Preliminary Transportation Management Plan (TMP)

Constructing State Route 11 from State Route 905 to the Otay Mesa East Port Of Entry

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Caltrans

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11-SD-11 PM 0.0 to 2.8
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July 2011

Constructing State Route 11 From State Route 905 to the Otay Mesa East Port Of Entry

This Transportation Management Plan has been prepared under the direction of the following engineers. The registered Civil Engineer attests to the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data upon which recommendations, conclusions, and decisions are based.

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Approval Recommended By:

Allen Holden, P.E.
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Introduction

The Transportation Management Plan (TMP) is designed to minimize motorist delays when implementing projects on the State freeways and highways system. This should be accomplished without compromising public or worker safety, or the quality of the work being performed.

This Preliminary TMP addresses a proposal for construction of State Route 11 (SR-11), Commercial Vehicle Enforcement Facility (CVEF), and the Otay Mesa East Port of Entry (OME POE). SR-11 is planned as a four-lane highway connecting the State Route 905(SR-905)/SR-11 freeway-to-freeway interchange to the proposed OME POE at the international border with Mexico.

The TMP elements recommended in this report are:

- Public Information
- Motorist Information Strategies
- Incident Management
- Construction Strategies
- Contingency Plans
- Alternate Route Strategies

The intent of the TMP is to implement these elements to effectively achieve the following goals and objectives:

- Reduce traffic delay or time spent in the queue to less than 15 minutes above normal recurring traffic delay.
- Maintain traffic flow throughout the corridor and the surrounding areas.
- Provide a safe environment for the work force and motoring public.

The total cost to implement the TMP elements and to achieve the goals and objectives is estimated to be **$239,500**.

Project Description

The project presented in this document (referred to herein as the "proposed project" or "project") includes the following major elements: State Route 11 (SR-11), a United States (U.S.) federal Port of Entry (POE) at the international border with Mexico, and a State of California Commercial Vehicle Enforcement Facility (CVEF). The proposed project is located in southwestern San Diego County. It is proposed to construct a new four-lane toll highway, SR-11, that would extend from the future State Route 905/State Route 125 Interchange approximately 2.7 miles east to the proposed Otay Mesa East POE in the City of San Diego's Otay Mesa area and in the County of San Diego's East Otay Mesa area. This project will reduce border wait times and border traffic congestion, and create a link between the U.S. regional highway system and the Mexico free and toll road systems.

The proposed project entails the highway connecting SR-905 to the CVEF and the Otay Mesa East POE as well as a southbound SR-125 to eastbound SR-11 connector. SR-11 will cross four local roadways: Sanyo Avenue, Enrico Fermi Drive, Alta Road, and the proposed extension of Siempre Viva Road. Sanyo Avenue would be a grade-separated undercrossing and Alta Road would be a grade-separated overcrossing. A full interchange would be constructed at Enrico Fermi Drive and a partial interchange at Siempre Viva Road. This partial interchange will provide access to and from the west. Northbound commercial vehicles will have access to Siempre Viva Road directly from the CVEF.

At the northwestern end of the Project, two connector roadways to SR-905 are proposed. The first connector begins from westbound SR-11 and terminates approximately 500 feet west of the SR-905/SR-11 freeway-to-freeway interchange (Interchange) where it merges onto SR-905. This connector is anticipated to cross over the westbound SR-905 off-ramp to La Media Road before merging onto SR-905. The westbound SR-905 off-ramp to La Media Road originates from westbound SR-905 and is anticipated to extend approximately 4000 feet while running parallel with SR-905 before terminating at the intersection with La Media Road.

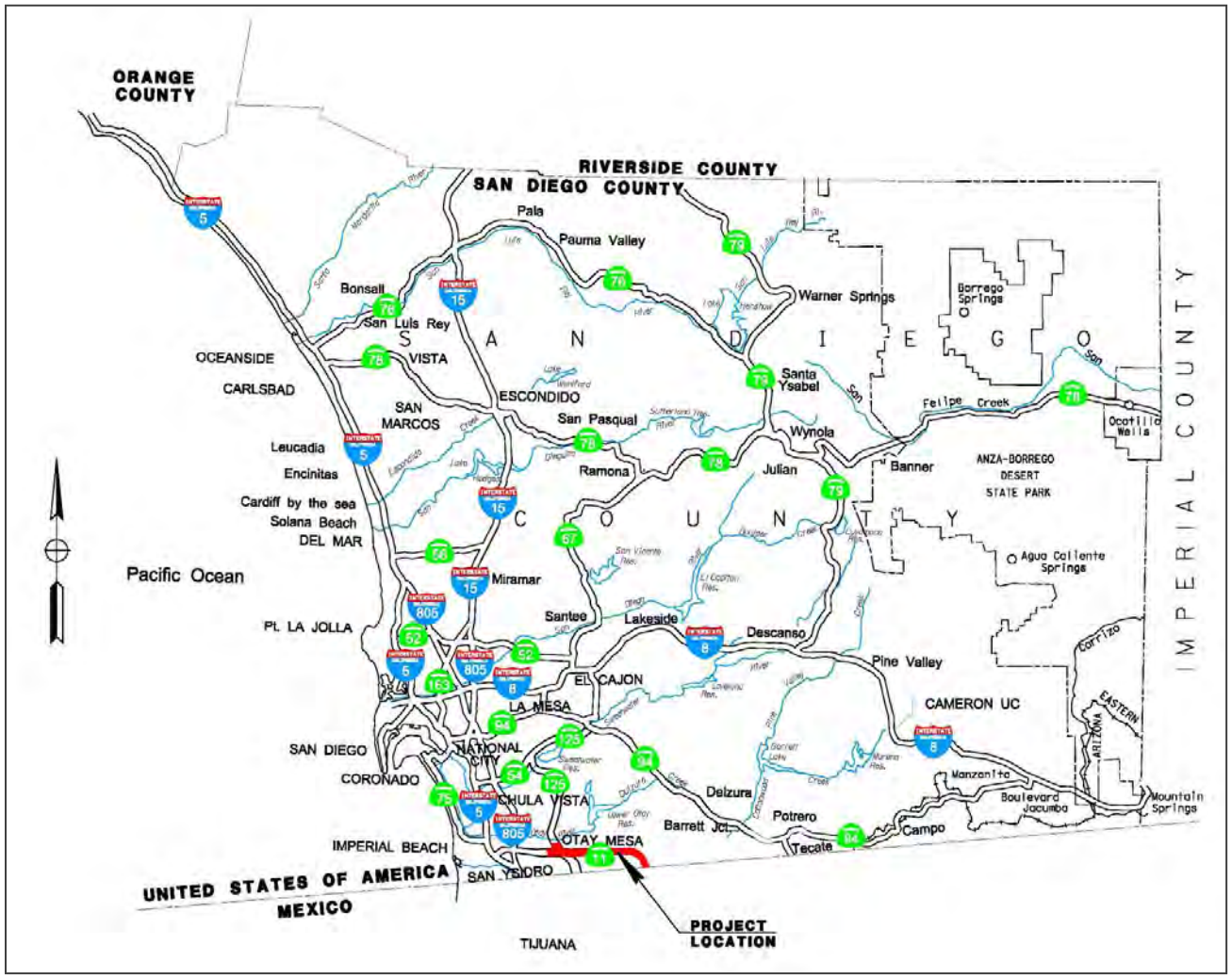
The second connector with SR-905 begins at the SR-905 eastbound off-ramp to SR-11, located immediately west of the Interchange, and transitions to SR-11. This connector is anticipated to cross over SR-905 and the SR-905 westbound off-ramp to La Media Road before transitioning onto eastbound SR-11.

