# MassDOT Scoring Criteria for Work Zone ITS

## MassDOT Project Location: Project #

<table>
<thead>
<tr>
<th>Base Criteria – Existing Conditions</th>
<th>Score</th>
</tr>
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<tbody>
<tr>
<td>AM Peak Hour Congestion [ Yes - No ] (*if yes estimated duration)</td>
<td>N/A</td>
</tr>
<tr>
<td>PM Peak Hour Congestion [ Yes - No ] (*if yes estimated duration)</td>
<td></td>
</tr>
<tr>
<td>Congestion in both AM &amp; PM [ Yes - No ] (*if yes estimated duration)</td>
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## Factor 1 – Impacts on Roadway Geometry: Permanent Setup or Recurring Short Duration

- Maintain existing cross-section (0 points)
- Loss of full shoulder (1 point)
- Narrowed travel lanes (3 points)
- Loss of travel lane (6 points)
- Loss of multiple travel lanes (10 points)

## Factor 2 – Duration of work zone: Long-term stationary work will have a duration of:

- < 6 months (1 points)
- 6 - 12 months (4 points)
- > 1 year (6 points)
- > 2 years (8 points)

## Factor 3 – Availability of Alternate Routes for detour or diversion of traffic:

- Several alternate routes available with spare capacity (0 points)
- Alternate route with spare capacity available (1 points)
- Alternate route with nominal capacity available (2 points)
- No viable alternate routes (4 points)

## Factor 4 – Queuing - Anticipated duration of Work Zone Queueing above recurring peak hour conditions are estimated to be:

- < 1 hour per day (3 points)
- 1-2 hours per day (5 points)
- 2 to 4 hours per day (7 points)
- > 4 hours per day (10 points)

## Factor 5 – Delay Time (Average Delay of vehicles above and beyond existing conditions)

*Note: use MassDOT WZ Delay Form*
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- Delays less than 12 minutes (0 points)
- Delays in between 12 to 20 minutes for a duration of 1 hour or more (2 points)
- Delays of between 20 to 30 minutes for a duration of 1 hour or more (5 points)
- Delays in excess of 30 minutes for a duration at least 2 hours (10 points)

## Factor 6 – Commercial Motor Vehicle Traffic Impacts:

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- Percent Heavy Vehicles <5% (1 point)
- Percent Heavy Vehicles 5 -10% (3 points)
- Percent Heavy Vehicles >10% (6 points)

## Factor 7 – Impacts of Specific Issues (Based on Judgement: No Impact = 0 / Impact = 1)

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- Existing Crash History within the Work Zone limits
- Traffic Speed Variability
- Increased travel time or restricted access to regional traffic generators
- Unusual or Unpredictable Weather Patterns Such as Snow, Ice, and Fog
- Frequently Changing Operating Conditions for Traffic
- Merging Conflicts and Hazards At Work Zone Tapers
- Complex Traffic Control Layout with Multiple Access Points (i.e. Ramps or Side Streets)
- Construction Vehicle Entry/Exit Speed Differential Relative to Traffic
- Limited offset to median or roadside barrier/guardrail
- Lane Diversions - Use of Highway Crossover or Center Work Zone

## Total Project Score

**If the total score is:**

- ≥30 – ITS is likely to provide significant benefits relative to costs for procurement
- ≥10 and <30 – ITS may provide some benefits and should be considered as a treatment to mitigate impacts
- <10 – ITS may not provide enough benefit as a treatment to justify the associated costs