BLOOMINGTON • MONROE COUNTY
mpo

CITIZENS ADVISORY COMMITTEE
October 24, 2018
6:30 – 8:00 pm
McCloskey Conference Room (#155)

Suggested Time:

~6:30pm I. Call to Order and Introductions

II. Approval of Minutes
  a. September 19, 2018

III. Communications from the Chair and Vice-Chair

~6:40pm IV. Reports from Officers and/or Committees

V. Reports from Staff
  a. I-69 Update

VI. Old Business
  a. 2013-2015 Crash Report – Draft
  b. Complete Streets Policy*

~7:30pm VII. New Business
  a. FY 2018-2021 Transportation Improvement Program Amendments*
    i. DES#1601851 - 2nd/Bloomfield Multimodal Safety Improvements
    ii. DES#1801945 – SR 46 from 0.44 miles W of I-69 to I-69
    iii. DES#1801946 – SR 45 from I-69 to 0.38 miles E of I-69 (End of concrete)
    iv. DES#1801948 – Bridge maintenance & repair at various TBD Seymour District locations
~7:45pm
  b. Rural Transit Optimization Study Input, Guest: Christy Campoll, RLS & Associates, Inc.

VIII. Communications from Committee Members *(non-agenda items)*
  a. Topic suggestions for future agendas

IX. Upcoming Meetings
  a. Policy Committee – November 9, 2018 at 1:30 p.m. (Council Chambers)
  b. Technical Advisory Committee – January 23, 2018 at 10:00 a.m. (McCloskey Room)
  c. Citizens Advisory Committee – January 23, 2018 at 6:30 p.m. (McCloskey Room)

Adjournment

**Action Requested / Public comment prior to vote (limited to five minutes per speaker).*
Auxiliary aids for people with disabilities are available upon request with adequate notice. Please call 812-349-3429 or e-mail human.rights@bloomington.in.gov.

Other information/suggested reading:
https://smartgrowthamerica.org/how-cities-can-reduce-traffic-instead-of-just-ensuring-more-of-it

Bloomington/Monroe County
Metropolitan Planning Organization

Crash Report

Calendar Years 2013 through 2015

October 2018

BLOOMINGTON • MONROE COUNTY
mpo

Bloomington-Monroe County Metropolitan Planning Organization
2013-2015 Crash Report

Table of Contents

Executive Summary

The Bloomington/Monroe County Metropolitan Planning Organization (BMCMPO) 2013-2015 Crash Report represents a continuation of the MPO's effort to provide an analysis of the crash location causes and trends within Monroe County. This report includes an analysis of raw crash data from the Indiana State Police (ISP) Department ARIES data portal (https://www.in.gov/isp/3147.htm) for Calendar Years 2013, 2014, and 2015.

This crash report prepared by the BMCMPO staff from the ISP raw data provides relevant generalized information for the MPO Citizen's Advisory Committee, the Technical Advisory Committee, and the Policy Committee. The crash report shall additionally achieve distribution to local units of government, Indiana University, and the general public through the BMCMPO website hosted by the Bloomington Planning and Transportation Department.

A summary of the specific calendar year crash trends provided below highlights general information on crash data within Monroe County. Detailed tables, charts, and summaries provided in subsequent chapters highlight information on annual and daily observational trends involving frequency, severity, and other related characteristics of crashes that occurred from 2013 to 2015. Additionally, the Appendix contains locational information of potential interest to decision makers, technical engineering, safety and planning representatives, and the general public.

Summary of Crash Trends from 2013 to 2015

The Indiana State Police, the Monroe County Sherriff's Department, the Town of Ellettsville Police Department, the Indiana University Police Department, and the City of Bloomington Police Department reported a total of 12,538 crashes within public right-of-way corridors between Calendar Years 2013 and 2015 (**Table 1**). This figure represents a 0.72% increase from the previous three-year calendar year 2012-2014 rolling average analysis period that tabulated a total of 12,448 crashes.

Table 1 - Monroe County Crash Trends – Calendar Year 2013 - 2015

Crash Type	2013	2014	2015	Total
Property Damage	3269	3335	3456	10,060
Personal Injury	785	824	849	2,458
Fatal	4	8	8	20
Total	**4058**	**4167**	**4313**	**12,538**

Approximately eighty percent (80%) of the total crashes reported in Monroe County during the Calendar Year 2013 - 2015 investigation period involved property damage or unknown crashes, while the balance of the data reported levels of personal injury and, to a much lesser extent, crashes resulting in fatalities.

Introduction

Mobility is a defining aspect of life in the United States and around the world. Transportation infrastructure investments have led to new opportunities for trade, travel, recreation, relocation, and economic growth. The BMCMPO receives approximately $3.1 million per year of federal transportation funding allocated from the Indiana Department of Transportation (INDOT) for local transportation network investments. Despite this continued investment, tangible and intangible costs attributable to motor vehicle crashes undermine the effectiveness of the local transportation system.

The BMCMPO Crash Reports demonstrate that motor vehicle crashes contribute to a significant loss of life, property, and productivity in Monroe County. A better understanding of crash trends is attainable through continued efforts in crash reporting and analysis. Targeted infrastructure investments should further improve safety on roads within Monroe County.

The purpose of this Crash Report is twofold. First, the Crash Report provides a consistent and straightforward means to disseminate annual crash data for use by any interested individual or organization. Second, the Crash Report provides another useful tool for civil engineers, transportation planners, and local policy makers when considering both funding and design strategies aimed at reducing the frequency and severity of transportation-related crashes. Specifically, the Indiana Department of Transportation and the BMCMPO require Local Public Agencies (LPAs) to use crash data as part of the Highway Safety Improvement Program (HSIP). This program provides federal funding to target areas with high incidences of crashes. The HSIP primary goal is reducing fatal and incapacitating injury crashes. The implementation of effective mitigation strategies further curtail crashes within Monroe County through annual reporting and analysis.

This Crash Report focuses on a three-year period from Calendar Years 2013, 2014, and 2015. By focusing on a longer time horizon, random variations in annual crashes do not unduly influence the trends reported. For instance, annual variations in bicycle and pedestrian crashes, fatalities and incapacitating injuries, and location-specific crashes can be significant, even though there may not be an actual change in the likelihood of those crashes. By using a three-year window, identified trends are more likely to be meaningful by using a three-year analyses window. The crash data tabulated from 2015 alone provide a snapshot of the most recent year.

Methodology and Data Considerations

The data for the Bloomington/Monroe County Crash Report originates from the “Automated Report and Information Exchange System” (ARIES) of the Indiana State Police (https://www.in.gov/isp/3147.htm). This system maintains statewide crash data from law enforcement agency reports dating back to 2003. The Indiana law enforcement report data are organized by collisions, units (vehicles), and individuals. These data elements, related to one another by a common master field (e.g., Master Record Number) offer independent analysis capability. It is possible to retrieve information regarding collisions (e.g., locations and dates of greatest crash frequency), number of vehicles involved, and individuals involved. It is also possible to perform more complex analyses using attributes from each of these entities.

As with any database, the validity of conclusions resulting from the data is contingent upon accurate and complete data entry. Lack of data information from hit-and-run collisions, confusion

surrounding alternate names of roads (e.g., Country Club Drive, Winslow Road), misspelled or mis-entered street names, GPS errors, and incomplete data entry undoubtedly introduce some error into the results of this report. Therefore, results of the Crash Report should not have a rigid interpretation.

The BMCMPO staff corrected obvious data errors to achieve valid results. Consequently, some minor inconsistencies may be evident when comparing crash reports from prior years. Therefore, the most recently issued Crash Report reflects the best and most accurate crash information. Regardless of methodological changes and slight differences between reports, the overall findings of this report are consistent with those of past years.

Collisions are categorically analyzed given the crash type and severity. If a crash included a moped, motorcycle, bus, and bicyclist or pedestrian, the crash was subsequently classified as a "moped/motorcycle", "bus", "bicycle" or "pedestrian" crash, accordingly, regardless of the number of vehicles involved. If the crash involved only motor vehicles, the "crash modal type" classification identified the number of cars: one car, two cars, or three or more cars (**Figure 1**). The "severity" classification of a collision is dependent upon the most severe injury that resulted from a crash. For example, if a crash resulted in a fatality as well as a non-incapacitating injury, the severity of the crash had an assigned classification as "Fatal Injury." Most data methods used in the report are self-explanatory.

Collisions were analyzed using available geographic, road inventory, and traffic count data. Individual crashes were located according to reported geographic coordinates which were available for more than 93% of all records. A crash frequency was determined for each intersection by tabulating the total number of crashes that occurred within a 250-ft radius of the center of the intersection. Crash rates were determined from available traffic data from the City of Bloomington, the Town of Ellettsville, Monroe County, and the Indiana Department of Transportation using standard adjustments and engineering judgment as necessary.

When reading the Crash Report, it is important to understand the distinction between "crashes" and "individuals." The term "crash" refers to the characteristics of the crash itself under consideration. For example, a "Fatal Injury" column (e.g., "Crash by Type and Severity, 2013-2015") shows how many crashes resulted in a fatal injury; it would be incorrect, however, to interpret this column as the number of fatalities since more than one fatality can result from a single crash.

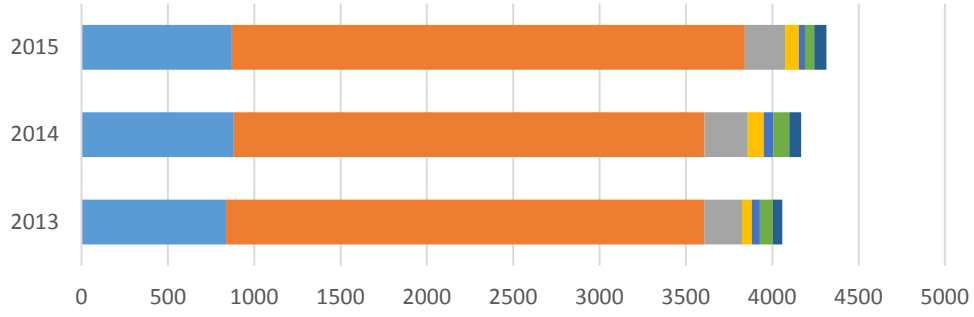
Crash Characteristics

This section provides a summary of crash characteristics in Monroe County, including the type and severity of crashes from 2013-2015. These factors reflect trends in the overall safety of the transportation system.

A further breakdown of the Calendar Year 2013 – 2015 crash totals provides insights into trends involving pedestrians, bicyclists, buses, mopeds/motorcycles, and crashes that resulted in fatalities. Over the course of the three years analyzed, there were twenty (20) fatal crashes resulting in twenty-one fatalities (**Table 2**), slightly fewer than the 24 fatalities reported from 2012 to 2014. Of the twenty (20) fatal crashes, seven (7) resulted from two-car crashes, five (5) were from one-car crashes, four (4) involved mopeds/motorcycles, and two (2) involved a pedestrian.

As has been the case for each of the prior nine (9) years, there were no fatalities involving a bicycle or a bus.

Figure 1 – Crashes by Modal Type – Calendar years 2013 - 2015



	2013	2014	2015
1-Car	838	882	870
2-Car	2768	2726	2972
3+ Cars	218	249	232
Bus	58	94	80
Cyclist	46	56	36
Moped/Motorcycle	77	92	53
Pedestrian	53	68	70

The time distribution of crashes continues to follow a predictable pattern correlating with peak hour and off-peak hour traffic volumes. The greatest number of crashes occurred during weekday rush hours between 4:00 P.M. and 6:00 P.M., with an average slightly greater than one (1) crash per hour for the entire county. There is also a peak from 12:00 P.M. to 1:00 P.M on weekdays. The weekend also follows a similar pattern in terms of frequency of crashes, but the crash rate has a more even distribution through the day and early evening hours. Between the hours of 7:00 PM and 4:00 AM, the weekend experiences a higher crash frequency compared with weekdays. Friday continued to have the highest number of crashes overall, while Sunday had the lowest number of crashes.

State and federal designated highway routes are prominently featured in the list of the highest crash frequency intersections or the total number of crashes over a given time period. Higher traffic volumes on these roads are undeniably the primary factor. INDOT jurisdictional intersections at SR 37 and 3rd Street, SR 45/46 and 10th Street, and SR 37 and Bloomfield Road are consistently high frequency crash locations. These intersections therefore warrant constant monitoring as do several local jurisdictional intersections that exhibit consistently high crash frequencies.

