Transportation Summary Report

NIRCC

Fiscal Year 2019

Produced by the
Northeastern Indiana Regional Coordinating Council

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INTRODUCTION

The Northeastern Indiana Regional Coordinating Council (NIRCC) is designated as the metropolitan planning organization (MPO) responsible for conducting transportation planning in the Fort Wayne-New Haven-Allen County Metropolitan Planning Area. Working with other public and private agencies, NIRCC strives to implement a transportation system that assures healthy growth and orderly development in the region. One of the main goals of NIRCC is working to develop a well-coordinated, multimodal, and functional transportation system to satisfy existing and future travel demands.

NIRCC and its staff work to provide a complete transportation system, one which will enhance the efficient movement of goods and people, while promoting greater safety and maintaining a conscious regard for the quality of life. For this goal to become a reality, constant monitoring of the existing system must occur. Staff is continually collecting data on the existing system to support the short-range planning process and to identify the challenges and opportunities of the future.

This Transportation Summary Report highlights and visually illustrates some of the transportation planning activities conducted and the products produced by NIRCC during Fiscal Year 2019. The primary purpose of this report is to familiarize the reader with the techniques used by NIRCC and the resulting products to promote a better understanding of the transportation planning process in our community. Included in this report is a summary of the traffic surveillance activities, vehicle miles of travel, intersection and arterial analyses, corridor studies, travel time and delay studies, Fiscal Year 2019-2022 Transportation Improvement Program (TIP) Projects for the Fort Wayne-New Haven-Allen County Metropolitan Planning Area, quarterly review, TITLE VI & ADA, Safety Management System (SMS) activities, congestion management, bicycle/pedestrian planning activities, Red Flag Investigation (RFI) studies, and transit planning.

Traffic Surveillance

Studies completed by the Northeastern Indiana Regional Coordinating Council

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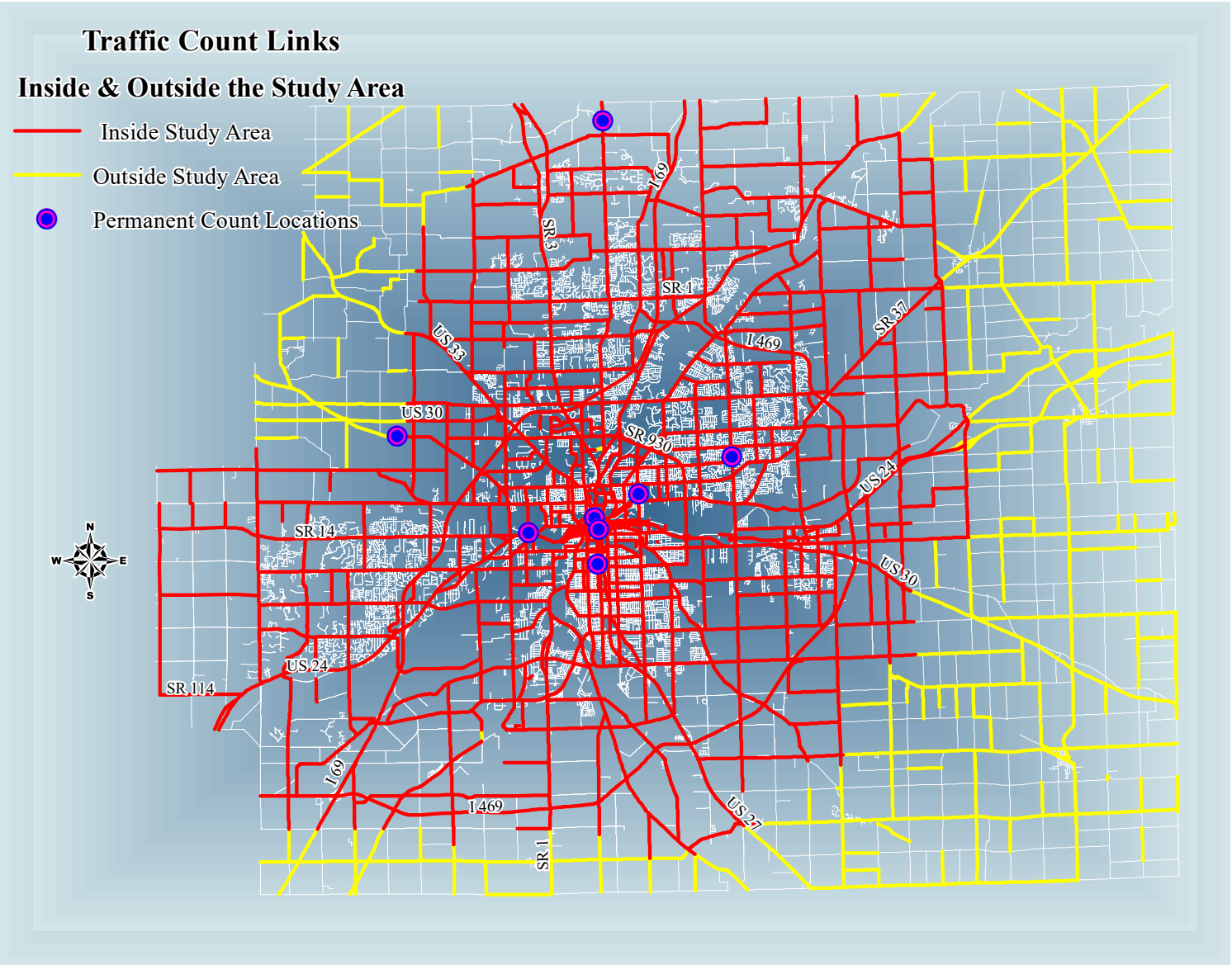
TRAFFIC SURVEILLANCE

Traffic counting provides an important base for short- and long-range transportation planning in an area. NIRCC is responsible for collecting and recording traffic count data for more than 2,000 traffic count links just within Allen County, as illustrated in figure 1. The majority of these links are located within the Metropolitan Planning Area and are shown in red. The yellow links are collected as part of our rural traffic count program. The data is collected on a rotational basis, which varies from link to link. NIRCC employs three types of counts, weekly, temporary ground counts, and classification counts.

The first type of counts are weekly counts. These are done at eight permanent local counting stations, also illustrated in figure 1. The permanent weekly counts are in locations that represent arterials and collectors in four different planning

Figure 1



areas of Fort Wayne and Allen County. The Indiana Department of Transportation (INDOT) maintains permanent counting stations on Interstate 69 and State Road 930. The data from these stations, collected each month, is used to develop monthly count factors. Monthly count factors are important because traffic volumes vary from one season to

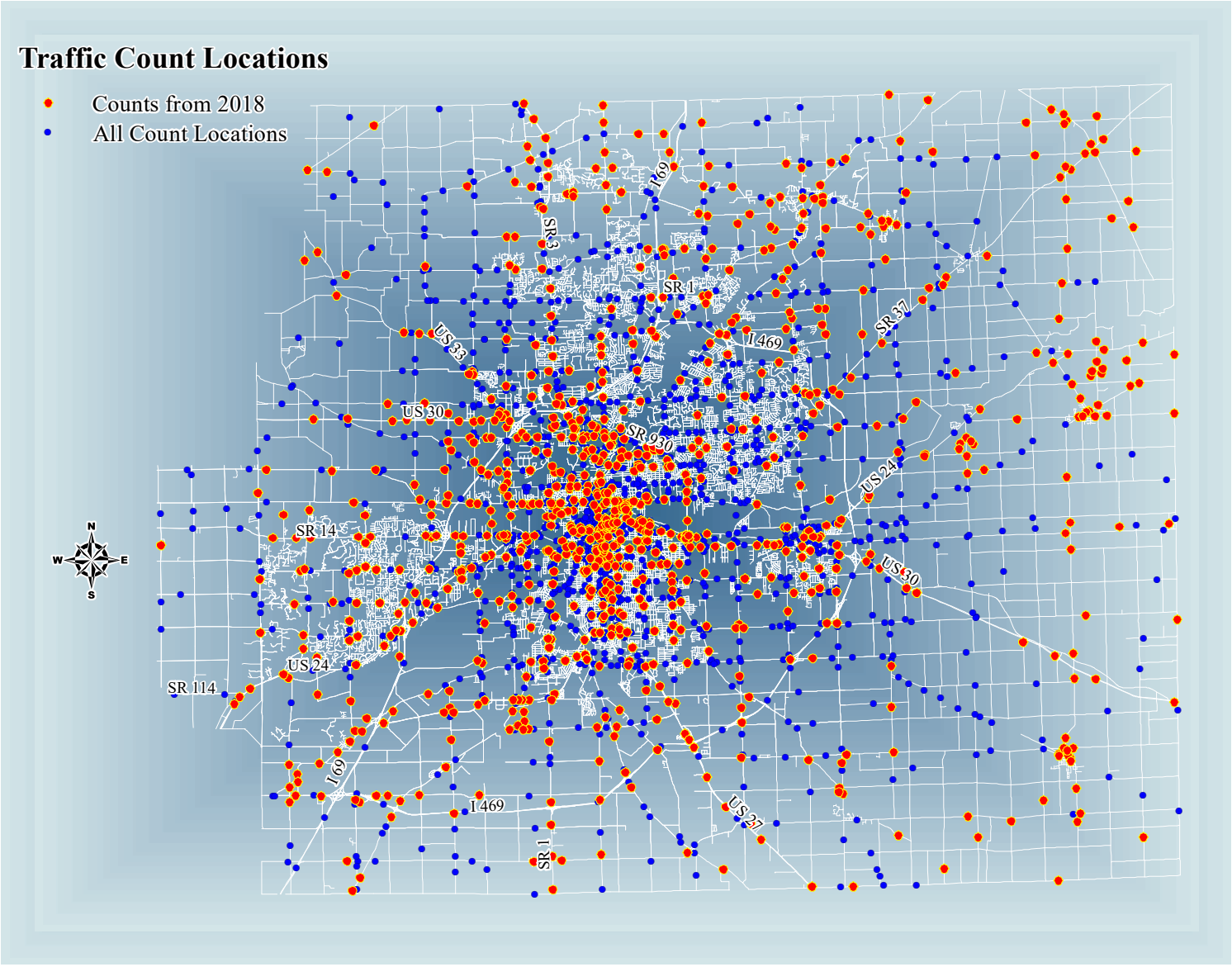


Figure 2

another for various reasons. Weather conditions, construction, economic activities and school/work schedules are just a few of the variables that cause seasonal variations in traffic flow. Traffic count data collected in November may be very different than traffic count data collected in July. Because of these differences, traffic counts throughout the year must be adjusted with these factors depending on the month and season if they are to be accurately compared. These factors are what adjust the raw traffic count data into the Average Annual Daily Traffic (AADT) volumes.

The second type of counts are temporary ground counts. In Count Year 2018 (February - December), data was collected at 1,121 locations within the Metropolitan Planning Area (MPA), as illustrated in figure 2. NIRCC also completed an

additional 21 counts in DeKalb County. Out of these 1142 counts, 250 locations were collected for the state program and 57 locations were collected throughout Allen County as part of our rural traffic count program. All of these counts are forty-eight hour, weekday counts that are conducted region-wide and adjusted for vehicle axle variability and seasonal variability. These counts fulfill three main objectives:

1) sample locations to estimate vehicle miles of travel, 2) sample highway performance monitoring system locations, and 3) collect coverage and special counts for planning and analysis purposes.

The last type of traffic counts are traffic classifications. Classification counts are conducted at selected locations to determine the frequency of various vehicle types. This data is collected, summarized, and then recorded as a component of the transportation characteristic file. The amount of truck traffic at a sampled location is the critical information collected by classification counts. The information is used for general system monitoring and for augmenting the data

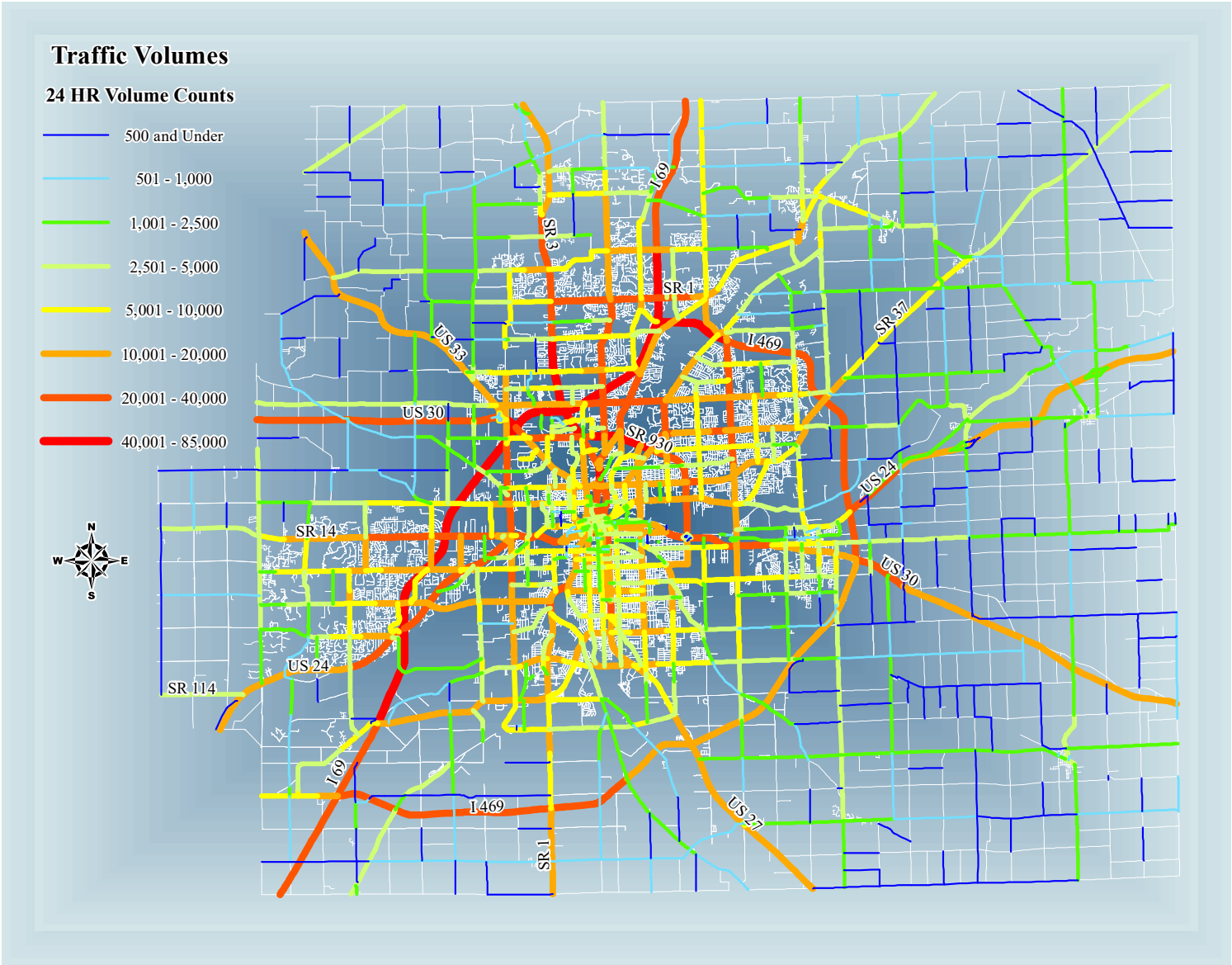


Figure 3

needs of Highway Performance Monitoring System (HPMS) sections and several management systems.

Figure 3 provides the range of traffic volumes present throughout Allen County. Some of the traffic count links shown in figure 1 and figure 3 exhibit links that may look unconnected or isolated. These links appear this way because they are usually part of the local road type samples or the railroad inventory count locations. Since most of the links are not functionally classified, they do not illustrate the continuity that the other links reveal.

Vehicle Miles of Travel

Studies completed by the Northeastern Indiana Regional Coordinating Council

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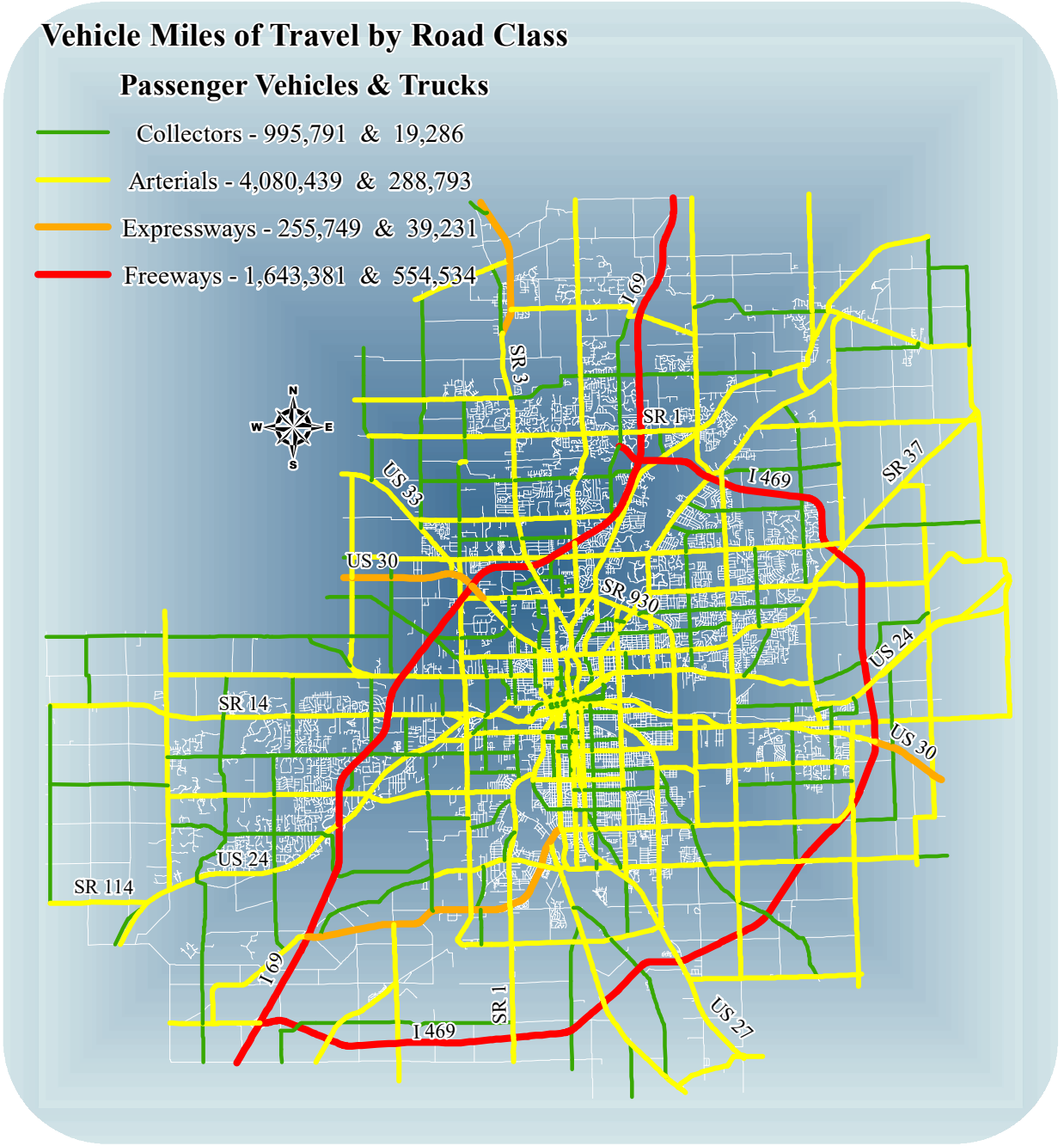
VEHICLE MILES OF TRAVEL

The purpose of the vehicle miles of travel (VMT) estimate is to provide a measurement of regional traffic growth. The VMT estimate incorporates several factors that influence quality of travel within a region including traffic volume, length and type of roadway facility, seasonal traffic variations, and vehicle types. The VMT estimate has been published annually for the region beginning in Fiscal Year 1986. With each annual estimate, NIRCC staff has attempted to improve its sampling and analytical skills to produce the most reliable estimate possible. Region wide, vehicle miles of travel increased from 7,652,446 in 2017 to 7,877,195 in 2018. This represents an increase of 2.94 percent. The VMT increased on arterial streets (1.73%), decreased on collector streets (17.39%) over the previous year. The VMT is illustrated for 2018 in figure 4.

Figure 4



The changes in VMT from year to year can be attributed to a number of possibilities. The most evident reason for VMT changes can be accredited to the increase or decrease in the amount of travel. Other factors that can affect the increase or decrease in VMT can include the price of gasoline, unemployment rates, automobile operating costs, and weather.

The bar chart shown in figure 5 displays the annual VMT estimates for the past 33 years spanning from 1986 to 2018 for the Fort Wayne-New Haven-Allen County Metropolitan Planning Area. It also provides a benchmark for VMT displaying the first estimate done in 1986. These VMT estimates do not include the number of vehicle miles traveled on the local streets. The amount of local samples NIRCC collects is not sufficient to calculate a reliable VMT estimate. For the most part, the general trend shown on the chart shows only slight changes in total VMT throughout the 33 year period but a significant increase since the inception of VMT in 1986. The VMT is anticipated to level out or continue to slightly increase. Even though gas prices and economic hardships may slightly change the growth patterns of VMT, there still seems to be factors that will continue to keep the VMT increasing a little even though some years experienced a slight decrease. These factors include an increase in automobile ownership per family, the spread of development, suburb to suburb travel, a rise in the percentage of two-income families, and other lifestyle changes.

Figure 5

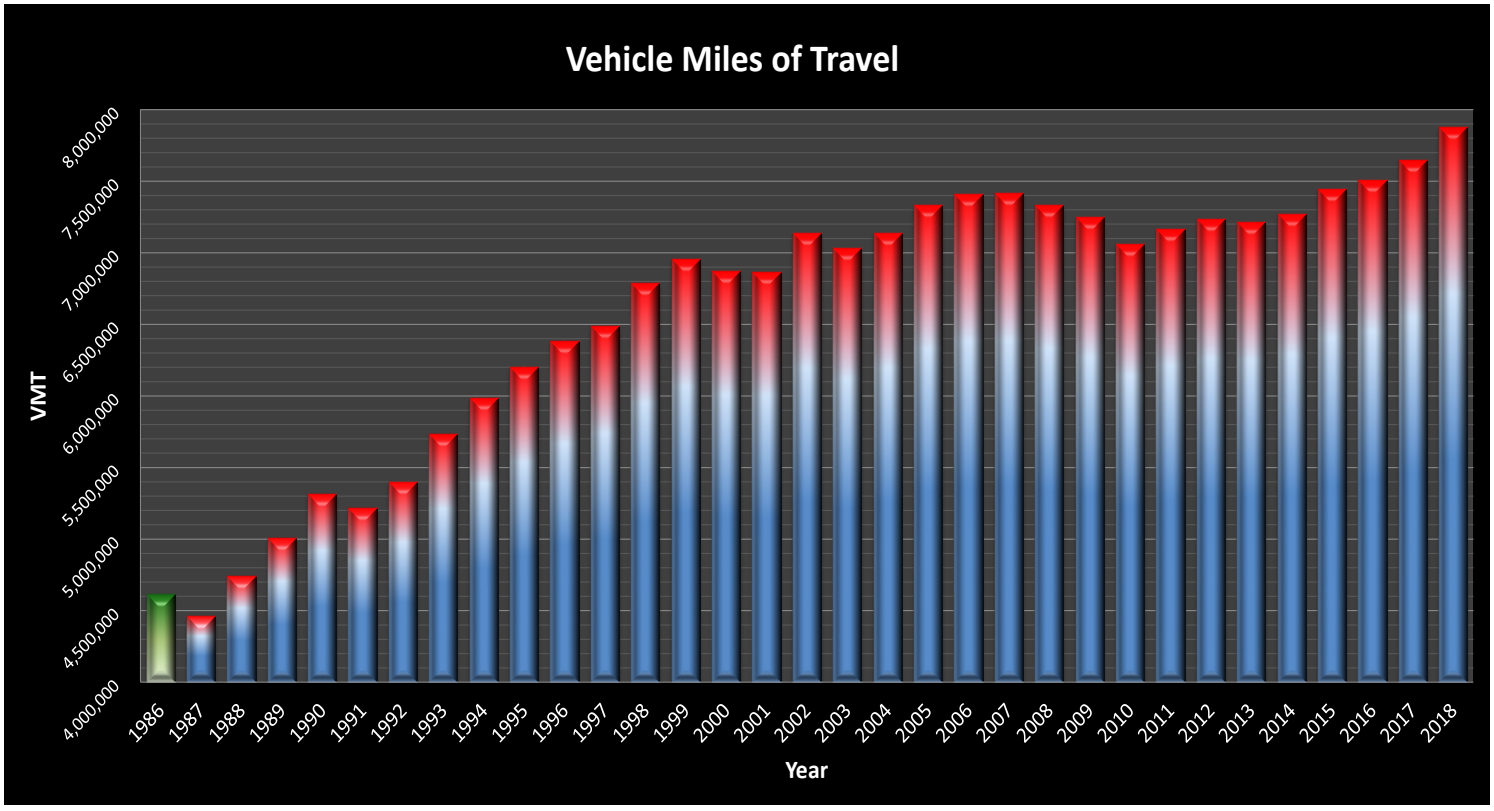
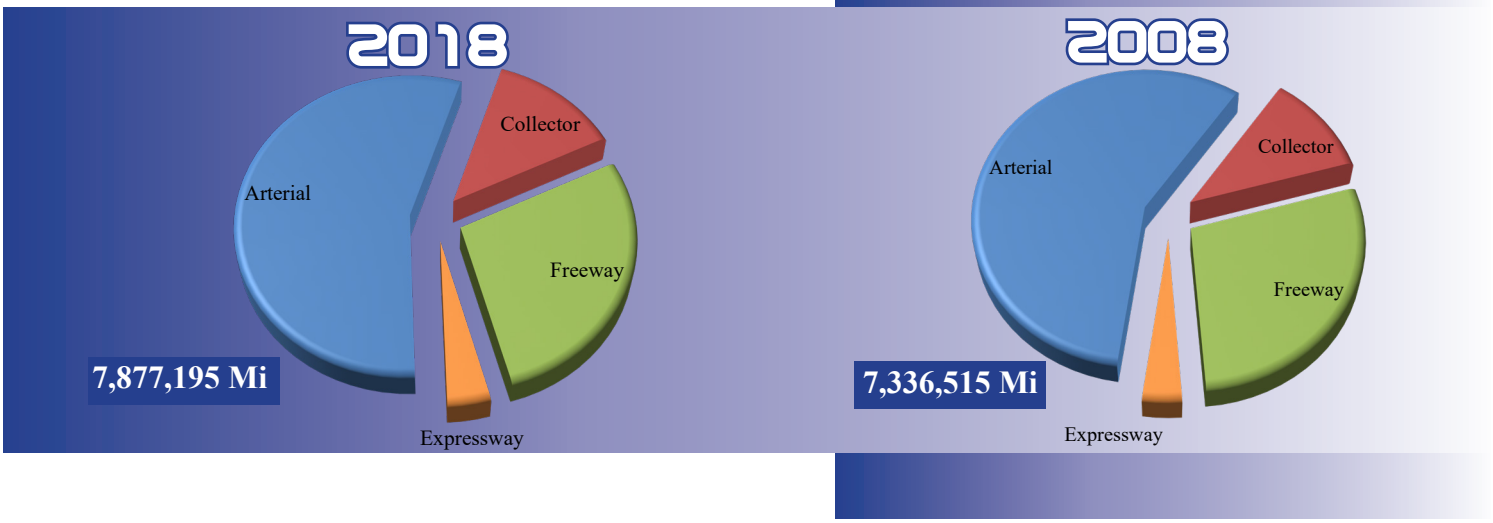


Figure 6 presents three pie charts that represent the proportions of VMT by street classification for the years 1986, 2008, and 2018. As you can see, the proportions of traffic in 1986 are different compared to the proportions of traffic in 2008 and 2018. Freeway traffic increased significantly while Arterial usage decreased. The main reason for these changes can be attributed to the opening of Interstate 469. The first year that Interstate 469 was included in the VMT estimates was in 1996. The addition of Interstate 469 caused a large shift of traffic from the arterial streets to the new freeway system.