The proposed OME POE is located at the southeastern end of the Project and will service passenger and commercial vehicle traffic in to and out of the United States. Two connecting roadways to the OME POE are proposed. The eastbound connection begins from eastbound SR-11 and terminates at the OME POE. Eastbound SR-11 will split commercial traffic and passenger traffic into separate roadways before passing under the proposed extension of Siempre Viva Road and terminating at the OME POE. The proposed interchange with Siempre Viva Road is located immediately northwest of the OME POE.

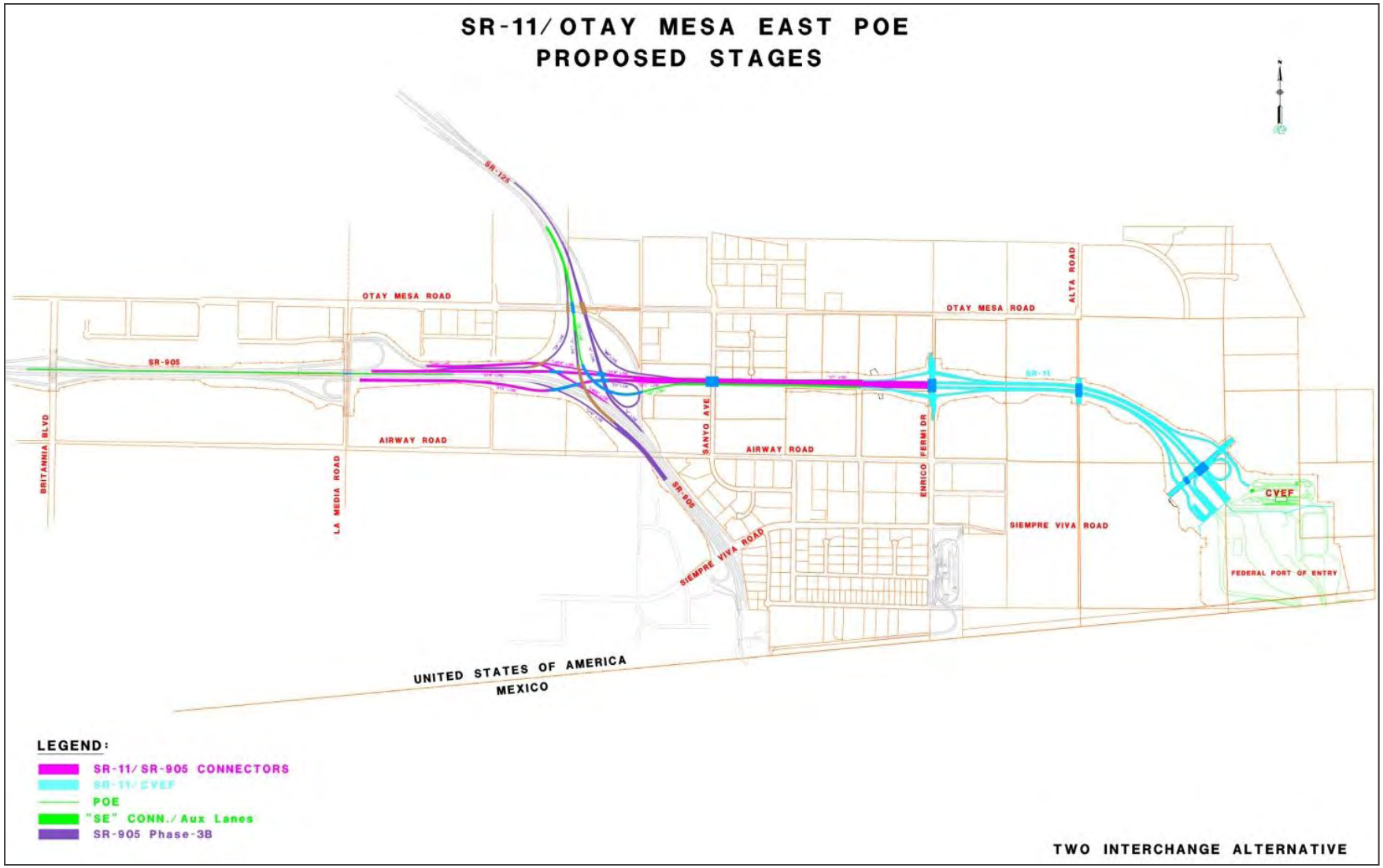
The westbound connection begins at the OME POE as two separate roadways and terminates as the northbound commercial and northbound passenger roadways merge onto SR-11. The northbound commercial roadway begins at the planned CVEF located adjacent to the north side of the OME POE. The passenger roadway begins at the northwest side of the OME POE and ascends to cross over both the southbound and northbound commercial roadways at grade with the Siempre Viva Road overcrossing. It then descends, looping 270 degrees to merge with the northbound commercial roadway. As both the commercial and passenger roadways merge, they cross under Siempre Viva Road, beginning westbound SR-11.

