



# CMF / CRF Details

CMF ID: 7741

Install shoulder rumble strips

Description:

Prior Condition: Roadways without should rumble strips

Category: Shoulder treatments

Study: [Validation and Application of Highway Safety Manual \(Part D\) in Florida, Abdel-Aty et al., 2014](#)

Star Quality Rating:

4 Stars

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

## Crash Modification Factor (CMF)

Value: 0.768

Adjusted Standard Error:

Unadjusted Standard Error: 0.118

## Crash Reduction Factor (CRF)

Value: 23.2 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 11.8

## Applicability

**Crash Type:**

All

**Crash Severity:**

All

**Roadway Types:**

Not specified

**Number of Lanes:**

2

**Road Division Type:**

Undivided

**Speed Limit:**

**Area Type:**

Rural

**Traffic Volume:**

**Time of Day:**

All

*If countermeasure is intersection-based*

**Intersection Type:**

**Intersection Geometry:**

**Traffic Control:**

**Major Road Traffic Volume:**

**Minor Road Traffic Volume:**

## Development Details

**Date Range of Data Used:**

2007 to 2010

**Municipality:**

**State:**

FL

**Country:**

USA

**Type of Methodology Used:**

2

<b>Sample Size Used:</b>	
<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Mar-08-2016
<b>Comments:</b>	

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