# AGENDA <br> BLOOMINGTON TRANSPORTATION COMMISSION <br> REGULAR MEETING <br> TUESDAY, DECEMBER 18, 2018 4:00 P.M. <br> COUNCIL CHAMBERS, CITY HALL <br> 109 EAST OLIVE STREET <br> BLOOMINGTON, ILLINOIS 

## 1. CALL TO ORDER

2. ROLL CALL

## 3. PUBLIC COMMENT

4. MINUTES: Review and approve the minutes of the November 20, 2018 regular meeting of the Bloomington Transportation Commission.
5. REGULAR AGENDA
A. TC-2018-08: Review of Preliminary DRAFT McLean County Complete Streets Implementation Study being completed by the McLean County Regional Planning Commission
B. Information: December Citizen Comments/Complaints Summary

## 6. OLD BUSINESS

A. TC-2018-06: Recommendations to USPS Regarding Post Office Relocation: UPDATE
B. Any old items brought back by the Commission
7. NEW BUSINESS
A. Any new items brought up by the Commission

## 8. COMMISSIONER COMMENTS

## 9. ADJOURNMENT

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## MINUTES

## BLOOMINGTON TRANSPORTATION COMMISSION REGULAR MEETING TUESDAY, NOVEMBER 20, 2018 4:00 P.M. COUNCIL CHAMBERS, CITY HALL 109 EAST OLIVE STREET BLOOMINGTON, ILLINOIS

MEMBERS PRESENT: Ms. Angela Ballantini, Ms. Jill Blair, Ms. Katherine Browne (at 4:10 pm), Mr. Michael Gorman, Ms. Elizabeth Kooba

MEMBERS ABSENT: Ms. Maureen (Reenie) Bradley, Ms. Kelly Rumley
OTHERS PRESENT: Mr. George Boyle, City Attorney; Assistant Chief Greg Scott; Mr. Jim Karch, Director of Public Works; Mr. Kevin Kothe, City Engineer; Mr. Philip Allyn, City Traffic Engineer; and several members of the public.

1. CALL TO ORDER: Mr. Gorman called the meeting to order at 4:02 pm.
2. ROLL CALL: Mr. Allyn called the roll. With four members in attendance, a quorum was established.

## 3. PUBLIC COMMENT:

There were no public comments.
4. MINUTES: Reviewed and approved the minutes of the October 16, 2018 regular meeting of the Bloomington Transportation Commission. Ms. Kooba motioned to approve the minutes. Ms. Blair seconded the motion. The motion was approved by the Transportation Commission unanimously via voice vote.

## 5. REGULAR AGENDA:

A. TC-2018-07: Approval of Proposed Policy on Establishing Reduced Speed Limit Areas Mr. Allyn indicated that this is the first item to come from the previous discussions on speeding. We have developed a policy to establish a defined area where the statutory speed would be reduced from 30 mph to 35. The policy was developed with three goals:

1. Provide a process that requires significant involvement from the residents of the area. This involvement will create personal investment in the change by the residents of the area. The highest likely hood of a lower speed limit resulting in slower vehicle speeds requires the buy-in of the people driving in the area. Without buy-in from the affected community, this policy will not be nearly as effective at making our streets safer.
2. The areas targeted by the policy are areas with a high likelihood of pedestrians and other users that are more vulnerable to vehicles traveling at higher speeds. The policy is not limited to these areas, but they are the main focus.
3. Create larger sized, well-defined areas so that it is more obvious to drivers that they are entering a new area. This should increase the likely hood that drivers will reduce their speed in these areas as opposed to not realizing that the speed limit changed.

Mr. Allyn indicated that the process moving forward would be to gain comments from the Commission first. A revised draft would then be provided to other stakeholders (police, planning department, etc.) for comments. Mr. Allyn will then compile comments into a final version to come back to the Commission for approval along with the application and a draft ordinance for recommendation to Council.

Ms. Blair indicated that the policy is very detailed with a lot of information. Is it good to start with a detailed policy and strip it back if needed or start general and add details? For example, why require $85 \%$ buildout on a subdivision before the area will be considered. Mr. Allyn indicated that if there are specific thresholds and/or criteria, it is much more transparent and more defendable when a decision is made. If an applicant does not get what they want, we can point to the reason. There is less chance of appearance of special treatment. The reason for the $85 \%$ number is so that the subdivision is a known entity when this change is considered. If it is considered when only $30 \%$ is built out and implemented, there could be significant pushback once it is 60 or $90 \%$ built-out. Mr. Gorman asked if it could be implemented as part of the initial preliminary plan approval for a development. For example, if a developer wants to build a new-urbanist style subdivision with skinny streets, smaller lots, etc., could the developer apply prior to the start of construction for the reduced speed as a feature of the subdivision. Mr. Allyn indicated that this discussion goes back to the need for resident buy-in for it to be successful. In that case, it would still work since people would be aware of the overall features of the subdivision and would not buy and build there if they did not buy-in to it. The $85 \%$ threshold was meant more for traditional subdivisions with the goal of not imposing a reduced speed limit on a large number of residents who are opposed and will thus not respect the lower speed. It should be possible to incorporate an allowance for consideration during the initial design approvals.

Mr. Boyle shared that there are often conflicts between having standards to avoid arbitrary decisions based on opinions and having too many standards so that there is no room for flexibility. Typically, to have flexibility, you end up with a lot of standards to be able to cover a lot of different situations.

Kate Brown arrived at 4:10 pm.
Mr. Gorman indicated that when people are choosing where to live, they would still have the opportunity to choose whether they want to live in a reduced speed limit community. Regardless of the level of buildout the development, prospective new builders/property owners would still have the ability to decide whether to purchase there. Mr. Gorman suggested removing the requirement for area buildout from the policy. There was general concurrence from the Commission.

Mr. Gorman asked about the difference in minimum area for the Campus land use ( 80 acres) versus the other uses ( 20 acres). It seems that a more relevant metric would be the amount of street rather than overall land area. Mr. Allyn indicated that the campus land use, whether educational or corporate, will often have a larger percentage of area that is parking lot, green space or building. The 80 -acre number is somewhat arbitrary. It was determined based on looking at what a defined area around Illinois Wesleyan could look like and it was around 70-80 acres. There is certainly room for discussion on this number. Mr. Gorman suggested setting the same 20 -acre minimum for all three uses. Several potential areas were looked at as a frame of reference. Ms. Blair asked about other examples of the campus use. Would a hospital qualify? Mr. Allyn indicated that he believed that it would. However, care will need to be taken to apply this policy to areas with a number of streets rather than a large area with just one or two streets. In that case, it would be more appropriate to study the street of concern rather than try to apply a blanket to a large area that is primarily parking lot or buildings. There was general concurrence to make the minimum area 20 acres for all three land uses.

Mr. Gorman asked about the reference in 3.b.ii to the Bloomington-Normal Street and Highway Plan as the source showing arterials and collectors. Mr. Allyn indicated that was a hold-over from another policy that needs to be updated. IDOT previously distributed paper and then PDF's of the functional classification map for the Bloomington-Normal area, which the City would then post to the website. They have since incorporated this information into a website called gettingaroundillinois.com. For the final version, we will be incorporating this website rather than the previous map.

Mr. Gorman asked about criteria 5 relating to areas with $85^{\text {th }}$ percentile speeds of 27 mph or less being assumed to be self-policing and will not be considered. If there is an area where everyone already drives

25 mph , wouldn't it make sense to still post at 25 mph so everyone is in agreement about the speed? Mr. Allyn indicated that this criteria was meant to help be efficient with everyone's time due to the effort required to implement the changes as well as future the signage maintenance and monitoring. It would be one more area that could cause confusion for drivers and/or police officers as to what the actual speed limit is. Mr. Gorman asked if it would be possible to have the area fall to a lower priority with implementation occurring after other areas rather than denying altogether. Mr. Allyn indicated that the goal of this policy is to slow down drivers. It would still require cost and staff time to implement and maintain for an area where there is not a speeding problem and thus negligible benefit. Ms. Blair asked about the $85^{\text {th }}$ percentile speed. Mr. Allyn indicated that the $85^{\text {th }}$ percentile speed is the speed at which $85 \%$ of vehicles travel at or below. For example, if a street has an $85^{\text {th }}$ percentile speed of $27 \mathrm{mph}, 85 \%$ of vehicles are traveling 27 mph or slower. $15 \%$ are traveling 28 mph or faster. Ms. Blair indicated that if even $10 \%$ of drivers are greatly exceeding the speed limit, this is still a problem. Mr. Allyn responded that if a driver chooses to ignore a 30 mph speed limit, they are likely to also ignore a 25 mph speed limit. Ms. Ballantini indicated that she understood the financial impacts of an unneeded implementation and was fine with the criteria remaining. Ms. Kooba indicated she believed that if the majority of people are driving slower, it is likely that other people coming into the area will follow suit and agreed with the criteria remaining.

Discussion was held pertaining to who gets to vote during the decision period. The reasons for residents voting include that they are most impacted, they are most aware of the traffic conditions of the area, and they are predominately the drivers on the streets in the area. The reasons for owners voting would relate to potential impacts (good or bad) to property values as well and owners are more consistent. Renters are typically more transient and would potentially be making a long-term decision for an area in which they will not reside in a year or two. Property owners are more likely to remain for the longer term. With regard to the viability of administering the voting, property owner information is generally readily available. There will be greater difficulty identifying all renters. For example, the City is not always aware of all rental agreements or how many units a house may be split into. There was consensus that both property owners and residents will get to vote. Each party will only get one vote, regardless of how many properties are owned. This will be changed in both the voting section and the application section.

Mr. Gorman asked for clarification on the percentages of votes required. Mr. Allyn confirmed that, as currently written, to be successful, $60 \%$ of ballots must be returned and $70 \%$ of those returned ballots must vote in favor of the reduced speed limit. Mr. Gorman expressed a concern that requiring a percentage of ballots to be returned could make it very difficult. There could be a large number of people who are indifferent and may not bother to return the ballot causing it to fail even though there may not be significant opposition. Mr. Allyn indicated that again, for it to be successful at impacting vehicle speeds, we need buy-in from the residents. If people do not care enough to make the simple effort to mark a vote and put it in the mail, they will not care enough to honor the lower speed limit and it will not be successful at lowering speeds. Ms. Blair indicated that it also puts some duty on those that do care to make the case to their neighbors. Mr. Allyn added that this is a special treatment. Requiring most of the people to vote demonstrates that it truly is something that most people want, not just a small vocal group. It was suggested to drop the returned ballot threshold to $50 \%$ plus 1 vote to ease the requirement but keep it in place. There was consensus on this change.

Mr. Gorman asked for clarification on the statement under the Preliminary Review section "If a request does not meet the requirements ... and advised that the issue may be resubmitted in one year for further consideration if conditions change." It may conflict with statements previous in the document about Staff working with the requestor on the application to meet the requirements. Mr. Allyn indicated that Staff would work with the requestors to modify their application if it does not meet the requirements when possible. For example, the proposed boundaries could be modified to include additional area to meet the minimum acreage or they could be extended to a logical boundary rather than stopping in the middle of a neighborhood. The statement under the Preliminary Review section pertains to criteria that simply cannot
be met resulting in the request being denied. If there is a change in conditions, they can reapply in one year. For example, if a neighborhood applies and, if granted, it would result in four speed limit changes within a mile. The request would be denied. However, if an adjoining neighborhood applies and is successful, the first neighborhood could reapply if the four-speed-limit-changes-within-a-mile criteria is now met. Mr. Gorman indicated that he would like to see the Preliminary Review statement expanded a bit to make sure it is clear.

