



TECHNICAL ADVISORY COMMITTEE

August 22, 2012

10:00 – 11:30 a.m.

McCloskey Room (#135)

- I. Call to Order and Introductions
- II. Approval of Minutes
 - A. February 22, 2012
 - B. March 28, 2012
 - C. May 23, 2012
- III. Communications from the Chair
- IV. Reports from Officers and/or Committees
 - A. LRTP Task Force
 - B. Updates on Projects in TIP
 - C. ADA Transition Plans
 - D. Citizens Advisory Committee
- V. Reports from the MPO Staff
 - A. MAP-21
 - B. 2012 MPO Conference
 - C. 2011 Crash Report
- VI. Old Business
- VII. New Business
 - A. FY 2012-2015 TIP Amendments*
 - a. INDOT TIP Amendments
 - i. New Signal Installation – SR 46 & Matthews Drive
 - ii. Bridge Deck Overlay – SR 46 & Stephens Creek
 - iii. Statewide Underwater Bridge Inspections
 - iv. Statewide Fracture Critical Bridge Inspections
 - v. Statewide Post-Tensioned Bridge Inspections
 - B. Complete Streets Exemption*
 - a. Old SR 37 & Dunn Street (City of Bloomington)
 - C. MPO UAB & MPA Boundary Updates*
 - D. MPO ADA Policy*
 - E. 2013 Meeting Schedule
- VIII. Communications from Committee Members (*non-agenda items*)
 - A. Topic Suggestions for future agendas
- IX. Upcoming Meetings
 - A. Policy Committee – September 14, 2012 at 1:30 p.m. (Council Chambers)
 - B. Technical Advisory Committee – September 26, 2012 at 10:00 a.m. (McCloskey Room)
 - C. Citizens Advisory Committee – September 26, 2012 at 6:30 p.m. (McCloskey Room)

Adjournment

(*Recommendations Requested / *Public comment prior to vote – limited to five minutes per speaker)



**Technical Advisory Committee Meeting Minutes
Feb. 22, 2012 McCloskey Conference Room 135, City Hall**

Technical Advisory Committee minutes are transcribed in a summarized outline manner. Audio recordings are on file with the City of Bloomington Planning Department.

Attendance

Technical Advisory Committee: Michelle Allen (FHWA), Kurt Babcock (County GIS), John Carter (MCCSC), John Collisson (County Highway), Chris Clothier (proxy for Jane Fleig City of Bloomington Utilities), Connie Griffin (Town of Ellettsville), Perry Maull (IU Campus Bus), Lew May (Bloomington Transit), Doug Norton (Rural Transit), Adrian Reid (City Engineer), Andrea Roberts (Public Works), Jim Ude (INDOT), and Chuck Winkle (City GIS).

Others: Steve Walls (INDOT)

MPO Staff: Vince Caristo, Josh Desmond, Raymond Hess, and Scott Robinson

- I. **Call to Order and Introductions** – Mr. Reid called the meeting to order (~10:00 AM)
- II. **Approval of Minutes:**
 - A. January 25, 2011—The spelling of Mary Jo Hamman was corrected on page 3. *****Mr. Maull moved approval. Ms. Roberts seconded.**
- III. **Communications from the Chair-- None**
- IV. **Reports from Officers and/or Committees**
 - A. LRTP Task Force—Mr. Desmond reported that the task force reviewed the draft RFQ to use to find a consultant to help develop our travel demand model. We are working on a list for firms to invite to participate in the RFQ. Any suggestions would be appreciated. He presented the estimated timeline for this part of the project.
- V. **Reports from the MPO Staff**
 - A. **FY2012 2nd Quarter Progress Report** – Mr. Hess presented the 2nd Quarter Report. We have spent 27% of our FY budget at this point. We anticipate increased spending for due to expenses such as hiring a consultant in the near future and costs associated with the MPO Conference.
 - B. **2012 MPO Conference** – Mr. Desmond said that the BMCMPPO will be hosting the Indiana MPO Conference this year from Tuesday, October 16 through Thursday, October 18. Staff is working hard to organize speakers, an award ceremony, an opening reception, and mobile workshops. Local MPO members can attend and might receive a discount. Mr. Hess said staff may be contacting some members of the local MPO to host some sessions, give presentations, etc. Suggestions for donations of prizes would be appreciated.
 - C. **2013-2014 Unified Planning Work Program** – Mr. Desmond said that funding for this UPWP will be slightly lower than last year. The Planning Emphasis Areas from FHWA and INDOT will include some carry overs from last year. They have created what they call Red

Flag investigations. Before you put a project in the TIP you would do a series of inventories of local environmental and historic cultural resources that would be impacted by the project. We will report on the details as we learn them. We have been asked to expand our Quarterly Tracking Reports. MACOG has quarterly meeting where all the LPAs sit around a table and present their reports. We need to organize a meeting like that possibly this fall. We need to make sure the LPA's ADA Transition Plans are done by the end of calendar year 2012. We could risk our federal transportation funding. Also, this year we need to reflect the 2010 census and adjust our Urbanized Area and our MPO Planning Area boundaries. Those new boundaries need to be approved by the Policy Committee. We also need to account for the new LRTP and the MPO Conference. Mr. Desmond said he will need to consult with the LPAs to talk about our contract service agreements to see if anything needs to be adjusted there.

D. Transportation Improvement Program -- Mr. Hess said that staff does not anticipate developing a 2013-2016 TIP. Our latest new TIP (2012-2015) is still in limbo. The State doesn't seem to be going to development a 2013-2016 State TIP. We will just try to resolve the issues revolving around the 2012-2015 TIP. Mr. Reid asked if we had ever skipped before. Mr. Hess said yes. It is somewhat difficult to figure out how to budget for 2 years of programming. We can rough out a project list in the meantime.

E. Project Tracking – Mr. Hess presented this quarterly report, but noted FHWA wants more information in the future. He discussed the change order policy that puts some funds aside should anyone need it. The report shows how money has been spent including administrative modifications. This report seemed a good place to have that information.

VI. Old Business

A. CAC's ADA Policy Statement (*Recommendation Requested*)—Mr. Hess said that the CAC had some concern about whether transportation projects were adequately addressing the needs of persons with disability. They developed a draft policy statement which we brought before the TAC in September. The TAC listed several concerns of the existing ADA policy. There was a point about decision-makers having technical credentials if they are making recommendations for certain funding sources or projects. The TAC recommended that any training specific to ADA issues be organized by staff and conducted by disability experts. The adoption of the ADA Transition plans is a federal requirement so it doesn't need to be stated in the ADA-policy statement. The CAC looked at the TAC recommendations and made some modifications to their existing ADA Policy statement. He read through the CAC's responses. The CAC likes the Universal Design concept and suggested defining that concept to alleviate ambiguity. Where Universal Design is found in the policy a footnote is placed referring to a definition Universal Design. They added the rest of the language recommended by the TAC but wanted to keep the language about required ADA Transition plans. Mr. Reid asked for comments. He said that the TAC had requested that the "Universal Design" be taken out and now it's in the title. The website referred to doesn't seem to apply since it is only about buildings. He would rather not include the reference to North Carolina State's policy. There was discussion about Universal Design. Mr. Robinson said that the CAC was interested in using it as a principle to follow rather than a specific guideline. Mr. Robinson said if Mr. Reid objects to referring to "Universal Design" but not the principles, staff could report that to the CAC at the meeting tonight. Mr. Reid would like to postpone the recommendation until the

next meeting. Mr. Desmond agreed with postponing this until the next meeting in order to give staff a chance to hear what the CAC thought about Mr. Reid's suggestions. *****Mr. Carter moved to postpone the vote until the next meeting. Ms. Roberts seconded. There was unanimous approval.**

VII. New Business

A. Transportation Improvement Program Amendments (*recommendations requested*)

- a. 35 Foot Buses (BT)**—Mr. May said that the amendment is to purchase two 35-foot hybrid buses with federal funds available to replace older buses. It would be an illustrative project given that it is subject to a discretionary award. The buses would cost approximately \$1.26 million for the FY2013.
- b. Fuel Capitalization (BT)**—In the recent federal appropriations bill for transit, fuel costs may be capitalized on a one-time basis at an 80:20 ratio rather than the usual 50-50 ratio. We propose to include the 80% capitalization in the FY 2012.
- c. Maintenance Facility Exhaust System Upgrade (BT)**—BT wants to upgrade their maintenance bays to be able to handle the 1500-2000 degree temperature spikes that the engines produce periodically to burn off diesel exhaust. The total cost would be around \$60,000. They propose to use their 5307 funding for 80% of the project. The rest would be split between BT and IU Campus Bus. Mr. Hess noted that with both motions they would be amending both the 2010-2013 and the 2012-2015 TIPs. *****Mr. Maull moved to approve the three TIP amendments. Ms. Roberts seconded. There was unanimous approval.**

VIII. Communications from Committee Members (*non-agenda items*)

A. Topic Suggestions for future agendas

IX. Upcoming Meetings

- A. Policy Committee – February 24, 2012 at 1:30 p.m. (Council Chambers)**
- B. Technical Advisory Committee – March 28, 2012 at 10:00 a.m. (McCloskey Room)**
- C. Citizens Advisory Committee – March 28, 2012 at 6:30 p.m. (McCloskey Room)**

The meeting was adjourned (~10:50 AM).

These minutes were _____ by the TAC at their regular meeting held on August 24, 2012. (SR)



Technical Advisory Committee Meeting Minutes
March 28, 2012 McCloskey Conference Room 135, City Hall

Technical Advisory Committee minutes are transcribed in a summarized outline manner. Audio recordings are on file with the City of Bloomington Planning Department.

Attendance

Technical Advisory Committee: Michelle Allen (FHWA), Kurt Babcock (County GIS), John Carter (MCCSC), Jane Fleig (City Utilities), Laura Haley (City ITS), Tom Micuda (City Planning), Adrian Reid (City Engineer), Andrea Roberts (Public Works), Mike Trexler (City Controller), Jim Ude (INDOT) and Dave Williams (City Parks)

Others: Mary Jo Hamman (Michael Baker Associates), Robin Thompson (URS), Steve Walls (INDOT), Alisa Wood (City Controller),

MPO Staff: Vince Caristo, Josh Desmond, Raymond Hess, and Jane Weiser

I. Call to Order and Introductions – Mr. Reid called the meeting to order (~10:04 AM).

II. Approval of Minutes – No minutes available.

III. Communications from the Chair -- None

IV. Reports from Officers and/or Committees

A. LRTP Task Force – Mr. Desmond said the RFQ went out on March 15. Responses are due on April 13. We would like to ask a subset of the LRTP Task Force to help review those proposals to narrow down top selections to 2 or 3 to interview and ultimately make our selection.

B. Updates on projects in TIP

INDOT – Mr. Walls said they plan to include the consultant groups in the update. They are on schedule and will open portions of Section 4 in 2012. The re-evaluation of Section 4 for two possible intersection plans at SR 37 and I-69 is coming up said Mr. Thompson. The Re-evaluation should go out in the 2nd week of April. There will be a 15-day comment period on these two options. Mr. Thompson said they would like to get the compiled comments to FHWA by the 1st of May. The Roundabout option and the Trumpet option were presented. The diamond/roundabouts option is the consultants preferred option. Mr. Micuda asked the relative difference in disturbance or size between a double roundabout and a standard interchange in terms of the width. Mr. Thompson said there is not a big difference in size. Mr. Micuda said with the roundabout you would have slower speeds in the roundabout than in a standard interchange. Are you comfortable with the curve being able to handle the largest trucks? Mr. Thompson said yes.

Mr. Thompson explained the trumpet design. We would not have to take any more right-of-way with this design. The footprint would be farther to the north. It would result in a lot more pavement. The advantage of the trumpet option is that it is free-flow. It reduces conflict points. Mr. Reid asked about the cost difference. Mr. Thompson said the trumpet option would cost

about \$1.5 million more than the roundabout. Mr. Micuda asked if they ever designed for anything other than a LOS “A.” Mr. Reid said that roundabouts are usually either “A” or “F.” Mr. Hess asked about the release date for public comment. Mr. Walls said it should be released within the first two weeks of April. The public comment period is 15 days after which time; the consultants will evaluate the comments to see if any tweaking needs to be done.

Ms. Hamman reported on Section 5. Her group has sent out letters and had outreach meetings. They have had 2 meetings with participating agencies including Ellettsville, Bloomington, Monroe County, Martinsville and Morgan County. Their Project Community Advisory Committee that deals specifically with issues associated with various groups along the corridor has met once. The meetings will be monthly. They are working at alternatives via input. They will have a large public information meeting where they will present the alternatives found in the document. Next they will publish the draft EIS and the Record of Decision in 2013. Their office is always open to receiving public comment on any issue. Mr. Micuda asked Ms. Hamman if they would attend the next TAC meeting to give people an overview of the information presented today. Mr. Hess thanked all the I-69 people for coming to the meeting.

City of Bloomington – Mr. Reid said the Sare/Rogers roundabout will go to letting in May. South Rogers St. should be letting in August. Mr. Hess noted that they will have to come up with a more formal system of quarterly project tracking. They will need to decide when and how to do this. Ms. Allen said that some districts are already doing this. It has been very helpful, keeps a project on schedule and helps hold everybody accountable. Mr. Micuda said he would suggest that we hold that meeting before or after the TAC meeting where INDOT and FHWA can be present. Mr. Desmond noted that we could do a conference call if your representative can't be here. Ms. Allen didn't know exactly how other MPOs did it. Mr. Desmond said staff has been invited to observe meetings at other MPOs. Mr. Hess said TAC members would get the written quarterly report first so that they can sit down and comment on parts of the report.

C. ADA Transition Plans

City of Bloomington—Mr. Reid said that he and Mr. Caristo have been meeting on our Sidewalk Inventory to see if we can see where problem areas are and how to use that information going forward. Mr. Hess talked about the letter from INDOT calling for ADA Transition Plans. Projects will be checked for ADA compliance.

Town of Ellettsville—Ellettsville is moving along with their Transition plans. They are starting their inventory. They have chosen people to fill key roles and have had a public information meeting and continue working on a draft report. Last September there was a partnership between BT, MPO staff and a disability advocate from the community. We applied for an accessible transportation coalition initiative grant through Easter Seals. Easter Seals came in and did a 2-day workshop related to transportation and accessibility. Now we have a new organization called the Monroe County Coalition on Accessibility and Mobility that meets monthly. You can contact that group via MPO staff.

