

# **Work Zone Transportation Management Plan Development Course**

Session 3  
TMP Types



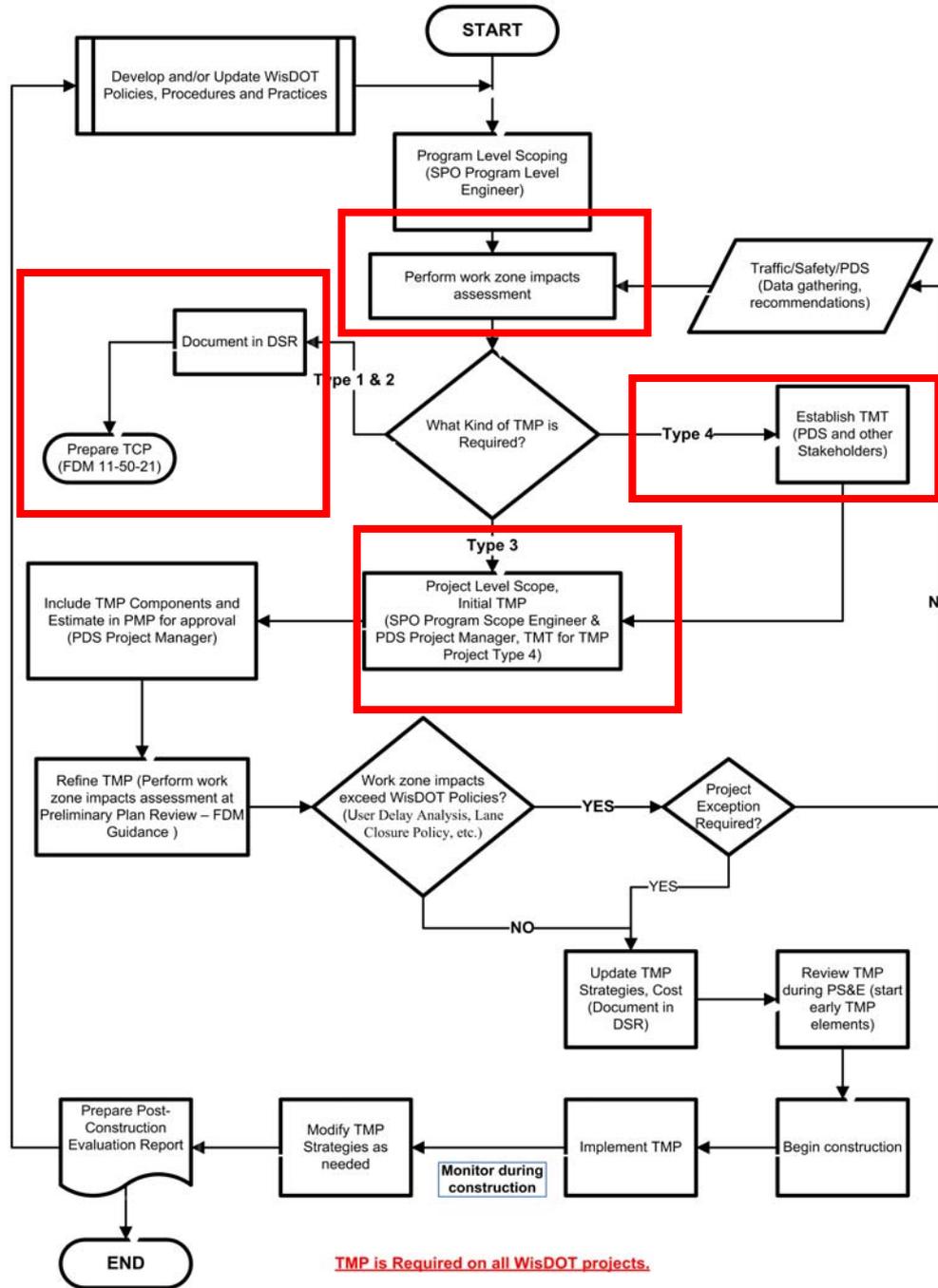
# Transportation Management Plan: So Far...

- Which projects cause delay?
- How much delay?
- Extent of impacts
- Opportunity to coordinate
- Cost estimation

# Transportation Management Plan: Choosing TMP Type

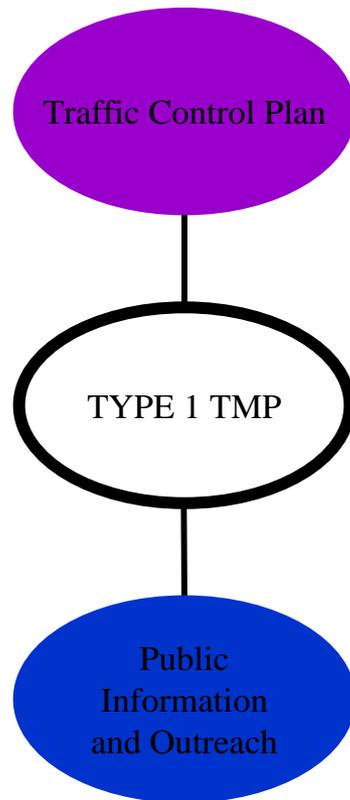
- Remaining question...
  - What Type of TMP should we prepare?
- Most often Type 1, 2 and 3
- Easier to consider impacts early than late
- Easier to lower TMP intensity than to increase

