# CHANGE AHEAD: THE CMF CLEARINGHOUSE TRANSITIONS TO A NEW RATING CRITERIA IN 2021

The CMF Clearinghouse will transition to the CMF rating criteria developed as part of the NCHRP 17-72 project for the 2nd edition of the Highway Safety Manual. This flyer provides an overview of the current CMF Clearinghouse star rating criteria, as well as the NCHRP 17-72 criteria. A series of frequently asked questions follows, that we will continue to add to as the transition progresses.

## CURRENT CMF CLEARINGHOUSE STAR RATING CRITERIA

Currently, CMFs are rated based on five criteria:

- Study Design (weight of 2).
- Sample Size (weight of 2).
- Standard Error (weight of 1).
- Potential Bias (weight of 1).
- Data Source – diversity in states (weight of 1).

Points are assigned to each criteria based on the level of rigor (excellent = 2 points, fair = 1 point, or poor = 0 points). The overall score is determined based on the following formula (with the maximum possible score of 14):

**Overall Score = (2 × Study Design) + (2 × Sample Size) + Standard Error + Potential Bias + Data Source**

The overall score is converted to star ratings based on the thresholds presented in the table below. It should be noted that under the current star rating system, very few CMFs receive 5 stars (unless the study uses data from multiple States).

| Score | Star Rating |
|---|---|
| 14 (max possible) | **5 Stars** |
| 11 - 13 | **4 Stars** |
| 7 - 10 | **3 Stars** |
| 3 - 6 | **2 Stars** |
| 1 - 2 | **1 Star** |
| 0 | **0 Stars** |

# RATING PROCEDURE DEVELOPED BY NCHRP 17-72 FOR THE 2ND EDITION OF HIGHWAY SAFETY MANUAL

As part of the ongoing NCHRP 17-72 project, a CMF rating system has been developed to identify CMFs for inclusion in the 2nd Edition of Highway Safety Manual. This rating system is much more rigorous and provides scores for various factors (there are multiples levels within factors and points for each level). The following table provides a summary of the factors used for the various study types: The total score is calculated by adding the points for the different factors, with a maximum possible score of 150.

| Before/After and Cross-Sectional Studies | Meta-Analysis Studies | Meta-Regression Studies |
|---|---|---|
| Sample Size | Methodology and data | Methodology and data |
| Study Design and Statistical Methodology | Individual CMF quality | Individual CMF quality |
| Statistical Significance | Appropriateness of combining | Appropriateness of developing a crash modification function |
| | Statistical significance | Appropriateness of statistical analysis |

## WILL THE CMF CLEARINGHOUSE MAINTAIN THE STAR RATING FOR EACH CMF?

The CMF ratings in the CMF Clearinghouse will continue to be presented in the form of a 5-star scale, along with the total score calculated using the NCHRP 17-72 rating criteria. This would provide CMF Clearinghouse users with the detailed scores for the various factors (and levels within factors) to aid in better decision making. The traditional 5-star rating will be determined based on the number of points a CMF earned using the rating system developed as part of NCHRP 17-72.

## WHAT HAPPENS TO THE STAR RATINGS FOR CMFS CURRENTLY IN THE CMF CLEARINGHOUSE?

Ratings for all the current CMFs will be converted to reflect the new rating criteria, following the rating system transition. We understand that DOTs and practitioners have been using the CMF Clearinghouse star ratings to inform their decision making. The transition to the NCHRP 17-72 rating criteria will lead to few instances where the star rating for current CMFs would change (there will be some higher rated CMFs that will score low under the new rating criteria, as well as some lower rated CMFs that will score high under the new rating criteria).

To minimize the impact of these changes, the CMF Clearinghouse will provide users with both the old and new star ratings for the CMFs currently present in the CMF Clearinghouse for a period of time after the transition.

CMFs added to the CMF Clearinghouse after the rating transition would only show the rating based on the new criteria.

## WHEN WILL THE CMF CLEARINGHOUSE TRANSITION TO THE NEW RATING CRITERIA?

The exact launch date for this transition is still to be determined; however, it will likely occur early in 2021. The CMF Clearinghouse is actively working behind the scenes to ensure a smooth transition for all users. We will continue to provide additional details regarding this transition to the CMF Clearinghouse users in the coming months.

Visit the CMF Clearinghouse for the most up to date information about the transition or contact Karen Scurry (**karen.scurry@dot.gov**) if you have specific questions regarding this rating system transition.

**THIS INFORMATION WILL BE REGULARLY UPDATED AT CMFCLEARINGHOUSE.ORG/CHANGES.CFM**