D. Citizens Advisory Committee—Mr. Hess said that the CAC agenda is similar to the TAC agenda. They will be discussing the recommendation from TAC to reconsider the language and

concept of Universal Design the CAC's ADA Policy Statement.

V. Reports from the MPO Staff

A. 2012 MPO Conference—Mr. Desmond reviewed progress on the MPO Conference to be held in Bloomington this fall. Rooms are being set aside, speakers decided upon and mobile workshops designed. Staff would be happy to hear from anyone locally who might have a topic to speak on.

VI. Old Business-- None

VII. New Business

A. 2013-2014 Unified Planning Work Program—Mr. Desmond presented an overview of what is going into this UPWP which starts on July 1. He presented an overview of our budget for the next 2 years, what the Planning Emphasis Areas (PEAs) are and an overview of the tasks that we are going to be adding or removing from our Work Program. Planning funding is \$255,286 with a local match (80/20 match every year) of \$63,821. That is about 3% lower than last year. We will have some carryover funding to amend into the FY 2014 Works Program. PEAs include: 1.) Red Flag Investigations associated with Planning and Environmental Linkages, 2.) Quarterly Tracking reports & meetings, 3.) ADA Transition Plans, and 4.) Adjusting our Urbanized Area Boundaries and our Metropolitan Planning Area Boundary. He provided a graph based on our current Work Program to illustrate changes to the new Work Program. The 2035 LRTP will be the biggest cost along with the 2012 MPO Conference. We may have to shift some usual funding areas to fund the 2035 LRTP. (See packet for additional details.) Staff plans to complete a draft UPWP for the next Policy Committee packet that will be sent as usual to INDOT for the April meeting. TAC and CAC will see the draft on April 25.

Mary Jo Hamman asked about a timeline for changing the Metropolitan Planning Area Boundary. Mr. Desmond said not yet, but he hopes to have that soon. She asked to be kept informed. Mr. Desmond didn't anticipate any substantive changes. Ms. Roberts asked if staff had an update on the federal transportation bill? Mr. Desmond said no. SAFETEA-LU may be extended.

VIII. Communications from Committee Members (*non-agenda items*)

A. Topic Suggestions for future agendas

IX. Upcoming Meetings

A. Policy Committee – April 13, 2012 at 1:30 p.m. (Council Chambers)

B. Technical Advisory Committee – April 25, 2012 at 10:00 a.m. (McCloskey Room)

C. Citizens Advisory Committee – April 25, 2012 at 6:30 p.m. (McCloskey Room)

The meeting was adjourned (~11:15 AM).

These minutes were _____ by the TAC at their regular meeting held on August 24, 2012 (SR).



Technical Advisory Committee Meeting Minutes
May 23, 2012 McCloskey Conference Room 135, City Hall

Technical Advisory Committee minutes are transcribed in a summarized outline manner. Audio recordings are on file with the City of Bloomington Planning Department.

Attendance

Technical Advisory Committee: John Carter (MCCSC), John Collisson (County Highway), Tom Micuda (City Planning), Lew May (Bloomington Transit), Adrian Reid (City Engineer), Jim Ude (INDOT), Dave Williams (City Parks), Laura Haley (City ITS), Jane Fleig (City Utilities), and Michelle Allen (FHWA).

Others: Sandra Flum (INDOT), Julie Thurman (Michael Baker Jr. Inc.), Dawn Replogle (URS Corporation), Vince Caristo (MPO Staff), Josh Desmond (MPO Staff), and Scott Robinson (MPO Staff).

- I. Call to Order and Introductions** - Mr. Reid called the meeting to order ~10:03 AM.
- II. Approval of Minutes.**
 - A. April 25 Minutes** – *****Mr. Micuda moved approval. Mr. Williams seconded and the minutes were approved with no corrections.*****
- III. Communications from the Chair** - None
- IV. Reports from Officers and/or Committees**
 - A. LRTP Task Force** - Mr. Desmond said two consulting firms were interviewed and the Task Force will make a decision on a preferred firm by this Friday. The Policy Committee will finalize the consultant selection process at their June 8, 2012 meeting so staff can begin contract negotiations.
 - B. Updates on Projects in TIP** - Mr. Collisson said a phase of Karst Farm Trail is on schedule for an August letting. Work continues on Bridge 33 on Mathews Drive/Mount Tabor Road. Mr. Williams said work is completed with the Cascades project and the Country Club Trailhead area. Design work is moving on schedule for the new Downtown Transit Center and schematic designs are being vetted said Mr. May. He anticipates construction bidding later this fall. Mr. Reid announced the full road closure for the Sare Road and Rogers Road intersection will be next Tuesday, which is a week earlier than first anticipated. Mr. Ude said work continues for the ramps at SR 37 and SR 45. The east 10th Street and SR 45/46 bypass intersection will be closed starting June 4, 2012 and the 17th Street intersection will be open. Work will commence for the signal at Arlington Road and SR 46 in one week. Ms. Replogle said the public comment period for the reevaluation of two interchange designs at SR 37 and I69 for Section 4 has closed and will be reviewed before a final design is selected and approved by FHWA. She also said the Rolling Glen Neighborhood has requested visual screening with landscaping. That is also being considered. Ms. Thurman said the four I69 alternatives within Section 5 are continuing to being reviewed as they work towards a preferred alternative by this Fall in preparation of a Draft Environmental Impact Statement.

C. ADA Transition Plans - Mr. Caristo reported that Bloomington is continuing to evaluate sidewalk data and are meeting every two weeks working towards completing a transition plan by the end of the year. Field inventories for curb ramps, cuts, and signals will be needed. Ms. Allen mentioned that there are some data resources available on-line and Ms. Flum said the precertification deadline is the end of June. Mr. Desmond said he received a message from Ms. Griffin that the Town of Ellettsville is continuing their field work inventory.

D. Citizens Advisory Committee – Mr. Desmond reported that the agenda for the CAC is essentially the same as the TAC agenda except that they will also be reconsidering the ADA Policy Statement tonight with changes based on the TAC’s suggestions.

V. Reports from the MPO Staff

A. A. 2012 MPO Conference - Mr. Desmond reported that staff is working to finalize many items associated with the fall MPO conference. Details will be continuously updated on the website and BMCMPPO members will have a discounted registration rate.

VI. Old Business – none.

VII. New Business

B. FY 2011-2012 UPWP Amendment (*Recommendation Requested*) - Mr. Robinson provided a summary to the memo included in the meeting packet and said this request is similar to a previous one for aerial imagery. The funds would be switched from the 201 Element for the travel demand model update and moved to the 302 Element since most model work will commence in the new fiscal year and not be needed for this fiscal year. Mr. Reid said the study looked at multi-jurisdictional projects and made recommendations that will improve overall safety and will specifically benefit bicyclists. *****Mr. Micuda moved approval and Ms. Fleig seconded. The motion was unanimously approved.*****

VIII. Communications from Committee Members (*non-agenda items*) – Mr. Desmond said there are no pertinent items for the June meeting and any could be addressed at the August meeting. He suggested canceling the meeting. Mr. Reid agreed as chair. Mr. Micuda said if INDOT has any reporting regarding I69 staff can arrange a meeting for informational purposes.

A. Topic Suggestions for future agendas – none.

IX. Upcoming Meetings

A. Policy Committee – June 8, 2012 at 1:30 p.m. (Council Chambers)

B. Technical Advisory Committee – June 27, 2012 at 10:00 a.m. (McCloskey Room)

C. Citizens Advisory Committee – June 27, 2012 at 6:30 p.m. (McCloskey Room)

Adjournment ~10:23 AM

These minutes were _____ by the TAC at their regular meeting held on August 22, 2012 (SR).

*Bloomington/Monroe County
Metropolitan Planning Organization*

Crash Report

Calendar Years 2009 through 2011

September 2012

DRAFT

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Executive Summary

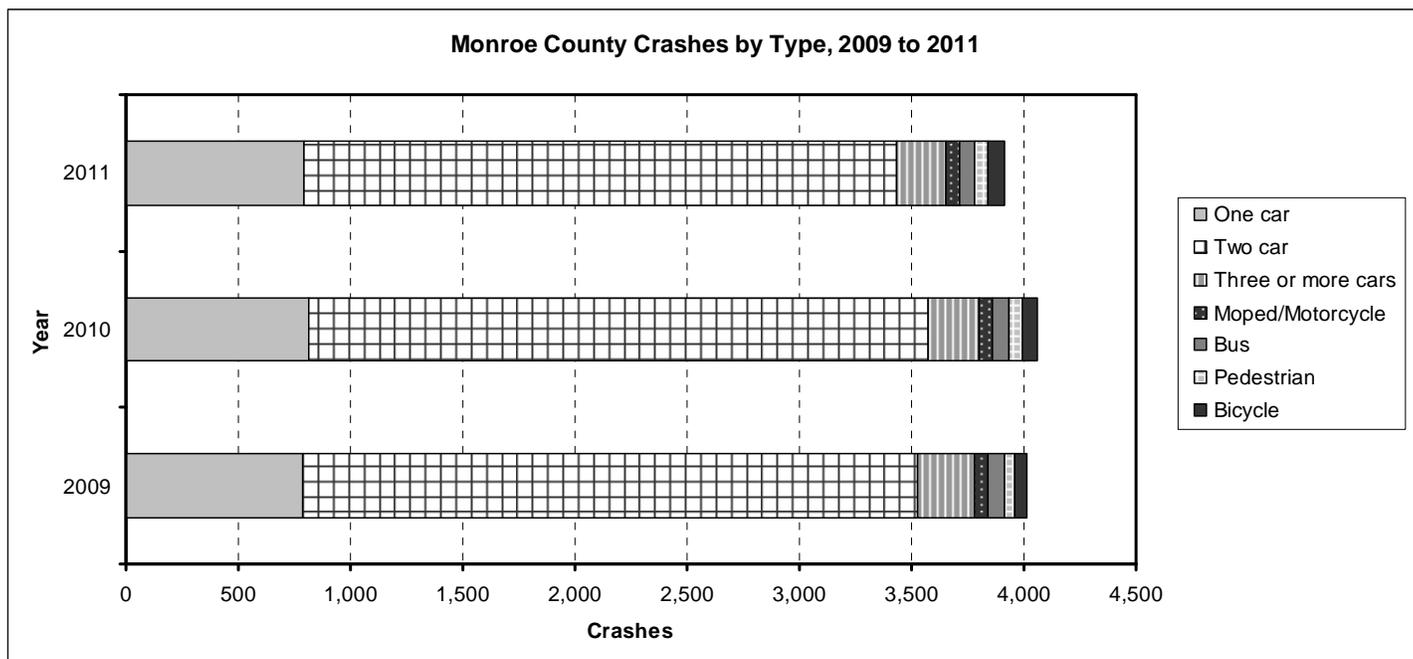
The current version of the Bloomington/Monroe County Metropolitan Planning Organization (MPO) Crash Report continues the MPO's effort to provide a thorough analysis of the causes and trends of crashes in Monroe County. This year's report includes crash data from 2009 to 2011.

This report has been compiled to provide information to the Citizen's Advisory Committee, Technical Advisory Committee, and Policy Committee of the MPO. Additionally, the report will be available to local government agencies, Indiana University, and the general public through the MPO website and the office of the Bloomington Planning Department.

A summary of the crash trends reported within Monroe County is provided below to highlight general information on crash data within Monroe County. In the following sections, detailed tables, charts, and summaries are provided to highlight information on the frequency, severity, and other related characteristics of crashes that occurred from 2009 to 2011. Additionally, the appendix contains information and analysis that may be of interest to some readers.

Summary of Crash Trends from 2009 to 2011

A total of 11,988 crashes were reported between 2009 and 2011 (Table 1). This figure represents a 3.4% decline from the previous period, 2008 to 2010, as reported in last year's crash report (12,415 crashes from 2008 to 2010). Total crashes for 2011 declined 3.6% compared to 2010. These trends mirror national data, where the total number of crashes declined by 1.6% from 2009 to 2010. Just over three quarters of the total crashes reported in Monroe County involved no injuries (property damage or unknown), and the rest reported various levels of severity in injuries sustained.



A further breakdown of the total 11,988 crashes provides useful 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 29 fatalities (Table 4), somewhat more than the 22 fatalities reported from 2007 to 2009. Of the 31 fatalities, almost half (13) were from single car crashes, six were from two-car crashes, six involved mopeds/motorcycles, and five involved a pedestrian. There were no fatalities involving a bicycle or a bus.

The time distribution of crashes continues to follow a predictable pattern. 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 1 crash per hour (Figure 1).

The weekend also follows a predictable 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 PM, the weekend experiences a higher crash frequency than during the week. Friday continued to have the highest number of crashes overall, while Sunday had the lowest number of crashes (Figure 2).

State highways are prominently featured in the list of intersections with the highest crash frequency, or total number of crashes over the time period (Table 2). This could be attributable to several factors, but higher traffic volumes and speeds on these roads are likely factors. The intersection at State Road 37 & W Bloomfield Rd topped the list, followed by State Road 46 & E 3rd St then State Road 45/46 Bypass & N College Ave/N Walnut St. Because these intersections continue to exhibit high numbers of crashes from year to year, safety improvements should be considered. Locations that show a high number of crashes, but do not involve state managed highways, should also be considered for safety improvements through the MPO's Highway Safety Improvement Program (Table A1).

The leading cause of crashes during the study period was once again failure to yield right of way with 2,455 incidents (Table 3). Other leading causes include following too closely, reaction to other driver behaviors, and unsafe backing. These causes can be addressed through law enforcement and education efforts as well as through physical improvements. Running off the right side of the road and speeding in adverse weather present opportunities for physical safety improvements, such as guard rails, rumble strips, and interactive signage. These types of improvements should be explored further to reduce crashes.

Bicycle and pedestrian crashes are an important consideration due to a relatively high number of non-motorized trips in the area, and the sensitivity to injury of individuals using these modes. It is well understood that when compared to other types of crashes, those involving bicyclists and pedestrians are much more likely to result in a fatality or incapacitating injury. Therefore, reducing the frequency of these crashes is a priority. The intersection of E 7th St & Jordan Ave had the highest number of bicycle crashes, while the intersection of N Dunn St & E Kirkwood Ave topped the list for pedestrian crashes in the third consecutive crash report, both locations warranting further investigation.

