Grant/Loan Assistance and other Financing Options
- o Police Department Business Watch Program
- Site Selection Assistance
- Workforce development
- Free online listing (on city website for business promotion)
- Commercial Rehabilitation Rebate Program
- California Green Business Network
- Business visitation program (brings city team and you together for face-to-face communication)
- Resources for Businesses
 - The South Bay Entrepreneurial Center (SBEC)
 - The Small Business Development Center (SBDC)
 - California Manufacturing Technology Consultants (CMTC)
 - Torrance Area Chamber of Commerce (TACC)
 - South Bay Workforce Investment Board (SBWIB)
 - Women in Advanced Manufacturing Career Exploration program
 - o California Governor's Office of Business and Economic Development (GO-Biz)
 - SCORE Long Beach/South Bay
 - Small Business Administration (SBA)
 - Recycling Marketing Development Zone (RMDZ)
 - Foreign Trade Zones (FTZ)
- Disadvantaged Business Enterprise (DBE) Resources

B. MARKETING (GENERAL)

The website provides the following information concerning marketing and branding:

- Strategic location
- Quality of Life
- Award winning schools
- Wayfinding Signage Plan
- Downtown Revitalization & Connectivity Plan
- #WhyTorrance (ArcGIS Story Map)
 - This site is designed for businesses looking to locate to Torrance, as well as for existing Torrance businesses that are looking to expand.
 - The information will provide a consolidated resource to City services, Economic Development tools, a visitor portal, and key demographic data.
- Business Visitation Program

- Business visits are conducted by the Economic Development Team on an annual basis to commercial, industrial and manufacturing businesses.
- The goal of these visits is to give each business a City contact and bring awareness of the resources available to assist them with their success.
- Assistance may include site selection, human resource solutions, permit streamlining, information and referral, marketing opportunities and financial incentives.
- o Additionally, the Mayor and City Council are invited to attend these outreach meetings.

C. PROMINENT INDUSTRIES (CURRENTLY MARKETED AS ASSETS)

N/A

D. TARGET CLUSTERS/INDUSTRIES (PROMOTED IN MARKETING)

N/A

E. ECONOMIC RESILIENCE (ADVOCATING COMMUNITY PRESERVATION)

N/A

Section 2: Organizational Structures of Peer City Economic Development Programs

Important organizational features of the peer cities' economic development programs are summarized on the following table, with additional narrative detail provided on the pages after the table.

The following organizational characteristics for each city are noted:

- Program positioning within City's overall organizational structure (i.e., in which City department is the ED program housed?)
- Total in-house staffing in terms of full-time equivalent (FTE) positions devoted (or partially devoted) to economic development activities
- Title of City's lead staff person for economic development
- Total annual budget for economic development-related functions
- Key external partnerships that support the City's in-housing economic development program

Since the level of resources (staffing, budget, etc.) is naturally influenced by the size of the city, the summary table provides population and employment data for each city for benchmarking purposes.

MATRIX OF BENCHMARK CITIES ADDITIONAL INFORMATION

Jurisdiction	Pop. 2022	Jobs 2019	Jobs 2020 ¹	ED Organization Structure	FTE	Program Manager	Budget	Other Partners
Downey	111,780	42,431	40,626	Economic Dev. and Housing Division is under Community Dev. Dept. that reports to the City Manager.	2.0 FTE	Economic Development and Housing Manager	\$1,700,708	 Community Benefit District Downey Chamber of Commerce Los Angeles County Economic Development Corporation (LAEDC)
El Segundo	16,995	71,075	69,443	In the past, the Economic Dev. Coordinator has reported directly to the City Manager. ²	0.0 FTE ³	Economic Development Coordinator	\$756,190	 El Segundo Economic Development Corporation (ESEDC)⁴ El Segundo Chamber of Commerce El Segundo Back to Business Roundtable LAEDC
Gardena	59,013	22,707	21,019	Economic Dev. Division/Manager is under the Community Dev. Dept. that reports to the City Manager.	1.0 FTE	Economic Development Manager	\$159,907	 Gardena Economic Development Advisory Committee/Task Force LAEDC Gardena Valley Chamber of Commerce (GVCC) North Gardena Business Association Southern California Edison (SCE) The USC Center for Planning & Development Advantage CDC California Employment Training Panel Small Business Administration – Glendale, CA Small Business Development Center (SBDC) – El Camino College California Manufacturing Technology Center (CMTC)
Inglewood	104,714	25,068	24,764	Economic and Community Dev. Dept. is a separate	3.0 FTE	Economic & Community	\$774,411	Inglewood Airport Area Chamber of CommerceLAEDC

Carson Economic Development Benchmark City ED Program Comparisons

Jurisdiction	Pop. 2022	Jobs 2019	Jobs 2020 ¹	ED Organization Structure	FTE	Program Manager	Budget	Other Partners
				department that reports to the City Manager		Development Director		
Long Beach	450,214	153,029	144,378	Economic Dev. is a separate department that reports to the City Manager	92.96 FTE	Economic Development Director	\$23,121,694	 LAEDC Long Beach Economic Partnership (LBEP) – Long Beach Accelerator Long Beach Chamber of Commerce CSULB Institute for Innovation & Entrepreneurship Long Beach Convention and Visitors Bureau Office of Special Events and Filming Long Beach SBDC California
Norwalk	99,919	23,230	22,524	Although there is an adopted "Norwalk Economic Development Plan", the Community Dev. Dept. are the staff primary involved in Economic Dev. Partnerships appear to contribute to Economic Dev. for the City of Norwalk.	0.0 FTE	N/A	Economic Development Services \$100,000	Norwalk Chamber of Commerce Kosmont Companies Long Beach SBDC California SCORE SELACO Cerritos College Norwalk-La Mirada Unified School District Los Angeles Economic Development Center League of California Cities Governor's Office of Business and Economic Development LAEDC
Santa Clarita	227,070	67,543	62,931	Economic Dev. Dept. is a separate department that reports to the City Manager	40.0 FTE	Director of Economic Development	\$41,924,019	_

Carson Economic Development Benchmark City ED Program Comparisons

Jurisdiction	Pop. 2022	Jobs 2019	Jobs 2020 ¹	ED Organization Structure	FTE	Program Manager	Budget	Other Partners
Santa Fe Springs	18,536	60,934 95,497	·	Economic Dev. Division is under the Planning & Dev. Dept. that reports to the City Manager Office of Economic Dev. is an	8.0 FTE allocated to the Planning & Dev. Dept.	Director of Planning and Community Development Economic		Santa Fe Springs Chamber of Commerce LAEDC
Torrance	143,001	95,497	,	office under the City Manager. ⁵	1.0	Development Manager	Not specific for ED, but for City Manager - \$6,053,337 General Fund	 Torrance Tech Committee The South Bay Entrepreneurial Center (SBEC) The Small Business Development Center (SBDC) – Hawthorne CMTC Torrance Area Chamber of Commerce (TACC) South Bay Workforce Investment Board (SBWIB) LAEDC Recycling Marketing Development Zone (RMDZ) California Governor's Office of Business and Economic Development (GO-Biz) Foreign Trade Zones (FTZ) SCORE Long Beach/South Bay

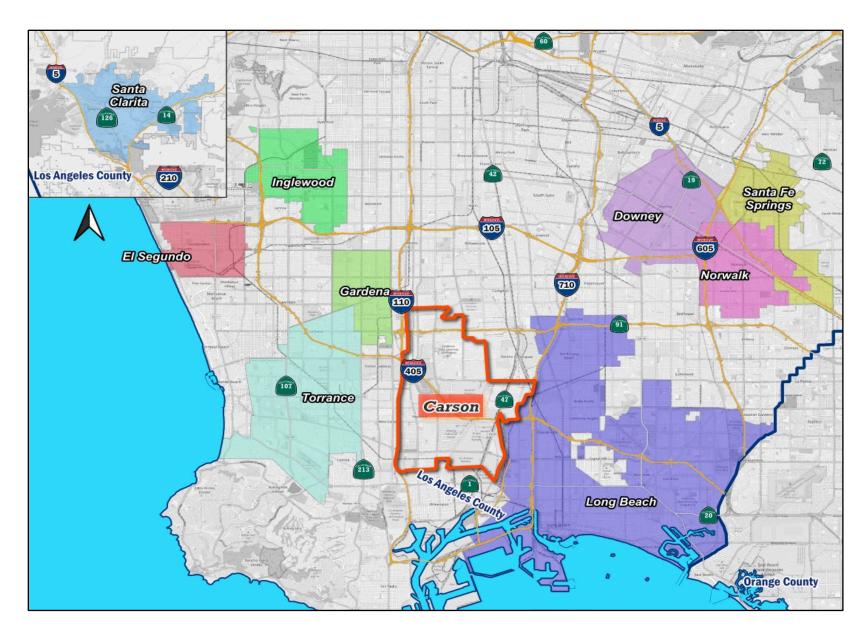
Notes

- 1. Total jobs for 2020 is noticeably lower in some cities, which might be attributed to the COVID-19 Pandemic. Jobs for 2019 have been included for reference.
- 2. Economic Development functions seem to be handled mainly by outside partners and within the city by the City Manager's Office.
- 3. The current budget does not include any FTEs for the Economic Development Coordinator.
- 4. The El Segundo Economic Development Corporation (ESEDC) has 3 leadership staff positions, 11 Board of Directors, and 11 Board of Governors.
- 5. The Torrance Economic Development Team includes professionals from various backgrounds that represent the full-service departments of the City, as well as external partners, to expand the level of communication and coordination with the business community to facilitate business attraction, retention, and expansion. There are 13.0 total FTEs that serve the team within the city.

Sources: U.S. Census Bureau, OnTheMap LEHD Program; CA DOF Table 1: E-5 City/County Population and Housing Estimates, 2022; TNDG.

MAP OF BENCHMARK CITIES

Carson Economic Development Benchmark City ED Program Comparisons



Carson Economic Development Benchmark City ED Program Comparisons

City of Downey

Organizational Structure

• Economic Development and Housing Division is under Community Development Department that reports to the City Manager.

Program FTE

• 2.0 FTE

Program Director

Economic Development and Housing Manager

Budget

\$1,700,708

Population (2022) [CA DOF]

111,780

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 42,431

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 40,626

Other Partner Organizations

- Community Benefit District
- Downey Chamber of Commerce
- Los Angeles County Economic Development Corporation (LAEDC)

City of El Segundo

Organizational Structure

• In the past, the Economic Development Coordinator has reported directly to the City Manager. Economic Development functions seem to be handled mainly by outside partners and within the city by the City Manager's Office.

Program FTE

• The current budget does not include any FTEs for the Economic Development Coordinator.

Program Director

• Economic Development Coordinator

Budget

\$756,190

Population (2022) [CA DOF]

• 16,995

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

71,075

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 69,443

Other Partner Organizations

- El Segundo Economic Development Corporation (ESEDC) 3 staff on leadership, 11 on Board of Directors, and 11 on Board of Governors
- El Segundo Chamber of Commerce
- El Segundo Back to Business Roundtable
- Los Angeles County Economic Development Corporation (LAEDC)

City of Gardena

Organizational Structure

• Economic Development Division/Manager is under the Community Development Department that reports to the City Manager.

Program FTE

• 1.0 FTE

Program Director

• Economic Development Manager

Budget

• \$159,907

Population (2022) [CA DOF]

• 59,013

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 22.707

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 21,019

Other Partner Organizations

- Gardena Economic Development Advisory Committee/Task Force
- Los Angeles County Economic Development Corporation (LAEDC)
- Gardena Valley Chamber of Commerce (GVCC)
- North Gardena Business Association
- Southern California Edison (SCE)
- The USC Center for Planning & Development
- Advantage CDC
- The California Employment Training Panel
- Small Business Administration Glendale, CA
- Small Business Development Center (SBDC) El Camino College
- California Manufacturing Technology Center (CMTC)

City of Inglewood

Organizational Structure

• Economic and Community Development Department is a separate department that reports to the City Manager

Program FTE

• 3.0 FTE

Program Director

• Economic & Community Development Director

Budget

• \$774,411

Population (2022) [CA DOF]

• 104,714

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 25,068

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 24,764

Other Partner Organizations

- Inglewood Airport Area Chamber of Commerce
- Los Angeles County Economic Development Corporation (LAEDC)

City of Long Beach

Organizational Structure

• Economic Development is a separate department that reports to the City Manager.

Program FTE

• 92.96 FTE

Program Director

• Economic Development Director

Budget

• \$23,121,694

Population (2022) [CA DOF]

• 450,214

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

• 153,029

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

144,378

Other Partner Organizations

- Los Angeles County Economic Development Corporation (LAEDC)
- Long Beach Economic Partnership (LBEP) Long Beach Accelerator
- Long Beach Chamber of Commerce
- CSULB Institute for Innovation & Entrepreneurship

Carson Economic Development Benchmark City ED Program Comparisons

- Long Beach Convention and Visitors Bureau
- Office of Special Events and Filming
- Long Beach SBDC California

City of Norwalk

Organization Structure

Although there is an adopted "Norwalk Economic Development Plan", the Community
Development Department are the staff primary involved in Economic Development.
Partnerships appear to contribute to Economic Development for the City of Norwalk.

Program FTE

• 0.0

Program Director

• N/A

Budget

• Economic Development Services \$100,000

Population (2022) [CA DOF]

• 99,919

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

23,230

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 22,524

Other Partner Organizations

- Norwalk Chamber of Commerce
- Kosmont Companies
- Long Beach Small Business Development Center
- SCORE
- SELACO
- Cerritos College
- Norwalk-La Mirada Unified School District
- Los Angeles Economic Development Center
- League of California Cities
- Governor's Office of Business and Economic Development
- Los Angeles County Economic Development Corporation (LAEDC)

City of Santa Clarita

Organizational Structure

• Economic Development Department is a separate department that reports to the City Manager.

Program FTE

• 40.0 FTE

Program Director

• Director of Economic Development

Budget

• \$41,924,019

Population (2022) [CA DOF]

• 227,070

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

67.543

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 62,931

Other Partner Organizations

- Santa Clarita Valley Chamber of Commerce
- Santa Clarita Valley Economic Development Corporation
- Los Angeles County Economic Development Corporation (LAEDC)
- Economic Development Division at College of the Canyons

City of Santa Fe Springs

Organizational Structure

• Economic Development Division is under the Planning & Development Department that reports to the City Manager

Program FTE

- Not clear how many FTE for Economic Development
- 8.0 FTE for Planning & Development Department

Program Director

• Director of Planning and Community Development

Budget

• \$351,800

Population (2022) [CA DOF]

18,536

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

60.934

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 57,313

Partners

- Santa Fe Springs Chamber of Commerce
- Los Angeles County Economic Development Corporation (LAEDC)

City of Torrance

Organizational Structure

Office of Economic Development is an office under the City Manager. The Economic
Development Team includes professionals from various backgrounds that represent the fullservice departments of the City, as well as external partners, to expand the level of
communication and coordination with the business community to facilitate business attraction,
retention, and expansion.

