



Transportation Concept Report
ROUTE 170
District 7
June 2015



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DISCLAIMER

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California Department of Transportation

MISSION: Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability.

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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' major goals of safety, efficiency, sustainability, system performance and excellence.

The System Planning process is primarily composed of several parts: the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP) and the Priority Listing of Projects.

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 Priority Listing of Projects 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 the 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-170 TCR. Outreach involved internal and external stakeholders.

Both internal and external stakeholders were asked to review the document for comments, edits, and consistency with 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 supports 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 SR-170 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 suggests a configuration for SR-170 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 that Level of Service (LOS). It is our Mission to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability.

The SR-170 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. The remaining sections provide a context for analyzing the SR-170 corridor and document the data resources.

Concept Summary Table

CONCEPT – 2035

| Segment | ADT | Dir. Split | Peak Hour | Truck Peak Hour | 2035 Baseline RTP | Concept LOS "D" Attainment | Concept LOS "F0" Attainment |
|--|---------------|---------------|------------------|--------------------|-----------------------------|----------------------------------|-----------------------------------|
| 1 (LAX to Rte 90) | UNCONSTRUCTED | | | | | | |
| 2 (Jct US-101/Rte.134 to I-5) PM R14.5/20.55 | 205,900 | 67.2% | 14,200 (6.9%) | 360 (2.6%) | 8 MF + 2 HOV V/C 0.99 | LOS E | 12 10 |

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 to 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.
- * 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-170 is a north-south state route that traverses Los Angeles County and is used as a commuter route. It crosses the northeastern San Fernando Valley and runs from the junction with SR-134 and US-101 up to I-5. In the event of a closure of I-5, SR-170 could potentially handle traffic that normally would use Rte 5.

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

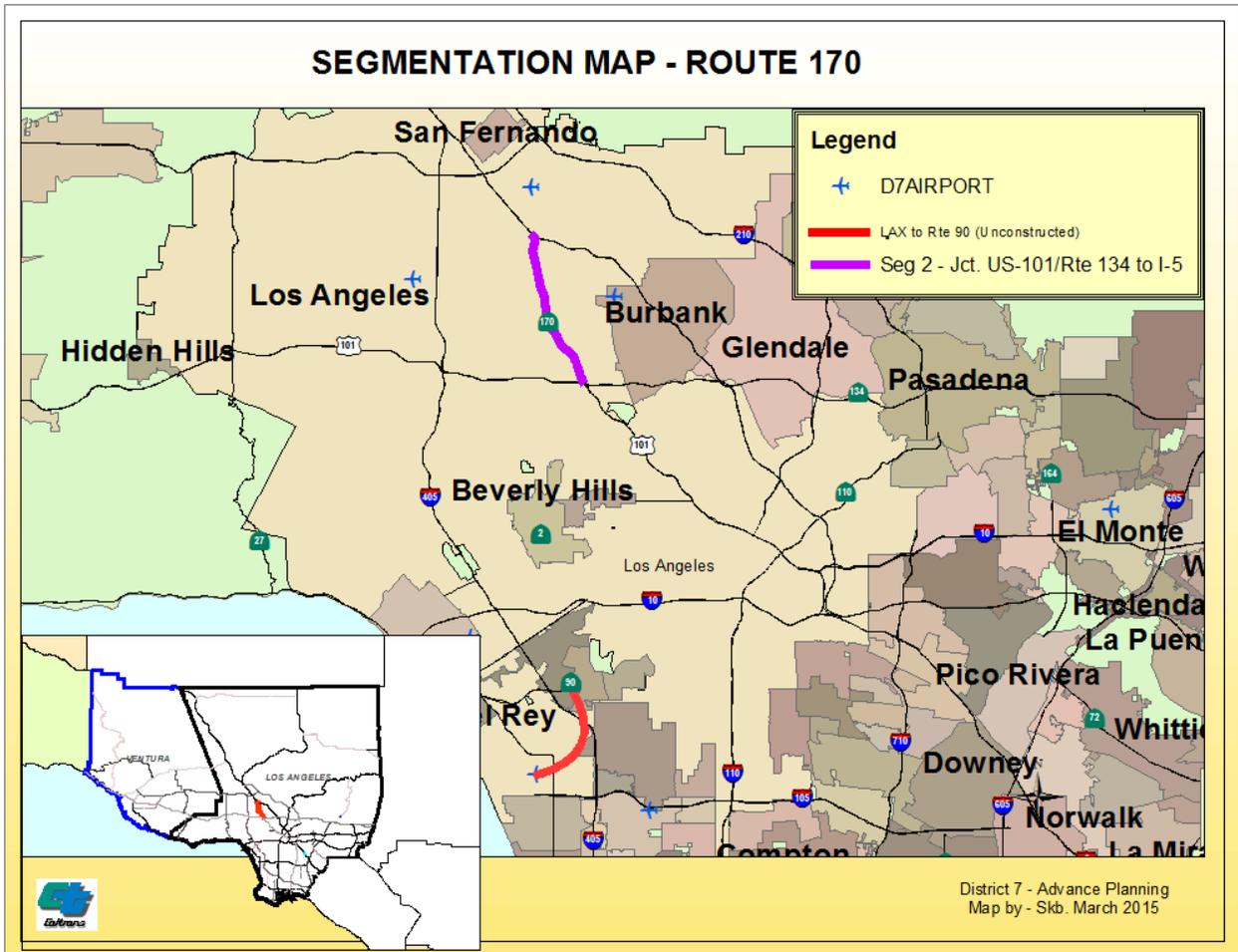
Traffic volume is forecasted to increase on SR-170 by 2035 and would require additional lanes to achieve an acceptable concept level of service. Several capacity improvements are planned, programmed, and recommended for this corridor.