Introduction

Mobility continues to be a defining aspect of life in the United States and around the world. Investment in transportation infrastructure has led to new opportunities for trade, travel, recreation, relocation, and economic growth. The BMCMPPO receives approximately \$3.1 million per year of federal transportation funding allocated from the Indiana Department of Transportation to invest in our local transportation network. Despite this continued investment, the effectiveness of our transportation system is undermined by human, economic, and financial costs attributable to motor vehicle crashes.

Motor vehicle crashes are a significant cause of death, injury, property loss and productivity loss in the United States. Data for 2009 shows that unintentional accidents were the 5th leading cause of death overall, and of the 118,021 total unintentional accidents reported, 39,031 (33%) are attributed to transportation.¹ While it may not be possible to completely eliminate motor vehicle crashes, gaining a better understanding of their causes can help transportation planners and engineers reduce their frequency and severity. This report attempts to characterize the motor vehicle crashes in Monroe County, Indiana, providing the basis for informed transportation policies and infrastructure investments.

The annual Crash Reports demonstrate that motor vehicle crashes contribute to a significant loss of life, property, and productivity in Monroe County. Through continued efforts in crash reporting and analysis, a better understanding of crash trends will be attained. From this information, targeted infrastructure investments should further improve safety on roads within the county. Therefore, the purpose of this report is twofold. First, the report provides a consistent and straightforward means to disseminate annual crash data which can be utilized by any interested individual or organization. Second, the report provides another tool for civil engineers, transportation planners, and local policy makers to use when considering mitigation strategies aimed to reduce the frequency and severity of transportation related crashes. Specifically, the Indiana Department of Transportation and the BMCMPPO 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. It is the overall goal of HSIP to reduce the number of fatal and incapacitating injury crashes. Through annual reporting and analysis, effective mitigation strategies can be implemented to further curtail crashes within Monroe County.

This report focuses on a three year period from 2009 to 2011. 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. However, results from 2011 alone are often highlighted to provide a snapshot of the most recent year.

¹ Centers for Disease Control, National Center for Health Statistics. National Vital Statistics Reports – Deaths: Final Data for 2009. Volume 59, Number 10. http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_03.pdf. Accessed on August 14, 2012.

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. This system contains crash data from police reports since 2003. The police report data is organized by collisions, units (vehicles), and individuals. These entities are related to one another by a field in each table (Master Record Number), but can also be analyzed independently. It is possible to retrieve information regarding collisions (e.g., where and when did the greatest number of crashes occur?), vehicles involved (e.g., how many crashes involved bicycles?), and individuals involved (e.g., how old were the crash victims?). It is also possible to perform more complex analyses using attributes from each of these entities (e.g., which location had the most elderly crash victims?).

As with any database, the validity of conclusions resulting from the data is contingent upon accurate and complete data entry. Lack of 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 should not be interpreted rigidly.

A significant effort was made to correct data errors and validate results. It is important to note that the methodology was improved for this report. Consequently, some minor inconsistencies may be evident when comparing crash reports from different years. Therefore, it should be understood that 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 were categorized for analysis based on the type and severity of the crash. If the crash included a moped, motorcycle, bus, bicyclist or pedestrian, it was 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 type” classification was based on the number of cars: one car, two cars, or three or more cars. The “severity” classification of a collision was based on the most severe injury that resulted from the crash. For example, if a crash resulted in a fatality as well as a non-incapacitating injury, the severity of the crash was classified 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 based on the reported geographic coordinates, which were available for more than 92% 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 counts conducted by the City of Bloomington, Monroe County, and the Indiana Department of Transportation, utilizing standard adjustments and engineering judgment as necessary.

When reading the report, it is important to understand the distinction between “crashes” and “individuals.” The term “crash” is used when the characteristics of the crash itself are under consideration, whereas the terms “individual” and “fatality” are used when the focal point is the people involved. For example, the “Fatal Injury” column of Table 1 (“Crash by Type and Severity, 2009-2011”) shows how many crashes resulted in a fatal injury in 2010, but it would be incorrect to interpret this column as the number of fatalities in 2010, since more than one fatality can result from a single crash.

Analysis

Crash Characteristics

This section provides a summary of crash characteristics in Monroe County, including the type and severity of crashes from 2009-2011. These factors reflect trends in the overall safety of the transportation system.

In 2011, a total of 3,914 motor vehicle crashes were reported in Monroe County (Table 1). Of these, nine resulted in one or more fatalities, while sixty-two caused incapacitating injuries. For the vast majority of crashes (3,074), injuries were not reported. Two-car crashes were the most common, comprising 68% of the total. One-car crashes and those involving three or more cars were also common, accounting for 20% and 6% of total crashes reported, respectively. Crashes involving a pedestrian, cyclist, moped/motorcycle, or bus were much less frequent. However, with the exception of crashes involving a bus, these were much more likely to involve injury than vehicle crashes.

Compared with 2009 and 2010, the overall number of crashes in 2011 decreased slightly.

Table 1. Crashes by Type and Severity, 2009-2011

Crash Type		Severity				Annual Total	Percent of Annual Total
		Fatal Injury	Incapacitating Injury	Non-incapacitating	No injury/unknown		
2009	One car	3	9	157	620	789	19.7%
	Two car	0	13	453	2273	2739	68.2%
	Three or more cars	1	4	94	151	250	6.2%
	Bus	0	1	5	57	63	1.6%
	Moped/Motorcycle	2	10	54	19	85	2.1%
	Bicycle	0	1	30	6	37	0.9%
	Pedestrian	1	6	41	3	51	1.3%
	Total	7	44	834	3129	4014	100.0%
	Percent of Annual Total	0.2%	1.1%	20.8%	78.0%	100.0%	
2010	One car	6	8	160	642	816	20.1%
	Two car	5	25	465	2265	2760	68.0%
	Three or more cars	0	3	93	125	221	5.4%
	Bus	0	0	5	57	62	1.5%
	Moped/Motorcycle	1	12	56	17	86	2.1%
	Bicycle	0	3	40	8	51	1.3%
	Pedestrian	1	10	46	7	64	1.6%
	Total	13	61	865	3121	4060	100.0%
	Percent of Annual Total	0.3%	1.5%	21.3%	76.9%	100.0%	
2011	One car	3	13	123	652	791	20.2%
	Two car	3	17	428	2194	2642	67.5%
	Three or more cars	0	6	71	146	223	5.7%
	Bus	0	0	2	55	57	1.5%
	Moped/Motorcycle	3	13	48	19	83	2.1%
	Bicycle	0	3	34	4	41	1.0%
	Pedestrian	0	10	63	4	77	2.0%
	Total	9	62	769	3074	3914	100.0%
	Percent of Annual Total	0.2%	1.6%	19.6%	78.5%	100.0%	
3-Year	Total	29	167	2468	9324	11988	
	Percent of 3-Year Total	0.2%	1.4%	20.6%	77.8%	100.0%	

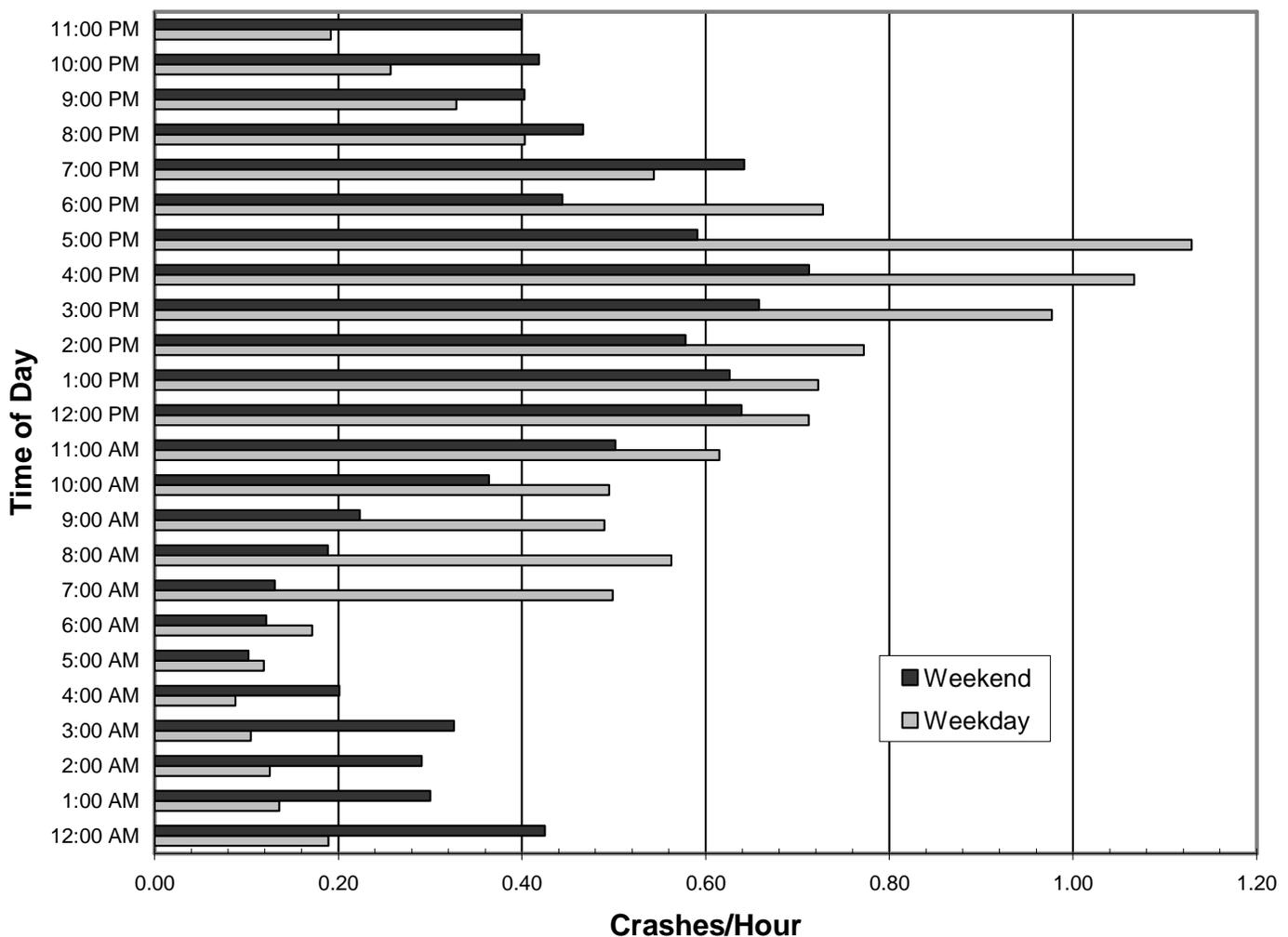
Time of Crashes

This section summarizes the number of crashes by hour and day. Information relating to the timing of crashes can be used by law enforcement agencies and emergency responders 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, 5:00 PM to 7:00 PM. The late afternoon was the most likely time for a crash to occur, with more than one per hour.

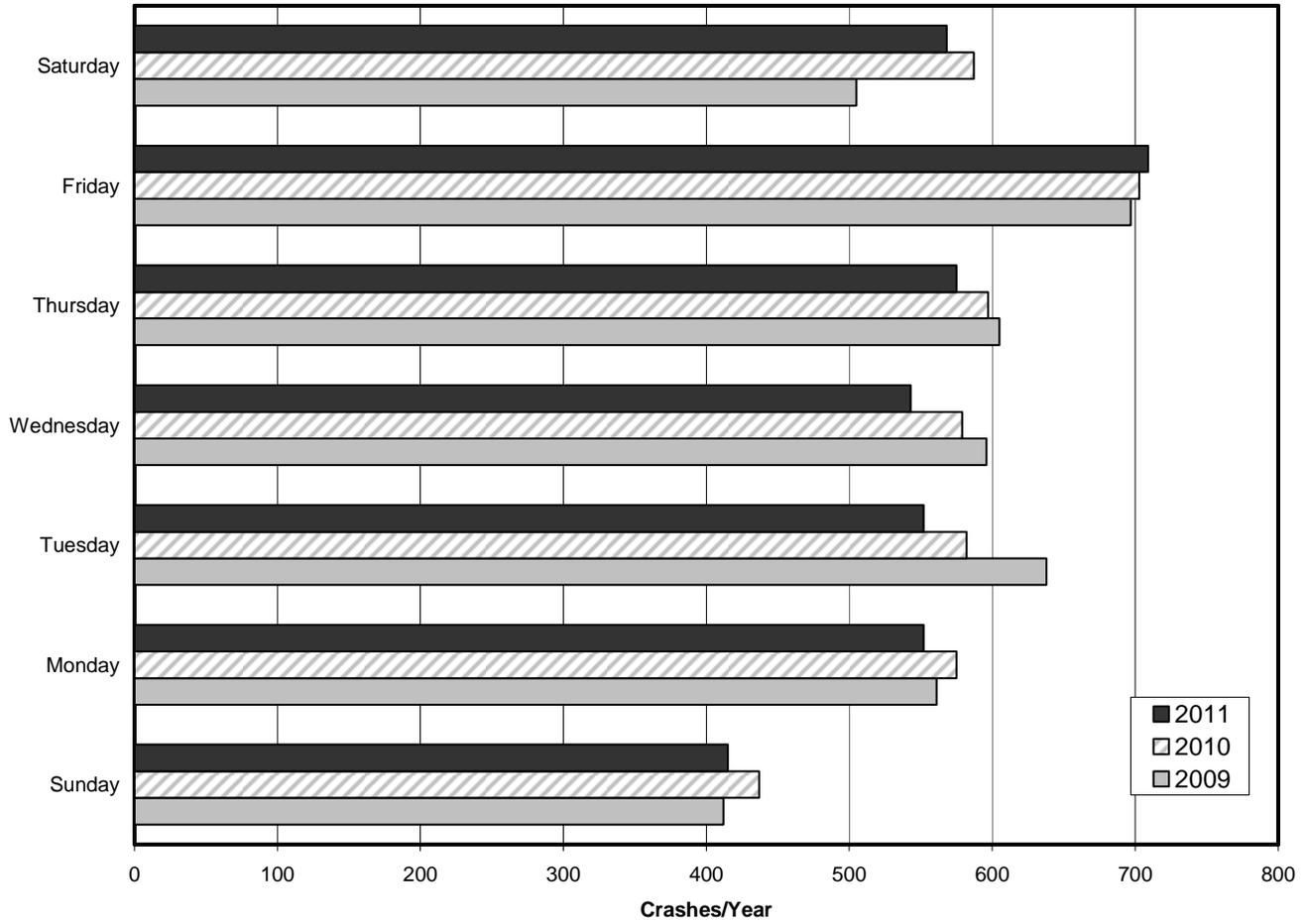
The hourly distribution of crashes for the weekend was less varied than for the work week. Crashes in the late evening and early morning were much more common during the weekend, and rush hour peaks were not as prevalent as on weekdays. During the study period, a greater number of crashes occurred on Fridays than on any other day and the fewest crashes occurred on Sundays (Figure 2).