Figure 6

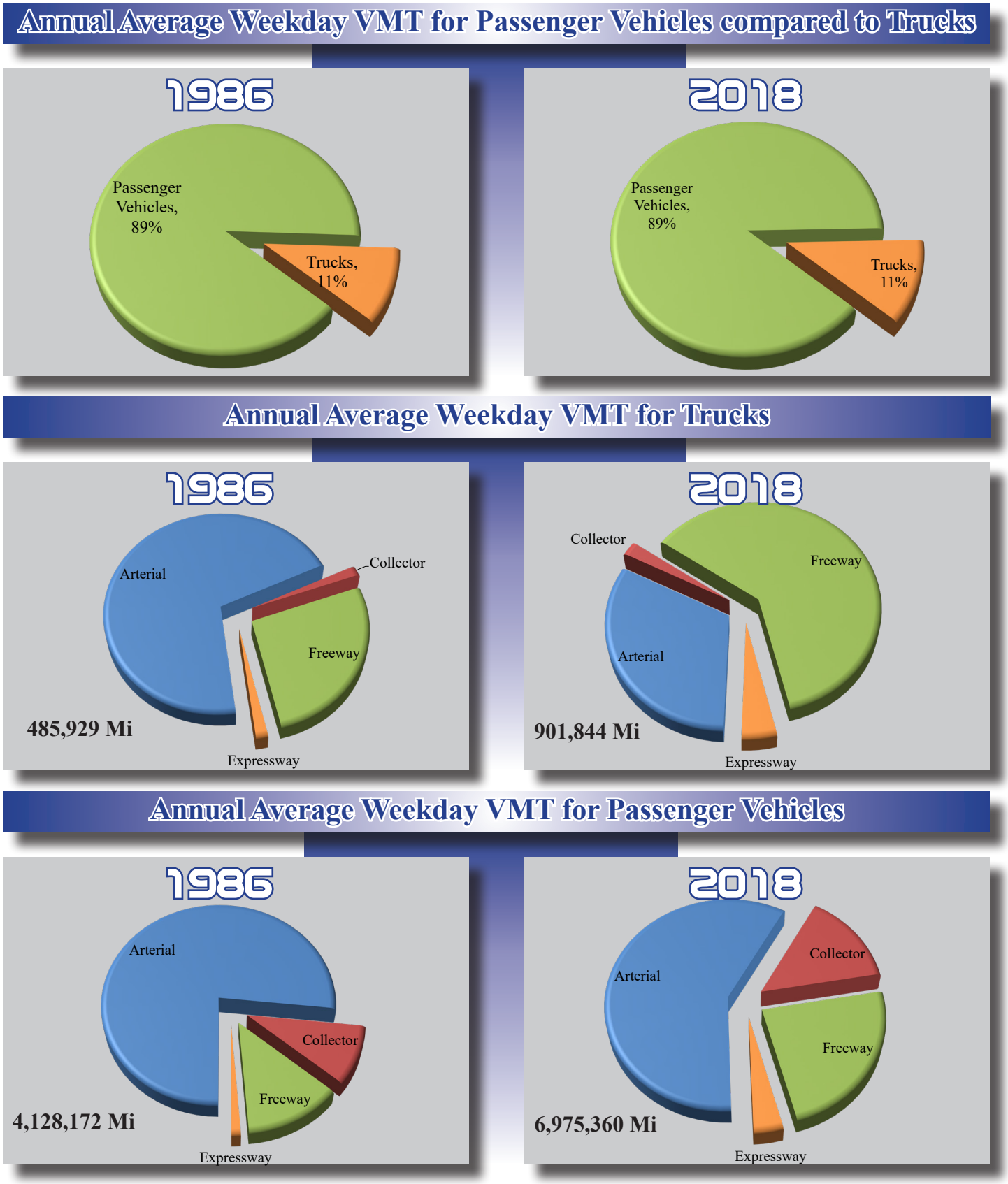
Annual Average Weekday VMT



The VMT is also broken down to show the annual average VMT for passenger vehicles and trucks. The pie charts contained in figure 7 illustrate the VMT for 1986 and 2018. The proportion of truck traffic compared to passenger vehicle traffic is almost identical in 1986 and 2018. A further breakdown of the proportionate usage of passenger vehicles versus trucks on the different road classifications shows some interesting differences between 1986 and 2018. Even though the proportion of truck traffic compared to passenger vehicle traffic is nearly the same for these two years, the distribution of traffic on arterials and freeways are much different. As previously mentioned, the traffic distributions between arterials and freeways changed significantly when Interstate 469 was included into the VMT estimates. The most significant change in traffic distribution between 1986 and 2018 came from the Annual Average weekday VMT totals for trucks. The pie charts show how much of an impact Interstate 469 has made between 1986 and 2018. The utilization of the freeway system has alleviated a significant amount of truck traffic from the arterials.

The pie charts contained in figure 8 illustrate the proportion of passenger vehicle traffic versus truck traffic for each type of road classification. Even though the amounts of truck traffic and passenger vehicle traffic significantly changed

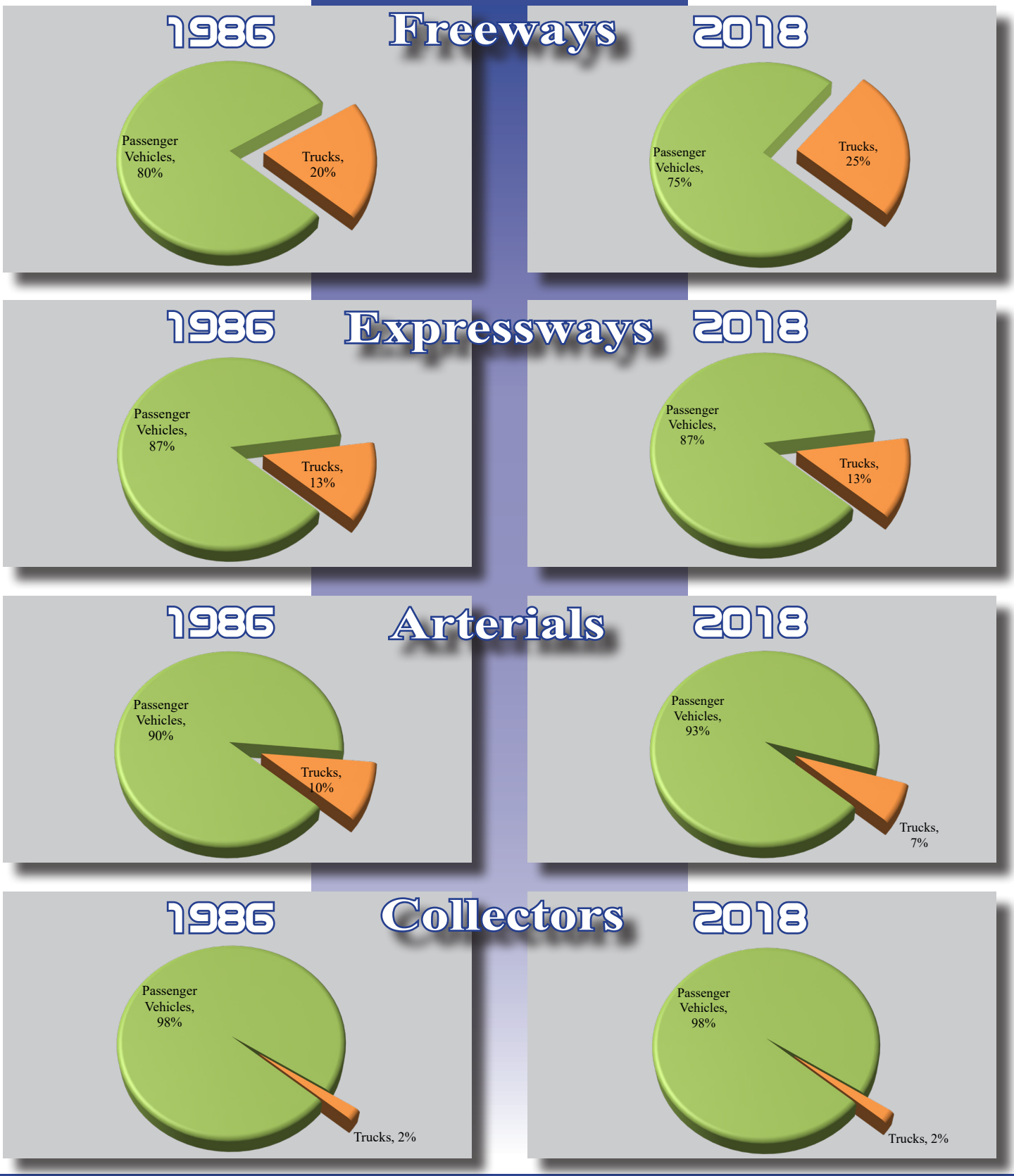
Figure 7



for some of the road classifications, the proportions of passenger vehicles and trucks for each road classification remained very similar between 1986 and 2018.

Figure 8

Percentage of Annual Average Weekday VMT for Passenger Vehicles Compared to Traucks



Intersection and Arterial Analysis

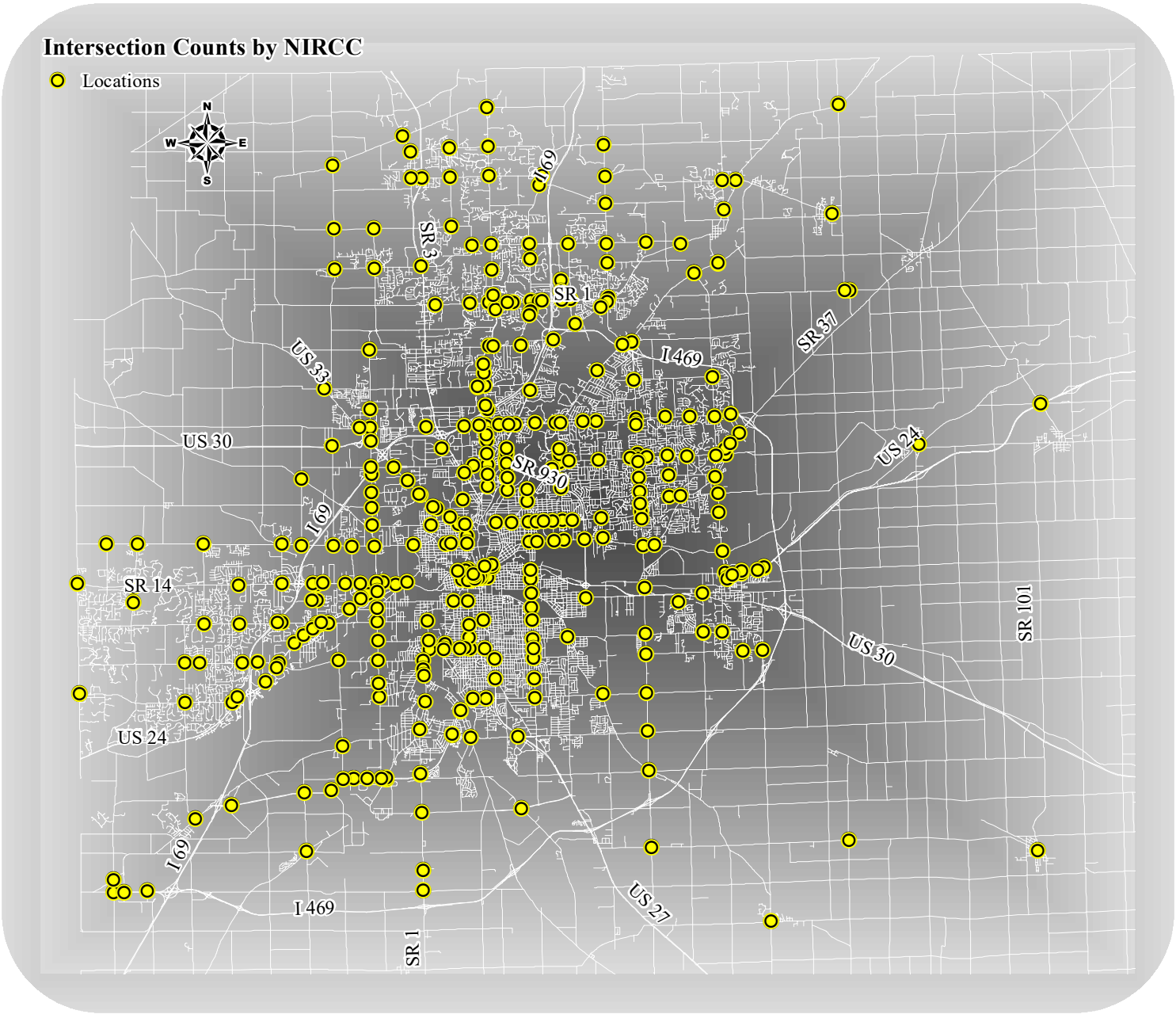
Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

INTERSECTION AND ARTERIAL ANALYSIS

NIRCC also conducts intersection and arterial analyses. Staff studies intersections within Allen County and examines their performance characteristics. These studies are conducted based on requests from the City of Fort Wayne, the City of New Haven, the Allen County Highway Department, and the Indiana Department of Transportation to evaluate problems and concerns with specific intersections. Figure 9 illustrates all the intersections that have been studied by NIRCC in the past. In Fiscal Year 2019, NIRCC evaluated 37 intersections which are listed in the table contained in figure 10. Out of these 37 intersections, 16 were signalized and 21 were unsignalized.

Figure 9



The targeted measures of effectiveness for intersections are delay and capacity. The level of service (LOS) of an intersection is defined alphabetically A through F, A being the best LOS and F being the worst. The LOS is based on the average delay (measured in seconds) experienced at an intersection. Level of service cannot be calculated when the volume to capacity ratio (V/C) exceeds 1.2 for an individual group. The level of service for each of the intersections counted in Fiscal Year 2019 are illustrated in figures 11 through 14 for each approach. These levels of service are only based on the peak hour for each intersection.

In order to qualify for a traffic signal, intersections must meet one or more of the primary volume signal warrants or both all-way stop warrants as described in the Manual on Uniform Traffic Control Devices 2009 Edition. The intersections reviewed for signal warrants along with other types of intersection analyses in Fiscal Year 2019 are illustrated in figure 15.

Figure 10

Signalized Intersections
• Adams Center Rd / Moeller Rd
• Anthony Blvd / Crescent Ave
• Anthony Blvd / Lake Ave
• Anthony Blvd / State Blvd
• Bethel Rd / Carroll Rd
• Coliseum Blvd / Hobson Rd
• Fogwell Pkwy / Lafayette Center Rd
• Gump Rd / SR 3
• Hobson Rd / Trier Rd
• Illinois Rd / Illinois Rd S
• Illinois Rd / Magnavox Way
• Lahmeyer Rd / Stellhorn Rd
• Maplecrest Rd / Nelson Rd
• Mayhew Rd / St Joe Rd
• Maysville Rd / State Blvd
• Reed Rd / St Joe Center Rd

Unsignalized Intersections
• Ardmore Ave / Sand Point Rd
• Ardmore Ave / Three Oaks Dr
• Bethel Rd / Hathaway Rd
• Bishop Rd / SR 1
• Cedar Canyons Rd / Coldwater Rd
• Cedar Canyons Rd / Dunton Rd
• Cedar Canyons Rd / Old Lima Rd
• Coldwater Rd / Shoaff Rd
• Dunton Rd / Hathaway Rd
• Flutter Rd / Schwartz Rd
• Gump Rd / Lima Rd
• Hand Rd / Hathaway Rd
• Hand Rd / Shoaff Rd
• Linden Rd / Rose Ave
• Meijer Dr / St Joe Center Rd
• Lima Rd / Shoaff Rd
• Progress Rd / Value Dr
•Ridge Crest Crossing / W Hamilton Rd
• Rose Ave / Tanglewood Dr
• Schwartz Rd / St Joe Center Rd
• Shoaff Rd / SR 3

Figure 11

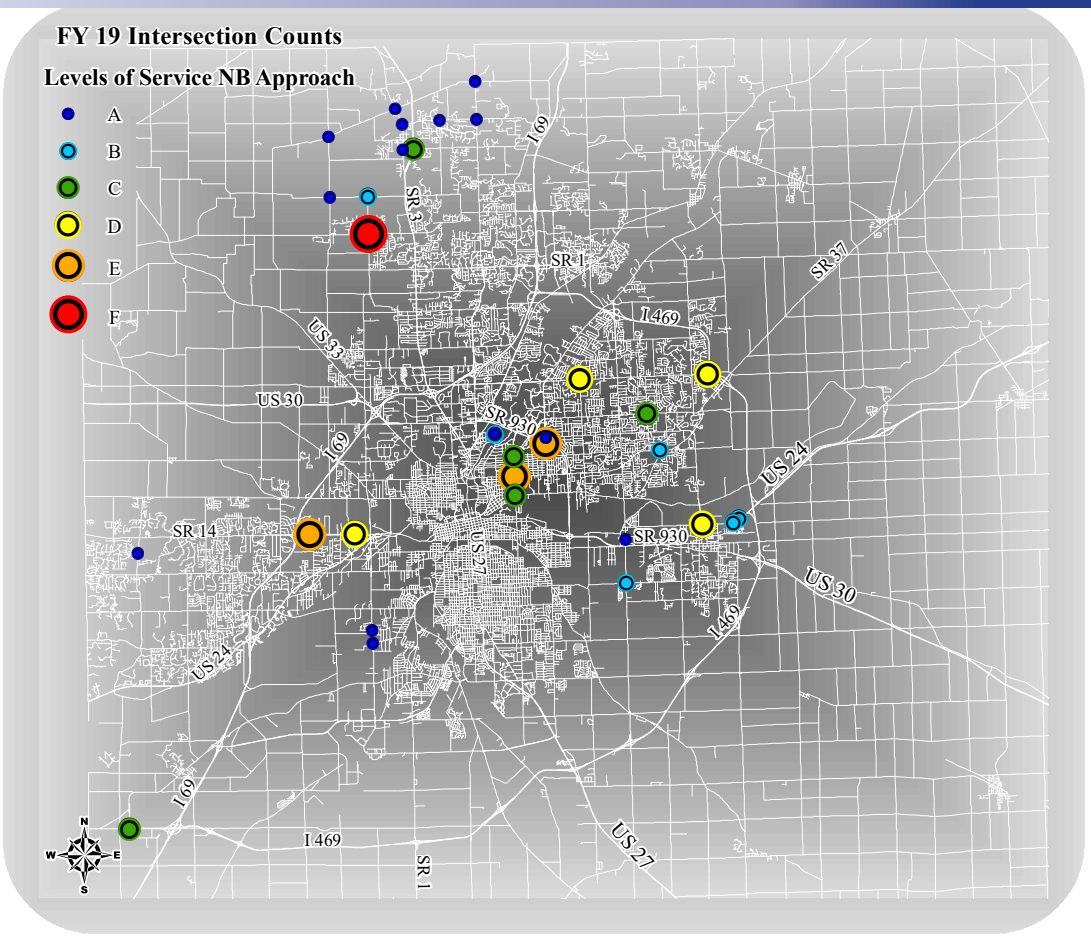
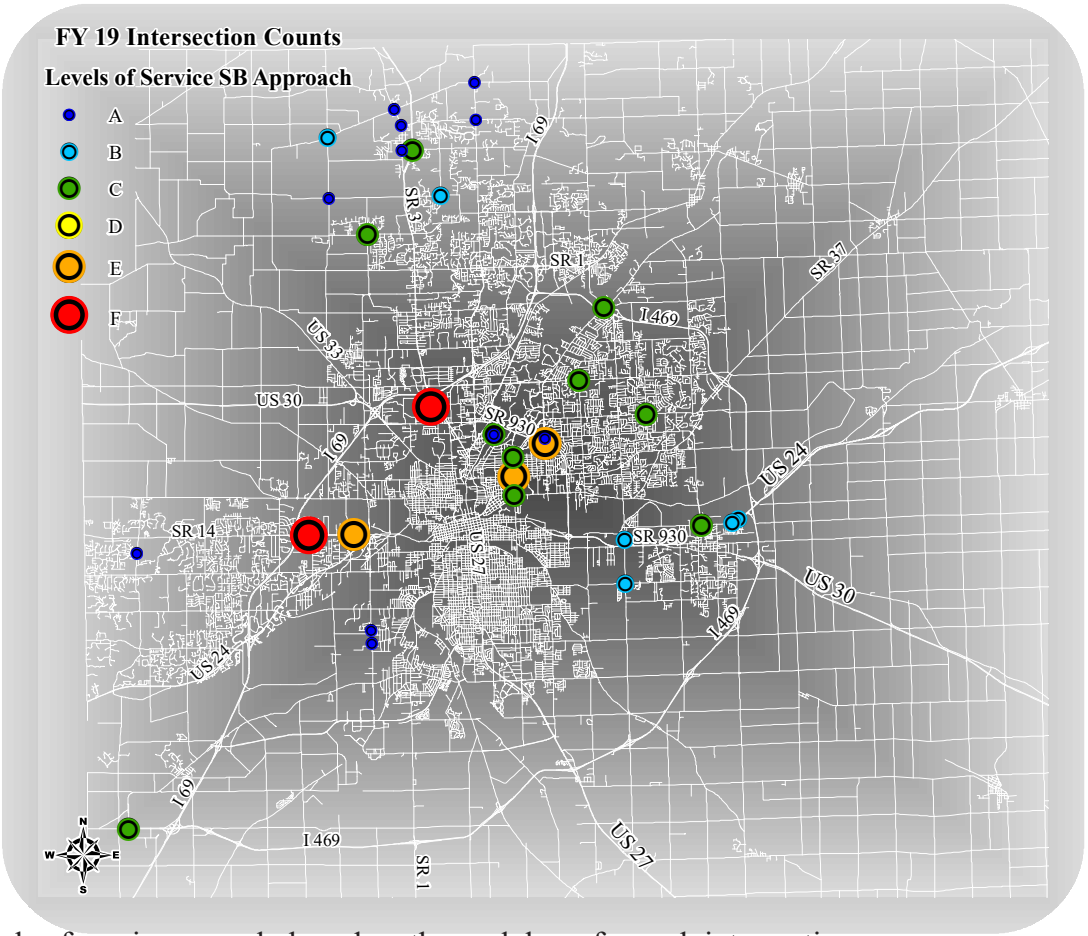


Figure 12



✻These levels of service are only based on the peak hour for each intersection.