CORRIDOR OVERVIEW

ROUTE SEGMENTATION

| County | Route | Segments | Description | County | Begin PM | End PM | No. of Lanes (each direction) |
|-------------|-------|----------|---------------------------|-------------|---------------|---------|----------------------------------|
| Los Angeles | 170 | 1 | LAX to SR-90 | Los Angeles | Unconstructed | | |
| Los Angeles | 170 | 2 | Jct. US-101/SR-134 to I-5 | Los Angeles | R 14.5 | R 20.55 | 4+1 |

SR-170 Segment Map



ROUTE DESCRIPTION

SR-170 is located in Los Angeles County in District 7. The first segment is unconstructed and the second segment is approximately 6.05 miles long. It is an essentially flat north-south route through the San Fernando Valley and is primarily used for commuter travel.

This TCR analyzes SR-170 conditions using the “segment” as the study unit. The segments are generally defined as “freeway interchange to freeway interchange,” “county line to freeway interchange” or “freeway interchange to end of freeway.”

Segment 1, which is unconstructed, runs from the Los Angeles International Airport to SR-90. Segment 2 runs from US-101 near Riverside Drive and the junction of SR-134 to I-5 near Tujunga Wash.

Portions of SR-170 (1.6 miles) between SR-2 and US-101 (PM 9.1/10.7) have been relinquished, but the City of Los Angeles still maintains the signs that direct drivers to the continuation of SR-170.

Route Designation and Characteristics

SR-170 is part of the State Freeway and Expressway System and the National Highway System. The first segment of SR-170 is unconstructed. The functional classification of the second segment is Other Freeway or Expressway. This route is a part of the Surface Transportation Assistance Act (STAA) truck route network; however trucks that measure 32 feet or more from rear axle to kingpin are restricted on SR -170 from SR- 2 to US-101. Trucks are also subject to turning restrictions. Since there is no on- ramp for trucks to use to go from SR-170 to northbound US-101, trucks must detour along surface streets to find an on-ramp.

| Seg | Freeway and Expressway System | National Highway System | Strategic Highway Network | Scenic Highway | Interregional Road System | High Emphasis Route | Focus Route | Federal Functional Classification | Major Goods Movement Route | Truck Designation |
|-----|-------------------------------|--------------------------|------------------------------------|--------------------------------|------------------------------|---------------------|----------------|-----------------------------------|----------------------------|-------------------|
| 1 | UNCONSTRUCTED | | | | | | | | | |
| 2 | Y | Y | N | N | N | N | N | Other Fwy or Express Way | N | STAA |
| | | | | | | | | | | |
| | | | | Regional | | | | | | |
| | Rural/Urbanized | Primary/Secondary System | Metropolitan Planning Organization | Transportation Planning Agency | Congestion Management Agency | | Local Agencies | | Air District | |
| 1 | UNCONSTRUCTED | | | | | | | | | |
| 2 | Urban | Primary | SCAG | Metro | Metro | Metro | N/A | SCAQMD | Flat | |

COMMUNITY CHARACTERISTICS

SR-170 is classified as an Other Freeway or Expressway in an urbanized corridor providing access to the San Fernando Valley in the City of Los Angeles. It serves the districts of Van Nuys and Valley Village, the cities of San Fernando and Burbank, and the neighborhoods of Panorama City, North Hollywood and Sun Valley.

LAND USE

The SR-170 corridor is congested in certain areas, highly developed and the land use varies from residential to commercial. The many significant trip generators along this corridor include:

Valley Plaza Park

North Hollywood Park

Whitsett Sports Field

North Hollywood Police Station

Los Angeles Valley College

West Coast Career College

Kaplan College

Concorde Career College

Laurel Plaza Shopping Center

Kaiser Panorama City Medical Center

Bob Hope (Burbank) Airport

Los Angeles Central Business District

Hollywood Bowl & Ford Theater

Universal Studios

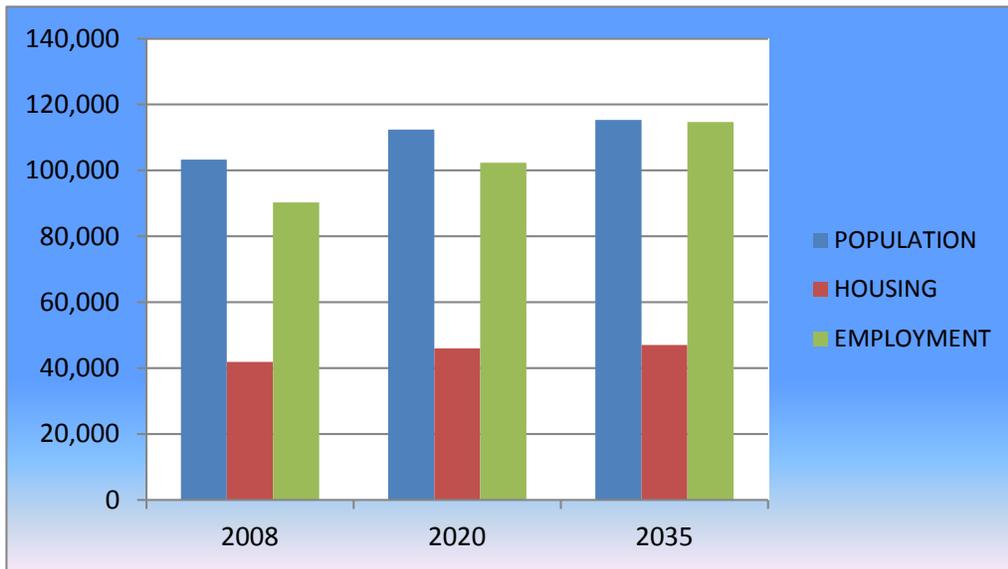
Metro Universal City Station

Significant growth in housing, population, and employment are generally projected throughout the SR-170 corridor area.

The following tables and graphs show projected socioeconomic growths in the cities along the SR-170 Corridor per the SCAG 2012 -2035 RTP/SCS Growth Forecast.

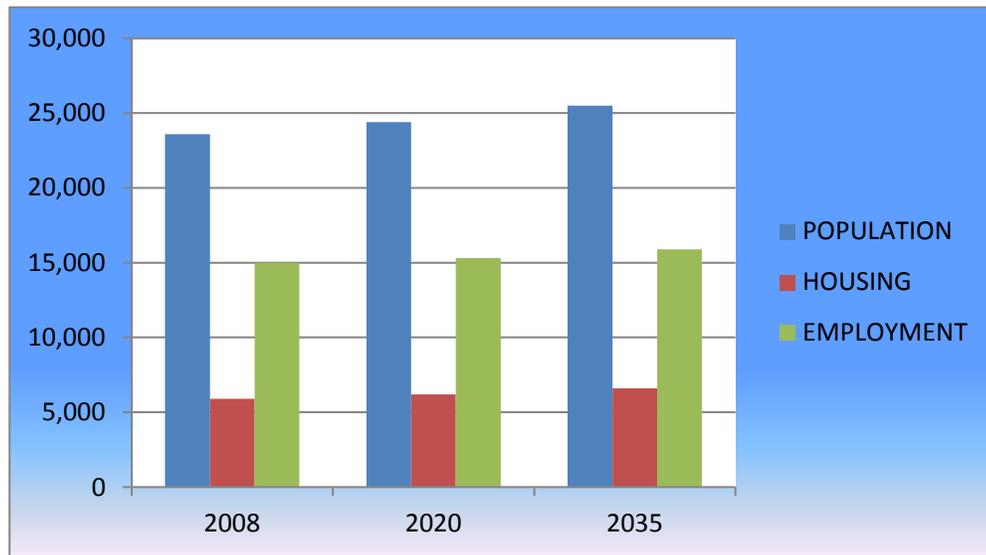
BURBANK

| | 2008 | 2020 | 2035 | 2008 - 2020 CHANGE | 2008 -2035 CHANGE |
|------------|---------|---------|---------|--------------------|-------------------|
| POPULATION | 103,300 | 112,400 | 115,300 | 8.81% | 11.62% |
| HOUSING | 41,900 | 46,000 | 47,000 | 9.79% | 12.17% |
| EMPLOYMENT | 90,300 | 102,300 | 114,700 | 13.29% | 27.02% |



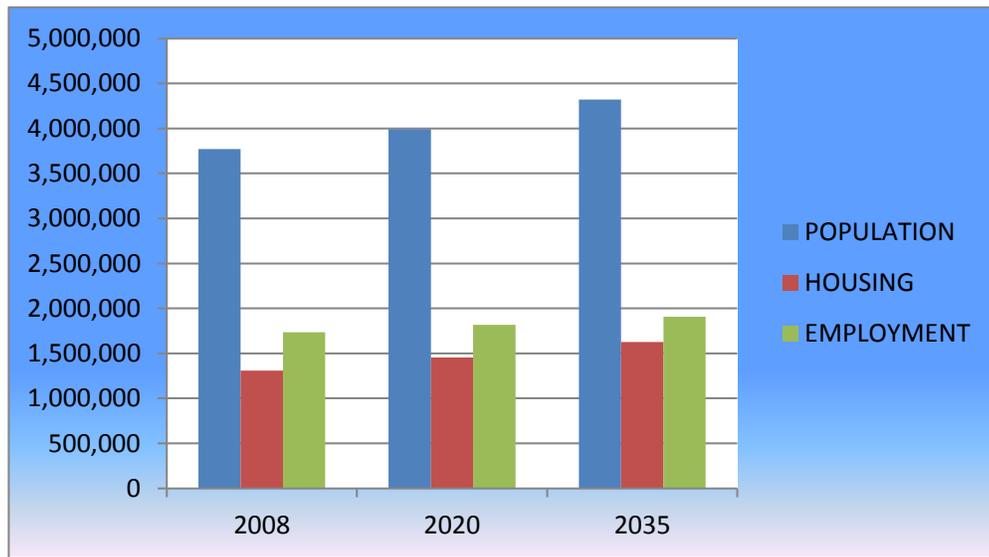
SAN FERNANDO

| | 2008 | 2020 | 2035 | 2008 - 2020 CHANGE | 2008 - 2035 CHANGE |
|------------|--------|--------|--------|-----------------------|-----------------------|
| POPULATION | 23,600 | 24,400 | 25,500 | 3.39% | 8.05% |
| HOUSING | 5,900 | 6,200 | 6,600 | 5.08% | 11.86% |
| EMPLOYMENT | 15,000 | 15,300 | 15,900 | 2.00% | 6.00% |



