

Transportation Management Plan (TMP)

Project Name

Select Highway

Select County

Select Design Phase

Project Key Number

Select Date

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# Introduction

The introduction should be a brief overview of the Project, including an overview of the existing conditions and proposed improvements, the proposed work zone traffic control strategies, the anticipated construction schedule and timeline, and the TMP goals.

The introduction may include TMP Roles and Responsibilities. It may include pertinent project specific information that may have a large impact on the project, i.e. extremely high traffic volumes, closures, etc.

Example:
Replacement of the I-5 bridges over King St. in King City is expected to create significant impacts in the vicinity of the project. This TMP shows the analysis of alternate traffic control schemes, the anticipated impacts of the construction, and the strategies that will be deployed to mitigate the impacts.

Roles & Responsibilities
Transportation Project Manager, Name, Contact Info – Roles & Responsibilities
Resident Engineer, Name, Contact Info – Roles & Responsibilities
Work Zone Traffic Control Designer, Name, Contact Info – Roles & Responsibilities
Work Zone Traffic Analyst, Name, Contact Info – Roles & Responsibilities
Public Information Officer, Name, Contact Info – Roles & Responsibilities

# Project Description

The project description should include the scope and background of the proposed Project.
Information included may be project background, type, limits/corridor, goals and constraints, schedule and timeline, and related projects.

Include:
-Project Purpose and Need
-Goals & Objectives (Roadway/Traffic Narratives)
-Schedule
-Vicinity Map
-Related Projects
-Stakeholders

# Existing Traffic & Roadway Conditions

 This section should describe all of the pertinent existing and proposed conditions within project limits, as related to the temporary traffic control. Include traffic information, roadway information, land use, stakeholder input, and other information pertinent to the TMP.

The existing conditions generally include:

- Roadway characteristics (history, roadway classification, number of lanes, geometrics).
- Historical traffic data (volumes, truck percentage, speed, peak hours, safety).
- Traffic operations (traffic controls).
- Pedestrian/bicycle facilities.
- Transit facilities.
- Land Use.

- Environmental.
- ROW.
- Stakeholder Input.

# Proposed Work Zone Strategies

Discuss the preferred Work Zone Traffic Control Strategies, including the Traffic Control Plan, Public Information and Outreach, Stakeholder Commitments, and Traffic Operations. This section should document when work zone standards will not be met and discuss justification for not meeting the standard

## Work Zone Traffic Control Narrative

Work Zone Traffic Control Narrative section should discuss the work zone traffic control strategies used for the Project, including:
- Construction stages and phases, including work that can be done during day/night
- Construction schedule
- Lane use
- Work Zone Traffic Analysis / Lane restriction hours
- Local and special events
- Detours
- Any other pertinent information related to decisions on work zone traffic control strategies

## Temporary Pedestrian Accessible Routing

The temporary pedestrian accessible routing section should discuss the pedestrian specific work zone traffic control strategies used for the Project.

## Freight Mobility

The adoption of the Guiding Principle has resulted in changes to the mobility coordination process. This section should discuss the freight mobility considerations taken into account as part of the work zone traffic control strategies. This includes:

-Route designation per SPDB Mobility Services Team Freight Mobility Map (including Day/Night maps).

-Coordination efforts and input from the Mobility Advisory Committee (MAC). Reference the “Project Mobility Considerations Checklist” in the ***Referenced Work Zone Documents*** section

-Highway Restriction Notice requirements (Form 734-2357)

-Horizontal/vertical clearances, and/or length/weight restrictions.

-Critical pair routes.

## Traffic Operations

The traffic operation section should discuss any traffic operations employed by the Project to lessen temporary traffic control impacts of the project. Items may include work zone ITS strategies, demand management strategies, work zone safety strategies, and incident or enforcement management strategies

## Public Information and Outreach

Discuss the communications strategies that seek to inform affected road users, the general public, area residences and businesses, and appropriate public entities about the project, the expected work zone impacts, and the changing conditions on the project. This may include traveler information strategies. The scope of the public information should be determined by the project characteristics and the public information and outreach strategies identified. Public information should be provided through methods best suited for the project, and may include, but not be limited to, information on the project characteristics, expected impacts, closure details, and commuter alternatives.