Figure 13

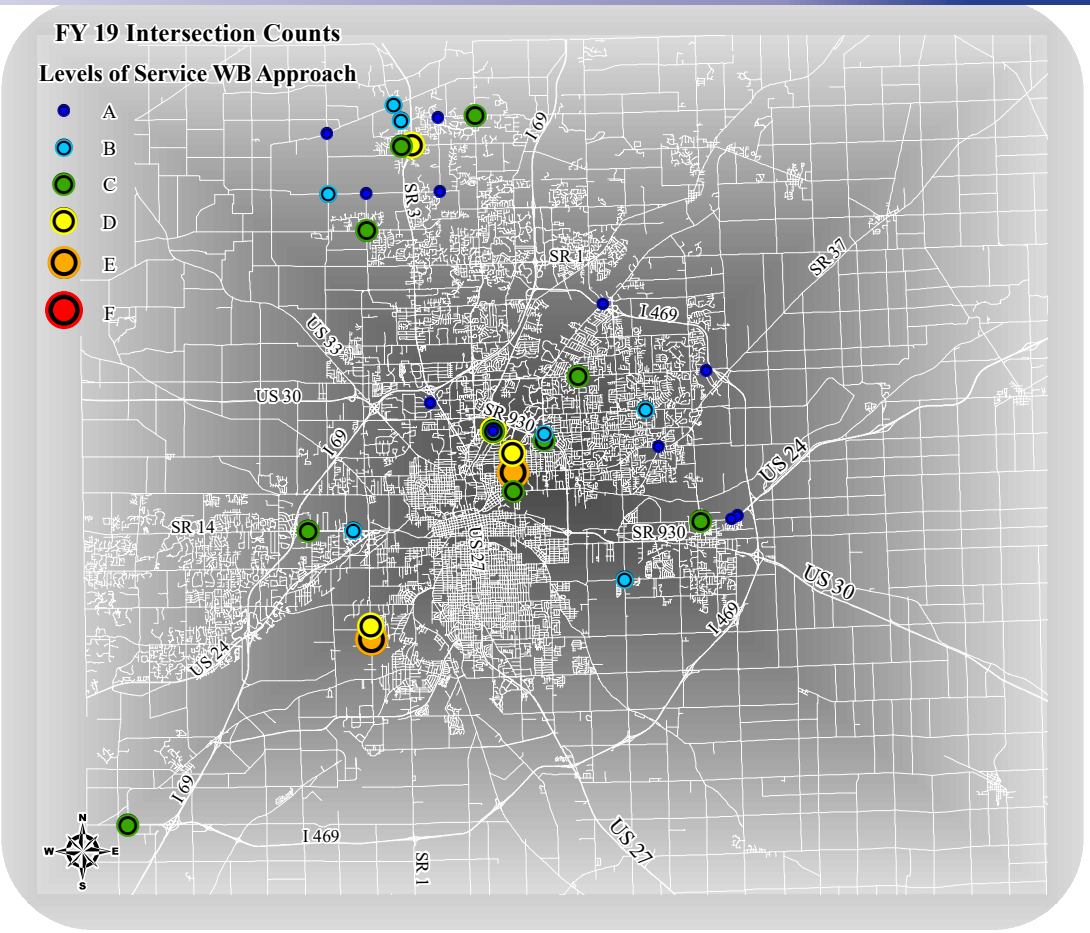
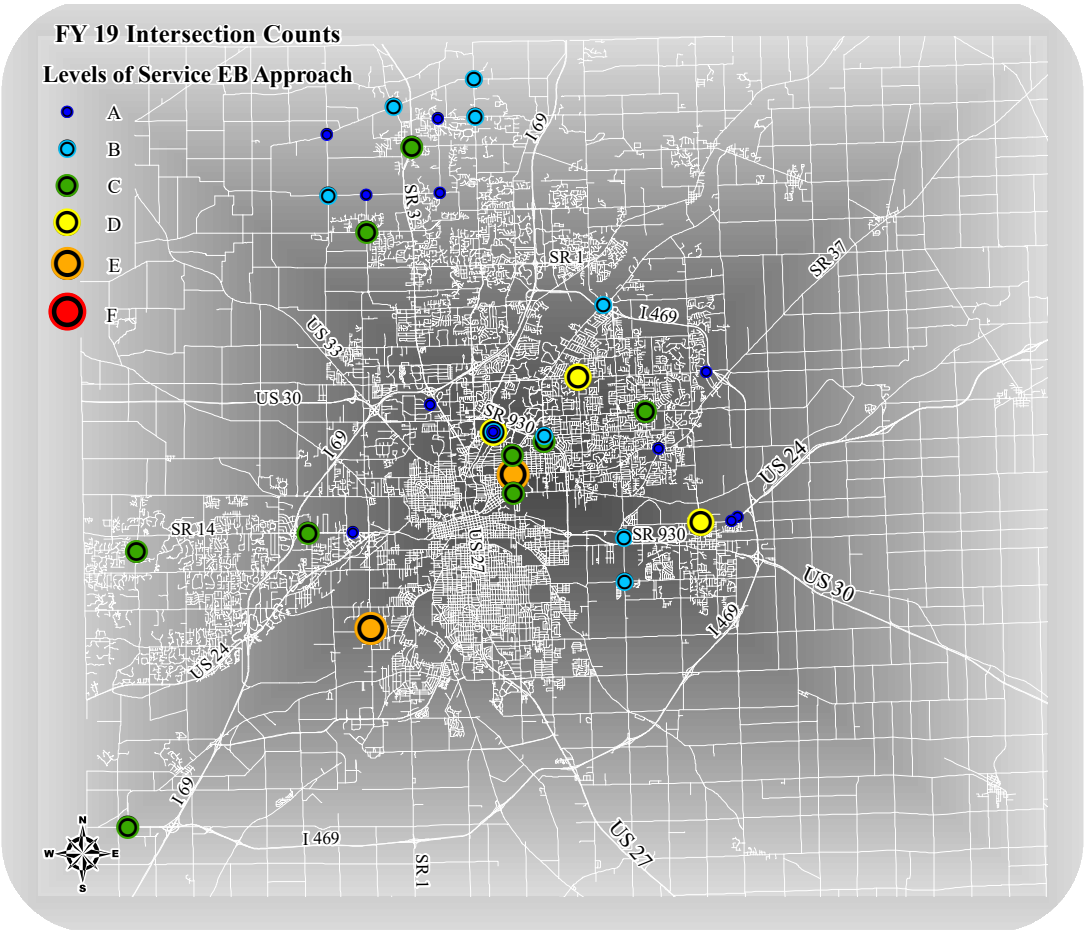
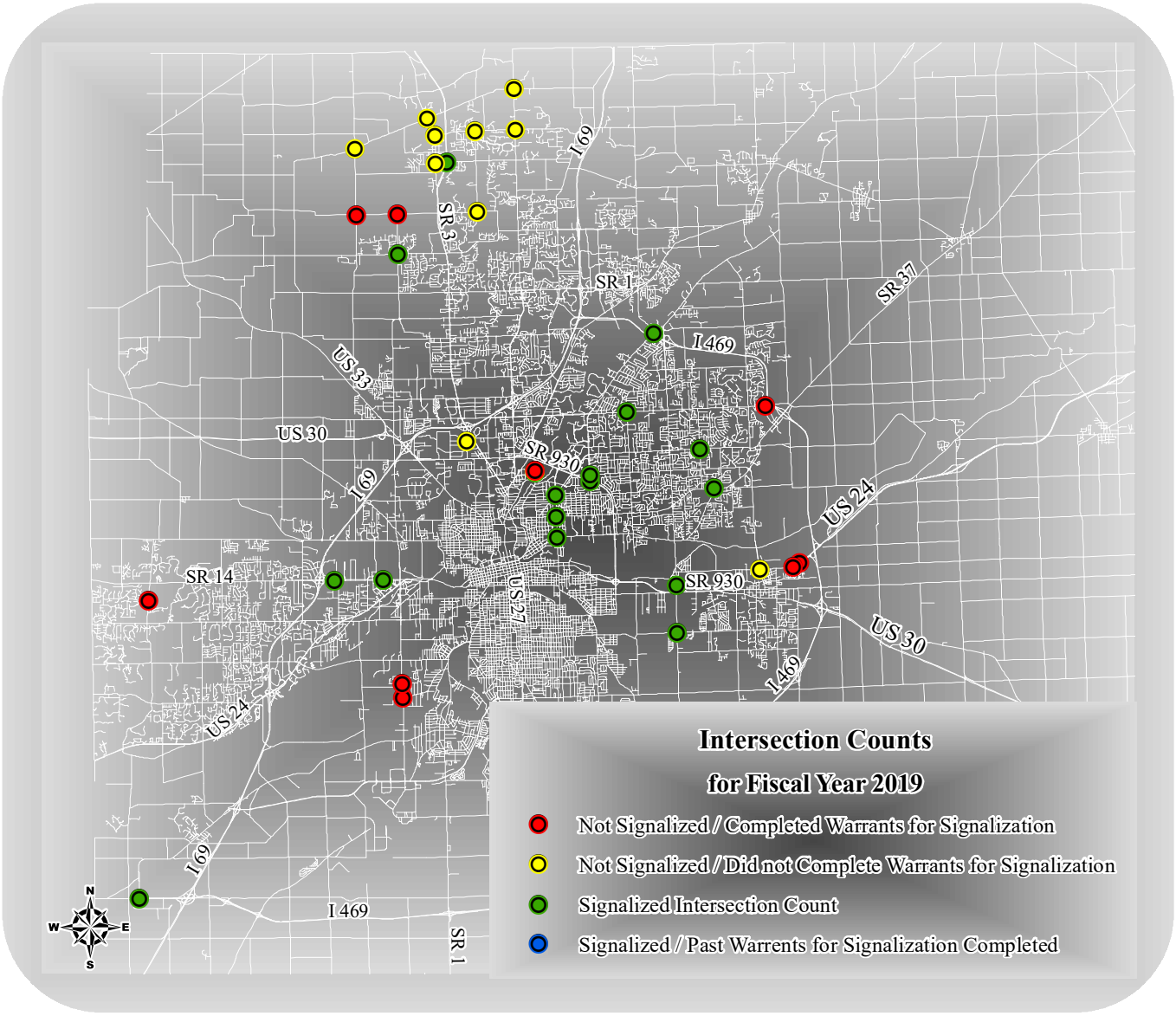


Figure 14



✻These levels of service are only based on the peak hour for each intersection.

Figure 15


I 69
SR 3
SR 1
SR 37
I 469
US 33
US 30
SR 930
I 69
US 24
SR 14
US 27
SR 930
US 30
I 469
US 24
I 69
I 469
SR 1
N
W
E
S
Intersection Counts
for Fiscal Year 2019
Not Signalized / Completed Warrants for Signalization
Not Signalized / Did not Complete Warrants for Signalization
Signalized Intersection Count
Signalized / Past Warrents for Signalization Completed

Corridor Studies

Studies completed by the Northeastern Indiana Regional Coordinating Council

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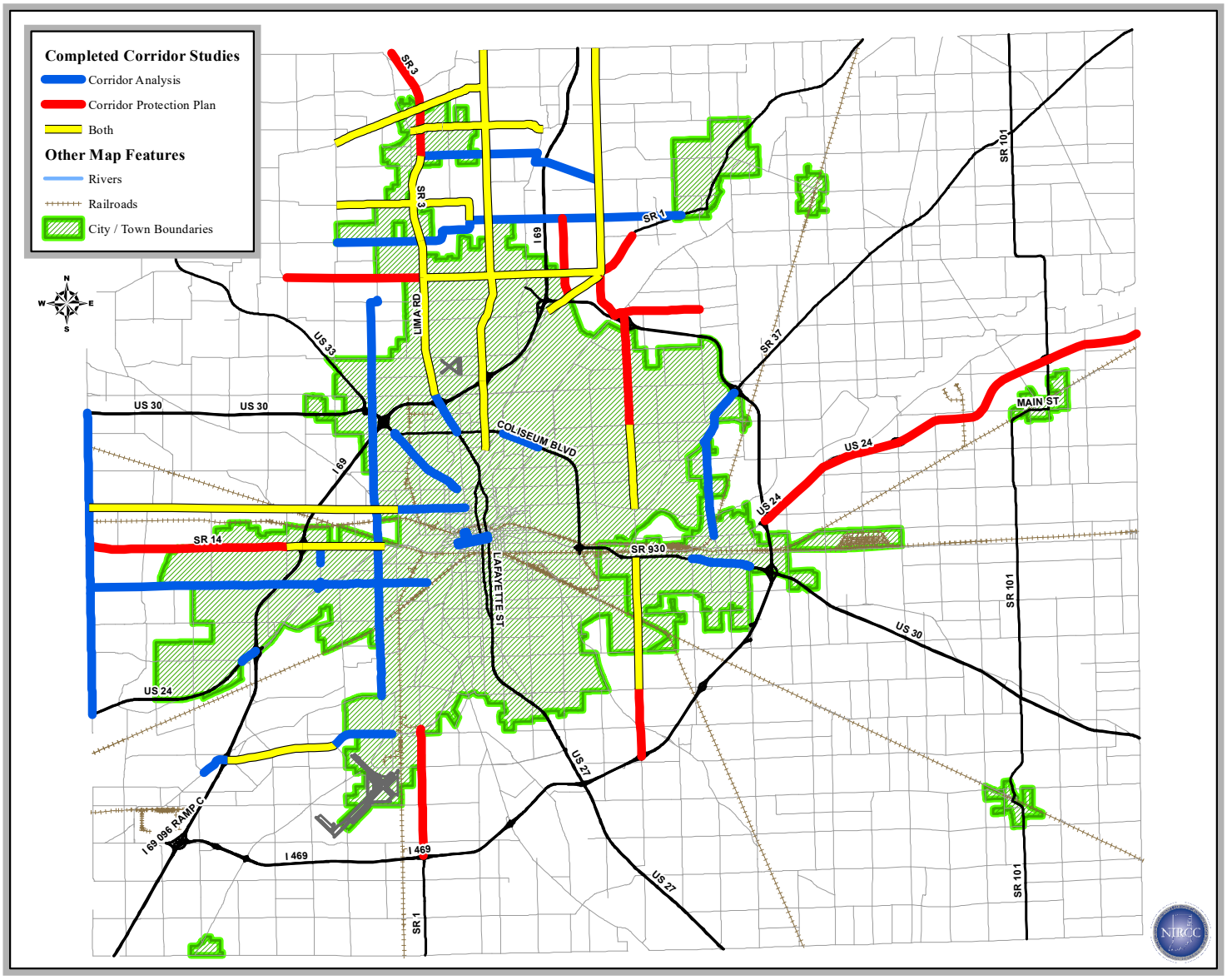
CORRIDOR STUDIES

Another activity conducted by NIRCC is the study of corridors throughout Allen County. There are two types of studies that are used to evaluate different aspects of the corridors: corridor and impact analysis studies and corridor protection studies and plans. Figure 16 illustrates the corridor studies that have been completed by NIRCC.

The main purpose of a corridor and impact analysis is to evaluate traffic impacts of future developments on an existing corridor, as well as locations that are in need of current or future infrastructure improvements. The corridor analysis estimates the number of new trips from anticipated developments that will be added to an existing facility to examine the changes of service level. When service levels fall below acceptable levels, recommendations are tested to

Figure 16



accommodate future traffic and relieve anticipated congestion problems along the corridor. Information provided by a corridor and impact analysis helps in developing a corridor protection plan that can be an efficient tool for mitigating potential congestion.

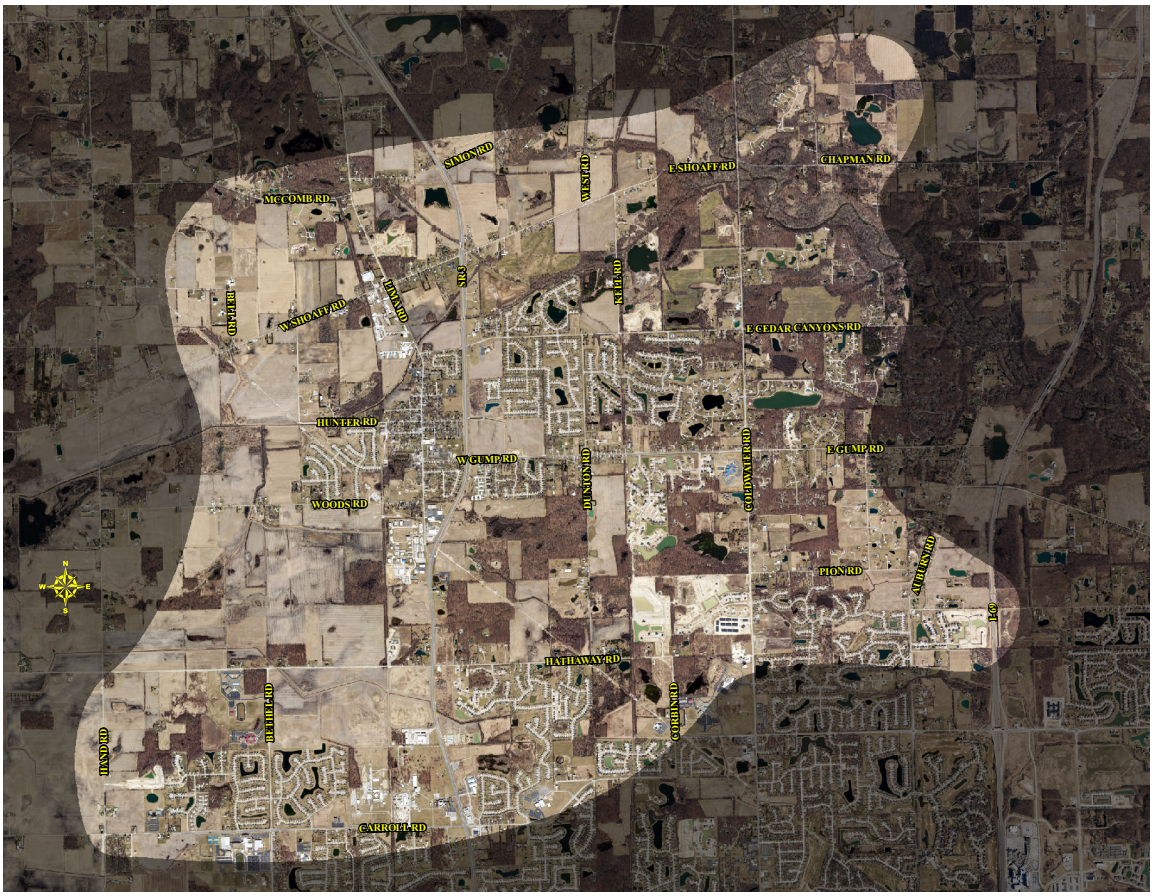
Corridor protection studies and plans evaluate and identify optimal access points along corridors for future developments and improvements. The adoptions of these plans facilitate efforts to resolve existing congestion and mitigate future problems. The recommendations from the plans aid local officials, planners, and developers during future development by protecting the integrity of the corridor from detrimental access.

Besides the traditional corridor studies which often only analyze one corridor or set of continuous corridors, NIRCC also performs a study called a sub-area analysis. A sub-area analysis analyzes a number of corridors within a given area or development. Information and materials produced by this type of analysis provide local policy-makers with an additional tool for assessing the impacts of new and expanding development to an area. The analysis focuses on assessing the current and future operating characteristics of the corridors and develops alternative strategies to improve safety and mitigate congestion. Staff looks at highway, transit, pedestrian and bicycle access as the major components of the analysis. Staff also evaluates how facilities, both within and outside of the analysis area, interact with each other and impact the current and future traffic patterns.

In Fiscal Year 2019, NIRCC completed one corridor and impact analysis and one sub-area analysis. NIRCC completed the Airport Expressway corridor and impact analysis which was initiated by NIRCC in FY17 due to the developments along the corridor, planned interchange reconstruction, and increase traffic along the corridor. The Study starts at Homestead Road and Lower Huntington Road in Allen County and ends at Airport Expressway and Lower Huntington Road in Fort Wayne. This corridor and impact analysis can be seen in figure 17. NIRCC also completed the Huntertown sub-area analysis in FY 19 which comprised a study area that included parts of Allen County and the Town of Huntertown. It studied three corridors including Hathaway Rd, Cedar Canyons Rd, and Shoaff Rd and also their surrounding areas. The Huntertown sub-area analysis study area can be seen in figure 18.

Figure 17

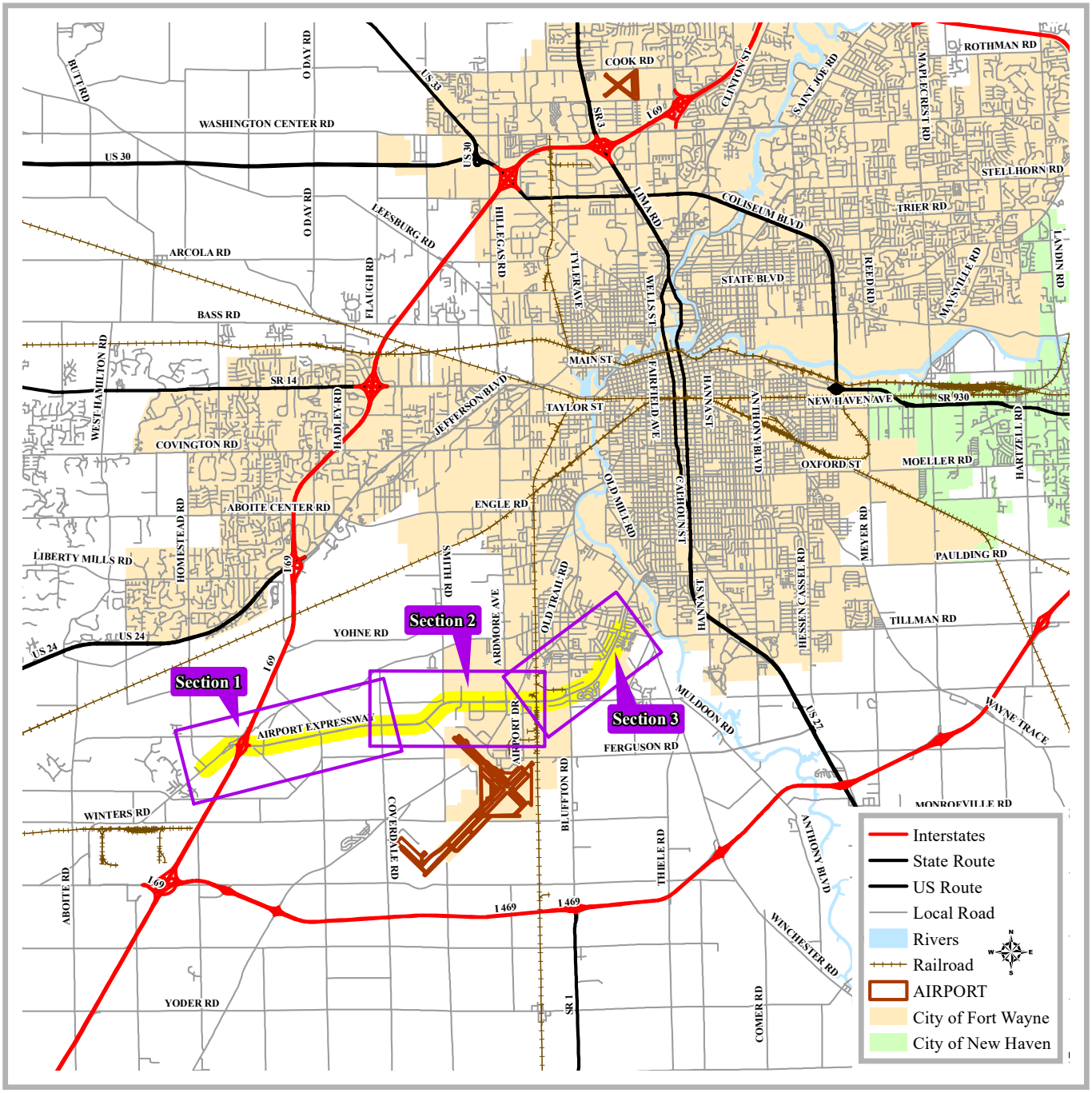
Figure 18



Corridor and Impact Analysis Study
Airport Expressway Corridor and Impact Analysis

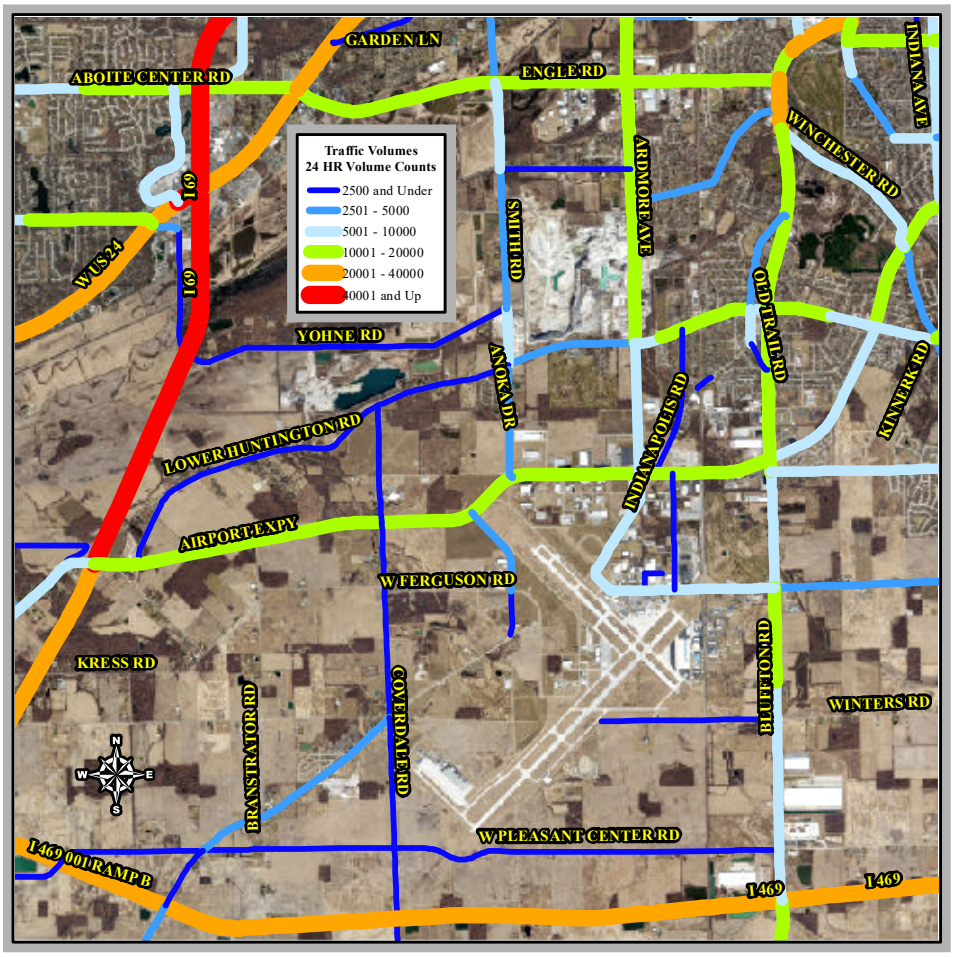
The main purpose of this corridor and impact analysis is to evaluate traffic impacts of proposed roadway projects and future developments on an existing corridor. The study of Airport Expressway was initiated by NIRCC in FY18, and completed in FY 19, due to the developments along the corridor, planned interchange reconstruction, and increase traffic along the corridor. This study focuses on three separate sections of the corridor. The first section starts from Homestead Road on the west and ends at Coverdale Road on the east. The second section starts at Coverdale Road and

Figure 19



ends at the Railroad Crossing. The third section starts at the Railroad Crossing and ends at Lower Huntington Road (figure 19). The analysis for this study calculated and examined existing conditions and estimated future changes to the levels of service (LOS) based on current and projected traffic volumes and with the planned future improvements.

