CITY OF CARSON

PLANNING COMMISSION STAFF REPORT

NEW BUSINESS DISCUSSION:	March 23, 2011
SUBJECT:	Workshop regarding truck routes and the Circulation Element of the General Plan
APPLICANT:	City of Carson
REQUEST:	Joint workshop with the city's Public Works Commission
PROPERTIES INVOLVED:	Citywide

COMMISSION ACTION

_____ Concurred with staff

_____ Did not concur with staff

_____ Other

COMMISSIONERS' VOTE

AYE	NO		AYE	NO	
		Chairman Faletogo			**Gordon**
		Vice-Chair Park			**Saenz**
		Brimmer			**Schaefer**
		Diaz			**Verrett**
		Goolsby			

Item No. 10-A

I. Background

Recent discussions with the City Council have raised questions regarding the current status of the General Plan Circulation Element related to the identification of truck routes. This workshop is proposed to provide a more comprehensive discussion of the Circulation Element, the implementing provisions contained within the Carson Municipal Code and new standards that will be imposed by the State of California. It is intended for the Planning Commission and Public Works Commission consider the broad range of transportation needs to address both short term and long term goals and objectives.

II. Truck Route Discussion

Victoria Street

Background

On December 7, 2010, the city Traffic Engineer presented the City Council with a report (attached Exhibit No. 1) referencing a resident letter stating that trucks operating on Victoria and Main Streets are creating nuisances for residents of the neighborhood south of Victoria Street and east of Main Street. The letter indicated that problems with noise, structural shaking, rattling windows, and emissions of dirt/soot from trucks traveling and parking on Victoria Street particularly affect properties whose back yards abut the arterial street. It was requested that the segment of Victoria Street between Main Street and Avalon Boulevard be eliminated from the truck route system.

At the above noted meeting the Council directed staff to:

1. Install "No Stopping Any Time" signs on the south side of Victoria Street between Main Street and Coleman Avenue;
2. Continue coordinating with the truck-oriented commercial operations near the intersection of Victoria and Main Streets to discourage their customers and employees from generating unnecessary noise; and
3. Schedule a joint meeting of the Planning Commission and the Public Works Commission to consider an amendment to the Circulation Element of the General Plan to remove part of Victoria Street from the list of streets designated as truck routes.

On February 16, 2011, the city Traffic Engineer reported to the City Council that the "No Stopping Any Time" signs were subsequently installed on the south side of Victoria Street and representatives of the truck-oriented operations were contacted regarding the noise concerns. Additionally, the city's Public Works Street Maintenance Division conducted grinding operations on Victoria Street east of Main Street and on Main Street south of Victoria Street to eliminate bumps and smooth out the pavement, thereby reducing the vibration impacts associated with trucks. It was also reported at this City Council meeting that a letter had been received from a resident of Colony Cove Mobile Home Estates indicating that trucks traveling on Victoria Street create noise, air pollution, and shaking for the residents near Victoria Street. It was requested that the segment of Victoria Street between Main Street and Central Avenue be eliminated from the truck route system.

Discussion

Victoria Street is an east-west truck route that extends from the east boundary of Carson at Wilmington Avenue to the west boundary of Carson at the I-110 freeway. It provides access to major industrial uses in the Dominguez Technology Center, which is located on the east end of Carson between Central and Wilmington Avenues, and to industrial uses west of Main Street.

Based on the locations of these industrial areas and the volumes of truck traffic observed on Victoria Street, it is clear that Victoria Street serves as a key truck route through Carson. If the segment of Victoria Street between Main Street and Avalon Boulevard or between Main Street and Central Avenue were to be eliminated from the truck route system as requested, trucks that would otherwise use Victoria Street as a travel route would be shifted to other streets. It is anticipated that the streets that would be most-directly affected would be Albertoni Street and Del Amo Boulevard, both of which run adjacent to residential properties.

Albertoni Street abuts Carson Harbor Village, Colony Cove Mobile Estates, and the north edge of Stevenson Village. Del Amo Boulevard abuts the residential neighborhood on the north side of Del Amo Boulevard between Avalon Boulevard and Wilmington Avenue as well as Del Amo Park and the South Bay Pavilion. The requested elimination of Victoria Street from the truck route system could adversely affect the residential properties and other sensitive uses along Albertoni Street and Del Amo Boulevard because truck volumes would increase on these alternate truck routes. In addition, it is likely that some of the re-routed trucks would use Avalon Boulevard, University Drive, and Central Avenue, which also run adjacent to residential properties and parks. While these roadways are not designated truck routes, they are frequently used illegally by truck drivers according to reports by concerned citizens and the Sheriff's Department.

It should be noted that the truck route system cannot have dead-end street segments whereby a legal truck route feeds only into non-truck route roadways. So if the segment of Victoria Street between Main Street and Avalon Boulevard is eliminated from the truck route system, there would be two options for avoiding a dead-end truck route that would be created on Victoria Street between Avalon Boulevard and Central Avenue. The first option would be to designate the segment of Avalon Boulevard between Victoria Street and Albertoni Street as a truck route. The second option would be to eliminate Victoria Street between Avalon Boulevard and Central Avenue from the truck route system in addition to the requested segment of Victoria Street between Main Street and Avalon Boulevard.

While the requested elimination of Victoria Street between Main Street and Avalon Boulevard or between Main Street and Central Avenue from the truck route system would result in a decrease in truck traffic along this segment of Victoria Street, it would result in an increase in truck traffic on streets that run adjacent to other residential properties. The truck-related impacts such as noise, vibration, and pollution would be reduced along Victoria Street; however, they would increase along other affected roadways such as Albertoni Street, Del Amo Boulevard, University Drive, and Central Avenue. It would also result in an inconvenience, an increase in

costs, and an increase in travel time for the truck operators and businesses that use Victoria Street as a truck access route.

Santa Fe Avenue

Background

Another roadway that has often been discussed as a candidate for elimination from the truck route system is Santa Fe Avenue. While the segment of Santa Fe Avenue between Dominguez Street and Del Amo Boulevard runs through an industrial area, the segment south of Dominguez Street runs adjacent to residential properties, an elementary school, and a future high school.

Discussion

Santa Fe Avenue is a north-south truck route that extends from the north boundary of Carson at Del Amo Boulevard to the south boundary of Carson at the I-405 freeway. It provides access to the industrial area between Dominguez Street and Del Amo Boulevard and the industrial area of Long Beach east of Santa Fe Avenue. It also serves as a link between these industrial areas and the I-405 freeway via Wardlow Road in Long Beach.

While Santa Fe Avenue is a legal truck route, it runs adjacent to uses that are not necessarily compatible with the truck route designation; i.e., residential properties, Dominguez Elementary School, and a high school that is scheduled for opening in 2011. The trucks that travel on Santa Fe Avenue generate noise, vibration, and pollution as well as potential safety issues during student arrival and departure times.

If the segment of Santa Fe Avenue between Del Amo Boulevard and the I-405 freeway were to be eliminated from the truck route system, trucks that would otherwise use Santa Fe Avenue as a travel route would be shifted to other streets. It is anticipated that most of this truck traffic would shift to Alameda Street, which runs primarily along industrial and commercial properties.

As noted above, the truck route system cannot have dead-end street segments whereby a legal truck route feeds only onto non-truck route roadways. So if Santa Fe Avenue is eliminated from the truck route system, there would be two options. One would be to eliminate the entire segment of Santa Fe Avenue between Del Amo Boulevard and the south city boundary. The other option would be to eliminate the segment of Santa Fe Avenue between Dominguez Street and the south city boundary from the truck route system and to add the segment of Dominguez Street or El Presidio Street between Santa Fe Avenue and Alameda Street to the truck route system.

Related Complete Street System Discussion

On September 30, 2008, Governor Schwarzenegger signed Assembly Bill 1358, the California Complete Streets Act. The Act states: "In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled

(VMT) and to shift from short trips in the automobile to biking, walking and use of public transit".

The Act required the Governor's Office of Planning and Research (OPR) to amend the General Plan Guidelines to assist city and counties in integrating multimodal transportation network policies into the circulation elements of their general plans. Starting January 2011, all cities and counties, upon the next update of their circulation element, must plan for the development of multimodal transportation networks.

Multimodal transportation networks allow for all modes of travel including walking, bicycling and transit to be used to reach key destinations in a community and region safely and directly. Jurisdictions can use complete streets design to construct networks of safe streets that are accessible to all modes and all users no matter their age or ability. Complete streets are defined as follows:

1. The American Planning Association defines complete streets as serving everyone, pedestrians, bicyclists, transit riders, drivers and considering the needs of people with disabilities, older people and children.
2. Caltrans defines complete streets as a transportation facility that is planned, designed, operated and maintained to provide safe mobility for all users including bicyclists, pedestrians, transit vehicles, truckers and motorists, appropriate to the function and context of the facility.

Potential benefits of multimodal transportation networks include: safety; health; greenhouse gas emission reduction and economic development and cost savings. Multimodal transportation networks using complete streets best practices can lead to safer travel for all roadway users. Networks that allow people to walk or bicycle as a viable transportation option can promote an active lifestyle by encouraging travelers to walk or ride bicycles instead of driving. Reducing driving by increasing the opportunity for walking, bicycling and transit also reduces vehicle emissions.

The update to the General Plan Guidelines via the Complete Streets and the Circulation Element recommend policy areas for consideration. Under "transportation routes" the guidelines for truck routes identify:

1. The development of proposed truck routes and policies supporting truck route regulations; and
2. The accessibility and accommodation of pedestrian and bicycle traffic where appropriate on truck routes.

City-wide Master Plan of Bikeways

The city of Carson has applied for a Caltrans Transportation Planning grant to create a city-wide Master Plan of Bikeways. If the city is successful in receiving said grant the proposed plan would identify bicycle routes/networks, policies for community involvement/integration, utilization of existing resources, facility design, implementation, maintenance, funding and special programs. The plan would serve as a planning document to guide the future improvements, development and maintenance of the city's bicycle network for local and regional commuters and

recreational riders. The plan seeks to improve bicycle safety, mobility and connectivity within the city and south bay region.

Conclusion

The implementation of route changes to any designated truck route and the incorporation of multimodal transportation networks/policies will require an amendment to Carson General Plan Circulation Element. Upon initiation of an amendment staff will coordinate with the city's Public Works Commission, hold public hearing with the Planning Commission and seek public and stakeholder participation.

III. Recommendation

That the Planning Commission:

- CONSIDER and DISCUSS the information provided for in this workshop;
- PROVIDE direction to staff.

IV. Exhibits

1. City Council staff report dated December 7, 2010
2. City Council staff report dated February 16, 2011
3. Update to the General Plan Guidelines/Complete Streets/Circulation Element

Prepared by: _____
Zak Gonzalez II, Planner

Reviewed by: _____
Sheri Repp Loadsman, Planning Officer

City of Carson
Report to Mayor and City Council

December 7, 2010
New Business Discussion

SUBJECT: CONSIDER AMENDING THE TRUCK ROUTE SYSTEM TO ELIMINATE VICTORIA STREET BETWEEN MAIN STREET AND AVALON BOULEVARD

Submitted by M. Victor Rollinger
Development Services General Manager

Approved by Jerome G. Groomes
City Manager

I. SUMMARY

This item is on the agenda at the request of Councilmember Gipson.

A letter was received from a resident of Bilson Street stating that trucks operating on Victoria and Main Streets are creating nuisances for residents of the neighborhood south of Victoria Street and east of Main Street (Exhibit No. 1). The letter, which includes an attached list of supportive resident names and addresses of Bilson Street and Milmore Avenue, indicates that the truck-related problems are particularly troublesome for the properties with back yards that abut these arterial streets (Exhibit No. 2). The problems cited in the letter include noise, structural shaking, rattling windows, and the emission of dirt and soot from trucks traveling on and parking on Victoria Street. The letter requests six action items that the residents would like for the city to implement, the most notable of which is to remove Victoria Street between Main Street and Avalon Boulevard from the truck route system.

II. RECOMMENDATION

TAKE the following actions:

1. DIRECT staff to install "No Stopping Any Time" signs on the south side of Victoria Street between Main Street and Coltman Avenue.
2. DIRECT staff to continue coordinating with the truck-oriented commercial operations near the intersection of Victoria and Main Streets to discourage their customers and employees from generating unnecessary noise.

III. ALTERNATIVES

1. REFER this issue to the Planning Commission to conduct a public hearing and consider an amendment to the Circulation Element of the General Plan to remove the segment of Victoria Street between Main Street and Avalon Boulevard from the list of streets designated as truck routes and to add the segment of Avalon Boulevard between Victoria Street and Albertoni Street to the truck route list.

EXHIBIT NO. 1

21.

2. REFER this issue to the Planning Commission to conduct a public hearing and consider an amendment to the Circulation Element of the General Plan to remove the segment of Victoria Street between Main Street and Central Avenue from the list of streets designated as truck routes.

3. TAKE another action the City Council deems appropriate.

IV. BACKGROUND

As the issues cited by the residents all involve trucks, traffic counts were taken on Victoria Street east of Main Street to quantify the total volume of traffic and the volume of trucks that use this roadway segment on a typical weekday. The counts were taken on Monday and Tuesday, November 1 and 2, 2010. The results of the traffic counts are summarized in the table below.

Traffic Count Summary – Victoria Street east of Main Street

Day of Survey	Daily Traffic Volumes		
	Total Traffic	Trucks	Truck Percentage
Mon – 11/01/10	18,011	1,023	5.7%
Tue – 11/02/10	19,589	1,123	5.7%
Average	18,880	1,073	5.7%

As shown, Victoria Street east of Main Street had an average total traffic volume of 18,880 vehicles per day. The truck volume was 1,073 trucks per day (575 eastbound and 498 westbound), which comprised 5.7 percent of the total traffic volume. The heaviest one-hour period of truck activity occurred from 5:00 p.m. to 6:00 p.m. when there were 107 trucks per hour (55 eastbound and 52 westbound). As a comparison, Victoria Street east of Avalon Boulevard had an average total traffic volume of 16,653 vehicles per day. The truck volume at this location was 1,215 trucks per day, which comprised 7.3 percent of the total traffic volume.

A map of the truck route system indicates that Victoria Street is a truck route from the east boundary of Carson at Wilmington Avenue to the west boundary of Carson at the I-110 freeway (Exhibit No. 3). It provides access to major industrial uses in the Dominguez Technology Center, which is located on the east end of Carson between Central and Wilmington Avenues, and to industrial uses west of Main Street.

Based on the locations of these industrial areas and the volumes of truck traffic cited above, it is clear that Victoria Street serves as a key truck route through Carson. If the segment of Victoria Street between Main Street and Avalon Boulevard were to be eliminated from the truck route system as requested, trucks that would otherwise use Victoria Street as a travel route would be shifted to other streets. It is anticipated that the streets that would be most-directly affected would

be Albertoni Street and Del Amo Boulevard, both of which run adjacent to residential properties.

Albertoni Street abuts Carson Harbor Village, Colony Cove Mobile Estates, and the north edge of Stevenson Village. Del Amo Boulevard abuts the residential neighborhood on the north side of Del Amo Boulevard between Avalon Boulevard and Wilmington Avenue as well as Del Amo Park and the South Bay Pavilion. The requested elimination of Victoria Street from the truck route system could adversely affect the residential properties and other sensitive uses along Albertoni Street and Del Amo Boulevard because truck volumes could increase on these alternate truck routes. In addition, it is likely that some of the re-routed trucks would use Avalon Boulevard, University Drive, and Central Avenue, which also run adjacent to residential properties and parks. While these roadways are not designated truck routes, they are frequently used illegally by truck drivers according to reports by concerned citizens and the Sheriff's Department.