# Transportation Management Plan Process



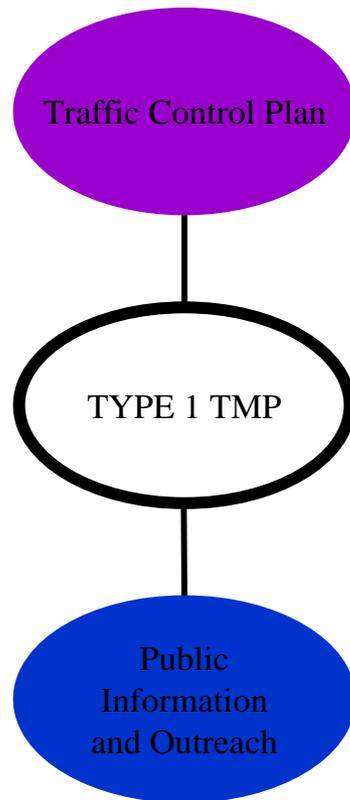
**TMP is Required on all WisDOT projects.**

# Transportation Management Plan: Typical TYPE 1 TMP



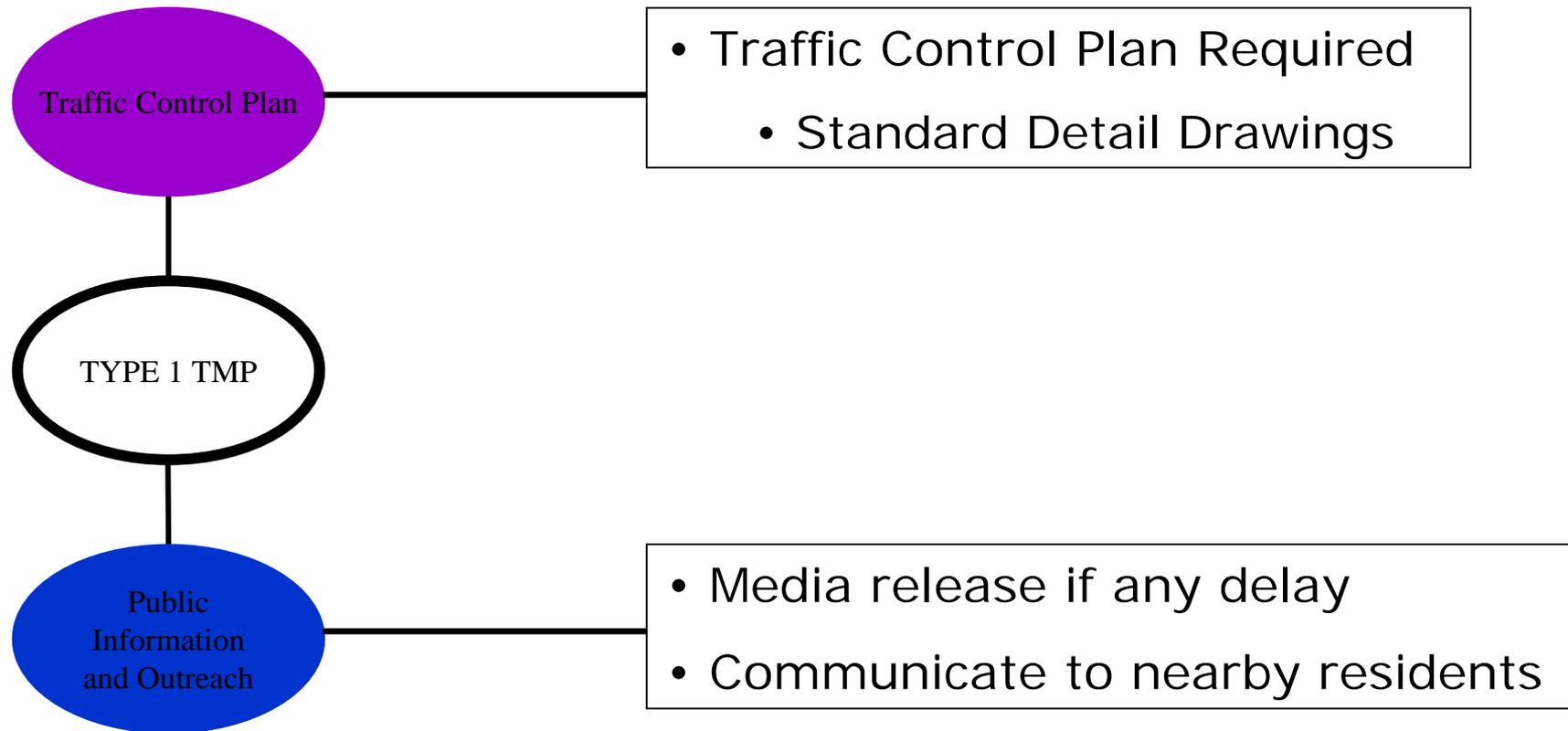
- Transportation Management Plan (TMP) Project Type 1
  - Work expected to cause minimal or no impacts
    - Mobile operation or Short duration work
    - Work outside of travel lanes
    - AADT less than 1,500 / work performed off-peak
    - Most local bridge projects
  - Traffic Control Plan
  - Media Release for some projects