Figure 20



LOS is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. LOS is based upon the average stopped delay per vehicle for various movements within the intersection. LOS "A" describes operations with very low delays; most vehicles do not stop at all. LOS "C" describes operations with longer delays; stopping vehicles are significant but many still pass without stopping. LOS "F" describes operations with delays unacceptable to most drivers; the intersection is exceeding capacity. When service levels fall below acceptable levels, recommendations are tested to accommodate future traffic and relieve anticipated congestion problems along the corridor. These studies also identify problem areas and develop recommendations for roadway improvements.

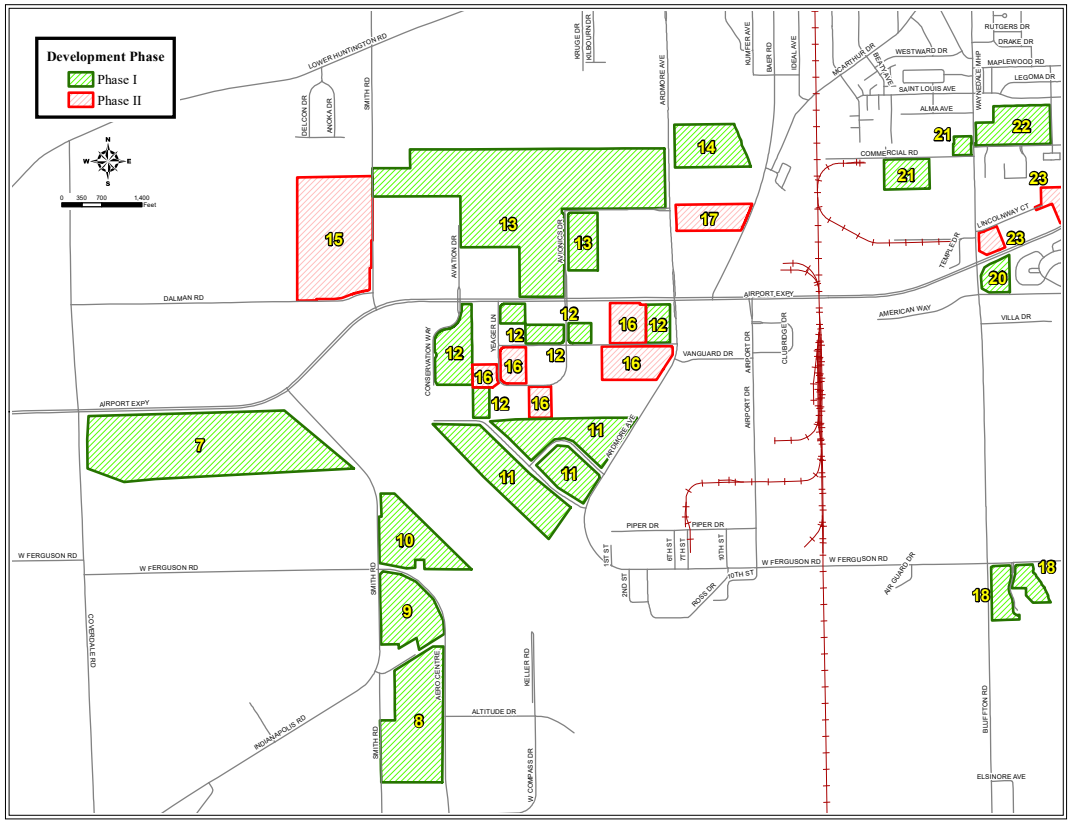
Airport Expressway is classified as an arterial and is an east/west corridor on the southwest side of the City of Fort Wayne and Allen County. Traffic volumes along this corridor vary from 7,400 vehicles per day all the way up to 17,700 vehicles per day (figure 20). Figure 19 shows the entire corridor in relation to the City of Fort Wayne and Allen County.

The study examines the following scenarios:

- Scenario 1: Existing Traffic Volumes
- Scenario 2: Existing volumes + traffic generated by the proposed developments(Phase I)
- Scenario 3: Existing volumes + traffic generated by the proposed developments(Phase I) + traffic generated by the areas with a potential for development (Phase II)

There is potential for a number of developments along the Airport Expressway corridor and the surrounding area. Figure 21 shows the proposed and potential developments from section 2 of the study that may occur in phase I and II for this corridor. These developments, along with an estimated 1.5 percent annual growth rate along Airport Expressway and 1.0 percent along all secondary roads, will increase the average annual daily traffic (AADT). Figure 22 shows an example table from the report which shows the number of trips these proposed and potential developments may generate.

Figure 21



The Airport Expressway study focused on fifteen intersections including the following: Homestead Road at Lower Huntington Road, Airport Expressway at Interstate 69 Ramp C/D, Airport Expressway at Interstate 69 Ramp A/B, Airport Expressway @ Ernst Road/ Lower Huntington Road, Airport Expressway at Coverdale Road, Airport Expressway at Smith Road (W), Airport Expressway at Smith Road (E), Airport Expressway at Aviation Drive / Conservation Way, Airport Expressway at Yeager Drive, Airport Expressway at Avionics Drive, Airport Expressway at Ardmore Avenue, Airport Expressway at Baer Road, Airport Expressway at Airport Drive, Airport Expressway at Bluffton Road, and Airport Expressway at Lower Huntington Road (Ft Wayne).

Figure 22

Table : New Trips from Phase I Residential/Commercial Development (combined)				
	Peak-Enter		Peak-Exit	
Site	AM	PM	AM	PM
7. Industrial Site - 50 Acres	332	112	88	336
8. Industrial Site - 48 Acres	332	129	59	301
9. Industrial ~ 26 Acres	183	71	32	166
10. Industrial ~ 25 Acres	176	68	31	160
11. Industrial ~ 74 Acres (3 parcels)	515	200	91	467
12. Industrial ~ 36 Acres (6 parcels)	293	94	47	215
13. Industrial ~ 160 Acres (5 parcels)	622	242	109	563
14. Industrial ~ 20 Acres	77	30	14	70
New Trips from Phase II Residential/Commercial Development for Section 2 (combined)				
15. Industrial ~ 60 Acres	231	90	41	210
16. Industrial ~ 38 Acres (6 parcels)	216	84	37	196
17 Industrial ~ 18 Acres	50	19	9	46

Figure 23

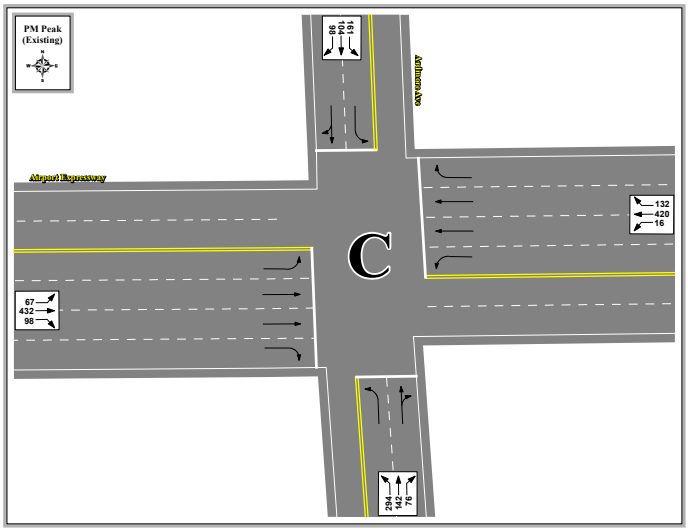


Figure 24

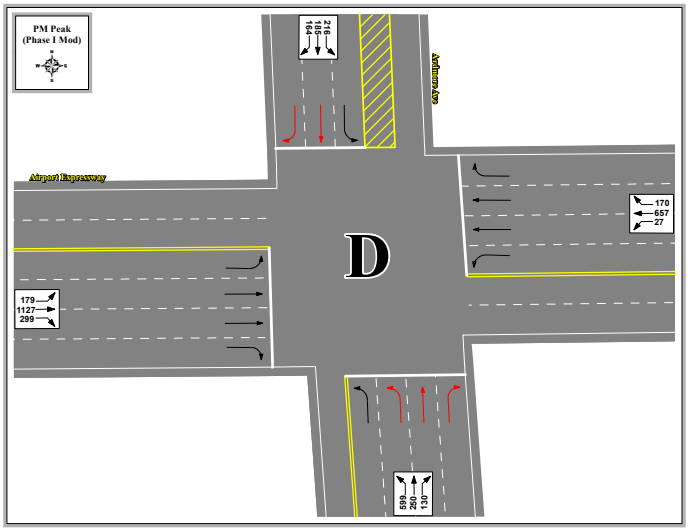
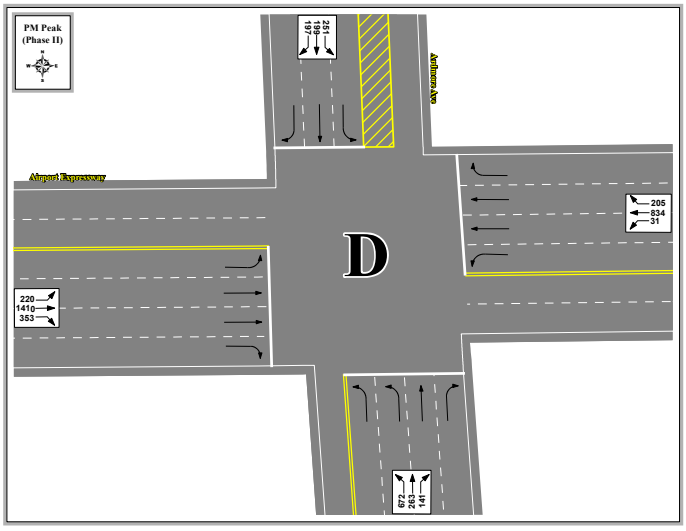


Figure 25



The following is an example of the Airport Expressway and Ardmore Ave intersection analysis. There were three scenarios analyzed for this intersection which showed existing conditions and the potential of future development and the impacts it would have on levels of service (see figures 23-25). This analysis also generated proposed projects and the resulting level of service changes to compare with existing conditions:

Scenario 1: - Existing Conditions (figure 23)

Airport Expressway is a 4-lane and Ardmore Avenue is a 2-lane facilities. Figure 23 shows the geometry at this intersection, along with the current p.m. peak volumes, and LOS. The intersection analysis indicates that this intersection is currently operating at a LOS "B" for a.m. and "C" during the p.m. peak hours.

Scenario 2: - Proposed Development Recommendations (figure 24)

The analysis indicates the intersection will operate at a LOS "E" for a.m. and "F" during the p.m. peak hours with the added trips of phase I during the peak hours. The intersection can be improved to a LOS "C" during the a.m. "D" during the p.m. peak hours with adding exclusive northbound and southbound right turn lanes and a second northbound left turn lane. See figure 24 for the p.m. peak volumes, and LOS with improvements included.

Scenario 3: - Potential Development Recommendations (figure 25)

The analysis indicates the intersection will operate at a LOS "D" for a.m. and p.m. peak hours with the added trips of phase II during the peak hours. See figure 25 for the p.m. peak volumes, and LOS.

The following gives a summary of the recommended improvements from the corridor analysis. If you would like any additional information about this corridor analysis or would like to see the full report please contact NIRCC.

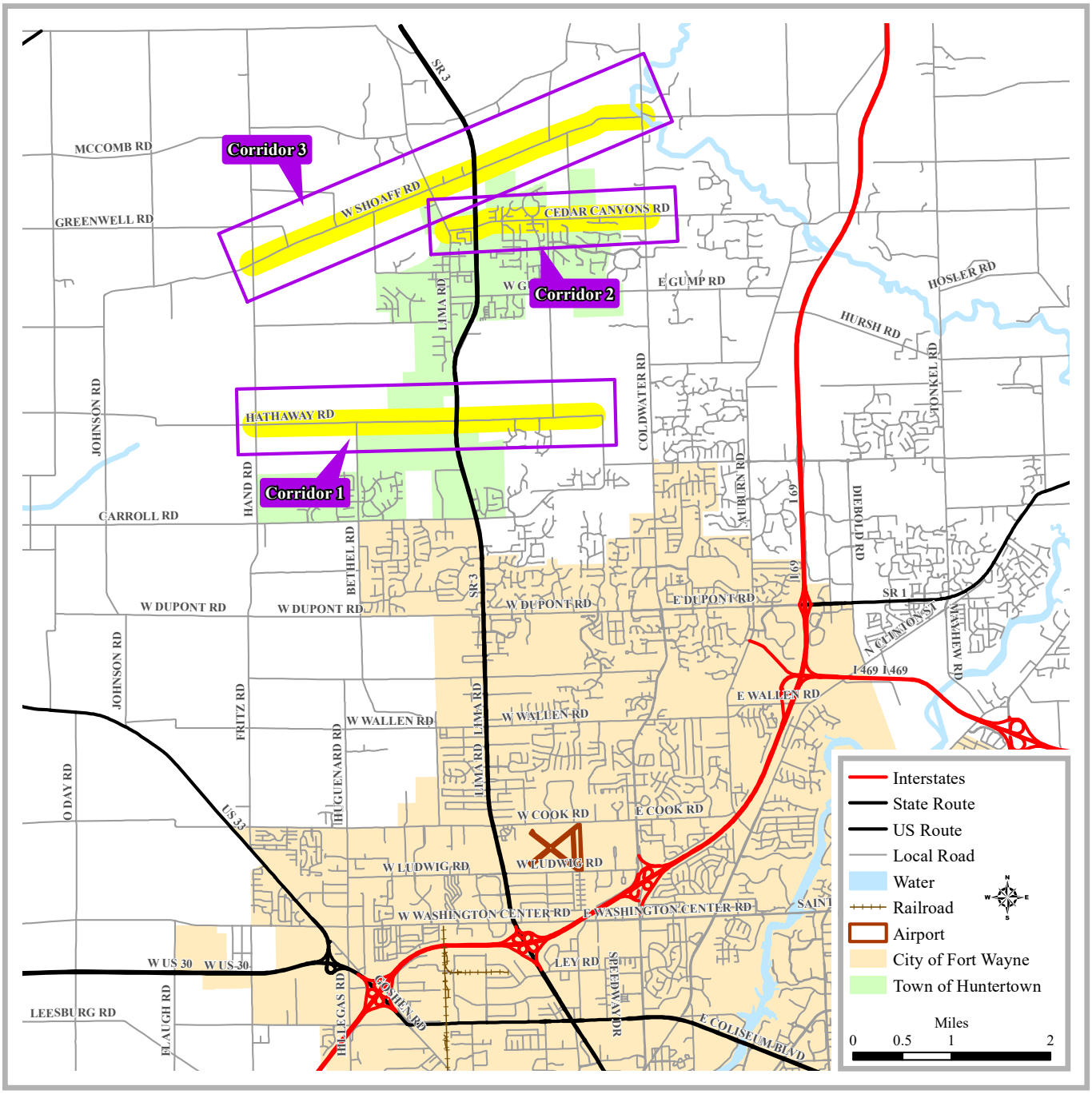
The recommended improvements are listed below based on Phase II traffic flow projections:

1. The Homestead Road / Lower Huntington Road intersection improvements; add an exclusive turn lanes on all approaches and signalization.
2. The Airport Expressway / Interstate 69 Ramp C/D intersection improvements; adding a second eastbound through lane and a second southbound left turn lane.
3. The Airport Expressway / Interstate 69 Ramp A/B intersections improvements; adding a second eastbound through lane, a exclusive northbound right turn lane, and signalization.
4. The Airport Expressway / Ernst Road/Lower Huntington Road intersection improvement; signalization.
5. The Airport Expressway / Coverdale Road intersection improvement; no recommendations at this time.
6. The Airport Expressway / Smith Road (W) intersection improvement; add exclusive right turn lanes on the northbound and eastbound approaches along with signalization.
7. The Airport Expressway / Smith Road (E) intersection improvement; no recommendations at this time.
8. The Airport Expressway / Aviation Drive/Conservation Way intersection improvement; signalization.
9. The Airport Expressway / Yeager Drive intersection improvement; add an exclusive westbound left turn lane within the existing median.
10. The Airport Expressway / Avionics Drive intersection improvement; signalization.
11. The Airport Expressway / Ardmore Avenue intersection improvement; add exclusive northbound and southbound right turn lanes and a second northbound left turn lane.
12. The Airport Expressway / Baer Road intersection improvement; realign the southbound approach to accommodate an exclusive left turn lane.
13. The Airport Expressway / Airport Drive intersection improvement; add an exclusive right turn lane on the westbound approach.
14. The Airport Expressway / Bluff ton Road intersection improvement; add exclusive right turn lanes on the eastbound and westbound approaches.
15. The Airport Expressway / Lower Huntington Road intersection improvement; no recommendations at this time.

Sub-Area Analysis Study
Huntertown Sub-Area Analysis

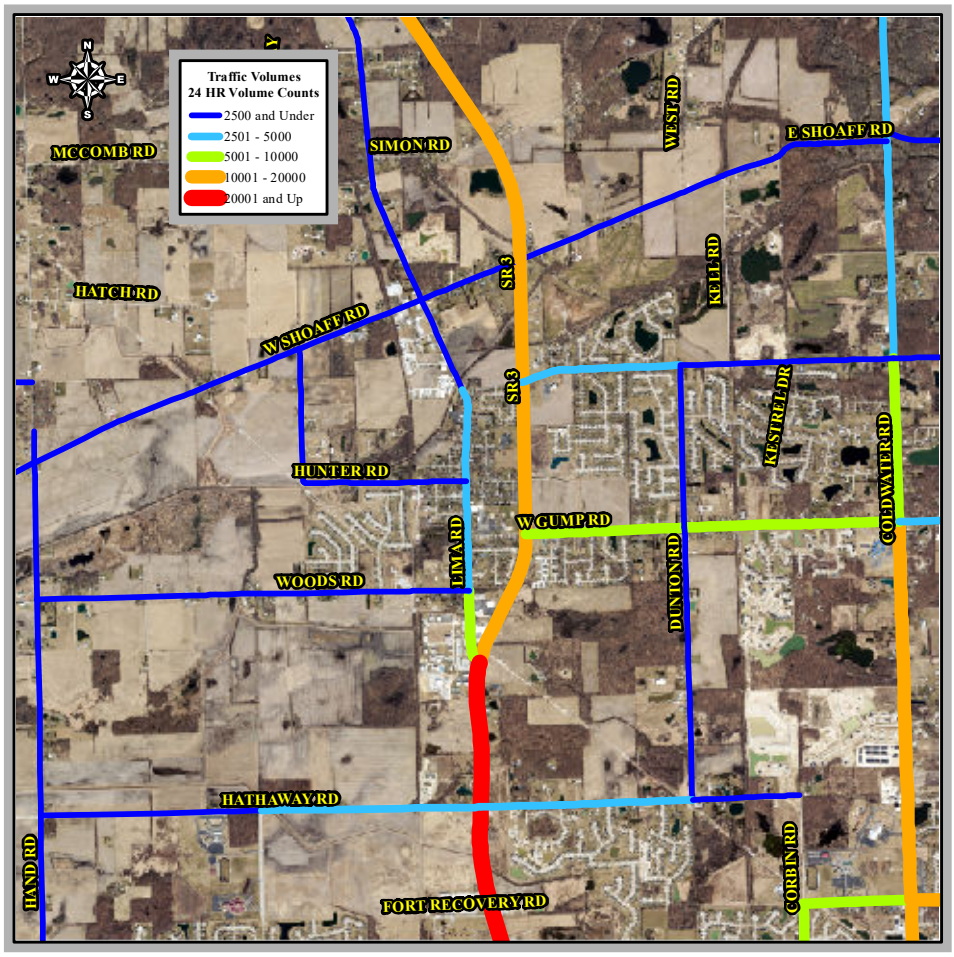
Besides the traditional corridor studies which often only analyze one corridor or set of continuous corridors, NIRCC also performs a study called a sub-area analysis. A sub-area analysis analyzes a number of corridors within a given area or development. Information and materials produced by this type of analysis provide local policy-makers with an additional tool for assessing the impacts of new and expanding development to an area. The analysis focuses on assessing the current and future operating characteristics of the corridors and develops alternative strategies to improve

Figure 26



safety and mitigate congestion. Staff looks at highway, transit, pedestrian and bicycle access as the major components of the analysis. Staff also evaluates how facilities, both within and outside of the analysis area, interact with each other and impact the current and future traffic patterns.

Figure 27



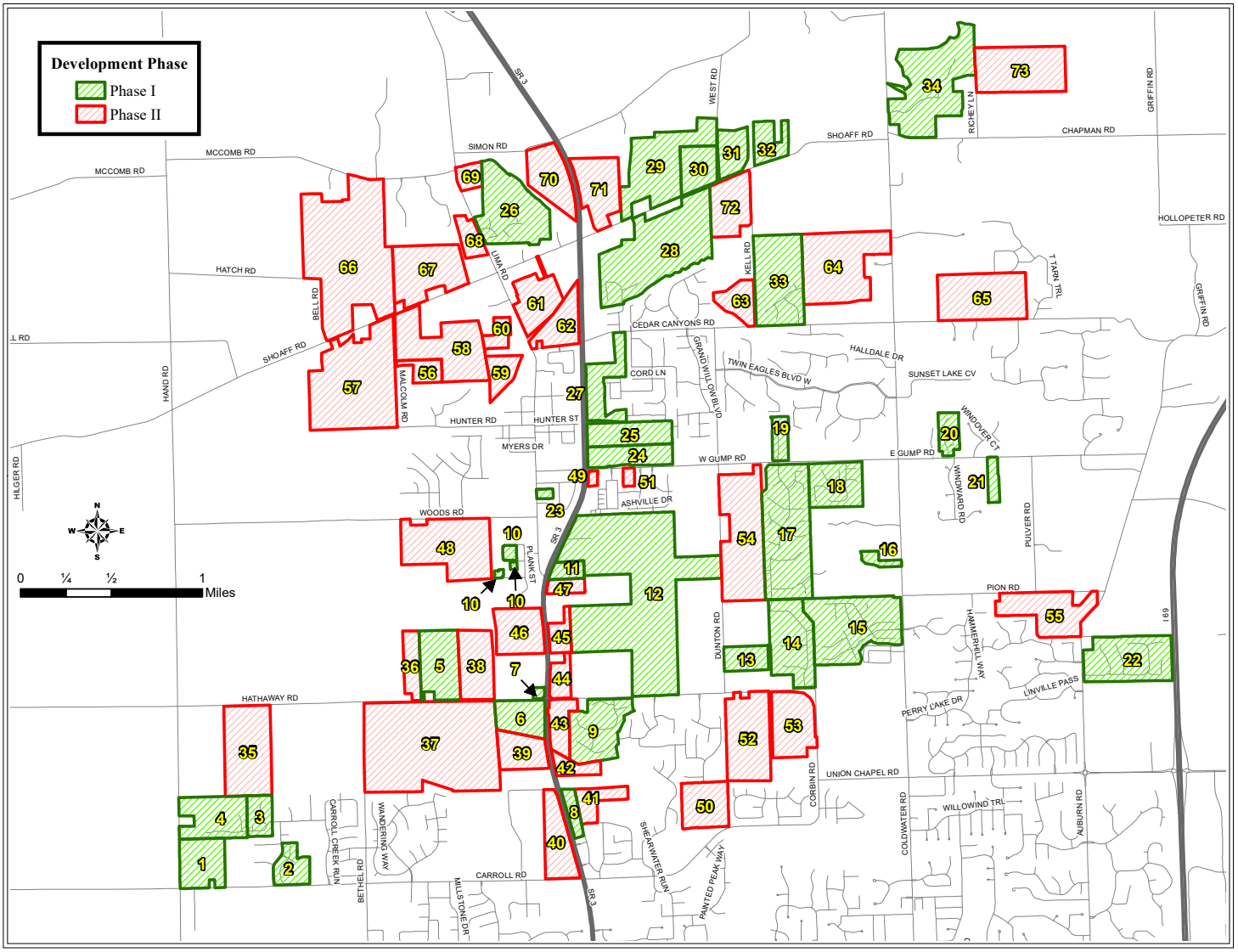
The most recent Sub-Area Analysis NIRCC completed was in the Huntertown area and comprised a study area that included parts of Allen County and the Town of Huntertown (figure 26). The purpose for this Sub-Area analysis is to evaluate traffic impacts of future developments, both currently proposed and with future potential, to identify problem areas and develop recommendations for roadway improvements that may be needed. The study not only takes into consideration the study area shown in figure 18 and 26, but also how this area interacts with the surrounding areas and anticipated development. For this study, the focus was on three main corridors in the area that are experiencing significant amounts of development and have potential for future development as well. These three corridors include Hathaway Rd, Cedar Canyons Rd, and Shoaff Rd and also the surrounding areas.