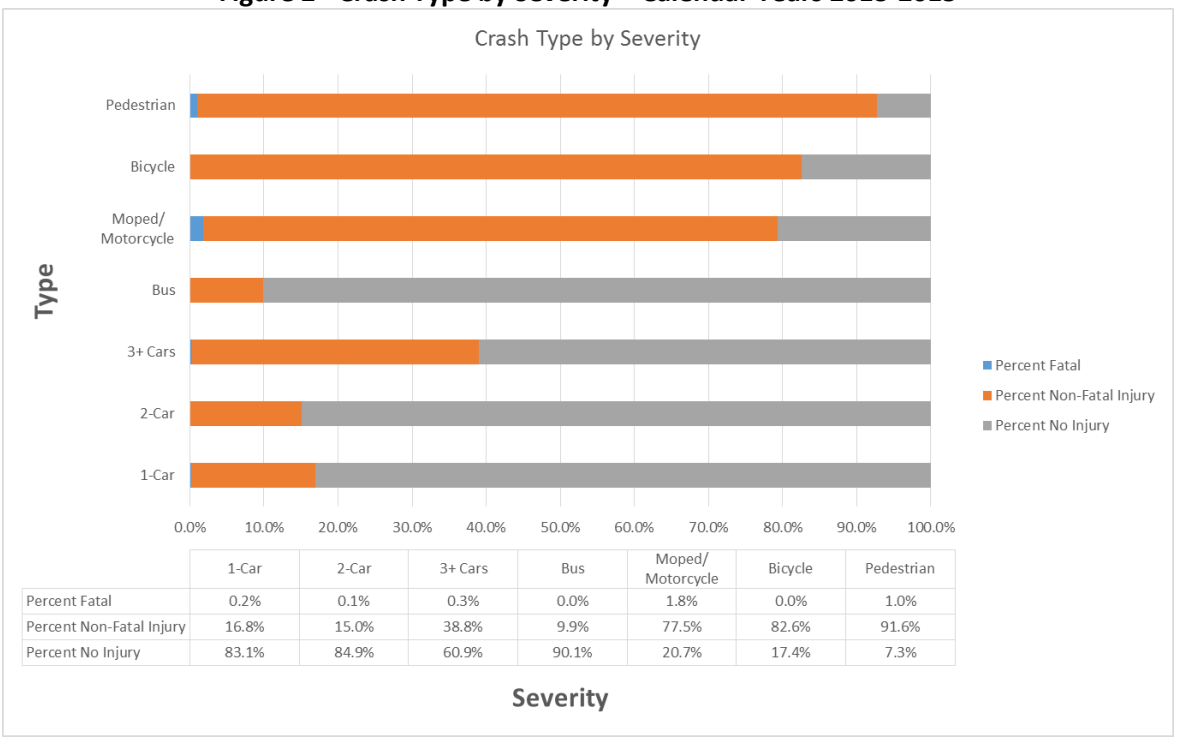
The leading cause of crashes during the Calendar Year 2013-2015 study period was once again a “failure to yield right of way” with 2,274 incidents. Other leading causes include “following too closely” and “unsafe backing”. These causes are addressable through law enforcement and education efforts as well as through selective physical improvements. “Running off the right side of the road” and “speeding in adverse weather” additionally present opportunities for physical safety improvements, such as guard rails, rumble strips, and interactive signage. These types of improvements warrant further exploration for crash reductions.

Crashes involving pedestrians and bicyclists are considerably important within the BMCMPO given a relatively high number of urbanized area non-motorized trips, the vulnerability to injury of individuals using these modes, and the BMCMPO's goals for increasing walking and bicycling modal shares. Compared to other types of crashes, those involving pedestrians and bicyclists are much more likely to result in a fatality or an incapacitating injury. Reducing the frequency and severity of these crashes is therefore a priority.

Table 2 - Crashes by Type and Severity – Calendar Years 2013-2015

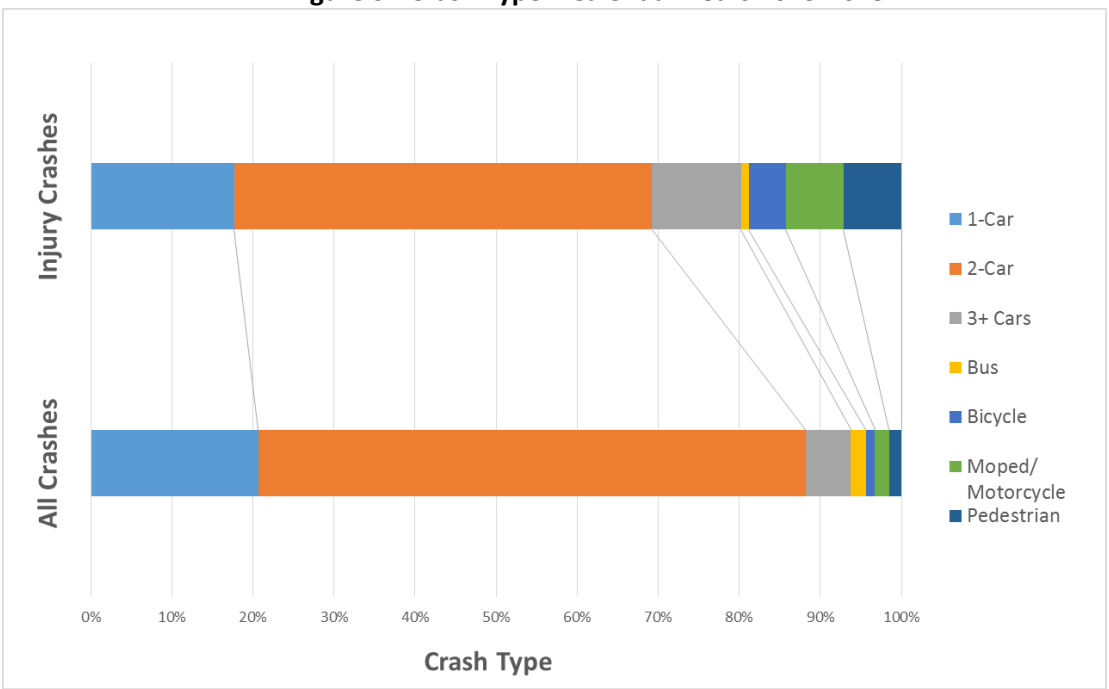
	Crash Type	Severity				Annual Total	Percent of Annual Total
		Fatal	Incapacitating	Non-incapacitating	No injury/ unknown		
2013	1-Car	0	20	118	700	**838**	20.7%
	2-Car	1	35	381	2351	**2768**	68.2%
	3+ Cars	2	7	75	134	**218**	5.4%
	Bus	0	0	2	56	**58**	1.4%
	Cyclist	0	2	35	9	**46**	1.1%
	Moped/Motorcycle	1	10	50	16	**77**	1.9%
	Pedestrian	0	5	45	3	**53**	1.3%
	Total	**4**	**79**	**706**	**3269**	**4058**	100.0%
	Percent of Annual Total	0.1%	1.9%	17.4%	80.6%	100.0%	
2014	1-Car	3	27	115	737	**882**	21.2%
	2-Car	3	45	353	2325	**2726**	65.4%
	3+ Cars	0	9	81	159	**249**	6.0%
	Bus	0	0	12	82	**94**	2.3%
	Cyclist	0	8	40	8	**56**	1.3%
	Moped/Motorcycle	0	16	58	18	**92**	2.2%
	Pedestrian	2	12	48	6	**68**	1.6%
	Total	**8**	**117**	**707**	**3335**	**4167**	100.0%
	Percent of Annual Total	0.2%	2.8%	17.0%	80.0%	100.0%	
2015	1-Car	2	78	76	714	**870**	20.2%
	2-Car	3	187	268	2514	**2972**	68.9%
	3+ Cars	0	49	50	133	**232**	5.4%
	Bus	0	6	3	71	**80**	1.9%
	Cyclist	0	15	14	7	**36**	0.8%
	Moped/Motorcycle	3	24	14	12	**53**	1.2%
	Pedestrian	0	32	33	5	**70**	1.6%
	Total	**8**	**391**	**458**	**3456**	**4313**	100.0%
	Percent of Annual Total	0.2%	9.1%	10.6%	80.1%	100.0%	
3-Year	**Total**	**20**	**587**	**1871**	**10060**	**12538**	
	Percent of 3-Year Total	**0.2%**	**4.7%**	**14.9%**	**80.2%**	**100.0%**	

Figure 2 - Crash Type by Severity – Calendar Years 2013-2015



	1-Car	2-Car	3+ Cars	Bus	Moped/ Motorcycle	Bicycle	Pedestrian
Percent Fatal	0.2%	0.1%	0.3%	0.0%	1.8%	0.0%	1.0%
Percent Non-Fatal Injury	16.8%	15.0%	38.8%	9.9%	77.5%	82.6%	91.6%
Percent No Injury	83.1%	84.9%	60.9%	90.1%	20.7%	17.4%	7.3%

Figure 3 - Crash Type – Calendar Years 2013-2015



Time of Crashes

This section summarizes the number of crashes by hour and day. Law enforcement agencies and emergency responders can use these data relating to the timing of crashes for planning purposes. Additionally, decision makers may use this information in an attempt to reduce peak crash times.

On weekdays, the number of crashes typically peaked in conjunction with the morning rush hour, 7:00 AM to 9:00 AM, and then increased gradually throughout the day until peaking again in conjunction with the evening rush hour, 4:00 PM to 6:00 PM. There was an additional peak at noon around the lunch hour. The late afternoon was the most likely time for a crash to occur, with more than one per hour.

The hourly distribution of weekend crashes exhibits a predictable pattern. Crashes in the late evening and early morning are apparently more common during the weekend, and rush hour peaks were not as prevalent as on weekdays. During the Calendar Year 2013-2015 study period, a greater number of crashes occurred on Fridays than on any other day and the fewest crashes occurred on Sundays (**Figure 4**).

Figure 4 - Crashes by Time of Day – Calendar Years 2013-2015

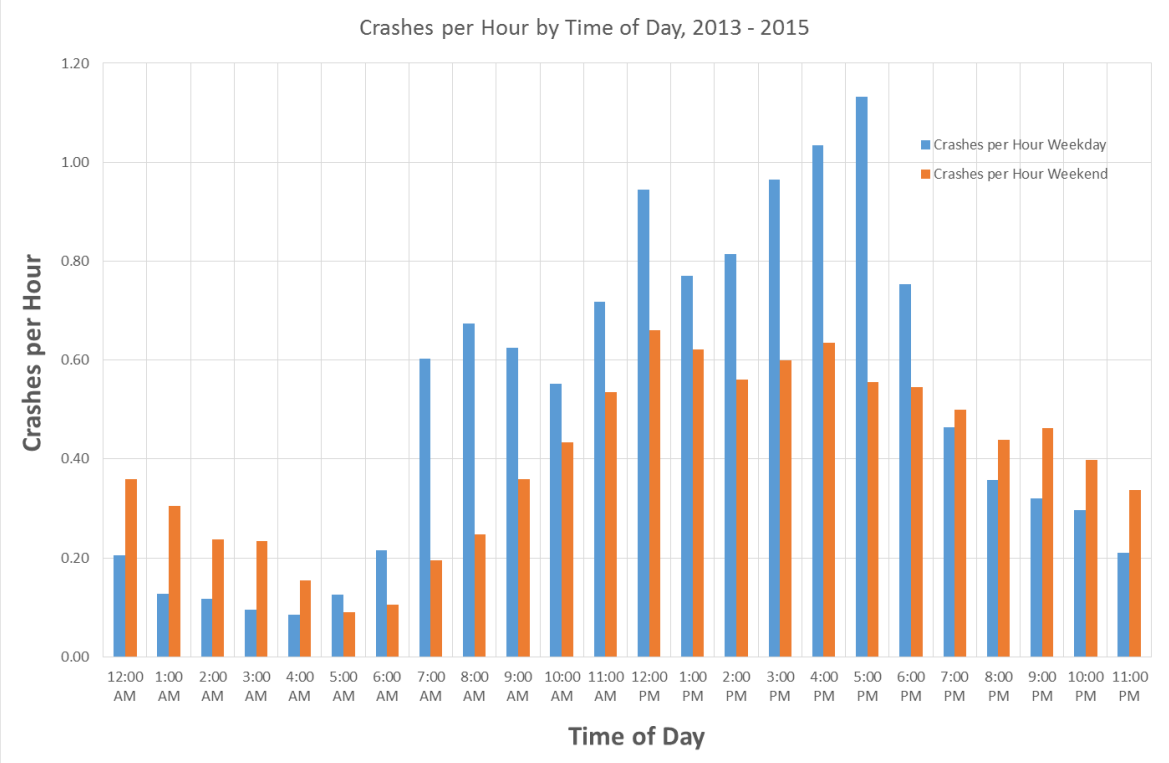
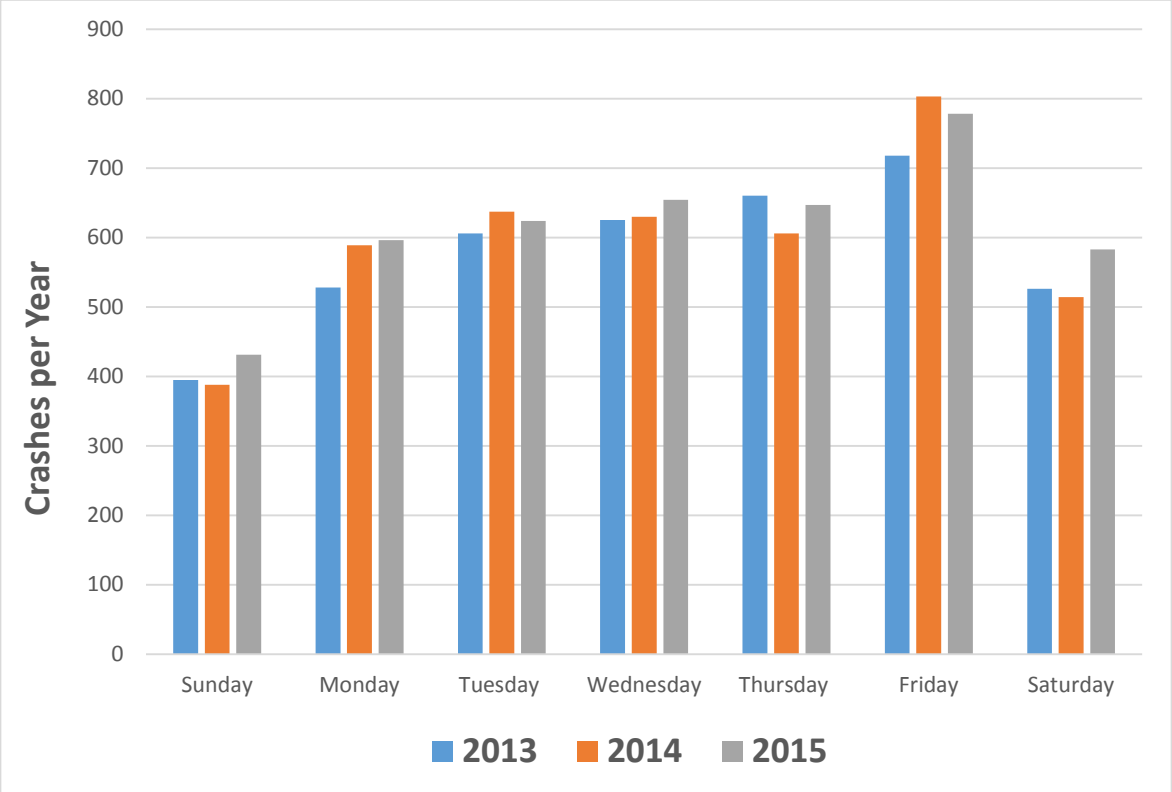


Figure 5 - Crashes by Day of Week – Calendar Years 2013-2015



Crash Locations

This section addresses the spatial distribution of crashes in Monroe County highlighting locations of high crash frequency, crash rates, and crash severity. This identification process used a stepwise approach: (1) ranking the sum total of all C.Y. 2013-2015 all Monroe County intersection crash locations into the "Top 50 Crash Locations," (2) adjusting these crash locations with traffic volume data thereby deriving three-year crash rates, and (3) a derivation of intersection severity rates.