The Project will impact a business area immediately east of Sanyo Avenue as SR-11 passes between existing businesses along an entire developed block. Retaining walls are proposed to lessen the impacts of the Project within this area. Additionally, it is assumed that the various utility and drainage structures that will need to be relocated and reconstructed will occur within the Project's assumed two-year construction timeframe. See Figure 3 at the end of this section for a map of the freeway-to-freeway interchange.

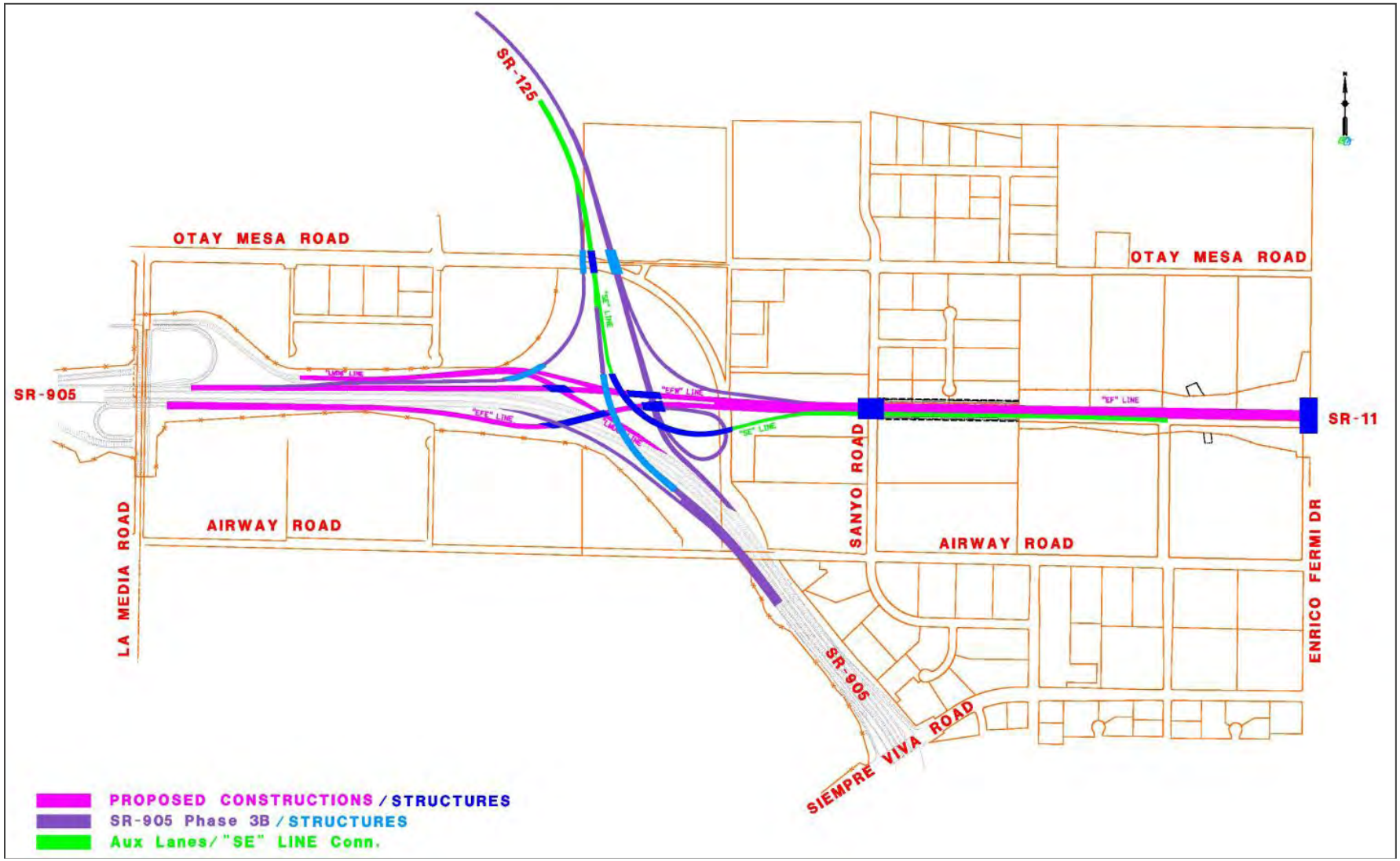
The Project is in the Project Approval and Environmental Document (PA&ED) phase. A Tier II EIR/EIS is under development. The Project is scheduled to break ground for construction late 2013, and opening day anticipated late 2015. A Location Map, Vicinity Map, and a Freeway-To-Freeway Interchange Map are located in Figures 1, 2, and 3, respectively.



Location Map
Figure 1



Vicinity Map
Two Interchange Alternative
Figure 2



Freeway-To-Freeway Interchange Map
Western portion of the Project
Figure 3

Existing Facilities

There are several significant facilities adjacent to the Project. The existing San Diego/Tijuana metropolitan border transportation infrastructure consists of two existing POEs: one in San Ysidro and one in Otay Mesa (See Figures 1, 2, and 3 preceding this section). The San Ysidro POE is served by two freeways, Interstate 5 (I-5) and Interstate 805 (I-805), which merge together into six lanes in each direction before crossing the border. The Otay Mesa POE is served by SR-905 and SR-125. Cross-border commercial traffic is restricted to the Otay Mesa POE. The nearest alternate commercial cross border corridor is located in Tecate, which is approximately 18 miles to the east geographically, and 43 miles by road, the majority of which is a two-lane highway through mountainous terrain.

State Route 905

Presently under construction, SR-905 will be a six-lane conventional highway, upon completion, connecting the Otay Mesa POE to both I-5 and I-805. In the project area, SR-905 will be heavily utilized by trucks and passenger vehicles crossing the International Border both into and out of Mexico. The area immediately surrounding SR-905 at the Otay Mesa POE is an active business area with many warehouses and industrial facilities. A large percentage (15%) of the daily traffic is comprised of trucks, including those with destinations well beyond the State and those which operate entirely within the roadway network surrounding the border crossing. Presently, SR-905 uses Otay Mesa Road a six-lane conventional road just north of Airway Road to connect to SR-125 and also to connect to I-5 and I-805 west of Britannia Blvd. It is assumed that SR-905 will be complete and fully functional before construction of SR-11 begins.

