

Transportation Management Plan Design Checklist

A comprehensive transportation management plan is a project within a project. VDOT is obligated to provide a safe and workable plan for controlling traffic that is consistent with the project's construction requirements. Although there may be more than one workable solution, a thorough analysis of all the variables will assist in producing a TMP that sets the appropriate level of safety for the general public as well as construction workers. The Project manager, with the Project Team, should thoroughly review this checklist to ensure that all applicable work zone elements have been captured during the design phases.

Required checklist items are in bold text. Not all items listed are applicable to every project, but should be considered when appropriate.

PROJECT DEFINITION & PLANNING

- Transportation Management Plan Strategy**
 - Scoping meeting with Regional Operations Director, Regional Traffic Engineer and Regional Work Zone Safety Coordinator**
 - Formal meeting with local agencies such as law enforcement, EMS/Fire, schools, etc. as applicable
 - Establish project's TMP category**
- Work Zone Capacity Analysis**
 - Existing lane capacity**
 - Work hour restrictions (days & hours)**
 - Detour route capacity analysis**
 - Appropriate work zone type(s)** (Long-term stationary, Intermediate stationary, etc.)
- Existing Operational Factors**
 - Local traffic operational problems**
 - Accidents & accident rate**
 - Geometric conflicts or issues**
 - Sight distance problems**
 - Adjacent project coordination**
 - Commercial/private access impacts
 - Special events
 - Seasonal factors
 - Ferry schedules
 - On-street parking
 - Emergency services
 - Transit, schools, mail delivery, parks, etc.
- Work Zone Location Considerations**
 - Define all work zone limits/locations**
 - Existing lane conflicts
 - Roadside hazards
 - Overhead/over width limitations
 - Grade/profile conflicts
 - Staged construction/work zones
- Worker Safety**
 - Positive protection (barrier)**
 - Work exposure during**
 - **Set-up**
 - **Removal**
 - **Work operations**
 - Flagger considerations**
 - Truck-mounted attenuator (TMA)**
 - Work zone intrusion analysis**

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Work Zone Temporary Traffic Control Strategies

Long-term

STRATEGY

- Total road closure
- Partial road closure
- Interchange closure
- Ramp closure
- Crossroad closure
- Lane shift
- Lane closure
- Shoulder closure
- Reversible lanes
- Temporary traffic signal
- Temporary yield/stop control
- Temporary widening/connections
- Temporary structures

PLAN TYPE

- Detour
- Crossover
- Detour
- Detour/Alternate route
- Detour/Alternate route
- Temporary Channelization
- Temporary Channelization/barrier
- Temporary Channelization/barrier
- Temporary Traffic Control figure/detail
- Temporary Traffic Control figure/detail
- Temporary Traffic Control figure/detail
- Temporary Channelization/barrier
- Temporary Channelization/barrier

Short-term

STRATEGY

- Off-peak road closure
- Off-peak Partial road closure
- Off-peak Interchange closure
- Off-peak Ramp closure
- Off-peak Crossroad closure
- Off-peak Lane closure
- Shoulder closure
- Flagger control
- Pilot car control

PLAN TYPE

- Detour
- Detour/Crossover
- Detour/Alternate route
- Detour/Alternate route
- Detour/Alternate route
- Temporary Traffic Control figure/detail

Refer to the Virginia Work Area Protection Manual for guidelines on work zone types and information on the application of Temporary Traffic Control Figures.

Construction Considerations for Temporary Traffic Control

- Removal of permanent traffic control features
- Maintaining existing features (illumination, signing, signals, etc.)
- Work area access control (safe ingress & egress)
- Adequate work area space for the contractor
- Adequate space for material/equipment storage
- Temporary illumination
- Temporary drainage
- Switchover to new stage (time for pavement marking/marker changes)
- Winter shut-down instructions (intermediate stage?)
- Cure time closure pours
- Existing shoulder durability (including drainage grates) for temporary lane shifts

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Work Zone Public Information and Outreach Strategies

- Brochures/Flyers/Fact Sheets/Newsletters
- Public Meetings/workshops/Events
- Paid Advertising (TV, Radio, Newspaper)
- Newspaper Articles
- TV/Radio traffic news
- Press Kit
- Project Hotline/511 System
- Dynamic Message Signs
- Highway Advisory Radio (HAR)
- Freight travel information
- Rideshare promotions
- Telecommuting promotions
- Park & ride/transit promotions
- Information center/kiosk
- Web site
- Web-connected traffic cameras

Work Zone Traffic Operations Strategies

- Incident/emergency response plan
- Law enforcement presence/enforcement
- Increased penalties for work zone violations
- Smart center contact information
- ITS for traffic monitoring/management
- Speed limit reduction
- Railroad crossing controls
- Truck/heavy vehicle restrictions
- HOV lanes
- Separate truck lanes
- Signal timing/coordination