



Transportation Concept Report
Route 14
District 7
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DISCLAIMER

Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 7 Division of Planning and Local Assistance makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

Mission – Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability

California Department of Transportation

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ABOUT THE TRANSPORTATION CONCEPT REPORT

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans' statutory responsibility as owner/operator of the State Highway System (SHS) by identifying deficiencies and proposing improvements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of safety, mobility, delivery, stewardship, and service.

The System Planning process is primarily composed of four parts: the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP) and the Transportation System Development Plan (TSDP).

The District wide DSMP is a strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The TCR is a planning document that identifies the existing and future route conditions as well as future needs for each route on the SHS. The CSMP is a complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The TSDP is a list of planned and partially programmed transportation projects used to recommend projects for funding. These System Planning products are also intended as resources for public/stakeholders, the regional and local agencies.

TCR Purpose

California's State Highway System needs long range planning documents to guide the logical development of transportation systems as required by law and as necessitated by public, stakeholders, and system users. The purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The TCR is developed with the goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

STAKEHOLDER PARTICIPATION

Stakeholder participation was sought throughout the development of the SR-14 TCR. Outreach involved internal and external stakeholders.

Both internal and external stakeholders were asked to review the document for comments, edits, and for consistency with the intent of existing plans, policies, and procedures. The process of including and working closely with stakeholders adds value to the TCR, allows for outside input and ideas to be reflected in the document, increases credibility and helps strengthen public support and trust.

EXECUTIVE SUMMARY

The main purpose of this TCR is to evaluate current and projected conditions along the route and suggest a configuration for Rte 14 that will meet projected demand. Historically the freeway system in Southern California is highly congested and this trend will continue into the future. Due to financial, environmental, right of way and political constraints, it is very difficult for Caltrans to continue to add more lanes to the system. Recognizing these constraints, the planned/programmed projects and strategies in the TCR are within a framework of programming and implementation constraints and regional policy.

In addition to these planned/programmed projects and strategies, the TCR also suggest a configuration for SR-14 that will meet future demand on this route. The suggested configuration is meant only to show the severity of future conditions and what it would take to attain those LOS. It is Caltrans' goal to provide improved mobility whenever possible.

The SR-14 Transportation Concept Report (TCR) is divided into several major sections; three of the sections – the Corridor Performance, System Characteristics and Corridor Concept – are the core of the document. All of the remaining sections provide a context for analyzing the Route14 corridor and document the data resources

Concept Summary Table SR 14 - CONCEPT - 2035 FACILITY

Segment	ADT	Dir. Split	Peak Hour	Truck Peak Hour	2035 Baseline RTP	Concept LOS "D" Attainment	Concept LOS "F0" Attainment	
1	UNCONSTRUCTED							
2 (Rte 5 to San Fernando Rd)	233,400	50.0%	16,300 (6.9%)	900 (7.7%)	10 MF		14	10
					V/C	LOS		
					1.17	F0		
3 (San Fernando Rd to Ward Rd)	140,400	52.0%	10,300 (7.3%)	800 (7.2%)	6 MF		8	6
					V/C	LOS		
					1.08	F0		
4 (Ward Rd to South Jct. Rte 138)	110,000	52.0%	8,500 (7.6%)	700 (7.0%)	4 MF		6	4
					V/C	LOS		
					1.07	F0		
5 (South Jct. Rte 138 to Ave I)	89,600	51.0%	7,500 (8.3%)	500 (6.5%)	6 MF		--	--
					V/C	LOS		
					0.58	C		
6 (Ave I to Kern County Line)	49,100	53.0%	3,100 (6.2%)	300 (6.6%)	4 MF		--	--
					V/C	LOS		
					0.45	B		

Source: 2012-2035 RTP/SCS

- * The number of lanes in the LOS D Attainment column is for both directions. LOS D Attainment indicate how many lanes it would require to achieve LOS D. It is meant show the severity of future conditions and what it would take to achieve LOS D. Caltrans is not suggesting that it is our plan to build the facility to achieve the LOS D.
- * The number of lanes in the LOS F0 attainment column is for both directions. The data in the LOS FO attainment column is only meant to show the severity of congestion on our system and what it would require to achieve that level of service. We recognize the difficulty in achieving the desired LOS given the financial, environmental, right of way and political constraints. However, it is Caltrans' goal to provide improved mobility when feasible.
- * Sometimes the model output implies that there would be aux. lanes (each direction) and aux. lanes are given only half capacity. That is why there are instances where we have odd number of lanes for both direction.
- * The 2035 Baseline includes all planned and programmed projects in the 2012-2035 RTP/SCS
- * For consistency with 2012-2035 RTP/SCS, year 2008 and 2035 were used.
- * 2008 & 2035 data are derived from the 2012-2035 RTP/SCS model. Data in this report is meant to be used for comparison purposes only and are not to be use for specific projects without further analysis.

Concept Rationale

SR-14 is a major east-west state route that traverses through Los Angeles County and is used for international, interstate, interregional and intraregional travel and shipping through an urbanized corridor. In addition, it is used as a commuter route.

The route is part of the California Freeway and Expressway System.

Traffic volume is forecasted to increase on SR-14 in 2035 and will require additional lanes to achieve the acceptable concept level of service. Several capacity improvements are planned, programmed, and recommended for this corridor.

