



CMF / CRF Details

CMF ID: 10010

Implement Active Traffic Management Strategies with Hard Shoulder Running

Description: Implement a mix of advisory variable speed limits, lane use control signals, and hard shoulder running on a segment of interstate.

Prior Condition: Static speed limits, no lane use control signals, and no hard shoulder running.

Category: Advanced technology and ITS

Study: [*Evaluation of the Impact of the I-66 Active Traffic Management System: Phase II, Dutta et al., 2018*](#)

Star Quality Rating:



[\[View score details\]](#)

Crash Modification Factor (CMF)

Value: 0.938

Adjusted Standard Error:

Unadjusted Standard Error: 0.054

Crash Reduction Factor (CRF)

Value: 6.2 (This value indicates a **decrease** in crashes)

| | |
|-----------------------------------|-----|
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 5.4 |

| Applicability | |
|----------------------------|---|
| Crash Type: | All |
| Crash Severity: | All |
| Roadway Types: | Principal Arterial Interstate |
| Number of Lanes: | 6-8 |
| Road Division Type: | Divided by Median |
| Speed Limit: | |
| Area Type: | Not specified |
| Traffic Volume: | 133000 to 184000 <i>Annual Average Daily Traffic (AADT)</i> |
| Time of Day: | All |

| <i>If countermeasure is intersection-based</i> | |
|---|--|
| Intersection Type: | |
| Intersection Geometry: | |
| Traffic Control: | |
| Major Road Traffic Volume: | |
| Minor Road Traffic Volume: | |

| Development Details | |
|---------------------------------|--------------|
| Date Range of Data Used: | 2011 to 2016 |
| Municipality: | |

| | |
|----------------------------------|--|
| State: | VA |
| Country: | United States |
| Type of Methodology Used: | Before/after using empirical Bayes or full Bayes |
| Sample Size Used: | |

| Other Details | |
|---|---|
| Included in Highway Safety Manual? | No |
| Date Added to Clearinghouse: | Jul-26-2019 |
| Comments: | Applies to a corridor with a mix of advisory variable speed limits, lane use control signals, and hard shoulder running along the corridor. |

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