To complete a successful Sub-Area Analysis NIRCC performs studies of three different levels of development in the area to see what types of traffic patterns and congestion may occur based on existing conditions. Once these traffic patterns are assigned to the system NIRCC is able to see where problems occur with regard to traffic congestion and then test different project alternatives that could alleviate these problems. Once project alternatives are selected NIRCC makes these recommendations to the appropriate agencies or boards.

The three different levels of development used in the Sub-Area Analysis include an existing condition level, a Phase I development level, and a Phase II development level (see figure 28). Using the existing condition level is just as it

sounds. NIRCC analyses what developments that are currently existing and what the existing traffic patterns (figure 27) are in the area. The Phase I development level focuses on proposed, or already approved, developments that will be built or are currently in some stage of development. The Phase I developments are used to calculate estimates for new traffic patterns and trips added to the existing roadway infrastructure based on what will occur in the near future. Then the final phase, Phase II development, is added to the analysis. Phase II uses a five to ten year horizon and the existing vacant land and land use patterns in the area to estimate what could potentially develop in the future.

Figure 28



Once the added traffic and trip patterns are determined based on this estimated growth from Phase I and Phase II, NIRCC can begin assigning Levels of Service (LOS) to existing infrastructure and determine what improvements may be needed to accommodate these development patterns. LOS is defined alphabetically A through F, A being the best LOS and F being the worst. This rating A through F represents a measure of driver discomfort, frustration, fuel consumption, and lost travel time. LOS is based upon the average stopped delay per vehicle for various movements within intersections and along corridors. For example, LOS "A" describes operations with very low delays, LOS "C"

describes operations with longer delays where stopping vehicles are significant but many still pass without stopping, and LOS "F" describes operations with delays unacceptable to most drivers and roadways are exceeding capacity.

Through this study NIRCC analyzed a total of twelve intersections along three corridors base on the existing infrastructure and three levels of development previously discussed. Two of the intersections were signalized and ten of them were stop controlled intersections only. The extents of these three corridors and the intersections studied were as follows:

- **Corridor 1: Hathaway Rd from Hand Rd to Corbin Rd.**
  - Intersections: Hathaway Rd at Hand Rd, Hathaway Rd at Bethel Rd, Hathaway Rd at SR 3, and Hathaway Rd at Dunton Rd.

- **Corridor 2: Cedar Canyons Rd from Lima Rd to Coldwater Rd.**
  - Intersections: Cedar Canyons Rd at Lima Rd, Cedar Canyons Rd at SR 3, Cedar Canyons Rd at Dunton Rd, and Cedar Canyons Rd at Coldwater Rd.

- **Corridor 3: Shoaff Rd from Hand Rd to Coldwater Rd.**
  - Intersections: Shoaff Rd at Hand Rd, Shoaff Rd at Lima Rd, Shoaff Rd at SR 3, and Shoaff Rd at Coldwater Rd.

The finalized analysis found that six of the intersections will need improved in the future based on the projected development patterns in the area. Two of these intersections (Shoaff Rd at Lima Rd and Shaoff Rd at SR 3) will need signalization. The remaining four intersections (Hathaway Rd at SR 3, Hathaway Rd at Dunton Rd, Cedar Canyons Rd at Lima Rd, and Cedar Canyons Rd at SR 3) all need improvements such as additional turn lanes and/or through lanes. To find out more about this study and more about specific results send a request for additional information to Jeff.Bradtmiller@co.allen.in.us.

Travel Time and Delay Studies

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

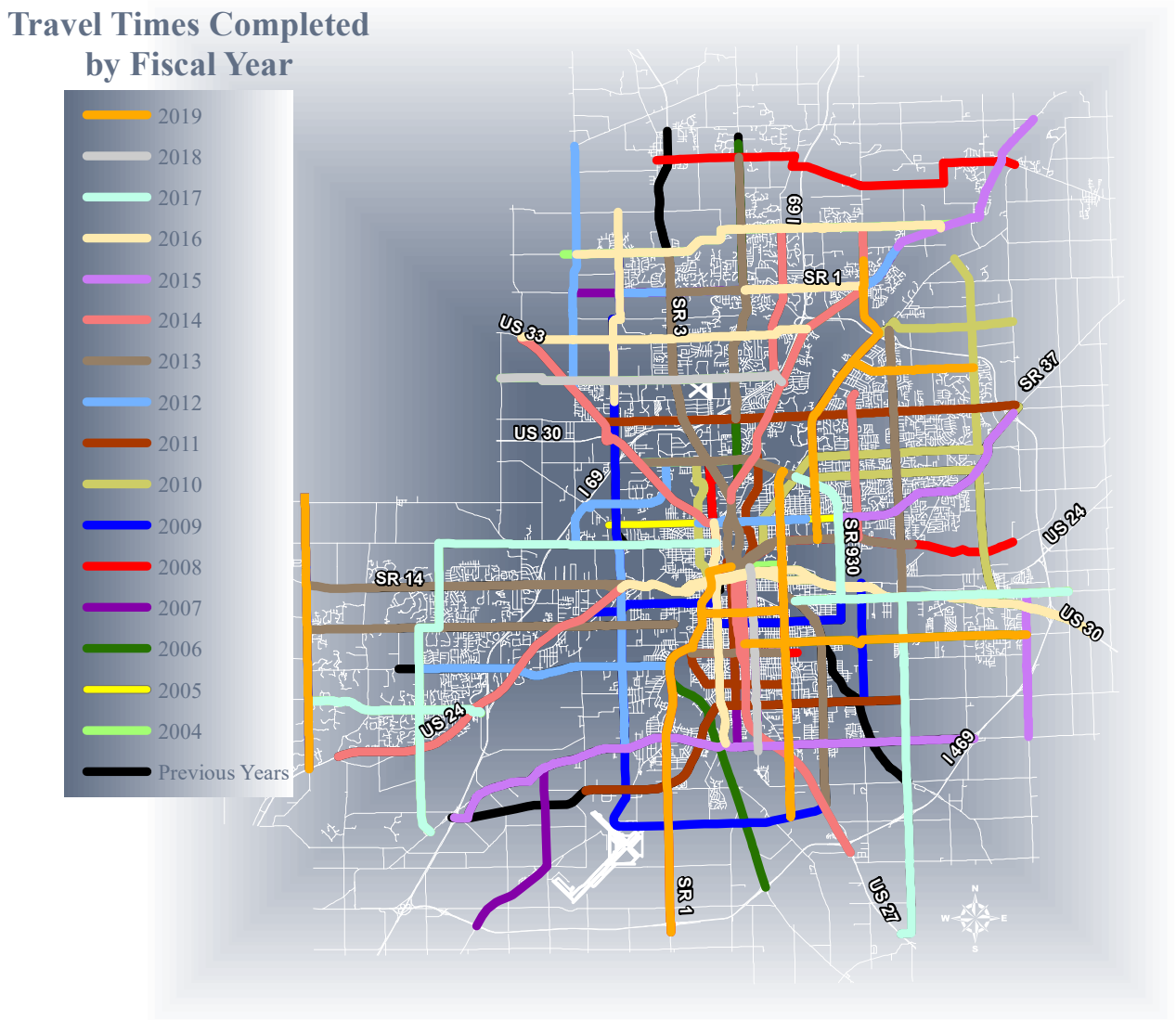
TRAVEL TIME & DELAY STUDIES

Another activity conducted by NIRCC is the travel time and delay studies. Figure 29 illustrates the travel time and delay studies that have been completed since Fiscal Year 1999. Travel time is one method to measure the congestion in the transportation system. It is essential for proper evaluation of the system because time is one of the most compelling and accurate yardsticks of the efficiency of street and highway service. Travel time is defined as the total time for a vehicle to complete a designated trip over a section of the road or from a specific origin to a specific destination. The studies conducted by NIRCC use the "average speed" method to obtain the travel time and delay data.

The following lists some of the uses that travel time data provide.

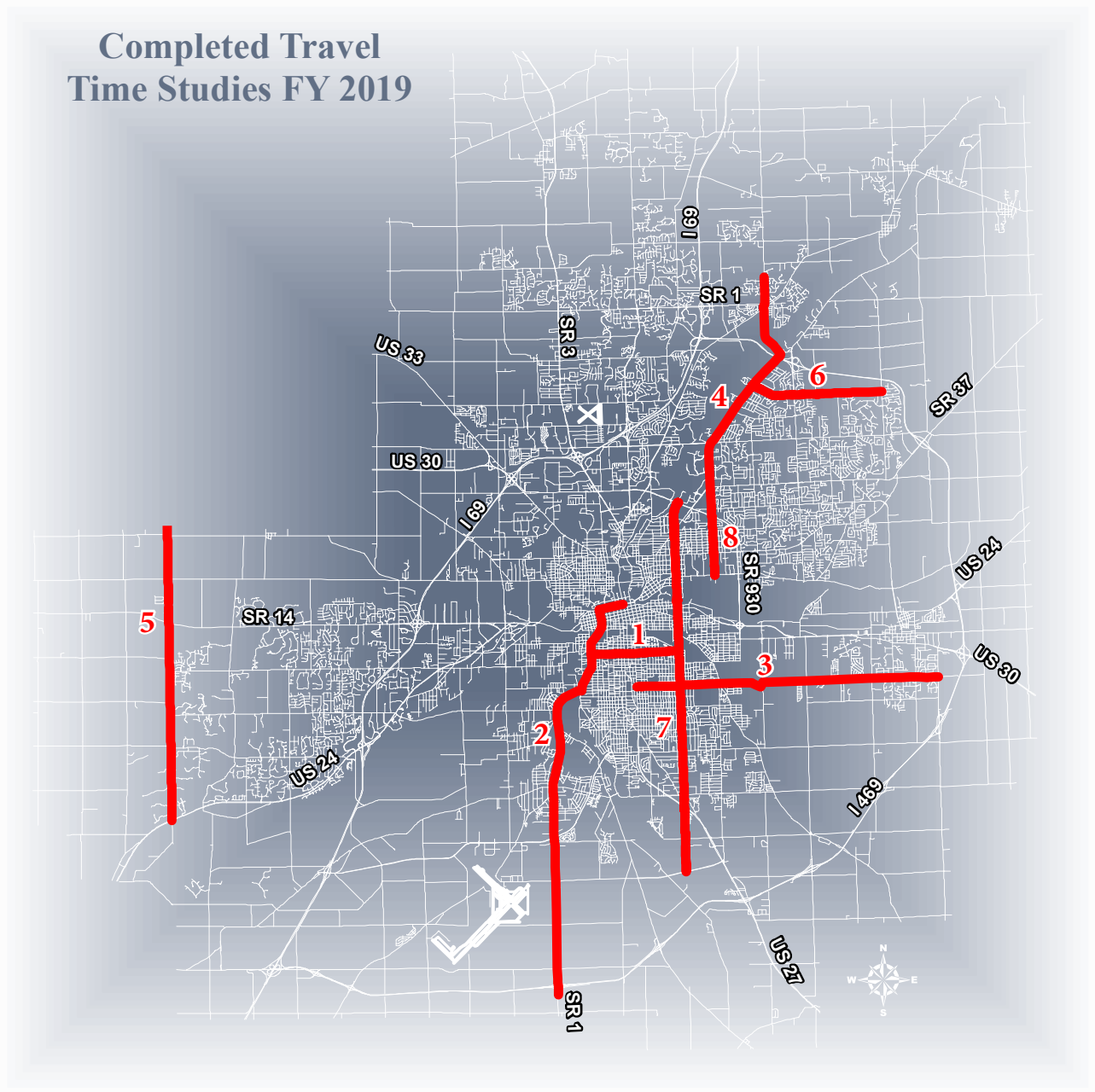
- *Identification of problem locations on facilities by virtue of high travel times and delay.*
- *Measurement of arterial level of service.*
- *Input into transportation planning models.*
- *Evaluations of route improvements.*
- *Input to economic analysis of transportation alternatives.*

Figure 29



NIRCC studied eight (8) corridors during Fiscal Year 2019 including: **1) Creighton Avenue** from Broadway to Anthony Boulevard **2) Main Street / Broadway / Bluffton Road** from Clinton Street to Brooks Road **3) Oxford Street / Moeller Road** from Lafayette Street to Minnich Road **4) Hobson Road / St Joe Road** from Trier Road to Oak Pointe Drive **5) West County Line Road** from Leesburg Road to US 24 West **6) Rothman Road** from St Joe Road to Wheelock Road **7) Anthony Boulevard** from Coliseum Boulevard to Ferguson Road and **8) Hobson Road** from Lake Avenue to Trier Road. The travel time studies completed during Fiscal Year 2019 are illustrated in Figure 30.

Figure 30



In order to calculate average travel times for a corridor, six runs are completed in each direction for three different time periods; morning peak travel (AM peak), evening peak travel (PM peak), and daytime travel (OFF peak). Traffic count information for each link in a corridor is examined to determine the peak hours.

In fiscal year 2007, NIRCC began using GPS (Global Positioning System) technology to conduct travel time and delay studies. The GPS software computes travel times by recording latitude and longitude coordinates every second during the travel time. The software takes this data and computes speed and time. This information can then be exported to create maps of every point taken by the software. We take the point data from the AM and PM peak time periods and create density maps. As the travel time vehicle slows down or stops, a mass of points are taken in a smaller area compared to the vehicle traveling at faster speeds resulting in more spacing between the points taken. The density maps shown in figures 31 - 46 give the results of this data. You will see on the maps that as the travel time vehicle slows down or stops multiple times at any given point the areas are shown in red. The blue areas indicate the vehicle is traveling at faster speeds.

The following pages present a summary along with density maps of the two corridors studied in Fiscal Year 2019. Some of the density maps show only sections of the entire travel time while others show the entire corridor. The density maps provided in this report only show the AM and PM peak time periods in each direction. Red boxes around any of the density maps reveal that they are the travel time with the greatest amount of delay for that corridor. Green boxes around any of the density maps reveal that they are the time period with the least amount of delay for that corridor. If an Off peak time period experienced either the greatest or least amount of delay it will not be provided as a density map.

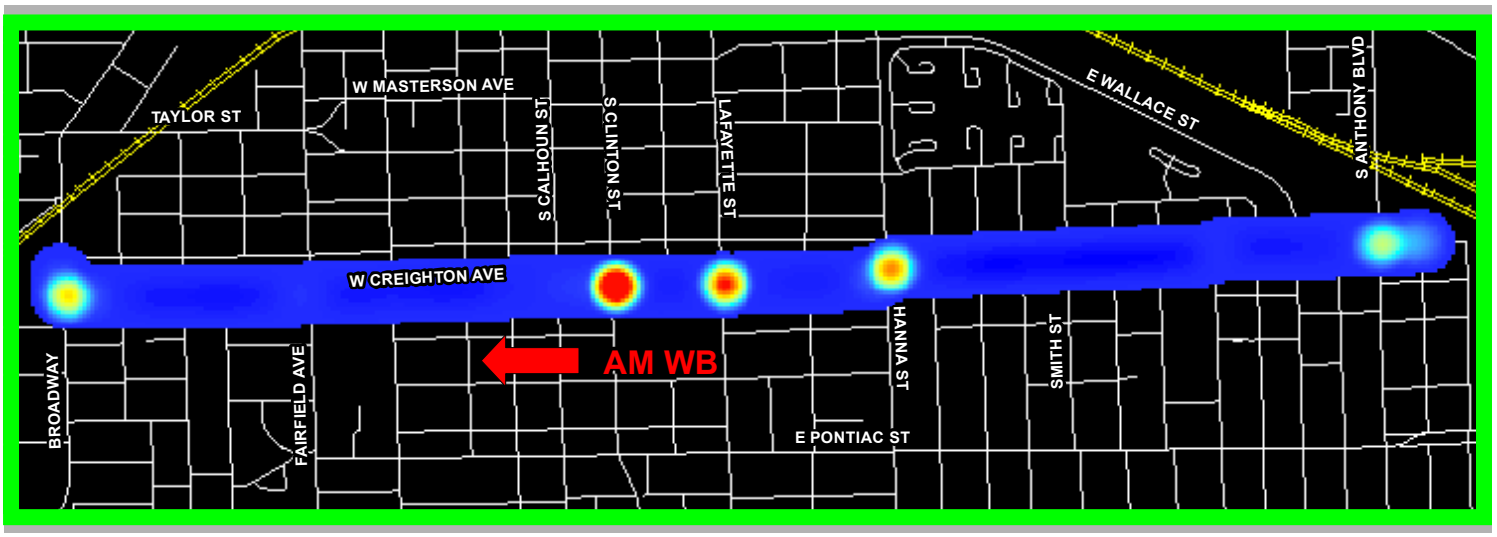
Bar graphs are also included on each page. Two of the bar charts display the average time that NIRCC staff actually encountered from the beginning to the end of the travel time corridor during the time period with the greatest amount of delay, shown in red, and the time period with the least amount of delay, shown in green. These two bar charts also display, in blue, what the travel time would be if there were no delays along the corridor. This time is reflective to what a person would experience if he or she were able to travel along this corridor at the posted speed limit without having to stop or slow down for traffic control devices and traffic congestion.

The other two bar charts display the average speed that NIRCC staff actually encountered from the beginning to the end of the travel time corridor during the time period with the greatest amount of delay, shown in red, and the time period with the least amount of delay, shown in green. These two bar charts also display, in blue, what the average speed would be if there were no delays along the corridor. This speed is reflective to what a person would experience if he or she was able to travel along this corridor at the posted speed limit without having to stop or slow down for traffic control devices and traffic congestion.

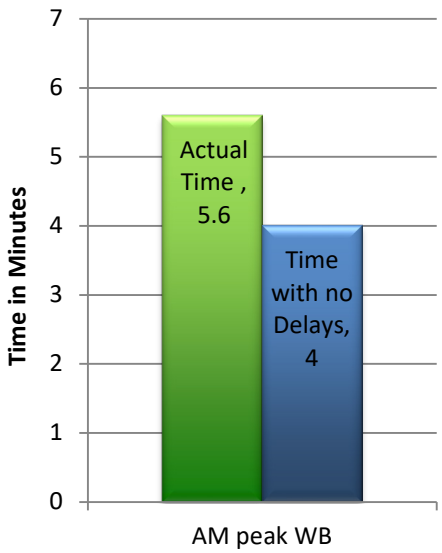
Travel Time and Delay Summary Section for Fiscal Year 2019

Figure 31

Creighton Avenue
AM Peak



Travel Time with the Least Amount of delay



Travel Speed with the Least Amount of delay

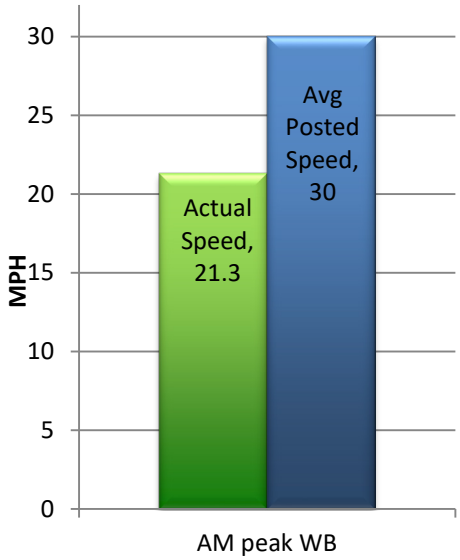
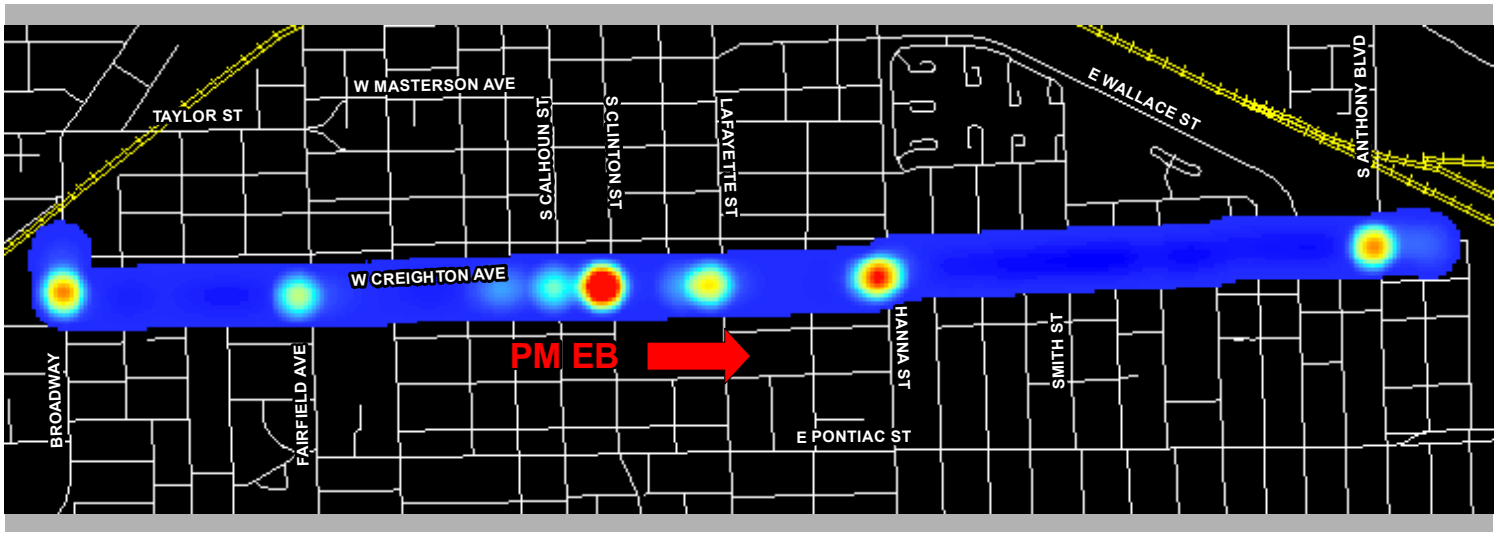
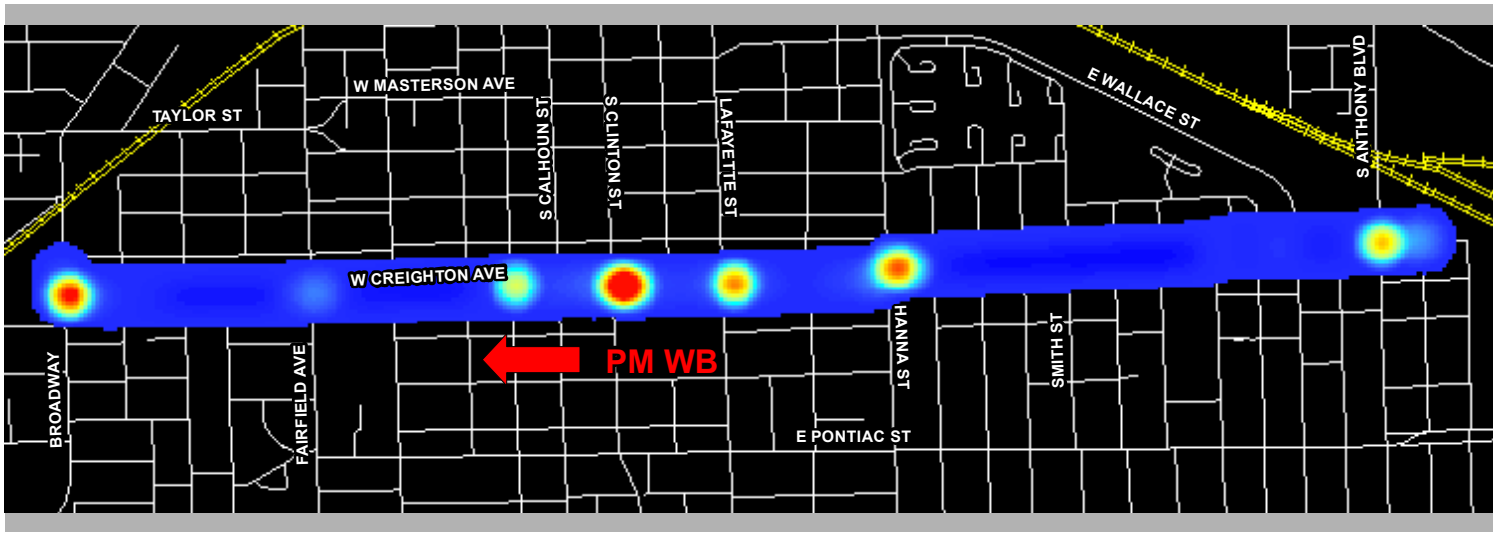