Figure 1. Crashes by Time of Day, 2009-2011²



² Hours shown represent the beginning of the hour. For example, "12:00 AM" represents the time period from 12:00 AM to 12:59 AM.

Figure 2. Crashes by Day of Week, 2009-2011



Crash Locations

This section addresses the spatial distribution of crashes in Monroe County in order to highlight problematic intersections. Two methods are used. First, all of the intersections in Monroe County are ordered based on crash frequency, or the total number of crashes that occurred at each location over the 3-year period. The top 50 intersections in Monroe County with the highest crash frequency are listed in Table 2. Second, the highest frequency crash locations are ranked based on crash rate, or the total number of crashes divided by the total number of entering vehicles over the time period (Table 3). Analyzing crash frequency and crash rates can help transportation planners, engineers, and officials to identify locations that may have hazardous geometric or operational deficiencies.

In 2011, the intersection with greatest crash frequency was State Road 37 & W Bloomfield Rd, where 36 crashes were reported (Table 2). This intersection also had the greatest number of total crashes during the period from 2009 to 2011, with 108 reported crashes. The highest frequency crash locations have remained consistent over time, with 83% of the locations in Table 2 having appeared in the previous year's analysis, covering the period 2008 to 2010.

However, locations with a high crash frequency are not necessarily more hazardous than locations with a lower crash frequency. To account for the effect of traffic volume on the total number of crashes at a particular location, a normalized crash rate was calculated for each of the intersections in Table 2 (Table 3)³. Available traffic counts were used to estimate the number of vehicles entering the intersection over the time period, utilizing standard adjustment factors and engineering judgment as necessary^{4,5}. During the period from 2009 to 2011, the intersection with the greatest crash rate was State Road 46 & S Pete Ellis Dr, followed by E 13th St & N Indiana Ave.

The methodology used in this report does not help identify intersections that have high crash rates but relatively few crashes overall, nor does it help to identify intersections that tend to have more severe crashes. Therefore, future reports should consider new additional analyses such as a comparison of intersections based on crash severity, and a comparison of crash rates among intersections with similar operating characteristics. These additional analyses will further aid transportation planners, engineers, and officials in effectively identifying hazardous locations, and securing funding to fix them.

³ Crash Rate = $N / ((\text{Intersection_AADT}) * 3 \text{ years} * 365 \text{ days} * 10^{-6})$,
where N = total number of crashes from 2009 to 2011, and
where Intersection_AADT = sum of average annual daily traffic entering the intersection

⁴ Indiana Department of Transportation. 2011 Traffic Adjustment Factors.
http://www.in.gov/indot/files/TrafficStatistics_AdjustmentFactors_05112011.pdf. Accessed on August 10, 2012.

⁵ Traffic counts were available for 97% of all intersection approaches. In six instances, standard estimates based on roadway classification were used. Traffic counts adjustment factors were applied for seasonal, yearly, and weekday variation, as applicable.

Table 2. Top 50 Crash Locations by Crash Frequency, 2009-2011

Crash Frequency Rank	Previous Rank	Intersection	Jurisdiction	Year			3-Year Total
				2009	2010	2011	
1	2	State Road 37 & W Bloomfield Rd	IN	30	42	36	108
2	5	State Road 46 & E 3rd St	IN	36	33	35	104
3	1	State Road 45/46 Bypass & N College Ave/N Walnut St	IN	41	29	29	99
4	3	State Road 37 & State Road 48/W 3rd St	IN	37	28	32	97
5	4	State Road 46 & S Pete Ellis Dr	IN	26	47	21	94
6	7	State Road 45 & S Curry Pike/S Leonard Springs Rd	IN	31	27	25	83
7	9	State Road 45/46 Bypass & E 10th St	IN	22	30	27	79
8	6	State Road 37 & W Vernal Pike	IN	33	24	20	77
9	8	State Road 45 & S Liberty Dr	IN	23	36	15	74
10	10	State Road 48 & S Liberty Dr	IN	25	24	21	70
11	11	State Rd 48 & S Gates Dr	IN	22	21	20	63
12	12	State Rd 46 & S Kingston Dr	IN	24	19	18	61
13	13	State Road 45/46 Bypass & N Kinser Pike	IN	19	19	21	59
14	36	W 3rd St & S Cory Ln	COB	9	23	24	56
15	15	W 10th St & N College Ave	COB	15	22	17	54
15	14	E 10th St & N Fee Ln	COB	15	24	15	54
17	20	E 3rd St & S Washington St	COB	24	17	12	53
18	54	State Road 45 & S Gillham Dr	IN	16	11	24	51
18	22	E 3rd St & S Jordan Ave	COB	11	18	22	51
18	18	State Road 46 & S Smith Rd	IN	20	14	17	51
21	17	W 2nd St & S College Ave	COB	23	15	12	50
22	26	W 3rd St & S College Ave	COB	12	18	17	47
23	50	E 17th St & N Jordan Ave	COB	6	14	26	46
24	23	State Road 37 & W Tapp Rd	IN	11	23	11	45
24	18	W 7Th St & N Walnut St	COB	15	18	12	45
26	47	E 10th St & N Union St	COB	10	13	21	44
26	23	State Road 45 & N Pete Ellis Dr/N Range Rd	IN	21	12	11	44
28	16	E 10th St & N Jordan Ave	COB	16	17	10	43
28	32	W 17th St & N Kinser Pike/N Madison St	COB	14	14	15	43
30	23	W 3rd St & N Walnut St	COB	19	11	10	40
31	20	S Walnut Street Pike & E Winslow Rd	COB	16	12	10	38
31	28	W Kirkwood Ave & N Walnut St	COB	14	12	12	38
31	36	E 10th St & N Sunrise Dr	COB	13	14	11	38
31	28	State Road 46 & E Eastgate Ln	IN	14	17	7	38
31	64	E 17th St & N Dunn St	COB	12	8	18	38
36	43	E 3rd St & S Woodlawn Ave	COB	7	13	16	36
36	50	State Road 46 & S Park Ridge Rd	IN	13	12	11	36
36	33	E 17th St & N Fess Ave	COB	17	10	9	36
39	43	E 3rd St & S Fess Ave	COB	10	13	12	35
39	35	W 7Th St & N College Ave	COB	14	14	7	35
41	36	E Rhorer Rd & S Walnut Street Pike	MC	9	13	12	34
41	70	State Road 45/46 Bypass & E 17th St	IN	10	11	13	34
41	41	State Road 45/46 Bypass & N Dunn St	IN	13	12	9	34
44	29	W 2nd St & S Rogers St	COB	10	17	6	33
44	70	E 10th St & N Jefferson St	COB	11	10	12	33
44	64	E 10th St & N Woodlawn Ave	COB	9	13	11	33
47	58	State Road 46 & N Centennial Dr	IN	8	14	10	32
47	45	W 4th St & S Walnut St	COB	6	14	12	32
47	40	E 13th St & N Indiana Ave	COB	10	11	11	32
50	28	W Grimes Ln & S Walnut St	COB	12	13	6	31
50	76	E 3rd St & S Jefferson St	COB	11	10	10	31
50	58	W 2nd St & S Patterson Dr	COB	11	15	5	31

Table 3. Top 50 Crash Locations by Crash Rate, 2009-2011

Crash Rate Rank	Crash Frequency Rank	Intersection	Jurisdiction	3-Year Total	Crashes per Million Entering Vehicles
1	5	State Road 46 & S Pete Ellis Dr	IN	94	1.83
2	47	E 13th St & N Indiana Ave	COB	32	1.72
3	31	E 10th St & N Sunrise Dr	COB	38	1.46
4	12	State Rd 46 & S Kingston Dr	IN	61	1.44
5	15	E 10th St & N Fee Ln	COB	54	1.39
6	2	State Road 46 & E 3rd St	IN	104	1.37
7	15	W 10th St & N College Ave	COB	54	1.33
8	36	State Road 46 & S Park Ridge Rd	IN	36	1.31
8	18	State Road 45 & S Gillham Dr	IN	51	1.31
10	17	E 3rd St & S Washington St	COB	53	1.28
10	36	E 17th St & N Fess Ave	COB	36	1.28
12	44	E 10th St & N Jefferson St	COB	33	1.26
13	14	W 3rd St & S Cory Ln	COB	56	1.22
14	26	State Road 45 & N Pete Ellis Dr/N Range Rd	IN	44	1.20
14	26	E 10th St & N Union St	COB	44	1.20
16	6	State Road 45 & S Curry Pk/S Leonard Springs Rd	IN	83	1.18
17	36	E 3rd St & S Woodlawn Ave	COB	36	1.16
18	39	E 3rd St & S Fess Ave	COB	35	1.14
19	31	S Walnut Street Pk & E Winslow Rd	COB	38	1.13
19	41	E Rhorer Rd & S Walnut Street Pk	MC	34	1.13
19	3	State Road 45/46 Bypass & N College Ave/N Walnut St	IN	99	1.13
19	31	State Road 46 & E Eastgate Ln	IN	38	1.13
19	7	State Road 45/46 Bypass & E 10th St	IN	79	1.13
24	10	State Road 48 & S Liberty Dr	IN	70	1.12
25	9	State Road 45 & S Liberty Dr	IN	74	1.10
26	24	W 7th St & N Walnut St	COB	45	1.06
27	18	E 3rd St & S Smith Rd	IN	51	1.05
28	31	E 17th St & N Dunn St	COB	38	1.02
29	44	E 10th St & N Woodlawn Ave	COB	33	1.01
30	23	E 17th St & N Jordan Ave	COB	46	1.00
31	21	W 2nd St & S College Ave	COB	50	0.99
31	11	W 3rd St & S Gates Dr	IN	63	0.99
33	18	E 3rd St & S Jordan Ave	COB	51	0.97
34	28	W 17th St & N Kinser Pk/N Madison St	COB	43	0.96
34	22	W 3rd St & S College Ave	COB	47	0.96
36	28	E 10th St & N Jordan Ave	COB	43	0.92
37	8	State Road 37 & W Vernal Pk	IN	77	0.91
38	1	State Road 37 & W Bloomfield Rd	IN	108	0.89
39	39	W 7th St & N College Ave	COB	35	0.87
40	31	W Kirkwood Ave & N Walnut St	COB	38	0.83
40	13	State Road 45/46 Bypass & N Kinser Pk	IN	59	0.83
42	47	W 4th St & S Walnut St	COB	32	0.78
43	4	W 3rd St & State Road 37	IN	97	0.75
44	44	W 2nd St & S Rogers St	COB	33	0.66
45	50	E 3rd St & S Jefferson St	COB	31	0.64
46	30	W 3rd St & N Walnut St	COB	40	0.61
47	41	State Road 45/46 Bypass & E 17th St	IN	34	0.60
48	41	State Road 45/46 Bypass & N Dunn St	IN	34	0.58
49	50	W 2nd St & S Patterson Dr	COB	31	0.53
50	24	State Road 37 & W Tapp Rd	IN	45	0.52
51	47	State Road 46 & N Centennial Dr	IN	32	0.51
52	50	E Grimes Ln & W Grimes Ln & S Walnut St	COB	31	0.43

Crash Factors

This section summarizes the primary crash factors from 2009 to 2011. An understanding of these causes informs infrastructure investments, enforcement activities, and educational efforts. For instance, unsafe speeds can be addressed by traffic enforcement and road design, while the tendency of motorists to drive off the road can be mitigated with a guardrail or rumble strips. Similarly, enforcement and education could reduce the number of crashes attributable to alcohol.

Failure to yield right of way was once again the most common cause of crashes, contributing to over 2,500 crashes from 2009 to 2011. Following too closely, driver errors, and unsafe backing were also significant crash factors. Table 3 shows the top 10 primary crash factors for 2009-2011, which account for over three-quarters of total crashes.

Table 4. Top 10 Primary Crash Factors by Severity, 2009-2011

Rank	Primary Factor	Severity				3-Year Total
		Fatal Injury	Incapacitating Injury	Non-Incapacitating Injury	No Injury/Unknown	
1	Failure to yield right of way	3	36	637	1,779	2,455
2	Following too closely	0	13	417	1,262	1,692
3	Other driver errors	2	15	199	1,049	1,265
4	Unsafe backing	0	3	33	1,167	1,203
5	Ran off road right	5	14	174	508	701
6	Speed too fast for weather conditions	0	4	120	404	528
7	Driver distracted	0	3	119	322	444
8	Animal/object in roadway	1	8	46	388	443
9	Disregard signal/reg sign	0	11	159	263	433
10	Improper turning	0	3	31	350	384

Fatalities

This section provides a focused look at motor vehicle fatalities in Monroe County from 2009 to 2011. As with previous sections, the material presented here can be useful for enforcement, education, and decision-making.

In 2011, there were nine fatalities in Monroe County (Table 5). Of these, three resulted from single-car crashes, three from two-car crashes, three from crashes involving a moped or motorcycle. Over the period from 2009 to 2011, the average annual number of fatalities per 100,000 residents was 7.3 for Monroe County. This figure is below the U.S. average of 10.63 fatalities per 100,000 people for 2010⁶.