## Work Zone Strategies Checklist

| Temporary Traffic Control | √ |
| --- | --- |
| Traffic Control Devices |
| 1. Temporary signs
 |[ ]
| 1. Sequential arrow boards
 |[ ]
| 1. Channelizing devices (tubular markers, drums)
 |[ ]
| 1. Pedestrian channelizing devices (PCD)
 |[ ]
| 1. Bicycle Channelization Devices (BCD)
 |[ ]
| 1. Temporary pavement markings
 |[ ]
| 1. Temporary traffic signals
 |[ ]
| 1. Flaggers
 |[ ]
| 1. Flaggers station lighting
 |[ ]
| 1. Radar speed trailers
 |[ ]
| 1. Temporary barrier glare screen
 |[ ]
| 1. Surface mounted tubular markers
 |[ ]
| Project Coordination Strategies |
| 1. Other area projects
 |[ ]
| 1. Utilities
 |[ ]
| 1. Right-of-Way
 |[ ]
| 1. Other transportation infrastructure
 |[ ]
| Innovative Contracting Strategies |
| 1. Design-Build
 |[ ]
| 1. A+B Bidding
 |[ ]
| 1. Incentive / Disincentive clauses
 |[ ]
| 1. Lane rental
 |[ ]
| 1. Performance specifications
 |[ ]
| Innovative or Accelerated Construction Techniques |
| 1. Prefabricated / precast elements
 |[ ]
| 1. Rapid cure materials
 |[ ]
| Traffic Control Strategies |
| 1. Construction phasing / staging
 |[ ]
| 1. Full roadway closures / detour
 |[ ]
| 1. Lane shifts or closures
 |[ ]
| 1. two-way, one-lane closures
 |[ ]
| 1. Ramp closures
 |[ ]
| 1. Freeway-to-freeway interchange closures
 |[ ]
| 1. Rolling slowdowns
 |[ ]
| 1. Night work
 |[ ]
| 1. Day work
 |[ ]
| 1. Weekend work
 |[ ]
| 1. Work hour restrictions for peak travel
 |[ ]
| 1. Pedestrian accommodation
 |[ ]
| 1. Bicycle accommodation
 |[ ]
| 1. Business access improvements
 |[ ]

| Transportation Operations | √ |
| --- | --- |
| Demand Management Strategies |
| 1. Transit service improvements
 |[ ]
| 1. Transit incentives
 |[ ]
| 1. Shuttle services
 |[ ]
| 1. Parking supply management
 |[ ]
| 1. Variable work hours
 |[ ]
| 1. Telecommuting
 |[ ]
| 1. Ridesharing / carpooling incentives
 |[ ]
| 1. Park-and-Ride promotion
 |[ ]
| Corridor/Network Management Strategies |
| 1. Signal timing / coordination improvements
 |[ ]
| 1. Bus turnouts
 |[ ]
| 1. Turn restrictions
 |[ ]
| 1. Parking restrictions
 |[ ]
| 1. Truck / heavy vehicle restrictions
 |[ ]
| 1. Reversible lanes
 |[ ]
| 1. Dynamic lane closure system
 |[ ]
| 1. Railroad crossing controls
 |[ ]
| 1. Coordination with adjacent construction site(s)
 |[ ]
| Work Zone ITS Strategies |
| 1. Late lane merge (zipper merge)
 |[ ]
| 1. Portable changeable message signs (PCMS)
 |[ ]
| 1. Smart work zone system, queue detection
 |[ ]
| 1. Smart work zone system, construction vehicle ingress warning
 |[ ]
| 1. Smart work zone system, delay/operations information
 |[ ]
| 1. Smart work zone system, wireless video monitoring
 |[ ]
| 1. Real-time detour
 |[ ]
| Work Zone Safety Management Strategies |
| 1. Speed limit reduction
 |[ ]
| 1. Temporary traffic barrier
 |[ ]
| 1. Mobile barrier
 |[ ]
| 1. Movable Barrier
 |[ ]
| 1. Impact attenuators
 |[ ]
| 1. Temporary transverse rumble strips
 |[ ]
| 1. Intrusion alarms
 |[ ]
| 1. Temporary sign supplemental warning light
 |[ ]
| 1. Automated flagger assistance devices (AFADs)
 |[ ]
| 1. Traffic control supervisor
 |[ ]
| 1. Temporary widening
 |[ ]
| 1. Road safety audits
 |[ ]
| Incident Management and Enforcement Strategies |
| 1. ITS for traffic monitoring/management
 |[ ]
| 1. Transportation Management Center (TMC)
 |[ ]
| 1. Surveillance (e.g., CCTV)
 |[ ]
| 1. Helicopter for aerial surveillance
 |[ ]
| 1. Traffic Screens
 |[ ]
| 1. Call boxes
 |[ ]
| 1. Mile-post markers
 |[ ]
| 1. Tow/freeway service patrol
 |[ ]
| 1. Total station units
 |[ ]
| 1. Photogrammetry
 |[ ]
| 1. Media coordination
 |[ ]
| 1. Local detour routes
 |[ ]
| 1. Contract support for Incident Management
 |[ ]
| 1. Incident/Emergency management coordination
 |[ ]
| 1. Incident/Emergency response plan
 |[ ]
| 1. Dedicated (paid) police enforcement
 |[ ]
| 1. Cooperative police enforcement
 |[ ]
| 1. Automated enforcement
 |[ ]
| 1. Increased penalties for work zone violations
 |[ ]
| 1. Emergency pull-offs
 |[ ]