It should be noted that the truck route system cannot have dead-end street segments whereby a legal truck route feeds into non-truck route roadways. So if the segment of Victoria Street between Main Street and Avalon Boulevard is eliminated from the truck route system as requested, then there are two options for avoiding a dead-end truck route that would be created on Victoria Street between Avalon Boulevard and Central Avenue. The first option would be to designate the segment of Avalon Boulevard between Victoria Street and Albertoni Street as a truck route. The second option would be to eliminate Victoria Street between Avalon Boulevard and Central Avenue from the truck route system in addition to the requested segment of Victoria Street between Main Street and Avalon Boulevard. These two options are shown as Alternative Nos. 1 and 2 in Section III.

While the requested elimination of Victoria Street between Main Street and Avalon Boulevard from the truck route system would result in a decrease in truck traffic along this segment of Victoria Street, it would result in an increase in truck traffic on streets that run adjacent to other residential properties. It would also result in an inconvenience, an increase in costs, and an increase in travel time for the truck operators and businesses that use Victoria Street as a truck access route. These issues are applicable to the request to eliminate the segment of Victoria Street from the truck route system as well as the request to restrict the hours of operation on this critical truck route. It is recommended, therefore, that the truck route status remain unchanged for Victoria Street.

The Planning Division has reviewed the request to remove Victoria Street between Main Street and Avalon Boulevard from the truck route system and concurs with the recommendation that the current truck route status be retained (Exhibit No. 4). If the City Council wishes to further consider the request to modify the truck route system, the issue must be referred to the Planning Commission because any

changes to the truck route system would constitue an amendment to the Circulation Element of the General Plan. Such amendments would require that a public hearing be conducted at the Planning Commission as well as any subsequent City Council meetings. A change to the truck route system would also require a modification to the Carson Municipal Code, which would be accomplished by the City Council adopting an ordinance that would modify Section 3260.2 of the Municipal Code, which is titled "Designated Routes."

The letter from the resident requests six action items that the residents would like for the city to implement. The actions that have already been implemented by staff, the recommended actions relative to each request, and staff's responses to each request are summarized below. The requests are presented in the same order as they are listed in the letter.

Request: Implement time limits for trucks on Victoria Street between Main Street and Avalon Boulevard (i.e., no trucks from 8:00 p.m. to 7:00 a.m.).

Response: Truck restrictions on Victoria Street during these times would shift the trucks to another truck route and increase the impacts to residents along these other routes (e.g., Del Amo Boulevard and Albertoni Street). Carson has numerous industrial and warehouse uses that are dependent on truck access and these businesses would be adversely affected if trucks could not use Victoria Street during the evening and night time hours because many of the facilities are 24-hour operations. It is recommended, therefore, that time restrictions not be implemented on Victoria Street for trucks.

Request: Implement road repairs at the intersection of Main and Victoria Streets to eliminate impacts from trucks.

Action: Carson's Street Maintenance Division inspected the intersection and observed that there were some irregularities in the pavement that needed to be repaired. The crew conducted grinding operations on Main Street south of Victoria Street and on Victoria Street east of Main Street to eliminate the bumps and smooth out the pavement, which substantially reduced the vibration impacts associated with the trucks.

Request: Install "No Stopping Any Time" signs on Victoria Street east of Main Street.

Response: This request was analyzed by staff and it is recommended that "No Stopping Any Time" signs be installed on the south side of Victoria Street between Main Street and Coltman Avenue. This action will be implemented if approved by the City Council.

Request: Notify nearby truck-oriented businesses of the concerns, asking them to encourage their customers and employees to be considerate and refrain from unnecessary horn honking.

Action: Staff has communicated with several of the businesses (i.e., the fueling station and Federal Express) regarding this issue and representatives of the businesses indicated that they would comply. It is recommended that these coordination and communication efforts continue to be implemented by staff.

Request: Replace or reinforce sound walls behind residences along Victoria and Main Streets.

Response: The walls at the rear of the residential properties are privately owned and cannot, therefore, be repaired or replaced by the city.

Request: Eliminate Victoria Street from the truck route system between Main Street and Avalon Boulevard.

Response: If this segment of Victoria Street were to be removed from the truck route system, the trucks would shift to another truck route and increase the impacts to residents along these other routes (e.g., Del Amo Boulevard and Albertoni Street). Carson has numerous industrial and warehouse uses that are dependent on truck access and these businesses could be adversely affected if trucks could not use Victoria Street.

V. FISCAL IMPACT

The estimated cost of installing the recommended "No Stopping Any Time" signs is $600.00. The estimated cost of changing the truck route signs if a segment of Victoria Street is eliminated from the truck route system is $2,000.00. Funds are available in the adopted FY 2010/11 budget.

VI. EXHIBITS

1. Location Map. (pg. 7)
2. Letter from resident. (pgs. 8-10)
3. Existing truck route map. (pg. 11)
4. Memorandum from Planning Officer. (pg. 12)

Prepared by: Richard Garland, Traffic Engineer
sf:Rev061902

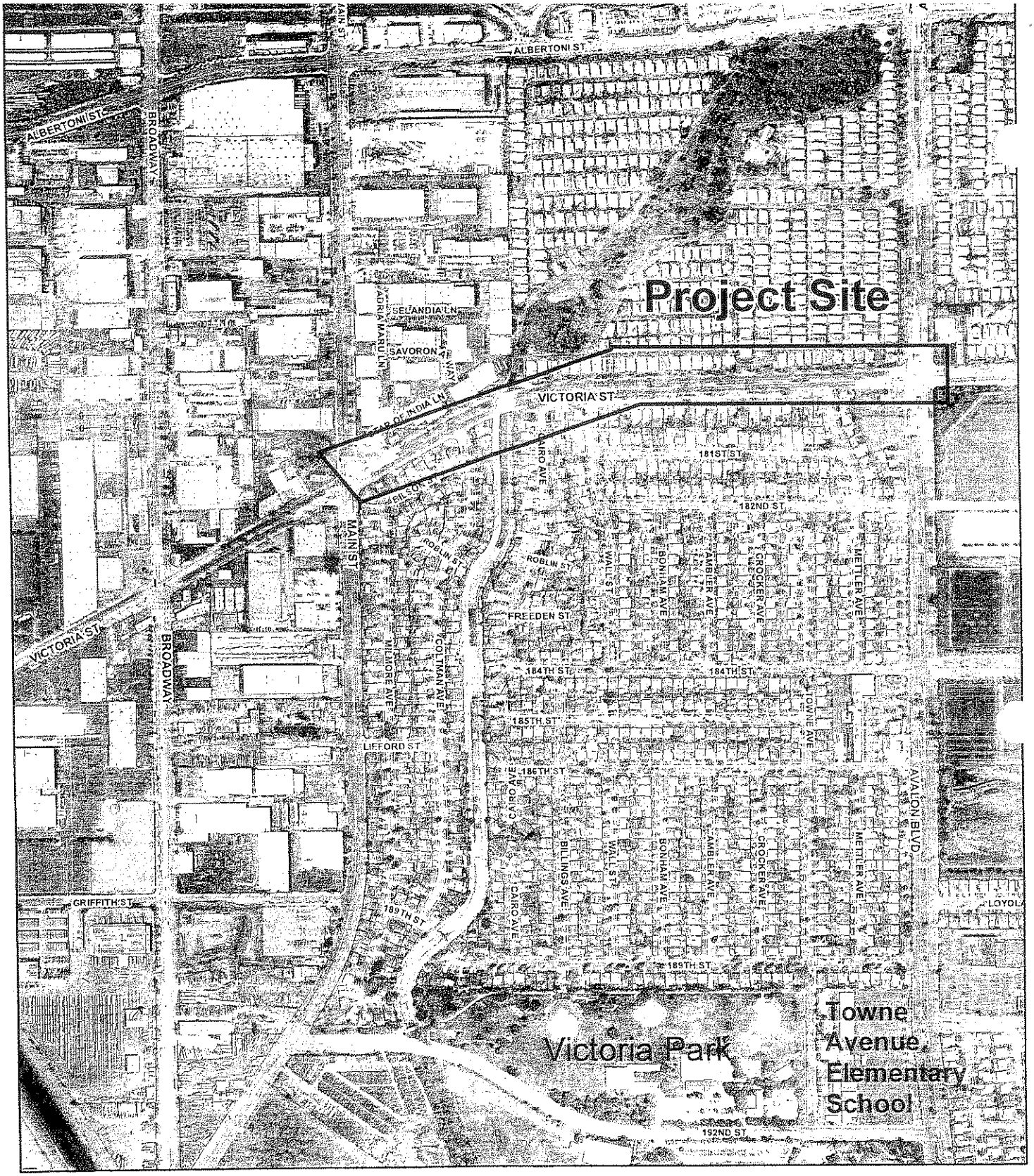
Reviewed by:

City Clerk	City Treasurer
Administrative Services	Development Services
Economic Development Services	Public Services

Action taken by City Council

Date_____ Action_____

_____



Location Map
Victoria Street - Main Street to Avalon Boulevard

B

EXHIBIT NO. 1

Date Printed: Tuesday, November 30, 2010
MXD: G:\ENGINEERING DIVISION\Location Maps\MXDs\Victoria Street_Main Street_to_Avalon Blvd.mxd
PDF: G:\ENGINEERING DIVISION\Location Maps\Victoria Street_Main Street_to_Avalon Blvd.pdf

September 28, 2010

City of Carson
701 E. Carson Street
Carson, CA 90745

Attention: Mike Gipson, City Councilman
Richard Garland, Traffic Engineer

Dear Sirs:

The homeowners and taxpayers located in the residential tract at Main and Victoria Streets need immediate assistance to stop continued disturbance of our peace.

Traffic has increased considerably with the building of the Home Depot Center at Victoria Street. In addition, there has been a considerable increase of truck activity on Victoria/190th and Main and between Victoria and Avalon Boulevard.

The noise and constant road slamming of trucks is interrupting our sleep and raising concerns about possible damage to our homes caused by the constant shaking of structures and rattling of windows. It has also been noticed that the trucks are constantly blowing their horns, stopping/parking at night on Victoria (behind our homes) and emitting dirt and soot that have increased our need to paint and/or power clean our homes.

We would like:

- Immediate time limits for trucks on Victoria/190th Avenue between Main and Avalon to allow residents to sleep (no trucks from 8:00 PM to 7:00 AM).
- Immediate road repairs at the intersection at Main and Victoria Street to help eliminate some of the slamming impact from heavy weight trucks.
- Immediate installation of "no stopping signs" on Victoria at Main behind homes.
- Immediate notice to surrounding companies (Gas Truck Stop, Federal Express etc.) to encourage their customers and employees to be considerate and not blow horns unless necessary in residential areas.
- Replace or re-enforce 40+ year old sound walls for residential area on Main and Victoria.
- **Eventual elimination of "truck route" on Victoria Street between Main and Avalon.**

We would appreciate your immediate attention to our problem.

Please correspond in writing with planned solutions to Debra Mason at 109 E. Bilson Street, Carson, CA 90746 with copies to the residents on the attached list.

Sincerely,

Debra Mason and

Carson Residents at Main & Victoria
See attached list

EXHIBIT NO. 02

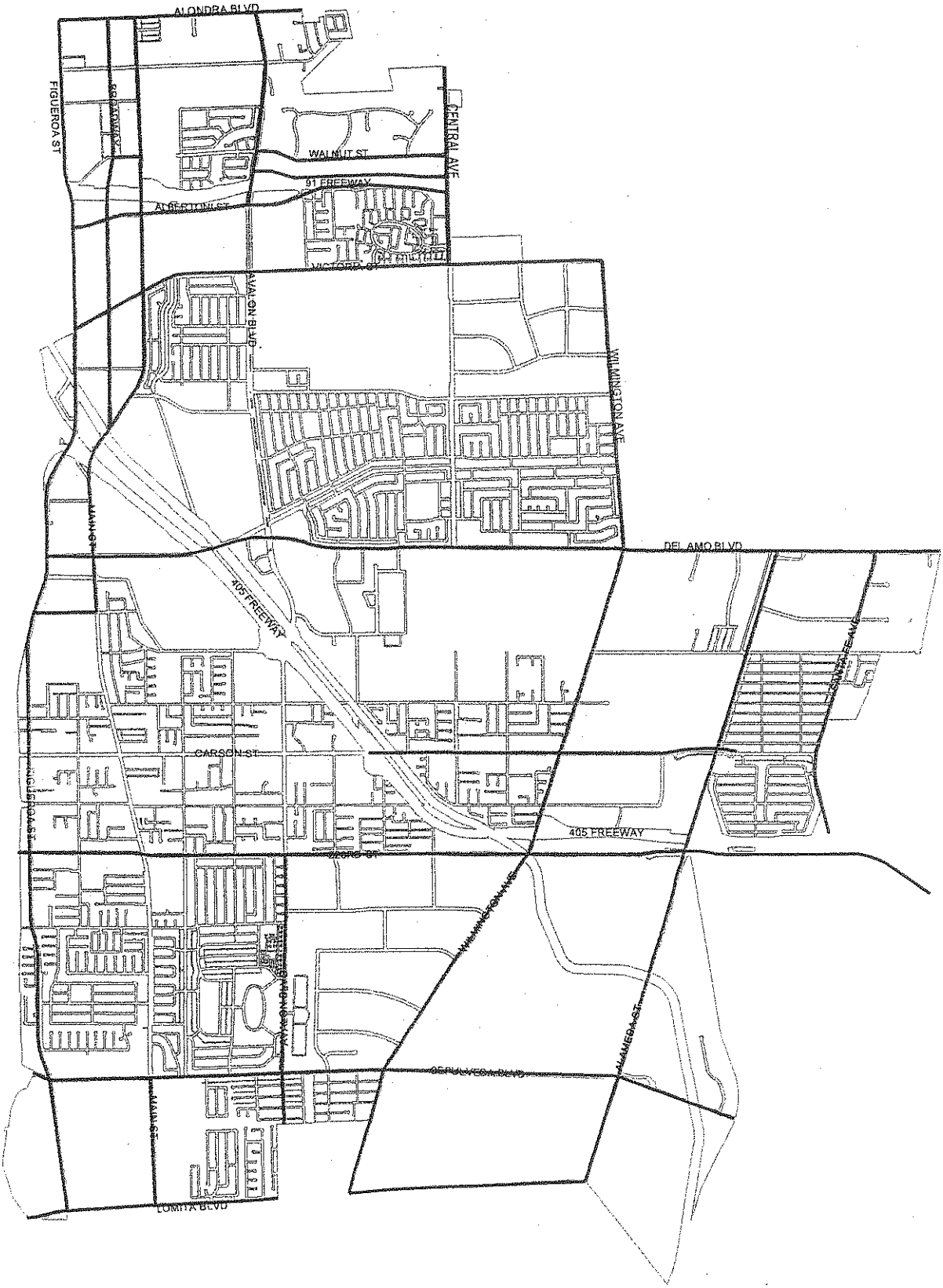
14

CARSON RESIDENTS AT MAIN & VICTORIA

PRINT NAME	ADDRESS	SIGNATURE
Debra Mason	109 E. Bilson St	Debra Mason
Herman Haverty	18203 Milmore	Herman Haverty
LULA & George Brooks	125 E. Bilson St.	Lula & George Brooks
ELLA & WILLIE HALL	18211 MILMORE AVE	Ella & Willie Hall
GOODY THOMAS	18217 MILMORE AVE	Goody Thomas
Dorothy M. Thomas	18217 Milmore Ave	Dorothy M. Thomas
CORA MACK	119 E. Bilson St	Cora Mack
COLLEEN KUSHI	137 E BILSON ST	Colleen Kushi
Angelic (Guillory) and Yolanda	18309 Milmore Ave	Angelic Guillory
Rebecca Nakamura	18315 Milmore Ave.	Rebecca Nakamura
Theresa/Felix Nwosu	18415 Milmore Ave	Theresa Nwosu
MARLA ABERNATHY	18509 MILMORE AVE.	Marla Abernathy
SHARON MALVIN	18915 MILMORE AVE	Sharon Malvin
BLANCHE BLAKE	18927 MILMORE AVE CARSON	Blanche Blake
KENNETH D. HARRISON	18939 milmore ave Carson	Kenneth D. Harrison
JOHN HARWOOD	18943 MILMORE AVE	John Harwood
Calvin Watkins	18947 milmore	Calvin Watkins
PATRICIA & WILLIE PATTERSON	18921 MILMORE AVE	Patricia & Willie Patterson
PAUL M. KANZANT	18739 Milmore Avenue	Paul M. Kanzant
FUMIO KINOSHITA	18909 MILMORE	Fumio Kinoshita
SHIGERU YONAMINE	18903 Milmore Ave	Shigeru Yonamine
Michael Edwards	18703 Milmore Ave	Michael Edwards