Table 5. Fatalities by Crash Type, 2009-2011

Year	Crash Type						Total	Fatalities per 100,000 Population
	One car	Two cars	Three cars or more	Moped and Motorcycle	Bicycle	Pedestrian		
2009	3	0	1	2	0	1	7	5.4
2010	6	5	0	1	0	1	13	9.9
2011	3	3	0	3	0	0	9	6.5
Total	12	8	1	6	0	2	29	7.3

⁶ U.S. Department of Transportation, National Center for Statistics & Analysis. Fatality Analysis Reporting System, Web-Based Encyclopedia. <http://www-fars.nhtsa.dot.gov/> Accessed on July 27, 2012.

Fatal Crash Locations

This section summarizes the locations for crashes that resulted in fatalities. From 2009 to 2011, there were 29 fatal crashes, which resulted in 29 fatalities. The locations of these fatal crashes are identified in Table 6. Location information will aid transportation planners and engineers to identify problematic locations. Fatalities are a major factor in determining HSIP funding eligibility (see the Table A1 in the appendix for more information).

Table 6. Fatal Crash Locations by Type, 2009-2011

Location	Jurisdiction	Total	Crash Type				
			One Car	Two Cars	Three or More Cars	Moped or Motorcycle	Pedestrian
E 13th St & N Fee Ln	MC	2	0	0	0	0	1
E Chandler Rd & S State Road 446	MC	1	0	0	0	1	0
E Monroe Dam Rd from S Strain Ridge Rd to S Foggy Morning Rd	MC	1	1	0	0	0	0
E North Dr & S Walnut St	MC	1	0	1	0	0	0
N Dunn St & N Old State Road 37	COB	1	0	0	0	1	0
N Old State Road 37 from W Gourley Pk to W Club House Dr	COB	1	0	0	0	1	0
N Thomas Rd & W Vernal Pike	MC	1	1	0	0	0	0
S Fairfax Rd & E Schacht Rd	MC	1	0	1	0	0	0
S Leonard Springs Rd & W Stapleton Ave	MC	1	0	1	0	0	0
State Road 37 & W Sample Rd	MC	1	0	1	0	0	0
State Road 37 & W Wayport Rd	IN	1	0	2	0	0	0
State Road 37 from E Ellis Rd to E Wylie Rd	IN	1	1	0	0	0	0
State Road 37 from E Zikes Rd to E Smithville Rd	IN	1	0	0	0	1	0
State Road 37 from W Simpson Chapel Rd to S Lee Paul Rd	MC	1	1	0	0	0	0
State Road 446 from E Kent Rd to N Brummetts Creek Rd	MC	1	0	1	0	0	0
State Road 446 from Moores Pk to Old State Road 446	MC	1	1	0	0	0	0
State Road 446 from S Chapel Hill Rd to E Allens Creek Rd	MC	1	1	0	0	0	0
State Road 45 & W Sparks Rd	IN	1	1	0	0	0	0
State Road 46 & E Kings Rd	MC	1	1	0	0	0	0
State Road 46 from W Flatwoods Rd to N Red Hill Rd	MC	1	0	0	1	0	0
State Route 446 from Old Richardson Rd to Merritt Drive	MC	1	0	1	0	0	0
W 3rd St & S Patterson Dr	MC	1	0	0	0	1	0
W Airport Rd from S Cave Rd to S Kirby Dr	MC	1	1	0	0	0	0
W Arlington Rd & N Canterbury Ct	MC	1	1	0	0	0	0
W Beasley Dr & S Curry Pike	MC	1	1	0	0	0	0
W Cockrell Rd from S Rockport Rd to S Sweetwater Ln	MC	1	0	0	0	0	1
W Eller Rd & S Garrison Chapel Rd	MC	1	0	0	0	1	0
W Howard Rd & N Starnes Rd	MC	1	1	0	0	0	0

Bicycle and Pedestrian Crashes

This section reports on the number of bicycle and pedestrian crashes in Monroe County from 2009 to 2011. Such crashes are an important consideration in Bloomington and Monroe County due to a relatively high number of non-motorized trips in the area. For instance, data from the 2010 American Community Survey indicates that 2.7% of commuters in Bloomington use a bicycle as their primary mode of transportation, while 10.7% walk⁷. By comparison, 0.6% of US commuters reported bicycling and 2.9% reported walking as their primary modes in 2010⁸. Individuals using these modes of transportation are particularly vulnerable to injury.

In 2011, there were 41 reported crashes involving a cyclist and 77 involving a pedestrian (Table 1). This included ten pedestrian and three bicycle crashes that resulted in incapacitating injuries. During the period from 2009 to 2011, 321 pedestrian and bicycle crashes were reported, resulting in two pedestrian fatalities. It is well understood that crashes involving these modes of transportation more often result in injury when compared with other crash types, therefore there is a need to reduce the frequency and severity of these crashes.

Table 7. Top Bicycle and Pedestrian Crash Locations, 2009-2011

Current Rank	Previous Rank	Intersection	Jurisdiction	Crash Type		Total
				Bicycle	Pedestrian	
1	-	E 7th St & N Jordan Ave	COB	5	1	6
2	1	N Dunn St & E Kirkwood Ave	COB	0	5	5
2	2	E 10th St & N Jordan Ave	COB	2	3	5
2	5	E 10th St & N Fee Ln	COB	3	2	5
2	5	N Fee Ln & E Law Ln	COB	2	3	5
7	5	W 7th St & N College Ave	COB	0	4	4
7	2	W 7th St & N Walnut St	COB	1	3	4
9	-	State Road 45 & S Curry Pk	IN	0	3	3
9	-	E Miller Dr & S Walnut St	COB	1	2	3
9	5	S College Mall Rd & Eastland Plaza	COB	2	1	3
9	5	E 3rd St & S Woodcrest Dr	COB	2	1	3
9	5	State Road 46 & S Kingston Dr	IN	0	3	3
9	-	N Grant St & E Kirkwood Ave	COB	1	2	3
9	-	E 10th St & N Union St	COB	2	1	3
9	-	E 13th St & N Indiana Ave	COB	3	0	3

⁷ US Census Bureau. 2010 American Community Survey, 1-Year Estimate. <http://www.census.gov/acs/> Accessed on July 27, 2012.

⁸ Ibid.

Conclusion

This report has demonstrated a number of meaningful trends relating to motor vehicle crashes in Monroe County. The information should inform transportation decision-making and, ultimately, lead to a safer, more efficient transportation system.

Some problem areas noted in this and past reports have already been improved or are in the process of being addressed. For example, in 2009, the City of Bloomington completed improvements to the intersection of E 17th Street and N Fee Ln, and Monroe County finished improvements to the dangerous curve at E Rogers Rd and S Smith Rd. Post-construction data from this report shows a 37% reduction in the crash frequency at the intersection of 17th Street and Fee Lane following the completion of these improvements⁹. In future years, we will be able to analyze the impact of improvements at the E Atwater Ave and S Henderson St intersection which were completed in 2011. Evaluation of past and future crash data at these, and other, locations will further aid in implementing appropriate and effective mitigation strategies to reduce crashes.

There are many additional locations that will require further study to see if physical improvements could be implemented to improve safety. Several intersections along State Roads (37, 45, 46, Bypass) continue to be problematic due to the sheer frequency of crashes. Due to jurisdictional boundaries at these locations, state and local officials, engineers, and staff will need to coordinate targeted safety improvements and reach agreements before any improvements can occur.

Data and analysis on other attributes are included within the report (e.g. bus, moped, motorcycle, fatalities, causes, locations, severity of crashes), providing additional information to identify trends and/or areas of concern. Future versions of this report may consider a more detailed analysis of the circumstances of fatal and incapacitating crashes and the characteristics of individuals involved. In particular, age-related factors and impacts could be explored. An improved understanding of these factors would help the community to better focus its efforts on reducing serious traffic injuries and their impact on our community, which is one of the primary purposes of this report.

By identifying potentially problematic locations, this report has taken the first step to improving safety on our local roadways. It is expected that transportation planners, engineers, and local officials together will use this information to determine locations that need attention, and seek funding for necessary physical improvements or other means (enforcement, education) to improve safety.

⁹ At this location, 30 crashes occurred from 2007 to 2009, while 19 crashes occurred from 2009 to 2011.