Program FTE

- 1.0 FTE Economic Development Manager Office of the City Manager
- 13.0 FTE Total for ED Team that is representative of

Program Director

• Economic Development Manager

Budget

- Not specific for Economic Development, but for City Manager \$6,053,337 General Fund Population (2022) [CA DOF]
 - 143,001

Place of Work (2019) [U.S. Census Bureau, OnTheMap LEHD Program]

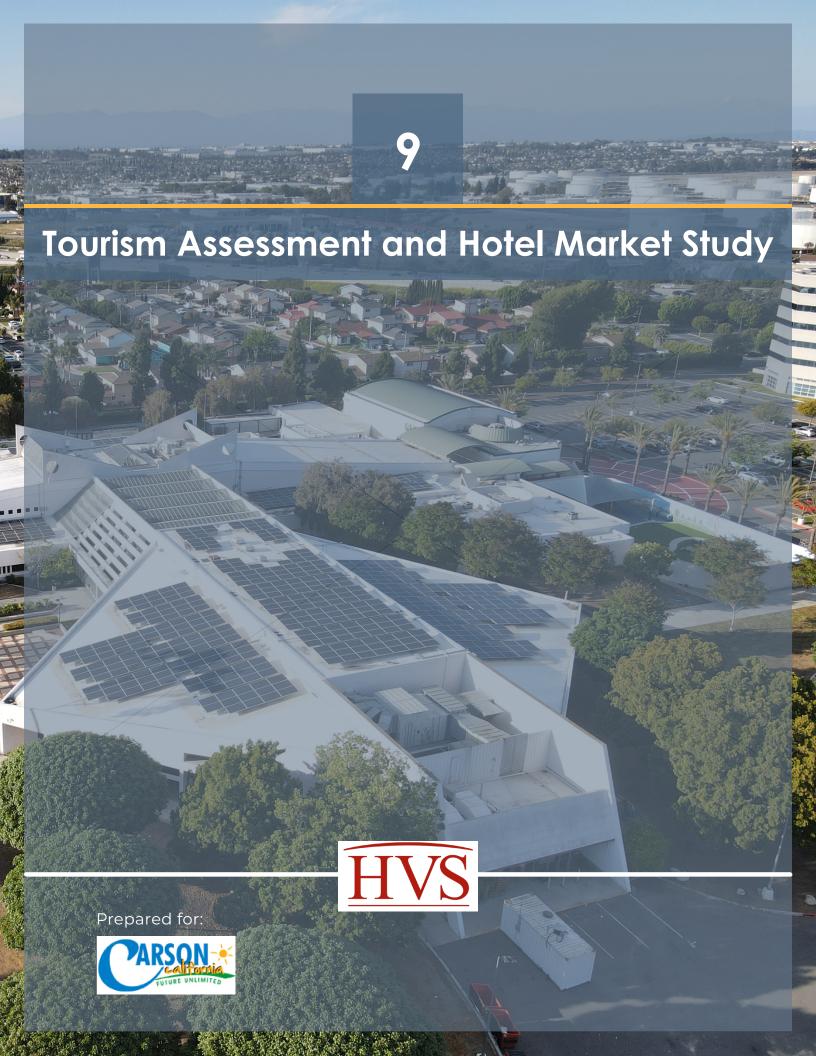
95.497

Place of Work (2020) [U.S. Census Bureau, OnTheMap LEHD Program]

• 88,603

Listed Partners

- Torrance Tech Committee (Advisory Group)
- The South Bay Entrepreneurial Center (SBEC)
- The Small Business Development Center (SBDC) Hawthorne
- California Manufacturing Technology Consultants (CMTC)
- Torrance Area Chamber of Commerce (TACC)
- South Bay Workforce Investment Board (SBWIB)
- Los Angeles County Economic Development Corporation (LAEDC)
- Recycling Marketing Development Zone (RMDZ)
- California Governor's Office of Business and Economic Development (GO-Biz)
- Foreign Trade Zones (FTZ)
- SCORE Long Beach/South Bay





TOURISM ASSESSMENT AND HOTEL MARKET STUDY

City of Carson Economic Development Strategic Plan

Carson, California



SUBMITTED TO:

Jami Williams, CNU-A Principal RRM Design Group 32332 Camino Capistrano, Suite 205 San Juan Capistrano, CA 92675 jawilliams@rrmdesign.com

PREPARED BY:

HVS Convention, Sports & Entertainment Facilities Consulting 1035 Keystone Ave. River Forest, IL 60305 +1 (312) 587-9900 May 26, 2023

1035 Keystone Ave. River Forest, IL 60305 +1 312-587-9900 +1 312-488-3631 FAX www.hvs.com Jami Williams, CNU-A Principal RRM Design Group 32332 Camino Capistrano, Suite 205 San Juan Capistrano, CA 92675 jawilliams@rrmdesign.com

> Re: Tourism Assessment and Hotel Market Study City of Carson Economic Development Strategic Plan Carson, California

Dear Jami Williams:

Attached you will find our Tourism Assessment and Hotel Market Study for the City of Carson Economic Development Strategic Plan.

We certify that we have no undisclosed interest in the properties, and our employment and compensation are not contingent upon our findings. This study is subject to the comments made throughout this report and to all assumptions and limiting conditions set forth herein.

It has been a pleasure working with you. Please let us know if we can provide any additional services.

Sincerely,
HVS Convention, Sports & Entertainment
Facilities Consulting

Thomas A Hazinski Managing Director

Thomas Hazinski

Jorge Cotte Project Manager

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1.	Tourism Development and the Visitor Economy
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5.	Certification

1. Tourism Development and the Visitor Economy

Nature of the Assignment

RRM Design Group engaged HVS Convention, Sports & Entertainment Facilities Consulting ("HVS") to conduct an analysis of tourism development and the visitor economy in Carson, CA. This report assesses the existing conditions of the lodging market in and visitation to Carson, identifies opportunities for tourism development, makes recommendations about potential hotel development, and provides strategies to incentivize the development of hotels and other tourism developments.

Methodology

In accordance with the Scope of Services, HVS performed the following tasks:

- 1. Thomas A Hazinski from HVS traveled to Carson, CA on August 10 and 11, 2022. During this visit, he met with local stakeholders and venue representatives.
- 2. Reviewed the economic and demographic data that indicate whether, and the extent to which, the local market area supports tourism amenities.
- 3. Conducted further interviews with local stakeholders and market experts.
- 4. Identified the key demand generators in Carson.
- 5. Reviewed and analyzed historical demand and attendance data available for the key demand generators.
- 6. Researched comparable venues, districts, and destinations, where necessary.
- 7. Analyzed and forecasted the Carson hotel market.
- 8. Recommended options for hotel development based on the above steps.
- 9. Provided an overview of potential incentives that may be offered to support hotel and tourism amenity developments.

HVS collected and analyzed all information contained in this report. HVS sought out reliable sources and deemed information obtained from third parties to be accurate.

Data Sources

HVS uses data from the location analytics platform Placer.ai to track visitation trends for key venues and locations, including seasonality, length of stay, hourly trends, visitor journey (where visitors went before and after), and economic and demographic data. Placer.ai provides mobility and foot traffic data through partnerships with over 500 mobile apps and access to over 30 million devices. Using

a proprietary extrapolation algorithm that accounts for potential biases in the data, Placer.ai uses a representative sample to produce location and visitor attribution data for the US. To ensure accuracy, Placer.ai depends on daily and weekly quality checks and benchmarks against public and validated data sources such as credit card transactions and store revenue.

For local economic and demographic data, HVS used Esri Business Analyst Online ("Esri"). Esri is a well-regarded forecasting service that applies geographic information system technology ("GIS") to produce extensive demographic, consumer spending, and business data analyses. Esri employs a sophisticated location-based model to forecast economic and demographic trends. Esri models rely on U.S. census data, the American Community Survey, and other primary research.

Local Demand Generators HVS identified four main tourism demand generators in the City of Carson: Dignity Health Sports Park, California State University, Dominguez Hills, the Carson Event Center, and Porsche Experience Los Angeles. Other nearby attractions are the Carroll Shelby Car Museum and the International Printing Museum.

Dignity Health Sports Park ("DHSP")—a multi-use sports complex with a soccer stadium, tennis stadium, track and field facility, and the VELO Sports Center velodrome. This venue is home to the LA Galaxy and regularly hosts major sports events at the professional and amateur levels. It is expected to host rugby, tennis, pentathlon, field hockey, and track cycling events in the 2028 Summer Olympics.

California State University, Dominguez Hills ("CSUDH")—with an enrollment of 17,882 in 2021, CSUDH is a diverse campus that primarily serves undergraduates. CSUDH recently opened the Toyota Center for Innovation in STEM Education which houses the Biology, Chemistry, and Physics departments and includes 42,000 square feet of laboratory space.

Carson Event Center—Owned by the city, this community center hosts many city and community programs. It is often used for religious services, support groups, and recurring events, such as bingo. A change in mission drives the venue increasingly to seek to host business and social events. Renovations are ongoing, and a rebranding study is planned.

Porsche Experience Los Angeles—Owned by Porsche North America as a marketing mission, this facility includes a road course, speedway, various skid pads and an off-road course, as well as a food and beverage outlet and function space. Attracted an average of 52,000 customers annually before the COVID-19 pandemic.

Based on Placer's visitation data, DHSP and CSUDH are by far the largest sources of visitation to Carson. However, any analysis should consider that CSUDH has significant repeat visitation from commuting students and that, due to proximity, there may be some overlap between the campus and DHSP.

The following figures show the estimated annual visitation to Carson's key demand generators.

FIGURE 1-1
VISITATION TO KEY DEMAND GENERATORS (2017-2022)

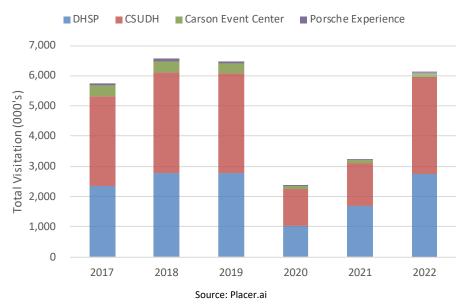


FIGURE 1-2
VISITATION TO KEY DEMAND GENERATORS (000'S)

	DHSP	CSUDH	Carson Event Center	Porsche Experience
2017	2,361.6	2,948.4	360.8	77.9
2018	2,777.2	3,323.7	375.9	96.7
2019	2,776.2	3,307.9	316.5	86.4
2020	1,033.8	1,210.2	90.8	46.8
2021	1,696.2	1,410.4	87.1	48.6
2022	2,735.2	3,198.4	159.9	65.1

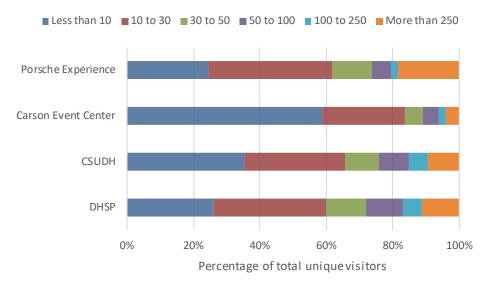
Source: Placer.ai

Carson's demand generators showed a significant recovery in 2022, but none of these facilities have recovered to their 2018 and 2019 levels of visitation. The

Carson Event Center has been the slowest to recover, which may be due to the facility's shifting priorities.

Visitor Origin for Key Demand Generators HVS analyzed how well Carson's demand generators are able to attract out-of-town visitation. The following figure shows how far visitors travel to Carson's key venues.

FIGURE 1-3
VISITOR ORIGINS TO KEY DEMAND GENERATORS (2017-2022)



Source: Placer.ai

The Carson Event Center draws the highest proportion of its attendance from local areas, while the Porsche Experience draws the highest proportion from visitors more than 250 miles away. On average, approximately 11% of US visitation to DHSP comes from more than 250 miles away, or roughly 40,000 unique visitors in a pre-COVID year.

Visitor Journeys

HVS uses Placer.ai's Visitor Journey platform to analyze the trends of activity directly before and after customers visit a venue. While this data does not capture subsequent trips (for example, a family who stopped for lunch before going to their hotel would only see their lunch counted in this analysis), on average, it provides an indication of how well Carson is serving its visitors.

FIGURE 1-4
HOTEL TRIPS GENERATED BY DHSP AND CSUDH

Visitor Origin (home distance)	Total Journey Volume	Hotel Trips as a % of Total Journeys	% Capture of Hotel Trips in Carson
	DHSP		
Less than 100 miles	83%	5%	13%
100 to 250 miles	5%	18%	25%
More than 250	12%	29%	30%
		Overall average	21%
	CSUDE	I	
Less than 100 miles	88%	2%	13%
100 to 250 miles	4%	4%	24%
More than 250	8%	13%	35%
		Overall average	22%

Sources: Placer.ai and HVS

While visitors from within 100 miles of Carson make up most of the activity volume, visitors from farther out are much more likely to visit a hotel. Regardless, Carson captures less than 40% of hotel trips for any of the visitor groups.

Major City Events

The City of Carson provided HVS with a list of Major Events going back to 2018. Most of these events are community events that expect to draw local and regional visitation. Overall, these events have drawn over 45,000 attendees to the City's parks and nearly 12,000 attendees to the Carson Event Center.

The following figure lists the events along with their location and estimated visitation.

