Turnpike Roadway Design Guidance

Maintenance of Traffic (MOT)

The following information is meant to provide clarification and additional guidance to designers for the development of Temporary Traffic Control Plans (TTCP) and the Tumpike TTCP General Notes.

Mainline /Ramp Closure(s):

- Add the existing facility Speed Limit sign (Index 102-600 Sign R2-1) 1,500 feet downstream of the End Road Work sign, for all lane closures employing the Motorist Awareness System (MAS) on Turnpike's mainline facilities.
- Provide a portable changeable message sign (PCMS) 14 days in advance of planned full mainline closures to alert motorists.
- Provide a PCMS seven days in advance of lane closures and ramp closures to alert motorists.

Mainline/Ramp Detours(s):

- For all detours, submit a Detour Tolling Analysis Memorandum for review by Turnpike Traffic Operations and Tolls Design. The Detour Tolling Analysis Memorandum is generated and reviewed during design and approved during construction.
- Plan for Traffic Control Officers at signalized intersections along the detour route where
 the existing signal phasing cannot process additional Turnpike traffic and the signal timing
 cannot be adjusted remotely during detour hours. In addition, plan for a Traffic Control
 Officer at all closed exit ramps to protect construction workers in the work zone and
 motorists from entering the work zone.

Markings/Signing:

• For *Note 1*, use only in conjunction with Level 1 TCP. Note will not be used when TCP Level 2 or 3 plans are prepared. Striping should be detailed in the plans in those cases.

Toll Plaza Coordination:

• For *Note 1*, the allowable closure times for the AET tolling points must be defined in these notes. Notes should be similar in style and content to the lane closure or detour hours.

Toll Site Milling and Resurfacing:

Review the General Tolling Requirements (GTR) 223 and determine what tolling
infrastructure is to be impacted during the milling and resurfacing effort. Coordinate with
Turnpike Tolls Design before the 45% MOT submittal to properly delineate the proposed
maintenance of traffic scheme adjacent to or within toll sites to be presented during the
45% MOT workshop.

Traffic Pacing:

- Traffic pacing shall only be allowed after all other possible alternatives have been explored and found to be impossible, impractical, or unsafe as noted in the Turnpike Lane Closure policy available for reference on the <u>Turnpike Design website</u>. If traffic pacing is determined to be necessary, provide sufficient justification and obtain written concurrence (email or meeting notes documentation is acceptable) from the Turnpike Traffic Operations Engineer prior to designing traffic pacing for these construction activities.
- For all traffic pacing operations, include a "safe route" plan if the construction activities last longer than the allowable pacing timeframe. This plan must note that it will only be used at the direction of the Turnpike Construction Project Manager. An example "safe route" traffic pacing plan is available for reference on the <u>Turnpike Design website</u>
- The number of allowable detours, durations, and restrictions must be defined in the plans.

Lane Closure Analysis:

 The lane closure analysis shall be submitted along with the 45% MOT submittal. This submittal will need to be processed as a separate ERC submittal independent of the 45% MOT submittal.

Lane Closure Variation Memorandum:

• For projects which cannot meet the required minimum ten-hour lane closure period per 24-hour work period, a lane closure variation memorandum needs to be submitted and reviewed in ERC. The draft lane closure variation memorandum should be submitted following the draft lane closure analysis submittal and comments have been addressed which provides a clear picture of whether the minimum ten-hour lane closure is being met or not. This variation memorandum should be approved by the Department prior to the Phase II plans submittal as per FDM 122.3.1.