Proposed Projects and Strategies

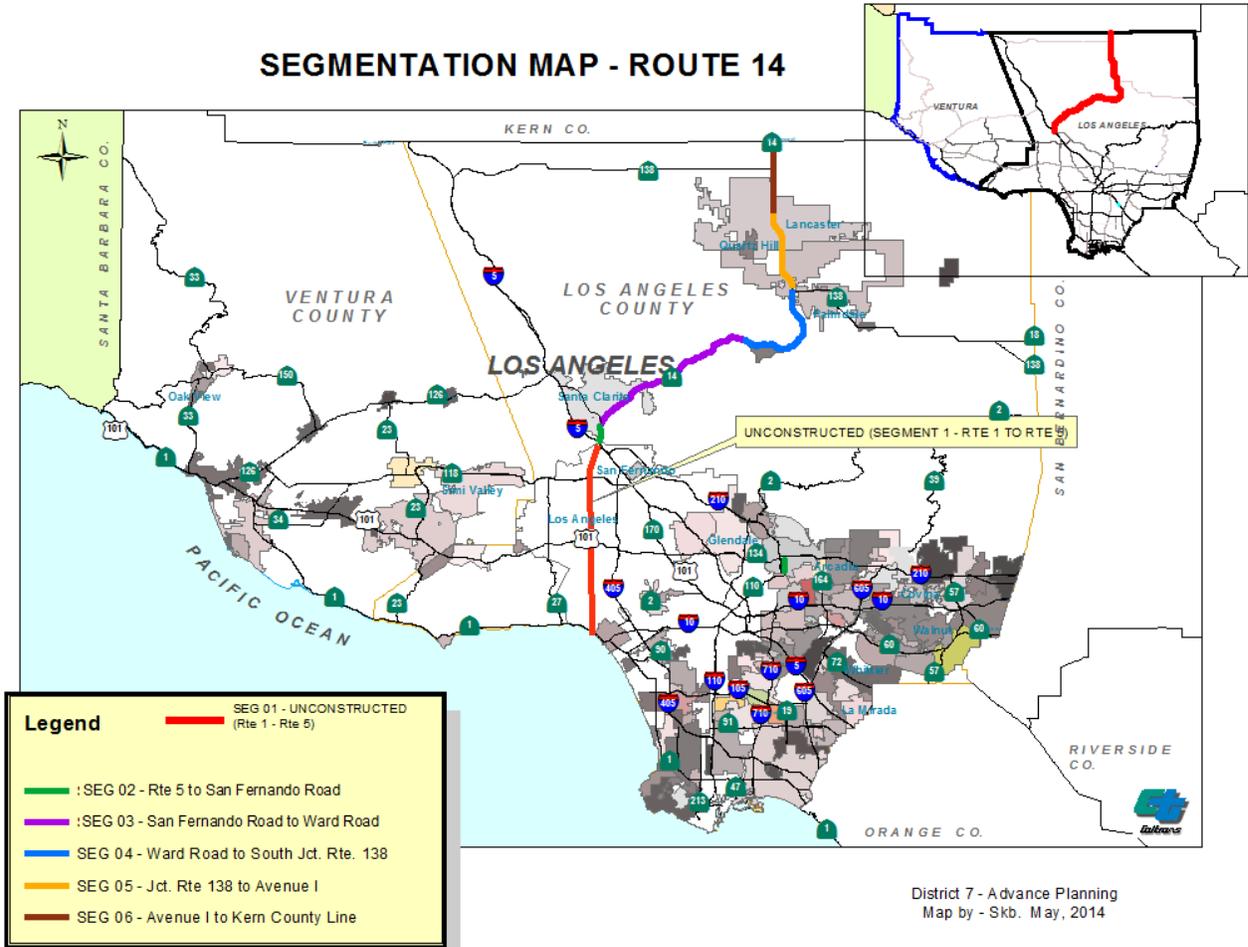
There are several capacity increasing and mainline improvements planned or programmed for SR-14 throughout the corridor in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

CORRIDOR OVERVIEW

ROUTE SEGMENTATION

SEGMENTS	DESCRIPTION	BEGIN PM	END PM
1	Rte. 1 to Rte. 5 (UNCONSTRUCTED)	R0.00	R24.79
2	Rte. 5 to San Fernando Rd	R24.79	R27.05
3	San Fernando Rd to Ward Rd	R27.05	46.76
4	Ward Rd to South Jct. Rte. 138	46.76	R59.8
5	Jct. Rte 138 to Avenue I	R59.8	68.97
6	Avenue I to Kern County Line	68.97	R77.00

SEGMENTATION MAP - ROUTE 14



ROUTE DESCRIPTION

Pursuant to Statutes relating to the California Department of Transportation, SR 14 is an interregional freeway (also known as Antelope Valley Freeway) In District 7, Route 14 spans a total distance of 77.01 miles, entirely within Los Angeles County. The constructed portion of Route 14 originates at Route 5 (P.M. 24.79) in the City of Los Angeles and terminates at the Los Angeles / Kern County line (P.M. R 77.01 near the City of Lancaster. Approximately 25 miles of SR 14, the segment between Pacific Coast Highway (SR-1) and Interstate 5 (I-5), is unconstructed.

Route Designation and Characteristics

Route 14 is an interregional commute corridor, which provides access to the Los Angeles Central Business District (LACBD) and other employment attractors located south of Route 14 corridor. Commuter traffic originates from the incorporated cities of Palmdale, Lancaster, and Santa Clarita and Newhall, Canyon Country, Saugus, Valencia are communities within the City of Santa Clarita.

Sulphur Springs, Lang, Pine Tree, Soledad Canyon, Agua Dulce, Vasquez Rocks, Vincent, Acton, Lakeview, and Summit are unincorporated communities within Los Angeles County.

Due to a jobs-housing imbalance, most of the residents of these developing corridor communities must commute a relative long distance to work in outlying areas.

Route 14 provides access to Fox Airport (Lancaster), Palmdale Airport, Agua Dulce Airport, and Edwards Air Force Base. Several recreational points of interest can be accessed from the Route 14 corridor. These include: Alpine Butte Wildlife Sanctuary, Palmdale Reservoir, Placerita Canyon State Park, Angeles National Forest, Vasquez Rocks County Park, Los Padres National Forest, Lake Hughes Recreational Area, and the eastern Sierra Nevada Mountains.

Route 14 is part of the National Highway System (NHS), the Strategic Highway Corridor Network (STRAHNET), and the interregional Road System (IRRS).

SR 14 ROUTE DESIGNATION AND CHARACTERISTICS

Seg	Freeway and Expressway System	National Highway System	Strategic Highway Network	Scenic Highway	Interregional Road System Route	High Emphasis Route	Focus Route	Federal Functional Classification	Major Goods Movement Route	Truck Designation
1 - R0.0/R24.79) UNCONSTRUCTED										
2 (R24.79/R27.05)	yes	yes	yes	No	Yes	Yes	Yes	Other Fwy or Expressway	No	National Network STAA
3 (R27.05/46.75)	yes	yes	yes	No	Yes	Yes	Yes	Other Fwy or Expressway/Other Principal Arterial	No	National Network STAA
4(46.75/59.80)	yes	yes	yes	No	Yes	Yes	Yes	Other Fwy or Expressway/Other Principal Arterial	No	National Network STAA
5 (59.80/68.96)	yes	yes	yes	No	Yes	Yes	Yes	Other Fwy or Expressway	No	National Network STAA
6 (68.96/77.01)	yes	yes	yes	No	Yes	Yes	Yes	Other	No	Other Principal Arterial

Seg	Rural/ Urban/ Urbanized	Primary/ Secondary System	Metropolitan Planning Organization	Regional Transportation Planning Agency	Congestion Management Agency	Local Agencies	Tribes	Air District	Terrain
1 - R.0/R24.79) UNCONSTRUCTED									
2 - R24.79/R27.05	Urban	Primary	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Rolling
3 - R27.05/46.75	Urban-Rural	Primary	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Mountainous
4 -46.75/59.8	Urban	Primary	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Rolling
5 - 59.8/68.96	Urban	Primary	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat
6 - 68.96/77.01	Rural	Primary	SCAG	Metro	Metro	Metro	N/A	SCAQMD	Flat

