



## CMF / CRF Details

CMF ID: 4785


**Install wider markings and shoulder rumble strips with resurfacing**

**Description:** Resurface roadway to improve rideability and install wider pavement markings (increase from 4 inch to 6 inch) and shoulder rumble strips.

**Prior Condition:** *No Prior Condition(s)*

**Category:** Delineation

**Study:** [\*Benefit/Cost Evaluation of MoDOT's Total Striping and Delineation Program: Phase II, Potts et al., 2011\*](#)

Star Quality Rating:	
	<a href="#">[View score details]</a>

Crash Modification Factor (CMF)	
Value:	0.8
Adjusted Standard Error:	
Unadjusted Standard Error:	0.043

Crash Reduction Factor (CRF)	
Value:	20 (This value indicates a <b>decrease</b> in crashes)
Adjusted Standard Error:	

<b>Unadjusted Standard Error:</b>	4.3
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### Applicability

<b>Crash Type:</b>	All
<b>Crash Severity:</b>	K (fatal),A (serious injury),B (minor injury),C (possible injury)
<b>Roadway Types:</b>	Principal Arterial Other Freeways and Expressways
<b>Number of Lanes:</b>	multi
<b>Road Division Type:</b>	Divided by Median
<b>Speed Limit:</b>	
<b>Area Type:</b>	Urban
<b>Traffic Volume:</b>	
<b>Time of Day:</b>	All

### *If countermeasure is intersection-based*

<b>Intersection Type:</b>	
<b>Intersection Geometry:</b>	
<b>Traffic Control:</b>	
<b>Major Road Traffic Volume:</b>	
<b>Minor Road Traffic Volume:</b>	

### Development Details

<b>Date Range of Data Used:</b>	2002 to 2009
<b>Municipality:</b>	
<b>State:</b>	MO

<b>Country:</b>	
<b>Type of Methodology Used:</b>	2
<b>Sample Size Used:</b>	Crashes
<b>Before Sample Size Used:</b>	502 Crashes
<b>After Sample Size Used:</b>	425 Crashes

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	May-01-2013
<b>Comments:</b>	

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