FIGURE 1-5
MAJOR CITY EVENTS (2018–2023)

Event	Date (s)	Location	Est. Attende
Philippine Independence Day	June 9, 2018	Veterans Park	5,000
Jazz Festival	October 6, 2018	Anderson Park	2,500
Halloween / Dia de los Muertos	October 27, 2018	Carson Event Center	500
Winter Fest	December 8, 2018	Carson Event Center	1,500
Cinco de Mayo Celebration	May 4, 2019	Carson Park	3,000
Philippine Independence Day	June 8, 2019	Veterans Park	5,000
Juneteenth	June 15, 2019	Mills Park	2,000
James M Foisia Park - Renaming Ceremony	August 10, 2019	Foisia Park	500
Jazz Festival	October 5, 2019	Anderson Park	2,500
Halloween / Dia de los Muertos	October 31, 2019	Carson Event Center	750
Winter Fest	December 21, 2019	Veterans Park	1,500
Halloween Drive Thru	October 31, 2020	Carson Event Center	760
Cinco de Mayo Celebration - Virtual	May 5, 2021	Online	N/A
Philippine Independence Day - Virtual	June 11 - 12, 2021	Online	N/A
Juneteenth - Virtual	June 19, 2021	Online	N/A
Jazz Festival (Virtual)	October 2, 2021	Online	N/A
Halloween Drive Thru	October 31, 2021	Carson Event Center	72
Country and Western Fair	November 20, 2021	Dominguez Park	75
Winter Fest	December 18, 2021	Carson Event Center	1,50
Cinco de Mayo Celebration	May 1, 2022	Carson Park	2,50
Philippine Independence Day	June 4, 2022	Veterans Park	3,000
Juneteenth	June 18, 2022	Mills Park	2,000
Samoan Heritage Day	June 25, 2022	Foisia Park	750
HSBC World Rugby Sevens Series	August 27 - 28, 2022	DHSP	30,000
Jazz Festival	October 1, 2022	Anderson Park	2,50
Halloween Carnival	October 29 - 31, 2022	Carson Event Center	3,000
Country and Western Fair	November 19, 2022	Dominguez Park	N/A
Winter Fest	December 10, 2022	Carson Event Center	1,50
Cinco de Mayo Celebration	May 6, 2023	Carson Park	1,50
Philippine Independence Day	June 3, 2023	Veterans Park	3,000
Juneteenth	June 17, 2023	Mills Park	1,00
Samoan Heritage Day	June 24, 2023	Foisia Park	500
Halloween Carnival	October 29 - 31, 2023	Carson Event Center	N/A
Summer Olympic & Paralympic games	June - July 2028	Venues across	N/A

Source: City of Carson

Carson has eight annual events that occur in its parks and the Carson Event Center. In 2022, these events are estimated to have gathered 15,250 community members together.

Dignity Health Sports Park

DHSP is the most significant tourism demand generator in Carson. DHSP staff provided HVS with attendance summaries for four kinds of events in 2019, 2021, and 2022 through September. The following figure summarizes overall visitation by event types, including LA Galaxy Games, Ticketed Events (boxing, concerts, G2, other sporting events), Non-Ticketed Events (film shoots, corporate events, graduations), and Other Activities (Youth leagues, Elite/ Development training, clinics).

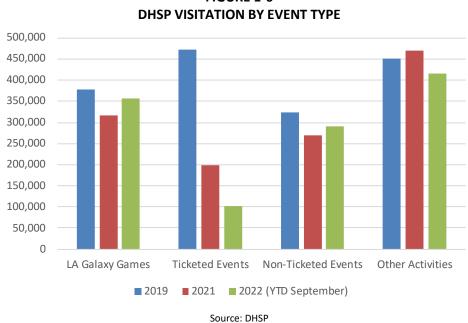


FIGURE 1-6

LA Galaxy Games have almost recovered to 2019 levels, having breached 350,000 total attendees in 2022. Ticketed Events have seen the biggest decline and struggle to recover since the pandemic. Non-Ticketed Events have mostly recovered to 2019 levels. Due to more availability, Other Activities surpassed 2019 levels in 2021. Other Activities include regional sports clubs and organizations which use the DHSP's facilities on a weekly basis.

Attendee Origins

DHSP staff provided HVS with summarized attendee origin data for LA Galaxy Games and other Ticketed Events. The following figure summarizes the distribution of DHSP visitation based on the geographic origin of visitors.

FIGURE 1-7
DHSP ATTENDEE ORIGINS BY GEOGRAPHIC ORIGIN
LA Galaxy Games

Attendee Origin	2019	2021	YTD 2022
City of Carson	1%	1%	1%
Los Angeles County	24%	31%	30%
Other Southern California	14%	14%	15%
Other California	41%	48%	48%
Other U.S.	3%	3%	3%
International	16%	2%	4%

Other Ticketed Events

Attendee Origin	2019	2021	YTD 2022
City of Carson	1%	1%	1%
Los Angeles County	22%	27%	23%
Other Southern California	16%	15%	17%
Other California	43%	49%	46%
Other U.S.	9%	7%	11%
International	9%	2%	3%

Source: DHSP

The largest drop in visitation has been from international attendees, which reflects a loss of 86,000 attendees since 2019. International travel has been slower to recover than domestic travel in the US, due to global effects from the Covid-19 and travel restrictions, which still require proof of vaccination from non-US citizens. Tourism to the US should continue to recover as vaccination rates rise globally, and more people become comfortable with international travel. During the COVID-19 pandemic, international arrivals dropped from 79.4 million in 2019 to 19.2 million in 2020 and 22.1 million in 2021. In 2022, international visitation recovered to 65% of 2019 levels. The US Department of Commerce's "National Travel and Tourism Strategy" aims to welcome 90 million international visitors by 2027, which would represent a growth of 10.6 million visitors from 2019.

To understand how well Carson captured the visitation drawn by DHSP events, HVS analyzed where visitors went before and after attending the DHSP. The following figure summarizes this activity by industry category, where the percentage of trips captured in Carson means that the visitor went to an establishment in that category that was located in the City of Carson. Note that the Stadium & Event Halls and the

Education categories will be over-represented due to the proximity of DHSP to CSUDH and the number of sports venues in that area.

FIGURE 1-8
DHSP VISITOR CAPTURE BY INDUSTRY (2022)

Category	Total Number of Trips	Trips in Carson	% Captured in Carson	Trips Lost by City
Dining	221,021	110,569	50%	110,452
Shops & Services	86,673	26,315	30%	60,358
Leisure	84,566	11,203	13%	73,363
Stadiums & Event Halls	65,428	59,410	91%	6,018
Groceries	58,245	12,354	21%	45,891
Education	53,651	37,292	70%	16,359
Hotels & Casinos	49,354	9,849	20%	39,505
Fitness	39,566	19,664	50%	19,902
Superstores	39,466	16,351	41%	23,115
Shopping Centers	36,632	21,776	59%	14,856
Apparel	21,922	2,409	11%	19,513
Total	878,362	345,143		533,219

Source: Placer.ai

The most frequent trip DHSP attendees took before and after events was in search of dining options. Shops and services, leisure, groceries, and lodging trips were the next most frequent trips. Leisure and lodging represent the highest opportunities for Carson to expand its capture of these trips.

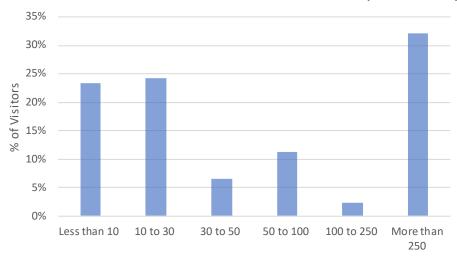
Major Event Case Study - HSBC Rugby Sevens

In order to better understand visitation to Carson, HVS analyzed the visitation to a single event in 2022.

This annual rugby event on August 27-28, 2022, included 16 teams representing the US, England, Scotland, Ireland, Wales, France, Spain, Canada, Argentina, Kenya, Japan, Australia, Fiji, Samoa, New Zealand, and South Africa. With 40 games over two days, the event featured eight hours of play per day. The park also had an "International Food, Music & Drink Festival" with live entertainment and amenities from around the world.

Placer.ai's tracking data estimates that attendance for this event was over 20,000 each day (approximately 29,000 unique visitors over the weekend), with over 30% of visitors coming from more than 250 miles away. The following figure shows the distribution of visitors by distance traveled.

FIGURE 1-9
VISITOR ORIGIN BY HOME DISTANCE -- HSBC RUGBY SEVENS (AUGUST 2022)



Home Distance from Venue (miles)

Source: Placer.ai

To understand how well Carson captured the visitation drawn by the HSBC Rugby Sevens, HVS analyzed where visitors went before and after attending the DHSP. The following figure summarizes this activity by industry category, where the percentage of trips captured in Carson means that the visitor went to an establishment in that category that was located in the City of Carson.

FIGURE 1-10
VISITOR JOURNEY CAPTURE BY INDUSTRY -HSBC RUGBY SEVENS (AUGUST 2022)

Category	% of Trips Before and After Venue	% of Category Trips Captured in Carson
Community Shopping Centers	17.5%	78%
Hotels & Casinos	17.4%	10%
Restaurants	16.6%	33%
Fast Food & QSR	12.8%	35%
Attractions	9.1%	75%
Fitness	8.1%	93%
Car Shops & Services	4.9%	54%
Banks & Financial Services	3.3%	100%
Event Halls	2.3%	100%
Theaters & Music Venues	1.9%	67%
Furniture and Home Furnishings	1.4%	58%
General Travel	1.3%	48%
Gas Stations & Convenience Stores	1.2%	15%
Breakfast, Coffee, Bakeries & Dessert Shops	1.0%	14%
Discount & Dollar Stores	0.7%	100%
Groceries	0.6%	3%

Source: Placer.ai

Visitors to this event had a higher-than-average percent of trips to hotels (than the DHSP average), but the City of Carson's capture of those hotel trips was lower than average. Torrance and El Segundo hotels had more visits from attendees to the HSBC Rugby Sevens than did hotels in Carson. Additionally, the City's capture of restaurant and fast-food trips was also below 50%.

Though it is impossible to capture all the demand generated by visitors to a large sporting event, especially due to the geographic limitations of Carson, there is room for the city to grow in how it serves visitors' needs for lodging and food and beverage.

Comparable Sports Venues

As one of the largest demand generators in Carson, HVS sought to contextualize DHSP by comparing it to other sports venues in the Los Angeles area. HVS compared the demographics of visitors to DHSP events and compared it to other major sports venues in Southern California.

The following figure shows the unique visitors and total annual visits to DHSP and seven comparable sports venues. Total visits include people who paid for tickets to DHSP events but also anyone who stepped foot on site.

FIGURE 1-11
UNIQUE VISITATION TO COMPARABLE SPORTS VENUES (2022)

	Seating	Thou	sands	Visit
Venue	Capacity	Unique Visitors	Total Visits	Frequency
SoFi Stadium	70,240	3,321	5,504	1.7
Crypto.com Arena	20,000	2,383	3,687	1.5
Kia Forum	17,500	2,132	2,937	1.4
Dignity Health Sports Park	27,000	657	2,733	4.2
Honda Center	18,900	1,212	1,877	1.5
LA Memorial Coliseum	77,500	867	1,431	1.7
Banc of California Stadium	22,000	743	1,372	1.8
Rose Bowl Stadium	88,565	615	828	1.3
	Average	1,491	2,546	1.9

Sources: Placer.ai and Respective Venues

DHSP is slightly above average in total visits but below average in unique visitors, indicating a high rate of return visitation.

The recently opened SoFi Stadium, which was host to the Super Bowl and several other significant events, had the highest visitation of local sports venues. The Rose Bowl Stadium has the lowest visitation of these venues. The Rose Bowl Stadium and The Kia Forum had the highest proportion of unique visitors.

Visitor Origin for Sports Venues

To evaluate the sports venues on their ability to attract out-of-town and overnight visitation, HVS used Placer.ai's trade area market. The following figure shows the visitation in 50-mile increments.

FIGURE 1-12
VISITOR DISTANCE TO COMPARABLE SPORTS VENUES (2022)

Venue	Seating Capacity	Less than 50 miles	50 to 100 miles	100 to 250 miles	More than 250 miles
Rose Bowl Stadium	88,565	73%	7%	4%	16%
LA Memorial Coliseum	77,500	77%	7%	4%	11%
SoFi Stadium	70,240	71%	11%	6%	12%
Dignity Health Sports Park	27,000	89%	5%	2%	4%
Banc of California Stadium	22,000	81%	6%	4%	9%
Crypto.com Arena	20,000	79%	7%	4%	10%
Honda Center	18,900	82%	9%	2%	7%
Kia Forum	17,500	69%	11%	7%	13%
	Average	78%	8%	4%	10%

Source: Placer.ai

During 2022, DHSP has attracted the lowest percentage of visitors from more than 50 miles distance. This indicates the DHSP draws more visitation from local and regional residents, which accords with its repeat visitation. The Kia Forum draws the highest proportion of its visitation from more than 50 miles, followed by SoFi Stadium. Strong repeat visitation results in higher-than-average local attendance

Visitor Journeys to and from DHSP

HVS analyzed the sports venues' visitor journeys to understand how frequently events correlate with hotel visitation and how frequently surrounding hotels are able to capture those hotel trips.

FIGURE 1-13
HOTEL VISITS OF COMPARABLE SPORTS VENUES (2022)

			Activity before and after venue			
Venue	City	Seating Capacity	Hotel Visits as % of Total Journeys	% Capture of Hotel Trips in respective City		
Rose Bowl Stadium	Pasadena	88,565	3%	30%		
Los Angeles Memorial Coliseu	Los Angeles	77,500	6%	63%		
SoFi Stadium	Inglewood	70,240	24%	37%		
Dignity Health Sports Park	Carson	27,000	9%	20%		
Banc of California Stadium	Los Angeles	22,000	5%	59%		
Crypto.com Arena	Los Angeles	20,000	12%	71%		
Honda Center	Anaheim	18,900	16%	60%		
Kia Forum	Inglewood	17,500	26%	23%		
		Average	13%	45%		

Source: Placer.ai

Due to its geographic area and supply of desirable hotel rooms, Los Angeles hotels are best able to capture the visits generated by their sports venues.

Despite having the lowest percentage of visitation from more than 50 miles, DHSP is close to the middle in visitor journeys to hotels. However, DHSP is second-to-last in being able to capture those hotel trips within Carson. While Carson may never capture hotel trips as often as Los Angeles venues, there is room for growth in its absorption of hotel demand. This can be addressed by adding hotel supply that is attractive to leisure tourists and by making Carson a destination in which visitors want to stay.

Length of Stay

HVS used Placer.ai's length of stay analysis to compare how much time attendees spend in sports venues. A longer length of stay indicates that a sports venue is able to retain and entertain its visitors. Length of stay is measured in the number of minutes a visitor spends at a venue. For major sports venues, spending more than two hours on site is typical.

