



## CMF / CRF Details

CMF ID: 10431

### Conversion of intersection to roundabout

**Description:** Conversion of stop- and signal-controlled intersections into roundabouts

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

**Category:** Intersection geometry

**Study:** [Effect of traffic roundabouts on accident rate and severity in Arizona, Mamlouk and Souliman, 2019](#)

Star Quality Rating:



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

### Crash Modification Factor (CMF)

**Value:** 1.6

**Adjusted Standard Error:**

**Unadjusted Standard Error:**

### Crash Reduction Factor (CRF)

**Value:** -60 (This value indicates an **increase** in crashes)

**Adjusted Standard Error:**

**Unadjusted Standard Error:**

### Applicability

**Crash Type:**

All

**Crash Severity:**

O (property damage only)

**Roadway Types:**

Not specified

**Number of Lanes:**

**Road Division Type:**

**Speed Limit:**

**Area Type:**

Urban

**Traffic Volume:**

**Time of Day:**

Not specified

### *If countermeasure is intersection-based*

**Intersection Type:**

Roadway/roadway (not interchange related)

**Intersection Geometry:**

Not specified

**Traffic Control:**

Roundabout

**Major Road Traffic Volume:**

**Minor Road Traffic Volume:**

### Development Details

**Date Range of Data Used:**

**Municipality:**

**State:**

AZ

<b>Country:</b>	USA
<b>Type of Methodology Used:</b>	Simple before/after
<b>Sample Size Used:</b>	

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Jun-01-2020
<b>Comments:</b>	For double-lane roundabout. Change in accident rate per year.

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