CARSON RESIDENTS AT MAIN & VICTORIA

PRINT NAME	ADDRESS	SIGNATURE
J.K. HIRAOKA	18709 MELHYDRE Ave	J.K. Hiraoka
Dianne Johnson-Wheeler	18635 Milmore Ave	Dianne Johnson-Wheeler
Calvin Wheeler	18635 Milmore Ave	Calvin Wheeler
JOENNA ELLSON	~~18745~~ 18631 Milmore Ave	Joenna Ellson
GRACE HARADA	18619 MILMORE AVE	Grace Harada
Ruth Kawae	18615 Milmore Ave	Ruth Kawae
ALWIN WILLS	18431 MILMORE AVE	Alwin Wills
Ray Michihara	18303 Milmore Ave	Ray Michihara
De Shay James	18233 Milmore Ave.	De Shay James
Robertha DeBeau	18325 milmore ave	Robertha LeBeau
Dwayne Martin	18331 Milmore Ave	Dwayne Martin
Kimie D. Fujiura	18419 Milmore Ave	Kimie D. Fujiura
Linda Turk	18425 milmore ave	Linda Turk
Frances Abe	18503 Milmore Ave	Frances Abe
Tai Ao Chu	18603 Milmore Ave	Tai Ao Chu
Rosie Bailey	18317 Milmore Ave	Rosie Bailey



City of Carson
Truck Routes

EXHIBIT NO. 03

Map Print Date: Tuesday, November 23, 2010
Updated: 05/15/2007
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CITY OF CARSON
INTEROFFICE MEMORANDUM

TO: Richard Garland, Traffic Engineer
FROM: Sheri Repp Loadsman, Planning Officer
SUBJECT: Identified Truck Routes in General Plan
DATE: November 24, 2010

The Planning Division has reviewed your analysis related to the request to remove Victoria Street between Main Street and Avalon Boulevard from the truck route system and concurs with your recommendation that the truck route be retained. Should the City Council request further consideration of the removal of all or a portion of Victoria Street from the truck route, a General Plan amendment would be required to provide for the corresponding change to the truck routes identified in the Circulation Element. Pursuant to Government Code Section 65353, the Planning Commission would be required to conduct a public hearing and provide a recommendation to the City Council. An additional public hearing would be required by the City Council to consider any amendment to the General Plan.

A copy of the relevant sections of the Government Code as provided as follows:

65353. (a) When the city or county has a planning commission authorized by local ordinance or resolution to review and recommend action on a proposed general plan or proposed amendments to the general plan, the commission shall hold at least one public hearing before approving a recommendation on the adoption or amendment of a general plan. Notice of the hearing shall be given pursuant to Section 65090.

(b) If a proposed general plan or amendments to a general plan would affect the permitted uses or intensity of uses of real property, notice of the hearing shall also be given pursuant to paragraphs (1) and (2) of subdivision (a) of Section 65091.

(c) If the number of owners to whom notice would be mailed or delivered pursuant to subdivision (b) is greater than 1,000, a local agency may, in lieu of mailed or delivered notice, provide notice by publishing notice pursuant to paragraph (3) of subdivision (a) of Section 65091.

(d) If the hearings held under this section are held at the same time as hearings under Section 65854, the notice of the hearing may be combined.

65354. The planning commission shall make a written recommendation on the adoption or amendment of a general plan. A recommendation for approval shall be made by the affirmative vote of not less than a majority of the total membership of the commission. The planning commission shall send its recommendation to the legislative body.

cc: Victor Rollinger, Development Services General Manager

EXHIBIT NO. 04

1-D

City of Carson
Report to Mayor and City Council

February 16, 2011
New Business Consent

SUBJECT: CONSIDER AMENDING THE TRUCK ROUTE SYSTEM TO ELIMINATE VICTORIA STREET BETWEEN MAIN STREET AND CENTRAL AVENUE FROM THE LIST OF STREETS DESIGNATED AS TRUCK ROUTES

Submitted by M. Victor Rollinger
Development Services General Manager

Approved by Clifford W. Graves
Interim City Manager

I. SUMMARY

This item is on the agenda at the request of Councilmember Santarina.

A letter was received from a resident of Colony Cove Mobile Home Estates stating that trucks operating on Victoria Street are creating noise, pollution, and vibration problems for residents who live near Victoria Street (Exhibit No. 1). The request is that the segment of Victoria Street between Main Street and Central Avenue be eliminated from the truck route system (Exhibit No. 2). The issue of truck traffic on Victoria Street was addressed at the December 7, 2010, City Council meeting, and the Council referred the issue to a future joint meeting of the Planning Commission and the Public Works Commission (Exhibit No. 3).

II. RECOMMENDATION

RECEIVE and FILE.

III. ALTERNATIVES

TAKE another action the City Council deems appropriate.

IV. BACKGROUND

The issue of truck traffic on Victoria Street was addressed at the December 7, 2010, City Council meeting, and the Council directed staff to take the following actions:

1. Install "No Stopping Any Time" signs on the south side of Victoria Street between Main Street and Coltman Avenue.
2. Continue coordinating with the truck-oriented commercial operations near the intersection of Victoria and Main Streets to discourage their customers and employees from generating unnecessary noise.
3. Schedule a joint meeting of the Planning Commission and the Public Works Commission to consider an amendment to the Circulation Element of the

EXHIBIT NO. 2 -

General Plan to remove part of Victoria Street from the list of streets designated as truck routes.

The "No Parking Any Time" signs were subsequently installed on the south side of Main Street and representatives of the truck-oriented operations near the intersection of Victoria and Main Streets were contacted regarding the noise issues. In addition, the city's Public Works Street Maintenance Division conducted grinding operations on Victoria Street east of Main Street and on Main Street south of Victoria Street to eliminate bumps and smooth out the pavement, thereby, reducing the vibration impacts associated with trucks.

With regard to a joint meeting of the Planning Commission and Public Works Commission, the meeting has been targeted for March 2011. At the time that this staff report was prepared, the Planning Commission had not yet established the date of the joint meeting. When the time, date and location of the meeting have been finalized, residents and affected business representatives will be notified, including Ms. Anzalone.

V. FISCAL IMPACT

None.

VI. EXHIBITS

1. Location Map. (pg. 4)
2. Letter from resident. (pg. 5)
3. Minutes, December 7, 2010, Item No. 21. (pgs. 6-7)

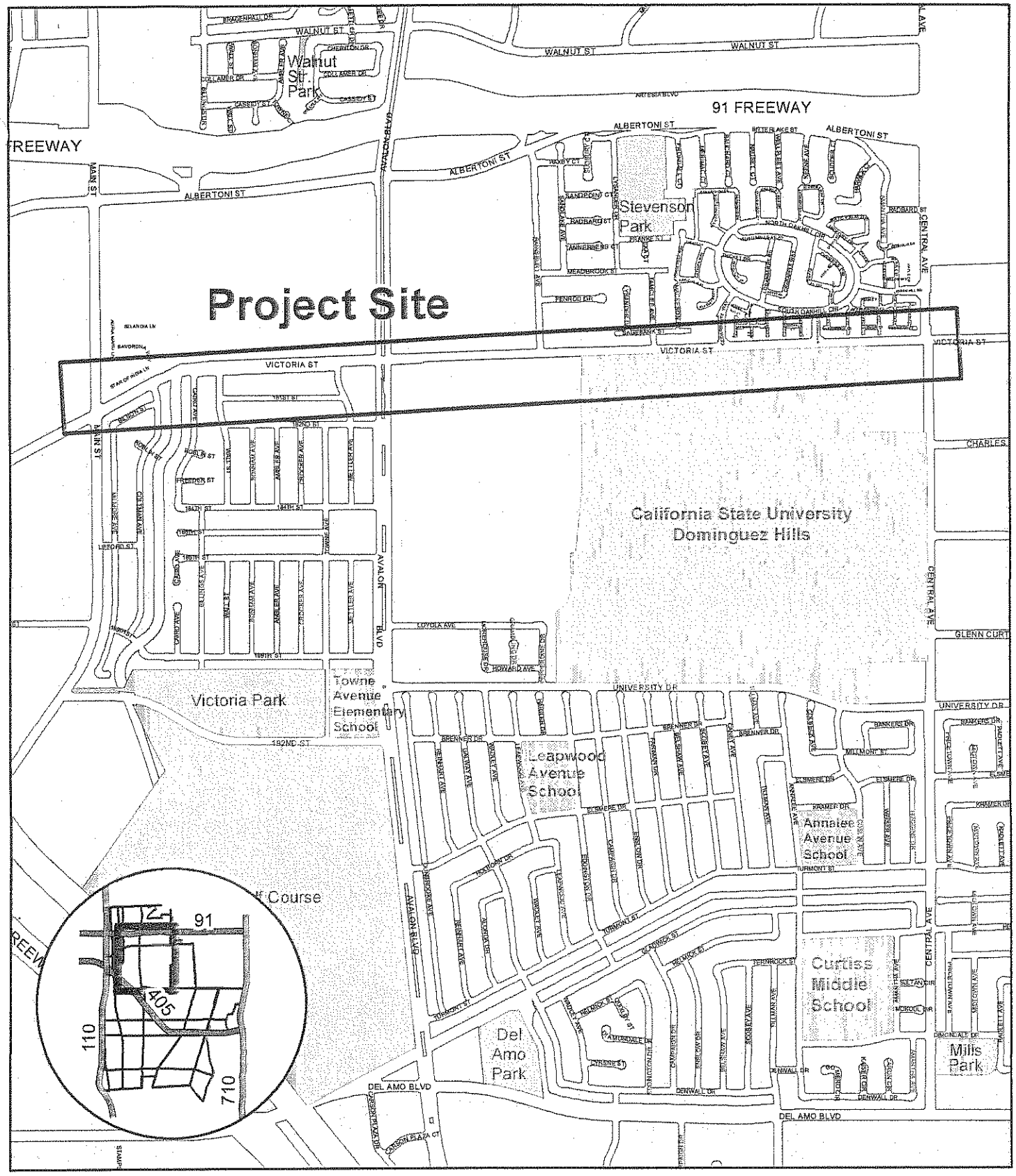
\\Carson_nas\devsvrs\ENGINEERING DIVISION\Agenda1\2011\02-16-11 CC Victoria Truck Route Removal.docx

Prepared by: Richard Garland, Traffic Engineer
TO:Rev010511

Reviewed by:

City Clerk	City Treasurer
Administrative Services	Development Services
Economic Development Services	Public Services

Action taken by City Council
Date_____ Action_____
_____



Location Map
Victoria Street -
Main Street to Central Avenue

EXHIBIT NO. 1

Date Printed: Tuesday, February 08, 2011
MXD: G:\ENGINEERING DIVISION\Location Maps\MXDs\Victoria Street_Main Street_to_Central Avenue.mxd
PDF: G:\ENGINEERING DIVISION\Location Maps\Victoria Street_Main Street_to_Central Avenue.pdf

January 5, 2011

CITY COUNCIL
11 JAN 10 A9:15

Dear Mayor Pro Tem
Elito Santarina

Enclosed are two e-mails I have been desperately trying to send you to no avail. I'm hoping you will read these and see the predicament we are in at Colony Cove Mobile Home Park.

Please let me know if anything is going to be done for the truck traffic on Vitoria St. It has become a life threatening problem with the noise, air pollution and the shaking of our homes with these heavy trucks. We have many sleepless nights also and I'm afraid our homes will be shaken to the ground eventually. We don't have any protection from these trucks only a small sidewalk. It feels like we are living on the Freeway.

The only solution I can come up with is that these tractor trailer trucks be forbidden to travel down Victoria between Central and Main. This is an all residential area and there are no businesses for them to deliver to. Only UPS, Fed Ex and DHL should be allowed for home deliveries and of course buses.

When we spoke at the Christmas party of the Jolly Club you mentioned that you and Mayor Jim Dear are working on this problem. I can only see an increase of trucks since then. I have noticed that there are signs "Truck Route" posted on every intersection from Central to Figueroa allowing these trucks to come up and down Victoria.

Please, please help us out in this matter and please acknowledge.

Thank you,

Rose Anzalone
Space 376
310/527-2852

EXHIBIT NO. 02

23

ITEM NO. (21) CONSIDER AMENDING THE TRUCK ROUTE SYSTEM TO ELIMINATE VICTORIA STREET BETWEEN MAIN STREET AND AVALON BOULEVARD (DEVELOPMENT SERVICES)

This item was heard at 9:43 P.M.

City Manager Groomes summarized the staff report and recommendation.

Public Comments

Debra Mason, 109 E. Bilson Street, Carson, California 90746.

Dee Carpenter-Kemp, 18409 Milmore Avenue, Carson, California 90746.

Miriam Vazquez, 21413 Martin Street, Carson, California 90745.

Pilar Hoyos, 22010 Wilmington, Carson, California 90745, representing Watson Land Company.

Cataya Dunn, 109 E. Bilson, Carson, California 90746.

Bill Smalley, 17700 Avalon Boulevard, No. 111, Carson, California 90746.

City Manager Groomes clarified that although staff was not opposed to the change in the truck route, it was not staff's position to recommend a change at this meeting.

RECOMMENDATION for the City Council:

TAKE the following actions:

1. DIRECT staff to install "No Stopping Any Time" signs on the south side of Victoria Street between Main Street and Coltman Avenue.

2. DIRECT staff to continue coordinating with the truck-oriented commercial operations near the intersection of Victoria and Main Streets to discourage their customers and employees from generating unnecessary noise.

ACTION: It was moved to take the following actions: 1) approve staff recommendation Nos. 1 and 2; 2) approve alternative staff recommendation No. 1, refer this issue to the Planning Commission to conduct public hearing and consider an amendment to the Circulation Element of the General Plan to remove the segment of Victoria Street between Main Street and Avalon Boulevard from the list of streets designated as truck routes and to add the segment of Avalon Boulevard between Victoria Street and Albertoni Street to the truck route list; and 3) refer this issue to the Public Works Commission for a recommendation to the City Council on motion of Dear and seconded by Santarina.

EXHIBIT NO. 03

Amendment to Motion

Council Member Davis-Holmes offered a friendly amendment to the motion to refer this issue to a joint meeting of the Planning Commission and Public Works Commission, which was accepted by maker and the second.

Additional Public Comments

Jenny Vazquez, 21413 Martin Street, Carson, California 90745.

Council Member Ruiz-Raber requested the installation of "no honking" signage at service stations and on streets, which was accepted by Mayor Dear and referred to City Manager Groomes, with no objections heard.

Subsequently, City Manager Groomes clarified that he understood the request of Council Member Ruiz-Raber as administrative direction to staff and that staff would expedite the process as expeditiously as possible. He referred to the joint meeting of the Planning Commission and Public Works Commission and reported that the meeting was a scheduling issue.

Mayor Dear inquired whether Ms. Mason would be willing to take the lead and notify neighbors and interested individuals about the joint meeting, which was accepted by Ms. Mason.