State Route 125

The SR-125 highway is a two-stage project that includes the 12.5 miles of highway from SR-54 near the Sweetwater Reservoir to SR-905 in Otay Mesa near the international border. The project is divided into three segments. The first two segments (Stage One) of the project are the Connector (a 3.2-mile publicly funded section from SR-54 to San Miguel Road in Bonita) and the Gap (a freeway-to-freeway interchange involving the reconstruction and expansion of an existing section of SR-54 where it intersects with the new route of SR-125). The remaining 9.3 miles of the project (Stage Two) connecting to SR-905 near the Otay Mesa border crossing is a state-of-the-art toll road. SR-125 opened initially as a four-lane highway with interchanges at SR-54, future Mount Miguel Road, East H Street, Otay Lakes/Telegraph Canyon Road, Olympic Parkway, future Birch Parkway and Otay Mesa Road/SR-905. SR-125 is designed so that it may be expanded with additional interchanges, carpool lanes and/or transit facilities constructed as future regional growth and transportation needs dictate. To date the south end of SR-125 terminates at Otay Mesa Road. The interchange connecting SR-125 with SR-905 is currently unfunded and plans to construct it are not progressing to date. It is assumed that construction will occur sometime after the Project is completed.

Traffic Management Plan

Project Goals and Objectives of the TMP

The policy for creating the Traffic Management Plan (TMP), according to Deputy Directive-60 (DD-60), is to minimize motorist delays when implementing projects or performing other activities on the State highway and freeway systems. This is accomplished without compromising public or worker safety, or the quality of the work being performed.

The TMP will address closures and other requirements to complete the project in a cost effective and timely manner with minimal interference with the traveling public.

The goals and objectives of this TMP are to:

- Reduce traffic delay or time spent in the queue to less than 15 minutes above normal recurring traffic delay.
- Maintain traffic flow throughout the corridor and the surrounding areas.
- Provide a safe environment for the work force and motoring public.

As a living document, the TMP remains active throughout the highway project. Evaluation of the success of TMP elements during the project is critical. Every effort should be made in advance to create a plan that will work effectively to minimize traffic delays. The TMP must be updated when material change to the project scope occurs affecting the function or adequacy of the TMP, or if TMP elements need to be adjusted to adequately address congestion at the project site.

TMP Elements: An Overview

The following TMP elements are considered the most important with respect to reducing traveler delay and enhancing traveler safety:

1) Public Awareness Campaign (PAC)
2) Motorist Information Strategies
    a. Portable Changeable Message Signs (PCMS)
    b. Ground Mounted Signs
    c. Highway Advisory Radio
    d. Caltrans Highway Information Network (CHIN)
3) Incident Management
    a. Construction Zone Enhanced Enforcement Program (COZEEP)

b. Freeway Service Patrol

c. Traffic Management Team (TMT)

4) Construction Strategies

a. Main Lane, Ramp, and Connector Closures

b. Total Facility Closure

c. Conflicts with Other Projects and Special Events

d. A+B Bidding

5) Contingency Plans

a. Traffic Contingency Plan

b. Contractor Contingency Plan

6) Alternate Route Strategies

a. Detour Traffic

The cost estimates for the above TMP elements are listed in the Transportation Management Plan Data Sheet (Appendix A). These TMP elements are discussed in the following sections.

1) Public Awareness Campaign (PAC)

The primary goal of a PAC is to educate motorists, merchants, residents, elected officials and governmental agencies about potential construction plans and schedule. The PAC is an important tool for reaching target audiences with important construction project information.

An effective PAC will enhance public acceptance, tolerance and cooperation. In addition, public awareness is expected to reduce the traffic demand in the construction zone by encouraging motorists to take alternate routes or to travel outside of closure hours.

In general, the PAC is designed to meet the following objectives:

- Identify target audiences that will be impacted by construction activities.
- Serve as the focal point for project-related questions regarding construction activities, road closures, noise, and dust.
- Inform the public about the construction project and how it could affect their travel through the SR-11 project area.

- Promote alternate routes and modes of transportation.

Specific elements that may be used to inform motorists about construction activities include hand delivered brochures, press releases as needed, paid advertising, public meeting/speakers bureau, and construction bulletins.

District 11 has an existing website where project information is posted. This website (www.dot.ca.gov/dist11) should be included in the PAC to inform motorists about construction activities.

The Project is located immediately north and east of the busy area of the Otay Mesa Port of Entry. There should be at least one public meeting before the start of this project. Several branches of law enforcement operate in the vicinity and their operations may be affected by the work being done. The San Diego Police Department, San Diego County Sheriff's Department, United States Customs and Border Protection (CBP), California Highway Patrol (CHP), and the United States Border Patrol should be notified of construction activities well in advance of its beginning. The Otay Mesa Chamber of Commerce, emergency services and the California Trucking Association should also be kept informed of construction activities and available detours. Additionally, construction bulletin brochures should be sent to all employers in the project area that have staff working nights. These notices should also be sent to all prisons in the area. Newspaper advertisements in the San Diego Union Tribune may be needed as this area of the county continues to grow. Radio advertisements may be substituted for newspaper advertisements.

2) Motorist Information Strategies

The effective implementation of this element is crucial in order to divert the desired volume of traffic away from the construction site. It also enables motorists to make informed decisions about their own travel plans and options with information that is as close as possible to being real-time. Consideration has been given to portable changeable message signs, ground mounted signs, and the Caltrans Highway Information Network (CHIN).

a. Portable Changeable Message Signs (PCMS's)

PCMS's are considered one of the most effective methods to alert motorists of construction activities prior to reaching the work zone, thereby encouraging them to take an alternate route.

- The project estimate calls for a total of six PCMS's. These should be visible to motorists on westbound and eastbound SR-905 to inform them of approaching construction activities.

- During construction, all PCMS's should be checked daily, and fixed or replaced as needed to ensure that they are in proper working condition and that their visibility is not compromised.

- Suitable locations and messages for the PCMS's will be developed jointly by the District Traffic Manager (DTM) Branch and Construction.

b. Ground Mounted Signs

Ground mounted signs are another effective method of getting information about construction and detours to motorists.