# Transportation Management Plan: Typical TYPE 1 TMP Examples



- Two-lane conversion to four-lane where no side roads are closed
- Local bridge projects that do not require posted detour
- Off-peak hours so delays are minimal.
- Pavement marking
- Signing, sign repairs, replacements.
- Maintenance operations, e.g. mowing, patching
- Survey work
- Utility work e.g. placement, maintenance
- Bridge work e.g. inspection, painting

# Transportation Management Plan: Typical TYPE 1 TMP Elements



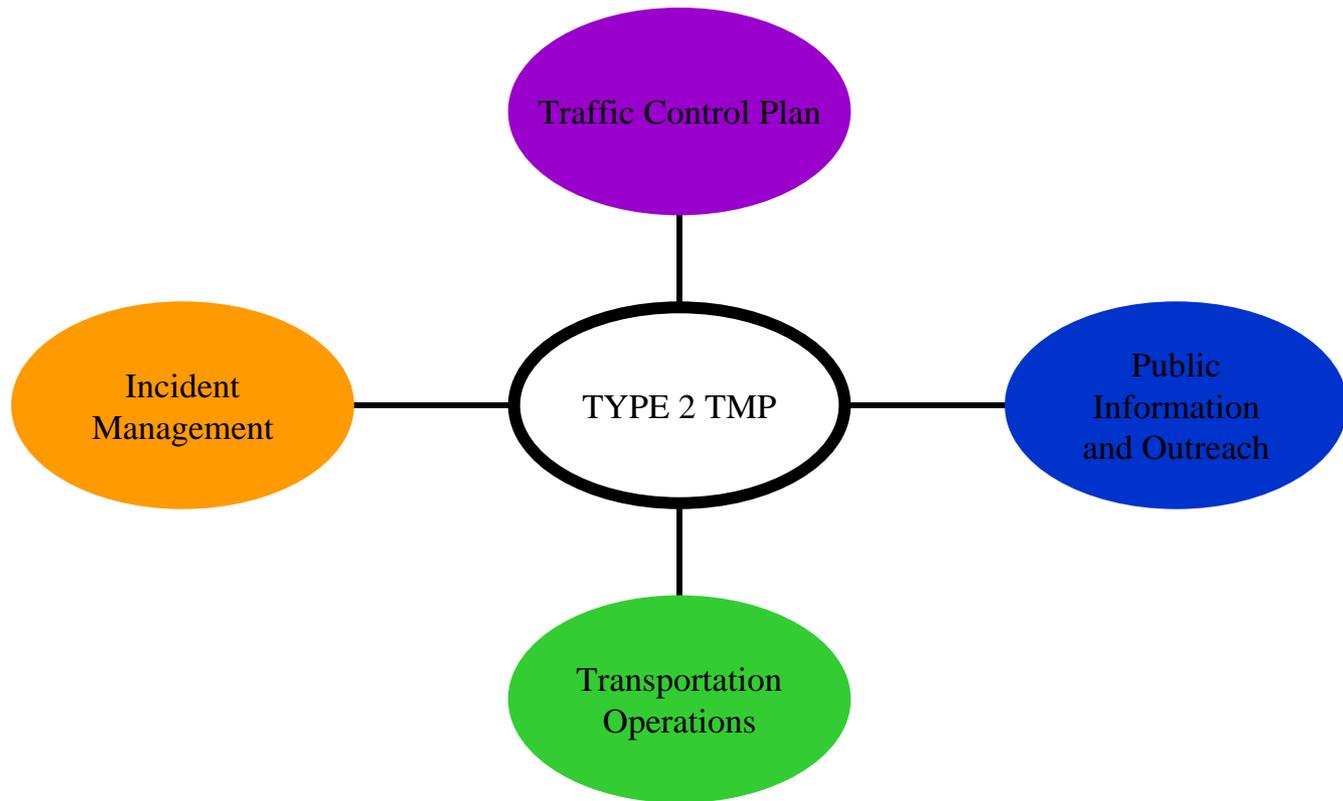
# Transportation Management Plan: Typical TYPE 2 TMP

- Transportation Management Plan (TMP) Project Type 2
- Work expected to cause minimal impacts/delays
- May involve lane or road closure
- **Less than 5 days of** exceeding delay criteria
- May require positive protection or shielding of hazards
- Resurfacing, pavement or bridge repairs, reconstructions or intersection improvements with minor impacts, construction on new alignment
- Traffic Control Plan
- Some elements of Transportation Operations, Public Information, and Incident Management Plans

# Transportation Management Plan: Typical TYPE 2 TMP Examples

- Resurfacing projects
- Pavement repairs
- Bridge deck overlays
- Bridge replacement (conventional highway requiring detour)
- Bridge painting on freeways
- Reconstructions with minimal delays
- Intersection improvement

# Transportation Management Plan: Typical TYPE 2 TMP Elements



# Transportation Management Plan: Typical TYPE 2 TMP Elements

## TRAFFIC CONTROL PLAN

- SDD
- Project specific traffic control plan
- Off peak, night or weekend work
- Reduced speed zones
- Variable lanes (narrow lane width or use of shoulder during peak periods)
- Project staging
- Traffic control improvements (e.g. supplemental/enhanced TTC devices)
- Truck traffic/permit restrictions,
- Incentive/Disincentive contract clauses,
- Crossover,
- Bicycle and pedestrian information, e.g., detour routes, barricade signs.