The amended motion was unanimously carried by the following vote:

Ayes:	Mayor Dear, Mayor Pro Tem Santarina, Council Member Davis-Holmes, Council Member Gipson, and Council Member Ruiz-Raber
Noes:	None
Abstain:	None
Absent:	None

Update to the General Plan Guidelines: Complete Streets and the Circulation Element

December 15, 2010

STATE OF CALIFORNIA
Arnold Schwarzenegger,
Governor

GOVERNOR'S OFFICE
OF PLANNING AND
RESEARCH
Cathleen Cox,
Acting Director

1400 Tenth Street
Sacramento, CA 95814

P.O. Box 3044
Sacramento, CA 95812

(916) 322-2318

www.opr.ca.gov

State of California
Arnold Schwarzenegger, Governor

Governor's Office of Planning and Research
Cathleen Cox, Acting Director

Scott Morgan, Director, State Clearinghouse

Contributors:
Selena Gallagher, Project Manager- Graduate Planner Intern, State Clearinghouse
Cuauhtemoc Gonzalez, Associate Planner, State Clearinghouse
Julia Lave Johnston, OPR Deputy Director for Planning Policy, State Clearinghouse
Seth Litchney, Senior Planner, State Clearinghouse
Anna Marie Young, Assistant Planner, State Clearinghouse

DIRECTOR'S MESSAGE

December 2010

I am pleased to announce the publication of the Governor's Office of Planning and Research (OPR), *Update to the General Plan Guidelines: Complete Streets and the Circulation Element.* Assembly Bill 1358 (AB 1358, Chapter 657, Statutes of 2008), the California Complete Streets Act, required OPR to amend the *2003 General Plan Guidelines* to provide guidance to local jurisdictions on how to plan for multimodal transportation networks in general plan circulation elements. This document amends guidance on preparing circulation elements found on pages 55-62 of Chapter 4 of the *2003 General Plan Guidelines*. Local jurisdictions should use this *Update* in conjunction with the *2003 Guidelines* when they are updating their general plan circulation elements.

The OPR staff thanks the many organizations and stakeholders who generously shared their expertise during the development of this *Update*. OPR consulted with various state agencies, regional agencies, local jurisdictions, planning and transportation consultants, health organizations, pedestrian and bicycle advocacy groups, and members of the public. This document is another example of how partnerships and collaboration can support quality communities for all Californians.

Based upon this broad consultation, OPR issued a *Draft Update to the General Plan Guidelines: Complete Streets and the Circulation Element* on October 20, 2010 for 30 days of public review and comment. All comments received on the draft document were carefully considered for incorporation. We hope that you will find this update to be an informative guide and useful tool in the practice of local planning. OPR always welcomes suggestions on ways to improve the *General Plan Guidelines*, and other OPR guidance documents. OPR strives to provide quality planning guidance to city and county decision makers, staff and community residents.

Cathleen Cox,

Acting Director, OPR

Table of Contents

SECTION I: PURPOSE AND BACKGROUND

PURPOSE

This update to the circulation element section of the *2003 General Plan Guidelines* meets the requirements of Assembly Bill 1358, The California Complete Streets Act. The Act requires the Governor's Office of Planning and Research (OPR) to amend the *General Plan Guidelines* to assist city and counties in integrating multimodal transportation network policies into the circulation elements of their general plans. Starting January 2011, all cities and counties, upon the next update of their circulation element, must plan for the development of multimodal transportation networks.[1]

To support cities and counties in meeting the requirements and objectives of AB 1358, this update provides guidance on general plan circulation element goals, policies, data collection techniques, and implementation measures related to multimodal transportation networks. The goal of this update is to provide information on how a city or county can plan for the development of a well-balanced, connected, safe, and convenient multimodal transportation network. This network should consist of complete streets which are designed and constructed to serve all users of streets, roads, and highways, regardless of their age or ability, or whether they are driving, walking, bicycling, or taking transit.

AB 1358 places the planning, designing, and building of complete streets into the larger planning framework of the general plan by requiring jurisdictions to amend their circulation elements to plan for multimodal transportation networks. These networks should allow for all users to effectively travel by motor vehicle, foot, bicycle, and transit to reach key destinations within their community and the larger region. OPR recommends that local jurisdictions view all transportation projects, new or retrofit, as opportunities to improve safety, access, and mobility for all travelers and recognize pedestrian, bicycle, and transit modes as integral elements of their transportation system. The standard practice should be to construct complete streets while prioritizing project selection and project funding so that jurisdictions accelerate development of a balanced, multimodal transportation network.

Understanding the existing resources, location, and design of a local jurisdiction is imperative to successfully implement a multimodal transportation network. The planning, design, construction, and operation of a multimodal transportation network will be different for each community. Complete streets will look different in rural, suburban, or urban communities. Cities and counties should focus on crafting a network of travel options that are reflective of a community's individual context. A list of selected references with more information on multimodal transportation networks is provided at the end of this document.

1 Assembly Bill 1358, Chapter 657, Statutes 2008.

BACKGROUND

The California Complete Streets Act (AB 1358)

On September 30, 2008 Governor Arnold Schwarzenegger signed Assembly Bill 1358, the California Complete Streets Act. The Act states: "In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled (VMT) and to shift from short trips in the automobile to biking, walking and use of public transit."[2]

The legislation impacts local general plans by adding the following language to Government Code Section 65302(b)(2)(A) and (B):

(A) Commencing January 1, 2011, upon any substantial revision of the circulation element, the legislative body shall modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.

(B) For the purposes of this paragraph, "users of streets, roads, and highways" means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

RELATED FEDERAL AND STATE POLICIES

U.S. Department of Transportation (DOT) Bicycle and Pedestrian Policy:

The *United States Department of Transportation Policy Statement on Bicycle and Pedestrian Transportation Accommodations Regulations and Recommendations* supports "fully integrated active transportation networks," that include accommodations for bicyclists and pedestrians.[3] The DOT's bicyclist and pedestrian accommodation regulations and recommendations are consistent with California's complete street policies and AB 1358. The DOT encourages all transportation agencies and local governments to adopt similar policies to ensure all users of streets, roads, and highways are taken into consideration when developing new or retrofitting existing transportation systems.

The *United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations* can be found at the following website:

http://www.fhwa.dot.gov/environment/bikeped/policy_accom.htm

2 Assembly Bill 1358, Chapter 657, Statutes 2008.

3 U.S. Department of Transportation Federal Highway Administration, *United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations*, March 2010 http://www.fhwa.dot. gov/environment/bikeped/policy_accom.htm (accessed July 2010).

California Department of Transportation (Caltrans) Complete Streets Policy:

The *California Department of Transportation Deputy Directive 64-Revision #1: 'Complete Streets: Integrating the Transportation System'* (DD-64-R1) was released on October 2, 2008. DD-64-R1 directs Caltrans staff to support increased mobility and access for all Californians on Caltrans built and maintained roads.

DD-64-R1 states that Caltrans will:

- "Provide for the needs of travelers of all ages and abilities in all planning, programming, design construction, operations, and maintenance activities and products on the State Highway System;
- View transportation improvements (new and retrofit) as opportunities to improve safety, access, and mobility for all travelers and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system;
- Develop integrated multimodal projects in balance with community goals, plans, and values; addressing the safety and mobility needs of bicyclists, pedestrians and transit users in all projects, regardless of funding;
- Facilitate bicycle, pedestrian, and transit travel by creating 'complete streets' beginning early in system planning and continuing through project delivery and maintenance and operations; and,
- Collaborate among all (Caltrans) department functional units and stakeholders to develop a network of complete streets." [4]

DD-64-R1 is limited to Caltrans owned and maintained streets, roads, and highways and focuses on the planning, construction, and maintenance of complete streets and when possible, on the creation of multimodal networks. The goals of DD-64-R1 provide important guidance for the design of streets that make up a local integrated multimodal transportation network.

Caltrans' *Complete Streets Implementation Action Plan* and other information on Caltrans' complete street policies can be found at the following website:

http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets.html

Safe Routes to School:

In 2005 the United States Congress passed the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users Act (SAFETEA-LU). This transportation reauthorization bill included funding for the Federal Safe Routes to School (SRTS) program. The objective of the SRTS program is to support the use of safe, active transportation modes (i.e. walking and bicycling) for children to and

4 California Department of Transportation, *Deputy Directive 64-R1*, (2008) http://www.dot.ca.gov/hq/tpp/offices/ ocp/complete_streets_files/dd_64_r1_signed.pdf (accessed June 2010).

from schools. The availability of active transportation modes can increase children's activity levels and decrease the likelihood of childhood diseases. This is especially important as childhood obesity rates and other illnesses related to inactivity are rapidly increasing both nationally and throughout California. [5]

The SRTS program is administered by the Federal Highway Administration, which distributes program funds to individual State Departments of Transportation. In California, Caltrans distributes the federal grant funding to eligible cities and counties for local SRTS projects. In addition, Caltrans administers its own Safe Routes to School program, known as SR2S, which includes high schools. The federal program opens eligibility only for K-8 schools. Funds for both programs are available on a competitive basis, with each Caltrans District having a fixed amount available for cities and counties.

Federal and State funding criteria vary slightly, but typically funds are allocated for:

(1) "The planning, design, and construction of infrastructure-related projects within approximately two miles of a primary or middle school (high schools per Caltrans funding) that will improve the ability of students to walk and bicycle to school;

(2) Non infrastructure-related activities that encourage walking and bicycling to school, including awareness campaigns and outreach to the press and community leaders, traffic education and enforcement, student training; and,

(3) SRTS program capacity building including training and hiring of state program volunteers, and managers." [6]

Eligible projects can include pedestrian facilities, traffic calming, traffic control devices, bicycle facilities, and public outreach and education.

Schools are an important node to include in the development of a local multimodal transportation network. Local multimodal transportation networks should address the needs of parents and children by providing safe active transportation options to and from schools. Doing so can reduce vehicle trips, reduce congestion, and improve road safety near schools, and increase children's activity rates. While the general plan itself is not eligible for funding, Safe Routes to School programs can help implement part of a connected, safe multimodal transportation network.

Additional information on SRTS and SR2S can be found at the following web sites:

http://www.saferoutesinfo.org
http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm.

5 California Department of Health Services, *Prevalence of Obesity and Healthy Weight in California Counties, 2001*, June 2004 http://www.cdph.ca.gov/pubsforms/Pubs/OHIRobesityweightCA2001.pdf (accessed December 1, 2010).
6 Safe Routes to School, *Safe Routes to School Guide*, http://www.saferoutesinfo.org/guide/index.cfm (accessed August 2010).

MULTIMODAL TRANSPORTATION NETWORKS

What are Multimodal Transportation Networks?

Multimodal transportation networks allow for all modes of travel including walking, bicycling, and transit to be used to reach key destinations in a community and region safely and directly. Jurisdictions can use complete streets design to construct networks of safe streets that are accessible to all modes and all users no matter their age or ability. Complete streets are defined below:

The National Complete Streets Coalition defines complete streets as follows:

> Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.
>
> Creating complete streets means transportation agencies must change their orientation toward building primarily for cars. Instituting a complete streets policy ensures that transportation agencies routinely design and operate the entire right of way to enable safe access for all users. [7]

The American Planning Association describes complete streets as follows:

> Complete streets serve everyone – pedestrians, bicyclists, transit riders, and drivers – and they take into account the needs of people with disabilities, older people, and children. The complete streets movement seeks to change the way transportation agencies and communities approach every street project and ensure safety, convenience, and accessibility for all. [8]

Caltrans defines complete streets as follows:

> A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Complete street concepts apply to rural, suburban, and urban areas.[9]

7 National Complete Streets Coalition, www.completestreets.org (accessed July 2010).

8 Barbara McCann and Suzanne Rynne, *Complete Streets: Best Policy and Implementation Practices*, American Planning Association, Report No. 559:1.

9 California Department of Transportation, *Complete Streets Implementation Action Plan*, Feb. 2010 http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/CompleteStreets_IP03-10-10.pdf (accessed July 2010).

POTENTIAL BENEFITS OF MULTIMODAL TRANSPORTATION NETWORKS

Safety

Multimodal transportation networks, using complete streets best practices, can lead to safer travel for all roadway users. Designing streets and travel routes that consider safe travel for all modes can reduce the occurrence and severity of vehicular collisions with pedestrian and bicyclists.[10] Streets and other transportation facility design considerations that accommodate a variety of modes and user abilities can contribute to a safer environment that makes all modes of travel more appealing.

Health

Multimodal transportation networks that allow people to walk or bicycle as a viable transportation option can promote an active lifestyle by encouraging travelers to walk or ride bicycles instead of driving. These active transportation modes increase physical activity rates. Frequent exercise is known to reduce obesity rates and lower the risk of heart disease and diabetes.[11] A comprehensive transportation network that allows safe walking and bicycling to multiple destinations, including transit, promotes better health.

Reducing the amount that people drive by increasing the opportunity for walking, bicycling, and transit also reduces vehicle emissions. Emissions from vehicles are a major contributor to poor air quality, which in turn, is a major contributor to health ailments such as asthma. Although poor air quality is not always the cause of asthma, vehicle emissions are a major contributor to asthma related illnesses.[12]

Multimodal transportation networks provide options and increase mobility for people who cannot or do not drive to stay connected to their communities. This is especially important for people with disabilities and for all people as they age. Without alternatives to the automobile, these individuals can easily become socially isolated; unable to access essential resources such as grocery stores, houses of worship, and medical care. Social isolation and a lack of access to essential resources can negatively impact people's physical and mental well-being.

Greenhouse Gas (GHG) Emission Reduction

Land use patterns and the existing transportation infrastructure play a direct role in the rate and growth of vehicle miles traveled (VMT); influencing the distance that people travel and the mode of travel they choose. The need to reduce transportation-related GHG emissions was highlighted in the

10 California Department of Transportation, *Complete Streets Implementation Action Plan.*

11 California Department of Public Health, *The Burden of Cardiovascular Disease in California, A Report of the California Heart Disease and Stroke Prevention Program*, 2007 http://www.cdph.ca.gov/programs/cvd/ Documents/CHDSP-BurdenReport-HighRes.pdf (accessed June 2010).

12 California Department of Health Services, *The Burden of Asthma in California: A Surveillance Report*, 2007 http://www.californiabreathing.org/images/stories/publications/asthmaburdenreport.pdf (accessed June 2010).

California Air Resources Board's (CARB) *2008 AB 32 Climate Change Scoping Plan.*[13] Transportation accounts for 38 percent of California's GHG emissions.[14] Studies show that even with aggressive state and federal vehicle efficiency standards and the use of alternative fuels, meeting the State's GHG reduction goals will require a reduction in how much the average Californian drives.[15] Reducing the number of automobile trips can reduce fuel consumption and GHG emissions.

Economic Development and Cost Savings

Creating multimodal transportation networks can improve economic conditions for both business owners and residents. A network of complete streets can be safer and more appealing to residents and visitors, which can benefit retail and commercial development. Multimodal transportation networks can improve conditions for existing businesses by helping revitalize an area and attracting new economic activity. Integrating the needs of all users can also be cost-effective, by reducing public and privates costs. Accommodating all modes reduces the need for larger infrastructure projects, such as additional vehicle parking and road widening, which can be more costly than complete streets retrofits.

REGIONAL PLANNING

Assembly Bill 32 and Senate Bill 375

The Legislature passed Assembly Bill 32 (AB 32), The Global Warming Solutions Act of 2006.[16] AB 32 requires the State of California to reduce its GHG emissions to 1990 levels no later than 2020. Senate Bill 375 (SB 375) builds on the existing regional transportation planning process undertaken by the state's 18 Metropolitan Planning Organizations (MPOs) to connect the reduction of GHG emissions from cars and light trucks to regional land use and infrastructure planning.[17] According to the California Air Resources Board (CARB), passenger vehicles are the number one emitter of GHG emissions in California.[18] SB 375 asserts that "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32."[19]

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13 California Air Resources Board, *AB 32 Climate Change Scoping Plan*, (2008): http://www.arb.ca.gov/cc/scopingplan/ document/scopingplandocument.htm (accessed September 2010).
14 California Climate Change Portal, "Greenhouse Gas Emissions Inventory," 2004 http://www.climatechange.ca.gov/inventory/index.html (accessed June 2010).
15 California Air Resources Board, *AB 32 Climate Change Scoping Plan.*
16 Assembly Bill 32, Chapter 488, Statutes 2006.
17 Senate Bill 375, Section 1(c), 2008.
18 California Air Resources Board, *California Greenhouse Gas Inventory for 2000–2008- by Category as Defined in the Scoping Plan*, (May 2010): http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-08_2010-05-12.pdf (accessed September 2010).
19 Senate Bill 375, Section 1(c), 2008.