Mr. Gorman asked for clarification on the third paragraph under Implementation. Would a minor collector that is currently not posted, and thus 30 mph per the statutory speed limit, stay at 30 mph or be reduced to 25 mph ? Mr. Allyn indicated that it would likely depend on the road and how it fits within the proposed area. If it is on a border, it probably stays the same. That paragraph was written to try to clarify between major collectors, which usually are more like arterials than local streets, and minor collectors, which are often more like local streets. There is a provision stating, "Variances may be evaluated in rare extenuating situations based on the character and use of the roadway." This may come into play if there is a street that should logically be changed or not changed contrary to the policy. There are also provisions that indicate variances would come to the Commission for concurrence. The outcome would also come back to the Commission as a City Code change for a recommendation to Council.

A discussion was held about how the criteria relating to full build-out and multiple phases of the same subdivision would apply to various areas. In general, this is somewhat of a grey area that would depend on factors such as the area proposed in the application, the likelihood of imminent construction of future phases, the size of the area, how well defined the area is currently and how the future phases will affect the border delineation, etc. There may be some discussion during the application process to make sure that the ultimate area makes sense for all parties. However, once the area is defined, and ballots are sent out, it will not be changed due to voting results.

Ms. Ballantini asked about the time frame that it would take between the initial application submittal and an ultimate decision. Mr. Allyn indicated that once ballots are sent out, the draft policy is currently written so that they need to be returned within 2 weeks. Any other time frames are highly variable based on staffing available at the time, weather impacts to data gathering, timing of the request in relation to holidays or staff construction obligations, size of the areas and the volume of addresses to be gathered and ballots to mail, etc.

Ms. Ballantini asked if the Commission would be notified of any application denials. Mr. Allyn indicated that the Commission would be notified of any applications, status updates (potentially via the monthly citizen comments/complaints report), and the outcomes. If the petitioner does not agree with the outcome, they can request an appeal to the Commission.

## B. Information: November Citizen Comments/Complaints Summary

Mr. Gorman inquired about Item 19: request for traffic calming on Gloucester Circle between Hersey and Dover. Gloucester Circle looks to be a long straight street were there could be an issue with speeding. Would the intersection of Gloucester Circle and Dover be a candidate for an all-way stop? Mr. Allyn indicated that stop signs are not recommended to be used for speed control because they teach people to run stop signs as well as they increase the occurrences of speeded between stop signs. The concern pertained to the perception of vehicles turning off of Hershey and speeding to Dover. The speed data gathered indicated that this was not the case; it was a perceived issue rather than reality. Mr. Allyn indicated that we could gather traffic data at the intersection to see if all-way stop criteria are met. Mr. Gorman mentioned that the report indicated traffic data was already gathered. Mr. Allyn indicated that volume data was gathered on Gloucester within the area of concern to evaluate the traffic calming criteria. We did not gather at the intersection itself or any volumes on Dover.

Mr. Gorman inquired about Item 51: number of crashes at Lee and MacArthur. Mr. Justin Boyd spoke during public comment several months ago about speeding and requested painting the parking lanes. How
close did the painted lines get to this intersection? Mr. Allyn indicated that at each intersection between Oakland and Center we painted the triangles defining the parking area. This would have been done at this intersection as well. The primary issue we are seeing at this intersection is with people running the stop sign on Lee or not properly yielding to traffic on MacArthur. We have tried a number of things over the year. Pavement markings are established. The next step is to install LED stop signs. We have been working on this intersection for at least five years. Mr. Kothe indicated that in the past we have also installed oversized stop signs and additional signage.

Mr. Gorman inquired about Item 53: request for curb painting at Summerfield and Hershey. What does "curb painting" main in this context. Mr. Allyn indicated that the request was to paint the radii curbs yellow so that they can be better seen. Current policy is to not paint curbs yellow due to cost and lack of staff availability. Mr. Allyn plans to visit the intersection during the evening to evaluate whether the existing lights at the intersection are not producing sufficient light or if there is a parking issue.

Mr. Gorman inquired about Item 55: request for temporary traffic signals at Rhodes Lane and US 150 and Item 67: request for right turn lanes at Rhodes Lane. What is the timeline and status of this project? Mr. Allyn indicated that we are still negotiating with the railroad on the details for the new Hamilton Road crossing. Mr. Kothe indicated we are currently finishing Phase I engineering and will be starting Phase II engineering soon. The project is programmed for construction in 2021-2022. The project is funded through Federal Surface Transportation Urban (STU) funding. The project is moving forward, but it takes time to get through all the environmental reviews and all the other pieces. Mr. Gorman asked about a confidence level on it happening in a 3-4 year timeframe. Mr. Kothe indicated that we are working with all the stakeholders. We are confident that it will happen, but cannot say for sure that it will be in 20212022, but that it what we are currently moving towards. Mr. Gorman indicated that he knows there is a significant backup on Rhodes Lane that could lead to poor decisions on turning onto US 150. If this project is that far out, could we install a temporary signal like we did at Streid and Ireland Grove? Mr. Allyn indicated that with US 150 being a State and Federal highway and with the involvement with the railroad, it would likely take several years to get even a temporary signal installed and would likely cost noticeably more than the Streid signals. Mr. Kothe added that the railroad involvement would require an ICC order, which could easily take 5-10 years itself. We have currently been working on the ICC order for the Fox Creek Road Bridge for about 5 years.

Mr. Allyn provided a brief overview of the Hamilton Road, Bunn to Commerce and the Fox Creek Road Bridge projects. Hamilton Road is the main arterial across the south side of town and connects the State Farm campus to Main Street as well as Veterans Parkway, I-74 and I-55, and extends west to the Fox Creek area. The Fox Creek Road Bridge project will replace a narrow, substandard bridge over the railroad and provide a sidewalk and path connection across the new wider bridge. The Hamilton Road extension will connect the intersection at Bunn to the intersection at Commerce and will include a new railroad crossing. Rhodes Lane will "tee" into Hamilton Road. Rhodes Lane will be disconnected from US 150 and have a cul-de-sac added, eliminated a dangerous intersection. State Farm traffic coming from the west of south currently uses one of three paths: Veteran's Parkway to Commerce to eastern Hamilton, western Hamilton to Rhodes to US 150 to eastern Hamilton, or Main Street to Woodrig, to eastern Hamilton. Both Rhodes and Woodrig are narrow roads that are not build to withstand the current traffic. The Woodrig intersection at Main Street does not function well and the sharp curve stop of its intersection to US 150 is not ideal. The Hamilton cross section will look similar to Hamilton to the west with four lanes and both a bike path and sidewalks. The project eliminates a significant gap that will get allow drivers to use safer roads designed for the actual traffic volumes and eliminate several dangerous intersections. It will also provide a path connecting the two distinct south side branches of Constitution Trail that run along Hamilton Road.

Ms. Blair inquired about Item 54 and others pertaining to delays on Ireland Grove Road at Towanda Barnes Road. The Commission voted previously on a full project but when it went to Council, the project
changed and only the southbound right was constructed. As constructed, the project does not seem to accomplish anything close to expectations with the westbound traffic. Are there plans to construct the rest of the project? Mr. Allyn indicated that the current Council indicated that they did not want to construct improvements on the Ireland Grove legs of the intersection.

Ms. Browne inquired about Item 18: request for traffic calming on Eastport between Clearwater and Empire. Ms. Browne is interested in the outcome of this item. A lot of people try to avoid the intersection of Clearwater and Hershey to avoid the school and Country Companies traffic during the morning and afternoon commutes and to try to avoid the left turn from Empire to Hershey. Ms. Browne would be interested to see the data when it is available.

## 6. OLD BUSINESS:

A. Ms. Browne requested revisiting the approval of the meeting minutes. She would like to see the phase "wheelchair bound" changed to a more preferred phase. Ms. Brown motioned to amend the minutes from the October 2018 meeting to reflect the change of the phase "people who are wheelchair bound" to "people who use wheelchairs". Motion seconded by Ms. Kooba and passed unanimously by voice vote.

## 7. NEW BUSINESS:

## A. None

## 8. COMMISSIONER COMMENTS:

None.
9. ADJOURNMENT: The meeting adjourned at $5: 18 \mathrm{pm}$ unanimously by voice vote; motioned by Ms. Blair and seconded by Ms. Kooba.

Respectfully,

Philip Allyn
City Traffic Engineer

## CITY OF BLOOMINGTON <br> REPORT FOR THE TRANSPORTATION COMMISSION <br> December 18, 2018

| CASE <br> NUMBER: | SUBJECT: | ORIGINATING FROM: |
| :---: | :---: | :---: |
| TC-2018-07 | Review of Preliminary DRAFT <br> Complete Street Implementation Study <br> by the MCRPC | Philip Allyn, PE, PTOE <br> City Traffic Engineer |
| REQUEST: | Initial review and comment by the Transportation Commission of a <br> Preliminary DRAFT McLean County Complete Street <br> Implementation Study being completed by the McLean County <br> Regional Planning Commission. |  |

STAFF RECOMMENDATION: Review and Feedback
Staff requests review and feedback on the preliminary DRAFT of the McLean County Complete Street Implementation Study being completed by the McLean County Regional Planning Commission (MCRPC). Comments received will be combined with City Staff comments and provided to the MCRPC for finalization of the report.

1. ATTACHMENTS:
a. City of Bloomington Code: Chapter 38, Article XII: Complete Streets
b. Preliminary DRAFT McLean County Complete Street Implementation Study by MCRPC

## 2. BACKGROUND AND SUPPLEMENTAL INFORMATION:

Chapter 29, Article XXVIII, Section 303: Powers and Duties of the City Code, gives the Transportation Commission "the general authority to: 1 . Make recommendations to improve transportation conditions on policy level matters, including but not limited to: (1) the implementation plan of complete streets policies and practices..." and " 2 . Review and make recommendations regarding matters of transportation on the following plans: (1) Complete Streets Implementation Plan..."

The McLean County Regional Planning Commission (the Metropolitan Planning Organization, or MPO, within which the City falls) is leading an effort to develop a plan for the implementation of Complete Streets in McLean County. This effort stemmed from action items identified in the Long-Range Transportation Plan and the study is being completed with the services of Hoyle Consulting Group led by Ms. Cynthia Hoyle.

The purpose of this study is to further define Complete Streets in Bloomington-Normal and prioritize segments for implementation in conjunction with transit-supportive development goals.

It is anticipated that having this completed document increases the likelihood of successful grant applications for funding for Complete Streets projects included in the document.

A brief overview of the preliminary draft of the study was recently presented to a group of planners, engineers and other officials for the City of Bloomington, Town of Normal, McLean County, the Illinois Department of Transportation (IDOT), and Connect Transit. Comments are being solicited from all stakeholders. At this point, the focus is still on major issues and big picture comments. Editorial changes (grammar, formatting, etc.) will be corrected with the next version.