# Transportation Management Plan: Typical TYPE 2 TMP Elements

## **PUBLIC INFORMATION & OUTREACH**

- Media releases,
- Notification to targeted groups, e.g. bicycle organizations, schools, organizations representing people with disabilities, motor cycles, snowmobiles, ATV, businesses, chamber of commerce.

# Transportation Management Plan: Typical TYPE 2 TMP Elements

## **TRANSPORTATION OPERATIONS**

- Fixed message signs,
- Changeable message signs ,
- Radar speed message sign,
- Coordination of adjacent or parallel construction projects.

## **INCIDENT MANAGEMENT**

- Enhanced enforcement - State patrol & local law enforcement during construction, (freeways & expressways)
- Emergency pullouts,
- State Traffic Operations Center (STOC) on freeways and expressways.

# Transportation Management Plan: Typical TYPE 3 TMP

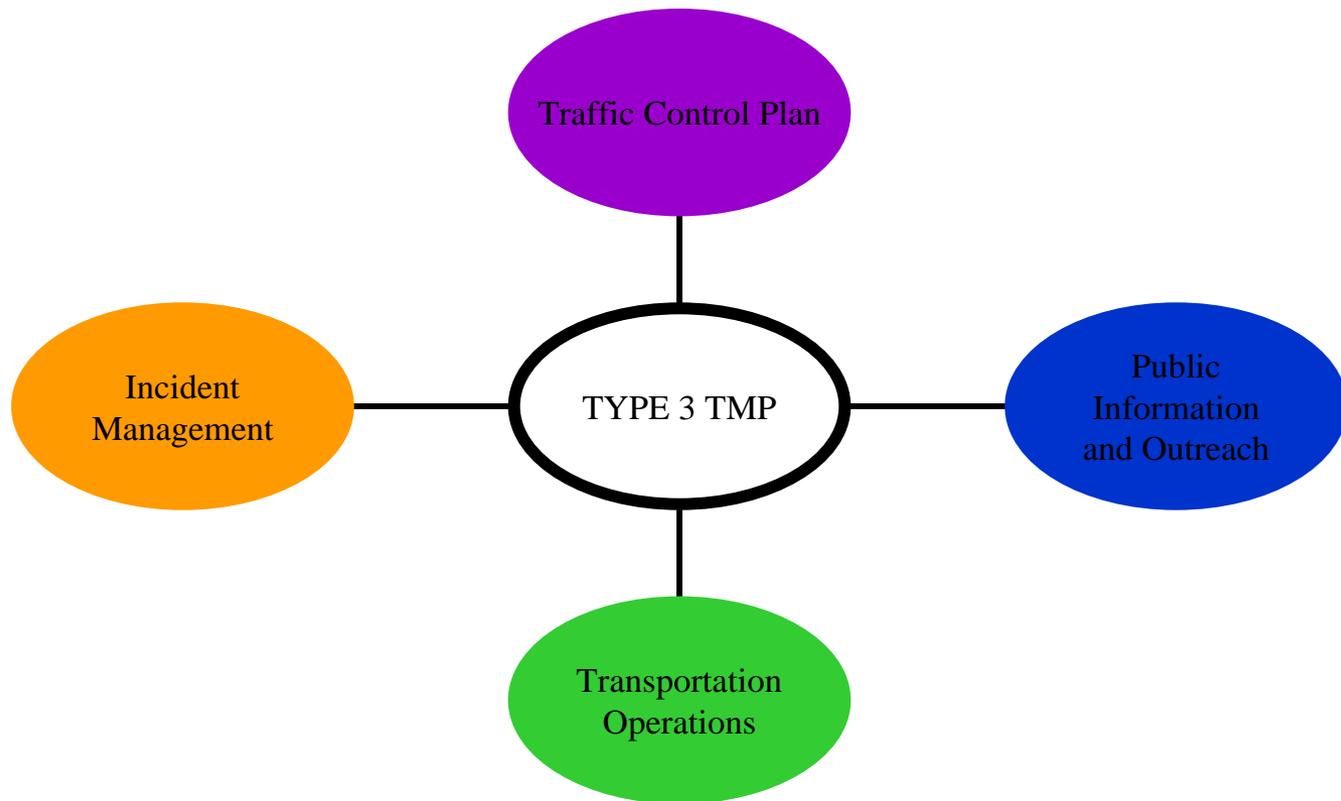
- Lanes closed and delays expected to exceed criteria for more than 5 days during work
- May require detours, single or multi-lane closures, single-lane alternating traffic scheme
- May require staged construction, even if through traffic is detoured
- Detour or alternate route may require improvements (signing, pavement surface/width etc.)
- May require night work
- Expedited project schedule may be required to meet community needs
- Multiple closures required to high-volume side roads or ramps
- Pedestrian, bicycle disruptions may require temporary walkways or paths
- May impose width or weight restrictions
- May require positive protection and/or shielding of hazards

# Transportation Management Plan: Typical TYPE 3 TMP Examples

In addition to TYPE 2 Examples:

- Urban reconstruction with unusual access needs or high traffic delays
- Bridge deck replacement
- Freeway ramp closures

# Transportation Management Plan: Typical TYPE 3 TMP Elements



# Transportation Management Plan: Typical TYPE 3 TMP Elements

## **TRAFFIC CONTROL PLAN**

In addition to TYPE 2 TMP:

- Extended weekend closures/full closures
- Temporary Traffic Screens
- Moveable barriers
- Bicycle and pedestrian information, e.g., detour routes, temporary paths/walkways, etc.,
- Traffic Control Specialist/surveillance items.