Appendix

Figure A1. Top 50 Total Crash Locations, 2009-2011

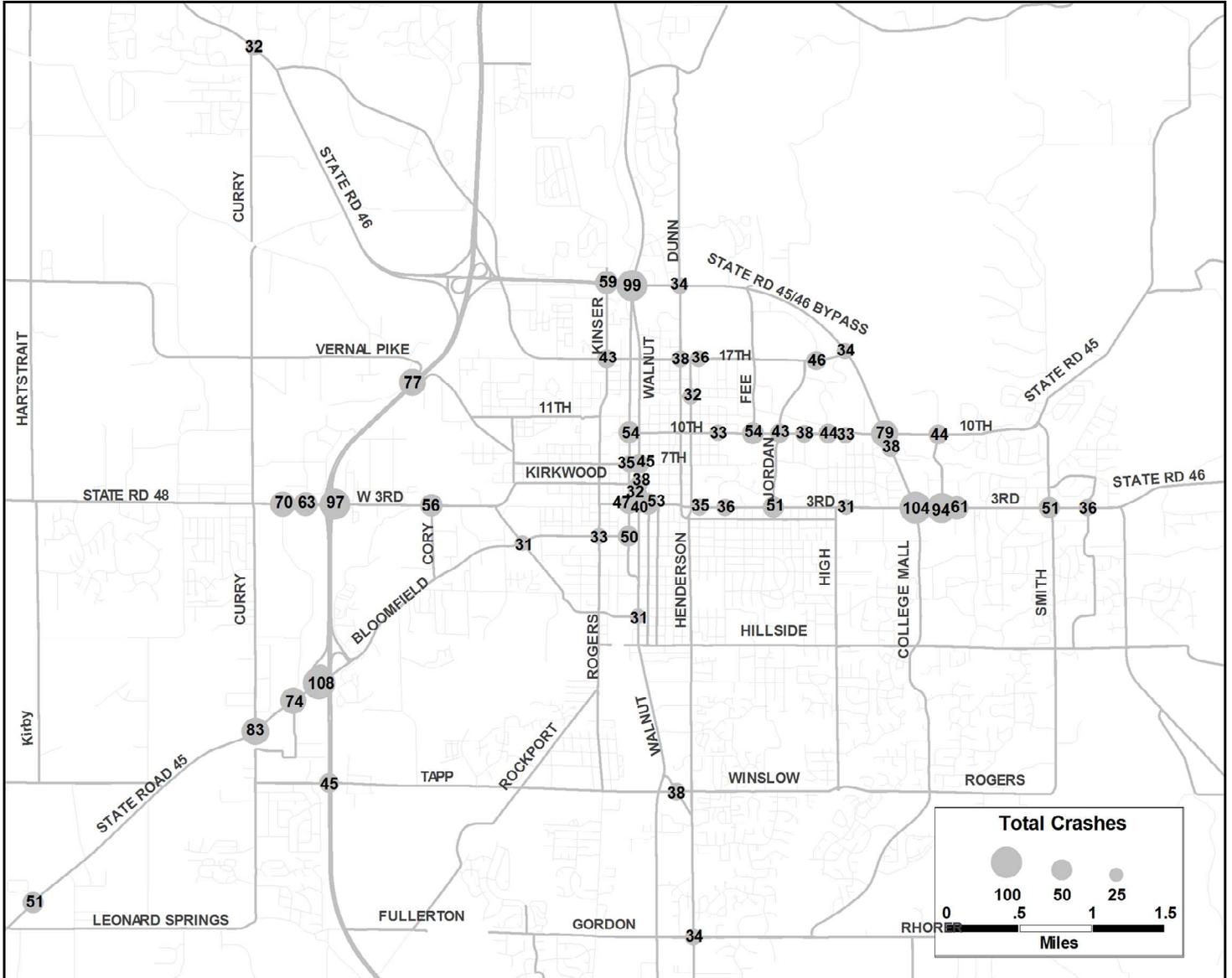


Figure A3. Fatal Crashes in Monroe County, 2009-2011

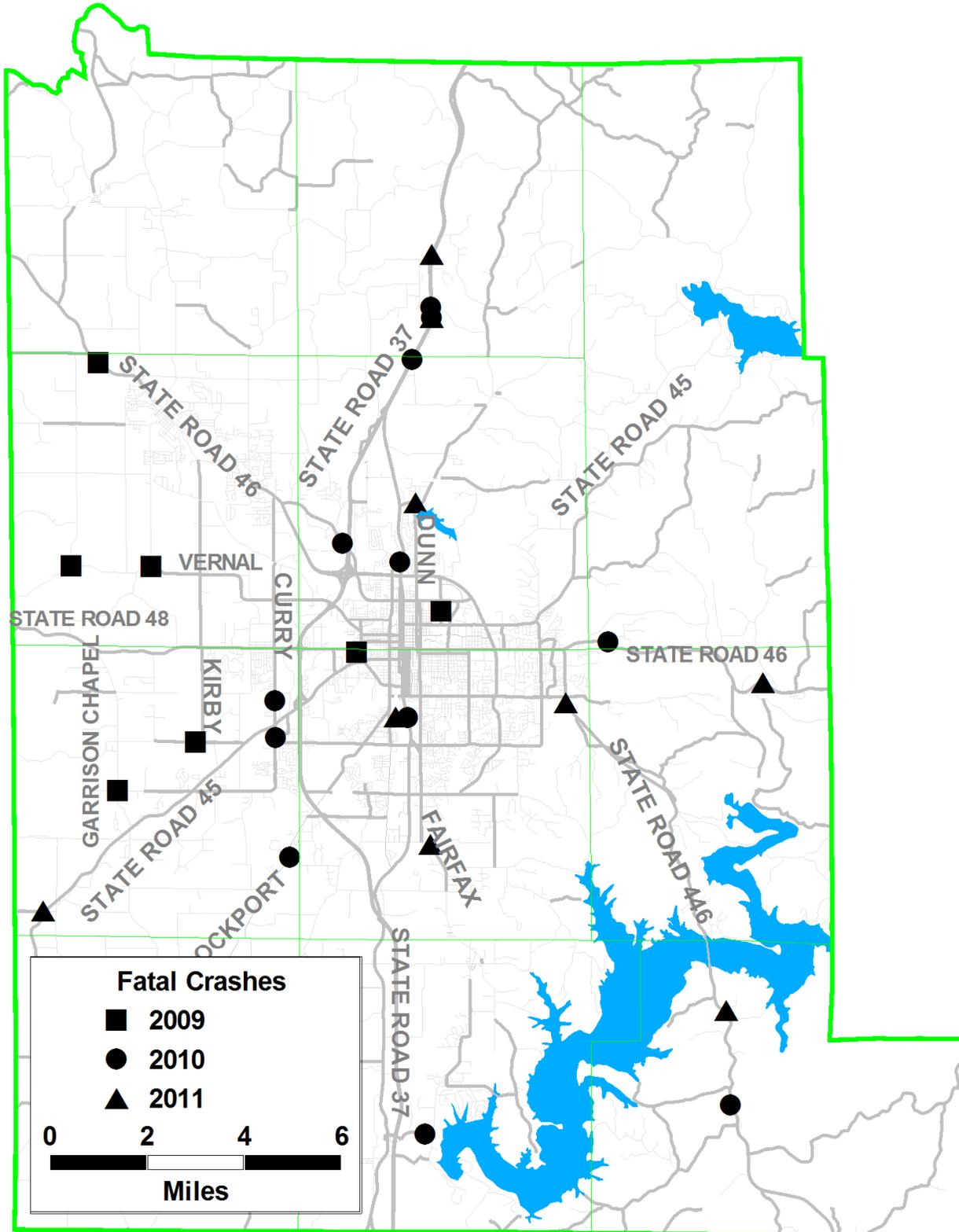


Figure A4. Fatalities by Gender and Crash Type, 2009-2011

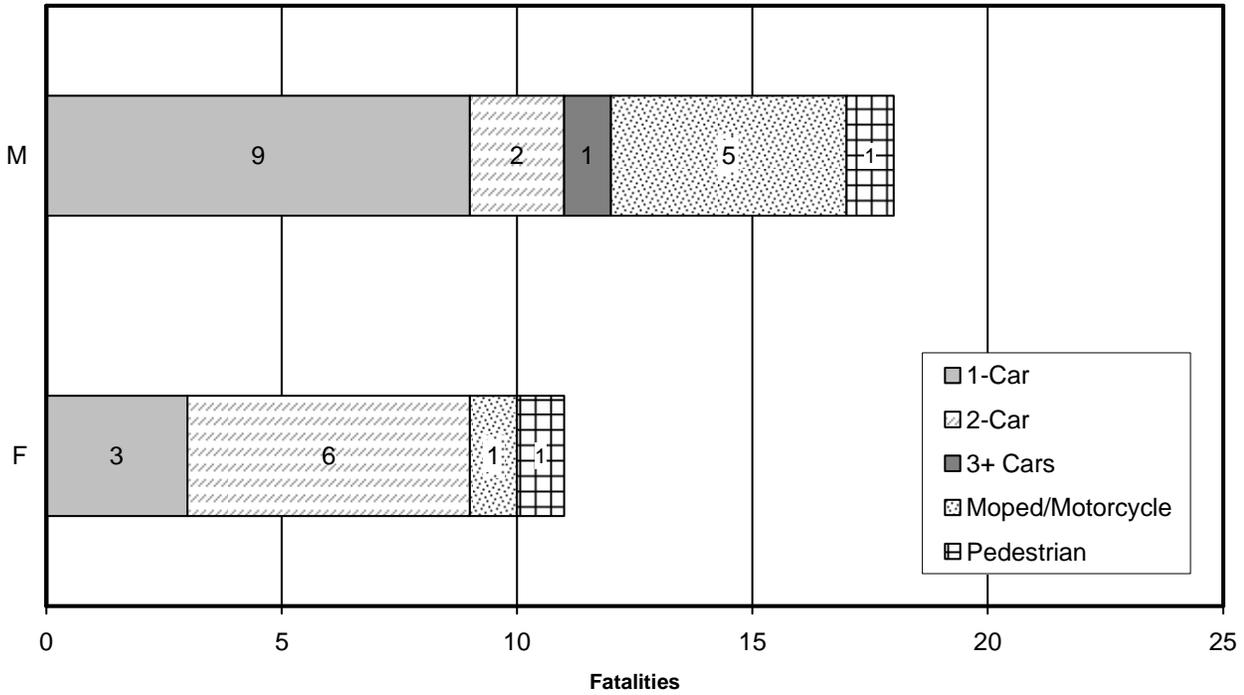
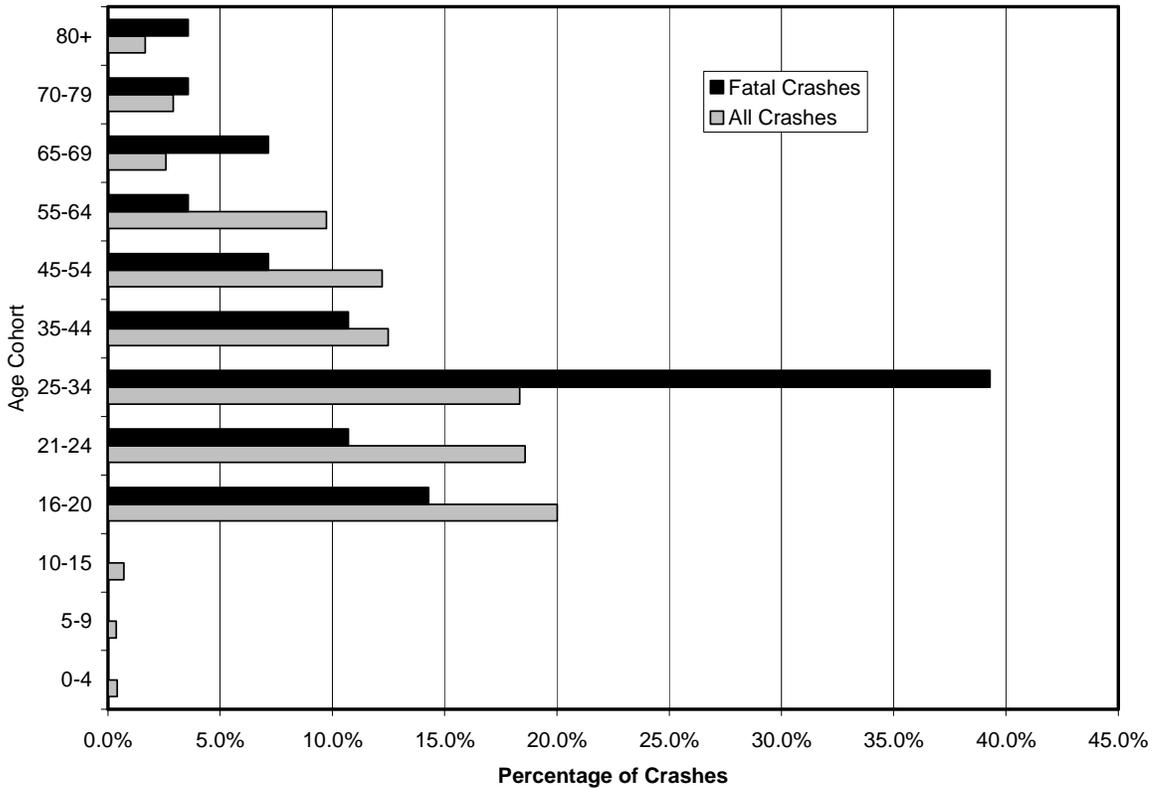


Figure A5. Portion of Individuals in All Crashes and Individuals Fatally Injured, by Age, 2009-2011¹⁰



¹⁰ For the purposes here, individuals whose age was not reported were excluded from the total number of individuals.

HSIP Eligibility List

The Highway Safety Improvement Program (HSIP) is a program that provides federal funding for areas with a high incidence of crashes, as identified through the annual crash reports. Emphasis is paid to locations which have a high frequency of crashes resulting in fatal or incapacitating injuries. The intent of the funding is to leverage effective safety improvements in a timely fashion to reduce the severity and frequency of crashes.

Table A1 is the list of locations that are automatically eligible for HSIP funding. According to BMCMPO guidelines, there are three criteria that determine eligibility. In order to be eligible, a location must be: 1) within the Urban Area of the BMCMPO, 2) exclusive of INDOT facilities, and 3) rank in the top 50 locations when locations are ordered first by the frequency of crashes resulting in fatal or incapacitating injury, and then by the frequency of crashes of any type.

Table A1. Eligible HSIP Locations, 2009–2011

Current Rank	Previous Rank	Location	Jurisdiction	Fatal or Incapacitating Injury Crashes	Total Crashes	Fatal	Any Injury
1	8	E 3rd St & S Jordan Ave	COB	2	51	0	22%
2	15	N Dunn St & N Old State Road 37	COB	2	24	1	46%
3	2	W 3rd St & S Patterson Dr	COB	2	21	1	33%
4	1	W 2nd St & S Walker St	COB	2	9	0	67%
5	34	N Elm St & W Kirkwood Ave	COB	2	8	0	38%
5	33	S Fairfax Rd & E Schacht Rd	MC	2	8	1	63%
7	4	N Curry Pk & W Jonathan Dr	MC	2	6	0	67%
8	5	W 7th St & N Walnut St	COB	1	45	0	20%
9	10	W 17th St & N Kinser Pk/N Madison St	COB	1	43	0	33%
10	11	E 10th St & N Sunrise Dr	COB	1	38	0	18%
11	9	W 2nd St & S Rogers St	COB	1	33	0	30%
12	-	W Grimes Ln & S Walnut St	COB	1	31	0	39%
13	16	E 3rd St & S Swain Ave	COB	1	29	0	3%
14	-	N Smith Pk & W Woodyard Rd	MC	1	27	0	30%
14	-	E Miller Dr & S Walnut St	COB	1	27	0	26%
16	13	N Jordan Ave & E Law Ln	COB	1	25	0	8%
17	19	E 17th St & N Lincoln St	COB	1	24	0	25%
18	-	W 3rd St & S Kimble Dr	COB	1	23	0	48%
19	-	E Longview Ave & N Pete Ellis Dr	COB	1	20	0	25%
19	20	S Fairfax Rd & S Walnut Street Pk	MC	1	20	0	50%
21	-	N Curry Pk & W Vernal Pk	MC	1	18	0	22%
21	21	E 3rd St & S Ballantine Rd	COB	1	18	0	11%
23	17	E 13th St & N Fee Ln	COB	1	17	1	29%
24	18	W 15th St & N Walnut St	COB	1	16	0	31%
25	27	S Curry Pk & W Roll Ave	COB	1	15	0	33%
25	30	S Walnut St & S Walnut Street Pk	COB	1	15	0	7%
27	26	E 18th St & N Dunn St	COB	1	14	0	14%
27	29	N Grant St & E Kirkwood Ave	COB	1	14	0	29%
29	-	W 11th St & N Rogers St	COB	1	13	0	31%
30	-	E 4th St & S Grant St	COB	1	12	0	8%
30	21	W 3rd St & S Yancy Ln	COB	1	12	0	25%
30	27	S College Mall Rd & Eastland Plaza	COB	1	12	0	58%
30	3	S Curry Pk & W Gifford Rd	MC	1	12	0	50%
34	23	E 10th St & N Fess Ave	COB	1	11	0	18%
35	-	N Jacob Dr & W Whitehall Crossing Blvd	COB	1	10	0	20%
35	35	W Allen St & S Patterson Dr	COB	1	10	0	40%
35	-	E 1st St & S Fess Ave	COB	1	10	0	40%
38	23	W 15th St & N College Ave	COB	1	9	0	11%
38	35	W 11th St & N Morton St	COB	1	9	0	11%
38	-	E 8th St & N Washington St	COB	1	9	0	11%
41	42	E 11th St & N Indiana Ave	COB	1	7	0	29%
41	-	W Fullerton Pk & S Leonard Springs Rd	COB	1	7	0	14%
41	-	W Gordon Pk & S Rogers St	MC	1	7	0	14%
44	-	E 6th St & N Indiana Ave	COB	1	6	0	33%
44	37	W Fullerton Pk & S Rockport Rd	MC	1	6	0	17%
46	-	E Burks Dr & S Walnut Street Pk	COB	1	5	0	40%
46	-	N Curry Pk & W Grand Ave	MC	1	5	0	40%
46	-	E Atwater Ave & S Park Ave	COB	1	5	0	20%
46	-	W Howe St & S Rogers St	COB	1	5	0	40%
46	-	W Grimes Ln/W Patterson Dr & S Morton St	COB	1	5	0	60%
46	-	S Rogers St & W That Rd	MC	1	5	0	40%

MEMORANDUM



To: BMCMPO Technical & Citizens Advisory Committees

From: Joshua Desmond, AICP
BMCMPO Director

Date: August 15, 2012

Re: Transportation Improvement Program Amendments

Amendments to the Indiana Department of Transportation Project List:

The Indiana Department of Transportation (INDOT) has identified five new projects that must be identified in the BMCMPO TIP in order for INDOT to undertake them within the Metropolitan Planning Area. These projects include three different types of bridge inspections, a new traffic signal, and a bridge deck overlay.

INDOT requests that the following projects be added to the BMCMPO FY2012-2015 Transportation Improvement Program:

State of Indiana Projects		Funding Source	Fiscal Year			
			2012	2013	2014	2015
Project: Bridge Inspections	PE	BR State		\$ 480,000	\$ 480,000	\$ 480,000
Location: Various				\$ 120,000	\$ 120,000	\$ 120,000
Description: Statewide underwater bridge inspections	ROW					
DES#: 1297250						
Support:	CON					
Allied Projects: n/a		TOTAL	\$ -	\$ 600,000	\$ 600,000	\$ 600,000

State of Indiana Projects		Funding Source	Fiscal Year			
			2012	2013	2014	2015
Project: Bridge Inspections	PE	BR State		\$ 400,000		
Location: Various				\$ 100,000		
Description: Statewide fracture critical bridge inspections	ROW					
DES#: 1297452						
Support:	CON					
Allied Projects: n/a		TOTAL	\$ -	\$ 500,000	\$ -	\$ -

State of Indiana Projects		Funding Source	Fiscal Year			
			2012	2013	2014	2015
Project: Bridge Inspections	PE	BR State		\$ 400,000		
Location: Various				\$ 100,000		
Description: Statewide post-tensioned bridge inspections	ROW					
DES#: 0901464						
Support:	CON					
Allied Projects: n/a		TOTAL	\$ -	\$ 500,000	\$ -	\$ -

Bloomington/Monroe County Metropolitan Planning Organization

State of Indiana Projects		Funding Source	Fiscal Year			
			2012	2013	2014	2015
Project: SR 46	PE					
Location: Intersection of W SR 46 & Matthews Drive (Ellettsville)						
Description: New traffic signal at intersection of W SR 46 & Matthews Drive (Ellettsville)	ROW					
DES#: 1173647	CON	HSIP			\$ 207,500	
Support:						
Allied Projects: n/a		TOTAL	\$ -	\$ -	\$ 207,500	\$ -

State of Indiana Projects		Funding Source	Fiscal Year			
			2012	2013	2014	2015
Project: SR 46	PE	NHS		\$ 16,000		
Location: 3.00 Miles E of SR 446		State		\$ 4,000		
Description: Bridge deck overlay at bridge over Stephens Creek (3.00 miles E of SR 446)	ROW					
DES#: 1297004	CON					
Support:						
Allied Projects: n/a		TOTAL	\$ -	\$ 20,000	\$ -	\$ -

Recommendation Requested

The Technical Advisory Committee and Citizens Advisory Committee are requested to make a recommendation to the Policy Committee on the proposed amendments.