FIGURE 1-14
LENGTH OF STAY OF COMPARABLE SPORTS VENUES (2022)

Venue	Average Length of Stay (minutes)	% of Visitors Spending more than 120 minutes
SoFi Stadium	193	63%
The Forum	200	70%
Honda Center	179	75%
Banc of California Stadium	173	91%
Crypto.com Arena	162	73%
LA Memorial Coliseum	161	77%
Rose Bowl Stadium	158	61%
Average	175	73%
Dignity Health Sports Park	109	34%

Source: Placer.ai

Despite its size, DHSP is considerably below average in length of stay, and only 34% of visitors in 2022 stayed for two hours or more. While event type may affect length of stay, DHSP can work to improve its retention of visitors.

Olympic Park Case Studies When major sports events are not occurring, sports venue parks must work to equip themselves with amenities and attractions so that they remain vibrant and active spaces that anchor the local community. Parks built to host Olympics competitions

have to reorient when the games end because sports events of that scale are extremely rare. While not exactly like the DHSP, these venues provide potential case studies for how a park built for one purpose can be developed as a sustainable destination.

Following are brief descriptions of five Olympics parks and villages and how they serve their communities.

London—Queen Elizabeth Olympic Park

The London Legacy Development Corporation (established in 2012) is a planning authority tasked with the development of buildings and public spaces near the Olympic Park. The Olympic Park has anchored the revitalization of its area in the East End of London, including partnerships with the local organizations, such as the University of East London and East Bank.

The park hosts sports, cultural, and community events but also has amenities such as walking and biking trails, a roller coaster, playgrounds, a Blossom Garden, and spaces for artwork. The park also has outdoor cafes, kiosks, and restaurants.

Business Improvement District and Creative Enterprise Zones have been used by the LLDC to foster development in and around the park. Recently, the park was the center for the launch of SHIFT, an innovation district that brings together public and private sectors "[w]ith a mission to solve some of the pressing issues of 21st century city living." ¹

May 26, 2023

 $^{^{1} \}qquad https://www.queenelizabetholympicpark.co.uk/media/press-releases/inclusive-innovation-district-launches-at-queen-elizabeth-olympic-park$



AERIAL VIEW OF QUEEN ELIZABETH OLYMPIC PARK

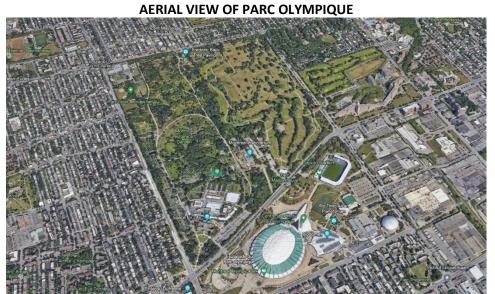
Source: Google Earth

Montreal—Parc Olympique

Host to the 1976 Olympic Games, the Parc Olympique revolves around its mission to "allow sports, cultural and community events, exhibitions, as well as tourist and recreational activities to be held there, in complementarity with its partners and the surrounding community; and to highlight the Olympic heritage and legacy."2 It is anchored by its Olympic Stadium but shares space with the Biodome, a planetarium, insectarium, and a movie theater.

The Parc Olympique also has an inclined observation tower, a unique esplanade and skate park, recreational swimming, office space, remote working areas, and a walking path with outdoor fitness equipment.

https://parcolympique.qc.ca/en/the-olympic-park/the-olympic-park/mission-and-vision/



Source: Google Earth

Seoul—Olpark

Built for the 1988 Olympic Games, this site still holds South Korea's largest sports arena. The park is divided into zones, which include "a leisure sports park, a cultural art park, an eco-park, and the History Experience Park dedicated to the area's rich historic heritage." Besides sports venues, Olpark is home to a wildflower garden, landscape tunnels, an ice skating rink, an Olympic museum, a music hall, a museum of art, a sculpture parking featuring 200 artworks, other temporary art installations, and the World Peace Gate.

https://english.visitkorea.or.kr/enu/ATR/SI_EN_3_1_1_1.jsp?cid=789703

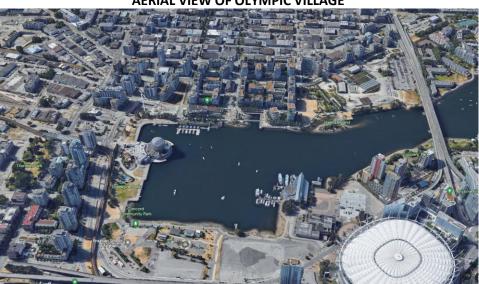
AERIAL VIEW OF OLPARK



Source: Google Earth

Vancouver—Olympic Village

The Olympic Village was built for the 2010 Olympic Winter Games. The Olympic Village Square is the core of what has become a highly desirable residential neighborhood. Preparation for the Olympics led to the development of public spaces, such as a walking and biking trail along Vancouver's seawall; a wetland park that features public art, picnic tables, and a children's play area; a dog park; a community garden; a square with a craft beer market; and a manmade "Habitat Island."



AERIAL VIEW OF OLYMPIC VILLAGE

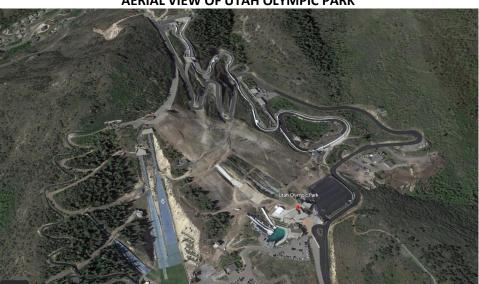
Source: Google Earth

Park City—Utah Olympic Park

The 2002 Olympic Winter Games were held on this site just east of Salt Lake City, Utah. The state created the Utah Olympic Legacy Foundation to transform "great Olympic memories... into lasting benefits for the host community and country," and its focus has been to foster youth participation in winter sports.⁴ Therefore, this park's focus has its Ski museum and a slate of extreme experiences, such as "zipline, ropes courses, extreme sledding, airbag jumps, and the alpine slide," and the unique Bobsled Experience.⁵

⁴ https://utaholympiclegacy.org/about/

https://www.visitparkcity.com/blog/post/best-adventures-in-park-city-forteens/



AERIAL VIEW OF UTAH OLYMPIC PARK

Source: Google Earth

Conclusion

From the centerpiece to revitalizing an entire district in London to a venue almost exclusively dedicated to participation in winter sports, there are a range of examples of how sports parks can continue to attract tourists while serving the local community. The one-time demand that the Olympics generates can be used to develop features that make DHSP and its surrounding area a more hospitable neighborhood for residents that would also sustain tourist visitation.

Features that should be considered include:

- High-quality public spaces, such as parks, plazas, walking trails, and playgrounds
- Cultural enrichment, such as temporary and permanent art installations, cultural exhibits, resident artists, and crafts people
- Diverse food and beverage options, including kiosks and outdoor cafes
- Flexible event spaces that can be used for cultural events, community gatherings, concerts, and outdoor fairs
- Connecting the park to nearby amenities with a pleasant and walkable experience

Collaborations with local businesses and organizations, and community engagement to further define residents' needs

CSUDH

CSUDH is a significant importer of students to Carson, but these students are primarily commuters and are unlikely to spend significant time and money around campus. Historically, CSUDH has been a 90% commuter campus, with an average student age of 24. With residential and supporting development, CSUDH could become a more significant engine for economic impact.

CSUDH is working on a master plan that would inscribe its long-term goals, as the university aims to expand its footprint after decades of stasis. The university plans to emphasize more full-time students and attract students from outside their service region. CSUDH is aware of the need to have sufficient housing and supporting amenities such as food and beverage and a variety of retail options in order to attract students who would be residents on or near campus.

CSUDH's current hospitality needs are for conference and event space due to growing interest in conferences and symposiums. Current hotel needs are minimal because most commute and do not live students living on campus; out-of-town visitation from friends and family are rare. Recent planned developments include an innovation and instruction building and new student housing, a dining hall, a health and wellness facility, additional housing for students, faculty, and staff, and research buildings.

While we should consider the CSUDH's plans to be oriented toward the long term, the City of Carson should seek opportunities for partnership, as many of the amenities that would attract students to stay near the university would also be amenities that could service other visitors.

Live Entertainment District

Various stakeholders involved in the City's economic development strategic planning process have indicated a strong interest in the concept of a Live Entertainment District that would leverage the unique opportunities represented by the presence of DHSP in Carson.

A Live Entertainment District is organized around the proposition that a neighborhood or otherwise defined geographic area becomes a destination by achieving a critical mass of demand generators and supporting amenities. Successful entertainment districts have a mix of uses that support each other to make a highly active neighborhood, which includes residential, office, lodging and hospitality, food and beverage, entertainment venues, leisure offerings, shopping and services, and event programming.

Districts should be defined by convenient transportation and accessibility, high-quality public spaces, pedestrian-friendly and highly walkable, and are marketed and programmed from a coherent district identity.

These districts are sometimes organic and emerged historically through the private sector developments of restaurants, residences, and retail outlets surrounding professional sports venues. Or their development can be influenced by state or local government initiatives and investment. Municipalities can delimit an official district, develop economic development and marketing organizations that serve the district, develop master plans for their preferred developments of the district, and encourage private investment through the use of incentive programs. A more robust discussion of public sector incentives follows at the end of Section 2.

DHSP is one of the most promising areas for development in the City. What follows are examples of some successful entertainment districts that could inform the goals in Carson. The following figure summarizes the area surrounding six districts as defined by a 20-minute walking distance. The 20-minute walking area for each district is shaded pink.

FIGURE 1-15
ENTERTAINMENT DISTRICT ESTABLISHMENTS WITHIN A 20-MINUTE WALK (2022)

				Establis	hments			Sales (\$ millions)			
District	Household Population	Aggregate Income (\$ millions)	Arts, Entertainm ent, Recreation	Accommod ation	Food Srv & Drinking Places	Retail Trade	Arts, Entertainm ent, Recreation	Accommod ation	Food Srv & Drinking Places	Retail Trade	
Kansas City - Power & Light	13,192	\$807.6	72	22	202	162	\$48.2	\$267.4	\$134.9	\$287.2	
Carson - DHSP	12,640	\$569.3	10	1	28	26	\$44.1	\$3.3	\$18.8	\$111.8	
Nashville - Nashville Yards	12,146	\$1,018.4	92	49	288	167	\$189.7	\$458.3	\$239.7	\$405.5	
Irving - Toyota Music Factory	8,943	\$706.5	12	12	43	31	\$10.2	\$78.6	\$41.7	\$197.1	
Green Bay - TitleTown	6,887	\$244.3	9	5	22	36	\$41.6	\$17.2	\$32.1	\$158.6	
Atlanta - The Battery	5,417	\$274.4	13	14	84	111	\$57.5	\$324.4	\$100.7	\$498.6	
Foxborough - Patriot Place	48	\$2.6	11	4	26	25	\$93.8	\$12.9	\$37.6	\$212.2	

Source: Esri

Arts, Entertainment, and Recreetion Hotels and Accommodations Retail Food & beverage Repossal Repossal Repossal

PATRIOT PLACE - FOXBOROUGH, MA

Anchor: Gillette Stadium

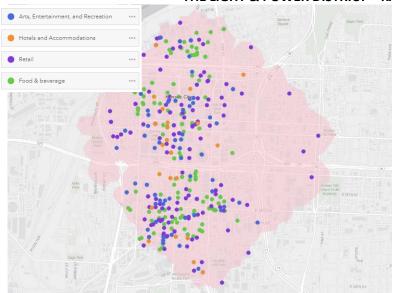
Total Visits to Anchor (2022): 3.4 M **Unique Visitors to Anchor (2022)**: 2.0 M

Developer: The Kraft Group

Completion/Opening year: 2007

Entertainment Venues: Comedy Scene, Helix eSports, Patriots Hall of Fame, Showcast Cinema De Lux, Howl at the Moon (sharing space with Splitsville Luxury Lanes and Topgolf Swing Suite)

THE LIGHT & POWER DISTRICT - KANSASY CITY, MO



Anchor: T-Mobile Center

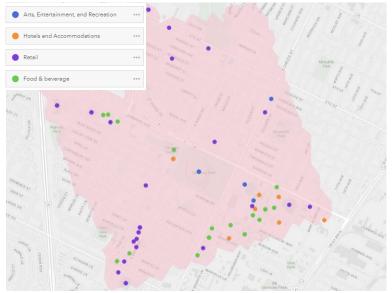
Total Visits to Anchor (2022): 1.0 M **Unique Visitors to Anchor (2022)**: 0.7 M

Developer: The Cordish Companies, designed by Beyer Blinder Belle and 360 Architecture

Completion/Opening year: 2008

Entertainment Venues: KC Live! Outdoor stage, The Midland Theater, Howl at the Moon, Mosaic (nightclub), No Other Pub (bowling and floor games), Sinkers Lounge (mini golf), PBR Big Sky

TITLETOWN DISTRICT - GREEN BAY, WI



Anchor: Lambeau Field

Total Visits to Anchor (2022): 2.6 M **Unique Visitors to Anchor (2022)**: 1.5 M

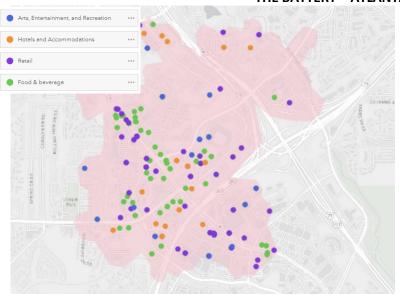
Developer: Green Bay Packers

Completion/Opening year: 2017

Entertainment Venues: Ariens Hill (tubing), Ice Skating, Game Courts (backyard games), Shokpo Optical

Playground

THE BATTERY - ATLANTA, GA



Anchor: Truist Park

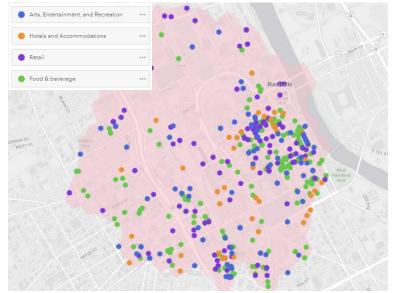
Total Visits to Anchor (2022): 6.2 M **Unique Visitors to Anchor (2022)**: 3.5 M

Developer: Atlanta Braves, Liberty Media, designed by HGOR

Completion/Opening year: 2017

Entertainment Venues: Coca-Cola Roxy, Silverspot Cinema, Park Bench (piano bar), Good Game (Top Golf Swing Suite), Punch Bowl Social (bowling and floor games)

NASHVILLE YARDS - NASHVILLE, TN



Anchor: The Union Station Nashville Yards (hotel), AEG music venue (to come)

Total Visits to Anchor (2022): N/A Unique Visitors to Anchor (2022): N/A

Developer: Southwest Value Partners,

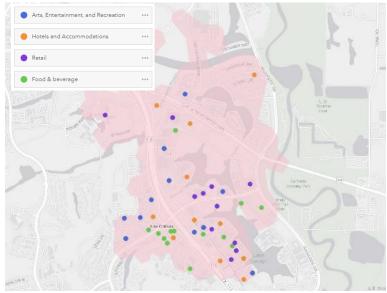
AEG

Completion/Opening year: 2024

Entertainment Venues: 4,500-capacity live music venue, an upscale eight-screen

cinema

TOYOTA MUSIC FACTORY – IRVING, TX



Anchor: The Pavilion

Total Visits to Anchor (2022): 1.9 M **Unique Visitors to Anchor (2022)**: 1.0 M

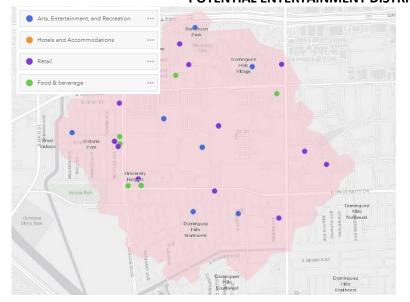
Developer: ARK Group, designed by

Gensler

Completion/Opening year: 2017

Entertainment Venues: Alamo Drafthouse Cinema, Texas Lottery Plaza

POTENTIAL ENTERTAINMENT DISTRICT - CARSON, CA



Anchor: Dignity Health Sports Park

Total Visits to Anchor (2022)*: 2.7 M **Unique Visitors to Anchor (2022)**: 0.6 M

Developer: N/A

Completion/Opening year: N/A

Entertainment Venues: N/A

*The adjacent CSUDH campus also attracts

3.2 million visitors per year.