LOS ANGELES

| | 2008 | 2020 | 2035 | 2008 - 2020 CHANGE | 2008 - 2035 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

For the purpose of analysis, the SR-170 is divided into 2 segments based on logical termini including intersections, jurisdiction and changes in land use.

| EXISTING FACILITY | | | | | |
|--------------------------|----------------------|-------------------------|------------------|-------------------------|-------------------|
| Segment/PM | Facility Type | Mixed-Flow Lanes | HOV Lanes | Centerline Miles | Lane miles |
| 1 | Unconstructed | | | | |
| 2 (R14.5/R20.55) | Freeway | 4 | 1 | 6.05 | 30.25 |

RAMP METERS

| RAMP METERS ON SR-170 | | | |
|---------------------------|-----------|----------------------|-------------|
| Postmile | Direction | Location | Comments |
| Segment 1 (UNCONSTRUCTED) | | | |
| Segment 2 (PM) | | | |
| 14.7 | NB | Vineland/WB. Rte 134 | Planned |
| 15.03 | NB | Tujunga/Riverside | Planned |
| 15.26 | SB | Magnolia | Operational |
| 15.5 | NB | Magnolia Blvd | Planned |
| 15.96 | SB | Burbank Blvd | Operational |
| 16.14 | NB | Burbank Blvd | Planned |
| 16.6 | SB | Oxnard Blvd | Operational |
| 16.61 | NB | Oxnard Blvd | Planned |
| 17.16 | SB | Victory Blvd EB | Non Ops |
| 17.19 | NB | Victory Blvd EB | Planned |
| 17.3 | SB | Victory Blvd WB | Operational |
| 17.42 | NB | Victory Blvd WB | Planned |
| 18.19 | SB | Sherman Way | Operational |
| 18.21 | NB | Sherman Way EB | Planned |
| 18.41 | NB | Sherman Way WB | Planned |
| 19.62 | SB | Roscoe EB | Operational |
| 19.68 | NB | Roscoe Blvd | Planned |
| 19.8 | SB | Roscoe WB | Operational |
| 20.27 | SB | Arleta | Operational |

Ramp Meter Development Plan - 2013

TSM&O (TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS)

As congestion spreads and intensifies and the level of incidents, delays, and disruptions increase, the level of service and reliability of the roadway systems in many areas continues to deteriorate. It is very important to operate the existing network to its fullest service potential.

The era of new roadway construction has largely ended in most of the country. In addition, the practice of widening existing freeways is also falling out of favor due to high costs, the built out nature of many urbanized areas and community desires for more multi-modal streets. There's growing momentum for making more efficient use of the existing transportation system.

MAP-21 defines transportation system management and operations (TSM&O) as integrated strategies to optimize the performance of existing infrastructure through the implementation of multimodal and intermodal, cross-jurisdictional systems, services and projects designed to preserve capacity and improve security, safety and reliability of the transportation system. TSM&O activities focus on a set of well known strategies such as incident management, traffic signal timing, ramp metering, road weather management, Active Traffic and Demand Management (ATDM) strategies, ITS technologies, and others.

