



# CMF / CRF Details

**CMF ID: 2009**

**Convert 12-ft lanes and 6-ft shoulders to 11-ft lanes and 5-ft shoulders**

**Description:**

**Prior Condition: 2-lane rural, undivided. Total width = 36 ft; Lane width = 10 ft; Shoulder width = 8 ft**

**Category: Roadway**

**Study: [Safety Effectiveness of Lane and Shoulder Width Combinations on Rural, Two-Lane, Undivided Roads](#), Gross et al., 2009**

<b>Star Quality Rating:</b>	
<input type="text" value="8 Stars"/>	<a href="#">[View score details]</a>

<b>Crash Modification Factor (CMF)</b>	
<b>Value:</b>	1.06
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	0.053

<b>Crash Reduction Factor (CRF)</b>	
<b>Value:</b>	-6 (This value indicates an <b>increase</b> in crashes)
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	5.3

## Applicability

**Crash Type:** Run off road

**Crash Severity:** All

**Roadway Types:** Not Specified

**Number of Lanes:** 2

**Road Division Type:** Undivided

**Speed Limit:**

**Area Type:** Rural

**Traffic Volume:** 1000 *Annual Average Daily Traffic (AADT)*

**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:** 1997 to 2001

**Municipality:**

**State:** PA

**Country:**

<b>Type of Methodology Used:</b>	5
<b>Sample Size Used:</b>	1893 Sites

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Dec-01-2009
<b>Comments:</b>	

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