- Ground mounted signs should be placed at visible locations in the streets around the main detour along Sanyo Avenue. These should be placed at decision-making points on routes approaching the detour to inform motorists about the options that exist for avoiding construction areas and for other alternate routes that may allow them to avoid the detour as well.

- A ground mounted sign should be used at the existing CVEF to help inform trucks leaving the CVEF of a detour to the north side of the Project along Sanyo Avenue.

- Signs should be in English and Spanish.

- Ground mounted signs should be maintained and updated to keep information current and accurate.

c. Caltrans Highway Information Network (CHIN)

Caltrans maintains a 24-hour information hotline (1-800-427-ROAD) as well as website (http://www.dot.ca.gov/cgi-bin/roads.cgi) with the latest information regarding the conditions of the California State Highway System. The hotline is available for free from any touchtone phone, cellular phone or pay phone. The information provided covers incidents that cause significant delays to the normal flow of traffic including, but not limited to, full closures, one-way traffic controls, lane closures, construction, maintenance projects, and emergencies.

3) Incident Management

a. Construction Zone Enhanced Enforcement Program (COZEEP)

COZEEP refers to the planned presence of CHP Officers stationed at a construction area. Their presence during active lane closures will decrease the response time of incident management and will also help reduce speeds in the work zone, thereby creating a safer environment by reducing the risk of accidents. Fifty nights of COZEEP are estimated to be utilized during placement and removal of K-rail along the SR-905/SR-11 interchange, restriping of the lanes, and falsework construction over SR-905.

b. Freeway Service Patrol

Freeway Service Patrol (FSP) should be provided whenever there are shoulders on existing SR-905 which are narrowed or eliminated. Availability of towing services, especially for large trucks, is

critical to the smooth and continuous operation of the freeway system. The San Diego Association of Government's (SANDAG) freeway service patrol should be made available to serve the Otay Mesa area. The FSP provided by SANDAG operates in the peak periods of weekdays only. Additional FSP would ensure that there is dedicated FSP coverage all day on weekdays and on Saturdays (not Sundays or Federal holidays). The cost to provide this additional FSP coverage is $1,468 per weekday and $949 per Saturday. Their contact information should be made available to CHP and San Diego Police working in the area. This service should be called at the earliest opportunity, as the response time may vary.

c. Transportation Management Team (TMT)

The TMT should be scheduled whenever construction activities are expected to cause a traffic queue on the freeway. The TMT units are to be requested by the Resident Engineer whenever a major lane closure or full freeway closure is planned. The TMT helps to prevent accidents (queue protection) by providing advanced warning to the motorists of abnormal downstream traffic congestion on the freeway. It can also help evaluate signs for detours out in the field and provide advance warning to the motorists in case of an accident or non-recurring congestion. Additionally, the TMT will direct traffic to alternate routes as traffic conditions dictate. The Construction Traffic Manager (CTM) and TMT staff will communicate on-site traffic conditions to the Transportation Management Center (TMC) in District 11 and help develop effective messages for portable and fixed CMS's. The TMT will also recommend changes in TMP elements that will be used to manage traffic.

The CTM and District Traffic Manager (DTM) will be responsible for overseeing the traffic management operation in this corridor. The TMT will assist with the monitoring of traffic conditions (i.e. traffic delays which approach the District's 15-minute delay threshold). Therefore, it is recommended that the TMT monitor planned lane closures for any delays that go beyond the 15-minute threshold and inform the Caltrans Construction Resident Engineer/Inspector.

The TMT will also assess potential problem areas and assist in implementing solutions. Due to the fact that the TMTs are equipped with truck-mounted changeable message signs, the CTM can deploy TMT units very quickly to provide end-of-queue signing to prevent accidents from occurring when nonrecurring congestion develops.

In order to provide these services, the TMT and CTM may need to be resourced for their efforts from this project EA. These services should only be used for mainline closures of construction operations which can be quickly and efficiently removed from the roadway without risking the safety of either workers or the traveling public.

The TMT service will be provided by Caltrans out of the TMC and will be responsible for facilitating communication between construction personnel, CHP personnel, and freeway service patrol. By acting as the primary communications center, the TMC will help expedite the correction of minor and major incidents, help make decisions concerning the closing and opening of on-ramps, manage traffic using the PCMS's and fixed changeable message signs, and provide traffic information to the media.

4) Construction Strategies

a. Lane, Ramp, and Connector Closures

In order to connect SR-11 and SR-905, two freeway-to-freeway connectors are proposed: eastbound and westbound. Both connectors will impact existing traffic as each connector is constructed connecting to SR-905. To allow placement of removable barriers (K-rail), a temporary lane shift is proposed for both directions of SR-905. Lane closures are anticipated during placement of K-rail and restriping operations. A temporary lane shift reduces existing lane widths by one foot so removable barriers can be placed to protect workers that are constructing the eastbound and westbound connectors. A temporary lane shift may reduce the existing three lanes on SR-905 from 12 feet wide to 11 feet wide, which will allow for a three-foot offset from the outer lane. K-rail, which has a width of two feet, will be placed on the three-foot offset. The remaining one foot of space from the outer edge of the outer lane will allow for a workable area to construct the freeway-to-freeway connectors. The reduced and restriped lane widths are expected to operate at design capacity and speed, and may be in place during the expected two-year duration of construction.

b. Total Facility Closure

In general, the Otay Mesa POE remains open 24 hours per day for non-commercial vehicles, but is closed each night between ten p.m. and six a.m for commercial vehicles. This will facilitate construction at the Interchange when full freeway closure is needed. Full closure of SR-905 is anticipated to last for four nights due to falsework construction for the eastbound and westbound SR-11 connectors. The closure requirements will be provided during the PS&E phase of the Project. The DTM and TMP Coordinator should be notified as far in advance of the needed closures as possible. Reasonable access to the border crossing facility should be provided to law enforcement as required.

c. Conflicts with Other Projects and Special Events

Concurrent construction with overlapping project limits should be anticipated in advance and may require a review of TMP elements during construction to avoid unanticipated impacts to traffic flow. A joint effort between the DTM/CTM and Construction must be made to check whether there will be any projects scheduled concurrently with the Project. To date, no major projects appear to be in a material or direct conflict. It is assumed that SR-905 will be completed before the Project begins construction. Also, it is assumed that SR-125 will not have any construction activity during construction of the Project.