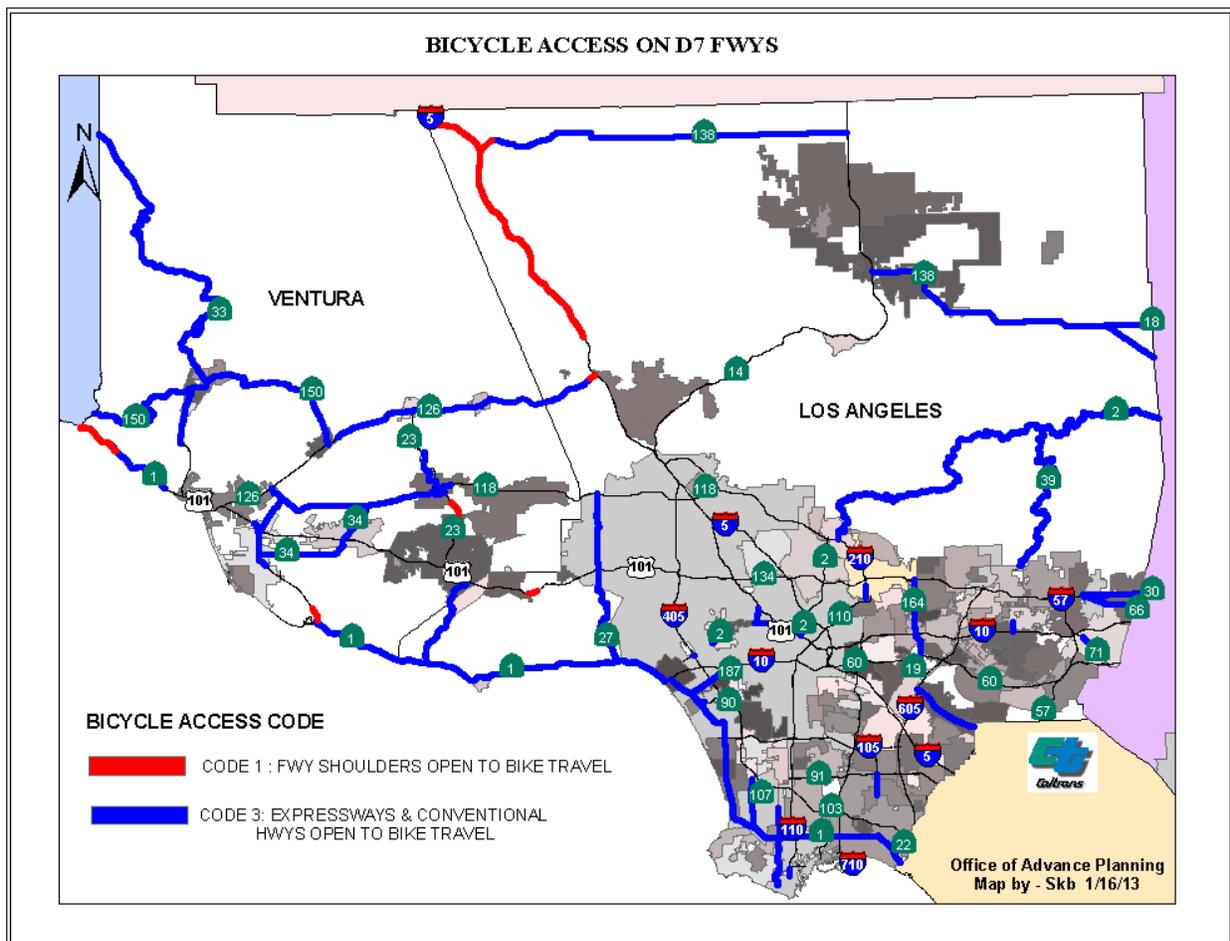
Incorporating TSM&O into Planning and Programming process will provide a more robust understanding of the statewide/regional transportation system and a toolbox of strategies that go beyond capacity expansion to include operations and demand management solutions.

Caltrans have incorporated System Performance as one of the Caltrans Strategic Plan Goals which is a five year implementation – and seeks to implement TSM&O on our most congested corridors through integrated Corridor Management or ICM which optimizes the use of existing infrastructure assets and leverages unused capacity. TSM&O will be an integral part to Caltrans' new mission to 'PROVIDE A SAFE, SUSTAINABLE, INTEGRATED AND EFFICIENT TRANSPORTATION SYSTEM TO ENHANCE CALIFORNIA'S ECONOMY AND LIVABILITY'.

ACTIVE TRANSPORTATION FACILITY

The following map shows the Bicycle Access on District 7 routes. Access Code 1 represents freeway shoulders open to bicycle travel and Access Code 3 shows expressways & conventional highways open to bicycle travel.

SR-170 is currently not open to bicycle travel. Future improvements to SR-170 corridor crossings or interchanges must not sever existing bicycle and pedestrian access facilities crossing the corridor. Any new and planned projects at crossings or interchanges must provide for the safe accommodation of bicycles and pedestrians.



In addition to Senate Bill No. 99 (SB-99) of September 26, 2013 pertaining to Active Transportation funding, the California Department of Transportation Deputy Directive (DD)-64-R2 (Complete Streets-Integrating the Transportation System), effective October 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.

The Complete Streets Act of 2008 Assembly Bill (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 (Revised 10/4/2013) 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.

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 (ADA), safety improvements and other Active Transportation Strategies.

The United States Department of Transportation (US DOT) Policy Statement on bicycle and pedestrian accommodation (March 11, 2010) states that the 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’s 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.”

SB-99, the listed Caltrans Deputy Directive, California Vehicle and Highway Code, SCAG’s 2012 RTP/SCS and U.S. DOT policy statements all support Complete Street including bicycle and pedestrian facilities for SR-170.

PARK AND RIDE FACILITIES

SR-170 has two Park and Ride Facilities located in close proximity. The table below lists these facilities.

| Address | Lot Name | Spaces | Cost |
|------------------------------|----------------------|--------|-----------------|
| 1200 Oxnard Street, LA, CA | 170 & Oxnard | 112 | Free |
| 5350 Lankershim Blvd, LA, CA | N. Hollywood Station | 952 | Free & Reserved |

Source: Metro

TRANSIT FACILITY

The transit component for State Route 170 embodies a multi-modal system including carpooling, Express Transit Service, Municipal Transit, Commuter Rail (Metrolink), and Intercity Rail (Amtrak). These provide limited community-based service. These agencies operate along this route, providing inter-city and commuter services (see below).