MEMORANDUM



To: BMCMPO Technical & Citizens Advisory Committees

From: Joshua Desmond, AICP
BMCMPO Director

Date: August 15, 2012

Re: Complete Streets Exemption: Old SR 37 & Dunn Street

Background

The BMCMPO Complete Streets Policy requires that all new projects entering the Transportation Improvement Program (TIP) comply with that Policy. If a project cannot comply, an exemption to the Policy must be approved by the BMCMPO Policy Committee. In this case, a joint City-County project, the Old State Road 37 & Dunn Street project, entered the TIP as a Complete Streets Policy compliant project. However, after some design work has been completed, a number of factors have emerged that lead the project sponsors to seek exemption from the Complete Streets Policy. An overview of the justification for that exemption is below.

Exemption Request

Please see the following pages provided by Bloomington City Engineer Adrian Reid for a detailed explanation of the requested exemption. The exemption is being sought based on the factors that are highlighted in the excerpt from the Complete Streets Policy below.

IV: Exemption

- (A) Complete Streets Exemption: The BMCMPO Policy Committee shall certify through resolution that justification exists for a roadway project to be exempted from any of the following requirements listed in section **II Policy, (B) Requirements: B1 through B4**. The Policy Committee may allow such an exemption under certain circumstances, including the following:
- 1) Ordinary maintenance activities designed to keep assets in serviceable condition (e.g. mowing, cleaning, sweeping, spot repair, and regular/seasonal maintenance);
 - 2) 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;
 - 3) There are extreme topographic or natural resource constraints;
 - 4) The Long Range Transportation Plan's 20-or-more year Average Daily Traffic projection is less than 1000 vehicles per day; 5) When other available means or factors indicate an absence of need presently and in the 20-or-more year horizon;
 - 6) A reasonable and equivalent alternative already exists for certain users or is programmed in the TIP as a separate project;
 - 7) The project is not a roadway improvement project and/or the Bloomington/Monroe County Metropolitan Planning Organization has no programming authority (e.g. State, Bloomington Transit, Rural Transit, and other projects)."

Recommendation Requested

The Technical Advisory Committee and Citizens Advisory Committee are requested to make a recommendation to the Policy Committee regarding the proposed Complete Streets Exemption.



City of Bloomington Engineering Department

May 14, 2012

Bloomington/Monroe County MPO
401 N. Morton Street, Suite 160
P.O. Box 100
Bloomington, Indiana 47402
Josh Desmond, Director

Re: Request for Complete Streets Exemption

Dear Mr. Desmond:

The City of Bloomington is teaming with Monroe County Highway Department on safety improvements to Old State Route 37 and North Dunn Street. The project is currently in the Preliminary Engineering phase. Our consultant has conducted a traffic analysis and topographic survey of the area is complete. We are still early in design but our initial analysis of the traffic data and site conditions indicate that the primary improvement will be a curve correction on Old 37 east of North Dunn Street.

Both County and City engineering staff have suspected that the poor roadway geometry on Old 37 has factored into an unusual number of fatal and incapacitating accidents. The travel lanes are narrow and there is little in the way of shoulders, both of which contribute to a relatively unforgiving environment for inattentiveness or driver error. Merely observing the guardrail along this stretch of Old 37 reveals evidence that vehicles frequently leave the roadway. The damaged guardrail and array of automotive parts along the roadside provide proof of undesirable driving conditions.

While we believe the curve correction addresses much of the issue, site conditions are very restrictive in terms of adding other roadway amenities which don't exist there today. Old 37 is notched into a rocky hillside with little provision for sidewalks, bike lanes, or multi-use path. The curve correction itself likely will require a certain degree of excavation into the rock wall. However, we would like to minimize the construction impacts to this environmental feature along the inside of the Old 37 curve. The wider the road cross-section, the more invasive constructing the new roadway will be on either side.

Therefore, we are requesting a Complete Streets exemption for Old 37 east of its intersection with North Dunn Street to mitigate environmental impacts to the hillside along the inside of the curve. Provision of bike lanes, sidewalks or other infrastructure both adds construction cost for rock excavation and adversely impacts the site's natural features. In an effort to minimize costs and impacts, the proposed roadway section would include two travel lanes with inside and outside shoulders. We would add new guardrail to the outside shoulder. The shoulder widths would be a function of INDOT guidelines for sight distance and clear distances through the curve. The remainder of the project would include bicycle and pedestrian accommodations in accordance with the MPO Complete Streets policy.

Currently, most bicycle traffic travels Hillview Drive through the Marlin Hills subdivision. This route would remain the preferred route were the exemption granted. We are considering additional accommodations for bicyclists, i.e. signage, striping, etc., along this route to formalize it as the preferred path of travel for cyclists who want to continue east of Dunn Street. The shoulders proposed for the project on Old 37 may also serve as makeshift bike lanes or a pedestrian way.

However, formal facilities for bicycles and pedestrians on Old 37 would end at Dunn Street. This reflects the City's *Bicycle and Pedestrian Transportation and Greenways System Plan*, which proposes multi-use path on the south side of Old 37 and west side of North Dunn Street as well as signed bike route. The Greenways Plan depicts neither of these facilities east of Dunn Street. The Monroe County Greenways System Plan calls for a "Road Improvement Opportunity" in this area but the plan lists no specific facilities for Old 37 east of North Dunn Street.

I thank you for your time and consideration of this matter and look forward to discussing this at the upcoming TAC, CAC and MPO Policy Committee meetings. Please let me know if questions arise or if additional information is needed.

Sincerely,



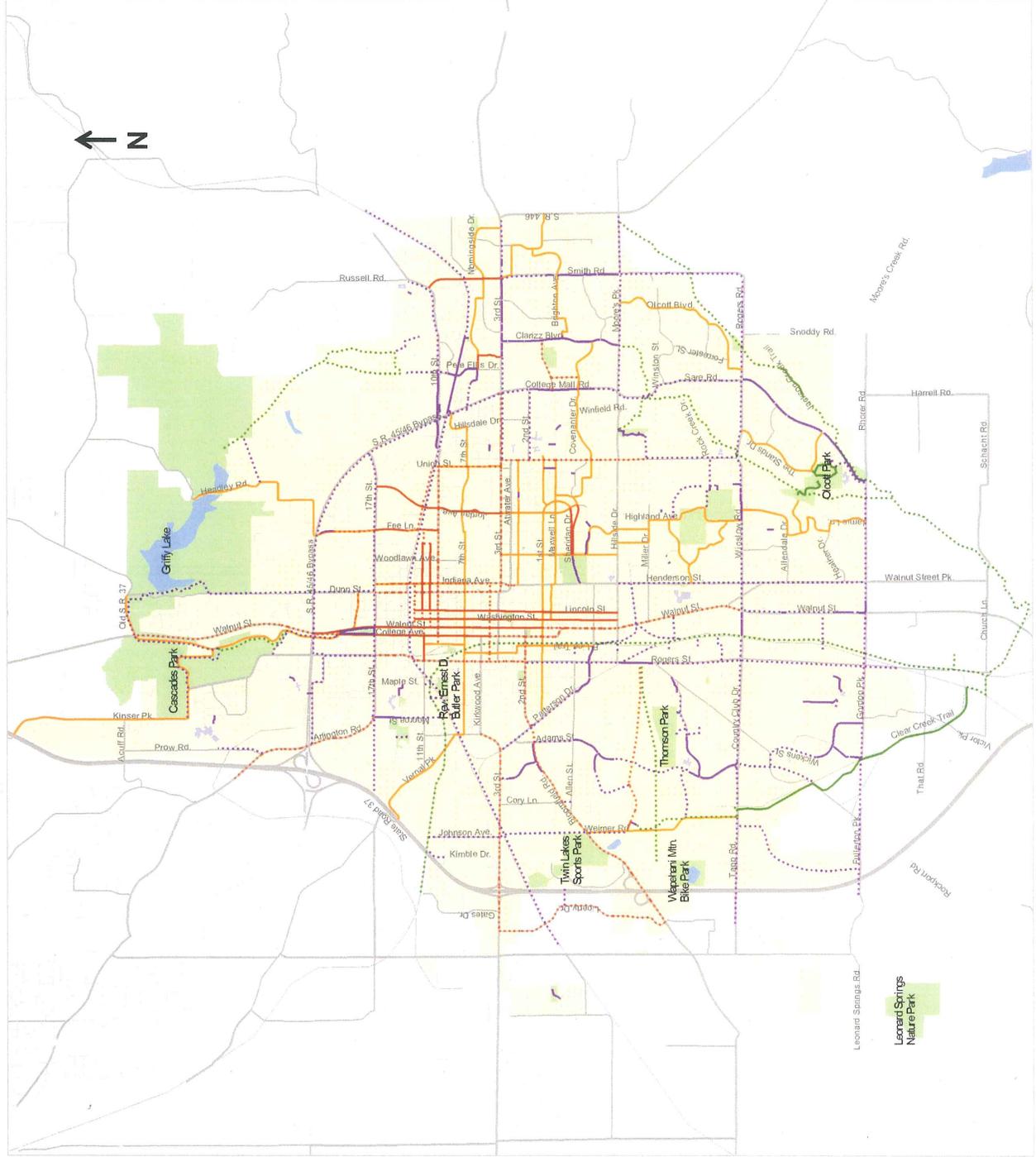
Adrian Reid, P.E.
City Engineer
City of Bloomington

City of Bloomington

Bicycle and Pedestrian Transportation & Greenways System Plan

Bicycle and Pedestrian Facilities Network

-  Planning Jurisdiction
-  City of Bloomington Parks
-  Lakes
-  Schools
-  Signed bike route
-  Existing bike lane
-  Future bike lane
-  Existing sidepath/connector path
-  Future sidepath/connector path
-  Existing multi-use trail
-  Future multi-use trail





Griffy Lake

Headley Rd

Old S.R. 37

S.R. 45/46 Bypass

Dunn

Walnut St

Cascades Park

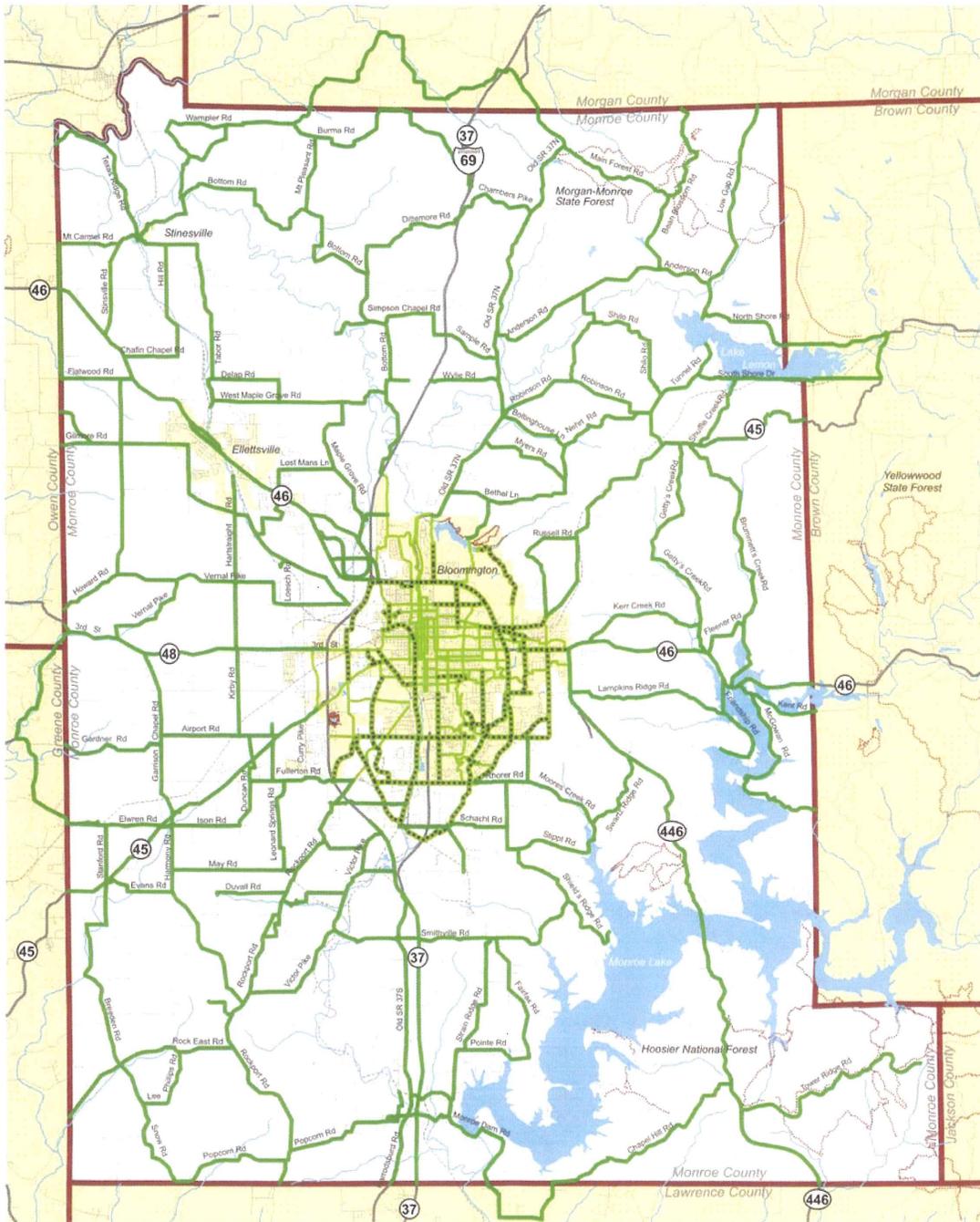
Kinser Pk

Acuff Rd.