# Transportation Management Plan: Typical TYPE 3 TMP Elements

## **TRANSPORTATION OPERATIONS**

In addition to TYPE 2 TMP Elements:

- Work Zone ITS

## **INCIDENT MANAGEMENT**

In addition to TYPE 2 TMP Elements:

- Crash investigation sites
- STOC Coordination
- Traffic Incident Management Team
- Pre-planning for incidents
- Traffic detectors and surveillance

# Transportation Management Plan: Typical TYPE 3 TMP Elements

## **PUBLIC INFORMATION & OUTREACH**

In addition to TYPE 2 Elements

- Brochures, flyers, and newsletters,
- News paper articles,
- Public meetings/hearings, (videos, slide shows, etc.)  
Coordination with targeted groups: bicycle organizations, schools, organizations representing people with disabilities, motor cycles, snowmobiles, ATV, businesses, chamber of commerce
- Paid advertising

# Transportation Management Plan: Typical TYPE 4 TMP

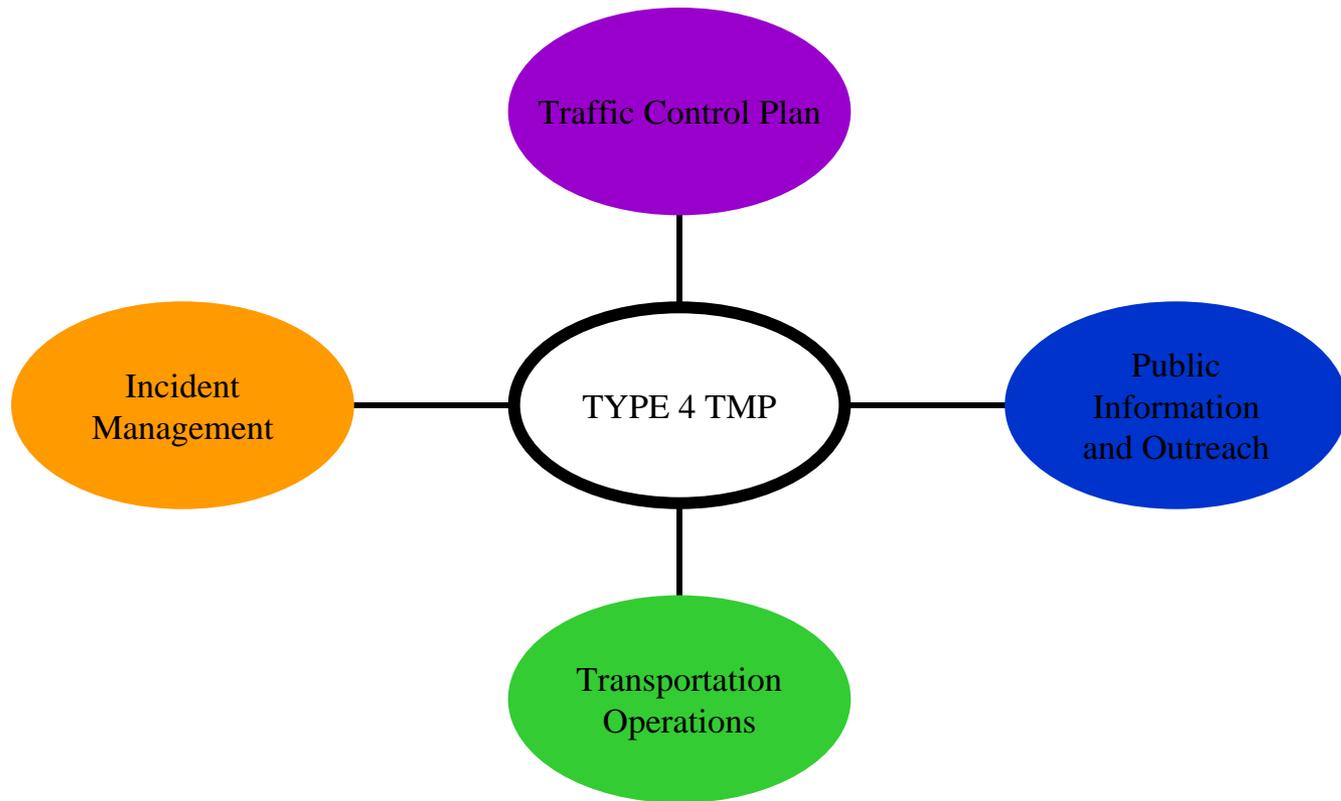
Similar to TYPE 3 Project with more severe impacts:

- Construction schedule is long term several months or years
- Work Zone impacts remote facilities
- Has regional effect
- May involve multiple contracts

# Transportation Management Plan: Typical TYPE 4 TMP Examples

- Freeway/Expressway reconstruction

# Transportation Management Plan: Typical TYPE 4 TMP Elements



# Transportation Management Plan: Typical TYPE 4 TMP Elements

## **TRAFFIC CONTROL PLAN**

In addition to TYPE 3 TMP:

- Lane shifts, A+B bidding, lane rental
- Reversible lanes
- Innovative methods
- Temporary bicycle and pedestrian facilities
- Traffic Control Specialist/surveillance items.