The main objectives of SB 375 are:

(1) To use the regional transportation planning process to direct funding to transportation projects that reduce GHG emissions by coordinating land use and transportation planning;

(2) To use the California Environmental Quality Act (CEQA) streamlining as an incentive to encourage residential development projects which help achieve AB 32 GHG emission reduction goals; and,

(3) To coordinate the state's requirements for regional housing development and planning with the regional transportation planning process.

Regional Transportation Plans (RTPs)

Each regional transportation planning agency, including federally recognized MPOs and state recognized Regional Transportation Planning Agencies (RTPAs), is required to prepare and adopt a RTP. The RTP's goal is to achieve a coordinated and balanced regional transportation system. The plan should consider all transportation systems, as well as their users and associated facilities and services including, but not limited to: mass transit, highways, railroads, bicycle, walking, goods movement, maritime, and aviation. The plan is meant to be action-oriented and pragmatic and to consider both short-term and long-term system issues. An RTP establishes the region's priorities for funding transportation infrastructure projects and other transportation programs.

The *2010 Regional Transportation Plan Guidelines* (RTP Guidelines) approved by the California Transportation Commission and prepared by Caltrans, summarizes RTP requirements in both federal and state law. State law directs the RTP to "present clear, concise policy guidance to local and state officials" and to "consider and incorporate, as appropriate, the transportation plans of cities, counties, districts, private organizations, and state and federal agencies"[20] A RTP must be consistent with the *RTP Guidelines*.

Although it is not legislatively required, the *RTP Guidelines* suggest that MPOs and RTPAs include local multimodal transportation policies in their plans. The *RTP Guidelines* recommend that regional transportation agencies integrate multimodal transportation network policies into their RTPs, identify the financial resources necessary to accommodate such policies, and consider accelerating programming for projects that retrofit existing roads to provide safe and convenient travel by all users. The guidelines also encourage MPOs and RTPAs to work with jurisdictions and agencies within their region to ensure that general plan circulation elements and local street and road standards include the necessary planning, design, construction, operations, and maintenance procedures, to support all transportation system users.[21]

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20 California Government Code §65080(a).

21 California Transportation Commission, 2010 *California Regional Transportation Plan Guidelines*, (April 2010): http://www.catc.ca.gov/programs/rtp/2010_RTP_Guidelines.pdf (accessed September 2010).

Federal transportation law emphasizes the need for the coordination of regional and local plans by requiring a RTP to be based on the most recent local planning assumptions including local general plans and other relevant factors. Any decisions about the allocation of transportation funds must be consistent with the RTP."[22]

Sustainable Communities Strategy

SB 375 requires each of the state's 18 MPOs to include a Sustainable Communities Strategy (SCS) in its RTP. RTPAs are not required to develop a SCS as part of their RTP. SB 375 also directs CARB, in consultation with MPOs, to develop regional GHG emission reduction targets for each MPO. MPO's must develop a SCS as part of its RTP that explains what feasible land use patterns and transportation system improvements would be necessary to meet CARB targets. An SCS must be adopted whether or not it meets CARB targets; however, if an MPO cannot meet these targets through its SCS, it must develop an alternative plan called an Alternative Planning Strategy (APS). An APS is not required to be part of the RTP and therefore does not impact RTP transportation funding decisions.

The SCS is expected to set forth a growth strategy that integrates land use, regional housing needs allocations, and the region's transportation infrastructure plan consistent with the goal of meeting CARB's regional GHG reduction targets. The SCS does not supersede a local general plan, specific plan, or zoning ordinance. SB 375 does not require that a local general plan, specific plan, or zoning ordinance be consistent with an SCS. However, a RTP must be internally consistent, so regional transportation funding and policy decisions need to be consistent with the SCS.

An SCS should perform the following tasks:

- Identify the general location of uses, residential densities, and building intensities within the region;
- Identify areas within the region sufficient to house all economic segments of the regional population, taking into account migration patterns, population growth, etc.;
- Identify areas within the region sufficient to house an eight-year projection of the regional housing need;
- Identify a transportation network to service the transportation needs of the region;
- Gather and consider the best available scientific information regarding the region's resource areas and farmland;
- When feasible, forecast a development pattern for the region, which when integrated with the transportation network, and other transportation

22 Part 450 of Title 23of, and Part 93 of Title 40 of, the Code of Federal.

measures and policies, reduces GHG emissions from passenger vehicles to achieve, the CARB GHG emissions reduction targets; and,

- Quantify the GHG emissions reduction projected by the SCS. If the SCS does not achieve the SB 375 targets, the SCS must identify the difference between its projected GHG emissions reduction and the CARB identified target for the region.[23]

To see a full description of what is required of an SCS please see G.C §65080(b)(2)(B).

SB 375 requires all regional counties not just MPOs to consider financial incentives for cities and counties that have resource areas or farmland, for the purpose of transportation investments. Such considerations include, but are not limited to:

- The preservation and safety of the city street or county road system;
- Farm-to-market transportation needs; and,
- Interconnectivity transportation needs.

Farm-to-market refers to the transportation facilities needed to provide connections between areas of agricultural production, processing, and storage facilities to agricultural distribution and sales activities.

The bill also requires that MPOs or county transportation agencies address financial assistance for counties to address countywide (transportation) service responsibilities, in counties that contribute towards the greenhouse gas emission reduction targets by implementing policies for growth to occur within their cities.

General plans should identify city and county resource areas and/or farmlands. County general plans may also identify policies targeting growth into the incorporated cities or towns within their limits.[24]

By updating general plans to include multimodal transportation network policies, cities and counties can support MPOs in developing an RTP and SCS and reaching regional GHG emission reduction targets. Once an SCS is adopted, establishing multimodal transportation network policies in the general plan that are consistent with the RTP and SCS can potentially increase the likelihood of funding for local priority projects through the RTP process. A city or county whose general plan is consistent with the regional SCS may be better situated to use the CEQA exemption and streamlining included in SB 375. The applicability of the SB 375 CEQA exemption is the sole realm of the city and county, MPOs cannot require a city or county to use an exemption or streamlining provisions for any particular site or project.

23 California Government Code §65080(b)(2)(B); Part 450 of Title 23 of, and Part 93 of Title 40 of, the Code of Federal.
24 California Government Code §65080(4)(C).

SECTION II: CIRCULATION ELEMENT UPDATE

This section is an update to the *2003 General Plan Guidelines* section on the circulation element (Chapter 4, pages 55-61). This amended and reformatted section of the *Guidelines* contains new information related to goals, policies, data collection, and implementation measures that will assist local governments in modifying the circulation element to plan for a balanced multimodal transportation network and the safe and convenient travel of all users of streets, roads, and highways.

CIRCULATION ELEMENT

The circulation element is not limited to transportation network issues. For the purpose of the circulation element, circulation includes all systems that move people, goods, energy, water, sewage, storm drainage, and communications. As a result, the circulation element should contain objectives, policies, and standards for transportation systems, including multimodal transportation networks, airports and ports, military facilities and operations, and utilities.

By statute, the circulation element must correlate directly with the land use element.[25] Land use patterns can have a significant impact on the effectiveness of a multimodal transportation network, since trip distance is a determinant of whether pedestrians and bicyclists, as well as transit users walking or bicycling to and from terminals, can reach a given destination. The land use plan and transportation network should be complementary. The close proximity of land uses can also facilitate effective transportation services and provide the ridership necessary to support high quality mass transit. Multimodal transportation policies should link transportation planning and land use planning to support effective multimodal transportation networks that connect people with desired destinations. This means that although AB 1358 only requires cities and counties to modify the circulation element to plan for a balanced, multimodal transportation network, jurisdictions will need to examine, and amend as necessary, the land use element. Jurisdictions should also consider the housing, open space, noise, conservation, and safety elements.

A key factor in creating a successful multimodal transportation network is making sure the planning objectives, policies, and standards reflect the rural, suburban, and/or urban context of a community within the planning area. Rural, suburban, and urban areas have different growth and development patterns and therefore face different opportunities and challenges when designing a multimodal transportation network.

A rural jurisdiction may require wide shoulders to accommodate pedestrian, bicycle, or equestrian travel. A jurisdiction with an suburban or urban context may accommodate

25 California Government Code §65302(b)(1).

pedestrian and bicycle travel with the inclusion of sidewalks and bicycle lanes along with controlled street crossings. Rural and suburban areas where there are greater distances between destinations may consider benches, covered resting areas, and other facilities that allow for people to successfully walk or ride a bicycle to frequently visited destinations. Jurisdictions that include all or a combination of rural, suburban, or urban areas should consider different policies, standards, and implementation measures specific for those areas when modifying the circulation element to plan for a well-balanced multimodal transportation network. When considering context issues such as needs of all users, needs of the community, traffic demand, impacts on alternate routes, impacts on safety, funding feasibility, and maintenance feasibility; relevant laws and regulations should be addressed.

The provisions of a circulation element can affect a community's environment as follows:

Physical—The circulation system is one of the chief determinants of physical settlement patterns and the system's location, design, accessibility, and mode varieties have major impacts on air, water, and soil quality, plant and animal habitats, environmental noise, energy use, community appearance, and the placement of land uses.

Social—The circulation system is a primary determinant of the pattern of human settlement. It has a major impact on the areas and activities it serves because of its potential to both provide accessibility and act as a barrier. The circulation system should be accessible to all segments of the population, including the disadvantaged, the young, the poor, the elderly, and the disabled. Transportation systems and facilities should not serve as barriers to community resources.

Health and Safety—The circulation system through design and accessibility of multiple modes of transportation can either promote or deter physical activity. Physical inactivity is linked to such health ailments as heart disease, diabetes, and obesity. The availability of multiple modes can also reduce automobile use and air pollution, reducing other negative health impacts. Circulation design can also influence travel safety by increasing or decreasing vehicle collision risks.

Economic—Economic activities normally require circulation of materials, products, ideas, and employees, so the efficiency of a community's circulation system has a direct effect on its economic productivity. The efficiency of a community's circulation system can either contribute to or adversely affect its economy and economic sustainability.

CIRCULATION ELEMENT CHECKLIST

The following is a checklist of statutory requirements for a general plan circulation element.

Requirements	*Statute*	*Check*
The general plan requires the inclusion of a circulation element.	*§65302(b)*	
A circulation element shall consist of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan.	*§65302(b)*	
Commencing January 1, 2011, upon any substantive revision of the circulation element, the legislative body shall modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.	*§65302(b)(2)(A)*	

MANDATORY CIRCULATION ELEMENT ISSUES

The circulation element shall contain objectives, policies, principles, plan proposals, and/or standards for planning the infrastructure to support the circulation of people, goods, energy, water, sewage, storm drainage, and communications. Mandatory circulation element issues as defined in statute include: major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities.[26] Additionally, the statute requires the circulation element be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways. The statute defines "all users of streets, roads, and highways" as "bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors."[27] Transportation networks should additionally consider pedestrian, bicycle, and transit routes, which may not always be located on or along streets, roads, and highways.

Circulation elements shall also take into consideration the provision of safe and convenient travel that is suitable to the rural, suburban, or urban context of a local jurisdictions general plan. This could include policies and implementation measures

26 California Government Code §65302(b).
27 California Government Code §65302(b)(2)(A).

for both retrofitting and developing streets to serve multiple modes and the development of multimodal transportation network design standards based on street types.

In addressing these mandatory issues, cities and counties may wish to consider the following:

No city or county can ignore its regional setting. Local planning agencies should coordinate their circulation element provisions with applicable state and regional transportation plans.[28] In addition, funding for new infrastructure and the maintenance of existing infrastructure can benefit from a regional approach. Likewise, the state must coordinate its plans with those of local governments.[29] The federal government is under similar obligations.[30]

Caltrans is particularly interested in the transportation planning roles of local general plans and suggests that the following areas should be considered:

- Coordination of planning efforts between local agencies and Caltrans districts;
- Preservation of transportation corridors for future multimodal system improvements;
- Development of coordinated transportation system management plans that include multimodal and transportation system demand strategies to achieve the optimal use of present and proposed infrastructure; and,
- Identification of complete streets and multimodal improvements on state highway routes.

These areas of emphasis are addressed through Caltrans' Intergovernmental Review (IGR), Regional Planning, and System Planning programs.[31] Caltrans goal is to resolve transportation problems early enough in the planning process so as to avoid costly delays to development. Coordinating state and local transportation planning is a key to the success of a circulation element.

28 California Government Code §65103(f) and §65080.
29 California Government Code §65080(a).
30 Title 23 USC 134.
31 California Department of Transportation, *Local Development-Intergovernmental Review (LD-IGR)*, (2007): http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa.html (accessed September 2010).

POSSIBLE POLICY AREAS AND DATA COLLECTION TECHNIQUE CONSIDERATIONS

The following suggestions are examples of possible policy areas and data collection technique considerations that could be used to prepare or amend a circulation element. Suggestions are generally categorized based on the statutorily required portions of the circulation element as described in G.C. 65302(b). Not all of these suggestions will be relevant in every jurisdiction. Suggestions pertaining to multimodal transportation networks (i.e. complete streets) are marked with a ‡.

Major Thoroughfares

Streets, Roads, and Highways

Policies and data collection for streets, roads, highways should include the consideration of transit services within a roadway right-of-way, in either mixed flow lanes, high occupancy vehicle (HOV) lanes, and/or street-running light rail tracks.

Possible Policy Areas:

- The availability of a mix of transportation modes and the infrastructure to support those modes to meet community needs. ‡
- The development and improvement of major thoroughfares, including future acquisitions and dedications, based on proposed land use patterns and projected demand. This may include a street, road, and highway classification system.
- The consideration of street patterns; curvilinear, grid, modified grid, etc. ‡
- The design of streets (including, but not limited to, width, block size, etc.)
    - The consideration of sidewalks and curbs as a standard street design principle. ‡
    - The consideration of bicycle lanes and/or shared lanes as a standard street design principle. ‡
    - The consideration of transit accessibility and transit priority measures as a standard street design principle. ‡
    - The consideration of shade trees and planting strips as a standards street design principle. ‡
- The consideration of traffic calming measures (narrower travel lanes, roundabouts, raised medians, speed tables, planting strips, etc.). ‡
- The safety of the traveling public, including pedestrians and bicyclists. ‡
- The accessibility and accommodation of bicycle and pedestrian traffic, where appropriate, on and across major thoroughfares. ‡

- The design of intersections and public right-of-ways to include adequate and safe access for all users including pedestrians, bicyclists, and motorists of all ages and abilities. ‡
- The development of a connected system of streets, roads, and highways that provides continuous, safe, and convenient travel for all users. ‡
- The consideration of separate performance and level-of-service standards for bicycle and pedestrian traffic or integrated performance and level-of-service standards that include multiple modes. ‡
- The development and improvement of transit, including transit services within a roadway right-of-way.
- The consideration of bus HOV lanes or other exclusive right-of-way for transit vehicles.
- The consideration of transit priority measures such as single priority and queue jump lanes.

