

Applying (or misapplying!) CMFs:

The ins and outs of estimating crash reductions



Thursday, Dec. 11, 2014



Introduction

Karen Scurry, P.E.
FHWA Office of Safety Programs

Agenda

Daniel Carter, P.E. – *CMF Clearinghouse primer and new features*

Engineering Research Associate, UNC Highway Safety Research Center

Frank Gross, Ph.D., P.E. – *Misapplication of CMFs*

Highway Safety Engineer, Vanasse Hangen Brustlin, Inc.

John Milton and Jennene Ring – *Developing a state CMF short list and using CMFs in benefit/cost analysis*

Washington DOT

Questions (submit any time in question box)

Webinar “Housekeeping”

- Rejoining the program
- Questions/assistance
- Post-webinar survey
- Certificate of attendance

Poll

- How many people are attending the webinar at your location?

Agenda

Daniel Carter, P.E. – *CMF Clearinghouse primer and new features*

Engineering Research Associate, UNC Highway Safety Research Center

Frank Gross, Ph.D., P.E. – *Misapplication of CMFs*

Highway Safety Engineer, Vanasse Hangen Brustlin, Inc.

John Milton and Jennene Ring – *Developing a state CMF short list and using CMFs in benefit/cost analysis*

Washington DOT

Questions (submit any time in question box)

New Features: Subcategories

- Some categories were getting too big (roadway, roadside, traffic control)
- Subcategories break it up into smaller, more specific groupings
- Example: Roadway
 - Lane width
 - Number of lanes
 - Lane restrictions
 - Pavement condition and friction
 - Winter weather treatment
 - Roadway rumble strips
 - Other

Searching the Clearinghouse

- When looking for something specific, search by countermeasure name
 - More search terms = narrower results
- When looking to see what the Clearinghouse has, use a blank search
 - Explore by category
 - Use filters to narrow results

New Features: Resources

- How to Develop and Use CMFs
- How to Develop and Use SPFs
- Others on b/c analysis and behavioral countermeasures

Issue: How to Present CMFs

- Some authors develop only one or two CMFs
- Some authors develop hundreds (disaggregate analysis)
- CMF Clearinghouse policy has been to present all CMFs reported by author

Poll

- How would you prefer to see the Clearinghouse present the results of a study that developed many CMFs for a countermeasure?

Agenda

Daniel Carter, P.E. – *CMF Clearinghouse primer and new features*

Engineering Research Associate, UNC Highway Safety Research Center

Frank Gross, Ph.D., P.E. – *Misapplication of CMFs*

Highway Safety Engineer, Vanasse Hangen Brustlin, Inc.

John Milton and Jennene Ring – *Developing a state CMF short list and using CMFs in benefit/cost analysis*

Washington DOT

Questions (submit any time in question box)

Agenda

Daniel Carter, P.E. – *CMF Clearinghouse primer and new features*

Engineering Research Associate, UNC Highway Safety Research Center

Frank Gross, Ph.D., P.E. – *Misapplication of CMFs*

Highway Safety Engineer, Vanasse Hangen Brustlin, Inc.

John Milton and Jennene Ring – *Developing a state CMF short list and using CMFs in benefit/cost analysis*

Washington DOT

Questions (submit any time in question box)

Agenda

Daniel Carter, P.E. – *CMF Clearinghouse primer and new features*

Engineering Research Associate, UNC Highway Safety Research Center

Frank Gross, Ph.D., P.E. – *Misapplication of CMFs*

Highway Safety Engineer, Vanasse Hangen Brustlin, Inc.