The methodology used in this report does not identify locations which have a higher than expected (i.e. statistically significant) crash totals, crash rates, or severity indices. Future crash reports should therefore consider a comparative analysis of intersections with similar operating characteristics. The BMCMPO staff shall additionally explore a network solution for calculating crash rates at lower crash frequency locations.

Table 3 - Top 50 Crash Locations by Crash Total – Calendar Years 2013-2015

Crash Total Rank	Intersection	Juris-diction	Year			Total
			2013	2014	2015	
1	SR 37 & 3rd Street	INDOT	25	28	36	89
2	SR 46 & Pete Ellis Drive	INDOT	32	27	27	86
3	SR 37 & Bloomfield Road	INDOT	26	33	25	84
4	SR 45 & Gillham Drive	INDOT	28	34	20	82
5	SR 45/46 Bypass & 10th Street	INDOT	26	22	30	78
6	SR 46 & 3rd Street	INDOT	23	20	26	69
7	SR 45 & S Liberty Drive	INDOT	16	22	27	65
8	SR 45/46 Bypass & College Ave/Walnut St	INDOT	16	24	24	64
9	SR 46 & Kingston Drive	INDOT	13	20	31	64
10	SR 45 & Curry Pike/Leonard Springs Road	INDOT	17	25	19	61
10	SR 37 & Tapp Road	INDOT	17	20	19	60
11	SR 45/46 Bypass & Kinser Pike	INDOT	15	23	22	56
12	SR 48 & Curry Pike	INDOT	15	22	18	55
13	Walnut Street Pike & Winslow Road	COB	20	18	14	52
14	SR 45 & Pete Ellis Drive/Range Road	INDOT	17	18	17	52
15	3rd St & Swain Avenue	COB	23	14	14	51
15	SR 48 & Gates Drive	INDOT	15	24	12	51
16	10th St & Union Street	COB	13	15	20	47
16	Grimes Ln & Walnut Street	COB	12	17	18	48
17	2nd St & College Avenue	COB	20	16	9	46
18	3rd St & Jordan Avenue	COB	17	14	15	45
19	17th St & Jordan Avenue	COB	15	13	16	45
20	SR 48 & Liberty Drive	INDOT	13	13	19	44
20	College Ave & Kirkwood Avenue	COB	19	16	8	43
21	3rd St & Fess Avenue	COB	10	10	23	43
22	3rd St & Walnut Street	COB	14	17	11	42
22	Dunn St & Kirkwood Avenue	COB	13	13	16	42

Table 3 - Top 50 Crash Locations by Crash Total – Calendar Years 2013-2015 (Continued)

Crash Total Rank	Intersection	Juris-diction	Year 2013	2014	2015	Total
23	2nd St & Patterson St	COB	13	13	15	41
23	3rd St & College Avenue	COB	18	14	8	40
24	4th Street & Walnut Street	COB	16	6	17	39
25	7th Street & Walnut Street	COB	12	14	10	39
26	Kirkwood Ave & Walnut Street	COB	14	14	11	36
26	SR 45/46 Bypass & 17th Street	INDOT	7	17	12	38
27	10th Street & College Avenue	COB	12	11	15	36
28	3rd Street & Indiana Avenue	COB	15	12	9	36
28	2nd Street & Rogers Street	COB	9	14	13	36
28	Rhorer Road & Walnut Street Pike	MC	7	18	11	35
28	Curry Pike & Vernal Pike	MC	9	16	10	36
28	SR 46 & Centennial Drive	INDOT	8	12	14	35
29	3rd St & Dunn Street	COB	12	12	9	34
29	9th Street & College Avenue	COB	9	11	13	33
30	7th Street & College Avenue	COB	9	15	11	33
31	SR 46 & Smith Road	INDOT	11	11	10	32
31	SR 45/46 Bypass & Dunn St	INDOT	13	11	7	32
	17th Street and Walnut Street	COB	10	14	8	32
32	Walnut St & Country Club Dr/Winslow Rd	COB	13	10	9	32
	10th Street & N Sunrise Drive	COB	7	8	15	31
32	10th Street & Woodlawn Avenue	COB	17	8	7	31
32	3rd Street & Washington Street	COB	9	12	10	31
33	17th Street & Kinser Pike/Madison Street	COB	9	9	13	30
33	SR 46 & Union Valley Road	INDOT	14	7	9	30

Table 4 - Top 50 Crash Locations by Crash Rate – Calendar Years 2013-2015

Crash Rate Rank	Crash Frequency Rank	Intersection	3-Year Total	Juris-diction	Crash Rate
1	5	SR 45 & Gillham Drive	84	INDOT	5.00
2	39	Kirkwood Avenue & Dunn Street	42	COB	3.78
3	20	3rd Street & Swain Avenue	55	COB	3.71
4	20	3rd Street & Fess Avenue	58	COB	3.51
5	4	SR 46 & Pete Ellis Drive	89	INDOT	3.18
6	18	Walnut Street Pike & Winslow Road	56	COB	2.96
7	6	SR 46 & S Kingston Drive	64	INDOT	2.94
8	1	SR 37 & 3rd Street	112	INDOT	2.73
9	16	10th Street & Union Street	51	COB	2.56
10	3	SR 37 & Bloomfield Road	86	INDOT	2.45
11	24	17th Street & Jordan Avenue	45	COB	2.35
12	2	SR 45/46 Bypass & 10th Street	82	INDOT	2.27
13	48	3rd Street & Dunn Street	38	COB	2.18
14	43	3rd Street & Woodlawn Avenue	37	COB	2.15
15	48	10th Street & Sunrise Drive	30	COB	2.09
16	24	10th Street & College Avenue	38	COB	2.05
17	37	3rd Street & Highland Avenue	30	COB	1.95
18	31	Rhorer Road & Walnut Street Pike	32	MC	1.92
19	22	4th Street & S Walnut Street	43	COB	1.91
20	37	14th Street & Walnut Street	30	COB	1.90
21	8	SR 37 & Vernal Pike	90	INDOT	1.88
22	14	SR 45 & Pete Ellis Drive/Range Road	52	INDOT	1.86
23	6	SR 46 & 3rd Street	78	INDOT	1.84
24	9	SR 45 & Liberty Drive	69	INDOT	1.81
25	35	Kirkwood Avenue & College Avenue	44	COB	1.73

Table 4 - Top 50 Crash Locations by Crash Rate – Calendar Years 2013-2015 (Continued)

Crash Rate Rank	Crash Frequency Rank	Intersection	3-Year Total	Juris-diction	Crash Rate
26	43	7th Street & Walnut Street	39	COB	1.63
27	26	2nd Street & College Avenue	46	COB	1.62
28	43	10th Street & Woodlawn Avenue	32	COB	1.60
29	22	Kirkwood Avenue & Walnut Street	36	COB	1.55
30	14	SR 37 & Tapp Road	73	INDOT	1.53
31	11	SR 45/46 Bypass & College Ave/Walnut St	65	INDOT	1.53
32	26	3rd Street & Jordan Avenue	40	COB	1.51
33	31	2nd Street & Patterson Drive	42	COB	1.51
34	10	SR 45/46 Bypass & Kinser Pike	60	IN	1.50
35	48	2nd Street & Rogers Street	40	COB	1.39
36	39	3rd Street & Washington Street	31	COB	1.39
37	31	7th Street & College Avenue	33	COB	1.37
38	43	8th Street & College Avenue	26	COB	1.36
39	13	SR 48 & Curry Pike	55	INDOT	1.32
40	16	SR 48 & Gates Drive	53	INDOT	1.28
41	11	SR 45 & Curry Pike/Leonard Springs Rd	52	INDOT	1.21
42	18	3rd St & College Avenue	41	COB	1.21
43	26	SR 48 & Liberty Drive	45	INDOT	1.15
44	39	SR 45/46 Bypass & 17th Street	36	INDOT	1.11
45	39	Kirkwood Avenue & Rogers Street	30	COB	1.10
46	30	Grimes Lane & Walnut Street	49	COB	1.08
47	48	10th Street & Jordan Avenue	30	COB	1.04
48	36	SR 46 & Smith Road	27	INDOT	0.98
49	43	SR 46 & Smith Pike	35	INDOT	0.90
50	31	Walnut St & Country Club Dr/Winslow Rd	30	COB	0.83

Table 5 - Top 50 Crash Locations by Crash Severity – Calendar Years 2012-2014

Severity Rank	Intersection	Juris-diction	Fatal	Injury	Property Damage	Severity Number
1	SR 37 & 3rd Street	INDOT	0	32	84	186
2	SR 37 & Bloomfield Road	INDOT	0	27	67	148
3	SR 46 & Kingston Drive	INDOT	0	26	57	135
4	SR 37 & Vernal Pike	INDOT	0	23	51	135
5	SR 45/46 Bypass & 10th Street	INDOT	0	14	83	131
6	SR 46 & Pete Ellis Drive	INDOT	0	18	69	123
7	SR 46 & 3rd Street	INDOT	0	15	68	113
8	SR 45/46 Bypass & Kinser Pike	INDOT	1	20	35	107
9	SR 45 & Gillham Drive	INDOT	1	4	80	104
10	SR 45 & Liberty Drive	INDOT	0	12	55	97
10	SR 48 & Curry Pike	INDOT	0	17	37	97
10	Walnut Street Pike & Winslow Road	COB	0	16	34	97
13	SR 45/46 Bypass & College Ave/Walnut St.	INDOT	0	19	36	96
14	4th Street & Walnut Street	COB	0	17	29	89
15	SR 45 & Curry Pike/ Leonard Springs Rd	INDOT	0	14	41	86
16	SR 45 & Pete Ellis Drive/ Range Road	INDOT	0	14	39	84
17	3rd Street & College Avenue	COB	0	16	34	82
18	SR 37 & Tapp Road	INDOT	0	14	39	81
19	2nd Street & Patterson Drive	COB	0	17	22	79
20	3rd Street & Jordan Avenue	COB	0	14	29	71
21	SR 48 & Gates Drive	INDOT	0	9	43	70
22	Grimes Lane & Walnut Street	COB	0	13	27	69
23	3rd Street & Fess Avenue	COB	0	10	38	68
24	10th Street & Union Street	COB	0	6	46	67
25	SR 48 & Liberty Drive	INDOT	0	10	33	66
25	SR 46 & Smith Road	INDOT	0	13	24	66
27	3rd Street & Swain Avenue	COB	0	8	40	64
27	Rhorer Road & Walnut Street Pike	MC	0	11	28	64
29	Kirkwood Avenue & Dunn Street	COB	0	11	24	63
30	7th Street & College Avenue	COB	0	10	29	62
31	10th Street & Jordan Avenue	COB	0	14	19	61
32	2nd Street & College Avenue	COB	0	8	35	59
32	Kirkwood Avenue & College Avenue	COB	0	9	29	59
34	SR 45/46 Bypass & 17th Street	INDOT	0	10	25	58

Table 5 - Top 50 Crash Locations by Crash Severity – Calendar Years 2012-2014 (Continued)

Severity Rank	Intersection	Juris-diction	Fatal	Injury	Property Damage	Severity Number
35	3rd Street & Walnut Street	COB	0	6	36	57
36	10th Street & College Avenue	COB	0	6	38	56
36	17th Street & Jordan Avenue	COB	0	6	38	56
36	3rd Street & Highland Avenue	COB	0	10	26	56
39	Walnut St & Country Club Dr/Winslow Rd	COB	0	8	31	55
39	3rd Street & Washington Street	COB	0	10	25	55
41	Kirkwood Ave & Walnut Street	COB	0	4	42	54
42	3rd Street & Woodlawn Avenue	COB	0	8	26	53
43	8th Street & College Avenue	COB	0	7	27	51
44	14th Street & Walnut Street	COB	0	7	29	50
44	10th Street & Woodlawn Avenue	COB	0	8	26	50
46	7th Street & Walnut Street	COB	0	6	28	46
47	Kirkwood Avenue & Rogers Street	COB	0	4	31	43
48	2nd Street & Rogers Street	COB	0	4	29	41
48	10th Street & Sunrise Drive	COB	0	4	29	41
50	3rd Street & Dunn Street	COB	0	3	30	39
51	SR 46 & Smith Pike	INDOT	0	2	32	38

Crash Factors

This section summarizes the primary crash factors from 2013 to 2015. An understanding of these causes informs infrastructure investments, enforcement activities, and educational efforts. Traffic law enforcement and road design can address unsafe speeds, while guardrail, rumble strips, or safety education can mitigate the tendency of motorists to drive off the road. Similarly, enforcement and education could reduce the number of crashes attributable to alcohol potentially leading to a decrease of weekend/late night hit and run crashes.

Table 5 illustrates the Top 10 Primary Crash Factors for 2013-2015 which account for over three-quarters of total crashes. Failure to yield right of way was once again the most common cause of crashes, contributing to nearly 2,300 crashes from 2013 to 2015. Following too closely and unsafe backing were additional significant crash factors. While failing to yield right of way was the most frequent crash cause, running off the road to the right was more dangerous based on the percentage of crashes that resulted in fatality or incapacitating injury. Table 5a shows the top 10 primary crash factors for 2013-2015 ranked in order of percent of incapacitating injury resulting from the crash. Of the most during the time period, which resulted in five (5) fatal crashes and the highest percentage of incapacitating injury.