| SR 170 - TCR TRANSIT INFORMATION - DISTRICT 7 | | | | | | | |
|---|----------------------------|-----------------------|-------------|-------------------------------|--------------|-----------------|---------------------|
| Source: Office of Mass Transportation and Transit Operators | | | | | | | |
| EXISTING SERVICE ON SR 170 | | | | | | | |
| Route | From/To | Operator | Rt # | Name/Description | Service Type | Service Span | Notes |
| 170 | I-5-US-101/SR134 | Santa Clarita Transit | 757 | Santa Clarita-N. Hollywood | Express | 7 Days | 30-75 min Frequency |
| 170 | I-5-US-101 | Amtrak Thruway Bus | San Joaquin | Bakersfield-Los Angeles | Intercity | 7 Days | 6 trips daily |
| COMMENTS | | | | | | | |
| Metro Red Line operates frequent service between North Hollywood and Downtown Los Angeles | | | | | | | |
| Metro Local 167 operates on Coldwater Cyn. between Roscoe and US 101 | | | | | | | |
| Metro Local 230 operates on Laurel Cyn. between I-5 and US101 | | | | | | | |
| FUTURE SERVICE | | | | | | | |
| Future CHSRA station could be located near SR 170 in San Fernando Valley | | | | | | | |
| INTERMODAL TRANSIT CENTERS AND STATIONS LOCATED ON OR NEAR SR 170 CORRIDOR | | | | | | | |
| Route | Location | City | Operator | Transit Service | Service Type | Service Span | Notes |
| 170 | North Hollywood Metro Stat | Los Angeles | Metro | Metro Red Line | Heavy Rail | 7 Days | Paid Parking |
| | | | | Metro Orange Line | Transitway | 7 Days | |
| | | | | Metro 152,154,156,162,224,240 | Local | 7 Days | |
| | | | | Burbank Bus | Local | Monday-Saturday | |
| | | | | LADOT 549 | Express | Weekdays Peak | |
| | | | | Santa Clarita Transit 757 | Express | 7 Days | |

FREIGHT

Truck traffic in Southern California is expected to grow significantly through 2035, using an increasing share of the region's highway capacity.

Economic activity associated with regional high-value manufacturing, the growing logistics industry, and international trade will be major drivers of growth in truck traffic. The largest clusters of these activities are along the east-west corridors, namely SR-60 and I-10.

Truck traffic from the San Pedro Bay Ports has major movements along I-710, SR- 91, and SR-60. Future growth in warehousing and manufacturing around these corridors, and continuing shifts in warehousing to the Inland Empire, will lead to increasing concentrations of truck traffic growth. In the future, the highest volumes of truck traffic will be experienced on the southern part of I-710 and SR-60. Several segments of I-210, I-10, and I-5 will experience high levels of congestion and will be among the most congested truck corridors in the region.

(Reference: SCAG's document – On The Move – a Comprehensive Regional Goods Movement Plan and Implementation Strategy – Dec. 2012)

Although not a major truck route, if an emergency shut down I- 5, SR-170 could be used as an alternate route for trucking.

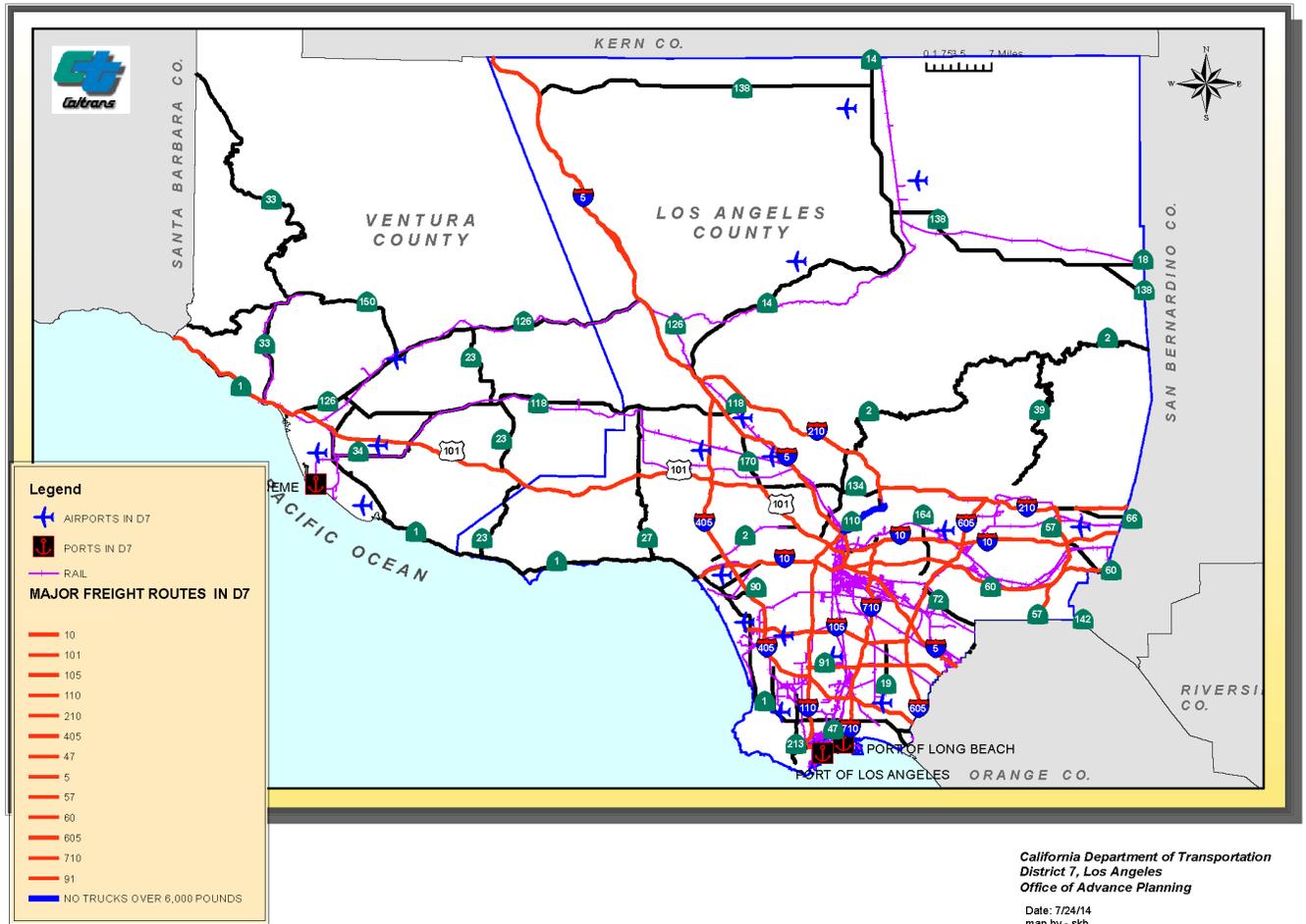
SR-170 is a part of the Terminal Access Route STAA truck network and its truck volumes in 2013 range from 3.88 percent to 5.14 percent of Annual Average Daily Traffic (AADT). Regionally, truck traffic is expected to increase by over 50 percent by 2025, with virtually no capacity available to handle this added volume.