*Source: Transportation System Information (TSI)

COMMUNITY CHARACTERISTICS

LAND USE

The SR-14 corridor is congested in certain areas, highly developed and the land use varies from residential, commercial, to industrial. The many significant trip generators along this corridor include: commercial, to industrial. Significant growth in housing, population, and employment are generally projected throughout the SR14 corridor area. This growth is expected to occur through the incorporated cities and the unincorporated communities in this corridor. Some of these cities and communities are:

1. Palmdale,
2. Lancaster
3. Santa Clarita,
4. Newhall,
5. Canyon Country
6. Saugus,
7. Valencia.

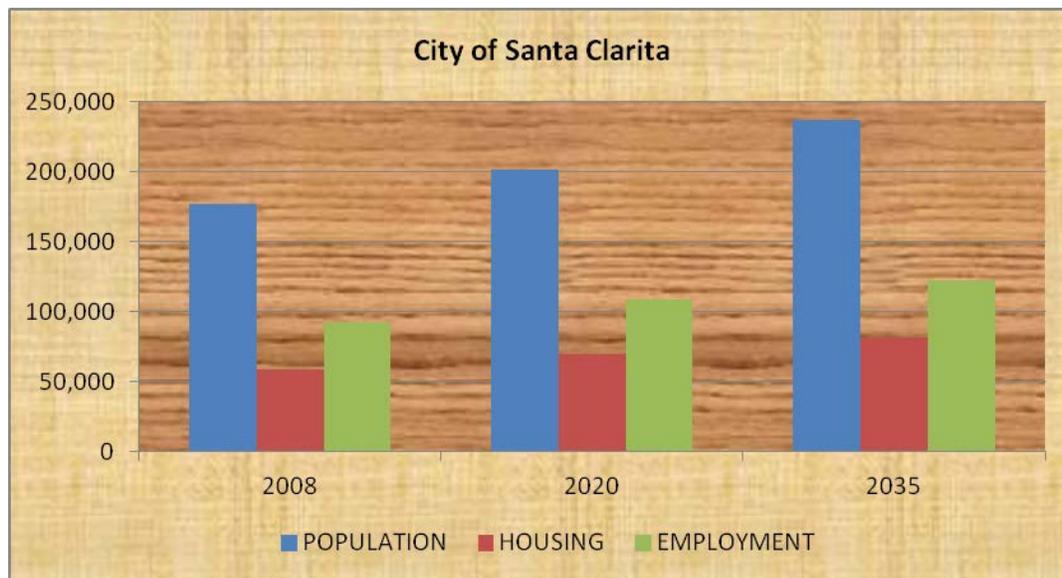
And the unincorporated areas are:

1. Sulphur Springs
2. Lang
3. Pine tree,
4. Soledad, Agua Dulce,
5. Vasquez Rocks,
6. Vincent,
7. Acton,
8. Lakeview, and
9. Summit.

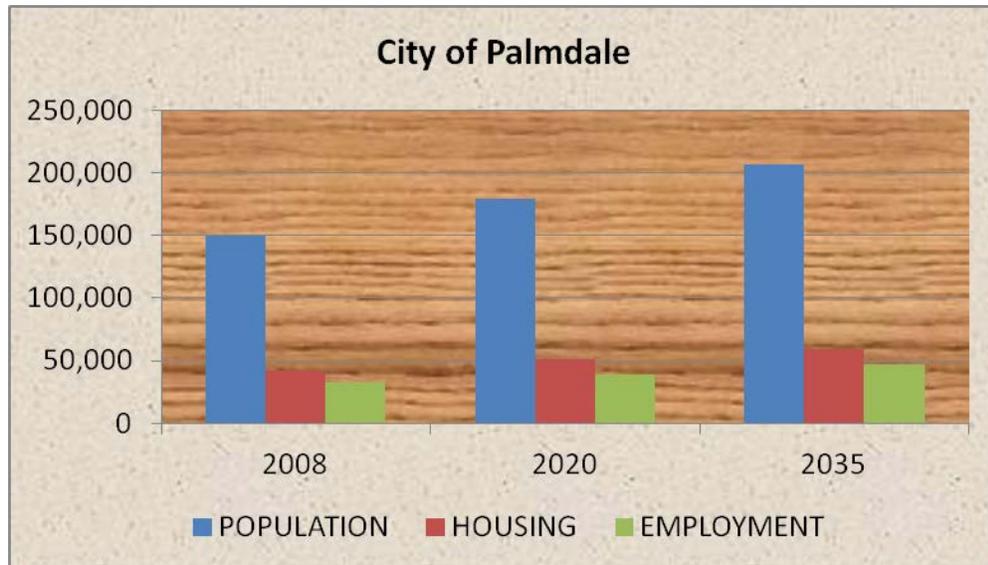
The following tables and graphs show projected socioeconomic growths in the cities along SR-14 Corridor per the SCAG 2012 -2035 RTP/SCS GROWTH FORECAST



CITY OF LANCASTER				2008 - 2020	2008- 2035
	2008	2020	2035	CHANGE	CHANGE
POPULATION	154,500	174,800	201,300	13.14%	30.29%
HOUSING	46,300	52,200	58,800	12.74%	27.00%
EMPLOYMENT	49,700	51,900	54,200	4.43%	9.05%



CITY OF SANTA CLARITA				2008 - 2020	2008- 2035
	2008	2020	2035	CHANGE	CHANGE
POPULATION	175,900	201,100	237,100	14.33%	34.79%
HOUSING	59,300	70,100	81,900	18.21%	38.11%
EMPLOYMENT	92,900	108,700	122,600	17.01%	31.97%



CITY OF PALMDALE				2008 - 2020	2008 - 2035
	2008	2020	2035	CHANGE	CHANGE
POPULATION	149,200	179,300	206,100	20.17%	38.14%
HOUSING	41,900	51,300	58,800	22.43%	40.33%
EMPLOYMENT	32,700	38,900	47,200	18.96%	44.34%



CITY OF LOS ANGELES				2008 - 2020	2008- 2035
	2008	2020	2035	CHANGE	CHANGE
POPULATION	3,770,500	3,991,700	4,320,600	5.87%	14.59%
HOUSING	1,309,900	1,455,700	1,626,600	11.13%	24.18%
EMPLOYMENT	1,735,200	1,817,700	1,906,800	4.75%	9.89%

SYSTEM CHARACTERISTICS

Existing Facility					
Segment/PM	Facility Type	Mixed-Flow Lanes	HOV Lanes	Centerline Miles	Lane Miles
1 (0.00 – R24.79) Rte 1 to Rte 5		unconstructed			
2 (R24.79 – R27.05) Rte 5 to San Fernando Rd.	Freeway	5	1	2.26	13.56
3 (R27.05 – 46.76) San Fernando Rd to Ward Rd.	Freeway	3	1	19.71	78.84
4 (46.76 – R59.8) Ward Rd to South Jct Rte. 138	Freeway	2	1	13.04	39.12
5 (R 59.8 – 68.97) Jct Rte 138 to Ave I	Freeway	3	0	9.17	27.51
6 (68.97 – R77.00) Ave I to Kern Co. Line	Freeway	2	0	8.03	16.06

For the purpose of analysis, the SR-14 is divided into segments based on logical termini including intersections, jurisdiction and changes in land use.