The frequency of crashes ranked by primary factor provides information about which crashes happen most often. The percentage comparison reveals which primary factors for crashes have previously resulted in injury and which are less likely to result in injury. For example, unsafe backing ranked third as a primary factor in a crash, but comparing likelihood of injury, 98% of crashes from unsafe backing result in no injury.

Table 6 - Top 10 Primary Crash Factors by Severity – Calendar Years 2013-2015

Rank	Primary Factor	Severity				Total
		Fatal	Incapacitating Injury	Non-Incapacitating Injury	Prop. Damage/ Unknown	
1	Failure to Yield Right-of-Way	1	153	469	1,651	**2,274**
2	Following Too Closely	0	87	450	1,604	**2,141**
3	Unsafe Backing	0	4	22	1,439	**1,465**
4	Ran Off Road – Right	5	87	178	759	**1,029**
5	Other (Driver) – Explain in Narrative	2	23	86	732	**843**
6	Speed Too Fast (Weather)	0	20	66	467	**553**
7	Animal/Object in Roadway	0	5	29	473	**507**
8	Disregard Signal/Sign	1	37	141	315	**494**
9	Improper Turning	0	16	31	430	**477**
10	Unsafe Lane Movement	0	10	39	392	**441**

Table 6a - Top 10 Primary Crash Factors by Severity Percentages – Calendar Years 2013-2015

Rank	Primary Factor	Severity				Total
		% Fatality	% Incapacity Injury	% Non-Incapacitating Injury	% Property Damage	
1	Failure to Yield	0.04%	6.7%	21%	73%	**2,274**
2	Following too Closely	0.00%	4.1%	21%	75%	**2,141**
3	Unsafe Baking	0.00%	0.3%	2%	98%	**1,465**
4	Ran Off Road-Right	0.49%	8.5%	17%	74%	**1,029**
5	Explain in Narrative	0.24%	2.7%	10%	87%	**843**
6	Too fast for Weather Conditions	0.00%	3.6%	12%	84%	**553**
7	Animal/Object in Roadway	0.00%	1.0%	6%	93%	**507**
8	Disregard Signal/Regulatory Sign	0.20%	7.5%	29%	64%	**494**
9	Improper Turning	0.00%	3.4%	6%	90%	**477**
10	Unsafe Lane Movement	0.00%	2.3%	9%	89%	**441**

Fatalities

This section provides a focused examination of motor vehicle fatalities in Monroe County from Calendar Year 2013 to 2015. As with previous sections, the material presented here can be useful for enforcement, education, and decision-making.

In 2015 there were eight crash fatalities in Monroe County (Table 6). Of these, three resulted from crashes involving a moped or motorcycle, three resulted from crashes involving two cars, and two resulted from crashes involving one car. Over the period from 2013 to 2015, the average annual number of fatalities per 100,000 residents was 4.9 for Monroe County. This figure is well below the U.S. average of 10.92 fatalities per 100,000 people for 2015.[1] While the average number of fatalities in Monroe County is lower than the national average, the national average might not represent the best comparison. The U.S. fares much worse than many other developed nations in terms of traffic safety. The United Kingdom and Sweden average 2.9 and 2.8 traffic deaths per 100,000 people, respectively[2].

An investigation of the causal factors leading to fatal crashes shows that veering left of the centerline and running off the road to the right are the most common cause of crashes leading to a fatality (Table 7).

Table 7 - Fatalities by Crash Type – Calendar Years 2013-2015

Year	Crash Type						Total	Fatalities per 100,000 Population
	One Car	Two Cars	Three Cars or More	Moped or Motorcycle	Bicycle	Pedestrian		
2013	0	1	2	1	0	0	**4**	**2.8**
2014	4	3	0	0	0	2	**9**	**6.3**
2015	2	3	0	3	0	0	**8**	**5.5**
Total	**6**	**7**	**2**	**4**	**0**	**2**	**21**	**4.9**

Table 8 - Fatal Crash Primary Factors – Calendar Years 2013-2015

Rank	Primary Factor	Fatal Injury	% of Total
1	Left Of Center	6	30%
2	Ran Off Road Right	5	25%
3	Unsafe Speed	2	10%
4	Other (Driver) - Explain In Narrative	2	10%
5	Pedestrian Action	2	10%
6	Failure To Yield Right Of Way	1	5%
7	Disregard Signal/Regulatory Signage	1	5%
8	Obstruction Not Marked	1	5%
	Total	**20**	**100%**

Fatal Crash Locations

This section summarizes the locations for crashes with identified fatalities. A total of twenty (20) recorded fatal crash locations resulted in a total of twenty-one (21) fatalities during the Calendar 2013-2015 study period. Table 8 identifies the locations of Calendar Year 2013-2015 fatal crashes. Location information will aid transportation planners and engineers to identify problematic locations. Fatalities are a major factor in determining HSIP funding eligibility.

Table 9 - Fatal Crash Locations by Type – Calendar Years 2013-2015

Location	Juris-diction	Total Deaths	Number of Crashes				
			One Car	Two Cars	Three or More Cars	Moped or Motorcycle	Pedestrian
Fairfax Rd and Schacht Rd	MC	1	0	0	0	1	0
Leonard Springs Rd and Duncan Rd	MC	1	1	0	0	0	0
Moon Rd, from Sand College Rd to County Line	MC	2	1	0	0	0	0
Old SR 46, from SR 46 to N Brummetts Creek Rd	IN	1	0	1	0	0	0
SR 37 and SR 45	IN	1	0	0	0	1	0
SR 37 and Ingram Rd	IN	1	1	0	0	0	0
SR 37 and Victor Pike	IN	1	0	0	0	1	0
SR 446 and Pine Grove Rd	IN	1	0	1	0	0	0
SR 45	IN	1	0	1	0	0	0
SR 45 and Gillham Rd	IN	1	0	1	0	0	0
SR 45 from S Breeden Rd to Burch/Stanford Rd	IN	1	0	0	1	0	0
SR 45/46 and Kinser Pike	IN	1	0	0	1	0	0
SR 46 and N 5th St	IN	1	0	0	0	0	1
SR 45/46 and Arlington Rd	IN	1	1	0	0	0	0
SR 46 and W Flatwoods Rd	IN	1	0	1	0	0	0
SR 46 from Flatwoods Rd to Chafin Chapel Rd	IN	1	0	1	0	0	0
SR 48 and Kirby Rd	IN	1	0	1	0	0	0
SR 48 from Vernal Pike to SR 43	IN	1	0	0	0	1	0
Beasley Dr and Curry Pike	MC	1	0	0	0	0	1
Howard Rd and Starnes Rd	MC	1	1	0	0	0	0
Total		**20**	**5**	**7**	**2**	**4**	**2**

Bicycle and Pedestrian Crashes

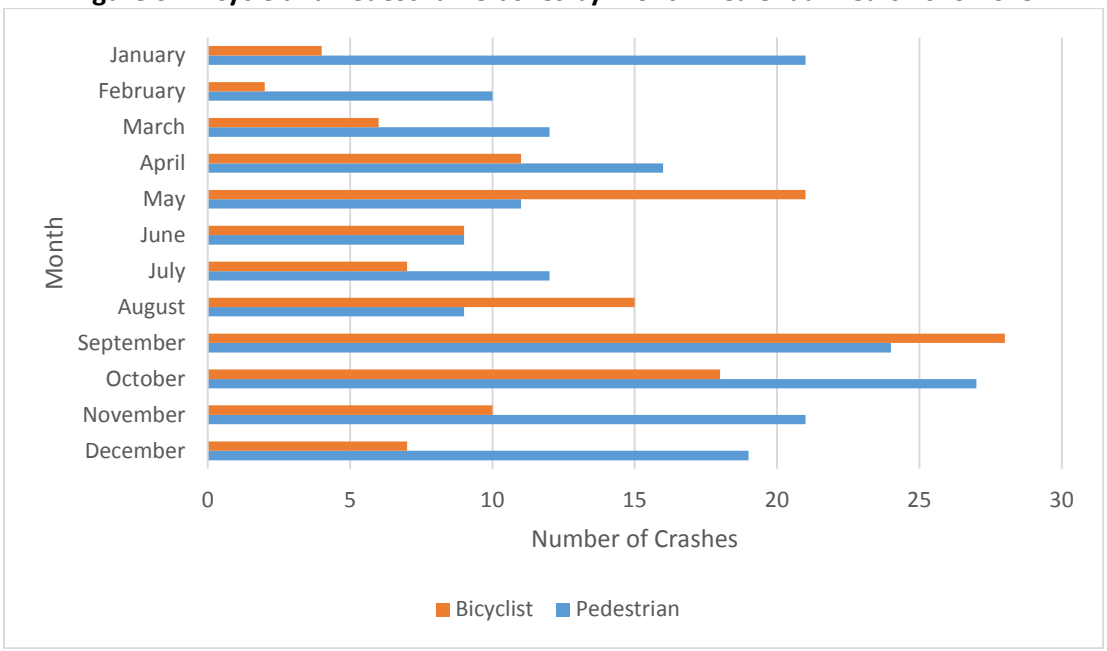
This section documents bicycle and pedestrian crashes in Monroe County from 2013 to 2015. Bicycle and pedestrian crashes within the City of Bloomington and Monroe County represent a planning priority given a high number of non-motorized trips within the urbanized area. Data from the 2013 American Community Survey indicates that 5.1% of commuters in Bloomington use a bicycle as their primary mode of transportation, while 14.7% walk for multiple trip purposes. The combined walking and biking commute rate ranks 7th among U.S. cities with a population of greater than 65,000 people. However, as described in this report, individuals using these modes of transportation are particularly vulnerable to injury.

Crashes involving cyclists and pedestrians more often result in injury when compared with motor vehicle crashes. Therefore there is a priority need to reduce the frequency and severity of these crashes. Figure 6 shows that the frequency of pedestrian and bicycle crashes varies by mode. Pedestrian crashes had peaks in January and October whereas crashes involving a bicyclist had peaks in May and September. Local agencies should therefore use this knowledge to emphasize enforcement and education strategies during these predictable seasonal peak months.

Table 10 - Top Bicycle and Pedestrian Crash Locations – Calendar Years 2013-2015

Rank	Intersection	Jurisdiction	Crash type		Total Ped + Bike
			Pedestrian	Bicycle	
1	7th Street & Jordan Avenue	COB	3	5	8
2	2nd Street & Walnut Street	COB	2	3	5
2	3rd Street & Jordan Avenue	COB	3	2	5
2	Dunn Street & Kirkwood Avenue	COB	4	1	5
3	3rd Street & Woodlawn Avenue	COB	3	1	4
3	SR 46 (3rd St) & N Clarizz Blvd	IN	2	2	4
3	Kirkwood Avenue & College Avenue	COB	4	0	4
3	Kirkwood Avenue & Walnut Street	COB	2	2	4
3	6th Street & Morton Street	COB	2	2	4
3	7th Street & Walnut Street	COB	3	1	4
3	17th Street & Indiana Avenue	COB	2	2	4

Figure 6 - Bicycle and Pedestrian Crashes by Month – Calendar Years 2013-2015



Conclusion

This C.Y. 2013-2015 Crash Report highlights a number of meaningful trends relating to motor vehicle, bicycle and pedestrian crashes in Monroe County. The information contained within this Crash Report represents an informational guide for transportation/traffic engineering decision-making ultimately leading to a safer and healthier transportation system for Monroe County and the Bloomington-Monroe County Metropolitan Planning Organization.

Several problem areas noted in this and past BMCMPO Crash Reports were improved upon or are in the process of being addressed, such as at many locations along the SR 37/I-69 construction corridor. Improvements at the intersection of Atwater Avenue and Henderson Street completed in 2011 resulted in a 54% reduction in crash frequency at that location, compared to the period from 2008 to 2010. Evaluation of past and future crash data at these and other locations will further aid in implementing appropriate and effective mitigation strategies to reduce and avoid future crashes.

This Crash Report identifies locations that may require further study to see if safety issues warrant capital improvement investments. Intersections along SR 37, SR 45, and SR 45/46 Bypass corridors continue with problematic issues given traffic volumes and correlated crash frequency. State and local transportation officials, engineers, and staff are coordinating information thereby targeted locations with warranted safety improvements due to jurisdictional boundaries at these locations.

Data and analysis and other attributes included within the report (e.g. bus, moped, motorcycle, fatalities, causes, locations, severity of crashes), provide additional information for identifying trends and/or areas of concern. Information regarding seasonal spikes in bicycle and pedestrian crashes can serve as a foundation for education and enforcement strategies. Future versions of this Crash Report may consider a more detailed analysis of hit and run locations and alcohol-related factors. An improved understanding of these factors would help the community to better focus its efforts on reducing serious traffic injuries and their subsequent impact on the BMCMPO planning area.

Future reports should consider comparing local jurisdiction intersections and/or roadway corridors with similar operating characteristics in order to help identify locations which have a higher than expected crash total, crash rate, or severity index. Additionally, a method to calculate a crash rate for every intersection in the network warrants exploration. These additional levels of analyses will further aid transportation planners, engineers, and officials in effectively identifying hazardous locations and securing funding for operational modifications.

This Crash Report represents an initial step toward improving safety on local BMCMPO area roadways by identifying problematic locations. Transportation planners, engineers, and local officials together will use this information to determine locations that need attention, and seek funding for necessary operational improvements, physical modifications or other means (enforcement, education) warranted to improve overall BMCMPO transportation system safety.

I. DEFINITION[1]

Complete streets are roadways designed to ~~safely and comfortably~~ accommodate all users, including, but not limited to, pedestrians, bicyclists, users of public transit, and individual mobility devices, people with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users[2]. Through complete streets, the safety and mobility for vulnerable road users is as much of a priority as all other modes.

II. APPLICABILITY[3]

This policy shall apply to ~~all~~ each of the following:

1. All new construction and reconstruction/retrofit of local roadways that will use federal funds through the BMCMPO for any phase of project implementation including planning, design, right-of-way acquisition, construction, or construction engineering. This includes all maintenance and ongoing operations projects such as resurfacing, repaving, restriping, rehabilitation or other types of changes to the transportation system~~.~~ or; [4]
2. Local roadway projects that are included in the TIP ~~after the adoption of the Complete Streets Policy~~ *and* are not past the Preliminary Field Check Phase or more than 30% complete with design at the time this policy is adopted~~.~~ or;
3. Local roadway projects where the BMCMPO has the programming authority to allocate federal funding.