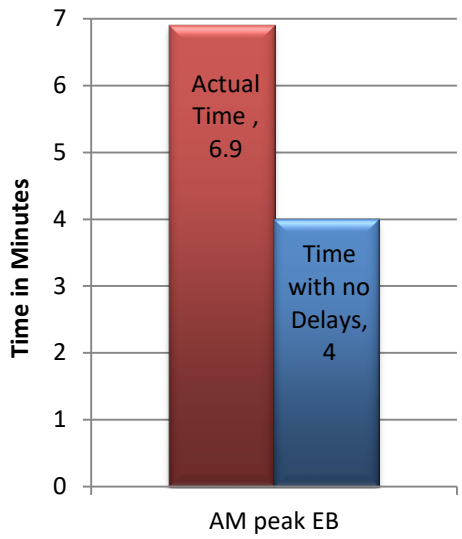
Figure 32

Creighton Avenue
PM Peak





Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

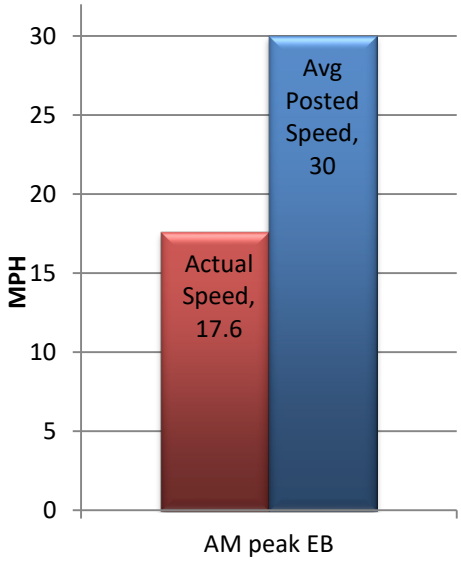
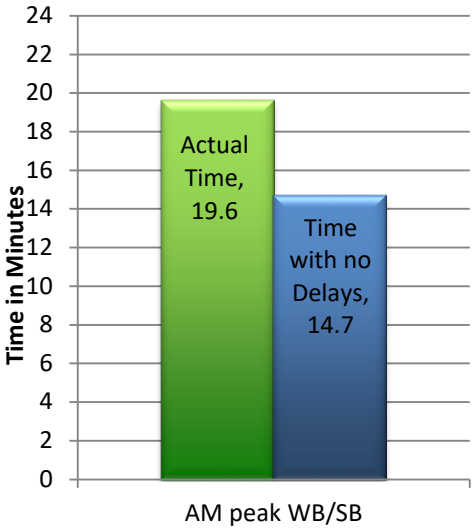


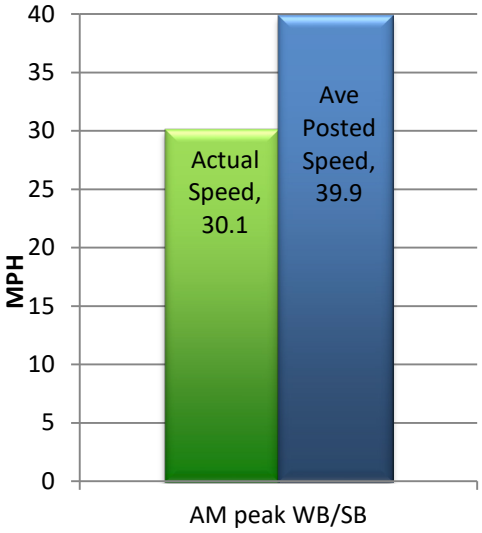
Figure 33

Main Street / Broadway / Bluff ton Road AM Peak

Travel Time with the Least Amount of delay



Travel Speed with the Least Amount of delay



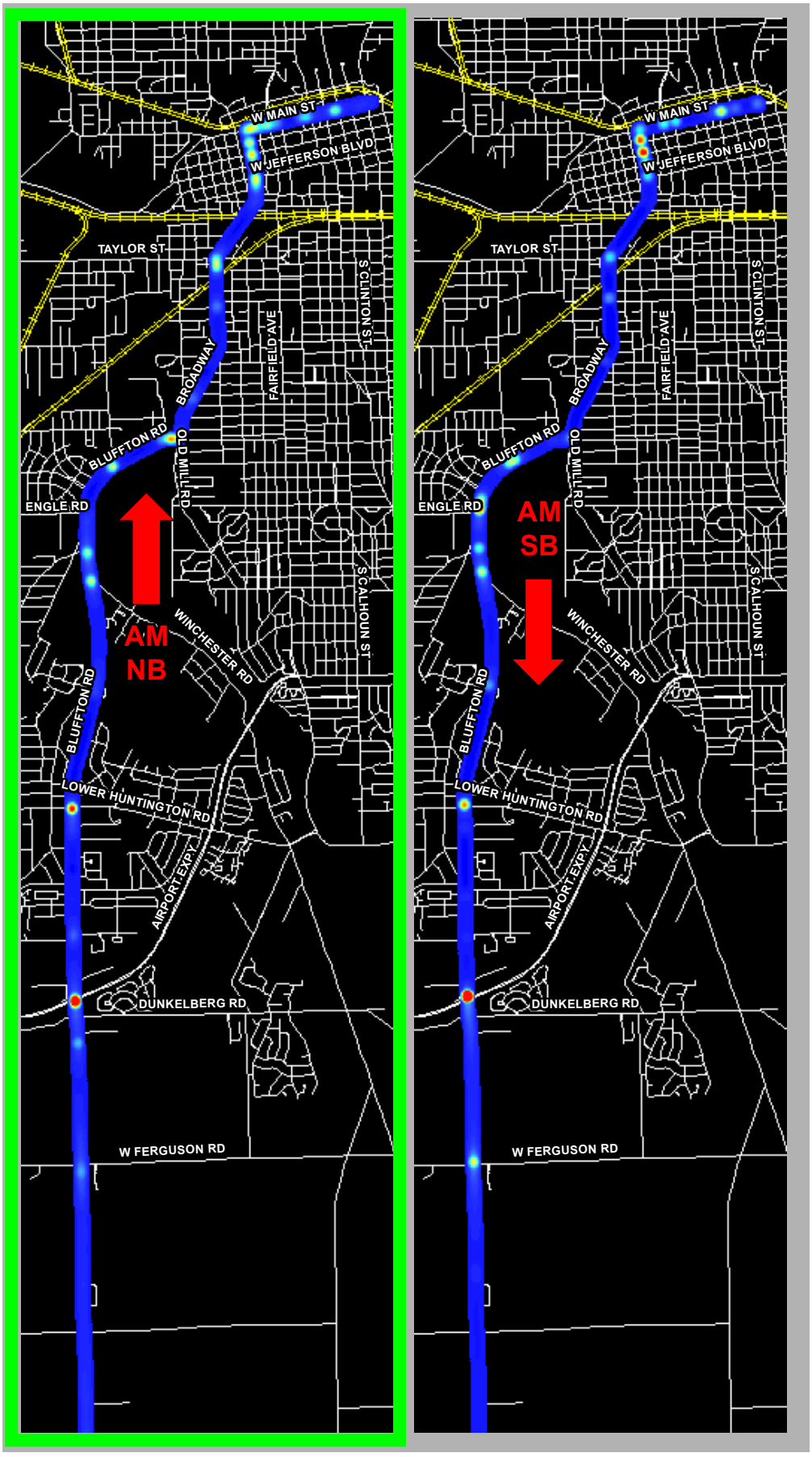
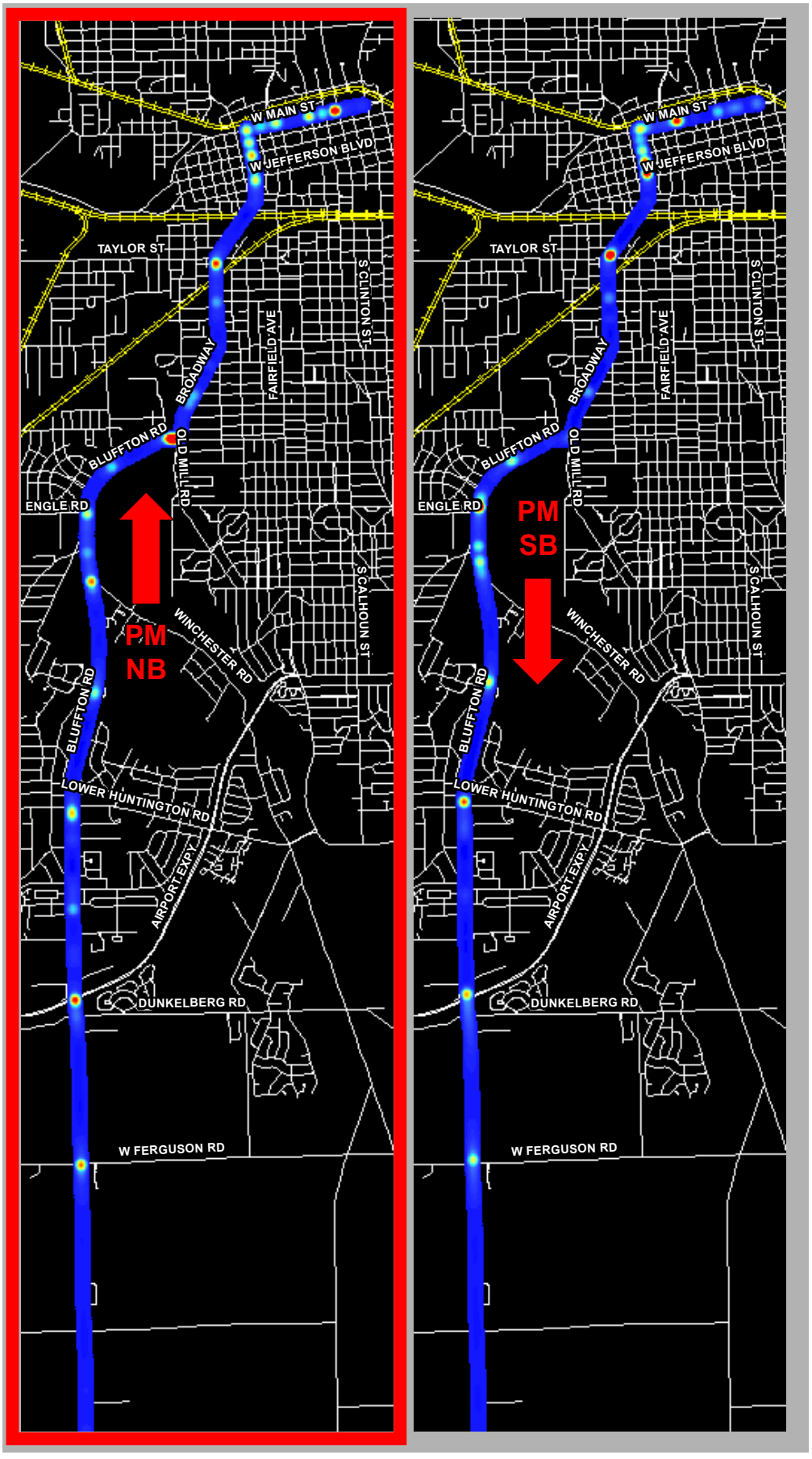
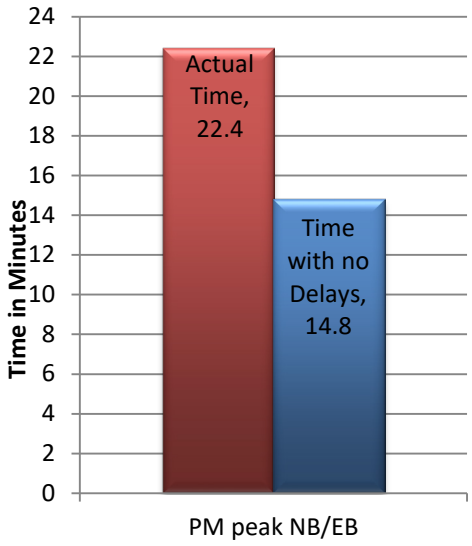


Figure 34

Main Street / Broadway / Bluff ton Road PM Peak



Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

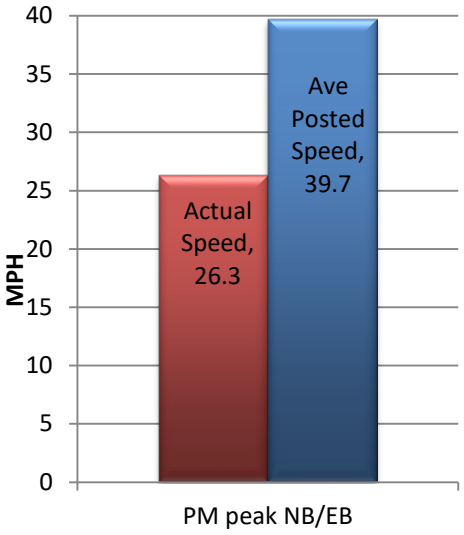
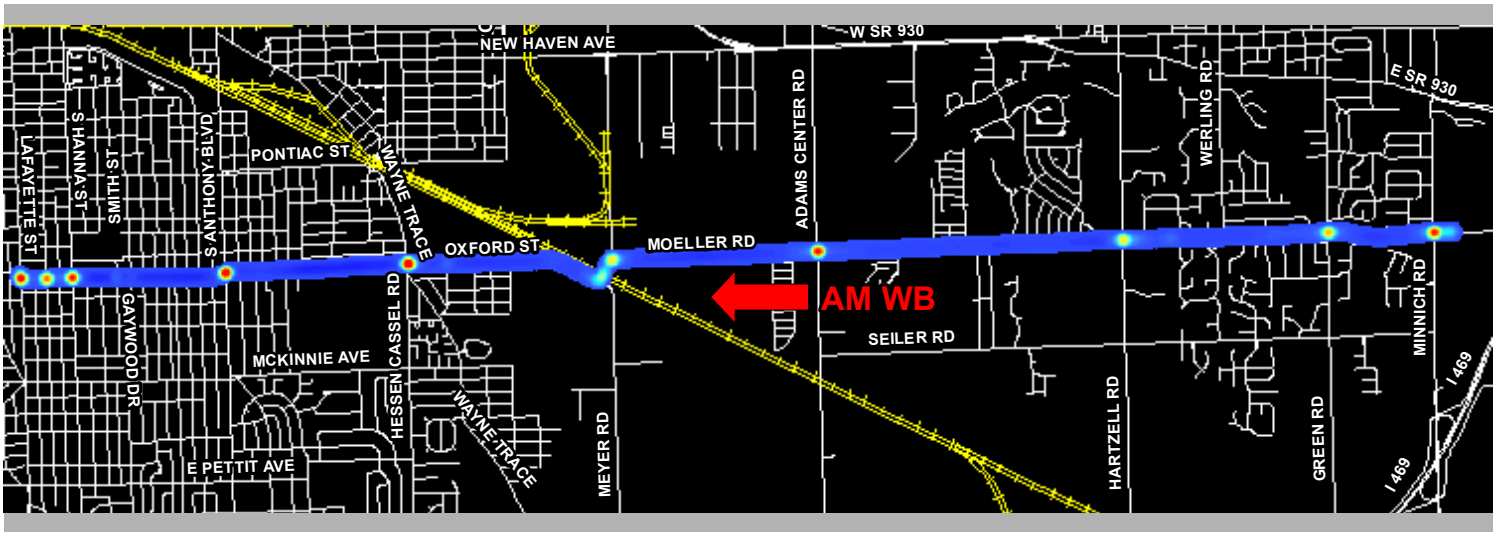
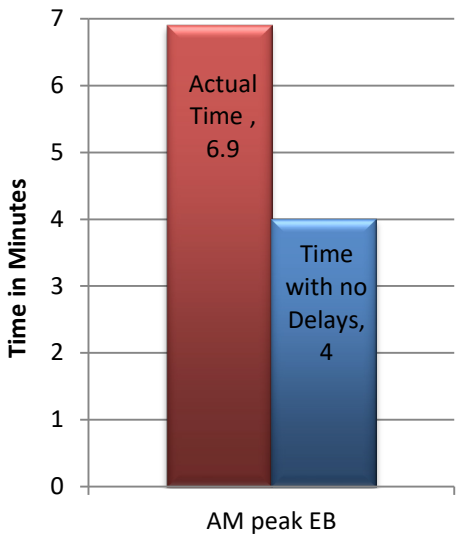


Figure 35

Oxford Street / Moeller Road
AM Peak



Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

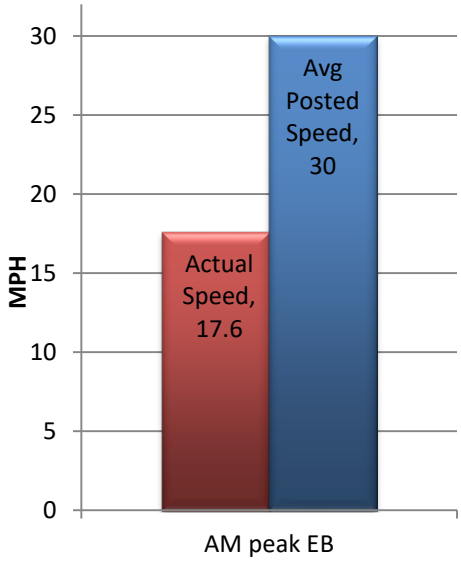
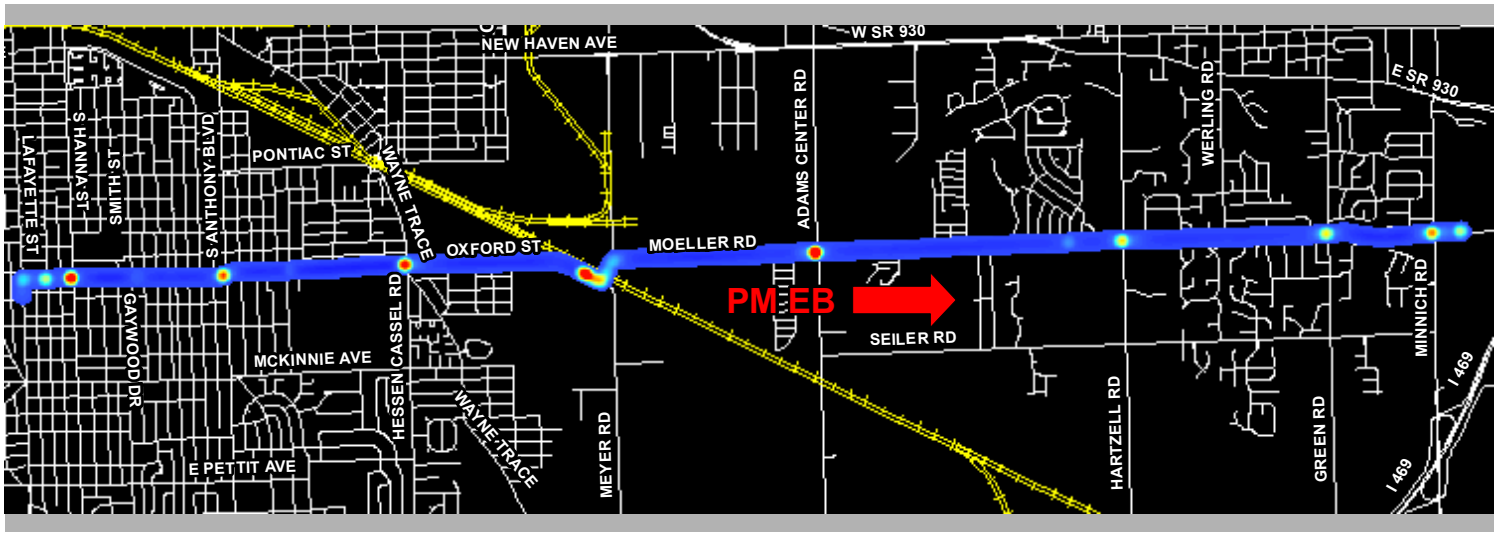
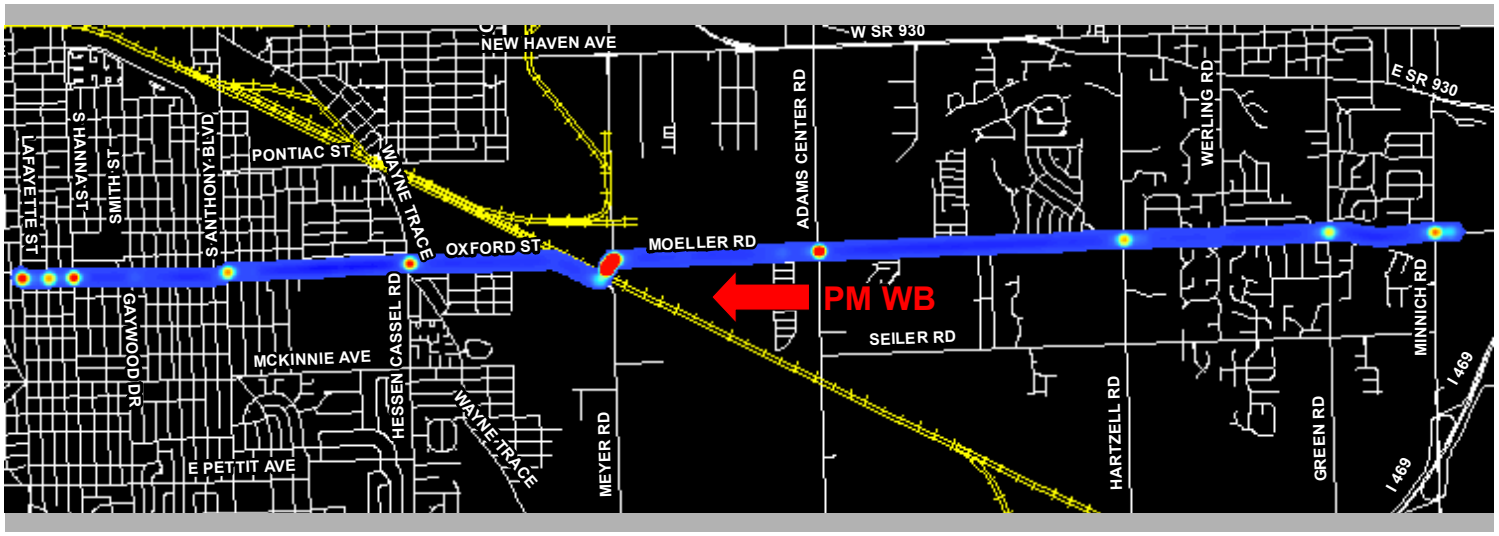


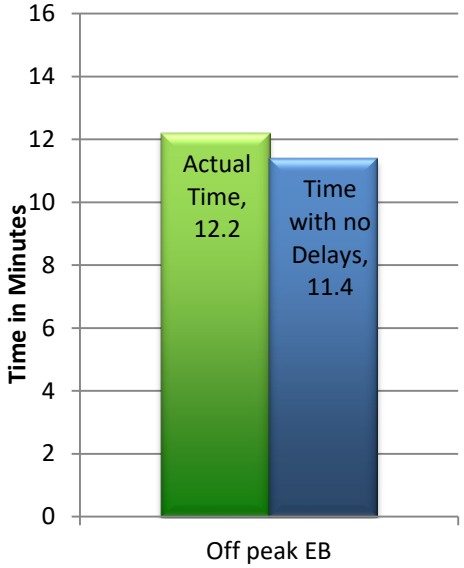
Figure 36

Oxford Street / Moeller Road
PM Peak





Travel Time with the Least Amount of delay



*Off Peak Travel Times are not shown graphically.

Travel Speed with the Least Amount of delay

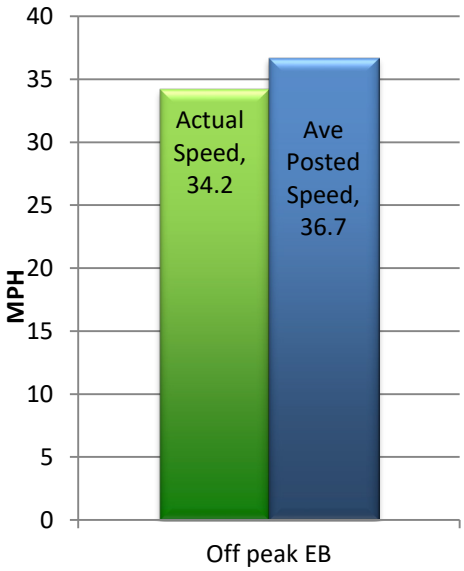
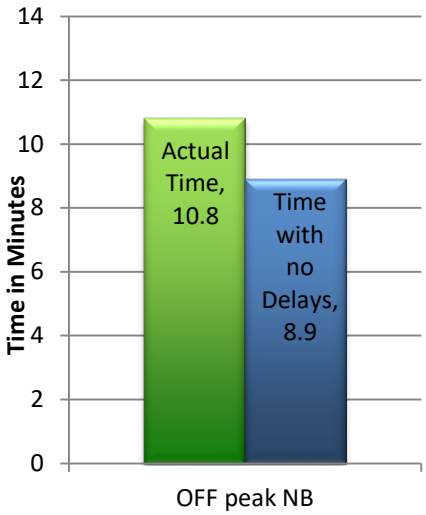


Figure 37

Hobson Road / St Joe Road
AM Peak

Travel Time with the Least Amount of delay



*Off Peak Travel Times are not shown graphically.