John Milton and Jennene Ring – *Developing a state CMF short list and using CMFs in benefit/cost analysis*

Washington DOT

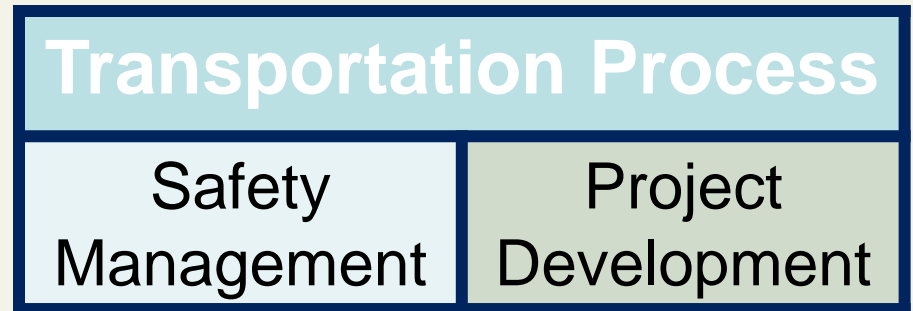
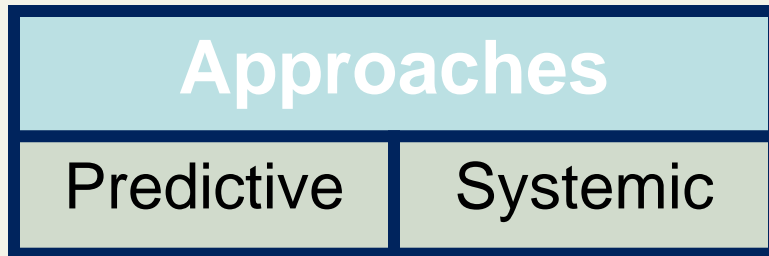
Questions (submit any time in question box)

CMF-Related Resources

- CMF Training Opportunities
 - Application of CMFs (*February 18, 2015 – register via NHI*)
 - Science of CMFs (*no scheduled sessions to date*)
 - CMF Development Pilot (*March 2015, tentative*)
- Technical Assistance
 - http://rspcb.safety.fhwa.dot.gov/p2p/p2p_app.aspx
- Synthesis of Countermeasure Service Life and Crash Severity Costs (*coming soon*)
- CMF Clearinghouse User Guide (*coming soon*)

What is the EDC-3 Data-Driven Safety Analysis Initiative?

- The application of two science-based analysis approaches into two common transportation processes



Why the Data-Driven Safety Analysis Initiative?

- **Key Message:**



Recording of Today's Webinar

CMF
CRASH MODIFICATION FACTORS CLEARINGHOUSE

[Skip to main content](#) | [Site Map](#) | [Notice](#) | [Sign Up for our e-Newsletter](#) | [Home](#)

[About CMFs](#) | [Submit CMFs](#) | [Resources](#) | [Contact](#)

Search for:

in

[Need Help?](#)

Applying (or misapplying!) CMFs: The ins and outs of estimating crash
Join us for a webinar on Thursday, Dec. 11, to learn about selecting the CMF most appropriate to a specific scenario. [Click here for more!](#)

- About the Clearinghouse
- How to Develop and Use CMFs
- How to Develop and Use SPFs
- Trainings
- Highway Safety Manual
- Countermeasure Selection
- Cost Benefit Analysis
- Behavioral Countermeasures
- International Resources
- Publications
- CMF Update (e-Newsletter)
- To the News
- Webinars**

A crash modification factor (CMF) is a multiplicative factor used to compute the expected number of crashes after implementing a given countermeasure at a specific site. The Crash Modification Factors Clearinghouse houses a Web-based database of CMFs along with supporting documentation to help transportation engineers identify the most appropriate countermeasure for their safety needs. Using this site, you can search to find CMFs or [submit](#) your own CMFs to be included in the clearinghouse.

Recently Added CMFs

Replace TWLTL with raised median	Install median on the minor approach of an unsignalized 3-leg intersection	Add...
CMF: 0.81	CMF: 0.82	CMF: 0.69
CRF: 19	CRF: 18	CRF: 31
Crash type: Rear end	Crash type: All	Crash type: All
Crash severity: All	Crash severity: All	Crash severity: All

www.CMFClearinghouse.org

Karen Scurry, P.E.
FHWA Office of Safety Programs
609-637-4207

karen.scurry@dot.gov