# Transportation Management Plan: Typical TYPE 4 TMP Elements

## **TRANSPORTATION OPERATIONS**

In addition to TYPE 3 TMP Elements:

- Ramp metering
- Transit incentives
- Rideshare incentives

## **INCIDENT MANAGEMENT**

Similar to TYPE 3 TMP Elements

# Transportation Management Plan: Typical TYPE 4 TMP Elements

## **PUBLIC INFORMATION & OUTREACH**

In addition to TYPE 3 Elements

- Traffic radio
- Variable work hours, park and ride lots, parking restrictions
- Hotline
- Web site

# TMP – TMP Approval

- Types 1, 2 & 3 document on TMP Approval Form, with attachments as needed
- Type 4: Separate report, with Executive Summary provided on TMP Approval Form
- Submit to Bureau of Project Development or Regional Local Program Coordinator
- TMP approval occurs as part of Design Study Report (DSR) approval or sooner
- Federal Oversight projects require FHWA approval of TMP

# **TMP – Examples**

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# TMP Documentation

## TMP DOCUMENTATION & REQUEST FOR APPROVAL

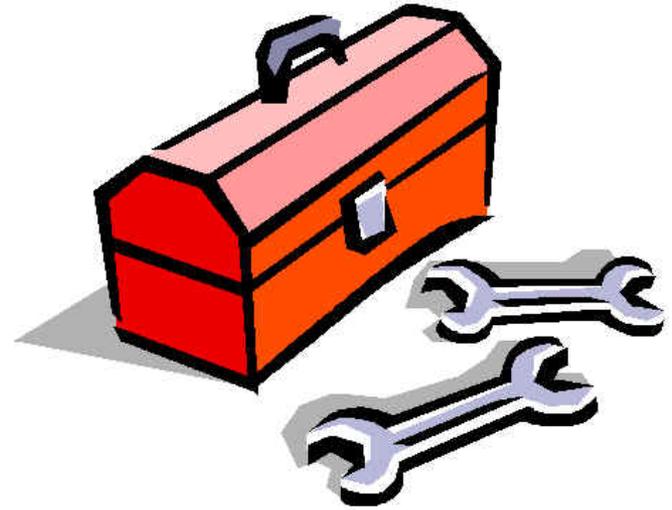
<b>TMP/Project Type</b>	<b>Action</b>
A. Project that requires a DSR and is TMP Type 1, 2 or 3.	Complete and submit this document and any attachments to BPD project services liaison.
B. Project that requires a DSR and is TMP Type 4.	Complete this document as the TMP Executive Summary and submit along with separate TMP report to BPD project services liaison.
C. Project does not require DSR and is TMP Type 1, 2 or 3.	Complete and submit this document and any attachments to BPD project services liaison.
For Federal Oversight projects, coordinate early in TMP development with BPD & FHWA project liaisons.	

# **TMP Documentation**

## **Initial TMP Outline for TYPE 4**

- 1. Introductory Material**
- 2. Executive Summary**
- 3. TMP Roles and Responsibilities**
- 4. Project Description**
- 5. Existing and Future Conditions**
- 6. Work Zone Impacts Assessment**
- 7. Work Zone Impacts Management Strategies**
- 8. TMP Monitoring Requirements**
- 9. Contingency Plans**
- 10. TMP Implementation Costs**
- 11. Conclusions / Recommendations**
- 12. Attachments / Appendices**

# WZ Mitigation Toolbox



# Mitigation Objectives

- Safety
- Mobility
- Access

# Project Website

**MARQUETTE INTERCHANGE PROJECT**

Getting Around | Project Guide | News and Talk | Traffic Information | Submit Comments | Site Map

**TRAFFIC information**

- Current Traffic Conditions
- Sign up for Alerts

**Construction Progress** 86% 2008

	J	F	M	A	M	J	J	A	S	O	N	D
2004												
2005												
2006												
2007												
2008												

**INFO zone headlines**

- TRAFFIC ALERT: I-794 EAST overnight full closures scheduled Fri.**
- TRAFFIC ALERT: I-94 EAST and NORTH overnight closure scheduled Fri.**
- Check out alternative transportation options during construction**

**PROJECT guide**

Get the big picture of the old and new Marquette Interchange

Map Your Route

**I-794 6TH ST**  
Wednesday, April 16, 2008 12:18:52 PM

**I-94 12TH ST**  
Wednesday, April 16, 2008 12:19:37 PM

# Safety Campaigns



[Getting Around](#) | [Project Guide](#) | [News and Talk](#) | [Traffic Information](#) | [Submit Comments](#) | [Site Map](#)

[Home](#) > [Project Guide](#) > [Work Zone Safety](#)

## Work Zone Safety

Each year in Wisconsin, both highway workers and motorists are killed and injured in crashes that happen in highway construction zones. Over the last five years, there has been an average of 2,000 work zone crashes annually, with an average of 11 fatalities each year. Most of those killed in work zone crashes are the motorists.

