

AASHTO Highway Safety Manual, 2nd Edition (NCHRP 17-71)

Overview of New and Updated Content

CONTENT OF HSM (1ST EDITION)



HSM Current Content

Volume	Part	Description
1	A	<ul style="list-style-type: none"> • Introduction • Human Factors • Fundamentals
1	B	<ul style="list-style-type: none"> • Safety Management Process (including network screening, diagnosis, economic assessment, etc.)
2	C	<p>Safety Performance and SPFs for:</p> <ul style="list-style-type: none"> • Rural Two-Lane Highways • Rural Multilane Highways • Urban and Suburban Arterials
3	D	Crash Modification Factors (Includes detailed list of “HSM Approved” CMFs)
--	Supplement	Safety Performance for Freeways, Interchanges, and Terminal Intersections

Research Efforts to be Included

- **NCHRP 17-71: HSM Production Contract (Active)**
- **NCHRP 17-72: Changes to Part D (Active)**
- **NCHRP 17-77: Systemic Safety Improvements (Active)**
- **NCHRP 17-84: Incorporating Bicycle and Pedestrian Methodologies into the HSM2 (Active)**
- **Other Completed Research Projects :**
 - NCHRP 17-54 (Roadside Features)
 - NCHRP 17-62 (Crash Type and Severity)

NCHRP 17-71 Project: *HSM2 Production Contract*

Joe Toole, Kittelson (PI)

NCHRP 17-72 Project:
*Update of Crash Modification Factors
for the Highway Safety Manual*

Raghavan Srinivasan (PI)

NCHRP 17-77:

Systemic Safety Improvements

Darren Torbic (PI)

NCHRP 17-84:

***Incorporating Bicycle and Pedestrian
Methodologies into the HSM2***

Darren Torbic (PI)

HSM2 CONTENT



General Changes for HSM2

- Review and Update of All Chapters
- Enhance the Human Factors Chapter
- Clarification in Terminology for CMFs versus SPF Adjustment Factors
- Change Format of Example Calculations
- Add Sample Problems

Critical Enhancements for HSM2

- Incorporate Expanded Information About Systemic Safety
- Update of All Existing Safety Performance Functions for Part C
- Expand Bicycle and Pedestrian Content
- Add New SPF Information including Roundabouts, One-way Urban Arterials, and 6-Lane Urban Arterials

Critical Enhancements for HSM2 (cont.)

- Elevate Calibration from Appendix to Chapter
- Elevate Weighting Procedure (EB Method)
- Completely Revise Part D (CMF) Content

HSM2 Content

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2	C	<p>Safety Performance and SPFs for:</p> <ul style="list-style-type: none">• Rural Two-Lane Highways• Rural Multilane Highways• Urban and Suburban Arterials (including one-way and 6-lane arterials)• Freeways, Interchanges, and Terminal Intersections• Enhanced Intersection Content• Bicycle and Pedestrian Facilities
3	D	<p>Crash Modification Factors (How to Develop, Select, and Apply CMFs)</p>
TBD	TBD	<p>Systemic Safety, Calibration Chapter, EB Procedure</p>

Schedule

Closely Monitoring Active Research

- Critical Research Activities Ending in 2019
- HSM2 Production Effort Late 2019 (or early 2020)
- Document Belongs to AASHTO so then must undergo Balloting

Questions?

Karen Dixon, Ph.D., P.E.

Email: k-dixon@tti.tamu.edu