

Butler County Single-Lane Modern Roundabouts Before/After Statistics

Hamilton Mason Road & Liberty Fairfield Road (ADT=12,050 vpd)		
	Before (01/2003-08/2008)	After (01/2009-12/2016)
Total Crashes / Per year (% reduction)	55 / 9.5 per year	17 / 2.13 per year (78%)
Injury Crashes (% reduction)	13	3 (77%)
Fatal Crashes (% reduction)	1	0 (100%)
Comments: 45% of after crashes are single-vehicle Failure to Control		

Lakota Drive West & Eagleridge Road (ADT=9,700 vpd)		
	Before (01/2004-06/2008)	After (01/2009-12/2016)
Total Crashes / Per year (% reduction)	19 / 4.22 per year	22 / 2.75 per year (35%)
Injury Crashes (% reduction)	4	1 (75%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments: 10 crashes involved fixed object (Sign=5, Curb=4, Light Pole=1)		

Jacksonburg Road & Morgenthaler Road (ADT=2,700 vpd)		
	Before (01/2006-06/2010)	After (01/2011-12/2016)
Total Crashes / Per year (% reduction)	13 / 2.9 per year	2 / 0.33 per year (89%)
Injury Crashes (% reduction)	5	1 (80%)
Fatal Crashes (% reduction)	1	0 (100%)
Comments: After crashes involved bicycle (injury) and the other snow covered road contributed to crash		

Trenton Road & Busenbark Road (ADT=8,200 vpd)		
	Before (01/2006-05/2011)	After (09/2011-12/2016)
Total Crashes / Per year (% reduction)	7 / 1.3 per year	8 / 1.5 per year (-15%)
Injury Crashes (% reduction)	2	3 (0%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments:		

Kyles Station Road & LeSourdsville West Chester Road (ADT=6,800 vpd)		
	Before (01/2008-05/2012)	After (09/2012-06/2016)
Total Crashes / Per year (% reduction)	8 / 1.8 per year	3 / 0.71 per year (61%)
Injury Crashes (% reduction)	2	2 (0%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments: Three crashes involved alcohol, struck sign, and a rear-end		

Yankee Road & Kyles Station Road (ADT=7,400 vpd)		
	Before (01/2009-05/2013)	After (09/2013-12/2016)
Total Crashes / Per year (% reduction)	8 / 1.8 per year	7 / 2.15 per year (-19%)
Injury Crashes (% reduction)	3	1 (67%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments: All-way stop installed October 2010 prior to roundabout		

Butler County Single-Lane Modern Roundabouts Before/After Statistics

Millikin Road & Mauds Hughes Road (ADT=5,800 vpd)		
	Before (01/2009-06/2013)	After (09/2013-12/2016)
Total Crashes / Per year (% reduction)	6 / 1.33 per year	3 / 0.92 per year (31%)
Injury Crashes (% reduction)	3	0 (100%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments: All-way stop installed October 2010 prior to roundabout. Alcohol involved in 1 of after crash		

S.R. 748 & Layhigh Road (ADT=2,750 vpd)		
	Before (01/2011-06/2015)	After (10/2015-12/2016)
Total Crashes / Per year (% reduction)	11 / 2.44 per year	0 / 0 per year (100%)
Injury Crashes (% reduction)	8	0 (100%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments: Previously, ranked #1 on BCEO Crash Rate list.		

Eaton Road & Beissinger Road (ADT=5,650 vpd)		
	Before (01/2011-07/2015)	After (11/2015-12/2016)
Total Crashes / Per year (% reduction)	14 / 3.05 per year	2 / 1.71 per year (44%)
Injury Crashes (% reduction)	8	0 (100%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments: Previously, ranked in Top 10 on BCEO Crash Rate list.		

Cin-Day Road & Kyles Station Road (ADT=13,835 vpd)		
	Before (01/2011-05/2016)	After (10/2016-4/2017)
Total Crashes / Per year (% reduction)	52 / 9.6 per year	4 / 6.86 per year (29%)
Injury Crashes (% reduction)	13	0 (100%)
Fatal Crashes (% reduction)	0	0 (N/A)
Comments: Prior to roundabout, traffic signal without turn lanes.		

Overall Total – 10 Single-Lane Modern Roundabouts		
	Before (47 yrs, 11 months)	After (41 years)
Total Crashes / Per year (% reduction)	193 / 4.03 per year	68 / 1.66 per year (59%)
Injury Crashes (% reduction)	61	11 (82%)
Fatal Crashes (% reduction)	2	0 (100%)
Comments: Overall, an 83% reduction in serious (injury + fatal) crashes.		

ADT = Average Daily Traffic

vpd = Vehicles per day