~~3.~~4. Projects which are beyond 30% complete with design are still bound to comply with the 2009 Complete Streets policy.

III. VISION AND PURPOSE

This Complete Streets Policy is written to empower and direct ~~citizens~~ residents, elected officials, government agencies, planners, engineers, and architects to use an interdisciplinary approach to incorporate the needs of all users into the design and construction of roadway projects funded through the Bloomington/Monroe County Metropolitan Planning Organization (BMCMPO).

The Complete Streets[1] concept is an initiative to design and build roads that adequately accommodate all users of a corridor, including pedestrians, bicyclists, users of mass transit, people with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users. This concept dictates that appropriate accommodations ~~(s)~~ be made so that all modes of transportation can function safely, comfortably and independently in current and future conditions. A Complete Streets policy can be adapted to fit local

[1] New heading.
[2] Unchanged.
[3] Unchanged.
[4] Formerly excluded resurfacing activities that do not alter the current/existing geometric designs of a roadway

Formatted: Centered

community needs and used to direct future transportation planning. Such a policy should incorporate community values and qualities including environment, scenic, aesthetic, historic and natural resources, as well as safety and mobility. This approach demands careful ~~multi-modal~~ multimodal evaluation for all transportation corridors integrated with best management strategies for land use and transportation. [5]

The desired outcome of this Complete Streets Policy is to create an equitable, balanced and effective transportation system for all types of users that is integrated with adjacent land uses where every roadway user can safely and comfortably travel throughout the community.[6]

The goals of this Complete Streets Policy are:

1. To ensure that the safety and ~~convenience~~ mobility of all users of the transportation system are accommodated, including pedestrians, bicyclists, users of mass transit, people with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users;
2. To incorporate the principles in this policy into all aspects of the transportation project development process, including project identification, scoping procedures and design approvals, as well as design manuals and performance measures;
3. To create a comprehensive, integrated, and connected transportation network that supports compact, sustainable development;
4. To ensure the use of the latest and best design standards, policies and guidelines;
5. To recognize the need for flexibility to accommodate different types of streets and users;
6. To ensure that the complete streets design solutions fit within the context(s) of the community.
7. To ensure equity for all people who use the transportation network, regardless of race, income or physical ability[7].

IV. POLICY

1. Roadway projects shall appropriately accommodate the safety and comfort of all users of the transportation system, including pedestrians, bicyclists, users of mass transit, people with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users. [8] It is important to remember that vulnerable road users have less crash protection than people contained inside vehicles and therefore have a higher risk of being injured or killed in the event of a collision due to the lack external crash protection provided by a car.
2. BMCMPO will promote the complete streets concept throughout the region and, therefore, encourages and recommends that all local MPO partner agencies adopt

[5] Unchanged
[6] New.
[7] New goal.
[8] Unchanged.

Formatted: Centered

their own comprehensive complete streets policy that applies to projects not funded through the MPO[9].

3. Complete streets solutions shall be developed to fit within the context(s) of the community and those solutions shall be flexible so that the ~~needs of the corridor~~ vision and goals of the MTP can be met.[10]
4. The LPA shall identify anticipated phases and key milestones of project development.[11]
5. The LPA shall create a project specific community engagement plan
6. The LPA shall maintain open lines of communication with key party/agency/interest groups and shall identify and maintain a key stakeholder list.[12]
7. Every project shall ensure that the provision of accommodations for one mode does not prevent safe and comfortable use by another mode[13].
8. Every project shall provide and maintain accommodations for all modes of transportation to continue to use the roadway safely and efficiently during any construction or repair work that encroaches on the right of way, ~~and/or~~ sidewalk, and multi-use path[14]. For instances where the full closure of a roadway is necessary to complete construction work, detour routes for all modes shall be established and signed using appropriate traffic control signage.
9. All projects shall make use of the latest and best design standards, policies, and guidelines[15].
10. Projects sponsored by the Indiana Department of Transportation (INDOT) that are located within the BMCMPO urbanizing area are strongly encouraged to comply with INDOT's self-adopted complete streets policy[16]

V. PROCESS

Transportation Improvement Program (TIP) Development

In response to a BMCMPO issued Call for Projects for any roadway project that seeks to use federal funding and be programmed in the TIP ~~Transportation Improvement Program (TIP)~~, the Local Public Agency (LPA) shall submit a completed TIP application form.

1. The LPA shall submit the following information to the BMCMPO staff:

   a. A detailed project location map and project description (e.g. project scope, reconstruction/new construction, ~~vehicular facilities, non-vehicular facilities~~ specify facilities for each mode);

[9] New.
[10] Unchanged.
[11] Unchanged.
[12] Unchanged
[13] New.
[14] New.
[15] Unchanged, except eliminates: "The Local Public Agency (LPA) shall also retain justification and design decision authority over its projects".
[16] New.

Formatted: Centered

b. Detailed purpose and need;
c. Clearly relate the purpose of a project to the MTP and any other existing plans and policies (e.g. ~~MTP,~~ MPO Crash Report);
d. The intent for the project to be Complete Streets Compliant or to seek a Complete Streets Exception[17];
e. Amount of federal funding requested by phase (e.g. preliminary engineering, rights of way, construction, construction inspection);
f. Anticipated dates for project design initiation and construction letting;
g. The project stakeholder list or key party/agency/interest group identification list including any underrepresented groups or communities;
h. The public participation process with goals to attain (e.g. public meeting dates and what will be accomplished). It is best not to come to the public to simply present pre-established goals but rather to encourage participation and dialogue that leads to ~~consensus~~ useful information. LPA's should be prepared to discuss constructively what the public cares about and ask for ideas;
i. ~~The primary contact or project representative information.~~ Contact information for the project manager.

2. Project selection process and criteria[18]

BMCMPO staff shall ~~convene a Project Prioritization Committee as part of the TIP development process. The purpose of this is to~~ evaluate project~~s~~ applications based on the Project Prioritization criteria found in ~~Appendix A~~ Section X. Project Prioritization Criteria. ~~This committee~~ BMCMPO staff will forward ~~a~~ the prioritized list and corresponding score sheets for each ~~of~~ project~~s~~ to the committees of the MPO as a recommendation for final decision. This list of prioritized projects is not intended to serve as a definitive decision making tool but rather as guidance for programming projects in to the TIP. Community engagement for project programming shall occur in accordance with the Public Participation Plan.

Post - Transportation Improvement Program (TIP) Adoption

1. Community Engagement

Maintaining a direct line of communication between residents and decision makers can improve outreach efforts and ultimately the projects themselves.

a. The LPA shall update the purpose and need of the project, if necessary, following initial public outreach as established in the original TIP application.
b. The LPA shall utilize a participatory design approach and engage the community and the MPO Citizen's Advisory Committee early in the project design process.
c. At least one public meeting is required, with the expectation that more may be necessary depending on factors such as project cost, size, or scope.

[17] Changed "exemption" to "exception"
[18] New.

Formatted: Centered

d. The LPA shall engage underrepresented communities and stakeholders identified in the original TIP application.
e. Outreach strategies should occur at convenient times for the general public and at locations making use of easy and natural gathering spaces such as neighborhood association meetings, community centers, public libraries, or farmers' markets.

~~1.~~2. Complete Streets Design Guidance[19]

Final design plans for all projects will be context-sensitive ~~and mesh well~~ with the adjacent land use while incorporating Americans with Disabilities Act (ADA) compliant design standards. Each project must be considered both separately and as part of a connected network to determine the level and type of project necessary for the street to be complete. LPA's are strongly encouraged to utilize a participatory design approach to project development.

LPA's shall use the latest and best design standards available with the understanding that some design standards are required such as those set by the Indiana Department of Transportation (INDOT). Other design guides include, but are not limited to:

a. U.S. Access Board Public Right-of-Way Accessibility Guidelines (PROWAG),
b. National Association of City Transportation Officials (NACTO) Urban Street Design Guide,
c. NACTO Urban Bikeway Design Guide,
d. Institute of Transportation Engineers (ITE) Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
e. American Association of State Highway Transportation Officials (AASHTO) Guide for the Planning, Designing and Operating Pedestrian Facilities
f. AASHTO Guide for the Development of Bicycle Facilities
g. AASHTO Green Book
h. Manual on Uniform Traffic Control Devices (MUTCD) – federal and Indiana Supplement

VI. EXCEPTIONS[20]

1. Approval Process

a. LPA's requesting an exception shall submit clear and supportive documentation for justifying the exception.[21]
b. A 14 day public comment period shall precede any final decisions made by the Policy Committee. The public shall be notified via legal notices in the newspaper, on the MPO website and via the MPO contact list.[22]

[19] New in that specific design guides are called out.
[20] New.
[21] New.
[22] New.

Formatted: Centered

c. Exceptions to this policy shall be approved by resolution of the MPO Policy Committee with guidance from the Technical and Citizen's Advisory Committees and the public at large. [23]

d. The BMCMPO Policy Committee shall make a decision to certify or not certify an exception under certain circumstances, including the following[24]:

i. The project involves a roadway that bicyclists and pedestrians are prohibited by law from using. In such case, efforts should be made to accommodate bicyclists and pedestrians elsewhere;
ii. There are extreme topographic or natural resource constraints;
iii. The Metropolitan Transportation Plan's 20-or-more year Average Daily Traffic projection is less than 1000 vehicles per day;
iv. When other available means or factors indicate an absence of need presently and in the 20-or-more year horizon;
v. A reasonable and equivalent alternative already exists for certain users or is programmed in the TIP as a separate project;
vi. The project is not a roadway improvement project and/or the ~~Bloomington/Monroe County Metropolitan Planning Organization.~~ BMCMPO has no programming authority (e.g. State, Bloomington Transit, Rural Transit, and other projects).

e. No project shall be granted an exception to any criteria that opposes any item in Section II. Applicability.

2. Appeals Process

Project sponsors may request a re-review of their projects by the Technical Advisory Committee (TAC)

a. All appeals will be heard and decided upon by a quorum of the TAC on an as needed basis.
b. The project sponsor shall submit adequate information to explain and substantiate the need for an exception.
c. BMCMPO staff will review the request initially and provide a report with recommendations to the TAC in advance of the regular meeting.
d. Members with conflicts of interest on a particular project must recuse themselves from deliberation on that project.
e. A sponsor may appeal only once to the TAC per special case before the decision rests. A sponsor may not appeal to any other committee of the MPO thereafter.

VII. ~~IMPLEMENTATION~~ NEXT STEPS[25]

~~1. Implementation Process~~ **1. Update MPO Plans and Documents**

[23] New.
[24] Unchanged.
[25] New.

Formatted: Centered

a. The MPO should update the Public Participation Plan to coincide with this Complete Streets Policy within nine months of the adoption of this policy.
b. The MPO should update the Metropolitan Transportation Plan (MTP) to coincide with this policy and reevaluate the MTP projects utilizing the project selection process and criteria in this policy. Update should occur within one year of the adoption of this policy.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, … + Start at: 1 + Alignment: Left + Aligned at: 0.75" + Indent at: 1"

~~**1. Community Engagement**~~

~~Maintaining a direct line of communication between residents and decision makers can improve outreach efforts and ultimately the projects themselves.~~

~~a. The LPA shall update the purpose and need of the project, if necessary, following initial public outreach as established in the original TIP application.~~
~~b. The LPA shall utilize a participatory design approach and engage the community and the MPO Citizen's Advisory Committee at the following project milestones:~~
~~i. During the project planning and scoping stages~~
~~ii. When design is 25% complete~~
~~iii. When design is 55% complete~~
~~iv. When design is 100% complete~~
~~v. Prior to finalizing the maintenance of traffic plans~~
~~c. The LPA shall engage underrepresented communities and stakeholders identified in the original TIP application.~~
~~d. Outreach strategies should occur at convenient times for the general public and at locations making use of easy and natural gathering spaces such as neighborhood association meetings, community centers, public libraries or farmer's market.~~

2. Education and Training[26]

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, … + Start at: 2 + Alignment: Left + Aligned at: 0" + Indent at: 0.5"

Education about complete streets roadway design best practices for community members and decision makers is essential. The BMCMPO encourages professional development and training on complete streets and active transportation issues for any MPO representative and staff including, but not limited to LPA project managers, members of the Policy Committee, the Technical Advisory Committee, the Citizens Advisory Committee, and MPO staff.

These individuals are encourage to attend at least one of the following opportunities per year: the annual Indiana MPO Conference, the Indiana Walk & Bike Summit, annual Purdue Road School as well as any other complete streets related conferences, webinars, workshops and seminars that may be put on by America Walks, Smart Growth America, Institute of Transportation Engineers, The American Planning Association, and The Congress for the New Urbanism.

3. Integrate transportation and land use

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, … + Start at: 2 + Alignment: Left + Aligned at: 0" + Indent at: 0.5"

Formatted: Centered

[26] New.

The BMCMPO along with the LPA's should create place-based street typologies to ensure sound transportation project decisions are made in conjunction with sound land use decisions. Place-based street typologies should be adopted/updated along with every MTP.

VIII. EVALUATION

1. Complete Streets Policy

The BMCMPO shall, at a minimum, evaluate this policy prior to the adoption of every ~~the Transportation Improvement Program~~ TIP[27]. This evaluation shall include recommendations for amendments to the complete streets policy and subsequently be considered by the Citizens Advisory Committee, Technical Advisory Committee and Policy Committee. Recommendations for amendments shall be distributed to the Local Public Agencies for review prior to consideration by the BMCMPO Committees.

2. Post-Construction Evaluation of Projects

The BMCMPO may evaluate projects using the performance measures in Section IX to understand the outputs and outcomes of transportation design, scope, and ultimately programming decisions.

