



# SAFETY & OPERATIONS CERTIFICATION DOCUMENT AMENDMENT

**BUREAU OF TRAFFIC OPERATIONS**

**To:** \_\_\_ Region Planning Chief: <Chief Name>  
Bureau of Traffic Operations – Traffic Engineering & Safety Section

**From:** <Analyst Name>  
\_\_\_ Region

**Date:** <MM/DD/YYYY>

**RE:** Amendment of the Safety & Operations Certification Document

Original Approval Date: <MM/DD/YYYY>

Design ID:

Construction ID:

Highway:

Project Title:

Project Subtitle:

County

Scheduled Construction Year:

Improvement Concept Code:

*This amendment includes analysis of locations or improvements that were not included within the original Safety and Operations Certification Document. Any analysis within this document may have used different configuration files or values when compared to the original analysis. The original information produced shall be used for comparison purposes only.*

Having considered the safety performance of the existing corridor and any proposed improvements, we believe this document reflects the intent of the policy and guidelines described in section 11-38 of the Wisconsin Facilities Development Manual.

If applicable, having considered the operational performance of the existing corridor and any proposed improvements, we believe this document reflects the intent of the policy and guidelines described in section 11-52 of the Wisconsin Facilities Development Manual.

**Preparer:**

\_\_\_\_\_  
Region Analyst

\_\_\_\_\_  
Date

**Approval:**

\_\_\_\_\_  
Bureau of Traffic Operations  
Traffic Engineering and Safety Section

\_\_\_\_\_  
Date

\_\_\_\_\_  
Region Supervisor

\_\_\_\_\_  
Date



## Purpose of Amendment

**A1. Provide a narrative for the reason of the amendment to the original Safety & Operations Certification Document.**

*Describe the purpose of the amendment such as project limit adjustments or additional alternatives that were reviewed and any additional information.*

## Diagnosis

**A2. For new Sites of Promise or additional sites, describe the crashes or operational deficiencies. If the location was described in the original Safety & Operations Certification Document, skip to Section A3.**

Sites of Promise:

*List new Sites of Promise (i.e., “flagged locations”) or additional sites evaluated within the project area. Include the Meta-Manager segment PDP ID or Intersection ID as well as other contextual information (i.e., street names) to describe the location. Determine and describe the safety or operational issues. Identify contributing factors and if they are correctable by an engineering solution. Describe any crash trends that may have occurred.*

**Attachments:** *Project location/overview map, Meta-Manager spreadsheet segment screenshot, Intersection Network Screening spreadsheet screenshot, Crash Diagrams, Vetting comments.*

*The Safety Certification Worksheet does not need to be updated with the amendment.*



## Countermeasure/Alternative Identification, Analysis Results and Economic Appraisal

**A3. Provide a brief description of the alternative(s) and the contributing factors that are being targeted. Include information within A3.1 from the original document for comparison purposes only. If the location was not identified within the original document, list all alternatives and the contributing factors that are being targeted by the alternative.**

**Location:**

**Reason for improvement (check all that apply):** Safety  Operations

Alternative(s)	General Description	How improvements address safety/operational issues
Alternative Name:		
Alternative Name:		

*For each location, create a new location table. Then list the alternatives and describe the contributing factors that would be mitigated with each alternative. Indicate if the improvement is for Safety, Operations, or both.*

**Attachments:** *Alternative concept drawings*

*Bureau of Traffic Operations (BTO) approval is **required** for all projects that consider alternatives as part of the Safety & Operations Certification Document.*

### **A3.1. Analysis Results**

Analysis Location:	<i>List the analysis location or limits of the proposed treatment with the largest impact</i>
Safety Analysis Method:	<i>List which method is used (Method 1, 2, or 3)</i>
External CMF Value:	<i>List the CMF value if using an external CMF. External CMFs are any CMFs used outside of the IHSDM software.</i>
External CMF Source:	<i>List the external CMF source, such as from the WisDOT CMF table. See Traffic Engineering, Operations and Safety Manual (TEOpS) 12-3-1.</i>
Unique Safety Analysis Notes:	<i>List any noteworthy comments about the analysis or IHSDM inputs.</i>

Alternative Name		Base	Alt. 1	Alt. 2	Alt. 3
Safety Certification Process (See FDM 11-38)	Fatal & Injury Crashes				
	Property Damage Only Crashes				
	Total Crashes				
	Crash Cost Value				
	Project Cost				
	Net Safety Benefit				



# SAFETY & OPERATIONS CERTIFICATION DOCUMENT AMENDMENT

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	Net Cost				
	Safety B/C				
Operations Certification Process (See FDM 11-52-15)	Delay Cost Over Project Life				
	Net Operational Benefit				
	Operations B/C				
	Safety & Operations B/C				
	STN-Only Operational Benefit (intersections only)				
	STN-Only B/C (intersections only)				

*In some cases, an alternative may be less expensive than the base case. For these cases, use the lowest cost alternative as the base case when performing the Economic Appraisal. When evaluating alternatives such as High Friction Surface Treatment or signal-related work, where resurfacing costs would be the same across all possible alternatives, the base case cost can be \$0.*

**Attachments:** *Cost Estimates, IHSDM Crash Prediction Evaluation Reports, Highway Safety Benefit-Cost Analysis tool results (Method 1 only), IHSDM Economic Analysis Report, Operations Certification Summary (if applicable)*

**A3.2. Describe other information relevant to the project such as community considerations, unique features, potential funding sources, etc.**

## ATTACHMENTS

Include attachments that were not included within the original analysis that are pertinent to the amended Safety & Operations Certification Document analysis

- A. Project Information
  - a. Project Location/Overview Map
- B. Diagnosis Documentation
  - a. WisTransPortal crash data spreadsheet with vetting comments
  - b. Crash Diagram(s)
- C. Countermeasure/Alternative Identification
  - a. Layout/Schematic for each alternative
- D. Analysis Results and Economic Appraisal
  - a. Cost estimate for each alternative
  - b. IHSDM Crash Prediction Evaluation Report for each alternative
  - c. IHSDM Economic Analysis Report
  - d. Highway Safety Benefit-Cost Analysis Tool results
- E. Operations Certification Summary (if applicable)
  - a. Turning movement counts



## SAFETY & OPERATIONS CERTIFICATION DOCUMENT AMENDMENT

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- b. Diagram of traffic volumes for each analysis period
  - c. AWSC warrants
  - d. Signal warrants
  - e. Software reports for operation analysis
  - f. DT 1887
  - g. Exhibit highlighting queues vs. available storage for each analysis period
  - h. OCP Benefit-Cost Tool printouts
- F. Original Safety & Operations Certification Document