**To avoid work zone crashes:**

- **Expect the Unexpected** - Normal speed limits may be reduced, traffic lanes may be changed, and people and vehicles may be working on or near the road.
- **Keep a Safe Distance** - between your vehicle and traffic barriers, trucks, construction equipment and workers. Just like you, highway workers want to return home safely.
- **Stay alert** - Don't be distracted by construction activity, using your cell phone, changing radio stations or by other goings-on inside or outside your vehicle. Inattention often leads to crashes.
- **Watch For Flaggers** - If you see a Flagger Ahead sign, stay alert and be prepared to obey the flagger's directions. In a work zone, **a flagger has the same authority as a road sign.** You



*Project Talk:  
Work Zone  
Safety*

**FINES  
DOUBLE  
IN WORK  
ZONES**



# Transit



[Getting Around](#) | [Project Guide](#) | [News and Talk](#) | [Traffic Information](#) | [Submit Comments](#) | [Site Map](#)

[Home](#) > [News and Talk](#) > [Info Zone](#) > [Check out alternative ...](#)

## Info Zone Article

[Check out alternative transportation options during construction](#)

With bridge, lane and ramp closures taking place on a continuous basis during the Marquette Interchange reconstruction, using alternate modes of transportation, like public transit, carpooling, biking or walking, can make travel easier. Listed below are Web sites that offer more information on commuting options during construction.

[Milwaukee County Transit System](#) - Complete fare and schedule information is available. MCTS also offers service to special events including Summerfest, the Wisconsin State Fair, lakefront festivals and Milwaukee Brewers home games. Call MCTS at (414)344-6711 for information on special routes.

[RIDESHARE Program](#) - [RIDESHARE](#) has gone interactive! That means you can ridematch yourself from your desktop in minutes!. This no obligation, free, and voluntary program serves commuters in the southern half of Wisconsin and northern Illinois. [www.rideshare.wi.gov](http://www.rideshare.wi.gov) >How to Register. It's like on-line dating for your car!



# Park & Ride

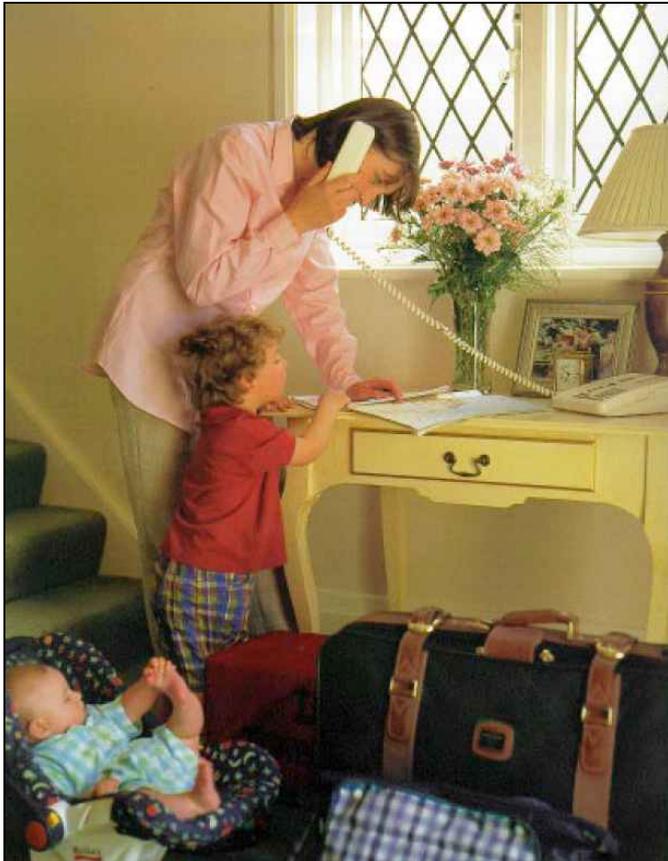


- Remote parking combined with local bus service.
- Useful for reducing special events traffic.

# 511 Traveler Info



Wisconsin Travel Info



# Law Enforcement



# Service Patrols



# Highway Advisory Radio



# Dynamic Speed Display Board



# Speed Advisory Systems



- Display actual speeds
- NB US 41 in Green Bay
- 2 lanes merge to 1 lane

# Travel Time / Delay Systems



# Dynamic Lane Merge



**Vs.**



# Dynamic Lane Merge System



# Moveable Barrier



# Designated Truck Lane



# Temporary Re-usable Rumble Strips



- Self-adhesive
- Removable
- Reusable

# Temporary Crash Cushions



# WZ Signage Simplification



# Portable CMS Messages



## TGM 06-02-55

- Not a replacement for regular warning or regulatory signs.
- *May* supplement a required static sign.

# Good Intentions, But...



# Is this the right message?



# Prohibited PCMS Text

- Alarmist Words & Phrases
  - Danger
  - Hazardous
  - Caution
- Generic Messages
  - Buckle Up
  - Drive Safely
  - Welcome to Wisconsin

# Preferred Text

## Two frames

1. Problem
2. Distance
3. Action

# Tips

- Simple words.
- Recognizable places.
- Remember, with two frames half the drivers will see the “second” frame first.