Initial Engineering Division comments include the following:

1) We recognize that transit is a major part of a successful multi-modal transportation system, both for the community overall, and for specific corridors. However, we question why the study strongly prioritizes and focuses on corridors along significant transit routes at the expense of other street corridors without a transit route that may see greater overall benefits with a Complete Streets implementation. For example, adding sidewalks and/or increased intersection pedestrian accommodations along a street that has high pedestrian traffic volumes or major pedestrian generators or adding a bike path or bike lanes along a key segment in the Bicycle Mast Plan could provide significant increases in those uses. However, with the current analysis methods, if there is not an existing bus route on such a street, it would not be considered a priority. This would result in exclusion from the report and reduced funding opportunities.
2) Suggest the removal of I-AA Drive from the study as it has recently been converted to a three lane street with a center turn lane as suggested. In addition, sidewalks are being constructed.
3) Suggest the removal of Front Street from the study as it has recently been reconstructed to increase pedestrian accommodations and calm vehicle speeds. In addition, the heavy transit use for this section is driven largely in part by the presence of the transfer area, which is currently under study for relocation.
4) Staff is currently considering alternate corridors to suggest for inclusion to replace those suggested for removal.

Commissioners are encouraged to provide any feedback on the preliminary draft study. Staff will compile comments received from the Commission and submit them back to the MCRPC for consideration.

## 3. STAFF RECOMMENDATION:

No recommendation for this item.
Respectfully submitted,

Philip Allyn, PE, PTOE
City Traffic Engineer

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## Section 180 : Complete Streets.

Section 180.1 : Definition.
Vehicular, public transportation, bicycle and pedestrian modes are integral to the transportation system, and the City of Bloomington views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers and to increase quality of life within the City of Bloomington. (Ordinance No. 2016-87)

## Section 180.2 : Implementation.

To best balance the needs of all users and provide increased flexibility to design the City will use design guidelines in accordance with the most up to date, relevant standards and best practices available on all new or existing transportation routes. Design standard references may include but are not limited to: (a) The Manual of Practice for the Design of Public Improvements in the City of Bloomington, Illinois. (b) Illinois Department of Transportation (IDOT) Bureau of Local Roads and Streets (BLR) Manual. (c) Illinois Department of Transportation (IDOT) Bureau of Design and Environment (BDE) Manual. (d) The Manual on Uniform Traffic Control Devices. (e) The Illinois Supplement to the Manual on Uniform Traffic Control Devices. (f) "Guide for the Planning, Design and Operation of Pedestrian Facilities," American Association of State Highway and Transportation Officials. (g) "Urban Bikeway Design Guide," National Association of City Transportation Officials. (h) "A Policy on Geometric Design of Highways and Streets," American Association of State Highway and Transportation Officials. (i) "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice," Institute of Transportation Engineers. (j) "Guide for the Development of Bicycle Facilities," American Association of State Highway and Transportation Officials. (k) "Public Rights-of-Way Accessibility Guidelines," United States Access Board. (l) "Complete Streets: Best Policy and Implementation Practices," American Planning Association. (m) Pedestrian Safety Guide and Countermeasures Selection System (FHWA-PEDSAFE). (n) Complete Streets Complete Networks: A Manual for the Design of Active Transportation (Active Transportation Alliance). (o) Other relevant federal, state, or local guidance, as appropriate. (Ordinance No. 201687)

## Section 180.3 :

The City of Bloomington will provide assistance to and coordinate with local, regional, state, and federal agencies in developing and implementing complementary Complete Streets policies and to ensure that all roadways and intersections within or directly adjacent to the City of Bloomington meet the local community standards adopted in accordance with this ordinance. (Ordinance No. 2016-87)

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Section 181: Applicability.
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## Section 181.1:

All public transportation projects under the City of Bloomington's jurisdiction will be designed to improve safety, access, and mobility for users of all ages and abilities, including pedestrians, bicyclists, public transportation vehicles and their passengers, motorist, transporters of commercial goods, persons with disabilities, older adults, and children, Review for consistency with and the potential incorporation of elements to advance the Complete Streets goals will be evaluated and, if warranted, applied to new construction as well as reconstruction of roadway improvement projects and into all phases of roadway projects including, but not limited to, scoping, programming, planning, design, construction, maintenance, and operations. (Ordinance No. 2016-87)

## Section 181.2 : Exemption.

The implementation of Complete Streets practices may not be required if the City of Bloomington determines that one or more of the following conditions exists: 1) the project occurs on a roadway where specified users are prohibited by law; 2) the project involves ordinary maintenance activities such as cleaning, sealing, spot repairs, patching, and surface treatments; 3) the cost of accommodations for a particular mode is excessively disproportionate to the need for accommodation and potential benefit of accommodation; 4) there is clear and quantifiable evidence of a lack of need or lack of increased safety benefits; and/or 5) the street surface is considered a historic street surface. The City of Bloomington may consult local, regional, state, and federal plans and leaders, as appropriate, in assessing exemptions. Exemptions to the Completes Streets policy must be documented in writing, submitted to the Director of Public Works and approved by the City Manager. In the event that consensus cannot be reached between the City Manager and the Director of Public Works, the City Council may make the final determination for an exemption. (Ordinance No. 2017-113)

## Section 182 : Accountability

## Section 182.1 :

In order to evaluate the City of Bloomington's progress toward implementation of a comprehensive Complete Streets policy, the City will prepare an annual report detailing its progress in this regard, which shall contain the following information: (a) Total miles of on-street bicycle routes and lanes; (b) Total miles of off-street paths and trails; (c) Linear feet of pedestrian accommodation; (d) Number of ADA compliant curb ramps; (e) Annual crash data and comparisons to benchmarks; (f) Exemptions to the Complete Street Policy granted and reason for exemption; (g) Other relevant data. (Ordinance No. 2016-87)

Section 183 : Severability.

## Section 183.1:

If any section, subsection, paragraph, sentence or clause of this ordinance or its application to any person or circumstance is held to be invalid by any court of competent jurisdiction or administrative agency, the invalidity of that provision or application shall not affect, impair, or invalidate any remaining section, subsection, paragraph, sentence, or clause of this ordinance or its application. (Ordinance No. 2016-87)

## Section 184 : Private Development.

## Section 184.1:

Review for Complete Streets consistency will be added to the existing private development review process. This includes application of the Complete Streets elements of each development at the City staff and administrative level. The Complete Streets project checklist shall be used to assist with and document the Complete Streets review. Complete Street improvements shall be required at the cost of the developer. Exemptions must be documented in writing and approved by the City Manager. (Ordinance No. 2016-87)

Section 185 : Effective Date.

Section 185.1:
This ordinance shall take effect September 1, 2016. (Ordinance No. 2016-87)

## McLean County <br> Complete Street Implementation Study



McLean County Complete Streets Implementation Study
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McLean County Complete Streets Implementation Study

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## Introduction

The McLean County Regional Planning Commission has been working with the cities of Bloomington and Normal, IL to create a livable, healthy, and equitable community. Both cities have worked to provide residents and visitors with choices in transportation mode by adopting various plans and policies. Both cities have adopted complete street policies and the community has both comprehensive transit service through Connect Transit as well as a community-wide trail system. However, challenges exist along major corridors for people walking, bicycling or using transit due to gaps in the infrastructure both along roadways and for crossing roadways. Developing a community implementation plan for complete streets that identifies high priority corridors, particularly for transit routes, will assist the cities and the transit system in making progress toward a community-wide multimodal transportation system.

## Background

Both cities have recently adopted and/or updated their comprehensive plans:

- Bring It Bloomington! Plan It. See It. Live It. - 2015
"Bloomington will be a unique, cohesive, and vibrant community, successfully uniting and integrating its downtown core, established neighborhoods, and future developments.
Supported by its high quality of life and enduring economic stability, Bloomington will be the destination for people and businesses that seek a culture of innovation and entrepreneurship. Its residents will continue to thrive, surrounded by rich history, arts and culture, lifelong learning opportunities, a healthy environment, and an active lifestyle."
- Town of Normal 2040 Comprehensive Plan: Complete. Connected. Compact. - 2017
".... a future Normal that endeavors to create a Complete, Connected, yet Compact community:
-Complete in that it includes diverse and inclusive neighborhoods, streets, centers, and destinations of every kind.
-Connected physically, socially, and technologically in ways that ensure constant and multiple interactions within Normal and with our global society.
-Compact with a wide variety of all uses contained in a contiguous community with a minimum of sprawl."

Both cities have passed complete streets policies:

- City of Bloomington Complete Streets Ordinance - 2016
"...the City of Bloomington has placed a priority on implementing policies that recognize the importance of addressing the transportation needs of pedestrians, bicyclists, and public transportation riders... works to improve the safety of city streets, enhance the quality of life of residents, encourage active living, and reduce traffic congestion..."
- Complete Streets Policy, Town of Normal, Illinois - 2016
"The Town of Normal shall strive to accommodate all users of the road network, including bicyclists, pedestrians, transit users, and the drivers of automobiles, transit vehicles, and freight vehicles, in roadway projects so as to create a connected, comprehensive, integrated network for all roadway users."

The cities both have bicycle and/or pedestrian plans:

- City of Bloomington Bicycle Master Plan - 2015
o Plan for a target audience of casual adult cyclists. At the same time, address the needs of those who are more advanced and those who less traffic-tolerant, including children.
o Strive for a network that is continuous, forming a grid of target spacing of $1 / 2$ to 1 mile to facilitate bicycle transportation throughout the City.
- Town of Normal Bicycle and Pedestrian Master Plan - 2009
"The Normal Bicycle and Pedestrian Master Plan presents the 20-year vision of a fullydeveloped bicycle and pedestrian system throughout the Town, serving residents, commuters, children and visitors alike. A complete bikeway and walkway network will enhance overall connections within the community and promote the overall health of area residents by making walking and bicycling safe, comfortable and attractive travel modes. Included in these plans are goals and objectives that are focused on creating choices in mobility and access via multiple modes including walking, bicycling, transit, and driving."


## Existing Plans - Priority Corridors

The City of Bloomington Bicycle Master Plan identified the following projects as high priority for implementation. Only those recommendations involving changes to the roadway or the addition of sidewalk and/or sidepaths are listed below.