Ramp metering is a traffic management Strategy, that uses traffic signals and accompanying equipment and techniques to manage on-ramp flow onto the freeway system. Route 14 has no Ramp metering elements installed on any of the on-ramps. The goal is to activate all the ramp meters along the Rte 14 and operate those on-ramps in order to help with the mainline traffic.

RAMP METERS ON SR 14			
POSTMILE	DIRECTION	LOCATION	COMMENT
SEGMENT 1 (R0.00-R24.79)			
NONE			
SEGMENT 2 (R24.79-R27.05)			
R25.095	NB	Sierra Hwy	Planned
R26.891	SB	San Fernando RD	Planned
R27.05	NB	San Fernando RD	Planned
SEGMENT 3 (R27.05-46.76)			
R27.05	NB	San Fernando RD	Planned
R27.876	SB	Placerita Cyn	Planned
R28.056	NB	Placerita Cyn EB	Planned
R28.122	SB	Sierra Hwy/ Placerita	Planned
R28.274	NB	Placerita Cyn WB	Planned
R29.542	SB	Golden Valley	Planned
R29.978	NB	Golden Valley	Planned
R30.643	SB	Sierra Hwy	Planned
R30.722	SB	Via Princess Way	Planned
R31.115	NB	Via Princess Way	Planned
R33.397	SB	Sand Cyn.	Planned
R33.592	NB	Sand Cyn.	Planned
R35.520	SB	Shadow Pines (Soledad Cyn)	Planned
R36.019	NB	Shadow Pines (Soledad Cyn)	Planned
R36.019	NB	Shadow Pines (Soledad Cyn)	Planned
R39.654	SB	Agua Dulce Cyn	Planned
R40.073	NB	Agua Dulce Cyn	Planned
R43.037	NB	Escondido Cyn.	Planned
R43.482	SB	Escondido Cyn.	Planned
R46.543	SB	Red Rover Mine Rd	Planned
SEGMENT 4 (46.76-R59.8)			
R47.131	NB	Red Rover Mine Rd	Planned
R48.465	SB	Crown Valley Rd.	Planned
R48.808	NB	Crown Valley Rd.	Planned
R50.617	SB	Santiago Rd.	Planned
R50.938	NB	Santiago Rd.	Planned
R51.476	SB	Soleda Cyn. Rd	Planned
R52.524	NB	Soleda Cyn. Rd	Planned

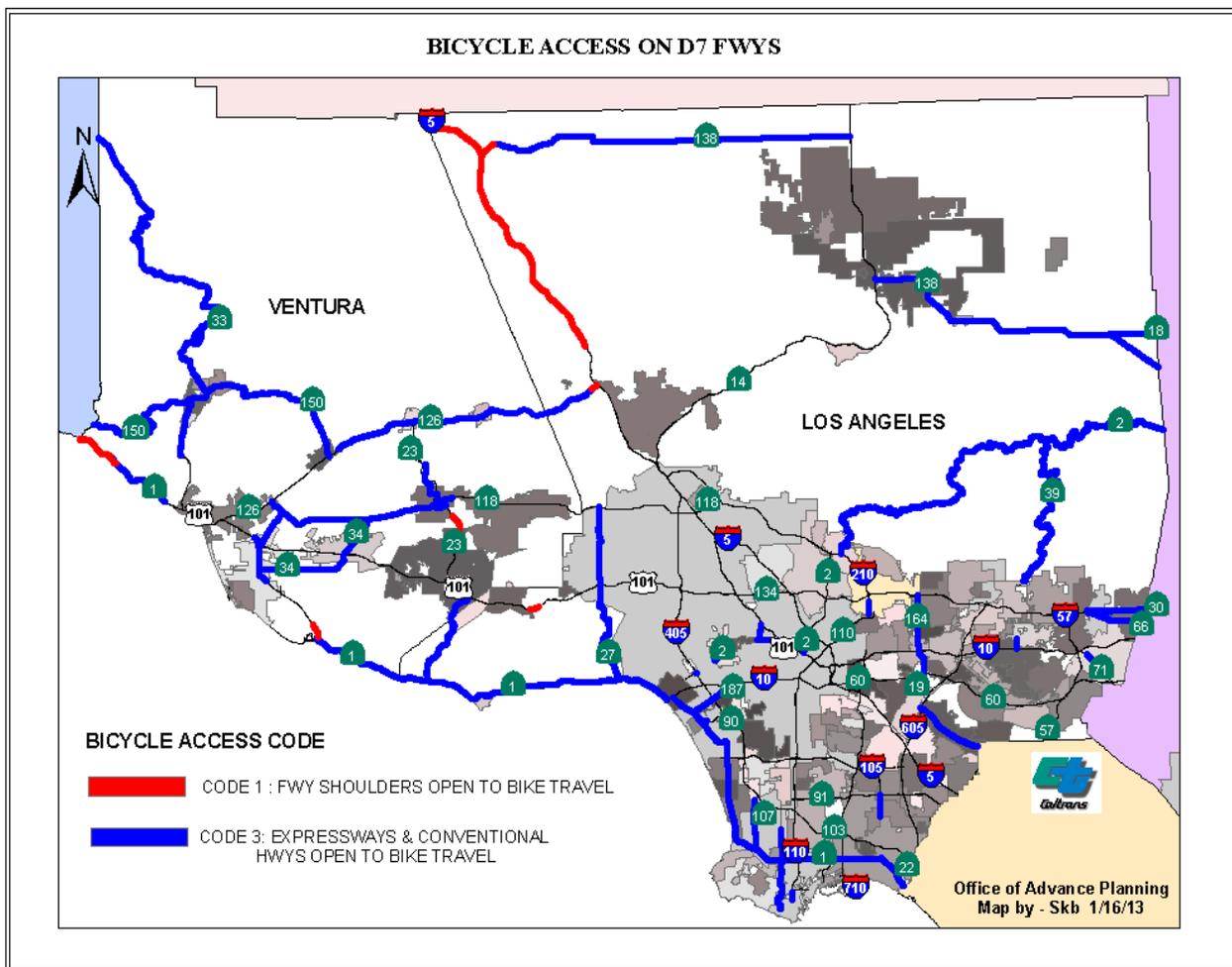
RAMP METERS ON SR 14			
POSTMILE	DIRECTION	LOCATION	COMMENT
R54.250	SB	Pear blossom Hwy.	Planned
R54.906	NB	Pear blossom Hwy.	Planned
R58.085	SB	Avenue S	Planned
R58.400	NB	Avenue S	Planned
SEGMENT 5 (R59.8-68.97)			
R61.267	SB	Avenue P	Planned
R63.506	SB	Avenue N EB	Planned
R63.628	NB	Avenue N EB	Planned
R63.717	SB	Avenue N WB	Planned
R63.810	NB	Avenue N WB	Planned
R64.540	SB	Avenue M EB	Planned
R64.637	NB	Avenue M WB	Planned
R64.724	SB	Avenue M WB	Planned
R64.834	NB	Avenue M WB	Planned
R65.554	SB	Avenue L EB	Planned
R65.637	NB	Avenue L EB	Planned
R65.730	SB	Avenue L WB	Planned
R65.823	NB	Avenue L WB	Planned
R66.658	SB	Avenue K EB	Planned
R66.660	NB	Avenue K EB	Planned
R66.850	SB	Avenue K WB	Planned
R66.870	NB	Avenue K WB	Planned
R67.514	SB	Avenue J-8	Planned
R68.141	NB	Avenue J	Planned
R68.775	SB	Avenue I	Planned
SEGMENT 6 (68.97-R77.00)			
R69.130	NB	Avenue I	Planned
R69.848	SB	Avenue H EB	Planned
R69.952	NB	Avenue H EB	Planned
R70.030	SB	Avenue H WB	Planned
R70.134	NB	Avenue H WB	Planned
R70.848	SB	Avenue H EB	Planned
R70.953	NB	Avenue H EB	Planned
R71.030	SB	Avenue G EB	Planned
R71.135	NB	Avenue G EB	Planned
R71.850	SB	Avenue G WB	Planned
R71.956	NB	Avenue G WB	Planned
R72.034	SB	Avenue F WB	Planned
R72.140	NB	Avenue F WB	Planned