Data Collection Techniques:

- Identify existing and proposed modes of transportation. ‡
- Assess all thoroughfares to determine if they are providing sufficient multimodal transportation options. ‡
- Assess the number and distribution of households with and without an automobile. ‡
- Assess the transportation needs of special groups within the population and the extent to which such needs are being met by existing streets, roads, and highways. (e.g., children, persons with disabilities, and the elderly). ‡
- Project future modal split by estimating the percentage of trips by transit, passenger car, van pools, etc.
- Assess the adequacy of the existing streets, roads, and highway systems and the need for expansion, improvements, and/or transportation operations management based on projected traffic including that generated by planned land use changes. Consider that the need for expansion should recognize economic principles such as cost effectiveness and efficiency as well as environmental and social consequences. ‡
- Analyze existing street, road, and highway traffic conditions for all transportation modes to determine current levels of use throughout the entire day. Assess whether existing travel demand or transportation network supply could be better managed to limit the need for expansion of streets, roads, and highways. ‡
- Analyze existing performance and levels of service of existing streets, roads, and highways for all transportation modes. Compare projected with desired performance and level of service standards for all transportation modes. ‡
- Project future traffic volumes for all modes on existing and planned streets, roads, and highways by accounting for the effects of changes in the following built environment characteristics: ‡
    - Density of land uses;
    - Diversity of land uses;

    - Design of network;
    - Destinations (regional accessibility);
    - Distance to transit;
    - Demographics;
    - Development scale; and,
    - Demand management (i.e. pricing, etc.)
- Determine the effects of projected traffic volumes for all transportation modes on existing street, road, and highway capacities. ‡
- Identify physical barriers and other constraints that prevent or inhibit use or access by all modes. ‡
- Analyze historical data and trends with regard to collisions involving all modes of travel. ‡
- Review the CA Highway Patrol's Statewide Integral Traffic Record System to identify areas where safety could be addressed. ‡
- Identify problem locations by analyzing injury severity and determining collision frequency relative to exposure by conducting motor vehicle, pedestrian, and bicycle counts. ‡
- Review traffic projects pertinent to local planning that are proposed within neighboring jurisdictions.
- Review pertinent regional transportation plans and project funding priorities under the regional transportation improvement program.
- Analyze the potential effects of alternative plan proposals and implementation measures (related to transportation and/or land use) on desired projected performance and multimodal levels of service.
- Analyze the potential effects of alternative plan proposals and implementation measures (related to transportation and/or land use) on residential land uses.
- The identification of farm-to-market transportation needs on streets, roads, and highways. ‡

<u>Transit and Railroads</u>

Policies and data collection for transit and railroads should consider both passenger and freight rail, and light rail and bus rapid transit alignments.

Possible Policy Areas:

- The development and improvement of transit and paratransit services, including mass rapid transit services, commuter light rail and heavy rail metro/subway systems, in consultation with the appropriate transportation agencies. ‡

- The accessibility and accommodation of all transit users. ‡
- The review and/or development of paratransit plan proposals for jitneys, car pooling, van pooling, taxi service, dial-a-ride, etc. ‡
- The adoption of technology that creates a more effective usage of existing transit such as real time monitors and personalized automatic notification arrivals. ‡
- The development and improvement of railroad facilities and services.
- The preservation and repositioning of abandoned railroad right-of-ways for future transportation corridor use, including bicycle paths and trails, or new passenger rail or bus services. ‡

Data Collection Techniques:

- Analyze existing public transit demand on transit capacity and services. ‡
- Assess the adequacy of existing transit services and the need for expansion and improvements. ‡
- Examine trends in transit use and estimates of future demand. ‡
- Assess the needs of people who depend on public transit. ‡
- Determine the effects of projected public transit demand on transit capacity and services. ‡
- Determine existing and projected performance and levels-of-service standards for transit. ‡
- Evaluate the transportation needs that are or are not being met by public or private bus companies. ‡
- Examine private bus company plans to provide bus services in the future. ‡
- Inventory existing paratransit services, uses, and routes. ‡
- Inventory the existing and future needs served by paratransit. ‡
- Inventory rail lines and facilities and assess plans for expansion and improvements.
- Determine transportation needs that are not being met by railroads.
- Identify abandoned railroad right of ways which could be preserved for future transportation corridor use, including bicycle paths and trails, or new passenger rail or bus service. ‡
- The identification of farm-to-market transportation needs for rail services. ‡

Navigable Waterways

Possible Policy Areas:

- The maintenance and improvement of navigable waterways.

Data Collection Techniques:

- Assess the adequacy of navigable waterways, including the need for expansion and improvements.

- Assess current and future land uses and communities near navigable waterways, ports, and harbors.
- Project future needs for navigable waterways.
- The identification of farm-to-market transportation needs on navigable waterways and at ports and harbors. ‡

Transportation Operations Management

Possible Policy Areas:

- The development of transportation operations management policies, such as the consideration of reducing speeds, separating pedestrians and bicyclists from vehicle traffic, and adding or upgrading traffic control devices, etc. ‡
- The provision of adequate crossing times and detection for all users at signalized intersections, consistent with AB 1581 (Fuller, Statutes of 2007). ‡
- The appropriate balancing of needs of various users when establishing speed limits for motor vehicles, consistent with AB 2767 (Jackson, Statutes of 2000). ‡
- The scheduling and financing of circulation operations maintenance projects.

Data Collection Techniques:

- Review pertinent regional, state, and federal corridor plans.
- Analyze the projected effects on the transportation system of construction improvements versus the projected effects of transportation operation management.
- Compare the costs of construction improvements versus the costs of transportation operation management.

Transportation Routes

Truck Routes

Possible Policy Areas:

- The development of proposed truck routes and policies supporting truck route regulations. ‡
- The development and preservation of farm-to-market routes. ‡
- The accessibility and accommodation of pedestrian and bicycle traffic, where appropriate, on truck routes, including farm-to-market routes. ‡

Data Collection Techniques:

- Identify existing truck routes and determine needed improvements. ‡
- The identification of farm-to-market routes. ‡

Pedestrian and Bicycle Routes

Possible Policy Areas:

- The development of a comprehensive pedestrian and/or bicycle plan. See California Streets and Highways Codes Sec. 891.2 requirements for bicycle transportation plans. ‡
- The development and improvement of pedestrian and bicycle routes, on and off, streets, roads, and highways. Consider special accommodations such as car-free zones, bicycle boulevards, and paths. ‡
- The connectivity of pedestrian and bicycle routes between homes, job centers, schools and facilities, and other frequently visited destinations. ‡
- The development of Safe Routes to School programs that address pedestrian and bicycle safety for a two mile radius around all elementary, middle, and high school facilities. ‡
- The development of pedestrian and bicycle facilities along routes that support the use of these routes such as benches, shelters, trees, bicycle parking, etc. ‡
- The dedication and preservation of independent alignments (utility, abandoned waterways, or live rail right-of-ways) for the development of bicycle paths. ‡
- The development of performance and level-of-service standards for pedestrian and bicycle routes and intersections. ‡
- The development and use of marketing and incentive programs to promote the increase of walking and bicycling. ‡

Data Collection Techniques:

- Assess the adequacy of existing bicycle and pedestrian route access, accommodations, and the need for improvements or additional infrastructure, considering connectivity to other transportation modes. ‡
- Identify gaps in bicycle and pedestrian access routes and determine how future projects can improve pedestrian and bicycle circulation. ‡
- Assess the adequacy of existing bicycle and pedestrian routes to and from school facilities in regards to the accessibility and safety of children. ‡
- Assess the adequacy of existing pedestrian routes to determine if all routes meet *Americans with Disabilities Act (ADA) Accessibility Guidelines* and applicable ADA Transition Plans. ‡
- Examine trends in bicycle usage. ‡
- Study pedestrian activity and patterns. ‡
- Assess historical data and trends with regard to vehicle, bicycle, and pedestrian collisions. ‡

- Inventory availability and adequacy of bicycle parking at major land use destinations, along transit routes and at transit terminals. ‡

Transit Routes

Possible Policy Areas:

- The development and improvement of public and private transit routes. ‡
- The development and improvement of access to and from transit routes by walking and bicycling and by people with disabilities. ‡
- The development of performance and level-of-service standards for transit routes and intersections that consider all transportation modes. ‡

Data Collection Techniques:

- Assess the adequacy of existing transit routes and the need for expansion or improvements. ‡
- Identify public and private bus routes within the local jurisdiction and determine the need for expansion or improvements. ‡
- Assess the accessibility to transit stops by walking or bicycling and by people of all abilities. ‡

Emergency Routes

Possible Policy Areas:

- The identification, development, and maintenance of evacuation and emergency access routes.

Data Collection Techniques:

- Analyze the adequacy of emergency access and evacuation routes.

Terminals

General and Commercial Airports

Possible Policy Areas:

- The development and improvement of aviation facilities found in Airport Master Plans and/or Airport Layout Plans.
- The consistency of the general plan with the provisions of any applicable Airport Land Use Compatibility Plan (§65302.3).
- The mitigation of aviation-related hazards including hazards to aircraft and hazards posed by aircraft.

- The access to and from aviation facilities by all modes of transportation. ‡
- The inclusion of bicycle parking at airports. ‡

Data Collection Techniques:

- Assess the adequacy of and safety hazards associated with existing aviation facilities and the need for expansion and improvements.
- Inventory potential noise and safety hazards posed by airport activities to surrounding land uses.
- Inventory potential safety hazards to aircraft passengers posed by existing or proposed land uses near airports.
- Assess the provisions of any Airport Land Use Compatibility Plan prepared pursuant to Public Utilities Code §21675.
- Assess the adequacy of access by all transportation modes to and from airports, based on existing and projected passenger and cargo loads. ‡

Ports and Harbors

Policies and data collection for ports and harbors should consider the needs of both deep-draft and small boats.

Possible Policy Areas:

- The development and improvement of port, harbor, and waterway facilities.
- The provision of the movement of goods to and from ports and harbors. ‡
- The accessibility to and from ports and harbors by all modes of transportation. ‡

Data Collection Techniques:

- Assess the adequacy and accessibility of port and harbor facilities, by all modes of transportation, including the need for expansion and improvements. ‡
- Assess the adequacy and accessibility of goods movement to and from ports and harbors. ‡
- Assess current and future land uses and communities near ports and harbors.
- Project future needs for port and harbor facilities.
- Review plans for improvements by harbor and port districts.

Railroad Depots

Possible Policy Areas:

- The development and improvement of railroad depots.
- The provision of the movement of goods to and from railroad depots. ‡

Data Collection Techniques:

- Assess the adequacy of existing railroad depots including the need for expansion or improvements.
- Assess the adequacy and accessibility of goods movement to and from railroad depots. ‡

Public and Private Transit Terminals

Policies and data collection for both public and private transit terminals should consider public or private buses, light rail systems, rapid transit systems, commuter railroads, high-speed rail, ferryboats, etc.

Possible Policy Areas:

- The location and characteristics of transit terminals to maximize accessibility by all modes of transportation. ‡
- The development and improvement of both public and private transit terminals and stops. ‡
- The development of intermodal transfer facilities, such as bicycle parking and bus transfer stations. ‡
- The provision of adequate and safe transit facilities including covered shelters, lighting, safe crossings, and locations that support eyes on the street. ‡
- The provision of safe and efficient multimodal access to and within transit terminals, complying with ADA standards. ‡

Data Collection Techniques:

- Identify all public transit terminals. ‡
- Assess the adequacy and accessibility of all public transit terminals. Ensure that all terminals are accessible by and accommodate for all potential users. ‡
- Evaluate public and private bus company terminal services and facilities; conditions, locations, and capital improvement plans. ‡
- Identify transportation nodes suitable for future transit-oriented development, including passenger rail. ‡
- Inventory and assess the need for bicycle parking improvements at all terminal types. ‡

Freight Truck Terminals and Warehouses

Possible Policy Areas:

- The development and improvements of freight trucking terminals and warehouses. ‡

- The provision of the movement of goods to and from freight truck terminals and warehouses.‡
- The provision of the movement of goods from farms to storage facilities. ‡

Data Collection Techniques:

- Project future needs for future freight trucking terminals and warehouses. ‡
- Assess the adequacy and accessibility of goods movement to and from freight truck terminals and warehouses. ‡
- Assess the adequacy and accessibility of goods movement from farms to storage facilities. ‡

Military Facilities

Policies and data collection for military facilities should consider military airports, ports and harbors, and accessible routes to and from military operations.

Possible Policy Areas:

- The inclusion of all military transportation thoroughfares and infrastructure in the planning area as part of the overall circulation system.
- The consideration of the needs of military installations and training needs when planning transportation and infrastructure projects.
- The reassurance that community and military transportation corridors maintain viability.
- The consideration of all military terminals including airports, ports, and harbors.

Data Collection Techniques:

- Consult with neighboring military planners to ensure that military installations, infrastructure, and training activities are considered in the circulation system.
- Assess major streets, roads, and highways near or surrounding all military facilities, including the need for development and maintenance of adequate ingress and egress routes.
- Assess all military terminals in the same manner as general and commercial terminals.

Utilities

Policies and data collection for utilities should consider sewer, water and drainage lines and facilities, oil and natural gas pipelines, power plants, transmission lines and corridors, proposed or state identified transmission line corridors, renewable and non-renewable energy, and energy storage.

Possible Policy Areas:

- The acquisition of necessary public utility right-of-ways.
- The development of standards for transportation and utility-related exactions.
- The development, improvement, timing, and location of community sewer, water, and drainage lines and facilities.

- The development, improvement, timing, and current and future locations of:
    - Oil and natural gas pipelines;
    - Power plants;
    - Major electric transmission lines and corridors;
    - Utility scaled and distributed energy generation; and,
    - Telecommunication cables and equipment.
- The development of preferences for financing measures to expand and improve public facilities.
- The availability of assistance to those who cannot afford utility services.

Data Collection Techniques:

- Assess the adequacy and availability of existing community water, sewer, energy, and drainage facilities, and the need for expansion and improvements.
- Assess existing and projected capacity of treatment plants and trunk lines.
- Determine the location of existing and proposed power plants, oil and gas pipelines, and major electric transmission lines and corridors.
- Assess potential future development of power plants, transmission lines, and renewable and non renewable energy. Consider such factors as the demand for transmission facilities, the transport and storage of hazardous materials, and local transportation impacts of current and future power plant developments.
- Assess power line or other utility easements for future bicycle paths or multipurpose paths. ‡
- Determine the locations of utility infrastructure that may be blocking the pedestrian right-of-way such as utility poles. ‡
- Determine the locations of utility infrastructure that may create hazardous conditions for bicyclists. ‡

Other Issues

Land Uses and Transportation Integration

Possible Policy Areas:

- The development of transit-oriented development standards, including the appropriate mix of density and intensity of land uses near transit stations, parking requirements, and service and delivery requirements. ‡
- The creation of land use patterns, such as mixed-use overlay districts, that allow frequently visited destinations to be accessible by multiple transportation modes. ‡

- The availability of transportation infrastructure needed to accommodate increased density and transit-oriented development. ‡
- The consideration of flexible performance and level-of-service standards, in areas planned for increased density and mixed uses to increase walking, bicycling, and transit ridership. ‡

Data Collection Techniques:

- Assess needed land uses, facilities, and structures that will enhance pedestrian, bicycle, and transit travel. ‡

Parking Facilities

Possible Policy Areas:

- The provision of bicycle parking. ‡
- The development of strategies for the control of parking demand such as improved transit services, amenities for bicyclists, subsidized rideshare vehicles, and the consideration of eliminating minimum parking requirements. ‡
- The development of strategies for the management of vehicle parking supply such as increased parking fees, graduated parking fees, shared parking, metered on-street parking, staggered work schedules, etc.

Data Collection Techniques:

- Assess the supply, demand, and utilization of existing on- and off-street parking, particularly in urban and commercial areas.
- Assess the effects of parking policies (i.e. off-street parking standards, on-street parking restrictions, graduated parking fees, etc.) on congestion, energy use, air quality, and public transit ridership. ‡
- Assess the need for and types of bicycle parking. ‡
- Analyze existing bicycle parking standards or requirements including parking requirements for commercial buildings, retail complexes, schools, etc. ‡

Air Pollution

Possible Policy Areas:

- The development of measures that would reduce public, private, and commercial motor vehicle emissions, consistent with regional air quality and transportation plan policies. ‡

Data Collection Techniques:

- Assess existing air quality pursuant to air quality district plans.
- Analyze air quality trends.
- Estimate air quality impacts of motor vehicle trips generated by land use changes and new thoroughfares based on regional air quality and transportation plans.