The economic vitality and well being of the Los Angeles region depends upon the safe and timely transport of goods as well as people. The current level of congestion is detrimental to this vitality, and future projections indicate that this situation will get much worse.

Significant actions need to be taken to protect the economic well being of the region. These actions must include improved rail service, additional and improved intermodal transfer facilities, truck lanes on major truck routes, improved access to seaports and improved air cargo accessibility with separation from passenger activities at the airports.

Seaports: The Port of Los Angeles, the Port of Long Beach and the Port of Hueneme are major ports in the region and are significant traffic generators.

D7 FREIGHT CORRIDOR MAP



ENVIRONMENTAL CONSIDERATION

California is known for traffic congestion and its impacts. Pollution of various types is typical in this region. Air, noise and water pollution are common. Below is the latest attainment/nonattainment status of SR-170 Corridor, which falls in the South Coast Air Quality Management District (AQMD).

| POLLUTANTS | STATE DESIGNATION |
|-------------------------------|-------------------|
| Ozone | Nonattainment |
| Carbon Monoxide | Attainment |
| PM2.5 | Nonattainment |
| PM10 (Particulate Matter) | Nonattainment |
| Nitrogen Dioxide | Attainment |
| Sulfur Dioxide | Attainment |
| Sulfates | Attainment |
| Lead | Attainment |
| Hydrogen Sulfide | Unclassified |
| Visibility Reducing Particles | Unclassified |

** Source: Air Resource Board 2012 State Designation Map*

CORRIDOR PERFORMANCE:

Segment 1 is unconstructed.

Segment 2 has 205,900 AADT in 2035 according to the RTP 2012 model data . The segment currently operates at LOS E during the period of peak congestion.

| Basic System Operations | | | | | | |
|--------------------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|
| Segment | AADT 2008 | AADT 2035 | LOS 2008 | LOS 2035 | VMT 2008 | VMT 2035 |
| 1 | UNCONSTRUCTED | | | | | |
| 2 | 195,400 | 205,900 | E | E | 1,050,300 | 1,151,500 |

Source: 2012-2035 RTP/SCS model data

| Truck Traffic | | | | |
|----------------------|--|---------------------------------------|---|--|
| Segment | Total Average Annual Daily Truck Traffic (AADTT) 2008 | Total Trucks (% of AADTT) 2008 | 5 + Axle Average Annual Daily Truck Traffic (AADTT) 2008 | 5 + Axle Trucks (% of AADTT) 2008 |
| 1 | UNCONSTRUCTED | | | |
| 2 | 5,330 | 3.5% | 1,170 | 21.9% |

Source: Caltrans Truck Volume Book

CORRIDOR CONCEPT

CONCEPT RATIONALE

The transportation concept describes the operating conditions and physical facilities required to provide those conditions that could exist on SR-170 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 concept summary 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-170 will be implemented.

The transportation concept is composed of a Level of Service (LOS) and facility component. The concept facility is the facility that could be developed to maintain or attain the concept LOS.