5) Contingency Plans

a. Traffic Contingency Plan

The DTM Branch shall be available on an as-needed basis to aid in providing assistance if redirecting traffic volumes is required. Such efforts may require additional cooperation on the part of

Caltrans Public Affairs, CHP COZEEP units, TMP coordinator, TMC personnel, TMT units, and/or maintenance personnel.

This plan is to be activated whenever the contractor's contingency plan is anticipated to fail and opening of lanes on time is deemed unachievable by Resident Engineer/field inspectors.

Early notification to the following is recommended:

- TMC personnel
- Public Information Officer
- District Traffic Manager Branch
- CHP
- TMT
- Maintenance
- Freeway Service Patrol

TMC personnel have access to contact numbers of all branches listed above and can assist in communications if required by field personnel.

It is highly recommended that both a Contractor Contingency Plan and a Caltrans Contingency Plan be reviewed prior to any lane closure activity.

b. Contractor Contingency Plan

Contract special provisions typically require the contractor to provide a Contingency Plan to the Resident Engineer. When developed for the Project, this plan should be submitted by the contractor and reviewed by the engineer. Back-up equipment and material should be on site for any item of work in which a failure may cause a late pick up of a lane closure.

6) Alternate Route Strategies

a. Detour

Temporary closures of SR-905, Enrico Fermi Drive and Alta Road will be required to construct SR-11. Therefore, temporary detours will be necessary to provide access to both sides of these local roadways. Sanyo Avenue will serve as the main detour when Enrico Fermi Drive and Alta Road are closed. During construction of the Project, falsework will be constructed over Sanyo Avenue, thereby closing the Sanyo Avenue detour for approximately two weeks that will include one lane

closure with a flagman during the day and complete closure at night. During this intermittent closure of Sanyo Avenue, the detour will be redirected along Airway Road, La Media Road, and Otay Mesa Road. It is assumed that the Sanyo Avenue detour will exist throughout the Project's two-year construction time frame. Enrico Fermi Drive will need complete closure for five days and a new at-grade detour will be built adjacent to the new bridge site that will remain open for six months.

Falsework will also be constructed for the eastbound connector to SR-905, and will require a temporary detour for approximately four nights to construct and remove falsework. When this closure occurs, both the eastbound and westbound SR-905 will be detoured along Siempre Viva Road and La Media Road where there are SR-905 interchanges at both local roads.

As part of the preferred alternative the southbound SR-125 to eastbound SR-11 connector will require a temporary closure of Otay Mesa Road for three nights to construct and remove falsework. When this occurs, the detour will be along Harvest Road, Airway Road and La Media Road.

The main detour throughout the Project's two-year construction duration will utilize Sanyo Avenue. Several minor detours will exist as falsework is constructed above Sanyo Avenue, and SR-11 is constructed.

Reasonable access to businesses along the main and minor detours should be maintained throughout the duration of the Project's construction. The Project expects the main detour to be operational throughout the duration of construction and assumes no modifications are necessary to any streets.

APPENDICES

Appendix (A) – TMP Data Sheet

TRANSPORTATION MANAGEMENT PLAN DATA SHEET
(Preliminary TMP Elements and Costs)

Co/Rte/KP SD/11/0.0 to 2.8 and SD/905/R8.4 to 10.1 EA 11 0000 0023 056310 Alternative No. Rev. 1

Project Limit SR-125/SR-905 to the Otay Mesa East Port of Entry

Project Description Construction of SR-11

Expected Construction Schedule 2013-2015

1) Public Information

☒	a. Brochures and Mailers	$6,000
☒	b. Press Release	
☒	c. Paid Advertising	$20,000
☐	d. Public Information Center/Kiosk	$
☒	e. Public Meeting/Speakers Bureau	
☐	f. Telephone Hotline	
☒	g. Internet	
☒	h. Others Construction Bulletins	$16,500

2) Motorists Information Strategies

☐	a. Changeable Message Signs (Fixed)	$
☒	b. Changeable Message Signs (Portable)	$30,000
☒	c. Ground Mounted Signs	$17,000
☒	d. Highway Advisory Radio	$
☒	e. Caltrans Highway Information Network (CHIN)	
☐	f. Others	$

3) Incident Management

☒	a. Construction Zone Enhanced Enforcement Program (COZEEP)	$50,000
☒	b. Freeway Service Patrol	$100,000
☐	c. Traffic Management Team	
☐	d. Helicopter Surveillance	$
☐	e. Traffic Surveillance Stations (Loop Detector and CCTV)	$
☐	f. Others	$

4) Construction Strategies

- [x] a. Lane Closure Chart
- [ ] b. Reversible Lanes
- [ ] c. Total Facility Closure
- [ ] d. Contra Flow
- [ ] e. Truck Traffic Restrictions $ _____
- [ ] f. Reduced Speed Zone $ _____
- [x] g. Connector and Ramp Closures
- [ ] h. Incentive and Disincentive Clause $ _____
- [ ] i. Moveable Barrier $ _____
- [ ] j. Others _____ $ _____

5) Demand Management

- [ ] a. HOV Lanes/Ramps (New or Convert) $ _____
- [ ] b. Park and Ride Lots $ _____
- [ ] c. Rideshare Incentives $ _____
- [ ] d. Variable Work Hours
- [ ] e. Telecommute
- [ ] f. Ramp Metering (Temporary Installation) $ _____
- [ ] g. Ramp Metering (Modify Existing) $ _____
- [ ] h. Others _____ $ _____

6) Alternative Route Strategies

- [ ] a. Add Capacity to Freeway Connector $ _____
- [ ] b. Street Improvement (widening, traffic signal... etc) $ _____
- [ ] c. Traffic Control Officers $ _____
- [ ] d. Parking Restrictions
- [x] e. Others Detour Traffic $ _____

7) Other Strategies

- [ ] a. Application of New Technology $ _____
- [ ] e. Others _____ $ _____

TOTAL ESTIMATED COST OF TMP ELEMENTS = $239,500

Project Notes:

Assumptions/ Comments:

1. Entire project will take approximately 520 working days to construct.

2. Current dollar values used. Inflation was not factored into the estimate.

3. Traffic Control/Maintain Traffic costs were not provided. Please consult with the OE or Construction office for this estimate.