Formatted: List Paragraph, Numbered + Level: 1 + Numbering Style: 1, 2, 3, … + Start at: 1 + Alignment: Left + Aligned at: 0.21" + Indent at: 0.46"

Formatted: Font: Century Gothic

Formatted: Indent: Left: 0.21"

Formatted: Font: Century Gothic

Formatted: Font: Century Gothic

IX. PERFORMANCE MEASURES[28]

The intent of this ~~complete streets~~ policy is to create a ~~safe and effective~~ transportation system that accommodates all users and modes. The performance of complete streets planning and ~~this~~, thus, this complete streets policy will be measured via the metrics below and made available publicly. Data will be presented using trend patterns with the intent to inform the public and decision makers about transportation project funding and design. The adage "what gets measured gets done" is important to remember when measuring the outcomes and outputs of transportation project decisions.

~~Performance Measure~~	~~Responsible for Collection~~	~~Mechanism for Data Collection~~	~~Responsible for Local Publication~~	~~Timeframe~~
~~1. Number and percentage of fatalities (motorized & non-motorized)~~	~~MPO Staff~~	~~Crash Report~~	~~MPO Staff~~	~~Annually~~
~~2. Number and percentage of serious injuries (motorized & non-motorized)~~	~~MPO Staff~~	~~Crash Report~~	~~MPO Staff~~	~~Annually~~
~~3. Number and percentage of bridges in good condition~~	~~Monroe County Staff~~	~~Asset Management Systems~~	~~MPO Staff~~	~~Every two years~~
~~4. Number and percentage of bridges in poor condition~~	~~Monroe County Staff~~	~~Asset Management Systems~~	~~MPO Staff~~	~~Every two years~~

Commented [AD1]: Performance Measures eliminated. Please see new table below.

[27] Changed from "long range transportation plan" to "transportation improvement program"
[28] New.

Formatted: Centered

5. Percentage of pavement in good condition	Local Public Agencies	Asset Management Systems	MPO Staff	Every two years
6. Percentage of pavement in poor condition	Local Public Agencies	Asset Management Systems	MPO Staff	Every two years
7. Annual hours of National Highway System peak hour excessive delay per capita	INDOT	TBD	MPO Staff	Annually
8. Number of transit vehicles that have met and exceeded their useful life	Bloomington Transit and IU Campus Bus	Asset Management Systems	MPO Staff	Every two years
9. Number of transit stops in need of amenities	Bloomington Transit to MPO Staff	Asset Management Systems	MPO Staff	Every two years
10. Percentage of people walking, biking and using transit	MPO Staff	Travel Survey, Traffic Counters	MPO Staff	Every three years
11. Number of projects constructed in low income and racial minority census blocks	U.S. Census Data	Annual List of Obligated Projects, Census Data	MPO Staff	Annually
12. Number of community members engaged at large and how many of those members are of an underrepresented population	MPO Staff	MPO and LPA Records	MPO Staff	Annually
13. Percentage of underrepresented population driving, walking, bicycling and using transit	MPO Staff	Travel Survey	MPO Staff	Every three years
14. Acreage of sensitive lands on which new transportation infrastructure is built (e.g. parks, karst, habitat)	MPO Staff	MPO and LPA Records	MPO Staff	Every three years
15. Average vehicle occupancy	MPO Staff	Travel Survey	MPO Staff	Every three years

This table is inspired by, adapted or adopted from Evaluating Complete Streets Projects: A guide for practioners. A resource created by American Association of Retired Persons (AARP) and Smart Growth America for measuring the results of projects

MEASURE	SCALE	METRIC
PLACE Being aware of community context, including existing and plane land use and buildings can result in streets that are vital public spaces. Place-focused measurements ensure a product that is compatible and enhances with the community.		
Quality of bicycling environment	Project	• Width of bicycle facilities • Pavement condition of bicycling facility • Bicyclist level of comfort. Comfort is in accord with separation of traffic, volume and speed of cars • Right turn on red restrictions
Quality of pedestrian environment	Project	• Crossing distance and time • Presence of enhanced crosswalks • Wait time at intersection • Width of walking facility • Right turn on red restrictions • Planting of new or maintaining of existing trees
Quality of transit environment	Project	•
Resident participation	Project	• Number of responses gathered • Number of people at meetings
Quality of automobile trips	Project	• Travel lane pavement condition

Commented [AD2]: New performance measure table

Formatted: Centered

Crash risk Safe travel is a fundamental transportation goal. Safety measures should watch for elements associated with injurious crashes and those associated with perceptions of safety.		
Compliance with posted speed limit	Project	• Percentage of drivers exceeding the posted speed limit • Match between target speed, design speed, and 85th percentile
Crashes	Project	• Number of crashes by mode on project (before and after) • Crash severity by mode and location
Crashes	Network	• Total Number • Rate and location by mode
Fatalities	Project	• Number of fatalities by mode on project (before and after)
Fatalities	Network	• Number of fatalities suffered by all modes
EQUITY Transportation services impact some populations and neighborhoods more than others. In project selection and evaluation, the distribution if impacts and benefits should be looked at for traditional disadvantage populations.		
Auto trips	Project	• Driving trips as portion of total trips along project
Auto trips	Network	• Driving trips to primary and secondary schools • Vehicle Miles Traveled (VMT) per capita • Driving commutes to work as portion of total commutes to work
Bicycle trips	Project	• Bicycling trips as portion of total trips along project
Bicycle trips	Network	• Bicycling trips as portion of total trips • Bicycling commutes to work as portion of total commutes to work
Transit trips	Network	• Transit trips as portion of total trips • Transit commutes to work as portion of total commutes to work
Walk trips	Project	• Walk trips as portion of total trips along project
Walk trips	Network	• Walk trips as portion of total trips in community • Walk commutes to work as portion of total commutes to work

X. Project Prioritization Criteria

The following project prioritization criteria is meant to serve the MPO committees as a guiding framework for choosing projects to program in to the TIP . The MPO is not bound by any outcomes of this process.

Formatted: Font: Century Gothic

Formatted: List Paragraph, Numbered + Level: 1 + Numbering Style: I, II, III, … + Start at: 1 + Alignment: Left + Aligned at: 0" + Indent at: 0.5"

Formatted: Centered

Formatted: Centered

Project Prioritization	
System Preservation & Maintenance	15%
Project improves upon *existing* infrastructure or serves to retrofit missing infrastructure (e.g. filling in sidewalk gaps)	+
Project addresses a maintenance need (e.g. repaving, bridge repair)	+
Project is located within existing right of way	+
Fiscal Responsibility	10%
Project budget is within the financial means of the MPO	+
Safety	15%
Project Addresses a High Crash Location	
Project location is identified in the most recent MPO Crash Report's top 50 crash locations	+
Project location is identified in the most recent MPO Crash Report's top 15 bicycle and pedestrian crash locations	+
Project incorporates safety improvement strategies	
Geometrical improvement for vehicular safety	+
Geometrical Improvement for bicycle safety	+
Geometrical Improvement for pedestrian safety	+
Signalization Improvement	+
Signage/Wayfinding	+
Project improves safe travel to nearby schools (within 1 mile)	+
Other improvements with rationale as to how the project improves safety	+
Multi-Modal Options	15%
Project incorporates Multi-Modal solutions	
Project located along existing transit service	+
Project located along existing pedestrian/bicycle facility	+
Project reduces modal conflict (e.g. traffic signals, grade separation, dedicated lanes)	+
Project includes transit accommodations (e.g. pullouts, shelters, dedicated lanes, signal priority)	+
Project includes sidewalk improvements	+
Project includes bicycle facility improvements	+
Project contains high comfort bicycle infrastructure appropriate to facility function (e.g. protected bike lane, multi-use path)	+
Project contains high comfort pedestrian infrastructure appropriate to facility function (e.g. curb extension, refuge island, crosswalk enhancement	+
Project makes a connection to an existing active mode facility	+
Congestion Management	10%
Project incorporates congestion management strategies	
Grade separation or dedicated travel space for individual modes	+
Improvements to access management	+
Signalization improvement	+
Improves parallel facility or contributes to alternative routing	+
Provides capacity for non-motorized modes	+
Adds transit capacity	+
Other strategies	+
Health & Equity	10%
Project provides increased accessibility for people with a low income & minorities	+
Project corrects ADA non-compliance	+
Project provides transportation choices for people with disabilities	+
Project provides transportation choices for aging adults	+
Project provides choices for young children	+
Project promotes physical activity	+
Project reduces vehicle emissions	+
Project has negative consequences for a natural resource	-
Project has negative consequences for a socio-cultural resources	-
Consistency with Adopted Plans	10%
Project located along planned transit service	+
Project located along planned pedestrian/bicycle facility	+
Local Master Thoroughfare Plan Priority	+
Transit Plan Priority	+
Bicycle/Pedestrian Plan Priority	+
Project supports goals and principles of MPO Metropolitan Transportation Plan	+
Project supports goals and principles of local land use plans	+
Other applicable planning documents	+
Context Sensitivity and Land Use	15%
Project contributes to the sense of place and matches the surrounding land use	
Project balances the need to move people with other desireable outcomes	+
Project involves minimal disruption to the community (e.g. limited land acquisition, limited change in traffic circulation)	+
Project is seen as adding lasting value to the community	+
Project supports high quality growth and land use principles	
Project improves accessibility and/or connectivity to existing land use development	+
Project location supports infill/redevelopment	+
Project contributes to transportation network grid development/roadway network connectivity	+

Commented [AD3]: Project Prioritization criteria eliminated. See new criteria below.

Formatted: Centered

Project Prioritization Criteria		
	Weighting	**Yes = 1, No = 0**
System Preservation & Maintenance		
Project improves upon *existing* infrastructure or serves to retrofit missing infrastructure (e.g. filling in sidewalk gaps)	15%	
Project addresses a maintenance need (e.g. repaving, bridge repair)		
Project is located within existing right of way		
	Total	0
Safety		
Project addresses a known high crash risk location	20%	
Project location is identified in the most recent MPO Crash Report's top 50 crash locations		
Project location is identified in the most recent MPO Crash Report's top 15 bicycle and pedestrian crash locations		
Project incorporates strategies that reduce crash risk		
Geometrical improvement for motorized safety		
Geometrical Improvement for non-motorized safety		
Signalization Improvement		
Signage/Wayfinding		
Project improves safe travel to nearby schools (within 1 mile)		
Other improvements with rationale as to how the project reduces crash risk		
	Total	0
Multi-Modal Options		
Project incorporates Multi-Modal solutions	20%	
Project located along existing transit service		
Project located along existing pedestrian/bicycle facility		
Project reduces modal conflict (e.g. traffic signals, grade separation, dedicated lanes)		
Project includes transit accommodations (e.g. pullouts, shelters, dedicated lanes, signal priority)		
Project includes sidewalk improvements		
Project includes bicycle facility improvements		
Project contains high comfort bicycle infrastructure appropriate to facility function (e.g. protected bike lane, multi-use path)		
Project contains high comfort pedestrian infrastructure appropriate to facility function (e.g. curb extension, refuge island, crosswalk enhancement)		
Project makes a connection to an existing active mode facility		
	Total	0
Congestion Management		
Project incorporates congestion management strategies	10%	
Grade separation or dedicated travel space for individual modes		
Improvements to access management		
Signalization improvement		
Improves parallel facility or contributes to alternative routing		
Provides capacity for non-motorized modes		
Adds transit capacity		
Other strategies		
	Total	0
Health & Equity		
Project provides increased accessibility for people with a low income & minorities	10%	
Project corrects ADA non-compliance		
Project provides transportation choices for people with disabilities		
Project provides transportation choices for aging adults		
Project provides choices for young children		
Project promotes physical activity		
Project reduces vehicle emissions		
Project will not have a negative impact for a natural resource		
Project will not have a negative impact for a socio-cultural resources		
	Total	0
Consistency with Adopted Plans		
Project located along planned transit service	10%	
Project located along planned pedestrian/bicycle facility		
Local Master Thoroughfare Plan Priority		
Transit Plan Priority		
Bicycle/Pedestrian Plan Priority		
Project supports goals and principles of MPO Metropolitan Transportation Plan		
Project supports goals and principles of local land use plans		
Other applicable planning documents		
	Total	0
Context Sensitivity and Land Use		
Project contributes to the sense of place and matches the surrounding land use	15%	
Project balances the need to move people with other desireable outcomes		
Project involves minimal disruption to the community (e.g. limited land acquisition, limited change in traffic circulation)		
Project is seen as adding lasting value to the community		
Project supports high quality growth and land use principles		
Project improves accessibility and/or connectivity to existing land use development		
Project location supports infill/redevelopment		
Project contributes to transportation network grid development/roadway network connectivity		
	Total	0
	Overall Total	0

Commented [AD4]: Please review new table for changes

Formatted: Centered

~~X.~~ XI. DEFINITIONS

Participatory Design – an approach to project design that actively involves all stakeholders to ensure the final design meets their needs and is usable.

Underrepresented Area – a geographic area that largely consist of marginalized or minority residents.

Vulnerable Road User or Vulnerable User – a person utilizing the right-of-way for transportation purposes whereby the individual is disadvantaged or limited by either the amount of protection in traffic (e.g. pedestrians and cyclists) or by the amount of task capability to smoothly integrate with other types of traffic (e.g. older or younger individuals). Vulnerable Users do not typically have a protective 'shell and/or move at slower speeds and are thus more susceptible to physical harm in the event of a collision, especially with vehicles with a larger mass.

Formatted: Centered

City of Bloomington
Planning and Transportation Department

October 03, 2018

RE: Fiscal Year (FY) 2018-2021 Transportation Improvement Program (TIP) Amendment

Mr. Martin:

Bloomington/Monroe County MPO staff recently informed the City of Bloomington that there is $79,053 of prior year balance (PYB) funding that is currently not programmed. Additionally, at the most recent Technical Advisory Committee (TAC) meeting it was discussed that the MPO would prefer to immediately program and spend these funds. At that meeting, the TAC members agreed to submit any desired TIP amendments related to this unprogrammed PYB funding prior to the October TAC meeting. The information below describes the City's proposed TIP amendment to utilize this funding.