RAMP METERS ON SR 14			
POSTMILE	DIRECTION	LOCATION	COMMENT
R73.840	SB	Avenue D (138)	Planned
R73.956	NB	Avenue D EB	Planned
R74.148	NB	Avenue D WB	Planned
R76.837	SB	Avenue A	Planned

SOURCE: 2013 Ramp Metering Development Plan

ACTIVE TRANSPORTATION FACILITY

The following map shows the Bicycle Access on District 7 freeways. Access Code 1 (red) represents Freeway shoulders open to bike travel and Access Code 3 (blue) showing Expressways & Conventional highways open to Bicycle travel in District 7. The followings show the importance of Active Transportation for the department;



In addition to Senate Bill No. 99 (SB-99) of September 26, 2013 pertaining to Active Transportation funding, California Department of Transportation Deputy Directive (DD-64-R1 of October 2, 2008) views all transportation improvements as opportunities to improve safety, access and mobility for all travelers in California and recognizes bicycle, pedestrian and transit modes as integral elements of the transportation system. Bicycle, pedestrian and transit travel is facilitated by creating “complete streets” beginning early in System Planning and continuing through project delivery, maintenance and operations.

In addition, the Complete Streets Act of 2008 (AB. No. 1358 of September 30, 2008) requires cities and counties to incorporate the concept of Complete Streets into their General Plan Updates to ensure that transportation plans meet the needs of all users of our roadway system. Also, California Vehicle Code and Streets and Highway Code Section 888 states that the department shall not construct a state highway as a freeway that will result in the severance or destruction of an existing major route for non-motorized transportation traffic and light motorcycles, unless it provides a reasonable, safe, and convenient alternate route or such a route exists. (Revised 10/4/2013. Page 7 of 11)

SCAG’s 2012-2035 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) invests \$6.7 billion towards increasing bikeways, bringing sidewalks into compliance with Americans with Disabilities Act, safety improvements and other Active Transportation Strategies. Also, the United States Department of Transportation (US DOT) Policy Statement on bicycle and pedestrian accommodation (March 11, 2010) states that US DOT encourages transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate.

Based on Caltrans context sensitive, smart mobility and complete streets policies and the Governor Office’s Climate Action and Sustainability Plan; ‘where the existing freeway or highway corridor has severed routes and has decreased connectivity between communities, employment hubs, schools, wild life corridors, every effort will be made to re-establish those lost connections on any project along the corridor.’

It is obvious from the above that Active Transportation is of great importance along SR-14 due to its strategic location and its large tourist “draw”. SB-99, the listed Caltrans Deputy Directive, California Vehicle and Highway Code, SCAG’s 2012 RTP/SCS and US DOT Policy Statements all support Complete Streets including bicycle and pedestrian facilities for SR-14.

TRANSIT INFORMATION AND ACTIVE TRANSPORTATION

Source: Office of Mass Transportation and Transit Operators

EXISTING SERVICE ON SR 14

Route	From/To	Operator	Rt #	Name/Description	Service Type	Service Span	Notes
14	Ave I-I-5	Metrolink	Antelope Valley Line	Lancaster-Los Angeles	Commuter Rail	7 Days	6-9 Trains
14	Kern County-Ave I	Eastern Sierra Transit	Mammoth Lakes-Lancaster	Mammoth Lakes-Lancaster	Rural	M-W-F	1 trip
14	Kern County-Ave I	Kern Regional Transit	Bakersfield-Lancaster	Bakersfield-Lancaster	Rural	7 Days	2-7 trips
14	Kern Co. Line-Palmdale Blvd	Amtrak Thruway Bus	San Joaquin	Bakersfield-Victorville	Intercity	7 Days	2 trips
14	Palmdale-I-5	AVTA	785	Downtown Los Angeles	Express	Weekdays Peak	8 trips (20 min Frequency)
14	Palmdale-I-5	AVTA	786	Century City/West Los Angeles	Express	Weekdays Peak	4 trips
14	Palmdale-I-5	AVTA	787	West San Fernando Valley	Express	Weekdays Peak	8 trips (20 min Frequency)
14	Palmdale-I-5	AVTA	North County TRANSporter	Palmdale-Newhall Metrolink	Express	Weekdays	4 trips
14	Newhall Ave-I-5	Santa Clarita	757	Santa Clarita-North Hollywood	Express	Weekdays	20-30 min. Frequency

NOTES

Metrolink Antelope Valley Line trains operate from Lancaster to Los Angeles

North County TRANSporter provides express bus service from Palmdale Transportation Center to Metrolink trains terminating at Newhall Metrolink Station

COMMENTS

AVTA Route 7 operates on 10th St. West between Ave. H and Ave. I and Ave. P to Technology Dr.

