



CMF / CRF Details

CMF ID: 7204

Increase median shoulder width

Description: Increase median shoulder width

Prior Condition: Median shoulder with unspecified width

Category: Shoulder treatments

Study: [NCHRP Report 794: Median Cross-Section Design for Rural Divided Highways, Graham et al., 2014](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.791

Adjusted Standard Error:

Unadjusted Standard Error: 0.087

Crash Reduction Factor (CRF)

Value: 20.92 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

| | |
|-----------------------------------|------|
| Unadjusted Standard Error: | 8.71 |
|-----------------------------------|------|

Applicability

| | |
|--------------------|--|
| Crash Type: | Cross median,Fixed object,Run off road,Other |
|--------------------|--|

| | |
|------------------------|-----|
| Crash Severity: | All |
|------------------------|-----|

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|-----------------------|---|
| Roadway Types: | Principal Arterial Other Freeways and Expressways |
|-----------------------|---|

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|-------------------------|---|
| Number of Lanes: | 4 |
|-------------------------|---|

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|----------------------------|-------------------|
| Road Division Type: | Divided by Median |
|----------------------------|-------------------|

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|---------------------|--|
| Speed Limit: | |
|---------------------|--|

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|-------------------|-------|
| Area Type: | Rural |
|-------------------|-------|

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|------------------------|--|
| Traffic Volume: | |
|------------------------|--|

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|---------------------|-----|
| Time of Day: | All |
|---------------------|-----|

If countermeasure is intersection-based

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|---------------------------|--|
| Intersection Type: | |
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|-------------------------------|--|
| Intersection Geometry: | |
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|-------------------------|--|
| Traffic Control: | |
|-------------------------|--|

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| Major Road Traffic Volume: | |
|-----------------------------------|--|

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| Minor Road Traffic Volume: | |
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Development Details

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|---------------------------------|--------------|
| Date Range of Data Used: | 2001 to 2005 |
|---------------------------------|--------------|

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|----------------------|--|
| Municipality: | |
|----------------------|--|

| | |
|---------------|----|
| State: | WA |
|---------------|----|

| | |
|----------------------------------|-----|
| Country: | USA |
| Type of Methodology Used: | 7 |
| Sample Size Used: | |

| Other Details | |
|---|--|
| Included in Highway Safety Manual? | No |
| Date Added to Clearinghouse: | Nov-01-2015 |
| Comments: | This CMF applies to a one foot increase in median shoulder width for all median-related crashes on four-lane freeways with a semi-rigid barrier. Median-related crashes include hit barrier, cross-median crashes, non-collision cross-median crashes, rollover, fixed-object or other median-related crashes. |

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