| Public Information and Outreach | √ |
| --- | --- |
| Public Awareness Strategies |
| 1. Branding
 |[ ]
| 1. Press kits
 |[ ]
| 1. Brochures and mailers
 |[ ]
| 1. Press releases / media alerts
 |[ ]
| 1. Mass media (earned and/or paid)
 |[ ]
| 1. Paid advertisements
 |[ ]
| 1. Project Information Center
 |[ ]
| 1. Telephone hotline
 |[ ]
| 1. Planned lane closure website
 |[ ]
| 1. Project website
 |[ ]
| 1. Public meetings / hearings, workshops
 |[ ]
| 1. Community task forces
 |[ ]
| 1. Coordination with media/schools/business/emergency services
 |[ ]
| 1. Work zone education and safety campaigns
 |[ ]
| 1. Work zone safety highway signs
 |[ ]
| 1. Rideshare promotions
 |[ ]
| 1. Visual information
 |[ ]
| Motorist Information Strategies |
| 1. Radio traffic news
 |[ ]
| 1. Variable message signs (VMS)
 |[ ]
| 1. Temporary motorist information signs
 |[ ]
| 1. Highway Advisory Radio (HAR)
 |[ ]
| 1. Extinguishable Signs
 |[ ]
| 1. Trip Check
 |[ ]
| 1. Traveler information systems(wireless, handheld)
 |[ ]
| 1. Live traffic camera(s) on a website
 |[ ]
| 1. Project information hotline
 |[ ]
| 1. Email alerts
 |[ ]

# Potential Work Zone Impacts

This section should discuss all of the potential impacts the project will have on public traffic, other projects, and the stakeholders, as related to the temporary traffic control. The Impact Assessment may be qualitative or quantitative, but generally will involve a brief discussion on how the project is expected to impact project users.
The mobility impacts must be documented and receive the support and acceptance from SPDB Mobility Services Team. The Mobility Procedures Manual remains as the policy document to be observed for all projects.
Discuss other adjacent projects (County, municipal, utility) that may affect the current project. Information collected from affected stakeholders may help identify or further clarify additional issues - including special events, seasonal or daily restrictions, local property developments, local ordinances (such as noise-related ordinances that may restrict night work), and access issues.

Impacts discussed may include:

-Schedule, including work that can be done during day or night.
-Traffic.
-TPAR.
-Bicycle.
-Environmental.
-ROW.
-Transit.

-Navigable Waters
-Freight (Project Mobility Considerations Checklist)
-Rail.

# Alternative Work Zone Strategies

The purpose of this section is to inform readers what other strategies for temporary traffic control were considered and why they were not implemented. Discuss other viable work zone traffic control strategies that were evaluated and considered for the project but not implemented. Alternative assessment may involve a high-level qualitative analysis or a detailed quantitative analysis for the evaluation.

Reference the “Work Zone Decision Tree” in ***Referenced Work Zone Documents*** section. This may include background information for items included in theWork Zone Decision Tree, including positive protection, day/night evaluation, etc.

# Referenced Work Zone Documents

This section should include all important referenced work zone documents including:

-Work Zone Decision Tree

-Project Mobility Considerations Checklist

-Traffic Control Plans 🡪 Final Design Phase ONLY

- Project-Specific Special Provisions (Sections 00220 – 00229) 🡪 Final Design Phase ONLY

**\*\*DO NOT include any estimates in the TMP\*\***

# Construction Monitoring

Construction Staff, in conjunction with the Work Zone Traffic Control Designer, should monitor the work zone and if necessary make changes. Any changes to the work zone strategies, including Contractor proposed modifications, should be consistent with the decisions and commitments made during the design of the project. All changes to the Work Zone Strategies should involve the Work Zone Traffic Control Designer and should be documented in the TMP.

The changes to the project temporary traffic control may include:
- Schedule, including work that can be done during day or night.

-Traffic.
-TPAR.
-Bicycle.
-Environmental.
-ROW.
-Transit.
-Freight (Project Mobility Considerations Checklist)
-Rail

# TMP Evaluation

The TMP should include an evaluation report upon completion of construction to document the temporary traffic control lessons learned and provide recommendations on how to improve the TMP process and/or modify guidelines.
The evaluation report should include an overall statement reflecting the usefulness, suggested improvements or changes for similar future projects, Traffic Control CCO’s, and incidents related to the TMP.
For a small project, a TMP evaluation could be a discussion with the TCP designer regarding what elements of the TCP plan went well and which could be further improved.

For larger projects, an actual evaluation report should be developed. The evaluation report not only helps the designer with lesson learned, but could also help policy makers improve the overall design process.