While the area within a 20-minute walk of DHSP has a strong population base, it ranks last in food and beverage and retail offerings. Though it shows some Arts, Entertainment, and Recreation establishments, these are all sports facilities or organizations that would not add appeal to the district.

Conclusion

The development of an entertainment district in Carson would likely require the development of a master plan that identified desired uses, preferred sites, and the incentives available to potential developers. This should include the development of music venues and other entertainment offerings, hotel and hospitality development, retail and restaurant outlets, and, as observed in the Olympic Park case studies, walkable and attractive public spaces. These efforts could be supported by the development of an economic development and/or a marketing entity dedicated to promoting the district.

Besides a strong anchor, keys to success for an entertainment district include:

- A mix of uses that support each other, including residential, office, lodging and hospitality, food and beverage, entertainment venues, shopping, leisure offerings
- Convenient transportation and accessibility

other City initiatives may include the following.

- High-quality public spaces, pedestrian-friendly and highly walkable areas
- District identity, including a marketing strategy, event programming, and economic development efforts
- Master plan that identifies desired uses, preferred sites, and available incentives for potential developers.

While Carson has a strong demand generator in DHSP, it is not considered a destination. To become one, Carson has to invest energy, political will, and funding into developing the characteristics and amenities that attract and retain out-of-town visitors. In addition to planning an entertainment district with DHSP as an anchor,

- The demand generated by DHSP is augmented by its proximity to CSUDH, which also brings thousands of visitors to its campus every year. Potential synergies with the university should be considered as part of any City strategies for the area.
- Expansion of City-wide events and festivals. Some ideas include free concerts, outdoor movie nights, attracting food trucks and other vendors, and attracting sponsors.

Other City-wide Takeaways

- Investment in the Carson Event Center. While the rebranding study and renovation efforts are underway, the Center could be freed to focus more on attracting events and less on community services, which would require shifting those services to other venues.
- Tracking the events that occur, such as City-wide festivals and Carson Event Center events, including event length, attendance, room nights, and scope of appeal, should be a priority. This could also include regular surveying of event attendees. These efforts will help the City set goals and benchmarks as it tries to expand its tourism offerings.
- The City should also track lost events that could have occurred in Carson but went to another destination. This will help the City understand what can be improved in its offerings.
- Establishment of a tourism marketing entity or a tourism manager, with the goal of fostering and selling the hospitality products in Carson. The tourism entity could spearhead the recommendations described above.

2. Hotel Market Analysis

Subject of the Market Study

Methodology

In this section, HVS assesses the existing lodging market supply and demand in Carson, compiles data on the historical performance of the local lodging market, and estimates future room night demand in the market. HVS identifies potential new lodging supply in the market area and provides a 10-year forecast of hotel supply, demand, and room revenue. This analysis assesses the need for additional future hotel development in Carson. HVS identifies strategies, including potential incentive programs, to incentivize hotel development in the City.

In accordance with our Scope of Services, HVS performed the following tasks:

- 1. analyzed the historical performance of the hotels in Carson,
- 2. estimated the amounts of induced and unaccommodated demand in the market, and
- 3. researched potential changes in hotel room supply.

Based on these hotel market trends and economic and demographic indicators of future changes in hotel demand, HVS projected the Carson hotel market's future performance. Through a market penetration analysis, HVS estimated the market's average daily room rate and occupancy assuming further hotel development. An estimate of average daily room rates and occupancies generates a projection of room revenues.

The methodology used to develop this study is based on market research and valuation techniques set forth in the textbooks authored by Hospitality Valuation Services for the American Institute of Real Estate Appraisers and the Appraisal Institute, entitled *The Valuation of Hotels and Motels,* 1 Hotels, Motels and Restaurants: Valuations and Market Studies, 2 The Computerized Income Approach to Hotel/Motel Market Studies and Valuations, 3 Hotels and Motels: A Guide to Market Analysis, Investment Analysis, and Valuations, 4 and Hotels and Motels – Valuations

¹Stephen Rushmore, *The Valuation of Hotels and Motels*. (Chicago: American Institute of Real Estate Appraisers, 1978).

² Stephen Rushmore, *Hotels, Motels and Restaurants: Valuations and Market Studies.* (Chicago: American Institute of Real Estate Appraisers, 1983).

³ Stephen Rushmore, *The Computerized Income Approach to Hotel/Motel Market Studies and Valuations*. (Chicago: American Institute of Real Estate Appraisers, 1990).

⁴ Stephen Rushmore, Hotels and Motels: A Guide to Market Analysis, Investment Analysis, and Valuations (Chicago: Appraisal Institute, 1992).

and Market Studies.⁵ All information was collected and analyzed by the staff of HVS Convention, Sports & Entertainment Facilities Consulting. HVS sought out reliable sources and deemed information obtained from third parties to be accurate.

Analysis of the performance of the hotel market includes discussion of the following key metrics:

- guest room count,
- available room nights—the number of rooms times the number of days they are available in any given period,
- occupancy rate—the number of occupied room nights divided by the available room nights in any given period.
- average daily room rate ("ADR")—room revenue divided by the number of occupied room nights, and
- revenue per available room ("RevPAR")—the product of occupancy rate and ADR.

Market Segments

The purpose of segmenting the lodging market is to define each major type of demand, identify customer characteristics, and estimate future growth trends. For the demand analysis, the overall market is typically divided into three segments based on the nature of travel.

Commercial demand is mainly individual business people passing through the local market or visiting area businesses, in addition to high-volume corporate accounts of local firms. Brand loyalty (particularly frequent-traveler programs), as well as location and convenience concerning businesses and amenities, influence lodging choices in this segment. Companies typically designate hotels as "preferred" accommodations in return for more favorable rates. Commercial demand is strongest Monday through Thursday nights, declines significantly on Friday and Saturday, and increases somewhat on Sunday night. In markets where the weekday occupancy often exceeds 90%, some unaccommodated commercial demand is likely to be present. Commercial travel is relatively constant throughout the year, with declines in late December and other holiday periods.

The **meeting and group** demand includes meetings, seminars, conventions, trade shows, and similar gatherings of ten or more people. Peak convention and conference demand typically occurs in the spring and fall. The primary categories considered under this designation are corporate, associations, and SMERFE (social,

Definitions

⁵ Stephen Rushmore and Erich Baum, *Hotels and Motels – Valuations and Market Studies*. (Chicago: Appraisal Institute, 2001).

military, educational, religious, fraternal, and ethnic) groups. Corporate groups typically meet during the business week, most commonly in the spring and fall months. These groups often are the most profitable for hotels, as they typically pay higher rates and usually generate ancillary revenues, including food, beverage, and banquet revenue. SMERFE groups are typically price-sensitive and tend to meet on weekends or during the summer months or holiday season when greater discounts are generally available. They generate limited ancillary revenues. The profile and revenue potential of associations varies depending on the group and the purpose of their meeting or event.

Factors related to group demand considered in our development of growth rates for this segment include the market's local corporate sources, which generate some group business. The same companies that create commercial demand also generate meeting and group demand through training activities and corporate social events. High school and collegiate sports teams, SMERFE groups, and social events, such as weddings and family reunions, also contribute to this demand segment.

Leisure demand is from individuals and families spending time in an area or passing through to other destinations. Travel purposes include sightseeing, recreation, or visiting friends and relatives. Leisure demand also includes room nights booked through Internet sites such as Expedia, Hotels.com, and Priceline. Leisure demand is strongest on Friday and Saturday nights and all week during holiday periods and the spring months. Future leisure demand is related to the overall economic health of the region and the nation. Trends showing changes in state and regional unemployment and disposable personal income correlate strongly with leisure travel levels.

The typical length of stay ranges from one to four days, depending on the destination and travel purpose, and the rate of double occupancy typically ranges from 1.8 to 2.5 people per room. Price sensitivity tends to vary with the product type.

Carson Hotel Market

The following map illustrates the locations of the hotels in Carson.



Chain Scale segments are grouped primarily according to actual average room rates. The Chain Scale segments are Luxury, Upper Upscale, Upscale, Upper Midscale, Midscale, Economy, and Independent. Upper Upscale properties are most effective for providing lodging for meetings and conventions, plus transient corporate and leisure demand.

The following figure shows the age, hotel chain scale, and the number of rooms of the Carson hotels.

FIGURE 2-1
CLASS, OPENING YEAR, AND ROOM COUNT OF CARSON HOTELS

	Hotel	Hotel Class	Opening Year	Number of Rooms
A B C	Cali Inn Carson DoubleTree by Hilton Carson Extended StayAmerica Los Angeles Carson	Midscale Upscale Economy	1991 1990 2004	35 225 107
D	Hampton by Hilton Los Angeles Carson Torra	Upper Midscale	1990	136
Ε	Motel 6 Carson	Economy	1975	169
F	Rodeway Inn Carson Los Angeles South	Economy	1984	31
	Six Properties			703

Sources: STR and HVS

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Hotel Market Analysis
Carson, California

Carson has three economy hotels and only one upscale hotel. The DoubleTree has 225 rooms, making up over 30% of the market. Economy scale hotels make up 44% of the supply in Carson.

The Carson hotels' average age is 33 years, with both the Hampton Inn and DoubleTree at 32 years old. Early this year, the DoubleTree completed a substantial renovation project that updated public areas and refreshed the rooms. The most recent hotel construction is the Extended StayAmerica, which is 18 years old.

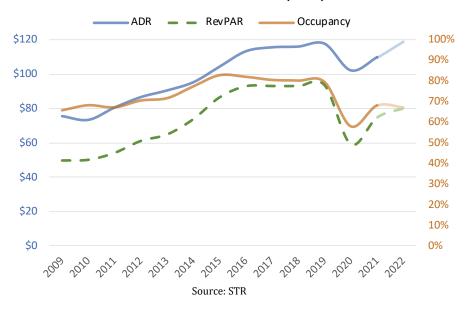
Historical Market Performance

In the lodging industry, price varies directly, but not proportionately, with demand and inversely, but not proportionately, with supply. Supply is measured by the number of guestrooms available, and demand is measured by the number of rooms occupied; the net effect of supply and demand toward equilibrium results in a prevailing price, or ADR. The purpose of this section is to investigate current supply and demand trends, as indicated by the current competitive market, and to set forth a basis for the projection of future supply and demand growth.

STR data have certain limitations. Hotels are occasionally added to or removed from the sample, and not every property reports data in a consistent and timely manner. These factors can influence the overall quality of the information. Nonetheless, STR data provide the best indication of aggregate growth or decline in existing supply and demand; thus, our analysis considers these trends.

The following figure shows the Carson hotels' historical performance, including the occupancy rates, ADR, and RevPAR. HVS estimated the ADR and Occupancy for November and December 2022 based on available market research.

FIGURE 2-2
CARSON HOTELS HISTORICAL OCCUPANCY, ADR, AND REVPAR



Occupancy increased from 2011 through 2015, when it peaked at 83.0%, then declined slightly through 2019. The relative stability of hotel occupancy, around 80% from 2017 through 2019, indicates the maximum functional capacity of the market. In 2020, Carson hotels registered 58.0% occupancy, a 27.1% decline from the market occupancy of 79.6% in 2019. The market recovered to 68.2% the following year but declined slightly in 2022 due to renovations at the DoubleTree, which restricted the hotel's guest rooms and function space from June through November. Looking only through May, Carson hotels showed a 6% improvement in occupancy in 2022.

The overall market average daily rate increased from \$74 in 2010 to \$117 in 2019. Though ADR growth slowed after 2016, it continued to rise until the pandemic. In 2022, STR reported the market reached the highest recorded ADR. Despite the dip in occupancy, this led to a RevPAR peak as well.

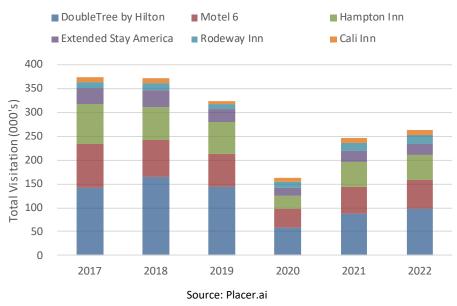
HVS used Placer.ai to estimate the total out-of-town visitation to hotels in Carson. This visitation, filtered by visitors originating from ten or more miles away, includes overnight guests, meeting and event attendees, and other daytime visitors.

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Hotel Market Analysis
Carson, California

2-6

FIGURE 2-3
CARSON HOTELS OUT-OF-TOWN VISITATION



Though visitation to hotels in Carson has rebounded from pandemic lows, it has not

yet recovered to the levels experienced before 2020.

