

PURPOSE

The 25% Traffic Engineering Review is intended to provide MassDOT the opportunity to evaluate the proposed design and Functional Design Report relative to current design standards, operation impacts, safety impacts and other potential community concerns associated with the proposed design.

GENERAL

This checklist represents the minimum amount of issues that should be considered when reviewing a 25% traffic submittal. The information below is not intended to address all aspects of report or plan preparation. To the extent practical, any comments relative to plan preparation made at the 25% stage will certainly improve the quality of the 75% submittal.

Any question listed below with a No or N/A answer requires a written comment.

I. Functional Design Report

- | | Yes | No | N/A | |
|---------------------------|-------------------------------------|--------------------------|-------------------------------------|---|
| 1 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | A. Existing Conditions
Is a description of the project study area included?
Comment: _____ |
| 2 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the project location (locus) map included?
Comment: _____ |
| 3 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is a discussion of existing deficiencies and an evaluation of the existing signs, signals and markings
Comment: _____ |
| B. Traffic Volumes | | | | |
| 4 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the traffic count data less than 2 years old from the date of FDR submission?
Comment: _____ |
| 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Are the Automatic Traffic Recorder (ATR) Counts included for the minor street approach for signalized intersections?
Comment: <u>No signalized intersections at critical trail crossing locations.</u> |
| 6 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are Manual Turn Movement Counts (TMC): Peak hour data for all study intersections included?
Comment: _____ |
| 7 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are Peak Hour Factors (PHF) identified?
Comment: _____ |
| 8 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are heavy vehicle, bicycle, and pedestrian count data included in the TMC?
Comment: _____ |
| 9 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do the base year volumes represent an average month during the year the FDR is submitted or no more than 2 years for MEPA permitted projects?
Comment: _____ |
| 10 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Have seasonal factors been reviewed and applied as necessary?
Comment: _____ |
| 11 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do the future year volumes represent a minimum of 7 years from the base year?
Comment: _____ |
| 12 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do the future year volumes include background growth and site development as necessary?
Comment: _____ |
| 13 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Are trip generation/distribution data for private development trips schematically displayed on the network?
Comment: <u>No significant private development anticipated in the project area.</u> |
| 14 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are base year and future year traffic volume networks provided?
Comment: _____ |

	Yes	No	N/A	
C. Safety Analysis				
15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are three years of Crash Data analyzed for project locations? (5 years is preferred)
	Comment: _____			
16	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are crash rate calculations included for all study area intersections and segments?
	Comment: _____			
17	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are collision diagrams provided for all study area intersections with more than 3 crashes per year?
	Comment: None of the intersections experienced 3 or more crashes per year during the years evaluated.			
18	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is a collision map provided for all study area segments?
	Comment: Project is a proposed trail, no roadway segments included.			
19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Was the Safety Review Prompt List utilized during a site visit?
	Comment: Roadway safety improvements is not the focus of this project.			
20	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is discussion regarding the Safety Review Prompt List included?
	Comment: See response to No. 19			
D. MUTCD Signal Warrants				
21	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is traffic count data provided for a minimum of the 8 highest hours for the major streets and minor street?
	Comment: Full intersection traffic signal control is not proposed for this project. Beacons proposed at critical crossing location.			
22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Was the minor street count data collected by a manual turning movement count method?
	Comment: _____			
23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does the signal warrant analysis follow procedures from MUTCD?
	Comment: _____			
24	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Do proposed signal installations meet an 8-hour volume warrant?
	Comment: See response to No. 21			
E. Operational Analysis				
25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are the intersection approaches evaluated using observed/appropriate peak hour factors?
	Comment: _____			
26	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are heavy vehicle percentages used in the analyses?
	Comment: _____			
27	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are pedestrian volumes and phasing incorporated into the analyses?
	Comment: _____			
28	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are capacity analyses completed for all the required analysis scenarios?
	Comment: _____			
29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do capacity analyses reflect the existing and proposed geometry conditions?
	Comment: _____			
30	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are coordinated signals/closely spaced intersections evaluated under a systems analysis?
	Comment: No systems are included in this project			
31	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are the 50th and 95th percentile vehicle queues documented?
	Comment: _____			
F. Proposed Design				
32	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is a description of the proposed geometric changes and/or alternative designs included?
	Comment: _____			
33	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is a narrative describing the pedestrian and bicycle accommodation improvements included?
	Comment: _____			
34	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is discussion included of how the proposed design will alter the traffic control conditions?
	Comment: _____			
35	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Was a roundabout design an alternative considered?
	Comment: Proposed project is a new trail, not an intersection improvement project.			
36	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are the Section 61 Findings attached for the Private Development projects?
	Comment: Not a private development project.			
37	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Do all traffic calming design treatments (where allowed) follow the Traffic Calming Guidelines?
	Comment: No traffic calming measures are proposed.			
38	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do all study area intersections include corrective design measures?
	Comment: _____			
39	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has "work to be done by others" been factored into schedule/design?
	Comment: _____			

- Yes No N/A G. Traffic Management
- 40 Is a Construction Management Outline included?
 Comment: _____
- 41 Are the appropriate traffic counts and capacity analyses included?
 Comment: No analysis required for the anticipated roadway impacts. _____

II. 25% Design Plans

- Yes No N/A A. Basic Design Plan Set
- 42 Does the plan set follow the preparation guidelines specified in the current Project Development and Design Guidebook?
 Comment: _____
- 43 Do the plans provide linework and details of the existing conditions for use in reference to the proposed design?
 Comment: _____
- 44 Do the proposed roadway cross-sections conform to current standards?
 Comment: _____
- 45 Are provisions made for bicycle accommodation where applicable?
 Comment: _____
- 46 Do pedestrian facilities meet the Massachusetts Architectural Access Board (MAAB) standards?
 Comment: _____

- Yes No N/A B. Traffic Signal Plans
- 47 Do the plans indicate the proper placement of the signal heads?
 Comment: Flashing beacon proposed at critical trail crossing location. _____
- 48 Are the signal head configurations in conformance with the MUTCD standards?
 Comment: _____
- 49 Do the signal layout plans show the proposed lane assignments and stop lines?
 Comment: _____
- 50 Is the Sequence and Timing Chart provided on the plans?
 Comment: See comment response for No. 47. _____
- 51 Is the Preferential Phasing Diagram, including pedestrian phases, shown on the signal plan?
 Comment: _____
- 52 Is a Time-Space Diagram for the interconnected signals included?
 Comment: See comment response for No. 47. _____
- 53 Is signal detector type and location included on the signal plans?
 Comment: _____

- Yes No N/A C. Traffic Management Plans (TMP)
- 54 Are preliminary Temporary Traffic Control Plans provided?
 Comment: _____
- 55 Do the typical layouts follow MassDOT's Standard Details and Drawings for the Development of TMP's?
 Comment: _____
- 56 If required, have the detour routes been clearly defined?
 Comment: No detours are proposed. _____
- 57 Is pedestrian and bicycle accommodation maintained during construction?
 Comment: _____