Bloomington recommendations (High Priority):

- Road diet conversions with bike lanes or buffered bike lanes:
o Cottage Grove Avenue
o Emerson Street (Center to Linden)
o Fairway Avenue (Empire to Eastland)
o Lincoln Street
o Main (Normal border to Locust)
o ML King Drive
o Regency Avenue
o Washington (Lee to Towanda)
o Washington (Kreitzer to St. Joseph)
- Bike Lanes:
o Albert/East (Grove to Constitution Trail)
o Emerson (Linden to Towanda)
o Fairway (Towanda to Empire)
o Grove (State to Vale)
o Hinshaw (Locust to Market)
o Lincoln (Constitution Trail to Mercer)
o Locust (Western to Morris)
o Locust (Catherin to Allin)
o Mercer (Lincoln to Ireland Grove)
o Morris (Veteran to Hamilton)
- Sidewalks:
o Bunn (RR crossing to Hamilton)
o Cottage Grove (White Oak Park north edge to Seminary)
o Locust (Colton to Towanda)
o Main (Center to Hamilton)
o Towanda (Empire to Washington)
o Wylie (Normal border to IL9/Market)
- Sidepaths:
o Empire (Airport to Towanda Barnes)
o Fox Creek (Danbury to Beich)
o IAA Drive (Vernon to Kurt)
o Ireland Grove (E. of Bear Creek to Towanda Barnes)
o Mercer (Ireland Grove to Hamilton)
o Six Points (Springfield to Morris)
o Towanda (Raab to Ireland Grove)
- Buffered Bike Lanes:
o Center (Normal border to Locust)
o East (Locust to Olive)
o Locust (Morris to Catherine)
o Madison (Locust to Olive)
o Main (Normal border to Locust)
- Crossings on Major Arterials
o Any Veterans Parkway project that includes resurfacing of cross streets in their intersection functional areas should study striping reconfiguration and lane narrowing for bike lanes (regular or green bike lanes), combined bike lane/turn lanes
o Business US 51 (Center/Madison to Olive, and Main/East) one-way couplet - restripe to add bike lanes, usually buffered bike lanes and usually with a "road diet" reduction in the number of lanes. South of the couplet, add sidewalks, widen to sidepath width, and use IDOT's new, narrower rumble strip standard with longitudinal gaps for bicyclists.
o Empire - finish sidewalks between Colton and Towanda; add sidepath and/or sidewalk between Towanda and Towanda-Barnes
o Locust - bike lanes between Western and Allin; finish sidewalks Colton to Towanda
o Market - accommodations added during future Sugar Creek bridge reconstruction
o Hinshaw - bike lanes between Locust and Market
o Lee - shared lane markings between Empire and Locust
o Morrissey - sidepath between Croxton and Woodrig
o Veterans - sidepath on one side, sidewalk on the other

The Bloomington Streets Master Plan identified the following streets for reconstruction. Reconstruction and/or resurfacing of streets is one of the most frequent, successful, and least expensive methods for implementing Complete Streets and adding bicycle and pedestrian infrastructure. Each reconstruction and resurfacing project should be reviewed for opportunities to redesign and improve roadways to provide safer and better access for all roadway users. Only those streets with transit routes and/or proposed bike/ped infrastructure are included.

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- Bunn Street (Lafayette to Woodrig)
- Emerson Street/Seminary Avenue (Cottage Grove to Center Street \& Linden to Towanda)
- Euclid/Brown Streets (Oakland to Market)
- Fox Creek Road (Danbury to Beich)
- Hamilton Road East (Bunn to Commerce)
- Lafayette (Center to Ash)

The Town of Normal Bicycle and Pedestrian Master Plan identified the following projects as high priority for implementation. Only those recommendations involving changes to the roadway or the addition of sidewalk and/or sidepaths are listed below.

- Southern Normal Corridor (Bryan/Dale/University/Virginia/Jersey) On-street bikeway
- Fell Avenue/School Street Corridor On-street bikeway
- Lincoln Corridor (Clay/Lincoln/Chippewa) On-/off-street bikeway
- College Avenue/Mulberry Street Corridor On-street bikeway
- Veterans Parkway Crossings Intersection improvements

The BN Mobile or Long-Range Metropolitan Transportation Plan 2045 (LRTP) was completed in November 2017. The plan emphasizes the priority areas introduced in the municipal plans to implement Complete Streets. More so, in the Mobility, Access and Choice chapter, an entire section is dedicated to considering Complete Streets under Engineering Strategies. Section 2.2 which states:
"Incorporate Complete Streets Principles into project design, planning and implementation process."
Other key considerations for Complete Streets in the LRTP include:

- ...Formulate and adopt a regional definition for Complete Streets, including criteria through which project proposals may be evaluated...
- Apply Complete Streets ordinance provisions in restoration or reconstruction of existing streets and roads as resources permit
- Where Complete Streets provisions are implemented, incorporate pedestrian and bicycle accommodations to enhance bicycle connectivity and safety.

The Main Street Transportation Improvement Feasibility Study: Bloomington-Normal, Illinois was completed in March of 2012. Main Street is an Illinois Department of Transportation owned and operated roadway. Key elements of the "Statement of Purpose" include:

- Main Street supports all modes of transportation; the movement of autos and trucks, pedestrians, bicycles and transit.
- Accordingly, the corridor and the roadway have multimodal needs and demands that require an integrated approach for all modes, as espoused in a Complete Streets environment.
- The corridor must be designed to accommodate both current and future transportation and land uses. This includes a variety of businesses, institutional uses, and housing.

Complete streets design is called out in the statement of purpose in this plan:
"A key component of the Statement of Purpose is the 'complete street' design approach, which refers to the integration of features that safely accommodate all users, including various modes

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of transportation such as automobile drivers, bus riders, bicyclists, and pedestrians of varying ages and capabilities."

A summary of the feasible transportation improvements in this study are provided in Exhibit a.
Exhibit a: Summary of Feasible Transportation Improvements

| SEGMENT DESCRIPTION | DESCRIPTION OF IMPROVEMENT |
| :--- | :--- |
| Segment 1 <br> 1-39 to 1-55 | Landscaped median |
| Segment 2 <br> 1-55 to College <br> Raab to College | Landscaped median <br> Narrow travel lanes to 11' <br> Stripe bike lanes OR widen parkway <br> Widen sidewalk <br> Reduce \& consolidate driveways |
| Segment 3 <br> Main/College | Traffic signal timing <br> modifications <br> 1ncrease southbound <br> left-turn lane |
| Main/McKinley OR Summit | New traffic signal |
| Main (College-Division) | Narrow travel lanes to 11' <br> Stripe bike lanes OR widen parkway Widen <br> sidewalk <br> Curb \& gutter reconstruction |
| Main (Division-Locust) | Remove one northbound travel lane, narrow travel lanes to 11', <br> retain parking Stripe buffered bike lane OR widen <br> parkway/sidewalk <br> Curb \& gutter reconstruction |
| Kingsley/Center (College- | Locust) <br> Narrow travel lanes to 11' <br> Stripe bike lane OR <br> widen parkway Widen <br> sidewalk <br> Curb \& gutter <br> reconstruction <br> Fill in sidewalk <br> gaps |


| Segment 4 |  |
| :--- | :--- |
| Locust Street | Convert to two-way operations Lee-Main to create truck route (2 <br> eastbound lanes \& 1 westbound lane) <br> Place 1L 9/US 150 designation along Locust <br> instead of Lee Acquire ROW NWQ <br> Locust/Center \& turn lane improvements |
| Center \& Main (Locust- <br> Front) | Convert to two-way traffic operations <br> Roadway extension to intersect <br> Madison \& East Traffic signal <br> modifications <br> Curb bump-outs, extend streetscape to Center |
| Madison \& East (Locust- <br> Olive) | Reduce to 3 lanes, narrow travel lanes to <br> 11' travel lanes Stripe buffered bike lane <br> OR widen parkway/sidewalk |
| Segment 5 <br> Main (Oakland-RT Dunn) | Maintain 3 NB lanes \& narrow <br> travel lanes to 11' Stripe bike lane <br> OR widen parkway/sidewalk |
| Main (Lafayette-Brigham |  |
| School) |  |
| Construct 10' off- |  |
| street path Reduce |  |
| \& consolidate |  |
| driveways |  |

## Crash Data Analysis

The lack of adequate infrastructure for people walking and bicycling can be a factor in bike and pedestrian related crashes. Insufficient facilities and/or inadequate design may increase the potential for conflicts with motorized vehicles. Figure 1 shows the locations of bike and pedestrian crashes in Bloomington-Normal for both injury and fatal crashes.

The results show that:
(1) Over $80 \%$ of crashes occurred at intersections, and about one third happen within a 150 -foot distance from bus stops. Though the causes of these crashes are not provided, safety improvements should target those locations where people walking or biking will encounter conflicts with vehicles.
(2) Due to the higher numbers of people walking and biking there is a higher concentration of crashes in the downtown areas for both Bloomington and Normal.
(3) Major roads with high traffic volumes and/or high speeds increases the risk and severity of crashes for all roadway users. Frequent crashes have occurred along traffic corridors like W Market St.,

Bloomington, Main St., Normal, Clinton St., Bloomington, Veterans Pkwy, Bloomington, and Linden St., Normal.

Figure 1 Crash Data Analysis


## Commuting Patterns

## Employment

Commuter travel patterns indicate the relationship between where people live and where they work. The American Community Survey (ACS), which is conducted by the U.S. Census, provides "County to County Commuting Flows". These data estimates show where people work, based on both residence and workplace. The data shows the major counties to which residents in the study area travel for McLean County Complete Streets Implementation Study
employment. Nearly $90 \%$ of community residents work within McLean County with a small percentage commuting to other communities such as Peoria, IL and Champaign-Urbana, IL.

Employment by industry shows McLean County's strength in finance, leisure and hospitality, and education and health service industries as shown in Table 1. Over one-fifth of employees work in the financial sector, with a significant portion employed by major institutions including State Farm Insurance Co., COUNTY Financial, Heartland Bank \& Trust, and Afni, Inc. Employment in Educational \& Health Services sector is also clustered in major employers, which include Illinois State University, Unit 5 Schools, Advocate BroMenn Healthcare, and OSF St. Joseph Medical Center.

Table 1: Major employers (employees>400) in Bloomington-Normal, 2016

|  | ComPANY NAMES | EMPLOYMENT |
| :--- | :--- | :---: |
| 1 | State Farm Insurance Co. | 14,532 |
| 2 | Illinois State University (ISU) | 3,300 |
| 3 | COUNTY Financial | 1,939 |
| 4 | Unit 5 Schools | 1,669 |
| 5 | Advocate BroMenn Healthcare | 1,271 |
| 6 | OSF St. Joseph Medical Center | 894 |
| 7 | Heartland Bank \& Trust | 763 |
| 8 | Afni, Inc. | 760 |
| 9 | Dity of Bloomington County, Government | 713 |
| 10 | Illinois Wesleyan University (IWU) | 691 |
| 11 | Town of Normal | 594 |
| 12 | GROWMARK, Inc. | 507 |
| 13 | Heritage Enterprises | 499 |
| 14 | Nestle USA | 480 |
| 15 | 465 |  |
| 16 |  | 415 |

Source: HR Representatives from each company/organization. Numbers aggregated by Bloomington-Normal Economic Development Council in the report of McLean County, Illinois, 2017 Demographic Profile (https://www.bnbiz.org/wp-content/uploads/2017/06/2017-Demographic-Profile-Website-Final.pdf)
U.S. Census Bureau's LEHD Origin-Destination Employment Statistics (LODES) data provides spatial patterns of employees by their residence and workplace locations at the census block level, and the commuting flows between them. Figure 2 presents number of jobs by census block and the locations of major employers in Bloomington-Normal area. The concentration of major employers at the city center

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and on existing bus routes increases the opportunity to provide public transportation as a viable means of commuting, especially for young people who may prefer to drive less and live closer to workplaces.