Historical Supply and Demand

The following figure summarizes aggregate Carson hotels' performance in the base year. HVS used 2022, the most recent complete year of data, as the base year of our analysis.

The following figure shows occupancy and average daily room rates through October 2022 compared to the Carson hotels in 2021.

FIGURE 2-4
CARSON HOTELS DEMAND, OCCUPANCY, ADR, AND REVPAR

	YTD Throu	gh October		
	2021	2022	Percen	t Change
Room Night Demand	146,851	143,761	-2.1%	
Available Room Nights	213,712	213,712	0.0%	
Occupancy	68.7%	67.3%	-2.1%	
ADR	\$108.65	\$121.03	11.4%	
RevPAR	\$74.65	\$81.41	9.1%	

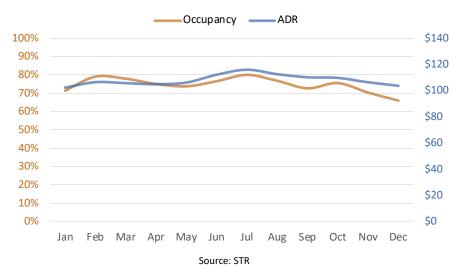
Source: STR

In 2022, occupancy declined from 2021 levels, but ADR increased, resulting in a higher RevPAR. We expect occupancy to recover in the following years.

Seasonality

The Carson hotels show moderate seasonal variation, with July displaying the highest ADR and the highest occupancy and December with the lowest ADR and the lowest occupancy, as shown in the figure below.

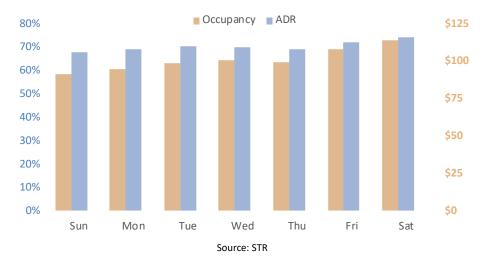
FIGURE 2-5
SEASONALITY GRAPH – CARSON HOTELS (2013 – 2022 AVERAGE)



Day of Week

The following figure shows the occupancy and ADR by day of the week for the Carson hotels.

FIGURE 2-6
OCCUPANCY AND ADR BY DAY OF WEEK – CARSON HOTELS (2013 – 2022 AVERAGE)



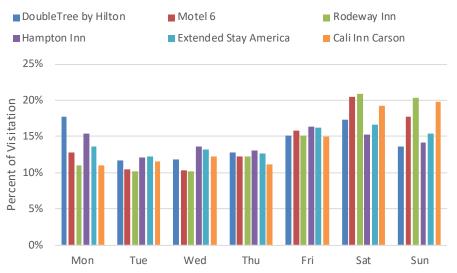
Leisure demand generates higher occupancy on Friday and Saturday nights. Saturday nights generated the peak average occupancy of 73% and peak average ADR of \$116. Sundays have the lowest average ADR and occupancy. Corporate and Meeting and Group demand could contribute to stronger mid-week demand.

To supplement the STR analysis, HVS used placer.ai. The following figure shows the percentage of total visitation to each property by day of week. Patterns of visitation differ from occupancy because the placer.ai data tracks day visitors as well as overnight guests.

May 26, 2023

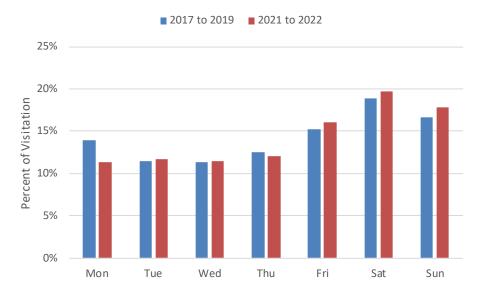
Hotel Market Analysis
Carson, California

FIGURE 2-7
WEEKDAY TRENDS BY PROPERTY (2017-19)



The following figure compares the weekday visitation trends from 2017 through 2019 to the post-pandemic averages in 2021 and 2022.

FIGURE 2-8
WEEKDAY TRENDS PRE- AND POST-PANDEMIC – CARSON HOTELS



Carson hotels had slightly more weekday visitation pre-pandemic than they did in 2021 and 2022. This trend most likely reflects the decrease in business travel and a larger share of leisure demand which peaks on weekends. From 2017 through 2019, the DoubleTree had the highest weekday demand, followed by the Hampton Inn. However, the Rodeway Inn and the Extended StayAmerica lead the pack in weekday visitation after the pandemic, a symptom of the more rapid recovery of leisure demand in comparison to corporate and meeting and group.

The following figure shows the daily and monthly occupancy rates of the Carson hotels. Green shaded areas indicate above-average occupancy rates, and red shaded areas indicate below-average occupancy rates.

FIGURE 2-9 **MOST RECENT 12 MONTHS MONTHLY AND DAILY OCCUPANCY – CARSON HOTELS**

WIOST MECE	1031 RECEIVE 12 MONTHS MONTHET AND DAILT OCCUPANCE				CAILO	CARSON HOTELS		
Month	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total Month
Nov - 21	59.9%	58.7%	60.7%	60.6%	65.5%	78.4%	82.3%	66.1%
Dec - 21	55.7%	58.2%	60.3%	66.1%	66.5%	75.0%	75.5%	65.7%
Jan - 22	58.8%	63.3%	65.0%	67.4%	69.7%	71.2%	72.7%	66.7%
Feb - 22	69.4%	70.0%	72.4%	75.0%	75.0%	77.4%	83.0%	74.6%
Mar - 22	62.0%	66.6%	71.4%	73.4%	73.2%	81.8%	82.8%	73.0%
Apr - 22	57.9%	67.3%	69.4%	74.2%	75.3%	77.6%	83.4%	72.7%
May - 22	63.7%	63.1%	67.8%	71.6%	70.1%	78.0%	80.4%	70.1%
Jun - 22	61.4%	63.8%	67.3%	67.5%	66.8%	72.5%	74.6%	67.7%
Jul - 22	59.4%	59.2%	62.7%	64.5%	65.7%	68.3%	71.2%	64.6%
Aug - 22	50.6%	53.7%	55.4%	57.8%	57.9%	60.4%	60.1%	56.5%
Sep - 22	60.0%	58.9%	63.2%	65.8%	64.8%	67.3%	69.5%	64.3%
Oct - 22	55.5%	59.0%	60.4%	61.2%	63.3%	70.4%	73.8%	63.3%
Total Year	59.5%	61.6%	64.6%	67.0%	67.8%	73.1%	75.7%	67.0%
	Minimum	50.6%	Average	67.1%	Max	83.4%		
Source: STR								

As is typical of most markets, Carson's demand is lowest in the Winter, particularly November through January, though demand strengthens in February and early spring. The occupancy rate on Saturday exceeds 80%, approximately 42% of the time, and on Friday, it exceeds 80%, about 8% of the time.

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FIGURE 2-10
MOST RECENT 12 MONTHS MONTHLY AND DAILY ADR – CARSON HOTELS

Month	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total Month
Nov - 21	\$112	\$110	\$113	\$113	\$115	\$118	\$128	\$116
Dec - 21	109	108	112	115	111	122	121	115
Jan - 22	106	107	108	109	109	114	114	110
Feb - 22	121	117	113	112	114	121	125	118
Mar - 22	111	116	117	114	116	116	120	116
Apr - 22	116	122	121	121	123	124	126	122
May - 22	122	125	126	122	119	130	132	125
Jun - 22	123	127	133	128	124	131	134	128
Jul - 22	125	122	123	128	119	129	132	126
Aug - 22	115	115	117	116	119	135	131	121
Sep - 22	119	122	126	126	119	124	127	123
Oct - 22	114	119	124	120	118	124	127	121
Average	116	118	119	119	117	124	126	120
	Minimum	\$106	Average	\$120	Max	\$135		

Source: STR

June had the highest monthly ADR at an average of \$128, and January the lowest at \$110. Overall, Saturday had the highest weekly average ADR at \$126, and Sunday the lowest at \$116.

Comparison to Peer Group

HVS compared the available hotel rooms in Carson to the "Peer" cities, as defined by The Natelson Dale Group, along with their population and aggregate household income.

FIGURE 2-11
CARSON PEER GROUP HOTEL SUPPLY

	Population	Aggregate Income (2022 \$ millions)	Rooms								
Peer Communities			Economy Class	Midscale Class	Upper Midscale Class	Upscale Class	Upper Upscale Class	Luxury Class	Total Rooms		
Cerritos	48,962	2,443	0	0	0	0	203	0	203		
Santa Fe Springs	19,034	543	130	81	0	0	0	0	211		
Carson	96,124	3,322	307	35	136	225	0	0	703		
Commerce	12,122	270	169	0	154	201	194	0	718		
Redondo Beach	70,846	5,505	107	128	108	957	0	215	1,515		
Inglewood	106,961	3,253	1,857	596	151	0	0	0	2,604		
El Segundo	17,404	1,251	273	0	521	1,520	349	0	2,663		
Torrance	146,425	8,200	630	179	651	1,185	491	0	3,136		
Long Beach	464,125	18,269	1,554	204	424	1,504	2,353	0	6,039		
Los Angeles County	9,992,643	4,960,501	23,246	7,226	9,921	18,207	26,638	13,193	98,431		

Sources: STR, TNDG, and HVS

Though of varying sizes, the average number of hotel rooms for these cities is 1,977, which makes Carson below average by 1,274 hotel rooms.

South Bay Hotel Submarket

Carson is part of the South Bay hotel submarket in Los Angeles County, which includes the following cities:

- Avalon, CA
- Carson, CA
- Gardena, CA
- Harbor City, CA
- Hawthorne, CA
- Hermosa Beach, CA
- Lawndale, CA
- Lomita, CA
- Manhattan Beach, CA
- Rancho Palos Verdes, CA
- Redondo Beach, CA
- San Pedro, CA
- Torrance, CA
- Wilmington, CA

HVS obtained daily STR data from Discover Los Angeles and analyzed the relationship between the South Bay submarket and the wider Los Angeles County hotel market. This data is confidential and is not able to be directly included in this report.

The South Bay submarket has 12,671 rooms, with Torrance providing the largest supply of rooms. In terms of average daily rate, South Bay has lagged behind the county's stronger markets, though it is generally stronger than the East, Southeast, and Airport markets. Historically, the submarket has closely mirrored the county's occupancy and has been slightly above average after March 2020.

The City of Carson makes up only 5.5% of total rooms in the South Bay submarket, but its performance is highly correlated, with approximately a 92% correlation between the city and submarket in occupancy and a 94% correlation in ADR from 2017 through May 2022. The continued recovery of the South Bay market, almost fully recovered in occupancy through early September of 2022, is promising for Carson's hotels and lends credence to the belief that the 2022 dip in occupancy is due to renovations in the DoubleTree and not a long-term trend.

Summary of the Carson Hotels

The following figure shows a summary of the estimated historical performance of the Carson hotels.

FIGURE 2-12
CARSON HOTELS HISTORICAL SUPPLY, DEMAND, OCCUPANCY, ADR, AND REVPAR

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Year	Available Room Nights	Annual Change	Occupied Room Nights	Annual Change	% Occ	Annual Change	ADR	Annual Change	RevPAR	Annual Change
2010	251,120		171,552		68.3%		\$74		\$50	
2011	251,364		169,138		67.3%		\$81		\$54	
2010	252,187		178,069		70.6%		\$87		\$61	
2013	252,580		181,245		71.8%		\$91		\$65	
2014	254,584		197,338		77.5%		\$95		\$74	
2015	255,993		212,422		83.0%		\$104		\$86	
2016	256,838		211,041		82.2%		\$113		\$93	
2017	256,595		206,941		80.6%		\$115		\$93	
2018	256,595		206,116		80.3%		\$116		\$93	
2019	256,595		204,252		79.6%		\$117		\$93	
2020	256,595		148,848		58.0%		\$102		\$59	
2021	256,595		175,120		68.2%		\$110		\$75	
2022	256,595		172,688		67.3%		\$119		\$80	
Average Annual Compounded Change: 2009-2022										
		0.2%		0.3%		0.2%		3.5%		3.7%
Average Annual Compounded Changed 2009-2019										
		0.2%		2.1%		1.9%		4.5%		6.5%
					oo. CTD					

Source: STR

The room supply in Carson has not changed significantly since 2010. From 2009 through 2019, the market has shown overall growth in occupied room nights of 2.1% on average per year, though available room nights remained steady, resulting in occupancy rates rising from 66% to 80%. From 2015 to 2019, room night demand decreased, causing occupancy to decline from the peak of 83% and remain around 80% until the pandemic. With the exception of a decline in 2020, ADR has grown every year since 2009, with an average growth of 4.5% through 2019.

HVS assumes the hotel market will continue its recovery to pre-pandemic levels of occupancy. Occupancy can only reach a peak of approximately 80%, and once that level is obtained, room night demand will not grow without additional hotel supply. Average daily room rate will likely grow at long-term historical averages.

Hotel Development Recommendations

Prior to the COVID-19 pandemic, the hotel market in Carson showed itself to be consistent. Occupancy was at or above 79.6% for five straight years in which ADR

also grew. Occupancies at this level typically indicate that the market can absorb additional hotel rooms. The Placer.ai analysis in the previous section of this report also indicates that significant amounts of hotel demand in Carson are leaving the market.

Given these characteristics, it is likely that developments from the private sector will enter the market. Select-service hotels generate higher ratios of profit relative to other hotel classes and were the most resilient during the pandemic. This incoming supply is also likely to be located along highway corridors. However, new hotel developments would be select-service properties that would be limited in their abilities to induce or generate new room night demand in Carson.

The City of Carson's potential involvement in hotel development is only necessary if the City would like to encourage particular forms of hotel development, such as a hotel of a higher hotel class, the presence of significant amounts of meeting space (which could attract events), particular locations (such as near the Carson Event Center or DHSP), or room block agreements. These features, desirable to the City, would, in general, make for less profitable developments for the private sector. Incentives are used for the city to encourage the development of properties that might not otherwise be feasible with private investment. The last section of this report reviews public/private partnerships and the potential avenues for public involvement in hospitality projects.

HVS has considered two potential scenarios of hotel development that would leverage Carson's existing tourism assets and have the strongest potential to drive out-of-town visitation to the City: hotel development attached to the Carson Event Center and hotel development near the DHSP.