- Identify and evaluate measures that will reduce the air quality impacts of motor vehicle trips that are consistent with regional air quality and transportation plans.

Electric and Non-Carbon Emitting Vehicles

Possible Policy Areas:

- The development of infrastructure implementation strategies focused on supporting the use of electric and other non-carbon emitting vehicles.

Data Collection Techniques:

- Analyze the demand for electric and non-carbon emitting supportive infrastructure along streets, roads, and highways.

Green Streets

Possible Policy Areas:

- The development of shade trees, green medians, and landscape standards for streets, roads, highways, and pedestrian and bicycle paths and trails. ‡
- The inclusion of trees, planting strips, and other landscaping as a street design standard. ‡

Data Collection Techniques:

- Assess current tree canopy conditions on existing streets, roads, and highways, as well as at existing transit terminals. ‡
- Assess future tree canopy conditions for proposed future streets, roads, and highways, as well as at proposed future transit terminal sites. ‡
- Assess the adequacy of budgets for maintaining shade trees and related landscaping along streets and paths. ‡

TECHNICAL ASSISTANCE

USEFUL DEFINITIONS

Air Installation Compatible Use Zone (AICUZ): A land use compatibility plan prepared by the U.S. Department of Defense for military airfields. AICUZ plans serve as recommendations to local government bodies having jurisdiction over land uses surrounding these facilities.

Airport: An area of land or water that is used or intended to be used for the landing and taking off of aircraft, and includes its building and facilities, if any.

Airport Land Use Compatibility Plan: A plan adopted by an Airport Land Use Commission, which sets forth policies for promoting compatibility between airports and the land uses which surround them.

All Users: Users of streets roads and highways including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation and seniors.[32]

Arterial: A major street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to properties.

Bicycle Boulevard: The Bicycle Boulevard Design Guidebook defines a Bicycle Boulevard as "low-volume and low-speed streets that have been optimized for bicycle travel through treatments such as traffic calming and traffic reductions, signage and pavement markings, and intersection crossing treatments.

Bicycle Lane: According to Caltrans' Highway Design Manual, Chapter 1000, a bicycle lane is a Class II Bikeway and provides a striped lane for one-way bicycle travel on a street or highway,

Bicycle Path: According to Caltrans' Highway Design Manual, Chapter 1000, a bicycle path is a Class I Bikeway and provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists is minimized.

Bus Rapid Transit (BRT): The Federal Transit Administration defines BRT as a "combination of facility, systems, and vehicle investments that convert conventional bus services into a fixed-facility transit service, greatly increasing their efficiency and effectiveness to the end user."

Collector: A street for traffic moving between arterial and local streets, generally providing direct access to properties.

32 California Government Code §65302(b)(2)(B).

Complete Street: The National Complete Streets Coalition defines complete streets as follows:

> Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.
>
> Creating complete streets means transportation agencies must change their orientation toward building primarily for cars. Instituting a complete streets policy ensures that transportation agencies routinely design and operate the entire right of way to enable safe access for all users.

The American Planning Association (APA) describes complete streets as follows:

> Complete streets serve everyone – pedestrians, bicyclists, transit riders, and drivers – and they take into account the needs of people with disabilities, older people, and children. The complete streets movement seeks to change the way transportation agencies and communities approach every street project and ensure safety, convenience, and accessibility for all.

The California Department of Transportation (Caltrans) defines complete streets as follows:

> A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Complete street concepts apply to rural, suburban, and urban areas.

Connectivity: A well connected circulation system with minimal physical barriers that provides continuous, safe, and convenient travel for all users of streets, roads, and highways.

Conventional Highway: According to the California Highway Manual, a conventional highway is, "a highway without control of access which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations."

Expressway: A highway with full or partial control of access with some intersections at grade.

Farm-to-Market: Transportation facilities which provide connections between areas of agricultural production, processing, and storage facilities to agricultural distribution and sales activities.

Production:	The growing of crops or livestock for the purpose of producing food, fiber, and nursery products
Processing:	All activities which handle, refine, or prepare commercial food, fiber, and nursery products for sale and consumption, including, but not limited to, packing plants, agricultural storage facilities, wineries, and dairies.
Distribution:	All facilities which have the primary function of receiving agricultural products and transmitting them to sales facilities.
Sales:	Retail and wholesale sale of agricultural products.

Freeway: A highway serving high-speed traffic with no crossings interrupting the flow of traffic (i.e., no crossings at grade). Streets and Highways Code §23.5, in part, states that "Freeway means a highway in respect to which the owners of abutting lands have no right or easement of access to or from their abutting lands or in respect to which such owners have only limited or restricted right or easement of access."

Heliport: A facility used for operating, basing, housing, and maintaining helicopters.

Local Scenic Highway: A segment of a state or local highway or street that a city or county has designated as "scenic."

Local Street: A street providing direct access to properties and designed to discourage through traffic.

Level-of-Service: According to the Transportation Research Board's 2000 Highway Capacity Manual Special Report, Level-of-Service is a qualitative measure describing the efficiency of a traffic stream. It also describes the way such conditions are perceived by persons traveling in a traffic stream. Level-of-Service measurements describe variables such as speed and travel time, freedom to maneuver, traffic interruptions, traveler comfort and convenience, and safety. Measurements are graduated, ranging from level-of-Service A (representing free flow and excellent comfort for the motorist, passenger, or pedestrian) to Level-of-Service F (reflecting highly congested traffic conditions where traffic volumes exceed the capacities of streets, sidewalks, etc.). Level-of-Service can be determined for freeways, multi-lane highways, two-lane highways, signalized intersections, intersections that are not signalized arterials, and transit, bicycle, and pedestrian facilities.

Light Rail or Light Rail Transit (LRT): A form of urban rail public transportation which typically travels at a lower speed and capacity than heavy and metro rail systems, but typically travels at higher speeds and capacity than traditional tram systems. LRT operates mostly in private right-of-ways, but can also at times be incorporated into public right-of-ways.

Major Thoroughfare: A major passageway such as a street, highway, railroad line, or navigable waterway that serves high traffic volumes.

Multimodal Transportation Network: A well balanced circulation system that includes multiple modes of transportation that meets the needs of all users of streets, roads, and highways. §65302(b)(2)(A).

National Scenic Byway: A segment of a state or interstate highway route that the United States Forest Service has designated as a scenic byway or which another federal agency has designated as a national scenic and recreational highway.

Official County Scenic Highway: A segment of a county highway the Director of Caltrans has designated as "scenic."

Official State Scenic Highway: A segment of a state highway identified in the Master Plan of State Highways Eligible for Official Scenic Highway Designations and designated by the Director of Caltrans.

Paratransit: Transportation systems such as jitneys, car pooling, van pooling, taxi service, and dial-a-ride arrangements.

Railroad Depot: A railroad terminal where passengers and goods are loaded and unloaded.

Recreational Trails: Public areas that include pedestrian trails, bikeways, equestrian trails, boating routes, trails, and areas suitable for use by persons with disabilities, trails and areas for off-highway recreational vehicles, and cross-country skiing trails.

Route: A sequence of roadways, paths, and/or trails that allow people to travel from place to place.

Scenic Highway Corridor: The visible area outside the highway's right-of-way, generally described as "the view from the road."

Terminal: A station, stop, or other transportation infrastructure along or at the conclusion of a transportation route. Terminals typically serve transportation operators and passengers by air, rail, road, or sea (i.e., airports, railroad depots, transit stops and stations, and ports and harbors).

Transit-Oriented Development (TOD): A moderate- to high-density development located within an easy walk or bicycle of a major transit stop, generally with a mix of residential, employment, and shopping opportunities. TOD encourages walking, bicycling, and transit use without excluding the automobile.

Utilities: A set of services provided by local public utilities such as electricity, natural gas, water, and sewage.

Walkability: The measurement of how walkable a community is. Walkable communities typically include footpaths, sidewalks, street crossing, or other pedestrian oriented infrastructure.

CASE LAW

The following case law summaries, presented by date, are correlated with general plan circulation elements:

Californians for Disability Rights, Inc. v. California Dept. of Transportation (2006-08)

A class action lawsuit brought about by the Californians for Disability Rights Inc. against the California Department of Transportation (Caltrans) on the basis that Caltrans was in violation of the Americans with Disabilities Act (ADA). The said violation was due to the lack of accessibility for persons with mobility and/or vision disabilities along and at Caltrans owned and maintained sidewalks and park and ride facilities. The suits settlement included a Caltrans agreement to spend $1.1 billion over the next 30 years to retrofit existing state owned sidewalks and park and ride facilities for accessibility by persons of all abilities, including the retrofit and installation of ADA compliant curb ramps. In addition, all new and temporary Caltrans street and park and ride facilities are held to the same standards.

Darlene Bonanno v. Central Contra Costa Transit Authority (2003)

A liability suit brought about by Darlene Bonanno, a disabled resident of Contra Costa County injured while crossing a street at an unprotected crosswalk while attempting to access a bus terminal, against the Central Contra Costa Transit Authority (CCCTA) on the basis of hazardous pedestrian crossing conditions and lack of adequate access to and from a bus terminal. It is stated that a public entity is "liable for injury caused by a dangerous condition of its property if the plaintiff establishes that the property was in a dangerous condition at the time of injury, that the injury was proximately caused by the dangerous condition, that the dangerous condition created a reasonably foreseeable risk of the kind of injury which was incurred, and the public entity had actual or constructive notice of the dangerous condition under Section 835.2 a sufficient time prior to injury to have taken measures to protect against the dangerous condition." It was concluded that the CCCTA created a hazardous condition based on the placement and maintenance conditions of its bus terminal and therefore were held partially liable for incurred injuries.

Joan Barden et al. v. City of Sacramento (2002)

A class action law suit brought about by a group of various individuals with mobility and/or visual disabilities against the City of Sacramento on the basis that they believed the city had violated the Americans with Disabilities Act (ADA) by failing to install curb ramps in new and retrofitted sidewalks and additionally failed to maintain existing sidewalks to ensure accessibility for persons with disabilities. Title II of the ADA provides that "no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity." Since sidewalks are a normal function of a city it was decided that sidewalks are considered to be a "public service, program, or activity," as defined by the ADA and therefore are subjected to all ADA compliance standards.

Robert Rohn et al. v. City of Visalia (1989)

This case discusses the limits on road exactions related to the circulation element. In *Rohn*, the court overturned a street dedication requirement on the basis of inadequate nexus evidence, based on the U.S. Supreme Court's *Nollan* decision on regulatory "takings" (*Nollan v. California Coastal Commission (1987) 107 SCt. 3141*). The City required Rohn to dedicate additional street right-of-way despite the fact that the proposed project would not contribute any additional traffic to the street. Since the dedication requirement was supported in part by the city's general plan, but not by empirical evidence of a need for the required dedication, this case shows that the general plan by itself is not armor against a takings claim.

If the circulation element is to be an effective basis for exactions, it must be based upon traffic studies that are sufficiently detailed to link land uses and related demand to future dedications. Additionally, ad hoc road exactions must be roughly proportional to the project's specific impacts on the road system (*Erhlich v. City of Culver City (1996) 12 C4th 854 and Dolan v. City of Tigard (1994) 114 SCt. 2309*). The circulation element alone may be an insufficient basis for exactions otherwise.

Concerned Citizens of Calaveras County v. Board of Supervisors (1985)

The Calaveras County Board of Supervisors adopted a new general plan which included an update to the County's general plan land use and circulation elements. A petition for writ of mandate was filed by the Concerned Citizens of Calaveras County accusing the County's general plan to be legally inadequate since the land use and circulation elements were internally inconsistent. Specifically, the County's circulation element's plan to physically and financially maintain and construct new roads and highways did not reflect the County's projected growth designated in its land use element. California Government Code Section 65300.5 reads, "In construing the provisions of (article 5, on the scope of general plans), the legislature intends that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." In addition, California Government Code Section 65302(b) reads that, "the circulation element-including existing and proposed major thoroughfares and transportation routes-be 'correlated' with the land use element." "'Correlated' means 'closely, systematically, or reciprocally related . . .' [Webster's Third New International Dictionary (1981) p. 511]."

It was concluded that the County's general plan could not identify future circulation problems or funding sources necessary for maintenance and improvements. The circulation element failed to provide feasible remedies for the predicted traffic congestion caused by the population increase. The county addressed this internal conflict by stating that it would lobby for funds to solve the future traffic problems. The court held that this vague response was insufficient to reconcile the conflicts in

the plan. The circulation element was deemed legally inadequate and the Calaveras County Board of Supervisors were asked to amend both the land use and circulation elements for adequacy and consistency prior to further adoption.

Twain Harte Homeowners Association v. Tuolumne County (1982)

The Twain Harte Homeowners Association filed for a writ of mandate and injunctive relief against Tuolumne County over the certification of an environmental impact report (EIR) prepared in connection with the adoption of the County's general plan. The association declared that the County's general plan land use, circulation, and housing elements were legally inconsistent and did not comply with California Government Code Section 65302. Specifically, the association said the circulation element addressed all factors required by subdivision (b) which states a circulation must consist of, "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities;" however, the circulation element failed to.correlate with the land use element. The circulation element's mentioned "facilities" were not reflected in the land use element. It was concluded that since the land use element was deficient in itself, that the circulation element too was deficient.

The *Twain Harte* case indicates that courts may look beyond the circulation element to supporting documents (e.g., other sections of the general plan) when such evidence is not readily apparent. Local governments should provide explicit evidence of correlation in both their circulation and land use elements. The *Twain Harte* case indicates that the courts will not automatically presume the existence of correlation simply because a local government has adopted both its circulation and land use elements. Although general plans, as legislative enactments of the police power, will be presumed valid by the courts (if they are reasonably related to promoting or protecting the health, safety, or welfare, and are not arbitrary and capricious), such plans must nevertheless be in substantial compliance with state law. In other words, the courts will review a plan for its actual compliance with the requirements of the state's general plan statutes. In this case, the court used the *General Plan Guidelines* to help determine compliance.

STATE AGENCY RESOURCES

Below is a non-exhaustive list of state agencies that can provide information and assistance to local governments in order to develop or update a circulation element.

California Air Resources Board
http://www.arb.ca.gov/homepage.htm

California Department of Transportation (Caltrans)
http://www.dot.ca.gov/

- Division of Aeronautics
  http://www.dot.ca.gov/hq/planning/aeronaut/
- Division of Local Assistance
  http://www.dot.ca.gov/hq/planning/Local Programs/
- Division of Mass Transportation
  http://www.dot.ca.gov/hq/MassTrans/
- Division of Transportation Planning
  http://www.dot.ca.gov/hq/tpp/

California Energy Commission
http://www.energy.ca.gov/

California Department of Public Health
http://www.cdph.ca.gov/

California Public Utilities Commission
http://www.cpuc.ca.gov/puc/

Governor's Office of Planning and Research
http://www.opr.ca.gov/

APPENDIX A

MULTIMODAL TRANSPORTATION NETWORK EXAMPLES

It is essential that each jurisdiction adopt goals, policies, and implementation measures that are suitable for their individual communities and general plan. This appendix includes various local and out of state examples of multimodal transportation goals, policies, and implementation measures adopted by local jurisdictions. **These are only examples** and may or may not address all components of multimodal transportation networks. This list is not exhaustive.