AVTA Route 1 operates on 10th St. West between Ave. I and Technology Drive (Lancaster-Palmdale)

AVTA Route 10 operates on 10th St. West between Ave. J and Technology Dr. (Lancaster-Palmdale)

AVTA Route 2 operates on 10th St. West between Ave. 0-8 and Palmdale Blvd.

Santa Clarita Routes 1,2 operate on Sierra Hwy. between Newhall Ave.and Soledad Cyn. Rd.

Santa Clarita Route 6 operates on Soledad Cyn Rd. between Sierra Hwy. and Shadow Pines Blvd.

FUTURE SERVICE

The proposed California High Speed Rail system would operate in the SR14 Corridor Blvd from SR58 to I-5

Future CHSRA station could be located near SR 14 in Palmdale

The proposed High Desert Corridor includes a potential rail component

INTERMODAL TRANSIT CENTERS AND STATIONS LOCATED ON OR NEAR SR 14 CORRIDOR

Route	Location	City	Operator	Transit Service	Service Type	Service Span
14	Lancaster Metrolink Station	Lancaster	City of Lancaster	Metrolink Antelope Valley Line	Commuter Rail	7 Days
				Amtrak Thruway Bus	Intercity	7 Days
				AVTA 1,4,7,11	Local	7 Days
				EST Mammoth Lakes-Lancaster	Local/Intercity	M-W-F
				KRT Bakersfield-Lancaster	Local	7 Days
14	Lancaster City Park	Lancaster	City of Lancaster	AVTA 1,4,5,10,11,12	Local	7 Days
				AVTA Lake L.A.,785,786,787	Express	Weekdays Peak
14	Palmdale Transportation Center	Palmdale	City of Palmdale	Metrolink Antelope Valley Line	Commuter Rail	7 Days
				Amtrak Thruway Bus	Intercity	7 Days

				AVTA 1,3,7,10	Local	7 Days
				AVTA Lake L.A., 785,786,787	Express	Weekdays Peak
				Greyhound	Intercity	7 Days
				North County TRANSporter	Express	Weekdays
14	Vincent Grade/Acton Metrolink	Acton	County of Los Angeles	Metrolink Antelope Valley Line	Commuter Rail	7 Days
				North County TRANSporter	Express	Weekdays (On request)
14	Via Princessa Metrolink	Santa Clarita	City of Santa Clarita	Metrolink Antelope Valley Line	Commuter Rail	7 Days
				Santa Clarita 1,2	Local	Weekdays Peak
14	Santa Clarita Metrolink	Santa Clarita	City of Santa Clarita	Metrolink Antelope Valley Line	Commuter Rail	7 Days
				Santa Clarita 5,6,501,502,	Local	7 Days
				796,797,799	Express	Weekdays
14	Newhall Metrolink	Santa Clarita	City of Santa Clarita	Metrolink Antelope Valley Line	Commuter Rail	7 Days
				North County TRANSporter	Express	Weekdays
				Santa Clarita 1,2,4,5,6,14,	Local	7 Days
				757,796,797,799	Express	Weekdays

FREIGHT

The economic vitality and well being of the Greater Los Angeles region depends upon the safe and timely transport of goods as well as people. SR-14 is identified as a Major International Trade Highway in the Caltrans 2007 Goods Movement Action Plan and Interregional Transportation Strategic Plan of 2012, in conjunction with other routes (I-10, I-105, I-110, I-405, I-605, I-710), sea ports and airports in the area, SR-14 serves as a part of the Intermodal Corridors of Economic Significance (ICES).

Current levels of congestion are detrimental to this vitality, and future projections indicate that this situation will get much worse. Southern California's aging transportation system is at capacity, serving a population in Los Angeles County of approximately ten million people. District 7 has five of the ten

worst truck bottlenecks in the U.S. Truck vehicle miles traveled (VMT) is expected to double by 2030. Significant actions thus need to be taken to protect the economic well being of the region. These include improved rail service, including more grade separations; additional and improved intermodal transfer facilities; truck lanes on major truck routes; improved intermodal transfer facilities; truck lanes on major truck routes; improved access to and enhanced cargo handling capabilities at seaports; and improved air cargo accessibility with separation from passenger activities at airports.

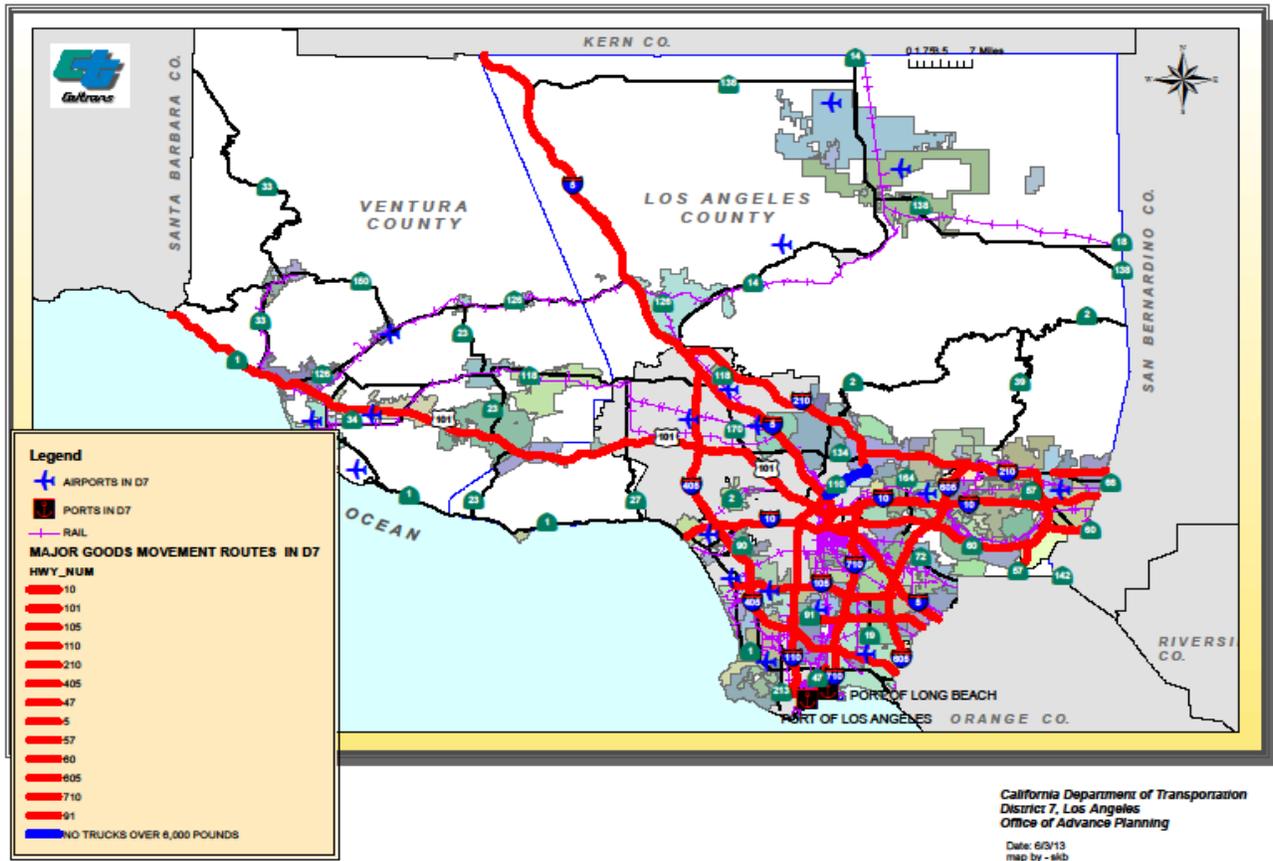
Some of the specific conditions affecting SR-14 are as follows:

SR-14 is a part of the Federal Surface Transportation Assistance Act (STAA) route network for oversized trucks.

Truck volumes in 2008 range from 4.5 % to 6.7 % of AADT. Regionally, truck traffic is expected to increase tremendously by 2035, with virtually no capacity available to handle this added volume.

Seaports: The ports of Los Angeles and Long Beach are near SR-14 and primarily accessible to it via Routes 710 and 110 and the Alameda Corridor. These two ports combined are the largest port complex in the United States. It is expected that most port cargo going less than 800 miles will be transported by truck. These are full service ports, handling in particular containers, autos, and bulk cargo. Together they are the third busiest in the world, and are forecasted to triple in both domestic and international cargo volumes by 2025.

D7 GOODS MOVEMENT CORRIDOR MAP



ENVIRONMENTAL CONSIDERATION - California is known for traffic congestion and its impacts. Pollution of various types is typical in this region. Air quality, noise and water pollution are common. Below is the latest attainment/nonattainment status of SR-14 Corridor which falls in the South Coast Air Quality Basin and Antelope Valley Air Quality Management District.

POLLUTANTS	STATE DESIGNATION
Ozone (1hr)	Nonattainment
Ozone (8hr)	Nonattainment
CO (8hr)	Attainment
PM10 (24 hr.)	Nonattainment
PM2.5 (24 hr.)	Nonattainment
NO2 (Annual)	Nonattainment
SO2 (1 hr)	Attainment
Lead	Nonattainment

CORRIDOR PERFORMANCE:

Basic System Operations						
Segment	AADT 2008	AADT 2035	LOS 2008	LOS 2035	VMT 2008	VMT 2035
1	UNCONSTRUCTED					
2	155,000	233,400	F0	F0	237,600	321,600
3	96,500	140,400	E	F0	1,816,000	2,787,100
4	83,000	110,000	D	F0	864,000	1,454,100
5	44,500	89,600	B	C	466,400	678,600
6	34,000	49,100	B	B	359,400	431,500

Truck Traffic				
Segment	Total Average Annual Daily Truck Traffic (AADT) 2008	Total Trucks (% of AADT) 2008	5 + Axle Average Annual Daily Truck Traffic (AADT) 2008	5 + Axle Trucks (% of AADTT) 2008
1	UNCONSTRUCTED			
2	7,700	4.9%	2,800	36.3%
3	4,300	4.5%	1,750	40.6%
4	4,300	5.1%	1,750	40.6%
5	3,000	6.7%	1,600	53.3%
6	2,200	6.4%	1,250	56.8%

CORRIDOR CONCEPT

CONCEPT RATIONALE The transportation concept describes the operating conditions and physical facilities required to provide those conditions that could exist on SR-14 after considering the conclusions, priorities and strategies discussed in the District System Management Plan (DSMP), the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and other planning documents. The route concept represents what could reasonably be accomplished to facilitate the mobility of traffic desiring to use the route. It assumes that management improvement strategies and system operation improvements to maximize the efficiency on SR-14 will be implemented.

The transportation concept is composed of a Level of Service (LOS) and facility component. The concept LOS indicates the minimum level of service the District would allow on a route prior to proposing an alternative to improve operating conditions. The concept facility is the facility that could be developed to maintain or attain the concept LOS.

PLANNED/PROGRAMMED PROJECTS AND STRATEGIES

Route	County	Lead Agency	Project Description	Project Completion	RTP ID/Source Document
SR-14	LA		Complete PA/ED for an approximate 63-mile West-East Freeway/Expressway and possible toll facility between SR-14 in LA County and SR-18 in SB County. High Desert corridor PA/ED combine the LA County measure R project from SR-14 in LA County Federal earmarks provided to City of Victorville for US-395 to SR-18. Both projects and funds are combined to complete the PA/ED from SR-18. [EA 26000]		LA0G665
SR-14	LA		Route 14: SR-14/Freeway/Avenue I interchange improvements. Widening Ave I from 2 to 3 Lanes in each direction. Adding dual left lanes, and widening a bridge structure. PPN0 3123.		LA0C8102
SR-14	LA		Route 14: SR14/Avenue K interchange improvements. Widen Northbound off ramp and 15 th Street West. Widen N/B Off ramp from 3 to 4 lanes at Ave K/15 th St-W.		LA0D336
SR-14	LA		Add 1 HOV lane each direction on the SR-14 from Avenue P-8 to L	2027	1H0101
SR-14	LA	LA County MTA	Study-Orange line Corridor development project High Speed Maglev & Station area development from North LA to South OC following SR14 and former Pacific Rail	2015	LAE1883
SR-14	Various		High Desert Corridor Construct New 4-6 Lane Facility: E-W I-14 to US-395 (Connecting SB CO #20020144). E-W I-5 To SR-14, N-S SR-14 to SR-138.	2020	1C0404
SR-14	LA		I-5 to San Fernando Rd- Add 2 HOV and 1 truck for a total of 3 consistent reversible HOV LANES.	Unknown	
SR-14	LA		I-5/SR-14 interchange-redo/restripe the transition from SB-14 to SB I-5 to allow a continuous 2 lane truck route and separate SR-5 with a physical barrier to prevent weaving and reduce queuing	Unknown	
SR-14	LA		Golden Valley Rd—widen Overcrossing at Golden Valley Rd.	Unknown	
SR-14	LA		Sand Canyon to Avenue P-8—Fitting the gap, making it a consistent 3 lane crossing section in each direction plus 3 consistent HOV lanes on SR-14	Unknown	
SR-14	LA		Ave G and SR-14 – Construct interchanges with High Desert Corridor at the sub regional level by the city of Lancaster at Avenue G and SR-14	Unknown	
SR-14	LA		I-5 to Kern County Line (mixed flow improvements)		Metro 2009 LRTP