Carson's Meetings and Conference Complex

The City's two main assets for meeting and group events, the Carson Event Center and the DoubleTree Hotel, are located on Carson St, bordered by Avalon Blvd to the west and Interstate 405 to the east. The addition of a hotel attached to the Carson Event Center could strengthen the facility's appeal to event planners who look for all-under-one-roof venues for their events and focus on selling the function space. Conferences, meetings, and other events can add to a City's economy by bringing out-of-town visitors who will spend on meals and other amenities in Carson and will become familiar with what the City can offer. Additionally, events can bring ancillary revenues, such as event set-up and food and beverage.

Historically, the Carson Event Center has functioned as a community center and served as a youth center, senior center, and job placement center, and as a space for local groups to meet. The Carson Event Center is currently in the process of

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rebranding and re-focusing its mission to focus on generating meetings and events. The success of this scenario depends on the Carson Event Center's ability to successfully attract high-value events, which would also require the entire facility to be available, meaning that the City's community center needs would have to be met elsewhere.

A hotel on this site could be a full-service property with meeting space to supplement the Carson Event Center or a select-service property (such as a Hilton Garden Inn or Courtyard by Marriott) whose meeting amenities are subsidized by the City.

Currently, much of the land on this site is taken up by parking spaces, and any development should study the parking needs generated and how they would be satisfied.

This is the most promising opportunity for hotel development in Carson to improve the meetings and group market in Carson and help refocus its existing meeting amenities.

A Live Entertainment District in Carson

The City's current primary demand generator is the DHSP, but it needs to become a destination rather than a collection of venues. A hotel on the park's site could service both visitors to the park and surrounding amenities and CSUDH as the university continues to expand its residential presence in the City. Additionally, a hotel project could anchor mixed-used development and help support the restaurants, retail, and entertainment amenities that could turn the area into a destination.

A well-developed Live Entertainment District could be a regular attraction for residents of and visitors to the South Bay region. However, it is likely that Carson would have to offer incentives to developers in order to attract the kind of amenities that would catalyze into an appealing neighborhood. Further discussion of Live Entertainment Districts can be found beginning on Page 1-20.

Another potential for development on this site could be the development of a hotel that could service Olympics attendees in 2028 and transition some or all of its rooms into dormitories for CSUDH in subsequent years. This would require a significant partnership for the university and would be a unique model for development.

Projecting the Performance of the Local Market

For the purposes of forecasting the Carson Hotel Market, HVS assumes that Carson is able to attract a high-quality, select-service, 120-room property adjacent or attached to the Carson Event Center (the "Proposed Hotel"). The property would have significant meeting space, business amenities, and a restaurant. We assume the

Proposed Hotel would open by 2027 in order to service demand during the Olympics in 2028.

Historical data and market interviews provided an understanding of the condition and recent changes in the Carson hotels and the overall market. Next, we project the Carson hotels over the next ten years based on:

- Changes in supply,
- Base growth in room night demand,
- Unaccommodated demand, and
- Induced demand.

HVS used the Hotel Construction report from BuildCentral, Inc. to research new potential hotel development in Carson. HVS found one hotel in the planning stages as of December 15, 2022, a TownePlace Suites by Marriott. Though it is unclear when the proposed TownePlace Suites will open, for the purposes of this analysis, HVS assumes that it will open in 2025. While it is impossible to know whether this hotel will open, it is likely that given the characteristics of this hotel market—steady ADR growth with average occupancies of 80% or more for several years—some limited-service product with 100 to 120 rooms will enter the market.

HVS found two other hotel projects for properties that could include 100 to 200 rooms, but these projects have not had updates since 2021. Therefore, we have not included them as potential supply. The following figure summarizes our assumptions regarding new supply, which includes the recommendation above.

FIGURE 2-13
NEW HOTEL SUPPLY IN CARSON

Year	Proposed Properties	Proposed Rooms
2025 2027	TownePlace Suites by Marriott Proposed Hotel Total	111 120 342

Sources: BuildCentral and HVS

New hotels affect the operating performance of the Carson hotels market. Based on our research and recommendations, the new supply considered in our analysis is presented in the figure below.

Supply Changes

FIGURE 2-14
CARSON ROOM SUPPLY PROJECTIONS (WEIGHTED DAILY ROOM COUNTS)

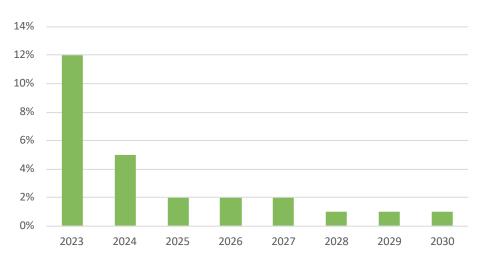


While HVS has taken reasonable steps to investigate proposed hotel projects and their status, it is impossible to determine with certainty every hotel that would open in the future due to the nature of real estate development. Future improvement in market conditions would raise the risk of increased competition. Our forecasts reflect this risk.

Estimated Demand Growth

HVS based demand growth rate estimates on assessment of occupancy trends, economic and demographic data, interviews, and identification of demand generators. The following figure shows estimated base growth rates through the stabilization of demand.

FIGURE 2-15
PROJECTED GROWTH RATES FOR CARSON HOTEL DEMAND



The market will continue to recover in 2023 and 2024 as room night demand rebounds from the current downturn.

Latent Demand

Unaccommodated Demand

Latent demand reflects potential room night demand that has not been realized by the existing Carson hotels; this type of demand can be divided into unaccommodated demand and induced demand.

Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must defer their trips, settle for less desirable accommodations, or stay in properties located outside the market area. Because this demand did not yield occupied room nights, it is not included in the estimate of historically accommodated room night demand. If additional lodging facilities are expected to enter the market, it is reasonable to assume that these guests will be able to secure hotel rooms in the future, and it is, therefore, necessary to quantify this demand.

Unaccommodated demand is further indicated if the market is at all seasonal, with distinct high and low seasons; such seasonality indicates that although year-end occupancy may not be over 70%, the market sells out many nights during the year.

Based on an analysis of monthly and weekly peak demand and sell-out trends using the pre-pandemic year of 2019, we estimate that up to 9.7% of the annual demand is unaccommodated.

Induced Demand

Induced demand represents the additional room nights attracted to the market following the introduction of a new demand generator. Situations that can result in induced demand include the opening of a new manufacturing plant, the opening or expansion of a conference center, or the addition of a new hotel with a distinct chain affiliation or unique facilities.

The following figure shows the estimated induced demand for room nights that would enter the Carson hotels over a five-year ramp-up period after the opening of the Proposed Hotel in 2027.

FIGURE 2-16
TIMING OF INDUCED DEMAND FOR CARSON HOTELS

Year	Transient	Meeting and Group	Olympics (one-time impact)	Total Induced Room Nights
2025	4,000	0	0	4,000
2026	4,000	0	0	4,000
2027	4,000	5,000	0	9,000
2028	4,000	10,000	20,000	34,000
2029	6,000	10,000	0	16,000
2030	6,000	10,000	0	16,000
2031	6,000	10,000	0	16,000

The Proposed Hotel would attract commercial, meeting and group, and leisure market segments because of national brand affiliation, overall quality of the property, ample meeting space, restaurant, lounge, and site. Hotel guests would include independent travelers willing to pay a higher rate for a new product, groups looking for room blocks and meeting space, and leisure travelers seeking high-quality rooms and recreational activities on weekends and when discounted room rates become available.

HVS assumes the TownePlace Suites would induce some demand as the first Marriott property in the market when it opens in 2025. We also assume a one-time impact over two months due to Olympics events occurring at DHSP, which the newer facilities would be well-positioned to accommodate.

Accommodated
Demand and Marketwide Projected
Occupancy

Four variables make up accommodated demand: 1) base demand—sources currently generating room nights, 2) previously unaccommodated demand absorbed due to growth in room supply, and 3) induced demand that is new to the market. These estimates are adjusted by 4) residual demand—the estimated

number of room nights not accommodated due to supply constraints. The following figure breaks down room night demand by these sources.

FIGURE 2-17
FORECAST OF CARSON HOTELS ROOM NIGHT DEMAND (000'S)

Source	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Room Nights (000's)										
Base Accommodated	173	193	203	207	211	216	218	220	222	224
Previously Unaccommodated	0	0	0	0	12	15	25	25	26	26
Induced	0	0	0	4	4	9	34	16	16	16
Total Available Demand	173	193	203	211	227	240	277	261	264	266
(Less Residual Demand)	(20)	(22)	(25)	(24)	(14)	(10)	(10)	(5)	(5)	(6)
Total Accommodated Demand	153	171	178	187	213	230	267	256	259	260
Accommodated Demand Change		11.9%	4.4%	4.6%	6.9%	6.0%	11.3%	-3.7%	0.6%	0.6%
Available Room Night Change		0.0%	0.0%	15.8%	0.0%	14.7%	0.0%	0.0%	0.0%	0.0%
Marketwide Occupancy		75%	79%	71%	76%	70%	78%	75%	76%	76%

To a certain degree, hotel management can manipulate the level of occupancy. For example, hotel operators may choose to lower rates to maximize occupancy. Our forecasts reflect an operating strategy and relationship between rate and occupancy based on historical market trends. The occupancy rate in the first stabilized year of 2030 is 76%.

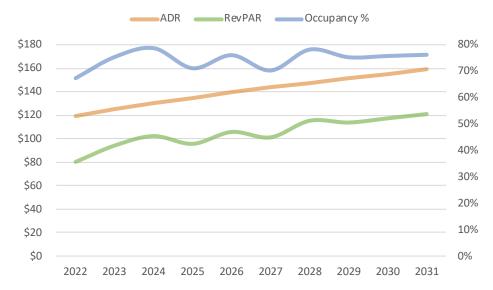
The stabilized occupancy reflects the anticipated results of the hotel market and excludes from consideration any abnormal relationship between supply and demand, as well as any unspecified, nonrecurring conditions that may result in unusually high or low occupancies. Additional competition and temporary economic downturns could force occupancy below our stabilized projection.

The following figure presents the forecast for occupancy, ADR, and RevPAR of the Carson hotel market over the next ten years.

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FIGURE 2-18 CARSON HOTELS FORECAST OF OCCUPANCY, ADR & REVPAR



The forecast for the Carson hotels shows a decrease in occupancy as new supply enters the market in 2025 and 2027. We forecast ADR growing at a rate of 3.5%, consistent with the historical average from 2009 through 2022, until stabilizing at the rate of inflation.

The projected growth in room night demand within the Carson hotel market provides the foundation for the development of additional hotel rooms. The Proposed Hotel attached to the Carson Event Center could enter the market and claim a portion of the room night demand as well as induce meeting and group room nights. After the new supply has stabilized in the market, demand growth and supply growth are balanced, resulting in little change in occupancy rates.

The prevailing outlook is that hotel markets will continue to recover from the pandemic's direct impact on the travel industry. The Carson hotels have historically experienced strong occupancy and consistent ADR growth. If strategically developed, new hotel developments could help grow room night demand as part of a conference and meetings complex or an entertainment district.

A public/private partnership ("P3") is an economic development tool gaining popularity in the hospitality industry. Despite positive market indicators and demand potential, some hotel projects do not create the necessary financial performance to support their feasibility. Public incentives can help bridge the feasibility gap and encourage private development of high-impact projects. Many

Conclusion

Public/Private Partnerships

local governments have entered a P3 with a developer to overcome a funding gap in the development budget for a conference center or a headquarters hotel.

The amount of public support required to finance a Conference Center Hotel through a P3 is dependent upon the gap between the capital cost of the project and the amount of debt and equity that can be raised in the capital markets. P3s in hotel developments are more frequently used for projects where a reasonable public equity investment can make the difference between a feasible and infeasible project.

The following figure summarizes typical deal terms in a P3.

FIGURE 2-19
SUMMARY OF P3 DEAL TERMS

Issue	Terms
Ownership	A privately-owned single purpose entity, typically a limited liability corporation ("LLC") holds title to the hotel. The owner is responsible for engaging the developer and operator.
Operations	The hotel may be managed by a hotel brand company (e.g. Marriott, Hilton, Hyatt, Intercontinental, Lowes). Or the hotel may be operated by a third party with a franchise agreement to brand the property. Compensation of the manager is typically based on a percentage of gross revenue, net operating income or both.
Financing	Privately-owned hotels are typically financed with a mix of debt and equity. In the current markets, lenders will lend 65% to 70% of the value of the project and equity investors or mezzanine lenders provide the balance of the funding. Typically the developer obtains a variable rate construction loan, which is later replaced with permanent financing when hotel operations stabilize. Equity investment is obtained by selling stock in the LLC and the development group may have a controlling interest in the LLC. In public/private partnerships, a governmental entity may also provide an equity contribution to the project with little or no expectation of obtaining a return on their equity investment.
Cost of Funds	Interest rates on permanent debt may range from 5% to 6% in the current financial markets. Private equity investors may require 15% to 20% return on equity due. These parameters vary depending on credit market conditions and the availability of capital for hotel investment.
Forms of Public Subsidies	Public subsidies may take the form of land contributions, infrastructure and parking development, tax abatements, tax turn-backs, tax-sharing agreements, and cash subsidies. Public subsidies must be tied to the public benefits the project will deliver.
Project Income Sharing	The investors in the LLC usually claim the residual project income from operations and the sale of the asset. Municipalities may negotiate a share of project income in exchange for providing public subsidies. Developers often negotiate a "preferred return," which gives the developer a first claim on income.

The financial feasibility of the Proposed Hotel depends on several factors, including:

construction costs,

- estimated net operating income,
- interest rate levels,
- availability of equity,
- seasonality and volatility of the local hotel market, and
- other factors that affect the allocation of investment risk and return.

The most frequently used methods of public incentive for a P3 have included:

- Project Generated Revenues
 - Abatement of lodging taxes collected on the property or redirection of those taxes to the project.
 - Abatement of the property tax or subordination of the property taxes to return on equity investment in the project.
 - o Turn back or abatement of sales taxes generated by the project.
 - o Imposition of project-specific taxes such as a higher lodging tax.
- Local Government Participation
 - a pledge of city-wide or special district lodging taxes to support the project. Less frequently, public entities fund their contribution to the project using:
 - food and beverage tax revenues generated by the property or from a special district, or
 - general sales taxes or sales taxes from a special district.
 - The use of tax-exempt financing for the conference center and/or hotel.
 - Credit enhancing all or a portion of the debt required to fund the project to obtain a lower interest rate.
 - Reduce or eliminate governmental development-related fees and permits on the project.
 - Grant to fund a portion of the project.