The City's 2nd/Bloomfield Multimodal Safety Improvements Project will construct a gap in the existing multiuse path along the north side of West 2nd Street/West Bloomfield Road between South Adams Street and South Patterson Drive. It will also improve the signalized intersections at South Landmark Avenue and at South Patterson Drive to include pedestrian signal indications and buttons, crosswalks, accessible curb ramps, at least one signal head per travel lane, signal head backplates, and other geometric improvements. The project implements elements of the City's Bicycle and Pedestrian Transportation & Greenways System Plan and the City's ADA Transition Plan. It is approved to use TAP, HSIP, and STP funding. The project addresses an "[area] of special concern" in the BMCMPO 2035 Long Range Transportation Plan and is also included in the updated 2040 plan. Most importantly, this project utilizes numerous nationally documented safety countermeasures and would reduce crash risk at a location ranked 19th on the BMCMPO's most recent Crash Report for the top fifty crash locations based on crash severity.

Currently, the project is federally funded for construction at a level of only 51.9% based on a final construction cost estimate. We are requesting that the $79,053 of unprogrammed PYB funding be applied to this project to achieve a federal funding level of 57.4% for construction. We believe that this project is very important and deserves an increased federal funding percentage. We recognize that other agencies may also desire these unprogrammed funds and hope to have a productive conversation about funding allocation at the next TAC meeting.

Additional details are included within the attached amendment forms. We appreciate the MPO's consideration of this amendments.

Sincerely,

Neil Kopper, Interim Transportation and Traffic Engineer

BLOOMINGTON • MONROE COUNTY

Bloomington/Monroe County Metropolitan Planning Organization

TIP Project Form (Updated 01/03/2017)

FY2018-2021 Transportation Improvement Program Project Request Form

NOTE: This form must be completed in its entirety in order for a new project to be considered for inclusion in the Transportation Improvement Program (TIP) ***OR*** to make changes to an existing project already programmed in the TIP. Please complete all parts, including signature verification and attach support materials before returning to BMCMPO staff at the address listed below.

Mail: Bloomington/Monroe County MPO
401 N. Morton Street, Suite 160
PO Box 100
Bloomington, IN 47402

-OR-

email: martipa@bloomington.in.gov
mpo@bloomington.in.gov
fax: (812) 349-3535

1. Public Agency Information (Fill in all applicable fields):

☐ Monroe County ☒ City of Bloomington ☐ Town of Ellettsville ☐ INDOT
☐ Rural Transit ☐ Indiana University ☐ Bloomington Transit ☐ _____

Contact Name (ERC): Neil Kopper Phone: 812-349-3423 Fax: _____

Address: 401 N Morton St, Suite 130 Bloomington IN

Email: koppern@bloomington.in.gov

2. Project Information: (Fill in all applicable fields):

- Project Name: 2nd/Bloomfield Multimodal Safety Improvements DES Number: # 1601851
- Is this project already in the BMCMPO FY2018-2021 TIP? ☒ Yes ☐ No
- Project Location (detailed description of project termini or attach an illustration): West 2nd Street/West Bloomfield Road from South Patterson Drive to South Adams Street.
- Brief Project Description: Construct the gap in the existing multiuse path along the north side of this corridor between S Adams and S Patterson Drive. Also construct intersection improvements at the S Landmark and at S Patterson signalized intersections.
- Support for the Project (e.g. Local plans, LRTP, TDP, etc.): BMCMPO 2035 Long Range Transportation Plan; Bicycle and Pedestrian Transportation & Greenways System Plan; ADA Transition Plan; BMCMPO Crash Report, BMCMPO TIP
- Allied Projects (other projects related to this one): West Bloomfield Road Sidepath and Signal Improvements Project (project constructed a multiuse path along the north side of the street from Basswood Drive to Ransom Ln) and the I-69 W Bloomfield Rd Overpass (project constructs a multiuse path along the north side of the street from Basswood Drive to Liberty Drive).
- Does the project have an Intelligent Transportation Systems component? No
  If so, is the project included in the MPO's ITS architecture? N/A

3. Financial Plan:

Identify ***ALL*** anticipated project costs for all phases, including total anticipated project costs beyond the four years to be programmed in the TIP (i.e. outlying years). Please identify any illustrative phases or costs in *italics*.

Note: Fiscal Year runs from July 1 to June 30 (ie: FY 2016 starts 7/1/15 and ends 6/30/16.)

Phase	Funding Source	FY 2018	FY 2019	FY 2020	FY 2021	*Outlying Years*
RW	Local	$ 80,000	$	$	$	*$*
		$	$	$	$	*$*
		$	$	$	$	*$*
CE	Local	$	$ 122,916	$	$	*$*
	STP	$	$ 20,491	$	$	*$*
	TAP PYB	$	$ 30,000	$	$	*$*
CN	Local	$	$ 610,622	$	$	*$*
	STP	$	$ 26,000	$	$	*$*
	HSIP	$	$ 470,684	$	$	*$*
	TAP PYB	$	$ 214,924	$	$	*$*
	STP PYB	$	$ 110,821	$	$	*$*
	Totals:	$ 80,000	$ 1,606,458	$	$	*$*

**Note that STP PYB addition of $79,053 is requested with this amendment.*

Construction Engineering/Inspection:

- Does the project include an acceptable percentage of construction costs set aside for construction engineering or inspections? ☒ Yes ☐ No ☐ N/A

Year of Implementation Cost:

- Has a two to four percent (2%-4%) inflation factor been applied to all future costs? ☒ Yes ☐ No

4. Complete Streets

New Projects – If this is a new project to be included in the TIP, then section III **MUST** be completed.

Existing Projects – If a project is already included in the current, adopted TIP (compliant or exempt) and changes have occurred or will occur to the project which would have bearing on the Complete Streets Policy information on file, then all of section III must be updated and resubmitted for consideration.

Not Applicable – If project is subject to the Complete Streets Policy, check the **Not Applicable** box and proceed to Section 5.

Complete Streets Applicability and Compliance – Check one of the following:

☐ **Not Applicable – If project is Not Applicable, please skip to Section 5.** The project is not subject to

the Complete Streets Policy because it is a transit project, a non-road project, a resurfacing activity that does not alter the current/existing geometric designs of the roadway, a 'grandfathered' local roadway project included in the TIP before the adoption of the policy, or is a project that uses federal funds which the BMCMPO does NOT have programming authority. *No Additional Information items (below) have to be provided for projects to which the Complete Streets Policy does not apply.*

☒ **Compliant** - The project will accommodate all users of the corridor. The project is new construction or reconstruction of local roadways that will use federal funds through the BMCMPO for **any** phase of project implementation. *Additional Information items **1-8** (below) must be submitted for compliant projects.*

☐ **Exempt** - The project is unable to accommodate all users of the corridor due to certain circumstances or special constraints, as detailed in Section IV of the CS Policy. *Additional Information items **1, 4-8** (below) must be submitted for exempt projects.*

Reason for exemption: _____

Additional Information – Attach to this application form the following information as required by the Complete Streets Policy. If any fields are unknown at the time of application, the applicant may indicate that "specific information has not yet been determined."

1) **Detailed Scope of Work** – Provide relevant details about the project that would be sufficient to use when seeking consulting services (detailed project description, vehicular elements, non-vehicular elements, new construction/reconstruction). *This project would construct a gap in the existing multiuse path along the north side of West 2nd Street/West Bloomfield Road between South Adams Street and South Patterson Drive. It would also improve the signalized intersections at South Landmark Avenue and at South Patterson Drive to include pedestrian signal indications and buttons, crosswalks, accessible curb ramps, at least one signal head per travel lane, signal head backplates, and other geometric improvements.*

2) **Performance Standards** – List specific performance standards for multimodal transportation, including, but not limited to transit, pedestrian, bicycle, and automobile users, ADA and Universal Design, environmental, utilities, land use, right of way, historic preservation, maintenance of services plan, and any other pertinent design component in relation to current conditions, during implementation/construction, and upon project completion. *Project will be constructed to improve safety and comfort for users of all ages and abilities and all modes of transportation. Project will comply with PROWAG, the City's adopted accessibility standards. Project will comply with all required environmental and historical regulations per the federal process. Project will have an appropriate maintenance of traffic plan to accommodate all users during construction.*

3) **Measurable Outcomes** – Identify measurable outcomes the project is seeking to attain (e.g. safety, congestion and/or access management, level-of-service, capacity expansion, utility services, etc.) *Project seeks to improve safety, comfort, and accessibility for people walking, on bicycle, using transit, or driving. Project will improve overall street capacity by providing transportation options.*

4) **Project Timeline** – Identify anticipated timelines for consultant selection, public participation, design, right-of-way acquisition, construction period, and completion date. *Design and right of way acquisition are complete. Construction is expected to start in early 2019 and finish within the calendar year.*

5) **Key Milestones** – identify key milestones (approvals, permits, agreements, design status, etc.) *All permits have been applied for at the appropriate time in project development. Design and right of way acquisition are complete. Construction is expected to start in early 2019 and finish within the calendar year. Project letting is January 2019.*

6) **Project Cost** – Identify any anticipated cost limitations, additional funding sources, project timing, and other important cost considerations not included in the table above. *Project is limited by available MPO funding. Project is seeking additional federal funding.*

7) **Public Participation Process** – Describe the public participation process (types of outreach, number and type of meetings, etc.), and the benchmark goals for the project (participation rates, levels of outreach, levels of accountability and corresponding response methods to input received, etc.). *Project has been presented to the MPO TAC, MPO CAC, and Bloomington Bicycle and Pedestrian Safety Commission. Those groups will receive updates about the project during development. Individual property owners*

adjacent to the project have been contacted for right of way acquisition. All comments and questions regarding the project have been considered and addressed as appropriate.

8) **Stakeholder List** – Identify the key parties/agencies/stakeholders/interest groups anticipated to be engaged during project development and their respective purpose and roll for being on the list. *INDOT, BMCMPO, various City of Bloomington Departments, Bicycle and Pedestrian Safety Commission, adjacent property owners/tenants, and other interested parties.*

5. Verification

I hereby certify that the information submitted as part of this form is accurate. Furthermore, if applicable, I certify the project follows the Complete Streets Policy.

Signature

10/3/2018

Date

BLOOMINGTON • MONROE COUNTY

Bloomington/Monroe County Metropolitan Planning Organization

TIP Project Form (Updated 01/03/2017)

Transportation Improvement Program Project Request Form

NOTE: This form must be completed in its entirety in order for a new project to be considered for inclusion in the Transportation Improvement Program (TIP) ***OR*** to make changes to an existing project already programmed in the TIP. Please complete all parts, including signature verification and attach support materials before returning to BMCMPO staff at the address listed below.

Mail: Bloomington/Monroe County MPO
401 N. Morton Street Suite 160
PO Box 100
Bloomington, IN 47402

-OR-

email: mpo@bloomington.in.gov
fax: (812) 349-3535

1. Public Agency Information (Fill in all applicable fields):

☐ Monroe County ☐ City of Bloomington ☐ Town of Ellettsville xx☐ INDOT

☐ Rural Transit ☐ Indiana University ☐ Bloomington Transit ☐ _____

Contact Name (ERC) Karlei Metcalf Phone: 812-524-3792_____ Fax: _____

Address: 185 Agrico Lane, Seymour, IN 47274_____

Email: kmetcalf@indot.in.gov

2. Project Information: (Fill in all applicable fields):

- Project Name: DES Number: #1801945
- Is this project already in the TIP? ☐ Yes x☐ No
- Project Location : SR 46 from 0.44 miles W of I-69 to I-69
- Brief Project Description: Pavement Replacement, New PCC
- Support for the Project (e.g. Local plans, LRTP, TDP, etc.): _____
- Allied Projects (other projects related to this one): _____
- Does the project have an Intelligent Transportation Systems component?N/A _____
  If so, is the project included in the MPO's ITS architecture? _____

3. Financial Plan:

Identify ***ALL*** anticipated project costs for all phases, including total anticipated project costs beyond the four years to be programmed in the TIP (i.e. outlying years). Please identify any illustrative phases or costs in *italics*.

Note: Fiscal Year runs from July 1 to June 30 (ie: FY 2016 starts 7/1/15 and ends 6/30/16.)

Phase	Funding Source	FY 2018	FY 2019	FY 2020	FY 2021	*Outlying Years*
PE	NHPP	$		$	$	*$*
	State	$		$	$	*$*
		$	$	$	$	*$*
CN	NHPP	$	$ 2200000			*$*
	ST		$550,000			*$*
		$	$	$	$	*$*
RW	NHPP	$		$	$	*$*
	ST	$		$	$	*$*
		$	$	$	$	*$*
	Totals:		2,750,000			*$*

Construction Engineering/Inspection:

- Does the project include an acceptable percentage of construction costs set aside for construction engineering or inspections? ☐ Yes ☐ No x☐ N/A

Year of Implementation Cost:

- Has a four percent (4%) inflation factor been applied to all future costs? x☐ Yes ☐ No

4. Complete Streets

New Projects – If this is a new project to be included in the TIP, then section III **MUST** be completed.

Existing Projects – If a project is already included in the current, adopted TIP (compliant or exempt) and changes have occurred or will occur to the project which would have bearing on the Complete Streets Policy information on file, then all of section III must be updated and resubmitted for consideration.

Not Applicable – If project is subject to the Complete Streets Policy, check the **Not Applicable** box and proceed to Section 5.

Complete Streets Applicability and Compliance – Check one of the following**:**

x☐ **Not Applicable – If project is Not Applicable, please skip to Section 5.** The project is not subject to the Complete Streets Policy because it is a transit project, a non-road project, a resurfacing activity that does not alter the current/existing geometric designs of the roadway, a 'grandfathered' local roadway project included in the TIP before the adoption of the policy, or is a project that uses federal funds which the BMCMPO does NOT have programming authority. *No Additional Information items (below) have to be provided for projects to which the Complete Streets Policy does not apply.*

☐ **Compliant -** The project will accommodate all users of the corridor. The project is new construction or reconstruction of local roadways that will use federal funds through the BMCMPO for **any** phase of project implementation. *Additional Information items **1-8** (below) must be submitted for compliant projects*.