Figure 2: Number of Workers by Employment Census Block and Bus Services


## Residence

Based on the ACS County to County Commuting Flows data, about 85\% of those employed in Bloomington live within McLean County.

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Figure 3 maps the geographic pattern of the number of workers living in the Bloomington-Normal area. The existing bus service does not cover some populated areas in the north, southeast and southwest, which indicates the potential for expansion of public transportation to better connect these neighborhoods and improve their job accessibility.

Figure 3: Number of Workers by Residence Census Block and Bus Services
 Legend

| Highways | Number of Workers | $56-126$ |
| :--- | :---: | :---: |
| Transit Stops | $1-19$ |  |
| busroute | $20-55$ |  |

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## Mode Choice

Table 2 provides trips to work data by transportation mode and shows that over $80 \%$ of workers in Bloomington and Normal drive to work alone. The second largest commute mode is carpooling with around $10 \%$ of workers sharing a ride to and from work. The share of trips via public transportation is about $2 \%$, compared with $9.2 \%$ in the State of Illinois $5.1 \%$ in the United States.

Studies show that the benefit of public transportation in mitigating urban congestion justifies transit infrastructure investments. ${ }^{1}$ The City of Bloomington Comprehensive Plan has also identified expansion of public transportation as a way of reducing air pollutants. ${ }^{2}$

Table 2: Journey to Work by Mode of Transportation

|  | BLOOMINGTON <br> CITY, ILLINOIS |  | NORMAL <br> TOWN, ILLINOIS | MCLEAN <br> COUNTY, <br> ILLINOIS |  | ILLINOIS |  | UNITED STATES |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, Means of Transportation to Work by Age: B08101. Retrieved May 27, 2018 from http://factfinder.census.gov

[^0]
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## Transit Propensity

## Goals and Methodology

This analysis, conducted by McLean County Regional Planning Commission, identifies the different areas of the community that are the most likely to use transit by estimating the residents' propensity to utilize transit to access to work, schools, and shopping. This study uses the following local data to identify the population areas most likely to want or need transit:

- Student Apartments- weight 1-4

College students and college-age persons are a large user of Connect Transit Services. This population is not just using the Redbird Express and Yellow lines, but several others to move around Bloomington-Normal according to the Connect Survey conducted in the spring.

- Subsidized Housing Units and Mobile Homes - weight 4

According to Connect Transit's 2018 survey, almost 85\% of respondents who gave an answer to the income question made under $\$ 35,000$ annually. For this reason, subsidized housing units and mobile homes were weighted heavily in this model.

- Assessed Value<\$40,000 - weight 1-4

Subsidized units and mobile homes do not capture home owners making under \$35,000 annually. For this reason, homes with assessed values under $\$ 40,000$ were accounted for as possible transit dependent locations.

- Connect Mobility Drop-off's and Pickups - weight 4

It is clearly more expensive for Connect to send out mobility shuttles than to run fixed-routes. Hence the location of frequent mobility users was mapped and weighted heavily. Transit accessibility measured at $1 / 8$ th mile to the bus stop.

- Housing Density - weight 1-4

A simple measure to identify existing locations of population densities.

- Senior Tax Exemptions - weight 1-4

Often, seniors are unable to drive on their own and having more accessible transit would allow them to become independent of help from family or others.

- Jobs Density - weight 1-4

2015 Census Bureau's Longitudinal Employer-Household Dynamics program employment data at block level was used to measure job density.

- Key Transit Destinations - weight 1-4

In future analysis, we hope to have a more comprehensive list of these locations, but in this model, hospitals and grocery stores were considered key transit destinations.

Unless otherwise noted, all attributes are measured by counting the instances of the attribute within a quarter-of-a-mile, of every 250 by 250 -foot square (cell) across Bloomington-Normal. These nine attributes are each ranked from 1-4, 1 being low number of instances and 4 being very high number of instances. The output sums these numbers and gives an overall score displayed between 9 and 36.36 is the maximum score possible, but the highest score achieved was just 24 found west of Downtown Bloomington. The output highlights concentrations of multiple populations with high transit propensity.

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## Transit Propensity Analysis in Bloomington-Normal

Figure 4 overlays transit propensity with current bus routes and average daily boardings for all bus stops. The propensity is measured in blue gradient with low propensity as light colors and higher propensity as the gradient gets darker. At locations where ridership is low, and the calculated propensity is high, it's worth checking bus frequency, connections and bus stop locations for any possible service gaps that may have dampened transit use. Meanwhile, areas that exhibit high ridership will be given priority of service improvement.

Figure 4: Transit Propensity in Bloomington-Normal Area


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## Complete Streets Policies, Implementation Plans, and Strategies

Complete Streets are designed and operated to enable safe access and mobility for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. With increasing local interest in active transportation modes e.g. walking, bicycling, and transit, it is important to consider a community-wide approach to implementation of the existing Complete Streets policies.

The advocacy group Smart Growth America notes that nearly 40 percent of all vehicle trips are less than 3 miles, 17 percent are less than a mile, and of that 17 percent, 47 percent are made by a car. The background behind some of these statistics is that 73 percent of Americans have no access to sidewalks or bike lanes, making the car the most convenient and safest option. Over two-thirds of Americans say that they want more transportation options so that they have more freedom to choose how they move around. This is important because at least 30 percent of Americans do not drive. As a result of these statistics there has been a shift toward more multi-modal policies and legislation to support additional mobility choices.

This section provides background information to help MCRPC build an understanding of national Complete Streets concepts and implementation options as well as resources to guide future conversations about Complete Streets policies and implementation approaches.


The National Complete Streets Coalition provides guidance on how to develop an implementation plan in the document Complete Streets Implementation: A Brief Guidebook as seen below:
"Creating an implementation plan or framework can maintain the momentum picked up during policy adoption...An implementation plan provides the opportunity to assess current practices, to assign responsibility for the following activities in this report, and to create estimated timelines for accomplishing those tasks. The community can use the resulting document as a tool to communicate its work with other agencies, with community leaders, and with supporters."

The passage of a Complete Streets Policy is the first step toward creating a complete transportation system. Successful implementation of the policy involves a number of steps including:

- Establishing an Implementation Committee, consisting of representatives of all departments with responsibility and/or impact on roadway projects, to oversee the process internally
- Use of an "external" committee with representation from city agencies, bicycle advocates, pedestrian advocates, older adult groups, and disability groups
- Evaluating development, maintenance, and project development policies, processes, and procedures to determine how to best integrate Complete Streets practices into the current city systems. This may include:
o Procedures that do not yet consider all users of all ages and abilities as routine practice


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o Current training processes
o Design standards and guides
o Current performance measures and outcomes

- Identifying principles for integration of "Complete Streets thinking" into the local, collector and arterial network and land use planning in each city and on Illinois Department of Transportation roadways;
- Identifying early opportunities for implementation of Complete Streets strategies while acknowledging the diversity of urban and rural contexts within the community;
- Identifying priority locations to serve as opportunities for faster implementation of Complete Streets;
- Consulting with the cities and IDOT to develop a citywide list of Complete Streets projects in conjunction with current plans for transit, bicycle, and pedestrian infrastructure for future funding opportunities;
- Identifying possible incentives for the planning and development of Complete Streets projects.
- Requiring annual reports that include Complete Streets progress

The overall strategy will include the following workflow components:

- Development of the goals and objectives that drive policy implementation including identification of high priority corridors to support transit services
- Development of action steps, both internally and externally, with local partners and develop specific Complete Street tools and approaches
- Needed plan updates
- Needed design updates
- Development of performance measures and outcomes
- Development of a method for annual reporting

The Illinois Department of Transportation Complete Streets Law states:
Sec. 4-220. Bicycle and pedestrian ways.
(a) Bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into State plans and programs.
(b) In or within one mile of an urban area, bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any State transportation facility except:

1) in pavement resurfacing projects that do not widen the existing traveled way or do not provide stabilized shoulders; or
2) where approved by the Secretary of Transportation based upon documented safety issues, excessive cost or absence of need.

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(c) Bicycle and pedestrian ways may be included in pavement resurfacing projects when local support is evident or bicycling and walking accommodations can be added within the overall scope of the original roadwork.

As previously noted, both Bloomington and Normal have adopted Complete Streets policies. For the purposes of this study Complete Streets are defined as:

Complete Streets are streets designed, constructed, operated, and maintained to safely accommodate all users of the road network and to provide a safe and efficient transportation system that improves the quality of life for all users.

Figure 5: Complete Street road diet with mid-block crosswalk at bus stop


## Complete Streets Design

The design of a complete street can vary significantly based on location, roadway design, traffic volume, vehicle speeds, and adjoining land use. Roadways that have two lanes each direction and traffic volumes

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of less than 20,000 vehicles per day are often good candidates for implementing a new design with fewer lanes, sometimes called a road diet. FHWA describes road diets as follows ${ }^{3}$ :

A Road Diet is generally described as "removing travel lanes from a roadway and utilizing the space for other uses and travel modes...the most common Road Diet reconfiguration, which is the conversion of an undivided four lane roadway to a three-lane undivided roadway made up of two through lanes and a center twoway left-turn lane (TWLTL). The reduction of lanes allows the roadway cross section to be reallocated for other uses such as bike lanes, pedestrian refuge islands, transit uses, and/or parking.

Figure 6: Typical Road Diet Basic Design ${ }^{4}$


The FHWA includes road diets in its recommendations for "Proven Safety Countermeasures" The benefits of installing a road diet may include:

- An overall crash reduction of 19 to 47 percent
- Reduction of rear-end and left-turn crashes due to the dedicated left-turn lane
- Reduced right-angle crashes as side street motorists cross three versus four travel lanes
- Fewer lanes for pedestrians to cross
- Opportunity to install pedestrian refuge islands, bicycle lanes, on-street parking, or transit stops

[^1]
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- Traffic calming and more consistent speeds. ${ }^{5}$

Road diets have been successfully implemented in numerous locations in Illinois. One example from Urbana, IL is provided below.


The research has shown that roadway safety is improved by lowering vehicles speed. Additionally, lower average speeds increase roadway capacity. The World Health Organization has reported that: "The relationship between speed and injury severity is particularly critical for vulnerable road users such as pedestrians and cyclists. For example, pedestrians have been shown to have a $90 \%$ chance of survival when struck by a car travelling at $30 \mathrm{~km} / \mathrm{h}(19-20 \mathrm{mph})$ or below, but less than $50 \%$ chance of surviving an impact at $45 \mathrm{~km} / \mathrm{h}(28-30 \mathrm{mph})$. Pedestrians have almost no chance of surviving an impact at 80 km/hr. (50 mph)." ${ }^{6}$

Lowering speeds by 5 mph can have a significant impact: "New research conducted by the Insurance Institute for Highway Safety indicates that lowering the speed limit by 5 mph on city streets can improve safety for motorists, pedestrians and bicyclists alike..." ${ }^{7}$ Additionally the research found that reducing the speeds on city streets that have lower speed limits had a bigger impact than on higher speed roadways: "In 2016, IIHS noted that the percentage of U.S. crash deaths related to speeding was higher

[^2]McLean County Complete Streets Implementation Study
on roads with 35 mph or lower speed limits than on roads with higher speed limits; some 33 percent vs. 26 percent." ${ }^{8}$

Research has shown that lane widths on a street are directly linked to vehicle speeds. The Texas Transportation Safety Institute research has shown: "On suburban arterial straight sections away from a traffic signal, higher speeds should be expected with greater lane widths." ${ }^{\prime 9}$ Past research from the Transportation Research Board have shown that: "... lane widths exclusively of 10 feet or more [rather than 12 feet] resulted in accident rates that were either reduced or unchanged. ${ }^{10}$ Narrowing lanes and changing the design of city streets can be a very effective tool for reducing roadway crashes, fatalities, and, in many cases, also improve traffic flow.