- o Increase the lodging tax to fund a portion of the project.
- o Infrastructure improvements, including roadway improvements, parking lots and decks, and other supporting developments.
- Marketing support for the project.

The package of incentives utilized by local governments in P3s for similar projects often includes providing the site, abatement of property taxes for a specified time, and the local government's portion of the hotel occupancy tax generated. The property taxes and the hotel occupancy tax are generated by the project, which limits the financial exposure of the local government. If Carson could offer a similar package of incentives, a P3 for the project should be offered through a Request for Qualifications and Proposals ("RFQ/P") process to determine if a developer would be interested in the project.

An alternative would be for Carson to finance the hotel's meeting space using municipal debt and enter into a long-term management agreement with the developer. Due to government ownership, the conference center is often exempt from property taxes under this structure, and the City may be able to utilize tax-exempt financing for a lower interest rate. Project-generated revenues, such as the lodging tax generated by the hotel, could fund a portion of the debt required to finance the conference center.

Also, the City may be able to capture the increase in property taxes from the hotel in a tax increment financing district ("TIF") or downtown development district to fund a portion of the debt. The management agreement may be able to make the developer responsible for any operating deficits and maintenance, reducing the long-term exposure of the City. The management agreement may also be able to require the marketing of the conference center includes a focus on larger events that create room night demand for other hotels in the City.

In order to maximize the impact of future hotel development, the city should pursue the following tasks:

- Commission a market and feasibility study for a potential hotel adjacent to the Carson Event Center
- Based on the feasibility study, identify the funding gap which would need to be filled by public incentives
- Identify which funding sources it is willing and legally able to use for the development of a hotel project.

Conclusions

- Prepare an RFQ that would be sent to potential developers.
- Integrate any proposed hotel project into the City's master plan to maximize the effect of creating a destination
- Refocus the Carson Event Center as an event venue, which would prioritize attracting out-of-town and multiday events
- Investigate the potential for utilizing the City's newly established Enhanced Infrastructure Financing District (EIFD) to support some of the above objectives.

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3. Conclusions and Recommendations

Establish a Tourism

Strategy for Carson

This section summarizes the conclusions and recommendations offered throughout this report based on assessments of the Carson lodging market, the conditions of visitation to Carson, and potential strategies to incentivize the development of hotels and other tourism developments.

In the past, Carson has not had unified efforts to attract out-of-town visitation or retain visitors to Carson. In order to improve its tourism performance, Carson must establish its preferred strategy based on what is most likely to be successful and fits with the City's goal. This strategy will dictate the efforts that the City should most pursue and the benchmarks that indicate when it has succeeded.

- Establish a marketing and branding identity for Carson:
 - Conduct a marketing study for the City, with a goal of developing a recognizable brand that reflects the City's strengths and opportunities and appeals to target visitor segments.
 - We understand that the City Council has commissioned a branding and marketing plan for the Carson Event Center and Public Information Center. The findings of this study should be integrated into the City's overall marketing efforts.
 - Based on that brand, create a comprehensive marketing plan that includes online and offline strategies, such as social media campaigns, targeted advertising, and public relations efforts.
 - Collaborate with local businesses, event organizers, and regional partners to promote the City's brand and offerings.
 - Regularly assess the effectiveness of marketing and branding efforts and adjust strategies as needed to maximize return on investment and reach.
- A tourism marketing entity for Carson:
 - Create a department or role within the City or economic development to spearhead tourism marketing efforts for the city.

- Identify funding sources that could be used specifically for tourism marketing efforts.
- Implement a comprehensive data tracking and analysis system to monitor visitation, event attendance, room nights, and other key metrics. For example, the City should have a ready calendar and list of all the city-wide events and relevant metrics of their success, both historically and projected.
- Use data insights to identify trends, areas of growth, and potential challenges in the tourism and hospitality sectors.
- Identify potential new city-wide events, festivals, fairs, and shows that Carson could attract, develop, and support to serve existing residents as well as attract out-of-town visitors.
- Regularly review and update the city's tourism and hospitality strategies based on the data-driven insights and evolving market conditions.
- Share data with relevant stakeholders, including local hotels, demand generators, tourism-related businesses, event organizers, and developers, to enable informed decision-making and collaboration.
- Foster collaboration and communication among stakeholders:
 - Establish a tourism and hospitality committee or task force consisting of representatives from the city, local businesses, event organizers, and other relevant stakeholders.
 - Organize regular meetings and workshops to discuss progress, share updates, and explore new opportunities for collaboration and growth.
 - Provide ongoing support and resources for local businesses and event organizers to help them succeed and contribute to the city's overall tourism and hospitality objectives.

Capitalizing on Existing Demand Generators DHSP and CSUDH are by far the largest sources of visitation to Carson. Before the Covid-19 pandemic, DHSP was a significant source of out-of-town and international visitors.

Though Carson may never capture all of the associated spending with drive-in and out-of-town visitors, there is a substantial room to grow in serving visitors' needs for lodging, food and beverage, and other leisure and entertainment options.

Compared to other sports venues in the region, DHSP struggles keeping visitors on campus when they do visit. Improving the on-site amenities will help make DHSP and the surrounding areas a destination which attracts people looking for entertainment, rather than just a venue that people visit and then depart.

- Based on other entertainment district and Olympic parks, Carson can improve the experience of its key neighborhoods with the following goals:
 - Conduct a market analysis to identify the types of retail, dining, and entertainment offerings that would be successful in the district.
 - Create a master plan that identifies desired uses, preferred sites, and available incentives for potential developers.
 - Establish zoning regulations and development guidelines that ensure a cohesive design and experience throughout the district.
 - Include a mix of residential, office, lodging, food and beverage, entertainment venues, shopping, and leisure offerings to create a vibrant, 24/7 environment.
 - Prioritize walkability, public transit options, and access to ensure convenient transportation and accessibility.
 - Develop a district identity with a marketing strategy, event programming, and economic development efforts targeting both local and out-of-town visitors.
- Enhance public spaces and amenities:
 - o Identify potential locations for high-quality public spaces such as parks, plazas, walking trails, and playgrounds.
 - Design spaces with a focus on safety, accessibility, and inclusivity for all residents and visitors.
 - Promote cultural enrichment through art installations, cultural exhibits, and partnerships with local artists and organizations.

- Diversify food and beverage options with kiosks, outdoor cafes, and collaborations with local businesses to provide a unique culinary experience.
- Create flexible event spaces for cultural events, community gatherings, concerts, and outdoor fairs to cater to diverse interests.
- Establish a wayfinding system that connects the park to nearby amenities and attractions, creating a seamless visitor experience.

• Foster partnerships with CSUDH:

- Continue regular communication and collaboration between the City and university leadership.
- Identify ways the City can support the CSUDH's long-term plans to develop housing, amenities, and necessary offerings to enhance the appeal of campus and draw additional residents among students, faculty, and staff.
- Collaborate on joint projects, initiatives, and programming that benefit both institutions and the broader community, such as research partnerships and joint events.

• Expand and invest in events and facilities:

- Increase the number and variety of annual events to attract diverse audiences, including free concerts, outdoor movie nights, food trucks, and sponsored events.
- Invest in the Carson Event Center to attract high-value events, shifting community services to other venues to allow the center to focus on events.
- o Track event data, attendance, room nights, and scope of appeal.
- Set goals for the Carson Event Center and any other tourism organizations in terms of room nights (or other major benchmarks) in order to evaluate the success of facility management in pursuing the City's tourism goals.
- Monitor lost events to understand areas for improvement in the city's offerings and use the information to inform future decisions.

Move the Carson Event Center's existing community services to other venues in order to allow the facility to focus entirely on attracting events.

Pursue hotel development at the City's key locations, including near the Carson Event Center:

- Commission a market and feasibility study for a potential hotel adjacent to the event center, identifying the optimal size, service level, and brand.
- The study should also evaluate potential sites to confirm the Carson Event Center or other promising sites, such as the DHSP.
- o Identify funding gaps and potential incentives for public-private partnerships (P3s) in hotel development.
- Prepare a Request for Qualifications and Proposals (RFQ/P) for potential developers, outlining the city's vision, criteria, and expectations.
- Integrate proposed hotel projects into the city's master plan to create a cohesive destination with seamless connections to nearby attractions.
- o Refocus the Carson Event Center as an event venue:
- Prioritize attracting out-of-town and multiday events, driving room night demand and economic impact.
- Develop a long-term management agreement with a developer or management company, ensuring the focus on larger events and reducing the city's exposure to financial risk.

Tourism Amenity Development

The avenues for developing additional tourism amenities are similar to those described in Section 2 of this report. The City should consider a range of incentives that would encourage developments that could support or attract tourist visitation. Examples of potential demand generators, as outlined in the sections on Olympic Parks and Live Entertainment Districts, could be live music venues, museums, movie theaters, upscale bowling and other floor games, food and drink markets, and nightclubs. Supportive developments include restaurants, storefront retail, residential, and hospitality.

Avenues to developing a specific district include:

- Zoning the necessary areas for mixed-use developments.
- Streamlined permitting for certain business types.
- Infrastructure improvements and the development of public spaces.
- Targeted financial incentives, as described above, such as tax abatements, tax rebates, state grants, and bond financing.
- The City could define a TIF district to capture property (or other) tax increases and uses those revenues to subsidize development.

Public agencies may choose from a wide variety of options to provide public support for hotel projects or other tourism amenities. Whatever forms public support may take, it must be tied to the public benefits the project would incur to the local community.

California Examples

HVS identified some examples of incentives offered by California cities and other assessments or taxes that may be used to support tourism.

- Torrance
 - Tourism business improvement district uses lodging taxes to fund Discover Torrance.
- Long Beach
 - Various business improvement districts based on assessments (which differ for each district) including lodging taxes, property taxes, and fees.
- Gardena
 - Hotel development with at least three-star hotel rating and 60 or more rooms can apply for the City to fill its funding gap using lodging taxes over 20 years.
 - Hotels developed along a preferred corridor are also eligible for permitting and fee waivers.
- West Hollywood
 - Arts and Cultural Affairs Commission that identifies the community's art needs, works to fulfill those needs, and presents recommendations.
 - The commission manages the Arts Grant Program for artists and nonprofit organizations for art projects that serve the community.
- Monterey Park
 - o Provided incentives to developments that offer certain amenities which benefit the public, such as
 - public gathering space,

- transit improvements,
- underground parking,
- pedestrian right-of-way improvements,
- inclusion of community meeting space, and
- key national tenants the city wants to attract.
- Incentives may include discounted parking requirements, higher capacity for density, or reductions in processing, in-lieu, or utility connection fees.
- o Rebate program for façade improvements.
- \circ Incentives are also available for full-service restaurant development.

The incentives and programs above are examples that the City of Carson should consider to encourage the development of businesses and amenities conducive to a vibrant cultural and tourism environment. These examples are not comprehensive and serve as a launching point for further development in the Economic Development Strategic Plan.

4. Statement of Assumptions and Limiting Conditions

- 1. This report is to be used in whole and not in part.
- 2. No responsibility is assumed for matters of a legal nature.
- 3. All information, financial operating statements, estimates, and opinions obtained from parties not employed by HVS are assumed to be true and correct. We can assume no liability resulting from misinformation.
- 4. Unless noted, we assume that there are no encroachments, zoning violations, or building violations encumbering the proposed subject property.
- 5. Any proposed facilities are assumed to be in full compliance with all applicable federal, state, local, and private codes, laws, consents, licenses, and regulations (including a liquor license where appropriate), and that all licenses, permits, certificates, franchises, and so forth can be freely renewed or transferred to a purchaser.
- 6. We are not required to give testimony or attendance in court by reason of this analysis without previous arrangements, and only when our standard per-diem fees and travel costs are paid prior to the appearance.
- 7. If the reader is making a fiduciary or individual investment decision and has any questions concerning the material presented in this report, it is recommended that the reader contact us.
- 8. We take no responsibility for any events or circumstances that take place after the date of our report.
- 9. The quality of a facility's on-site management has a direct effect on a property's economic performance. The forecasts presented in this analysis assume responsible ownership and competent management. Any departure from this assumption may have a significant impact on the projected operating results.
- 10. We do not warrant that our estimates will be attained, but they have been developed based on information obtained during our market research and are intended to reflect reasonable expectations.
- 11. Many of the figures presented in this report were generated using sophisticated computer models that make calculations based on numbers carried out to three or more decimal places. In the interest of simplicity,

- most numbers have been rounded. Thus, these figures may be subject to small rounding errors.
- 12. It is agreed that our liability to the client is limited to the amount of the fee paid as liquidated damages. Our responsibility is limited to the client and use of this report by third parties shall be solely at the risk of the client and/or third parties. The use of this report is also subject to the terms and conditions set forth in our engagement letter with the client.
- 13. Although this analysis employs various mathematical calculations, the final estimates are subjective and may be influenced by our experience and other factors not specifically set forth in this report.
- 14. HVS, is not a municipal advisor and HVS is not subject to the fiduciary duty set forth in section 15B(c)(1) of the Act (15 U.S.C. 78o-4(c)(1)) with respect to the municipal financial product or issuance of municipal securities. The reader is advised that any actual issuance of debt would be done under the advice of its bond counsel and financial advisors. Financial advisor would provide advice concerning the specific structure, timing, expected interest cost, and risk associated with any government loan or bond issue. Potential investors should not rely on representations made in this report with respect to the issuance of municipal debt.
- 15. This report was prepared by HVS Convention, Sports & Entertainment Facilities Consulting. All opinions, recommendations, and conclusions expressed during this assignment are rendered by the staff of this organization, as employees, rather than as individuals.



5. Certification

The undersigned hereby certify that, to the best of our knowledge and belief:

- 1. the statements of fact presented in this report are true and correct;
- 2. the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions;
- 3. we have no present or prospective financial or personal interest with respect to the parties involved;
- 4. HVS is not a municipal advisor and is not subject to the fiduciary duty set forth in section 15B(c)(1) of the Act (15 U.S.C. 78o-4(c)(1)) with respect to the municipal financial product or issuance of municipal securities;
- 5. we have no bias with respect to the subject of this report or to the parties involved with this assignment;
- 6. our engagement in this assignment was not contingent upon developing or reporting predetermined results;
- 7. our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined result that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this document;
- 8. Thomas A Hazinski personally visited the area described in this report.

Thomas A Hazinski

Managing Director

Jorge Cotte

Senior Director