Route	County	Lead Agency	Project Description	Project Completion	RTP ID/Source Document
SR-14	LA		Pear blossom to Avenue P – Add 1 MF lane and 2 HOV for a total of 3 consistent reversible HOV lanes		Metro 2009 LRTP
SR-14	LA		Avenue S Interchange upgrade		Metro 2009 LRTP
SR-14	LA		10 th St West – Interchange Upgrade		Metro 2009 LRTP
SR-14	LA		Widen, modify ramp/bridge –Project 11 (Ave N)		PDS/Metro 2009 LRTP
SR-14	LA		Widen bridge, modify ramps and install traffic signals at off ramps (Ave M overcrossing between 10 th and 15 th Street)		PDS/Metro 2009 LRTP
SR-14	LA				
SR-14/138	LA	CALTRANS	Rte 138 – In Palmdale @ Ave P -8 From Rte 14 to 100 th Street – Acquisition of ROW for future Rte 138 (Tier 2 Env) (CFP 2212 \$3540 2001 CFP 8021 (EA # 116720 PPNO 0393F)	2020	LA962212

Demonstration Projects from Compass Blueprint (Compass Blueprint is a new way to look at how Southern California grows. It is driven by Mobility, Livability, Prosperity and Sustainability)

SANTA CLARITA – NORTH NEWHALL SPECIFIC PLAN

The City of Santa Clarita developed two concept plans for a transit oriented village supporting the redevelopment of the existing North Newhall downtown adjacent to the Metrolink Station.

Goals –

- Encourage a mix of commercial, office and residential uses
- Enhance and strengthen the North Newhall Downtown
- Encourage the use of public transit
- Provide safe multi-modal circulation and connections across the Metrolink Tracks
- Complement the rural and equestrian character of the Placerita Canyon

CONCLUSION

Traffic volume is forecasted to increase on SR-14 due to the growth in population, housing and employment along this route and throughout the region. Growth in the region will continue to create mobility challenges and put additional stresses on our transportation system. Southern California is not only an important component of California's economy but it is also vital to the United States and world's economies as a whole. It is critical that mobility be maintained and improved in order to sustain the economic growth that is expected. In addition to sustaining the economic vitality of the region, mobility is also an important component in enhancing the quality of life for the residents in this region. SR-14 is only one component of the transportation infrastructure but it plays a critical role in providing mobility for the region. In order to improve mobility, additional capacity will be required beyond those planned and programmed in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to maintain an acceptable level of service through 2035.

District 7 Office employs a variety of strategies to address current congestion challenges including:

- High Occupancy Vehicle Lane (HOV)
- Ramp Metering
- Congestion Pricing (Toll Lanes)
- Changeable Message Signs (CMS)

Several regional freeway capacity expansion projects are in the planning process, under development or under construction which will assist in decreasing congestion. Constructing an HOV or Managed Lane system continues to be a priority.

The highway system is only one component of the transportation infrastructure; but it plays a very important role in providing mobility for the region. To achieve the desired minimum acceptable level of service, additional lanes will be needed beyond those planned and programmed in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

In addition to the projects on our system, Caltrans supports programs such as Transit Oriented Development (TOD). TOD is a moderate to higher density development, located within easy walk of major a transit stop. Generally with a mix of residential, employment and shopping opportunities designed for pedestrians. Research have shown that these types of development increase the number of trips made by transit, walking and cycling thus reducing the number of car trips and reducing tailpipe emissions.

SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) identifies High Quality Transit Areas (HQTAs) meeting definitions established in SB 375. These areas are intended to direct and prioritize future growth, and further, establish eligibility for certain types of projects to access CEQA streamlining. Note, however, that residential and other types of development along freeways can be associated with increased health risk due to emissions exposure. Future projects

should refer to available information resources, including but not limited to SCAG's 2012-2035 RTP/SCS Environmental Justice Appendix and Program Environmental Impact Report.

Appendix A

GLOSSARY OF TERMS AND ACRONYMS

Acronyms

AADT	Annual Average Daily Traffic
ADT	Average Daily Traffic
AQMD	Air Quality Management District
CALTRANS	California Department of Transportation
CMP	Congestion Management Plan
FHWA	Federal Highway Administration
HOV	High Occupancy Vehicle Lane
HOT	High Occupancy Toll Lane
IC	Interchange
ITS	Intelligent Transportation System
LOS	Level of Service
MF	Mixed Flow Lane
MFE	Mixed Flow Equivalent
ML	Managed Lane
MPO	Metropolitan Planning Organizations
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
RTPA	Regional Transportation Planning Agency
SCAG	Southern California Association of Governments
SHOPP	State Highway Operation Protection Program
STIP	State Transportation Improvement Program
T	Truck Lane
TDM	Transportation Demand Management
V/C	Volume to Capacity Ratio
VMT	Vehicle Miles Travel

DEFINITIONS

Annual Average Daily Traffic (AADT) - AADT is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th.

Concept LOS – The minimum acceptable level of service over the next 20-25 years.

Facility Concept – Describes the facility and strategies that may be needed within 20-25 years. This can include capacity increasing, state highway, bicycle facility, pedestrian facility, transit facility, non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, transportation demand management, and incident management.

Headway – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles.

Level of Service (LOS) – It is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort and convenience. LOS can be categorized as follows:

LOS A describes free flowing conditions.

LOS B also indicative of free flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.

LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the present of other vehicles.

LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.

LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.

LOS F is a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle.

Mainline – includes travel way for through traffic but not freeway to freeway interchanges, local road interchanges, ramps, or auxiliary lanes.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between six percent and 10 percent of the Annual Daily Traffic (ADT). The lower values are generally found on roadways with low volumes.

Post Mile (PM) – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route within a county to the next county line. The milepost values start over again at each county line. Mile post values usually increase from south to north or west to east depending upon the general direction the route follows within the State. The milepost at a given location will remain the same year after year. When a section of road is relocated, new milepost (usually noted by an alphabetical prefix such as “R” or “M”) are established for it.

Segment – A portion of a facility between two points.

Vehicle Miles Traveled (VMT) – Is the total number of miles traveled by motor vehicles on a road or highway segments.