# Examples

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BRIDGE  
CLOSED

4 MILES  
AHEAD

USE  
MAIN ST

# Examples

---

4 MILES  
AHEAD

USE  
MAIN ST

BRIDGE  
CLOSED

# Examples

USE  
MAIN ST

BRIDGE  
CLOSED

4 MILES  
AHEAD

# Examples

---

BRIDGE  
CLOSED  
4 MILES

USE  
MAIN ST

# Examples

---

USE  
MAIN ST

BRIDGE  
CLOSED  
4 MILES

# Examples

---

ONE LANE  
ROAD  
2 MILES

WATCH  
FOR  
FLAGGER

# Examples

---

WATCH  
FOR  
FLAGGER

ONE LANE  
ROAD  
2 MILES

# Examples

TWO-WAY  
TRAFFIC  
AHEAD

KEEP  
RIGHT

# Examples

---

KEEP  
RIGHT

TWO-WAY  
TRAFFIC  
AHEAD



BREAK  
IN  
ROAD



## Goals of Public Outreach Related to the TMP

1. Encourage the media to report on the project.
2. Use publicity generated by the project as part of the traffic management strategy.
3. Release info at the appropriate time.
4. Avoid inaccurate media coverage.
5. Respond to inaccurate coverage if it would damage the project.



# Outreach Plan Toolbox

- WisDOT website.
- Press releases & info packs.
- News conferences.
- Project e-mail list.
- Direct mail.
- Letters, calls or direct contact with major generators.
  - Trucking companies
  - Large employers
  - Organizers of festivals & special events
- Public Information Meetings

# Foreign Language Outreach

[Home](#) > [Project Guide](#) > [Community Outreach](#) > Kev Soj Tsuam Tes Dejnum



*Cajj nyooog kho kev  
loj sibtsuam PR*

Kev Clybourn thiab tus  
choj ntwam kev 16  
4 hlis 2004 - 12 hlis  
2004

## Kev Tsham Tawm rau Neeg Zejzog

### Lug lwm txojkev mus, mus kom txog chaw.

Kev tshuam Marquette Interchange txojnum twb pib rau xyoo 2004 thiab teem cajj ua kom tiav rau xyoo 2008. Teg num no tsis yog zoo rua Milwaukee xwb; yeej zoo rau tagnrho Wisconsin. Vim tias muaj zoo kev loj, kev mus los yoojyim thiab nyob ruaj khov yuav ua rau kom muaj lagluam los ntxiv, muaj haujlwm ntau, thiab muaj neeg tuaj cig saib xeev Wisconsin coob.

Thawj coj tuav dejnum tau saib xyuas kom muaj kev mus los zoo thiab yoojyim rau lub cajj kho kev. Vim peb tsis xav kom koj hloov qhov chaw koj yuav mus, tsuas yog seb yuav mus li cas thiaj li txog xwb. Daim ntwam no yuav qhia me ntsis txog teg dejnum thiab lub cajj nyooog teem cia, thiab qhia koj siv cov cuab yeej tshwj xeeb xws li xovtooj thiab web site los pab thiaj mus dhau lub cajj kho kev. Kuj muaj qhia txog ntau yam kev cajj tsheb khiav mus los, lagluam thiab haujlwm rau neeg ua.

### Ua kom tau haujlwm rau txhua tug

Peb sawdaws yuav tsum mus tau rau txhua qhov chaw peb xav mus. Nram no yog qhia seb peb yuav ua li cas thiaj tau haujlwm rau peb:

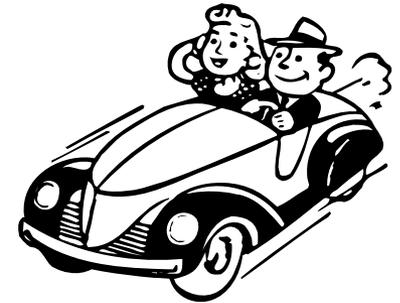




# Content of Press Release

- “For Immediate Release” or “Embargoed Until”
- Practical advice for dealing with construction traffic.
- Most important info up front, details follow.
- Written at 8<sup>th</sup> Grade level.
  
- See Handouts #FS 16 & 17

# Typical Press Release Traffic Advice



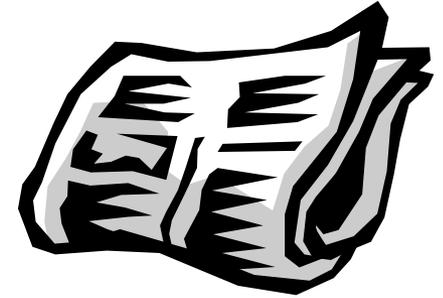
- Use alternate routes.
- Avoid traveling in peak hours.
- Inform visitors, guests, customers, suppliers.
- Consider carpool (or bus if locally relevant).

# Typical Press Release Safety Advice



- Observe WZ Speed Limits.
- Be alert for unexpected traffic patterns.
- Watch for trucks and equipment entering the traffic stream.

# Dealing With the Media



- Identify your target audience.
- Use the media outlets that are most likely to reach the target audience.
- "All news is local."
- Respect journalist deadlines.
- Don't be too technical.
- Respond to real issues, but allow critics to blow off steam.
- Designate a spokesperson

# You're On the Air...



- For radio, info must be very concise.
- Jot down 2 or 3 key points and repeat them a couple of times during the interview.
- If interviewed by phone, go to the quietest possible location.
- Speak confidently.

30



10

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10

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ROAD WORK  
CLOSED 2 MILES

ROAD WORK  
CLOSED 2 MILES

ROAD WORK  
CLOSED 2 MILES

6 25 '92