4. Portable CMS specified for this project by this estimate are designated for congestion relief as outlined by DD-60. Portable CMS required for other purposes should be included under other specifications. Six portable CMS are assumed here ($5,000 each).

5. The COZEEP specified for this project by this estimate is designated for congestion relief as outlined by DD-60. The COZEEP required for other purposes should be included under other specifications.

6. There should be at least one public meeting before the start of the project. The Otay Mesa Chamber of Commerce should be notified of all closures affecting their members. Construction Bulletin brochures should be sent to employers that have staff working nights. These notices should also be sent to all of the prisons in the area. Newspaper ads in the San Diego Union may be needed as this area of the county continues to grow. Radio ads may be substituted for newspaper ads. Tweets for each closure will be sent out. In addition, emergency services shoud be notified as well as the CA trucking association.

Note 1: All projects who's contract value is $5 million or more, and/or meet certain other criteria should be evaluated for applicability of A+B Bidding. Consult the OE for more details about A+B Bidding.

Note 2: As outlined in Deputy Directive 60, this TMP is a living document, subject to change as required by changing circumstances. If there is material change to the project scope which will affect the function or adequacy of the TMP, then changes to the TMP must be addressed. If traffic conditions at the project site demonstrate that TMP elements need to be adjusted to adequately address congestion, then the TMP shall be altered accordingly.

Note 3: Hospitals with emergency services and fire stations that may require access through work zones at all hours should be accommodated. Schools, major venues, shopping malls, and other heavily utilized areas should also be notified of construction activities that may impact their services.

PREPARED BY Allen Holden DATE 7/19/11

APPROVED BY Foroud Khadem DATE 7/19/11

Appendix (B) – Deputy Directive 60

Deputy Directive

Number: DD-60-R1

Refer to Director's Policy: DP-03 Safety and Health
DP-05 Multimodal Alternatives Analysis
DP-08 Freeway System Management

Effective Date: September 2007

Supersedes: DD-60 (06-15-00)

TITLE Transportation Management Plans

POLICY

The California Department of Transportation (Department) minimizes disruption to the traveling public during construction or other planned activities necessary on the State Highway System. The Department uses innovative means to accelerate completion of highway work activities while taking necessary steps to maintain public and worker safety and the quality of the work being performed.

Transportation Management Plans are required for all planned activities on the State Highway System. Transportation Management Plan measures and associated road user costs and additional construction costs are considered during the project initiation or planning stage to the fullest extent feasible. Transportation Management Plans include strategies that strive to minimize work-related traffic delays while reducing overall duration of work activities where appropriate. Strategies that may result in a net reduction of overall delay for motorists include: full facility closures, extended weekend closures, continuous weekday closures, A+B contract specifications, and performance-based traffic handling specifications.

BACKGROUND

The Department's major emphasis on transportation projects has largely shifted from new construction to reconstruction, operation, and maintenance of existing facilities. With the ever-increasing traffic volumes on California's State Highway System and more complex project corridors, the need to actively manage the State's highway facilities has become critical.

In order to prevent unreasonable traffic delays resulting from planned work, Transportation Management Plans must be carefully developed and implemented to maintain acceptable levels of service and safety during all work activities on the State Highway System.

The Federal Highway Final Rule, 23 Code of Federal Regulations 630, Subpart J, referred to as "Work Zone Safety and Mobility" requires the Department to adopt a policy that implements Transportation Management Plans on all federally-funded highway projects. Transportation Management Plans are to be consistent with the Final Rule guidelines for developing and implementing that policy.

Transportation Management Plans are to be consistent with Deputy Directive-64, "Accommodating Non-Motorized Travel."

DEFINITIONS

Transportation Management Plan is a program of activities for alleviating or minimizing work-related traffic delays by the effective application of traditional traffic handling practices and an innovative combination of various strategies. These strategies encompass public awareness campaigns, motorist information, demand management, incident management, system management, construction methods and staging, and alternate route planning. Depending on the complexity of the work or magnitude of anticipated traffic impacts, a Transportation Management Plan may provide lane closure charts, Standard Special Provisions for maintaining traffic, traffic control plans, and for a major project, a separate comprehensive report. The Department's "Transportation Management Plan Guidelines" provide more information on the recommended level of detail for Transportation Management Plans.

Major Lane Closures are those that are expected to result in *significant traffic impacts* despite the implementation of Transportation Management Plans.

Significant Traffic Impact is defined as being an individual traffic delay of 30 minutes or more above normal recurrent travel time on the existing facility. Transportation Management Plan strategies are designed to maintain additional delays below this maximum threshold, i.e. less than 15 or 20 minutes. This 30 minute maximum delay may be exceeded with approval by the District Lane Closure Review Committee.

District Lane Closure Review Committee is comprised of the Deputy District Directors of Construction, Design, Maintenance and Traffic Operations, and the District Public Information Officer (PIO).

Headquarters Lane Closure Review Committee is comprised of the Division Chiefs of Construction, Design, Maintenance and Traffic Operations, and the Deputy Director of External Affairs. The California Highway Patrol (CHP) will be called upon to participate as appropriate at the District or Headquarters Level.

RESPONSIBILITIES

District Directors:

- Enforce Transportation Management Plans and lane closure policies to ensure compliance with established procedures, guidelines, and policies.
- Ensure that resources for all Transportation Management Plan activities are provided.

Chief, Division of Traffic Operations:

- Develops, implements, and maintains statewide policy regarding Transportation Management Plans.
- Provides direction and assistance to District staff on all Transportation Management Plan activities as well as resources for training of District staff involved in Transportation Management Plans.
- Ensures consistency among the Districts on the development and implementation of Transportation Management Plans.

Deputy District Directors, Construction, Design, Project Management, Maintenance and Traffic Operations:

- Require all staff involved in Transportation Management Plan activities to participate in Transportation Management Plan training.
- Ensure that staff involved in highway work activities consider alternatives that will strike a balance between reducing the overall construction duration and minimizing disruption to the traveling public.

Chief District PIO:

- Participates in the project development phase of appropriate projects as determined by the Project Development Team to provide input on the cost of public awareness campaigns, which should be included in the construction contract allotment under State Furnished Materials and Expenses.
- Attends preconstruction or planning meetings as needed and prepare a project plan for community outreach strategies.
- Works with the District Project Manager to ensure that Transportation Management Plan funding for community outreach strategies is planned accordingly as well as expended appropriately, and that personnel time is included in the Work Breakdown Structure for the project.
- Assists or be the lead in implementation of a project's public awareness campaign.