PLANNED/PROGRAMMED PROJECTS AND STRATEGIES

| Segment | County | Post Miles | Project Description | Source | RTP ID |
|---------|--------|-------------------|--|---------------|----------|
| 2 | LA | I-5 36.0-39.4 | From SR-170 to SR-118 one HOV lane in each direction (10 to 12 lanes) including the reconstruction of the I-5/SR 170 mixed flow connector and the construction of the I-5/SR-170 HOV to HOV connector and the construction of the I-5/SR-170 HOV | RTIP | LA000357 |
| 2 | LA | US-101 1.57-11.75 | Add HOV lanes in both directions between SR-170 and I-110 | Meto 09 L RTP | |

| |
|--------------------------|
| COMPASS BLUEPRINT |
| None |

CONCLUSION

Traffic volume is forecasted to increase on SR-170 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 the 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-170 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 what is 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 employs a variety of strategies to address current congestion challenges including:

- High Occupancy Vehicle Lanes (HOV)
- Ramp Metering
- Congestion Pricing (Toll Lanes)
- Changeable Message Signs (CMS)
- TSM&O (Transportation System Management and Operations)

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. Incorporating TSM&O strategies into Planning process will help to support Caltrans new mission of providing safe, sustainable, integrated and efficient transportation system in the region.

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 a major a transit stop. TODs generally have a mix of residential, employment and shopping opportunities designed for pedestrians. Research has shown that this type of development increases

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 California Environmental Quality Act (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

| | |
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| AADT | Annual Average Daily Traffic |
| ADT | Average Daily Traffic |
| AQMD | Air Quality Management District |
| CALTRANS | California Department of Transportation |
| CEQA | California Environmental Quality Act |
| CHSRA | California High Speed Rail Authority |
| CMP | Congestion Management Plan |
| FHWA | Federal Highway Administration |
| HOV | High Occupancy Vehicle Lane |
| HOT | High Occupancy Toll Lane |
| HQTA | High Quality Transit Areas |
| IC | Interchange |
| IRRS | Interregional Road System |
| ITIP | Interregional Transportation Improvement Program |
| ITS | Intelligent Transportation System |
| LACBD | Los Angeles Central Business District |
| LOS | Level of Service |
| MF | Mixed Flow Lane |
| MFE | Mixed Flow Equivalent |
| ML | Managed Lane |
| MPO | Metropolitan Planning Organizations |

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|--------|--|
| RTP | Regional Transportation Plan |
| RTIP | Regional Transportation Improvement Program |
| RTPA | Regional Transportation Planning Agency |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCS | Sustainable Community Strategy |
| SHOPP | State Highway Operation Protection Program |
| SHS | State Highway System |
| SR | State Route |
| STIP | State Transportation Improvement Program |
| STAA | Surface Transportation Assistance Act |
| T | Truck Lane |
| TDM | Transportation Demand Management |
| TMS | Transportation Management System |
| V/C | Volume to Capacity Ratio |
| VMT | Vehicle Miles Traveled |

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, Transportation Management System (TMS) field elements, transportation demand management, and incident management.

Focus Route – Focus Routes are a subset of the 34 High Emphasis Routes. The routes represent 10 Interregional Road System (IRRS) corridors that should be of the highest priority for completion to minimum facility standards in the 20-year period. Completion of the Focus Routes to minimum facility standards (for most routes freeway or expressway) will assure a statewide trunk system is in place and complete for higher volume interregional trip movements.

Focus Routes serve as a system of high volume primary arteries to which lower volume and facility standard state highway routes can connect for purposes of longer interregional trips and access into statewide Gateways. The routes, taken as a whole, constitute a “backbone” for additional capacity and complete facilities for the state. They balance north-south and east-west access and connectivity statewide. The Focus Routes assure rural connectivity for the north state and otherwise connect the fastest growing urbanized areas and urban centers to a trunk system. All Focus Routes are on the National Highway System (an exception is the S.R. 49 portion of the S.R. 20 corridor), Freeway and Expressway System, and are STAA Truck or Truck Terminal Routes.

High Emphasis Route – The High Emphasis category represents routes that have high interregional importance from a statewide perspective. This makes them a priority to be programmed and constructed to at least the minimum facility concept standard (for most routes, this is freeway or expressway). The interstates are included in the High Emphasis category to highlight their critical importance to interregional travel and the State as a whole.

Interregional Road System (IRRS) -- The Interregional Road System was first identified by statute in 1989 as part of the Blueprint Legislation (a 10-year transportation funding package including AB 471, SB 300, and AB 973). It is a subset of the entire 265 State Highway System (SHS) routes that provides connectivity among all of California’s regions. There are currently 93 statutory IRRS routes (page 3 and Appendix E, page 101 Interregional Transportation Strategic Plan – October 2013). The IRRS was conceived as part of the larger effort to address the critical transportation system funding and development needs of the State. The implementation of IRRS improvements is dependent on prioritization of State transportation revenues. Most interstates are included in the IRRS. SB 45 requires that the Interregional Transportation Improvement Program (ITIP) include a specific allocation of funds to be programmed on IRRS routes in non-urbanized areas.

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 density, 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 within the traffic stream is now clearly affected by the presence 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 an extremely unstable flow. Maneuverability and psychological comfort are poor.

LOS F is a stop and go, low speed condition 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 post mile values increase from the beginning of a route within a county to the next county line. The post mile values start over again at each county line. Post mile values usually increase from south to north or west to east depending upon the general direction the route follows within the State. The post mile at a given location will remain the same year after year. When a section of road is relocated, new post miles (usually noted by an alphabetical prefix such as “R” or “M”) are established for it.

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