Implementing complete streets designs via road diets and other measures can significantly reduce roadway crashes and reduce fatalities without increasing congestion. "The Federal Highway Administration has determined that road diets do not cause congestion on roads that carry fewer than 20,000 cars daily. Adding center-turn lanes actually increases capacity, because traffic is not stopped for vehicles waiting to make left turns."11

## Complete Street Design Challenges on Bus Routes

Pedestrian access: Bus stops with incomplete pedestrian design may discourage people from using public transportation. In many cases, bus riders are forced to walk in a busy street that lacks sidewalks or cross a street that does not have a safe roadway crossing at the bus stop, or they may have to wait at a bus stop in the grass not connected to pedestrian paths, sidewalks, or curb ramps. A lack of pedestrian links within the bus stop catchment area can be a barrier for bus riders, especially for people in wheelchairs, senior citizens, and youth.

Bicycle compatibility: Transit systems can interconnect with bicycling networks to expand the transit catchment area. Many transit agencies in the U.S. incorporate bike racks at transit stops. More than 100 transit systems carry bikes on buses and trains. ${ }^{12}$ Considering the Bloomington-Normal community's investment in the bikeway network, bicycle-friendly bus routes can be expected to extend the range of people who can reach and use transit.

Implementation priority: Complete Streets design along transit routes can support neighborhoods with higher transit propensity, by considering factors such as land use, road design and classification, vehicle target speed, and traffic volume. Street segments that are listed as high priority for implementation in the City of Bloomington Bicycle Master Plan, the Bloomington Streets Master Plan, and the Town of Normal Bicycle and Pedestrian Master Plan are discussed in this study.

[^3]
## Crosswalk Design Guidance

Uncontrolled pedestrian crossing locations correspond to higher pedestrian crash rates than controlled locations, frequently due to inadequate pedestrian crossing accommodations. Application of the appropriate design for crosswalks at unsignalized locations is critical. Factors such as the number of lanes, speed limits, and average number of vehicles per day are key factors in determining the best design. The Federal Highway Administration has created a program named Safe Transportation for Every Pedestrian (STEP) to help transportation agencies address crashes by using countermeasures with known safety benefits at uncontrolled crossing locations. A process for identifying the best design is outlined in the following graphic, Figure 7, that is included in the report, Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.

Figure 7: Process diagram for selecting countermeasures at uncontrolled pedestrian crossing locations.


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Table 3 provides a summary of measures by roadway type from the same report. The table offers guidance for review, design, and implementation of the best countermeasures for the priority locations discussed later in this study.

Table 3: Application of pedestrian crash countermeasures by roadway feature ${ }^{13}$

| Roadway Configuration | Speed Limit |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\leq 30 \mathrm{mph}$ | 35 mph | $\geq 40 \mathrm{mph}$ | $\leq 30 \mathrm{mph}$ | 35 mph | $\geq 40 \mathrm{mph}$ | $\leq 30 \mathrm{mph}$ | 35 mph | $\geq 40 \mathrm{mph}$ |
|  | Vehicle AADT <9,000 |  |  | Vehicle AADT 9,000-15,000 |  |  | Vehicle AADT > 15,000 |  |  |
| 2 lanes* | $\begin{array}{llll} 1 & 2 & 3 & 4 \\ 5 & 6 & & \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{llll} 1 & & 3 & 4 \\ 5 & 6 & & \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ \hline & 4 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 6 \\ 7 \end{array}$ |
| 3 lanes with raised median* | $\begin{array}{cccc} 1 & 2 & 3 & 4 \\ 5 & & & \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{lll} 1 & 3 & 4 \\ 5 & 7 \\ \hline \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{lll} 1 & 3 & 4 \\ 5 & 7 & \\ \hline \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ |
| 3 lanes w/o raised median ${ }^{\dagger}$ | $\begin{array}{llll} 1 & 2 & 3 & 4 \\ 5 & 6 & 7 & \\ \hline \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 0 \end{array}$ | $\begin{array}{llll} 1 & & 3 & 4 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 4 \\ 5 & 7 & \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 0 \end{array}$ | $\begin{array}{lll} 1 & & 3 \\ 5 & 6 & 7 \end{array}$ |
| 4+ lanes with raised median ${ }^{\ddagger}$ | $\begin{array}{cc} 1 & 3 \\ 5 & \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 7 \end{array}$ |
| 4+ lanes w/0 raised median ${ }^{\ddagger}$ | $\begin{array}{llll} 1 & & 3 \\ 5 & 6 & 7 & 8 \end{array}$ | $\begin{array}{lll} 1 & 3 & \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 608 \end{array}$ | $\begin{array}{lll} 1 & 3 & \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{ll} 1 & 3 \\ 5 & 6 \\ \hline \end{array}$ | $\begin{array}{lll} 1 & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 1 & 3 \\ 5 & 6 & 7 \end{array}$ | $\begin{array}{lll} 11 & 3 \\ 5 & 6 & 7 \end{array}$ |

*One lane in each direction tone lane in each direction with two-way left-turn lane ${ }^{ \pm}$Two or more lanes in each direction

Given the set of conditions in a cell,

* Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
\# Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

1 High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels
2 Raised crosswalk
3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
4 In -Street Pedestrian Crossing sign
5 Curb extension
6 Pedestrian refuge island
7 Pedestrian Hybrid Beacon
8 Road Diet

This fable was developed using informafion from: Zegeer, C. V., Stewart, J. R., Huang, H. H., Lagenwey, P. A., Feaganes, J., \& Campbell, B. J. (2005), Safefy effects of marked versus unmarked crosswalks af uncontrolled locations: Finat report and recommended guidelines (No. FHWA-HRT-04-100); Manuat on Uniform Traffic Control Devices, 2009 Edifion, Chapfer 4F. Pedestrian Hybrid Beacons; the Crash Modification Factors (CMF) Clearinghouse websife (hifp://www. cmfclearinghouse.org); and the Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE) websife (hifp://www.pedbikesafe.org/PEDSAFE/).

## Proposed Infrastructure Projects

Locations for infrastructure improvement are based on the following four considerations:

- Pedestrian access to bus stops:

To provide safe access for bus riders, bus stops should be connected with sidewalks and close to intersections or pedestrian crossings. Where bus stops are in-between roadway intersections that are 800 to 1000 feet apart, a mid-block crosswalk should be provided to reduce the number of pedestrians crossing the street at unmarked locations. This study identified bus stops that

[^4]are not supported by a crosswalk within a 400-foot distance in ArcGIS, or not connected with existing sidewalk and side path systems.

- Existing roadway conditions regarding pedestrian safety:

Major roads with higher traffic volumes, greater width and/or higher speeds can increase the risk and severity of pedestrian crashes while people are crossing the street. This study evaluates road conditions in terms of pedestrian safety considering the parameters of roadway classification (e.g. highway, major arterial, collector), posted speed and number of travel lanes.

- McLean County transit propensity model:

This study takes into consideration both transit ridership and the propensity results from the McLean County transit propensity model. The priority bus stops are aligned with the criteria adopted by the Connect Transit Board which includes locations that have at least 15 passenger boardings a day.

- Complete street plans and proposed implementations:

Sidewalk, crosswalk and side-path implementation recommendations are consistent with the guidelines in the City of Bloomington Bicycle Master Plan, the Normal Bicycle and Pedestrian Master Plan, the Main Street Transportation Improvement Feasibility Study, and other municipal plans and policies.

Table 4 identifies 13 street segments as the candidates for complete street implementation and summarizes the method as an evaluation matrix that highlights how much each segment has fulfilled the criteria and at what level of priority they should be considered for implementation. Figure 9 shows the locations of these street segments along with major trip destinations, and the bus stops that are either less connected or have a high ridership.
Table 4: Evaluation Matrix


McLean County Complete Streets Implementation Study

Implementation Continuum:

- ENERGIZE. Bus stop areas where there are above average market conditions for complete streets improvement. These areas typically need targeted, short term actions to achieve intensified pedestrian activity and transit ridership.
- CATALYZE. Bus stop areas with average market conditions for TOD and that are of less priority in existing plans for specific infrastructure or amenity improvements. Catalytic amenity investments should yield sought-after complete street improvement results.
- STRATEGIZE. Bus stop areas that show infrastructure deficiencies but are of low market potential, or low development readiness, for complete street development in the near term. Planning is needed to guide future investment and infrastructure projects in these locations.

Figure 8: Proposed Street Segments for Complete Street Implementation


McLean County Complete Streets Implementation Study

## Street Segments Proposed for Priority Complete Streets Implementation

This section provides a brief summary of characteristics and proposed changes for each of the street sections for implementation of complete streets measures.

## 1. N Main St (Rabbs to Gregory), Normal

| \# of Bus Stops | 10 | Posted speed | $30-35 \mathrm{mph}$ |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 4 |
| Bus stop connection to crosswalk | low | Transit ridership | high |
| Road Class | highway | Transit dependent population | high |
| Priority of implementation | Road Diet High Priority in City of Normal Main Street: A Call for <br> Investment. | Consider implementation of existing road diet plan, focus on <br> intersection treatment at Rabbs Rd, Summit St, and Bowles St, <br> provide mid-block crossing at bus stops. Potential treatments <br> include crosswalks, pedestrian refuge islands, and/or rapid <br> flashing beacons. |  |
| Proposed changes |  |  |  |



McLean County Complete Streets Implementation Study
2. N Main St (College to Division couplet), Normal

| \# of Bus Stops | 3 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 2 |
| Bus stop connection to crosswalk | medium | Transit ridership | medium |
| Road Class | highway | Transit dependent population | Medium-high |
| Priority of implementation | Road Diet High Priority in City of Normal Main Street: A Call for <br> Investment. |  |  |
| Proposed changes | Provide crosswalks with appropriate signage. Increase bus stop <br> visibility. |  |  |



McLean County Complete Streets Implementation Study
3. N Main St (Division to Locust), Bloomington

| \# of Bus Stops | 4 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 3 |
| Bus stop connection to crosswalk | medium | Transit ridership | high |
| Road Class | highway | Transit dependent population | high |
| Priority of implementation | Road diet and buffered bike Lanes in City of Bloomington Bicycle <br> Master Plan. |  |  |
| Proposed changes | Provide crosswalks, appropriate signs, and/or flashing beacons <br> near bus stops were needed. |  |  |



McLean County Complete Streets Implementation Study
4. N Main St (Oakland to RT Dunn), Bloomington

| \# of Bus Stops | 4 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 3 |
| Bus stop connection to crosswalk | medium | Transit ridership | Medium-high |
| Road Class | highway | Transit dependent population | high |
| Priority of implementation | Widen parkway/sidewalk in City of Normal Main Street: A Call <br> for Investment. |  |  |
| Proposed changes | Provide mid-block crosswalks at key bus stops including ADA <br> ramps. |  |  |