Travel Speed with the Least Amount of delay

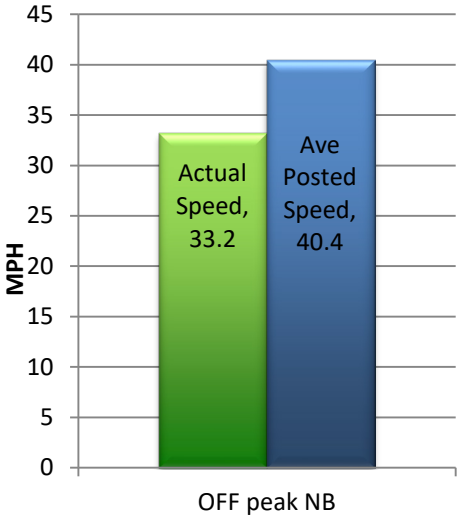
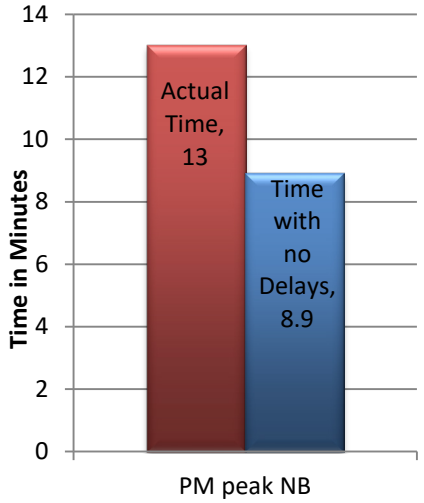


Figure 38

Hobson Road / St Joe Road
PM Peak

Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

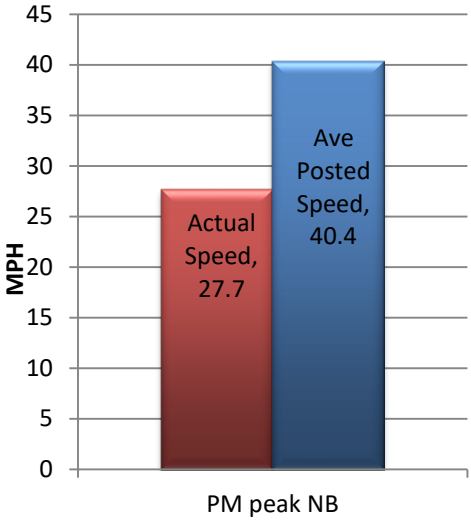
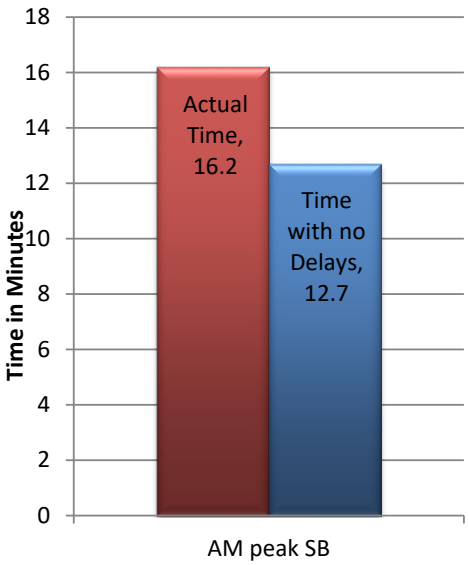


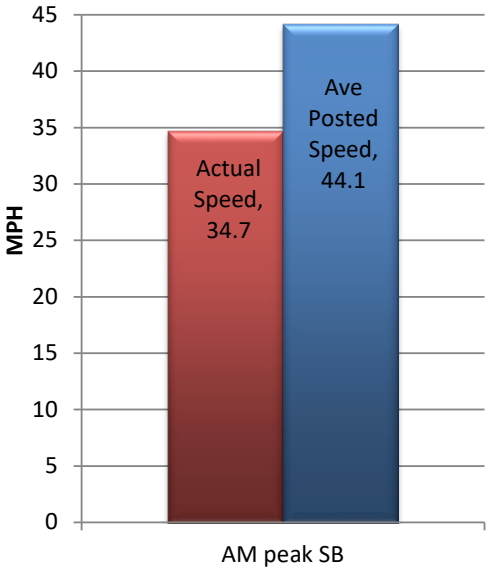
Figure 39

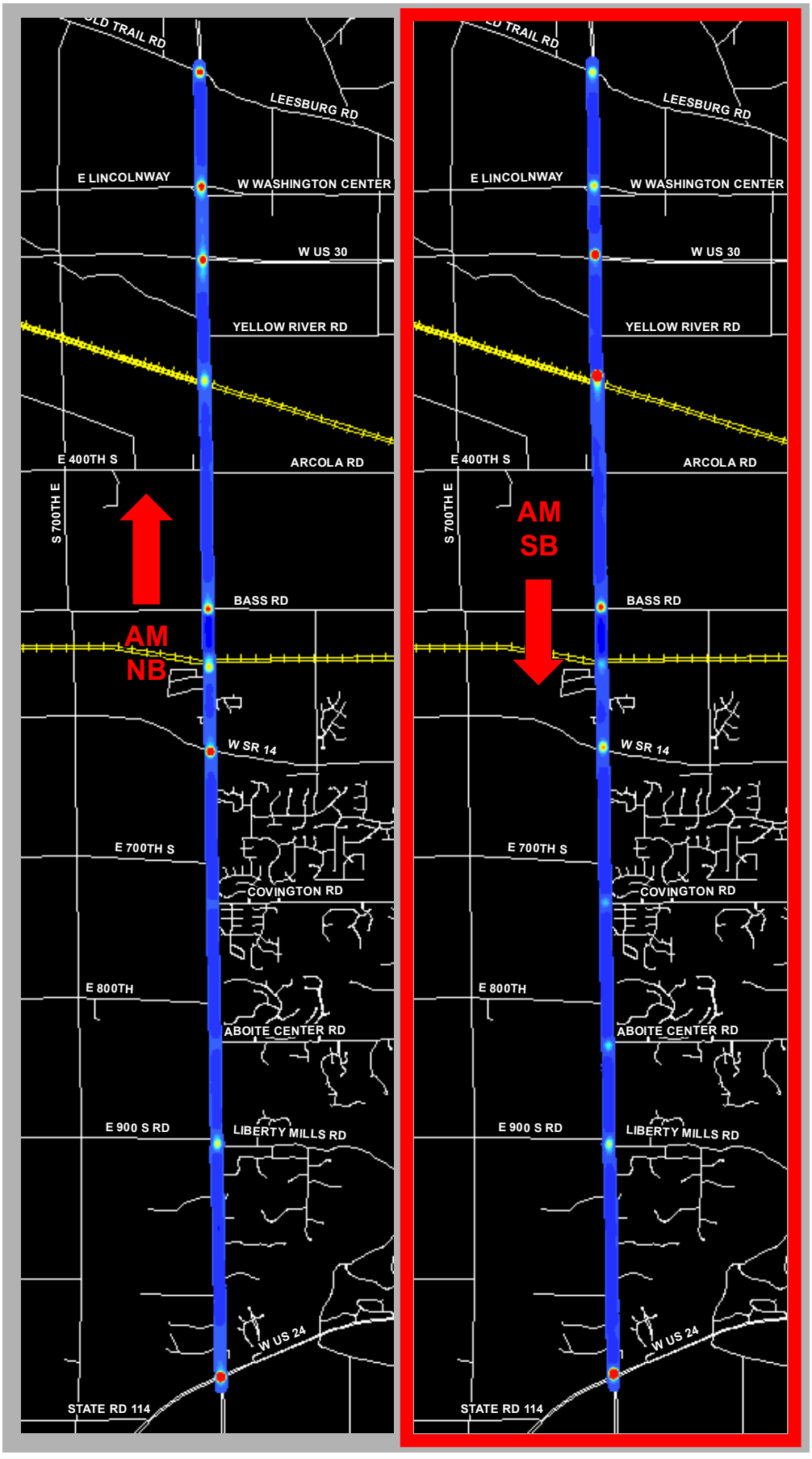
West County Line Road
AM Peak

Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay





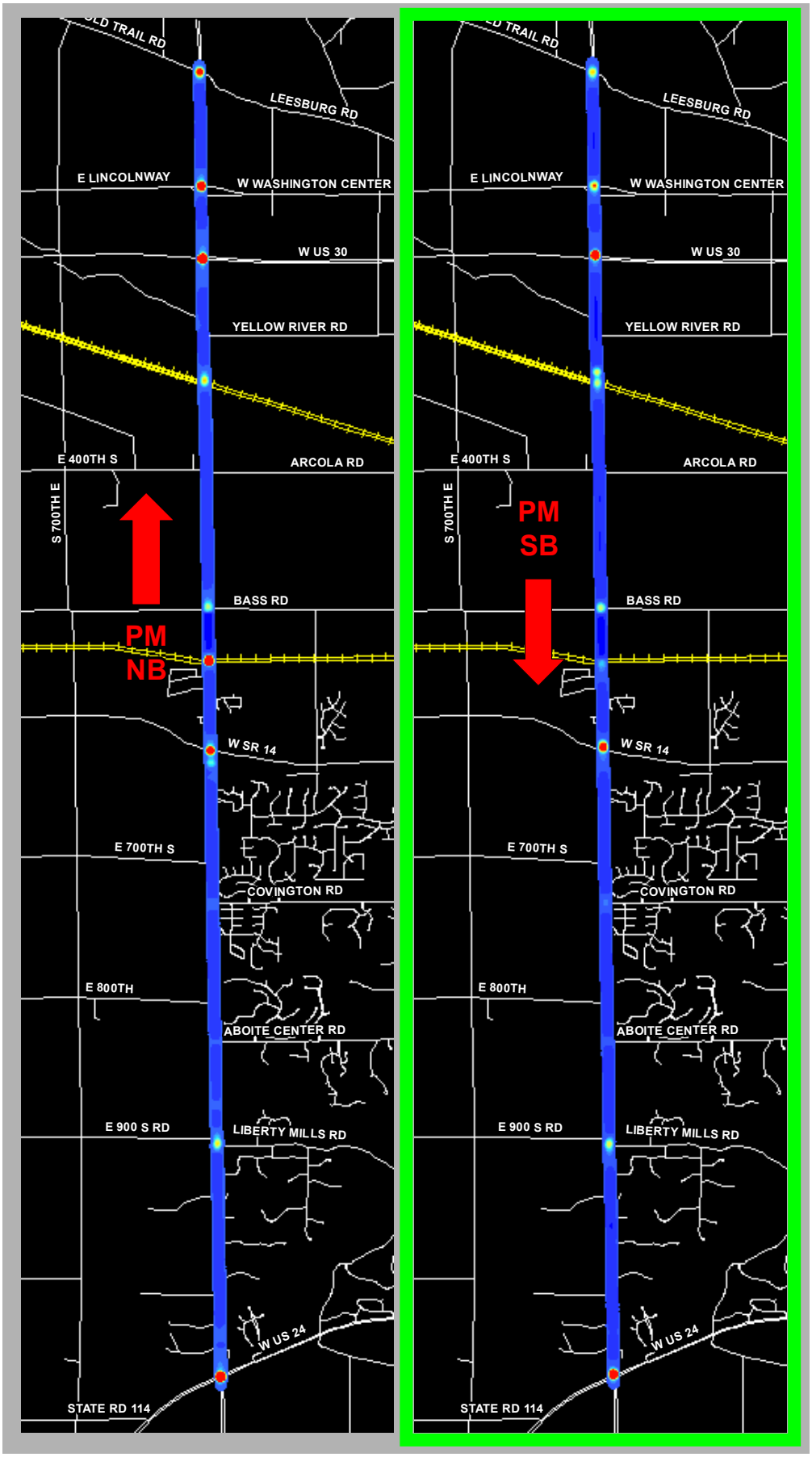
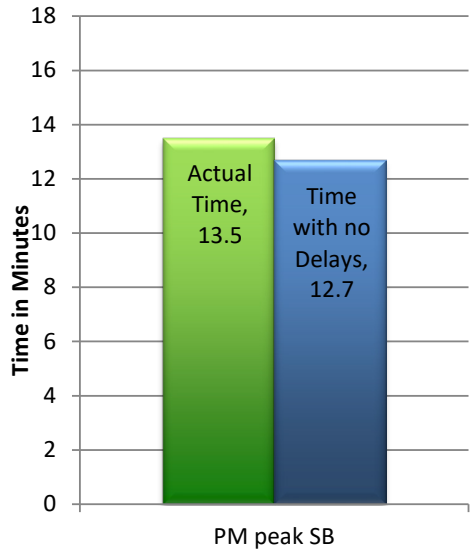


Figure 40

West County Line Road
PM Peak

Travel Time with the Least Amount of delay



Travel Speed with the Least Amount of delay

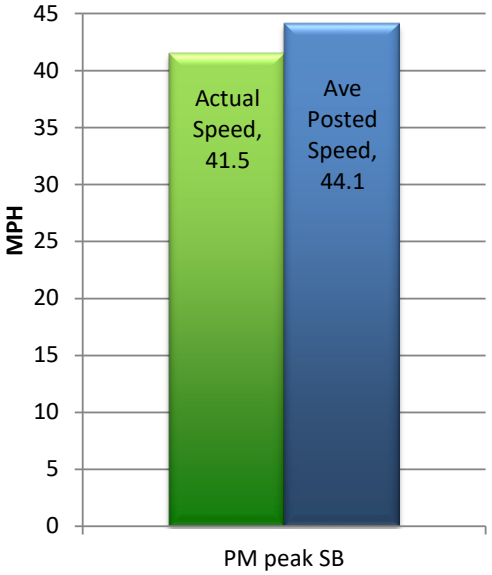
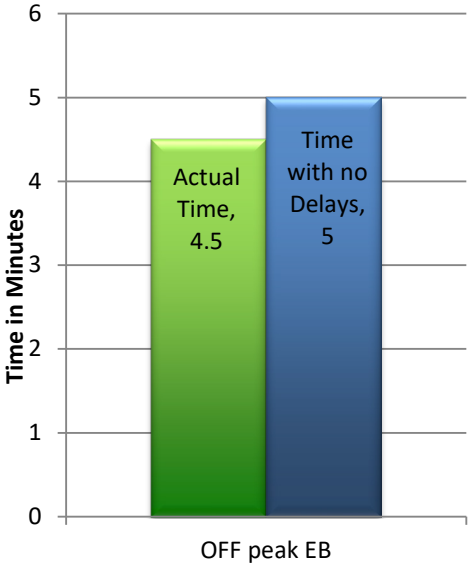


Figure 41

Rothman Road
AM Peak

Travel Time with the Least Amount of delay



*Off Peak Travel Times are not shown graphically.

Travel Speed with the Least Amount of delay

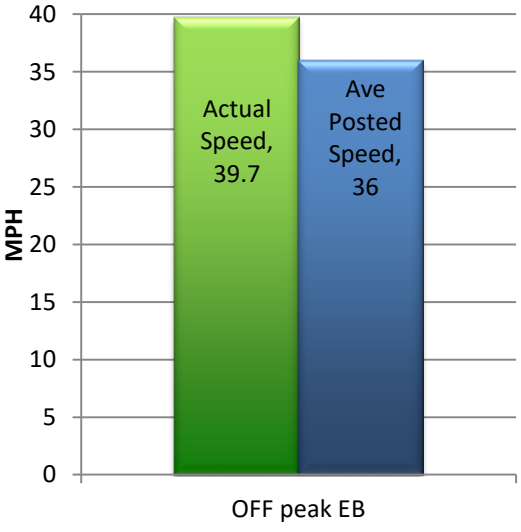
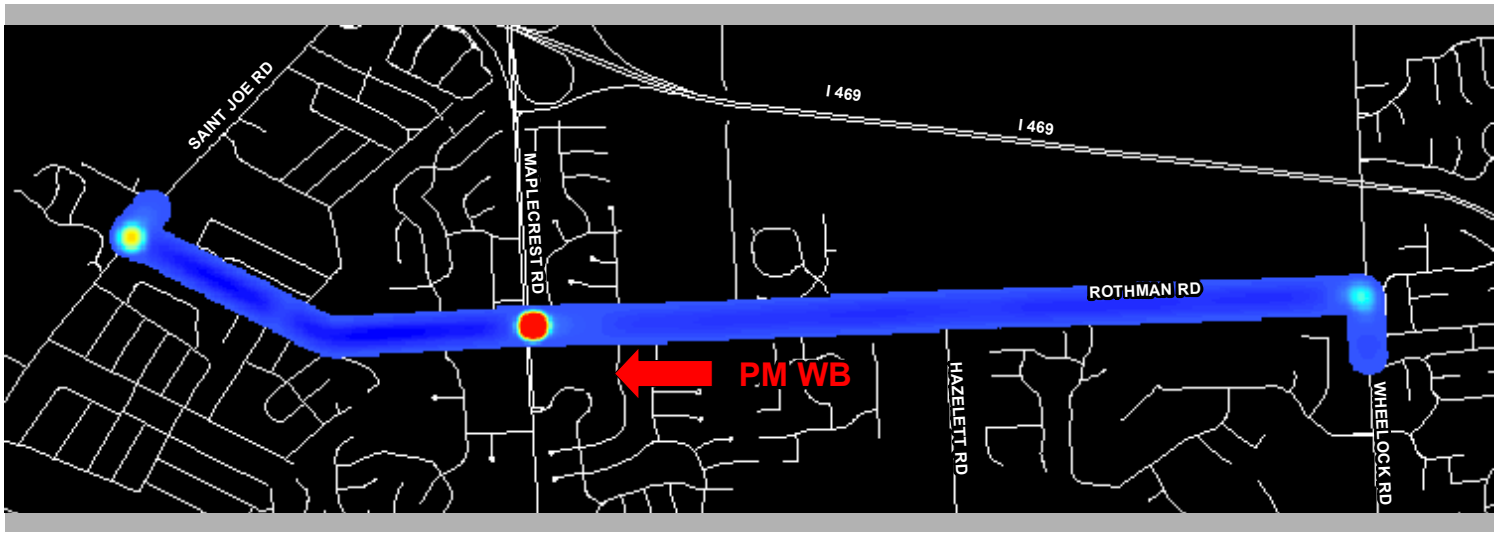
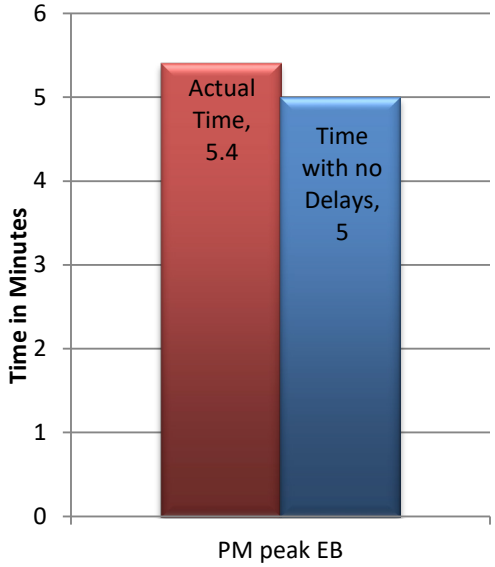


Figure 42

Rothman Road
PM Peak



Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

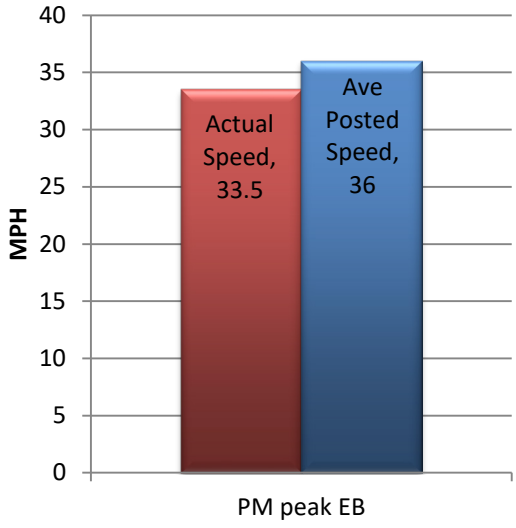
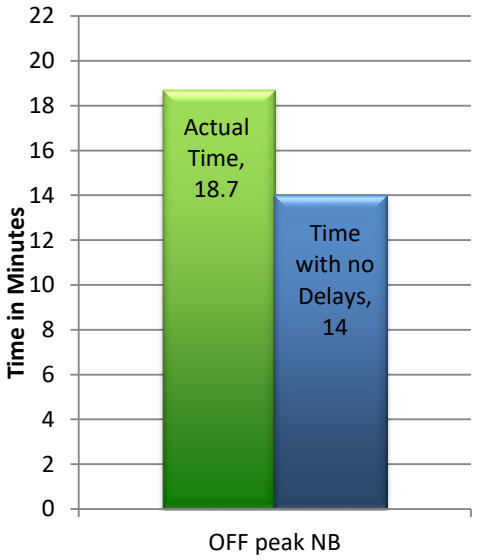


Figure 43

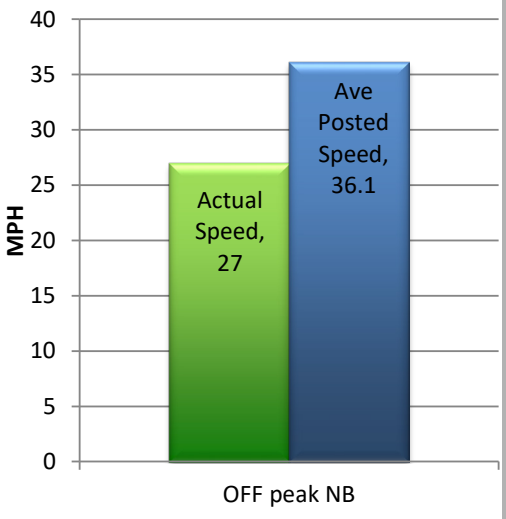
Anthony Boulevard
AM Peak

Travel Time with the Least Amount of delay



*Off Peak Travel Times are not shown graphically.