☐ **Exempt -** The project is unable to accommodate all users of the corridor due to certain circumstances or special constraints, as detailed in Section IV of the CS Policy. *Additional Information items **1, 4-8** (below) must be submitted for exempt projects*.

Reason for exemption: _____

Additional Information – Attach to this application form the following information as required by the Complete Streets Policy. If any fields are unknown at the time of application, the applicant may indicate that "specific information has not yet been determined."

1) **Detailed Scope of Work** – Provide relevant details about the project that would be sufficient to use when seeking consulting services (detailed project description, vehicular elements, non-vehicular elements, new construction/reconstruction).
2) **Performance Standards** – List specific performance standards for multimodal transportation, including, but not limited to transit, pedestrian, bicycle, and automobile users, ADA and Universal Design, environmental, utilities, land use, right of way, historic preservation, maintenance of services plan, and any other pertinent design component in relation to current conditions, during implementation/construction, and upon project completion.
3) **Measurable Outcomes –** Identify measurable outcomes the project is seeking to attain (e.g. safety, congestion and/or access management, level-of-service, capacity expansion, utility services, etc.)
4) **Project Timeline** – Identify anticipated timelines for consultant selection, public participation, design, right-of-way acquisition, construction period, and completion date.
5) **Key Milestones –** identify key milestones (approvals, permits, agreements, design status, etc.)
6) **Project Cost** – Identify any anticipated cost limitations, additional funding sources, project timing, and other important cost considerations not included in the table above.
7) **Public Participation Process** – Describe the public participation process (types of outreach, number and type of meetings, etc.), and the benchmark goals for the project (participation rates, levels of outreach, levels of accountability and corresponding response methods to input received, etc.).
8) **Stakeholder List** – Identify the key parties/agencies/stakeholders/interest groups anticipated to be engaged during project development and their respective purpose and roll for being on the list.

5. Verification

I hereby certify that the information submitted as part of this form is accurate. Furthermore, if applicable, I certify the project follows the Complete Streets Policy.

_____Robin Bolte_____ 09/20/18_____

Signature Date

BLOOMINGTON • MONROE COUNTY
mpo

Bloomington/Monroe County Metropolitan Planning Organization
TIP Project Form (Updated 01/03/2017)

Transportation Improvement Program Project Request Form

NOTE: This form must be completed in its entirety in order for a new project to be considered for inclusion in the Transportation Improvement Program (TIP) ***OR*** to make changes to an existing project already programmed in the TIP. Please complete all parts, including signature verification and attach support materials before returning to BMCMPO staff at the address listed below.

Mail: Bloomington/Monroe County MPO
401 N. Morton Street Suite 160
PO Box 100
Bloomington, IN 47402

-OR-

email: mpo@bloomington.in.gov
fax: (812) 349-3535

1. Public Agency Information (Fill in all applicable fields):

☐ Monroe County ☐ City of Bloomington ☐ Town of Ellettsville xx☐ INDOT
☐ Rural Transit ☐ Indiana University ☐ Bloomington Transit ☐ _____

Contact Name (ERC) Karlei Metcalf Phone: 812-524-3792_____ Fax: _____

Address: 185 Agrico Lane, Seymour, IN 47274_____

Email: kmetcalf@indot.in.gov

2. Project Information: (Fill in all applicable fields):

- Project Name: DES Number: #1801946
- Is this project already in the TIP? ☐ Yes x☐ No
- Project Location : SR 45 from I-69 to 0.38 miles E of I-69 (end of concrete).
- Brief Project Description: Concrete Pavement Restoration (CPR).
- Support for the Project (e.g. Local plans, LRTP, TDP, etc.): _____
- Allied Projects (other projects related to this one): _____
- Does the project have an Intelligent Transportation Systems component?N/A _____
  If so, is the project included in the MPO's ITS architecture? _____

3. Financial Plan:

Identify ***ALL*** anticipated project costs for all phases, including total anticipated project costs beyond the four years to be programmed in the TIP (i.e. outlying years). Please identify any illustrative phases or costs in *italics*.

Note: Fiscal Year runs from July 1 to June 30 (ie: FY 2016 starts 7/1/15 and ends 6/30/16.)

Phase	Funding Source	FY 2018	FY 2019	FY 2020	FY 2021	*Outlying Years*
PE	NHPP	$		$	$	*$*
	State	$		$	$	*$*
		$	$	$	$	*$*
CN	NHPP	$	$ 2,200,000			*$*
	ST		$550,000			*$*
		$	$	$	$	*$*
RW	NHPP	$		$	$	*$*
	ST	$		$	$	*$*
		$	$	$	$	*$*
	Totals:		2,750,000			*$*

Construction Engineering/Inspection:

- Does the project include an acceptable percentage of construction costs set aside for construction engineering or inspections? ☐ Yes ☐ No x☐ N/A

Year of Implementation Cost:

- Has a four percent (4%) inflation factor been applied to all future costs? x☐ Yes ☐ No

4. Complete Streets

New Projects – If this is a new project to be included in the TIP, then section III **MUST** be completed.

Existing Projects – If a project is already included in the current, adopted TIP (compliant or exempt) and changes have occurred or will occur to the project which would have bearing on the Complete Streets Policy information on file, then all of section III must be updated and resubmitted for consideration.

Not Applicable – If project is subject to the Complete Streets Policy, check the **Not Applicable** box and proceed to Section 5.

Complete Streets Applicability and Compliance – Check one of the following**:**

x☐ **Not Applicable – If project is Not Applicable, please skip to Section 5.** The project is not subject to the Complete Streets Policy because it is a transit project, a non-road project, a resurfacing activity that does not alter the current/existing geometric designs of the roadway, a 'grandfathered' local roadway project included in the TIP before the adoption of the policy, or is a project that uses federal funds which the BMCMPO does NOT have programming authority. *No Additional Information items (below) have to be provided for projects to which the Complete Streets Policy does not apply.*

☐ **Compliant -** The project will accommodate all users of the corridor. The project is new construction or reconstruction of local roadways that will use federal funds through the BMCMPO for **any** phase of project implementation. *Additional Information items **1-8** (below) must be submitted for compliant projects*.

☐ **Exempt -** The project is unable to accommodate all users of the corridor due to certain circumstances or special constraints, as detailed in Section IV of the CS Policy. *Additional Information items **1, 4-8** (below) must be submitted for exempt projects*.

Reason for exemption: _____

Additional Information – Attach to this application form the following information as required by the Complete Streets Policy. If any fields are unknown at the time of application, the applicant may indicate that "specific information has not yet been determined."

1) **Detailed Scope of Work** – Provide relevant details about the project that would be sufficient to use when seeking consulting services (detailed project description, vehicular elements, non-vehicular elements, new construction/reconstruction).
2) **Performance Standards** – List specific performance standards for multimodal transportation, including, but not limited to transit, pedestrian, bicycle, and automobile users, ADA and Universal Design, environmental, utilities, land use, right of way, historic preservation, maintenance of services plan, and any other pertinent design component in relation to current conditions, during implementation/construction, and upon project completion.
3) **Measurable Outcomes –** Identify measurable outcomes the project is seeking to attain (e.g. safety, congestion and/or access management, level-of-service, capacity expansion, utility services, etc.)
4) **Project Timeline** – Identify anticipated timelines for consultant selection, public participation, design, right-of-way acquisition, construction period, and completion date.
5) **Key Milestones –** identify key milestones (approvals, permits, agreements, design status, etc.)
6) **Project Cost** – Identify any anticipated cost limitations, additional funding sources, project timing, and other important cost considerations not included in the table above.
7) **Public Participation Process** – Describe the public participation process (types of outreach, number and type of meetings, etc.), and the benchmark goals for the project (participation rates, levels of outreach, levels of accountability and corresponding response methods to input received, etc.).
8) **Stakeholder List** – Identify the key parties/agencies/stakeholders/interest groups anticipated to be engaged during project development and their respective purpose and roll for being on the list.

5. Verification

I hereby certify that the information submitted as part of this form is accurate. Furthermore, if applicable, I certify the project follows the Complete Streets Policy.

_____Robin Bolte_____ 09/20/18_____

Signature Date

BLOOMINGTON • MONROE COUNTY
mpo

Bloomington/Monroe County Metropolitan Planning Organization
TIP Project Form (Updated 01/03/2017)

Transportation Improvement Program Project Request Form

NOTE: This form must be completed in its entirety in order for a new project to be considered for inclusion in the Transportation Improvement Program (TIP) ***OR*** to make changes to an existing project already programmed in the TIP. Please complete all parts, including signature verification and attach support materials before returning to BMCMPO staff at the address listed below.

Mail: Bloomington/Monroe County MPO
401 N. Morton Street Suite 160
PO Box 100
Bloomington, IN 47402

-OR-

email: mpo@bloomington.in.gov
fax: (812) 349-3535

1. Public Agency Information (Fill in all applicable fields):

☐ Monroe County ☐ City of Bloomington ☐ Town of Ellettsville xx☐ INDOT
☐ Rural Transit ☐ Indiana University ☐ Bloomington Transit ☐ _____

Contact Name (ERC) Brad Williamson Phone: 812-524-3971_____ Fax: _____

Address: 185 Agrico Lane, Seymour, IN 47274

Email: bwilliamson@indot.in.gov

2. Project Information: (Fill in all applicable fields):

- Project Name: DES Number: #1801948
- Is this project already in the TIP? ☐ Yes x☐ No
- Project Location : Various locations in the Seymour District to be determined as needed.
- Brief Project Description: Bridge Maintenance and Repair
- Support for the Project (e.g. Local plans, LRTP, TDP, etc.): _____
- Allied Projects (other projects related to this one): _____
- Does the project have an Intelligent Transportation Systems component?N/A _____
  If so, is the project included in the MPO's ITS architecture? _____

3. Financial Plan:

Identify ***ALL*** anticipated project costs for all phases, including total anticipated project costs beyond the four years to be programmed in the TIP (i.e. outlying years). Please identify any illustrative phases or costs in *italics*.

Note: Fiscal Year runs from July 1 to June 30 (ie: FY 2016 starts 7/1/15 and ends 6/30/16.)

Phase	Funding Source	FY 2018	FY 2019	FY 2020	FY 2021	*Outlying Years*
PE	NHPP	$		$	$	*$*
	State	$		$	$	*$*
		$	$	$	$	*$*
CN	STP	$	$ 800,000			*$*
	ST		$200,000			*$*
		$	$	$	$	*$*
RW	NHPP	$		$	$	*$*
	ST	$		$	$	*$*
		$	$	$	$	*$*
	Totals:		$1,000,000.			*$*

Construction Engineering/Inspection:

- Does the project include an acceptable percentage of construction costs set aside for construction engineering or inspections? ☐ Yes ☐ No x☐ N/A

Year of Implementation Cost:

- Has a four percent (4%) inflation factor been applied to all future costs? x☐ Yes ☐ No

4. Complete Streets

New Projects – If this is a new project to be included in the TIP, then section III **MUST** be completed.

Existing Projects – If a project is already included in the current, adopted TIP (compliant or exempt) and changes have occurred or will occur to the project which would have bearing on the Complete Streets Policy information on file, then all of section III must be updated and resubmitted for consideration.

Not Applicable – If project is subject to the Complete Streets Policy, check the **Not Applicable** box and proceed to Section 5.

Complete Streets Applicability and Compliance – Check one of the following**:**

x☐ **Not Applicable – If project is Not Applicable, please skip to Section 5.** The project is not subject to the Complete Streets Policy because it is a transit project, a non-road project, a resurfacing activity that does not alter the current/existing geometric designs of the roadway, a 'grandfathered' local roadway project included in the TIP before the adoption of the policy, or is a project that uses federal funds which the BMCMPO does NOT have programming authority. *No Additional Information items (below) have to be provided for projects to which the Complete Streets Policy does not apply.*

☐ **Compliant -** The project will accommodate all users of the corridor. The project is new construction or reconstruction of local roadways that will use federal funds through the BMCMPO for **any** phase of project implementation. *Additional Information items **1-8** (below) must be submitted for compliant projects*.

☐ **Exempt -** The project is unable to accommodate all users of the corridor due to certain circumstances or special constraints, as detailed in Section IV of the CS Policy. *Additional Information items **1, 4-8** (below) must be submitted for exempt projects*.

Reason for exemption: _____

Additional Information – Attach to this application form the following information as required by the Complete Streets Policy. If any fields are unknown at the time of application, the applicant may indicate that "specific information has not yet been determined."

1) **Detailed Scope of Work** – Provide relevant details about the project that would be sufficient to use when seeking consulting services (detailed project description, vehicular elements, non-vehicular elements, new construction/reconstruction).
2) **Performance Standards** – List specific performance standards for multimodal transportation, including, but not limited to transit, pedestrian, bicycle, and automobile users, ADA and Universal Design, environmental, utilities, land use, right of way, historic preservation, maintenance of services plan, and any other pertinent design component in relation to current conditions, during implementation/construction, and upon project completion.
3) **Measurable Outcomes –** Identify measurable outcomes the project is seeking to attain (e.g. safety, congestion and/or access management, level-of-service, capacity expansion, utility services, etc.)
4) **Project Timeline** – Identify anticipated timelines for consultant selection, public participation, design, right-of-way acquisition, construction period, and completion date.
5) **Key Milestones –** identify key milestones (approvals, permits, agreements, design status, etc.)
6) **Project Cost** – Identify any anticipated cost limitations, additional funding sources, project timing, and other important cost considerations not included in the table above.
7) **Public Participation Process** – Describe the public participation process (types of outreach, number and type of meetings, etc.), and the benchmark goals for the project (participation rates, levels of outreach, levels of accountability and corresponding response methods to input received, etc.).
8) **Stakeholder List** – Identify the key parties/agencies/stakeholders/interest groups anticipated to be engaged during project development and their respective purpose and roll for being on the list.

5. Verification

I hereby certify that the information submitted as part of this form is accurate. Furthermore, if applicable, I certify the project follows the Complete Streets Policy.

_____Robin Bolte_____ 09/17/18_____

Signature Date