Prow Rd.

Arlington

ROAD IMPROVEMENT OPPORTUNITIES



-  Monroe County Road Improvement Opportunity
-  Bloomington ATP Off-Street Opportunity
-  Bloomington ATP On-Street Opportunity
-  Bloomington & DNR Trail (Hiking, Biking, Equestrian)
-  Incorporated Municipality (Bloomington, Ellettsville, Slinesville)



To: Technical Advisory Committee, Citizens Advisory Committee

From: Vince Caristo, MPO Staff

Date: August 15, 2012

Re: Urbanized Area Boundary Map Update

Background

Following the conclusion of each decennial census, the United States Census Bureau designates a new list of Urbanized Areas (UZA). The UZA is a statistical geographic entity defined by the Census Bureau as a central core and adjacent densely settled territory that together contain at least 50,000 people, generally with an overall population density of at least 1,000 people per square mile.

The UZA that is designated by the U.S. Census Bureau is used by state and federal agencies in the allocation of transportation funding, and its geographic limits serve as the starting point for an MPO's Urban Area Boundary (UAB). Projects that utilize federal Surface Transportation Program (STP) funds must occur within the boundaries of the UAB. The UAB must include the entire area within the census-designated UZA, and should be a single contiguous area that encompasses nearby major traffic generators and areas with urban characteristics. Each MPO has the ability to add, smooth, and adjust the UAB edges to better suit local transportation planning needs, allowing for a slightly larger geographic area than the Census-designated UZA.

Additionally, an MPO must define a Metropolitan Planning Area (MPA), which is the area within which the MPO needs to be fiscally constrained for transportation projects. Projects that occur within the MPA boundaries need to be included in the MPO's Transportation Improvement Program (TIP). At a minimum, the MPA must include the areas within the UAB, as well as the contiguous geographic areas that are likely to become urbanized within the 20 year forecast period covered by the MPO's transportation plan. The MPA boundary is meant to foster an effective planning process that ensures connectivity between modes and promotes overall efficiency.

2010 Census UAB/MPA Update

The current UAB and MPA boundaries are based on the results of the 2000 Census. They were officially approved by The Indiana Department of Transportation (INDOT) in September, 2006. Based on the results of the 2010 Census, the UZA for the Bloomington/Monroe County has changed to reflect the new population density information. As a result, the MPO will need to propose an updated UAB to incorporate the revised UZA. Additionally, the MPA must be revised to capture the expanded UAB as well as any new areas that are likely to become urbanized in the next 20 year forecast period. Once approved by the MPO, the proposed UAB and MPA boundaries are sent to INDOT for review and concurrence.

MPO Staff has coordinated closely with personnel from the City of Bloomington, Monroe County and the Town of Ellettsville in crafting the proposed UAB and MPA boundaries. Please see the attached maps indicating the existing and proposed new UAB and MPA boundaries. MPO staff focused on keeping the transition to the new boundaries as simple as possible, avoiding large scale changes to either boundary as much as possible.

Action Requested

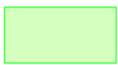
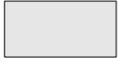
MPO Staff requests that the Citizens and Technical Advisory Committees review the proposed UAB and MPA boundaries and make a recommendation to the Policy Committee. The proposed boundaries will be presented to the Policy Committee for approval on September 14.

Bloomington/Monroe County Metropolitan Planning Organization

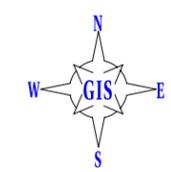
2012 Urban Area Boundary Update

Proposed Metropolitan Planning Area (MPA) & Urban Area Boundary (UAB) Updates Proposal 1

Legend

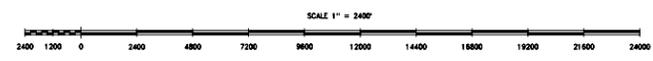
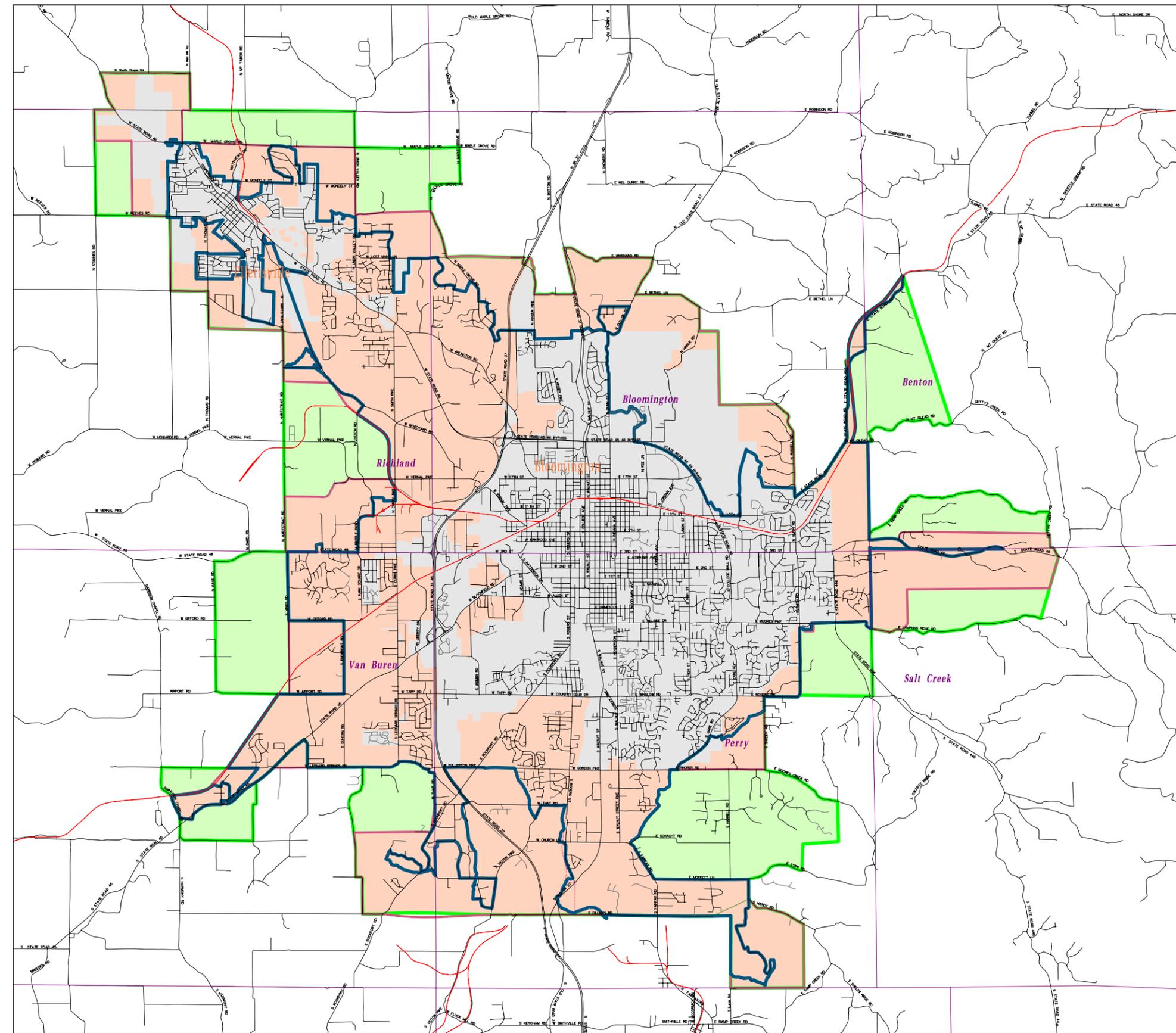
-  Proposed Metropolitan Planning Area
-  Proposed Urban Area Boundary
-  Incorporated Areas
-  2000 MPA Boundary
-  2000 UAB Boundary
-  2010 Census Urbanized Area (UZA)

July 11, 2012



City of Bloomington, Indiana
Geographic Information System
This map was produced by the City of Bloomington GIS, for use by the City and general public as map information. The geographic and geometric information is based on aerial photography flown in March 1981 and March 1993. Updates from aerial photography took place in April 1986, April 2000, March 2006, and April 2010. Information is updated by GIS technicians from development drawings, plans, and other sources. The accuracy of information contained in this document is based on National Mapping Standards, however it is NOT warranted.
The Corporation boundary reflects amendments effective January 1, 2010.
Information and Technology Services Department
3 January 2012

Bloomington Geographic Information System



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MEMORANDUM



To: BMCMPO Technical Advisory Committee
From: Scott Robinson, Long Range/Transportation Manager
Date: August 15, 2012
Re: BMCMPO Accessibility and Design Principles Policy Statement

Background:

The Citizens Advisory Committee (CAC) drafted an Accessibility and Design Principles Policy Statement over the course of several months. The Policy Statement was first approved by the Citizens Advisory Committee on June 22, 2011, but since has been reviewed and revised by the Technical Advisory Committee (TAC) and the CAC ADA Subcommittee. The most recent round of revisions has addressed language concerns over the use of Universal Design and includes all editorial changes, thus far, highlighted in the final draft of the enclosed Policy Statement.

The CAC reviewed and recommended approval of the Policy Statement (final draft) at their May 23, 2012 meeting. A recommendation by the TAC is requested, so final action by the Policy Committee can be considered at their September meeting. The Policy Statement calls for its adoption by the Policy Committee.

Recommendation Requested

The Technical Advisory Committee is requested to make a recommendation to the Policy Committee for their consideration as a BMCMPO Policy.

DRAFT Accessibility and **Universal Design Principles** Policy Statement

Developed by the BMCPO Citizens Advisory Committee

Approved by the CAC 5/23/12

Revised 04/26/12 (revisions are ~~struck through~~ or underlined and/or **highlighted**)

Introduction

The Bloomington/Monroe County Metropolitan Planning Organization (BMCMPPO) is responsible for federally funded transportation projects within the urbanized area. The BMCMPPO adopted a Complete Streets Policy to ensure transportation corridors accommodate all users, including people with disabilities. In July 2010, the Director of the BMCMPPO signed a proclamation of recommitment to full implementation of the Americans with Disabilities Act (ADA).

These directives of the BMCMPPO ensure that all transportation planning activities will strive to achieve accessibility for persons with disabilities by:

- i. Using direct access approaches to participation, information dissemination, and thoroughfare design and implementation for all people regardless of their abilities, mobility, age, and other physical characteristics; and
- ii. Using other approaches to further augment direct access approaches through the use of assistive technologies.

Therefore, the Citizens Advisory Committee of the BMCMPPO adopts the following recommendations and strategies to further enhance the policy directives already established:

- i. Proactively seek direction on transportation investments from citizens with disabilities such that any investment can improve their ability to travel within the BMCMPPO area.
 1. Designate disability advocates or local mobility experts to be on the project stakeholder list for federally funded projects (Complete Streets Policy – Sections II.B.6 & 7; TIP Call For Projects Form – section III.7); and
 2. Specify clear, concise, and realistic performance measures, measurable outcomes, and key milestones in relation to issues of accessibility and **fully integrated user universal design principles**¹ for federally funded transportation projects (Complete Streets Policy – Section II.B.4 & 5; TIP call For Projects Form – Section III, items 2 and 3).
- ii. Encourage participation on BMCMPPO committees and subcommittees by citizens with disabilities.
 1. Annually invite local organizations representing persons with disabilities to serve on the Citizens Advisory Committee; and
 2. Explore the possibility to have disability ~~interests~~ experts or persons with credentials represented on other BMCMPPO Committees, including but not limited to the Technical Advisory Committee and the Transportation Enhancement Selection Committee.
- iii. Hold regular educational trainings for BMCMPPO members organized by staff on best practices of accessibility, ADA compliance, and universal design for public spaces and thoroughfares.
- iv. Require adoption of ADA Transition Plans (Plans) for BMCMPPO local member agencies.

¹ As defined by BMCMPPO as the Center for Universal Design based at North Carolina State University: “The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” This includes the Designs shall be guided by the following seven principles of universal design: equitable use; flexibility in use; simple and intuitive use; perceptible information; tolerance for error; low physical effort; size and space for approach and use. More information is available at the Center for Universal Design – http://www.ncsu.edu/project/design_projects/udi/.

1. Plans will prioritize or target areas of need;
 2. Plans will benchmark performance measures;
 3. Plans will specify funding priorities, timelines, and other implementation actions;
 4. Plans will set indicators to measure progress;
 5. LPAs will be held accountable to their Plans through project selection for the TIP;
- v. Seek adoption of this policy by the Policy Committee.

MEMORANDUM



To: BMCMPO Technical & Citizens Advisory Committees

From: Scott Robinson, Long Range/Transportation Manager

Date: August 15, 2012

Re: Calendar Year 2013 Meeting Schedule

The Committees of the Bloomington/Monroe County Metropolitan Planning Organization must consider their meeting schedules for the 2013 calendar year. If the Technical Advisory Committee and Citizens Advisory Committee wish to keep the same meeting schedule as 2012 and meet on the fourth Wednesday every month (TAC @ 10:00am; CAC @ 6:30pm), the meeting schedule would be as follows:

- January 23, 2013
- February 27, 2013
- March 27, 2013
- April 24, 2013
- May 22, 2013
- June 26, 2013
- July – Summer Recess
- August 28, 2013
- September 25, 2013
- October 23, 2013
- November 20, 2013 (Note: this is the week before Thanksgiving and the third Wednesday)
- December – Winter Recess

Consensus Requested

The Technical Advisory Committee and Citizens Advisory Committee are asked to come to consensus on their respective meeting schedule for 2013 so that the McCloskey Room can be reserved accordingly.