

MassDOT Scoring Criteria for Work Zone ITS	
MassDOT Project Location:	Project #
Base Criteria – Existing Conditions	N/A
AM Peak Hour Congestion [Yes - No] (*if yes estimated duration)	
PM Peak Hour Congestion [Yes - No] (*if yes estimated duration)	
Congestion in both AM & PM [Yes - No] (*if yes estimated duration)	
Factor 1 – Impacts on Roadway Geometry: Permanent Setup or Recurring Short Duration	<u>Score</u>
Maintain existing cross-section (0 points)	0
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:	<u>Score</u>
• < 6 months (1 points)	0
• 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:	<u>Score</u>
Several alternate routes available with spare capacity (0 points)	0
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 <u>above recurring peak hour</u> conditions are estimated to be:	<u>Score</u>
• < 1 hour per day (3 points)	0
• 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	<u>Score</u>

March 2016 Page 1



MassDOT Scoring Criteria for Work Zone ITS		
MassDOT Project Location:	Project #	
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)	0	
Delays in excess of 30 minutes for a duration at least 2 hours (10 points)		
Factor 6 – Commercial Motor Vehicle Traffic Impacts:	<u>Score</u>	
Percent Heavy Vehicles <5% (1 point)		
Percent Heavy Vehicles 5 -10% (3 points)	0	
Percent Heavy Vehicles >10% (6 points)		
Factor 7 – Impacts of Specific Issues (Based on Judgement: No Impact = 0 / Impact = 1)	<u>Score</u>	
Existing Crash History within the Work Zone limits	0	
Traffic Speed Variability	0	
Increased travel time or restricted access to regional traffic generators	0	
Unusual or Unpredictable Weather Patterns Such as Snow, Ice, and Fog	0	
Frequently Changing Operating Conditions for Traffic	0	
Merging Conflicts and Hazards At Work Zone Tapers	0	
Complex Traffic Control Layout with Multiple Access Points (i.e. Ramps or Side Streets)	0	
Construction Vehicle Entry/Exit Speed Differential Relative to Traffic	0	
Limited offset to median or roadside barrier/guardrail	0	
Lane Diversions - Use of Highway Crossover or Center Work Zone	0	
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	0	
• <10 – ITS may not provide enough benefit as a treatment to justify the associated costs		

March 2016 Page 2