McLean County Complete Streets Implementation Study
5. N Main St (Veterans Pkwy to Hamilton), Bloomington

| \# of Bus Stops | 2 | Posted speed | 45 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | Medium-low | \# of lanes | 4 |
| Bus stop connection to crosswalk | low | Transit ridership | medium |
| Road Class | highway | Transit dependent population | Medium-low |
| Priority of implementation | Bus stops at this segment exhibits high ridership but are not well <br> connected with sidewalk and pedestrian safety infrastructure. |  |  |
| Proposed changes | Crosswalks at signalized intersections should include pedestrian <br> countdown signals. |  |  |



McLean County Complete Streets Implementation Study
6. E College Ave (Grandview to Veterans Pkwy), Normal

| \# of Bus Stops | 6 | Posted speed | 20-30mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 4 |
| Bus stop connection to crosswalk | low | Transit ridership | high |
| Road Class | Minor arterial | Transit dependent population | Medium-high |
| Priority of implementation | This is one of the high-ridership, high-propensity areas. |  |  |
| Proposed changes | Add pedestrian crossings mid-block near bus stops with refuge <br> island treatment and pedestrian activated rapid flashing <br> beacons. |  |  |



McLean County Complete Streets Implementation Study
7. Gregory Street (Adelaide to Main), Normal

| \# of Bus Stops | 2 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 4 |
| Bus stop connection to crosswalk | low | Transit ridership | high |
| Road Class | Minor arterial | Transit dependent population | Medium-high |
| Priority of implementation | Bus stops on this street have high daily boardings, yet bus <br> riders are likely to find it difficult to cross the four-lane street. |  |  |
| Proposed changes | Provide pedestrian crossings mid-block near bus stops with <br> refuge island treatment and pedestrian activated rapid flashing <br> beacons. |  |  |



McLean County Complete Streets Implementation Study
8. E Lincoln St (Mercer to Veterans Pkwy), Bloomington

| \# of Bus Stops | 6 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | $2 / 4$ |
| Bus stop connection to crosswalk | Medium-low | Transit ridership | medium |
| Road Class | Major collector | Transit dependent population | Medium-low |
| Priority of implementation | Road diet conversion with bike lanes or buffered bike lanes as <br> recommended in the City of Bloomington Bicycle Master Plan. |  |  |
| Proposed changes | Implement the bike lane plan, complete the sidewalk, improve <br> the connection of bus stops to sidewalks and bikeway. |  |  |



McLean County Complete Streets Implementation Study
9. W Market St (Morris to East), Bloomington

| $\#$ of Bus Stops | 8 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 2 |
| Bus stop connection to crosswalk | medium | Transit ridership | Medium-high |
| Road Class | Minor arterial | Transit dependent population | Medium-high |
| Priority of implementation | This area shows high transit propensity. |  |  |
| Proposed changes | Improve bus stop visibility and add pedestrian facilities where <br> lacking. |  |  |



McLean County Complete Streets Implementation Study
10. E Front St (Madison to East), Bloomington

| \# of Bus Stops | 3 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 2 |
| Bus stop connection to crosswalk | medium | Transit ridership | high |
| Road Class | Local road | Transit dependent population | high |
| Priority of implementation | Close to Bloomington downtown area, this road segment carries <br> high public transportation ridership and already has pedestrian <br> and bike facilities in place. However mid-block bus stops <br> contribute to pedestrians' unsafe crossing behavior. |  |  |
| Proposed changes | Add safe pedestrian crossings at bus stops and provide <br> appropriate signage |  |  |



McLean County Complete Streets Implementation Study
11. IAA Drive (Kurt to Vista), Normal-Bloomington

| \# of Bus Stops | 4 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | high | \# of lanes | 2 |
| Bus stop connection to crosswalk | medium | Transit ridership | medium |
| Road Class | Major collector | Transit dependent population | medium |
| Priority of implementation | This part of the roadway connects to the Constitution Trail but <br> does not have sidewalks on the east side of the street. Bus stops <br> on the other side of major entrance/exits are not conspicuous <br> and have no crosswalk connections. |  |  |
| Proposed changes | Complete the sidewalk. Provide crosswalks at Rowe Dr., the <br> Empire Crossing, and where the walking path cuts through. |  |  |



McLean County Complete Streets Implementation Study
12. Parkway Plaza Dr (Veterans Pkwy to Susan), Normal

| \# of Bus Stops | 2 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | low | \# of lanes | 4 |
| Bus stop connection to crosswalk | low | Transit ridership | Medium-high |
| Road Class | Minor collector | Transit dependent population | Medium-high |
| Priority of implementation | The bus stops in front of Parkway Plaza shopping center have <br> high bus ridership but could be improved for better rider <br> experience, particularly while waiting for the bus. |  |  |
| Proposed changes | Provide sidewalk, crosswalks, and bus shelters. |  |  |



McLean County Complete Streets Implementation Study
13. W Beaufurt St (Main to Linden), Normal

| $\#$ of Bus Stops | 4 | Posted speed | 30 mph |
| :--- | :--- | :--- | :--- |
| Bus stop connection to sidewalk | low | \# of lanes | $2-4$ |
| Bus stop connection to crosswalk | low | Transit ridership | high |
| Road Class | Minor collector | Transit dependent population | Medium-high |
| Priority of implementation | This street is in the area with the highest bus ridership in the <br> community. |  |  |
| Proposed changes | Improve bus stop facilities, provide sidewalks and crosswalks. |  |  |



## CITY OF BLOOMINGTON REPORT FOR THE TRANSPORTATION COMMISSION

## November 20, 2018

| $\begin{gathered} \text { CASE } \\ \text { NUMBER: } \end{gathered}$ | SUBJECT: | ORIGINATING FROM: |
| :---: | :---: | :---: |
| INFORMATION | Summary of Citizen Comments/Complaints Received December, 2018 | Philip Allyn, PE, PTOE City Traffic Engineer |
| REQUEST: | Item submitted as information for the Transportation Commission. Any feedback or comments are welcome. |  |

## STAFF RECOMMENDATION: N/A

Staff submits the following information to the Commission. Any comments or feedback is appreciated.

## 1. ATTACHMENTS:

a. None

## 2. BACKGROUND AND SUPPLEMENTAL INFORMATION:

The following comments were received by the Engineering Department between November 13, 2018 and December 10, 2018 or are updates of previous comments (additions to previous updates are Bold-Underlined:

1) Received request from Dunraven Homeowner's Associate to restrict parking on west side of Glenbridge between Ballybunion and Dunloe. Letters were delivered to neighborhood requesting feedback on proposed parking ban on west side of street. Responses received overwhelmingly favor restricting parking. Mailed letter to residents notifying them that the parking restriction would be put in place.
Engineering will evaluate over next 90-120 days and incorporate into City Code provided there are no unintended consequences that arise. Signs scheduled to be installed on or after April 24; no additional comments received to date. Continuing to monitor until August 30, 2018. No additional complaints or comments received. City Code will be updated to reflect changes. Item considered closed.
2) Received request to review restricting parking to one side of street and install traffic calming on Tanner between Park Lake and Springfield. Reviewed file and location has been reviewed several times in past years with no findings of excessive speeding. Speed and traffic data to be gathered to evaluate request when weather and staffing allows.
3) Received request to remove a No Parking sign in front of a house and an old utility pole which no longer has any lines on it along the back of the property. Reviewed request: parking restriction required to allow room for school buses and garbage trucks to turn around (house is on the end of a street without a cul-de-sac). Currently verifying owner of the pole, believed to be Ameren about its removal. Confirmed Ameren owned pole and contacted them about removal; also provided contact info to resident. Resident indicated school buses no longer use her street (child no longer school age) and garbage trucks use alley. Discussed further with internal staff on sign and confirmed that parking restriction needed to allow garbage trucks to turn from the alley. Staff to replace existing faded sign.
4) Received request to allow parking along the south side of Westport Court. Reviewed current restrictions and signing. Letters being developed to be delivered to neighborhood requesting feedback on proposed parking changes. Feedback received in favor of allowing additional parking. Signs scheduled to be installed on or after May 3; no additional comments received to date. Continuing to monitor until September 30, 2018. No additional complaints or comments received. City Code will be updated to reflect changes. Item considered closed.
5) Received request from multiple residents along the 1300 and 1400 blocks of Oak Street to restrict parking with a Tow Away Zone on both sides of the street from 6 am to 6 pm , Monday through Friday. Letters being developed to be delivered to neighborhood requesting feedback on proposed parking ban. Results returned with enough votes to put in the requested parking ban. However, some of the comments against the parking ban indicated a significant hardship (i.e., at least one house without a driveway who needs to be able to park in the street). We are working to contact these individuals to discuss potential options. Implemented requested parking ban on July 17, continuing to monitor until October 30, 2018. Immediately following change, received minor complaints that were able to be resolved. No additional complaints or comments received. City Code will be updated to reflect changes. Item considered closed.
6) Received request for handicap spot on 1200 block of Oak Street. Waiting to receive supporting documentation of plaque or license plate from requestor.
7) Received Request to replace faded parking restriction signs along Washington Street. Need to visit site and submit work order to sign crew.
8) Received complaint of speeding on E. Oakland east of Hershey, especially around Watford. Due to hill east of Warford, can be worrisome turning from Watford onto Oakland and being overtaken. Request reduction from 40 mph to 30 mph . Completed field check. There is a hill to the east of Watford limiting the view of the intersection from westbound Oakland. There is also an existing "intersection warning" sign with a 30 mph plaque. Could consider speed reduction, but would need speed study. 85 th percentile likely closer to 40 mph than 30 mph . Will gather speed data and review crash data.
9) Received request for increased pedestrian warnings at US 51 (Madison) and Front Street. To be reviewed following completion of Front Street work and likely referred to IDOT for consideration. May modify crosswalks with new ADA ramps.
10) Received request for clearly marked drop-off at the Arena on US 51 (Madison). To be reviewed and responded to but likely unable to provide due to moving lanes of traffic and IDOT jurisdiction. Passenger loading and unloading zone is currently posted on Front Street west of Madison.
11) Received request for crosswalk warnings at East and Locust for crossing from BCPA to/from north parking lot. To be reviewed and responded to after updating crosswalk policy.
12) Received request to relocate "CT" to Front Street by Arena. Need to contact submitter and clarify.
13) Received four coordinated requests for an all-way stop or other pedestrian warning enhancements at Stone Mountain and College for pedestrians walking north and south to/from Tipton Park. Due to close proximity to Northpoint Elementary School, will be reviewed and data collected when school resumes in the fall. Traffic counting completed. Traffic signal warrants not met. All-way stop warrants not met. Sent work order to mark crosswalk across College and install pedestrian warning signs at the crosswalk and in advance. Crosswalk has been marked. Warning signs still needed. Need to evaluate sign indicating school crossing is further west at the school.
14) Received complaint about truck traffic on Fort Jesse Road. Need to review.
15) Received request for traffic signals at Fort Jesse Road and Airport Road. Intersection currently 4 -way stop with plans to signalize in near future. Traffic counting and data collection completed. Need to review signal warrants.
16) Received complaint of speeding and request for "Children at Play" signs on Gill Street at pass-through-cul-de-sac west of Airport. Need to evaluate "Yield" sign usage for clarity.
17) Received complaint of Park Drive on Chestnut being blocked by park traffic. Need to contact resident and clarify concern.
18) Received request for traffic calming on Eastport Drive between Clearwater and Empire. Need to gather speed and traffic volume data and compare to Traffic calming policy.
19) Received request for traffic calming on Gloucester Circle between Hersey and Dover. Collected speed and traffic volume data. Does not qualify for traffic calming under Traffic Calming Policy (excessing speeding threshold not met).
20) Received request for traffic calming on W. Oakland between Livingston and Euclid. Need to gather speed and traffic volume data and compare to Traffic calming policy.
21) Received request to add flashing yellow arrows at Emerson and Towanda due to confusion of eastbound left turn drivers and non-90 degree angle of intersection. Contacted requester and indicated flashing yellow arrows are beginning to be incorporated as other signal maintenance work is completed at an intersection. This particular location will be reviewed closer due to unique geometry for higher priority of flashing yellow arrow implementation.
22) Received report of missing no parking sign at McGregor and Oakland. Need to visit site and review.
23) Received report of defaced handicapped parking sign on University. Visited site, graffiti cleaned from sign. Need to complete work order for replacement of faded parking sign at same location.
24) Received request to remove school zone on southbound Center Street by Thornton's for Corpus Christi is no longer needed due to school closing. Need to confirm if this zone was just for Corpus Christi and not also Bent Elementary.
25) Received request for school crossing sign added at Washington and Darrah. Need to determine which intersection leg is being requested and evaluate request.
26) Received concern about an increase in collisions on GE Road between Golden Eagle and Towanda Barnes Road. Need to pull accident data, review for trends and evaluate options.
27) Received two separate concerns about commercial parking on residential portion of Norma Drive. Need to contact residents and discuss.
28) Received request for stop or yield sign at Ark Dr. and Matthew Dr. ("Tee" intersection). Need to visit site and review.
29) Received request for no parking in front of a residence on Colton due to constant blocking of driveway. Need to visit site and review.
30) Received complaint of landscaping creating a sight obstruction at Peirce and Mercer. Need to visit site and review.
31) Received complaint of out of town school buses parking and blocking alley behind Elmwood Road and the BHS football/baseball fields during school sports activities. Need to visit site and review.
32) Received complaint about new power poles at Hershey and Jumer causing a sight obstruction. Visited site to review. Contacted Ameren to discuss poles. Ameren agreed at least one of the poles may not be necessary; they are reviewing internally.
33) Received request for street light at College and Stone Mountain. Evaluating options to add a street light to the southeast quadrant to light the south leg and the bike path crosswalk. Submitted request to Ameren for an estimate to install.
34) Received request for additional school zone signage around Corpus Christi School. Need to visit site and review current signage.
35) Received complaint of speeding on GE Road between Towanda Barnes and Airport Road with numerous accidents on a consistent basis. Request study of adding traffic signals and/or stop signs. Contacted and will gather speeding and crash data.
36) Received request to limit parking on Beecher between Fell and Horenberger due to sight distance reasons. Need to visit site and evaluate.
37) Received request from Benjamin Elementary School for No Parking along Black Oak Lane adjacent to the school. Upon site visit and reviewing current code and signing, parking is already prohibited between Ireland Grove and Jackpine Road. Request considered closed.
38) Received complaint of stop sign obstructed by a tree limb at westbound Raspberry and Woodbine. Need to evaluate and coordinate with Parks Dept. for trimming.
39) Received notification of missing No Parking signs on S. Williamsburg and Yorktown. Existing signs have severely faded. Need to visit site and replace signs as needed.
40) Received concern about no turn on red at Six Points Road and S. Morris. Need to contact to clarify.
41) Received request for explanation on why parking not being allowed on Elmwood between Colton and Towanda. During football games many cars park on Colton, creating unsafe conditions, when they should be able to park on Elmwood. Need to research and evaluate.
42) Received complaints of bicyclists blowing stop sign at Bunn / Buchanan and Buchanan / Clayton. Request to evaluate options for additional signage and increased enforcement.
43) Received request for stop sign on Baker at Roosevelt (T intersection). Will review accident history and evaluate sight distance.
44) Received concern about a no parking sign at Lincoln and Main. Need to contact and determine exact concern.
45) Received concern about inadequate school zone signage for Corpus Christi School. Requested multiple blinking lights. Complained of cars extending out onto Lincoln during pickup and drop-offs. Need to visit site and review school zone signage and discuss modifications to drop-off and pickup routing on school site with school.
46) Received concern about parking availability in neighborhoods surrounding Sarah Raymond School during school drop-off, pickup, and special events. Need to evaluate parking in area and discuss with school.
47) Received concern about speeding and stop sign running in neighborhoods surrounding Corpus Christi School during school drop-off and pickup to avoid allway stop at Lincoln and Mercer. Need to discuss modifications to drop-off and pickup routing on school site with school.
48) Received concern about number of crashes at Lee and MacArthur. We have been attempting several ways over last several years to reduce crashes at this intersection. We continue to look for new solutions.
49) Received request for school crossing guard at Irving.
50) Received request for curb painting at Summerfield and Hershey.
51) Received request for temporary traffic signals at Rhodes Lane and US 150. To be reviewed and referred to IDOT for consideration. This intersection will be eliminated with the Hamilton Road project.
52) Received multiple requests for arrows to be painted on Evans Street indicating direction of travel. Currently exploring options to better control wrong-way traffic.
53) Received complaint of cars not stopping for stopped school bus at Harvest Pointe and Dry Sage Circle. Request 4-way stop, reduced speed limit or Children at Play sign. Contacted and discussed issues with submitter. There are several repeat offenders. Encouraged them to contact the school to request the bus driver submit a report of failure to stop when it occurs. Encouraged them to take photos and document and submit to the police department for enforcement. Contacting the school district to inquire about revising bus pickup locations to eliminate the need for children to cross Harvest Pointe. Need to research posted 35 mph speed limit on Harvest Pointe.
54) Received request for stop sign at corner of Sugarberry and Winterberry in the Grove ("T" intersection). Need to evaluate and complete work order if sign is warranted.
55) Received comment indicating pavement markings on Chestnut between Center and Main have not been restored since the street was resurfaced. Responded that weather has delayed the contractor from placing the new markings. Temporary markings will be placed since it is unlikely that weather will allow the permanent markings to be restored prior to winter. Temporary markings have been placed. Permanent markings will be installed in the spring when weather allows. Item considered closed.
56) Received request for street light on Cottage between Perry and Graham. Need to visit site and evaluate lighting levels.
57) Received request for handicap markings to be repainted on Clayton at 314 E . Grove Street following resurfacing. Unable to complete this year due to weather, but will repaint in spring.
58) Received concerns about the speed of traffic on Beich Road presenting a hazard to drivers entering and exiting the candy plant. An employee inadvertently pulled onto Beich and was involved in a collision. The interstate presents an optical distraction. Need to review crash data and potentially gather speed data. Posted speed on this rural road is currently 45 mph . Will contact requestor for additional information.
59) Received request to consider changing speed limit on Streid Drive and Oakland between Hershey and Streid to reduce the speed of vehicles on these roads. Speed data currently being gathered and analyzed.
60) NEW: Received notification of missing End School Zone sign on westbound Washington at Washington School. Need to verify and complete work order for replacement.
61) NEW: Received request for removal of handicap parking spot on 700 block of N. McLean due to person no longer living there. Need to verify, complete work order for removal, and update City Code.
62) NEW: Received request for One Way and Do Not Enter signs at Jackson and Four Seasons. Working with owner of this private intersection open to the public to evaluate MUTCD compliant options.
63) NEW: Received notification of missing No Parking sign on east side of East Street north of Empire. Need to verify and complete work order for replacement.
64) NEW: Received notification of missing street name sign at East Street and Empire. Need to verify and complete work order for replacement.
65) NEW: Received request for removal of handicap parking spot on 600 block of W . Chestnut due to person no longer there. Need to verify, complete work order for removal, and update City Code.
66) NEW: Received request for stop or yield signs at Matlock and Dorset Ct., Matlock and Yorkshire Ct., and Matlock and Cumbria Dr. Need to evaluate and complete work order if signs are warranted.

## 3. STAFF RECOMMENDATION:

Staff submits the above information to the Commission. Any comments or feedback is appreciated.

Respectfully submitted,

Philip Allyn, PE, PTOE
City Traffic Engineer


[^0]:    ${ }^{1}$ Anderson, Michael L. "Subways, Strikes, and Slowdowns: The Impacts of Public Transit on Traffic Congestion". No. w18757. National Bureau of Economic Research, 2013.
    ${ }^{2}$ McLean County Regional Planning Commission. "Bring it Bloomington, City of Bloomington Comprehensive Plan 2035". Adopted August 24, 2015. Retrieved May 28, 2018 from http://www.cityblm.org/home/showdocument?id=12032

[^1]:    ${ }^{3}$ FHWA. "Road Diet Informational Guide" "Section 1.1. What is a Road Diet?" https://safety.fhwa.dot.gov/road diets/guidance/info guide/ch1.cfm\#s11
    ${ }^{4} \mathrm{Ibid}$.

[^2]:    ${ }^{5}$ FHWA. Office of Safety Proven Safety Countermeasures. https://safety.fhwa.dot.gov/provencountermeasures/ ${ }^{6}$ World Health Organization. "Road Safety - Speed". http://www.who.int/violence injury_prevention/publications/road traffic/world report/speed en.pdf ${ }^{7}$ AASHTO Journal October 17, 2018. "Studies Say Lower Speed Limits Will Help Improve Roadway Safety." https://aashtojournal.org/2018/08/31/studies-say-lower-speed-limits-will-help-improve-roadway-safety/

[^3]:    ${ }^{8} 1 \mathrm{lbid}$.
    ${ }^{9}$ Kay Fitzpatrick, P.E., Paul J. Carlson, P.E., Mark D. Wooldridge, P.E., and Marcus A. Brewer. "Report 1769-3, Design Factors That Affect Driver Speed on Suburban Arterials". Texas Transportation Institute. https://d2dtl5nnlpfrOr.cloudfront.net/tti.tamu.edu/documents/1769-S.pdf
    ${ }^{10}$ Douglas Harwood. "Effective Utilization of Street Width on Urban Arterials". National Cooperative Highway Research Program Report 330. http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp rpt 330.pdf
    ${ }^{11}$ Institute for Local Government. "Road Diets Make Streets Leaner, Safer, and More Efficient". http://www.ca-ilg.org/sites/main/files/file-attachments/sustainability road diets.pdf
    ${ }^{12}$ https://www.smartgrowthamerica.org/app/legacy/documents/cs/factsheets/cs-transit.pdf

[^4]:    ${ }^{13}$ Lauren Blackburn (VHB), Charles Zegeer (HSRC) and Kristen Brookshire (HSRC). "Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations". FHWA-SA-17-072. Pg. 16.