CALIFORNIA CITIES AND COUNTIES with Multimodal Transportation Goals and Policies in their General Plans	
CA Jurisdiction	Document Location
City of Arroyo Grande	http://www.arroyogrande.org/city-hall/city-departments/community-development/ planning/general-plan/circulation.pdf
City of Brisbane	http://www.ci.brisbane.ca.us/Upload/Document/D240001033/ChapterVITransportationAndCirculation.pdf
City of Calistoga	http://www.ci.calistoga.ca.us/Index.aspx?page=519
City of Cloverdale	http://cloverdale.net/DocumentView.aspx?DID=381
City of Encinitas	http://www.cityofencinitas.org/NR/rdonlyres/56B20F5C-9B4D-4126-BFF5-2206C09A547F/0/circulation.pdf
City of Fairfax	http://www.town-of-fairfax.org/html/gpac_progress.html
City of Highland	http://www.ci.highland.ca.us/GeneralPlan/PDFs/03-Circulation_Element.pdf
City of Hughson	http://hughson.org/files/Complete%20Final%20GP.pdf\
City of Lemon Grove	http://www.ci.lemon-grove.ca.us/DocumentCenterii.aspx?FID=33
City of Live Oak	http://www.liveoakcity.org/index.php?option=com_docman&Itemid=200
City of Napa	http://74.205.120.199/images/CDD/planningdivisiondocs/generalplan/2009/chapter%203%20-%20transportation.pdf
City of Oakland	http://www2.oaklandnet.com/Government/o/CEDA/o/PlanningZoning/s/GeneralPlan/DOWD009015
City of Oakley	http://www.ci.oakley.ca.us/UserFiles/file/GeneralPlan/03%20Circulation%20Element.pdf
City of Orland	http://cityoforland.com/govt/dept/planning/documents/CurrentGeneralPlanMarch2003.pdf
City of Rohnert Park	http://www.ci.rohnert-park.ca.us/index.aspx?page=86
City of Sacramento	http://www.sacgp.org/documents/04_Part2.04_Mobility.pdf
City of San Diego	http://www.sandiego.gov/planning/genplan/pdf/generalplan/adoptedmobilityelemfv.pdf

CALIFORNIA CITIES AND COUNTIES with Multimodal Transportation Goals and Policies in their General Plans (continued)	
CA Jurisdiction	Document Location
City of San Jacinto	http://www.ci.san-jacinto.ca.us/city-govt/development/general-plan/Circulation %20Element.pdf
City of San Leandro	http://www.sanleandro.org/civica/filebank/blobdload.asp?BlobID=3816
City of Sanger	http://www.ci.sanger.ca.us/devserv/planning/2025%20GENERAL%20PLAN.pdf
City of Santa Barbara	http://www.santabarbaraca.gov/Government/General_Plan/
City of Solano Beach	http://www.ci.solana-beach.ca.us/csite/cms/app_engine/assets/images/cd_circulation element.pdf
City of Turlock	http://www.ci.turlock.ca.us/pdflink.asp?pdf=documents/developmentservices/planning/generalplan/5-01.pdf?o=o&title=Turlock%20General%20Plan
Contra Costa County	http://contra.napanet.net/depart/cd/current/advance/GeneralPlan/General%20Plan.pdf
Inyo County	http://inyoplanning.org/general_plan/goals/ch7.pdf
Marin County	http://www.co.marin.ca.us/depts/cd/main/fm/cwpdocs/CWP_CD2.pdf
Napa County	http://countyofnapa.org/GeneralPlan/
Riverside County	http://www.rctlma.org/genplan/content/gp.aspx
Yolo County	http://www.yolocounty.org/Index.aspx?page=1528

CALIFORNIA CITIES AND COUNTIES with Multimodal Transportation Implementation Examples		
CA Jurisdiction	Document Tile	Document Location
City of Elk Grove	Rural Road Improvement Standards	http://www.egplanning.org/rural_roads/files/adopted_documents/Rural%20Road%20Improvement%20Standard_11.20.07.pdf
City of Sacramento Transportation & Air Quality Collaborative	Best Practices for Complete Streets	http://www.cityofsacramento.org/transportation/dot_media/engineer_media/pdf/bp-CompleteStreets.pdf
City of San Diego	Street Design Manual	http://www.sandiego.gov/planning/documents/pdf/trans/complete.pdf
City and County of San Francisco	Better Streets Plan	http://www.sacog.org/complete-streets/toolkit/files/docs/SF%20Controller_Better%20Streets%20Plan%20Recommendations%20for%20Improved%20Streetscape%20Project%20Planning,%20Design,%20Review%20and%20Approval.pdf

CALIFORNIA CITIES AND COUNTIES with Multimodal Transportation Implementation Examples (continued)		
CA Jurisdiction	Document Tile	Document Location
City of Sanger	Standard Details	http://www.ci.sanger.ca.us/Public%20works/standard%20details/Cover-Indexcmpt.pdf
City of Stockton	Pedestrian Safety and Crosswalk Installation Plan	http://www.stocktongov.com/publicworks/publications/PedGuidelines.pdf
Sacramento County	Street Improvement Standards	http://www.msa2.saccounty.net/ce/dss/ldsir/pages/improvementstandards.aspx

MULTIMODAL TRANSPORTAION EXAMPLES from outside California		
Jurisdiction	Document Title	Document Location
Fort Collins, CO	Master Street Plan	http://www.fcgov.com/transportationplanning/msp.php
Town of Basalt, CO	Complete Street Design	http://www.basalt.net/planningPdf/StreetsFinal.pdf
Decatur, GA	Community Transportation Plan	http://www.decaturga.com/cgs_citysvcs_dev_transportationplan.aspx
Louisville, KT	Complete Streets Manual	http://services.louisvilleky.gov/media/complete_streets/complete_streets_manual.pdf
Rochester, MN	Complete Streets Policy	http://www.co.olmsted.mn.us/departments/docs/CompleteStreetsResolution__2_.pdf
Oxford, MS	Creating a Walkable, Bikeable Community Through Complete Streets	http://oxfordms.net/docs/reports/pathwaysfinalreport.pdf
Charlotte, NC	Charlotte NC Urban Street Design Guidelines	http://www.charmeck.org/Departments/Transportation/Urban+Street+Design+Guidelines.htm
	Transit Station Area Principles	http://ww.charmeck.org/Planning/Land%20Use%20Planning/Transit_Station_Area_Plans/TransitStaionAreaPrinciples.pdf
Columbus, OH	Complete Streets	http://pubserv.ci.columbus.oh.us/transportation/NewsRelease/Complete_Streets.pdf

MULTIMODAL TRANSPORTAION EXAMPLES from outside California (continued)		
Jurisdiction	Document Title	Document Location
Eugene, OR	Multi Modal Street Design	http://www.eugene-or.gov/portal/server.pt/gateway/PTARGS_0_2_282993_0_0_18/Multi%20Modal%20Street%20Design.pdf
Kirkland, WA	2001 Kirkland Nonmotorized Transportation Plan	http://www.ci.kirkland.wa.us/Assets/Public+Works/Public+Works+PDFs/Transportation/Non-Motorized+Transportation+Plan.pdf
Seattle, WA	Seattle Complete Street Ordinance	http://clerk.ci.seattle.wa.us/~scripts/nph-brs.exe?d=CBOR&s1=115861.cbn.&Sect6=HITOFF&l=20&p=1&u=/~public/cbor2.htm&r=1&f=G

APPENDIX B

ADDITIONAL RESOURCES

LEGISLATION AND POLICIES

Assembly Bill 1358 California Complete Streets Act (Leno)
http://www.leginfo.ca.gov/pub/07-08/bill/asm/ab_1351-1400/ab_1358_bill_20080930_chaptered.pdf

Assembly Bill 32 California Global Warming Solutions Act of 2006 (Nunez)
http://www.climatechange.ca.gov/publications/legislation/ab_32_bill_20060927_chaptered.pdf

Senate Bill 375 Regional Targets (Steinberg)
http://info.sen.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_bill_20080902_enrolled.pdf

Executive Order # S-3-05 Est. GHG Emissions Reduction Targets
http://gov.ca.gov/index.php?/executive-order/1861/

Caltrans Deputy Directive 64-R1
http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/dd_64_r1_signed.pdf

Caltrans' Complete Street Implementation Plan
http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/CompleteStreets_IP03-10-10.pdf

U.S. Department of Transportation Federal Highway Administration
Policy Statement on Bicycle and Pedestrian Accommodations, Regulations, and Recommendations
http://www.fhwa.dot.gov/environment/bikeped/policy_accom.htm

SUPPORTING ORGANIZATIONS

AARP
www.aarp.org

America Bikes
www.americabikes.org

America Walks
www.americawalks.org

American Planning Association
www.planning.org

American Public Transportation Association
www.apta.com

Association of Pedestrian and Bicycle Professionals
www.apbp.org

California Bicycle Coalition
www.calbike.org/completestreets.htm

Institute of Transportation Engineers
www.ite.org

National Center for Bicycling and Walking
www.bikewalk.org

National Complete Streets Coalition
www.completestreets.org

Pedestrian and Bicycling Information Center
www.walkinginfo.org

Safe Routes to School
http://www.saferoutesinfo.org/

Smart Growth America
www.smartgrowthamerica.org

RESOURCES FOR POLICY DEVELOPMENT

AARP Public Policy Institute

Planning Complete Streets for an Aging America
http://www.aarp.org/home-garden/livable-communities/info082009/Planning_Complete_Streets_for_an_ Aging_America.html

Alliance for Biking and Walking
Bicycling and Walking in the US 2010 Benchmarking Report
http://www.peoplepoweredmovement.org/site/index.php/site/memberservices/C529

American Association of State Highway and Transportation Officials (AASHTO)
A Policy on Geometric Design for Highways and Streets (Green Book)
https://bookstore.transportation.org/Item_details.aspx?id=110
(In print only)

American Disabilities Act
ADA Standards for Accessible Design
http://www.ada.gov/adastd94.pdf

American Planning Association
Complete Streets Best Policy and Implementation Practices
http://www.planning.org
(In print only)

Association of Pedestrian and Bicycle Professionals
Bicycle Parking Guidelines, Second Edition
http://www.apbp.org/?page=Publications
(In print only)

California Climate Change Portal
California's Resource for Global Climate Change Information
http://www.climatechange.ca.gov

California Department of Health Services
The Burden of Asthma in California: A Surveillance Report
http://www.californiabreathing.org/images/stories/publications/asthmaburdenreport.pdf

California Department of Public Health
The Burden of Cardiovascular Disease in California: A Report of The California Heart Disease and Stroke Prevention Program
http://www.cdph.ca.gov/programs/cvd/Documents/CHDSP-BurdenReport-HighRes.pdf

California Department of Transportation (Caltrans)
Bicycle Transportation Account
http://www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm

Bus Rapid Transit (BRT) Handbook
http://www.dot.ca.gov/hq/MassTrans/Brt.html

California Highway Design Manual, Chapter 1000
http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm

California Manual on Uniform Traffic Control Devices
http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/

California Safe Routes to School Program
http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm

Design Information Bulletin (DIB) 80: Roundabouts
http://www.dot.ca.gov/hq/oppd/dib/dib80-01.htm

Design Information Bulletin (DIB) 82: Pedestrian Accessibility Guidelines for Highway Practices
http://www.dot.ca.gov/hq/oppd/dib/dibprg.htm

Local Assistance Procedure Manual
http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm

Smart Mobility Framework 2010: A Call to Action for the New Decade
http://www.dot.ca.gov/hq/tpp/offices/ocp/smf_files/SmMblty_v6-3.22.10_150DPI.pdf

California Highway Patrol
Statewide Integrated Traffic Records System
http://www.chp.ca.gov/switrs/

California Office of Traffic Safety
California Traffic Safety Report Card
http://www.ots.ca.gov/OTS_and_Traffic_Safety/Report_Card.asp

California School Boards Association
Safe Routes to School: Program and Policy Strategies
http://www.sacog.org/complete-streets/toolkit/files/docs/CSBA_SRTS%20Program%20and%20 Policy%20Strategies.pdf

Sample Safe Routes to School Board Policy and Administrative Regulation
http://www.sacog.org/complete-streets/toolkit/files/docs/CSBA_Sample%20Admin%20Regulation% 20and%20Board%20Policy.pdf

California Transportation Commission
2010 Regional Transportation Plan Guidelines
http://www.catc.ca.gov/programs/rtp/2010_RTP_Guidelines.pdf

Center for Clean Air Policy
Cost-Effectiveness Greenhouse Gas Reductions through Smart Growth and Improved Transportation Choices
http://www.ccap.org/docs/resources/677/CCAP%20Smart%20Growth%20-$%20per%20ton%20CO2%20(June%202009)%20FINAL%202.pdf

Initiative for Bicycle and Pedestrian Innovation
Fundamentals of Bicycle Boulevard Planning and Design
http://www.ibpi.usp.pdx.edu/media/BicycleBoulevardGuidebook.pdf

Institute for Transportation Engineers (ITE)
Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
http://www.ite.org/css/

Metropolitan Transportation Commission
Complete Streets Checklist
http://www.mtc.ca.gov/planning/bicyclespedestrians/Routine_Accommodation_checklist.pdf

Routine Accommodation of Pedestrians and Bicyclists in the Bay Area
http://www.mtc.ca.gov/planning/bicyclespedestrians/Routine_Accommodation_Study.pdf

Midwest Research Institute
Relationships of Lane Width to Safety for Urban and Suburban Arterials
http://www.completestreets.org/webdocs/resources/lanewidth-safety.pdf

National Cooperative Highway Research Program – Transportation Research Board of the National Academies
Accessible Pedestrian Signals: A Guide to Best Practices
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w117a.pdf

Improving Pedestrian Safety at Unsignalized Crossings
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_562.pdf

Report 616: Multimodal Level of Service Analysis for Urban Streets
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_616.pdf

Rails to Trails Conservancy
Active Transportation for America
http://www.railstotrails.org/resources/documents/whatwedo/atfa/ATFA_20081020.pdf

Sacramento Area Council of Governments (SACOG)
Complete Streets Resource Tool Kit
http://www.sacog.org/complete-streets/toolkit/START.html

Sprinkle Consulting
Bicycle Level of Service for Arterials
http://pubsindex.trb.org/view.aspx?id=801673

Bicycle Level of Service for the Roadway Segment
http://www.sprinkleconsulting.com/bp_downloads.html

Intersection Level of Service for Bicycling Through Movement
http://www.sprinkeconsulting.com/bp_downloads.html

Modeling the Roadside Walking Environment: A Pedestrian Level of Service
http://www.sprinkleconsulting.com/bp_downloads.html

Real-Time Human Perceptions: Toward a Bicycle Level of Service
http://trb.metapress.com/content/n118452647112qg6/fulltext.pdf

University of California Berkeley – Center for Resource Efficient Communities
Building Energy Efficient Communities: A Research Agenda for California
http://crec.berkeley.edu/crec.whitepaper.pdf

University of California Berkeley – Institute of Transportation Studies
A Technical Guide for Conducting Pedestrian Safety Assessments for California Cities
http://www.techtransfer.berkeley.edu/pedsafety/psa_handbook.pdf

U.S. Architectural and Transportation Barriers Compliance Board
Accessible Rights-of-Way: A Design Guide
http://www.access-board.gov/prowac/guide/PROWguide.pdf

U.S. Department of Transportation – Federal Highway Administration
ADA Standards for Transportation Facilities
http://www.access-board.gov/ada-aba/ada-standards-dot.cfm

Designing Roads for Multimodal Safety and Access
www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets_files/Multimodal_01_Introduction_7-2007.ppt

Designing Sidewalks and Trails for Access
http://www.fhwa.dot.gov/environment/sidewalk2/index.htm

Detectable Warning in Transit Facilities: Safety and Negotiability
http://accessforblind.org/publications/ProjectAction/Detectable%20Warnings%20in%20Transit%20Facilities%20-%20Safety%20and%20Negotiability.pdf

Detectable Warning Surfaces: Color, Contrast, and Reflectance
http://accessforblind.org/publications/USDOT/dws-ccr.pdf

Manual on Uniform Traffic Control Devices
http://mutcd.fhwa.dot.gov/

Pedestrian Road Safety Audit Guidelines and Prompt Lists
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