- Develops and maintains liaisons with the media, affected local jurisdictions and legislators, and other external partners both prior to and during the construction period, as needed.

District Lane Closure Review Committee:

- Reviews proposed work activities and approves or makes recommendations in a timely manner when planned activities are expected to 1) result in significant traffic impacts, or 2) be of an interregional, statewide, or otherwise sensitive nature.
- When the District Lane Closure Review Committee determines that consultation or approval by the Headquarters Lane Closure Review Committee is appropriate, requests through the District Traffic Manager that the Headquarters committee convene to discuss a specific project and its anticipated impacts.

District Transportation Management Plan Managers:

- Act as single focal points for planning and development of Transportation Management Plans. Participate in the evaluation of design, potential traffic impacts and mitigation measures for project alternatives and in the preparation of Project Study Reports, Project Reports, Plans, Specifications, and Estimates. The Transportation Management Plan Manager should involve District Traffic Manager, members of the Planning, Maintenance and Construction Divisions and the Project Development Team in the planning and development of the Transportation Management Plan to address all pertinent issues, including multi-modal strategies, roadway maintenance during temporary closures, and constructability review.
- Work with the District Traffic Manager, District Design, Project Manager, Construction and PIO as appropriate to determine the extent of a Transportation Management Plan and ensure that the Transportation Management Plans are updated during all phases of a project. Facilitate review, approval, modification or disapproval of all Transportation Management Plan measures.
- Consider the cumulative impact of multiple projects as well as other activities that may create or generate an increase in traffic demand within the limits and during the work period. Oversee implementation and coordination of inter-regional Transportation Management Plans between corridors, districts, neighboring states and Mexico.
- Ensure that Transportation Management Plan planning and implementation is coordinated with the CHP and other local and regional transportation stakeholders as appropriate.

District Project Managers:

- Require Transportation Management Plans to be considered in the earliest stages of development for all projects and activities performed on the State Highway System.
- Identify needed project resources for all Transportation Management Plan measures and activities.
- Schedule projects to combine with other work activities to the extent possible.
- Encourage the use of innovative construction staging and contracting methods to accelerate project completion when appropriate.
- Include the District Transportation Management Plan Manager, the District Traffic Manager, and the PIO as needed on Project Development Teams from project initiation through completion of construction and provide adequate project information for review.
- Coordinate development of Transportation Management Plans with affected local and regional transportation stakeholders as needed.

District Traffic Managers:

- Consult with the Transportation Management Plan Manager during the planning and development of the Transportation Management Plan.
- Responsible with the District Construction Engineers, Resident Engineers, Encroachment Permit Inspectors, Maintenance Supervisors/Superintendents and PIO to ensure implementation of the Transportation Management Plan and make changes to the Transportation Management Plan if needed during conduct of the work.
- Determine when review of work activities by the District Lane Closure Review Committee or Headquarters Lane Closure Review Committee is required or necessary.
- Responsible for the day-to-day traffic decisions pertaining to traffic impacts from planned activities on the State Highway System.
- Coordinate with the Transportation Management Center or District Communication Center staff to respond with appropriate measures when significant travel delays occur on the State Highway System.
- Facilitate review, approval, modification, or disapproval of planned lane closure requests on the State Highway System.
- Recommend termination or modification of active planned lane closure operations without compromising the safety of the public or workers, when traffic impact becomes significant.
- Review construction contingency plans.

District Design, Office Engineer, Maintenance, and Encroachment Permit Engineers:

- Ensure Transportation Management Plan measures are fully incorporated in the development of a project.

- Coordinate with the District Traffic Manager and the District Transportation Management Plan Manager to consider alternative strategies as appropriate to determine the best alternatives for balancing traffic impact cost, and construction duration and cost.
- Ensure that impacts of Transportation Management Plan options are fully considered during the development of work schedules and cost estimates.
- Coordinate with District Traffic Management and District Transportation Management Plan Manager if changes in Transportation Management Plan strategies are warranted during all phases of the work. Ensure that Transportation Management Plan content is up-to-date by obtaining certification of the Transportation Management Plan by District Traffic Manager and District Transportation Management Plan Manager before submittal to the Office Engineer at Ready-to-List phase.
- Develop project information in consultation with the Project Manager, District Traffic Manager and Transportation Management Plan Manager to present to the District Lane Closure Review Committee or Headquarters Lane Closure Review Committee when deemed appropriate.

District Construction Engineers, Resident Engineers, Encroachment Permit Inspectors, and Maintenance Supervisors/Superintendents:

- Ensure full implementation of approved Transportation Management Plans in close coordination with the District Traffic Manager so that disruption to the traveling public is minimized.
- Work with the District Traffic Manager to ensure that project activities conform to the Transportation Management Plan, contingency plans are implemented if necessary, and disruption to the traveling public is minimized and does not exceed limits established in the Transportation Management Plan.
- Include the District Transportation Management Plan Manager, the District Traffic Manager, and the PIO as appropriate in preconstruction or work planning meetings.
- Determine when a construction contingency plan from the contractor is required.
- Ensure contractor is prepared to comply with Transportation Management Plans as related to work performance.
- Notify District Communication Centers or Transportation Management Centers when unforeseen traffic impacts result from planned work.
- Notify the District Communication Center or Traffic Management Centers to report the status of all lane closures in a timely manner (when closures are put in place and when they are picked up) so that accurate information is provided to the public. When reporting, provide specific details, particularly when a planned lane closure may be picked up late and significant traffic impacts are expected to result.

- Coordinate work activities with the CHP and other local and regional transportation stakeholders as appropriate.

Traffic Management Center Staff:

- Status lane closures in the statewide Lane Closure System.
- Activate Transportation System Management elements in support of the Transportation Management Plan.
- Inform the District Traffic Manager when notified of potential significant impacts due to planned highway activities.

APPLICABILITY

All departmental employees involved in Transportation Management Plan activities.

Randell H. Iwasaki

RANDELL H. IWASAKI
Chief Deputy Director

September 28, 2007
Date Signed