Travel Speed with the Least Amount of delay



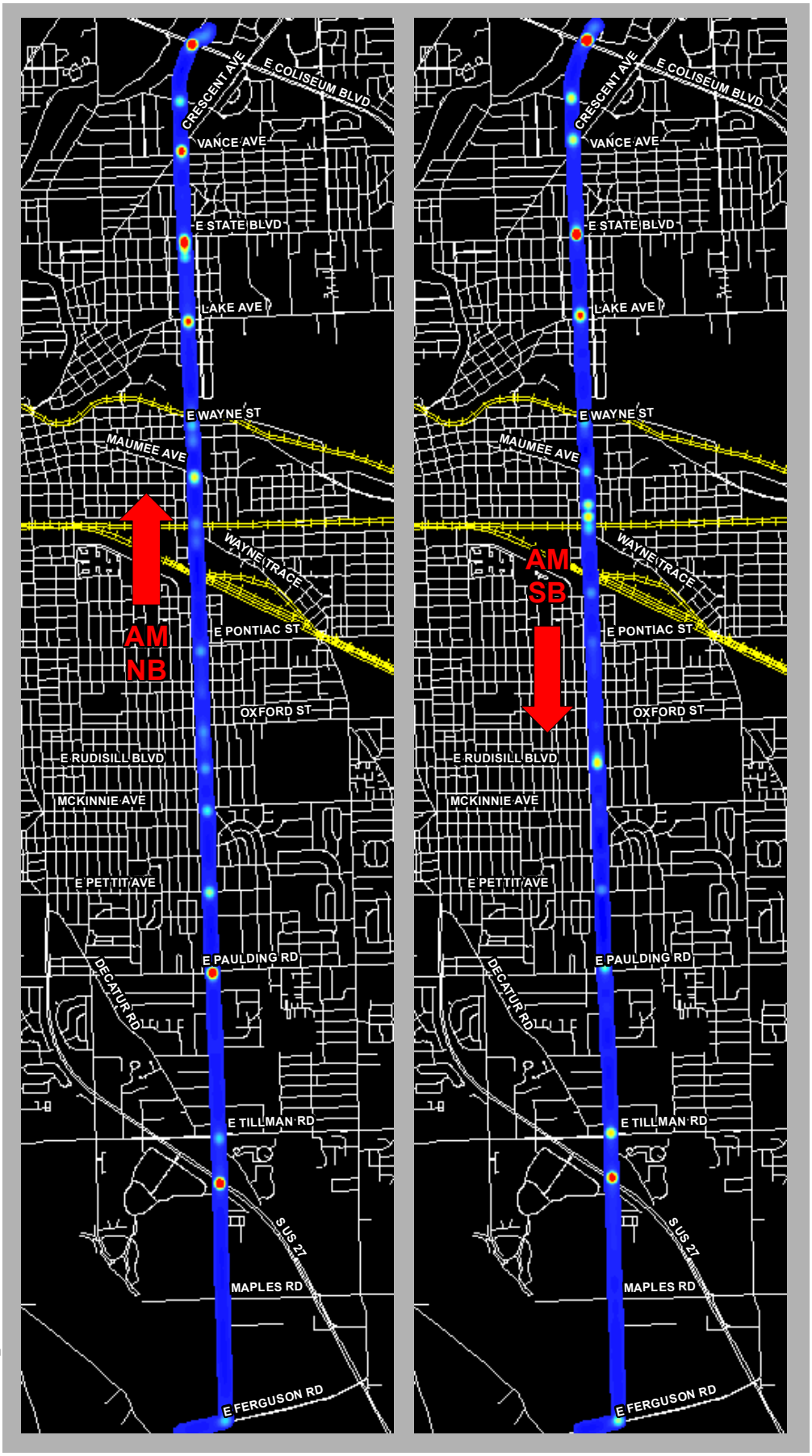
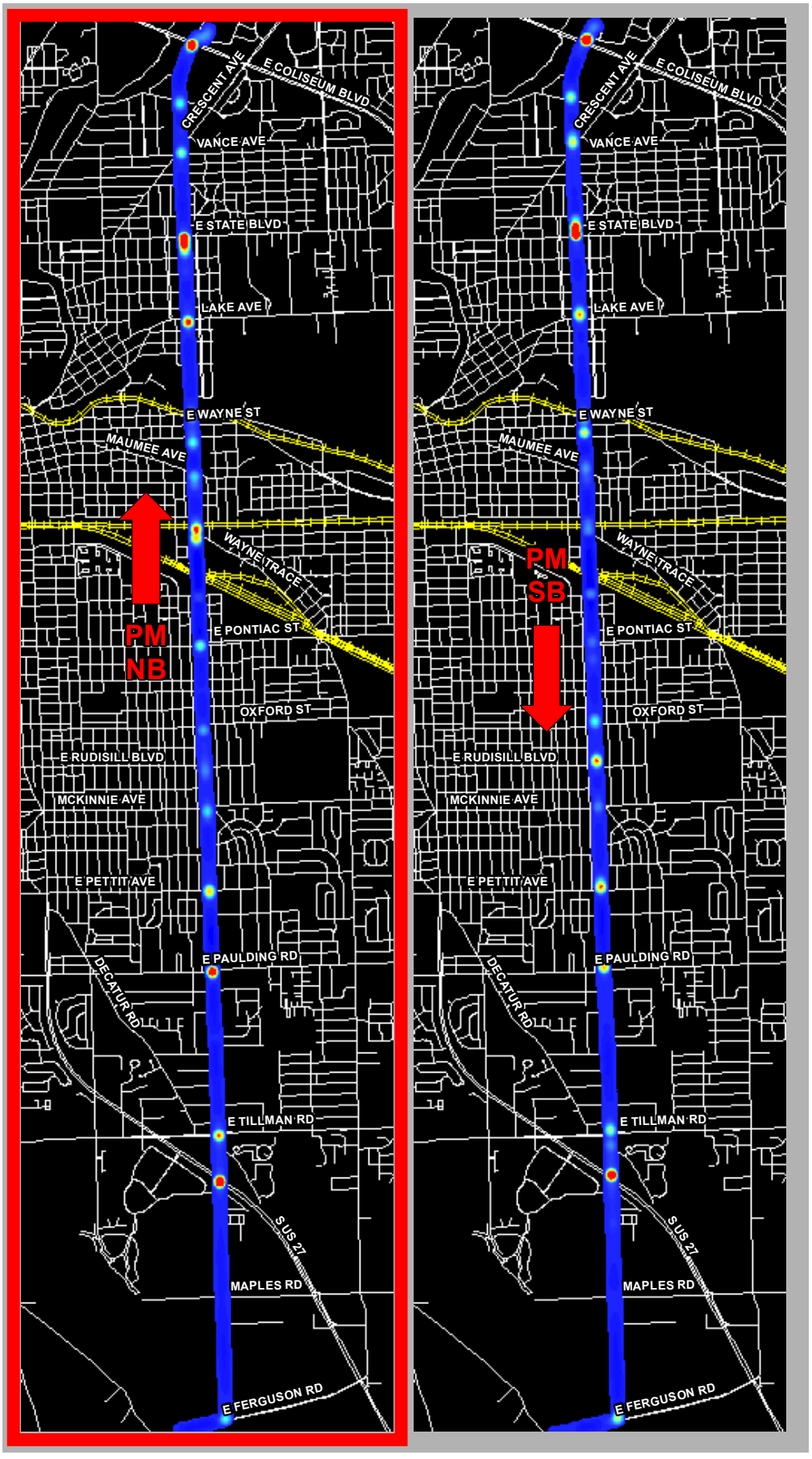
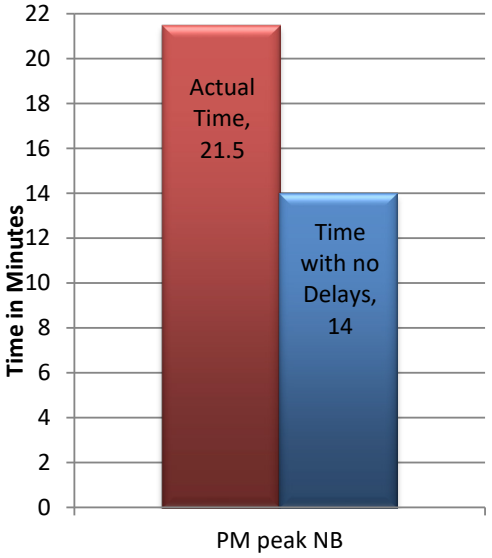


Figure 44

Anthony Boulevard
PM Peak



Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

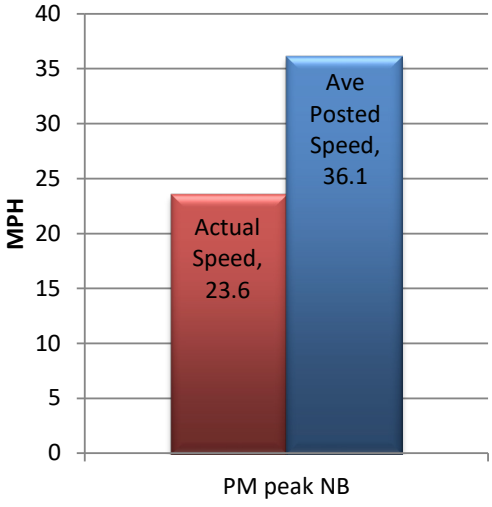
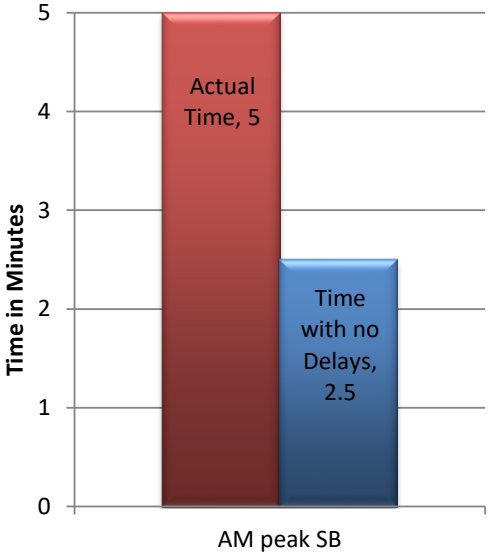


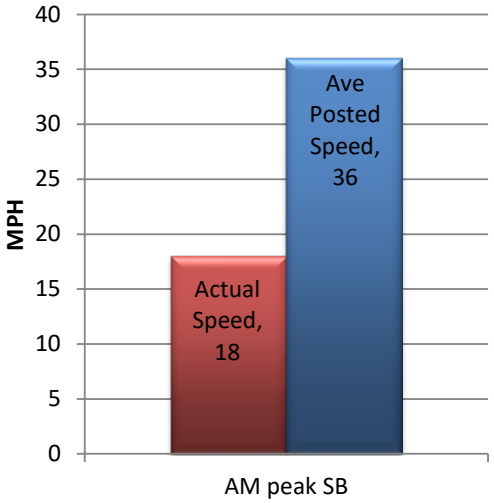
Figure 45

Hobson Road
AM Peak

Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay



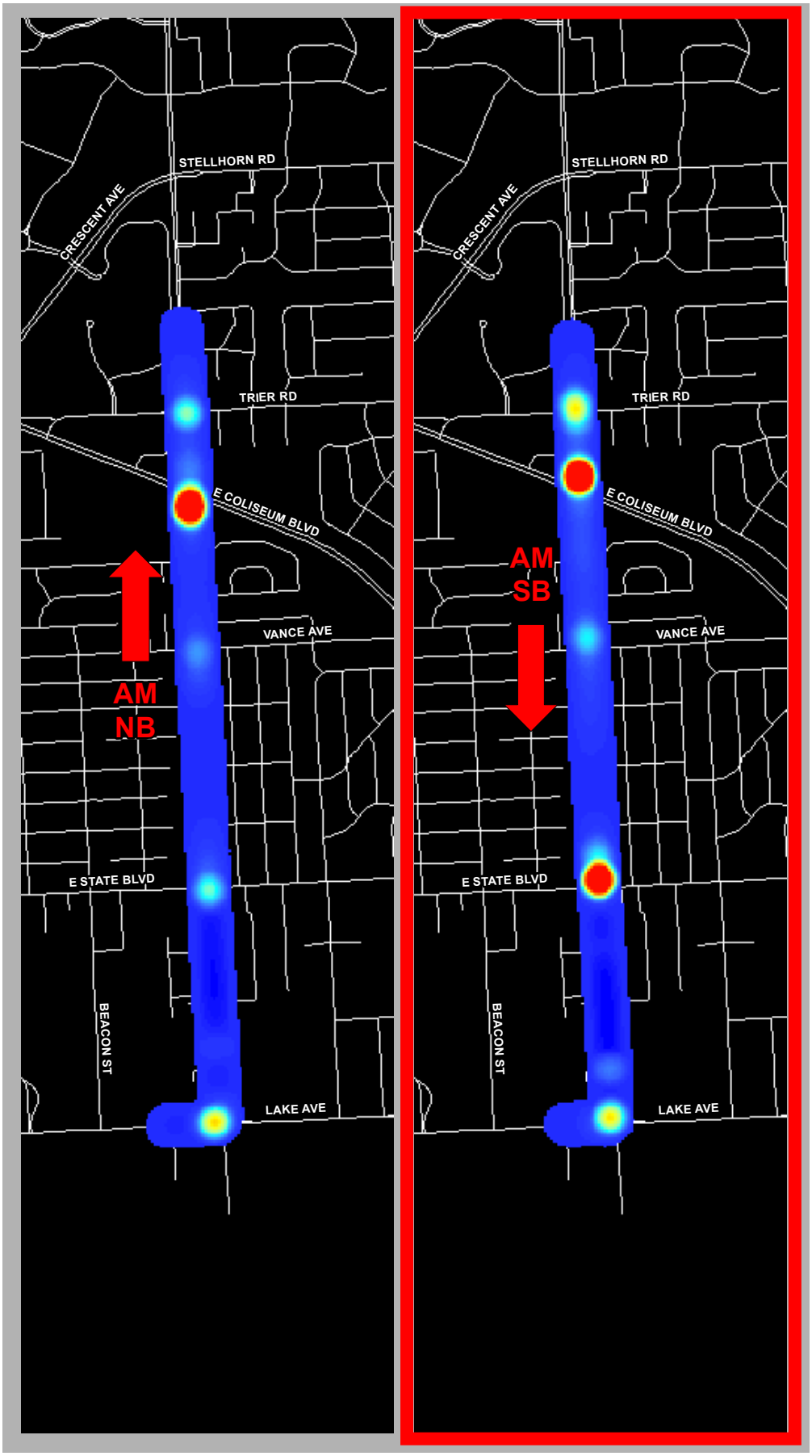
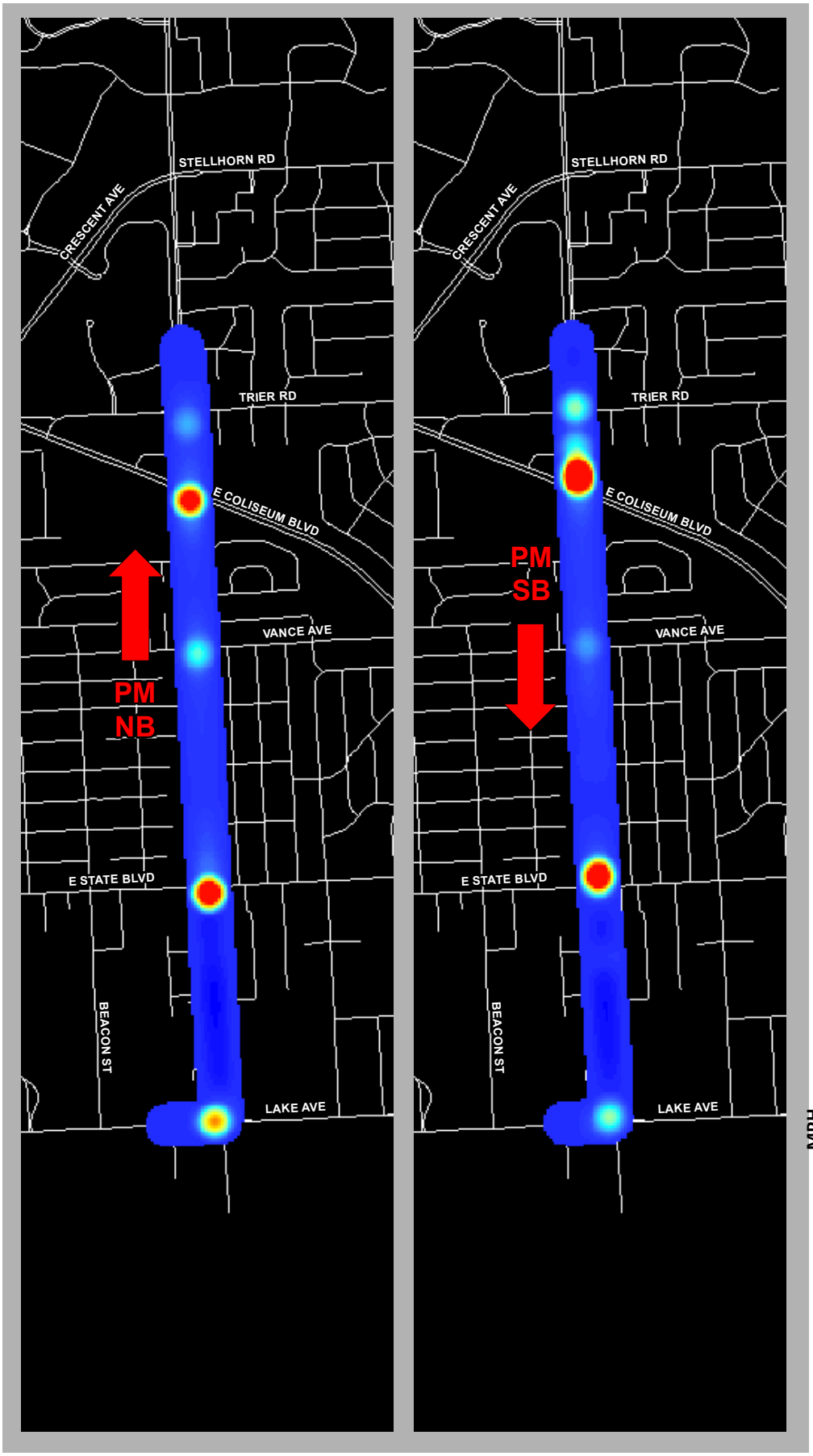
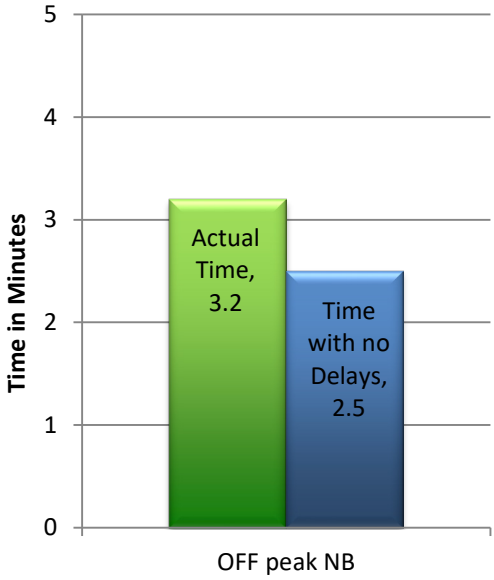


Figure 46

Hobson Road
PM Peak

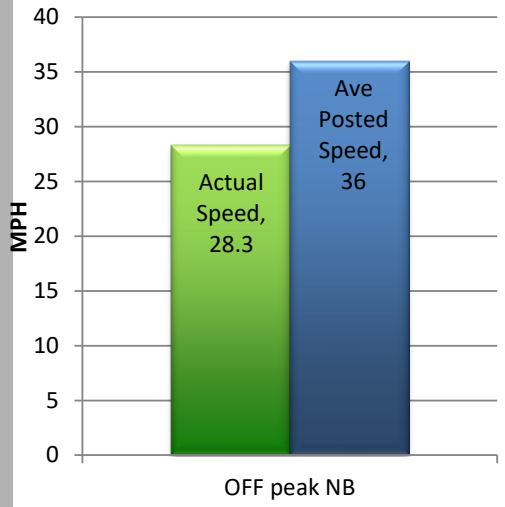


Travel Time with the Least Amount of delay



*Off Peak Travel Times are not shown graphically.

Travel Speed with the Least Amount of delay



Transportation Improvement Program

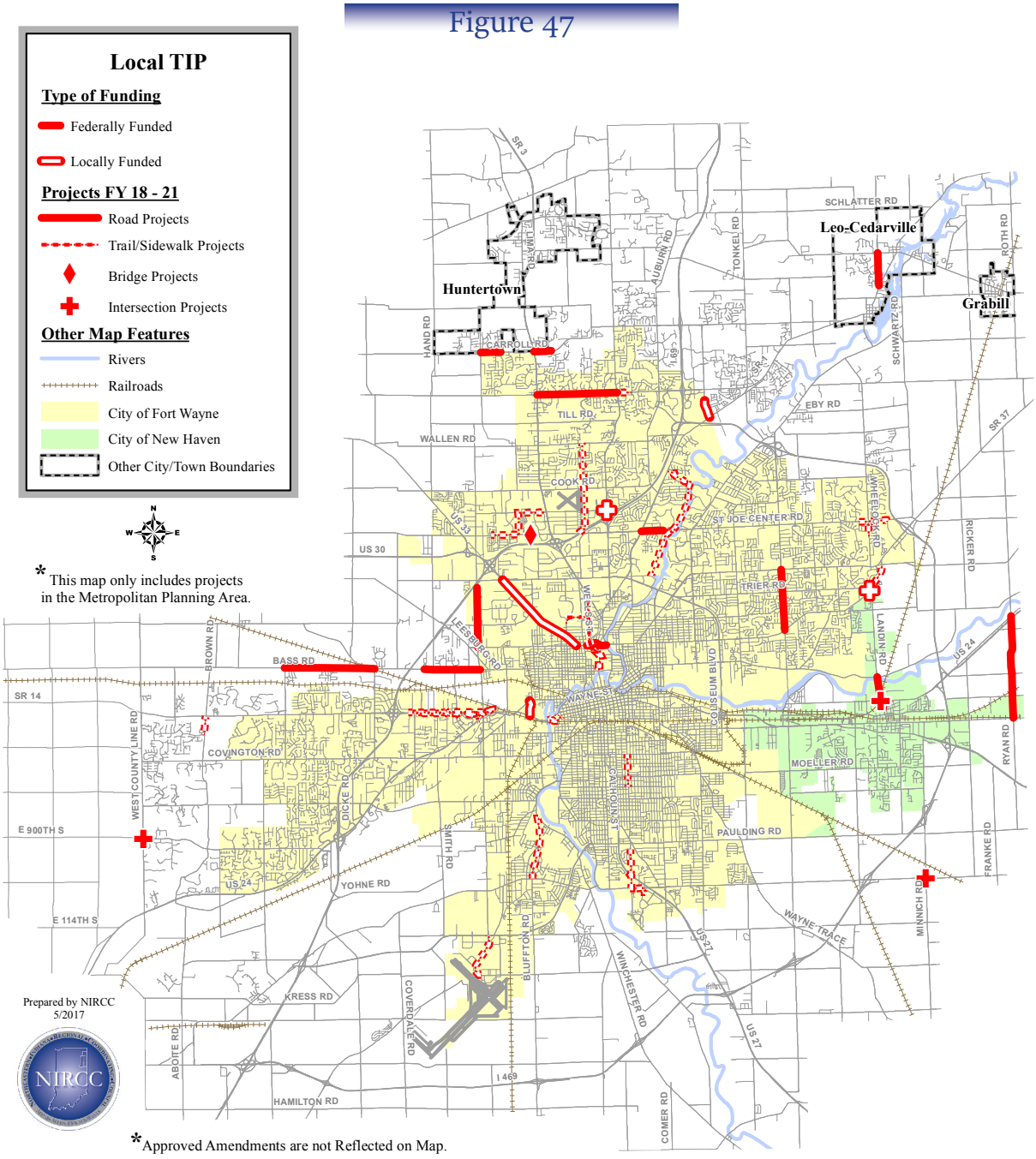
Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) PROJECTS

During Fiscal Year 2019, NIRCC continued to implement the projects in the 2018-2021 Transportation Improvement Program (TIP). In addition to working in the 2018-2021 TIP, NIRCC prepared the Transportation Improvement Program for Fiscal Years 2020-2024. NIRCC began publishing the Transportation Improvement Program (TIP) in 1977 as an annual document, however now it is being produced every other year to align with the INDOT State Transportation Improvement Program (STIP). The next TIP 2022-2026 will be prepared in Fiscal Year 2021. The TIP is a multi-year capital improvements program documenting highway and transit projects, which will serve the needs of the Fort Wayne-New Haven-Allen County Metropolitan Planning Area. The TIP is used to guide the expenditure of federal funds in our area. Short range and long range transportation plans including the Indiana Department of Transportation's Capital

Figure 47



Improvements Program are used to formulate the TIP. The TIP includes commitments of the City of Fort Wayne, Fort Wayne Public Transportation Corporation, City of New Haven, Town of Huntertown, Town of Leo-Cedarville and Allen County to utilize and match federal funds. The Indiana Department of Transportation projects listed in the TIP represents commitments that the State of Indiana makes to improve the transportation system in the Metropolitan Planning Area.

Figure 48

Each project typically goes through three different phases before construction completion. These phases include preliminary engineering (PE), right-of-way engineering and acquisition (RW), and construction (CN). The preliminary engineering includes development of construction plans. Right-of-way engineering and acquisition includes the determination and actual purchase of the right-of-way needed for the project. The construction stage is the actual construction of the project. Each of the projects listed will go through one or more of the phases during the four-year period.

Figure 49

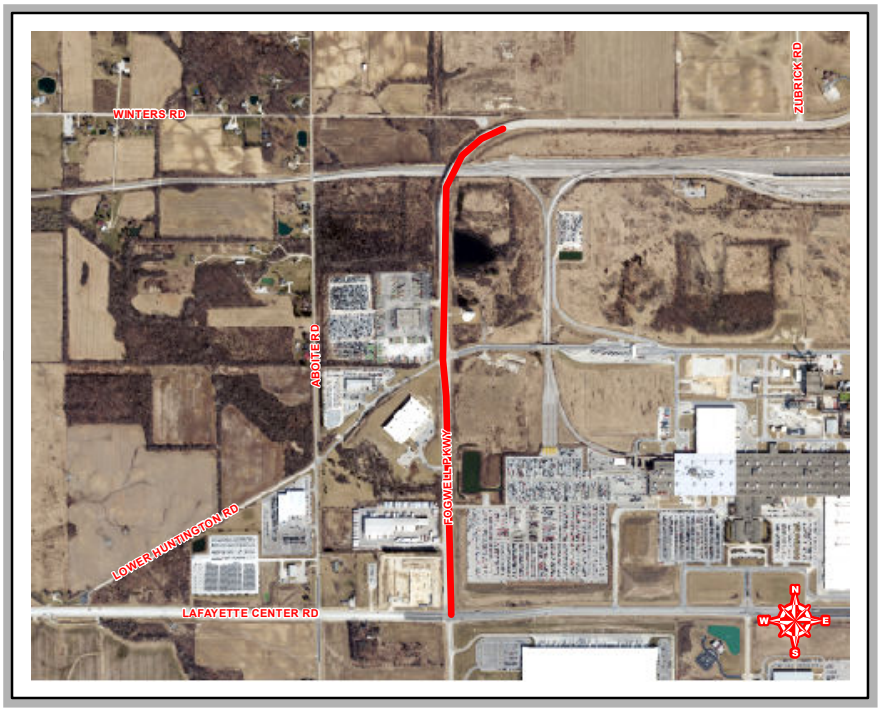


Figure 47 shows the locations of local TIP projects throughout the Metropolitan Planning Area. The local TIP map identifies projects that utilize federal aid funds with matching local funds from the City of Fort Wayne, City of New Haven, Town of Huntertown, Town of Leo-Cedarville and Allen County. Figures 48 and 49 provide aerial views to show detailed examples of projects shown in Figure 47. The following pages provide a listing of projects for each fiscal year and the phase for each project. Please note that projects listed on page 67 are locally funded projects only. Also note that not all projects listed on the following pages are shown in figure 25 as some of the projects were amended after the map was made.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) PROJECTS LISTED

PHASE CLASSIFICATIONS

PE - Preliminary Engineering RW - Right of Way CN - Construction

FY 2019 TIP Federally and Locally Funded Projects

Project	Phase	Improvement Type
Allen County Bridge Inspection	PE	Bridge Inspection
Amstutz Road: Hosler Rd to Leo Rd/SR 1	PE	Road Reconstruction
Bass Road: Scott Rd to Hadley Rd (Phase 1)	RW	Road Reconstruction
Broadway/St/Landin Rd: North River Rd to Powers St	RW	Intersection Imp/Road Reconstruct
Carroll Road: e/o Bethel Rd to Millstone Dr; Lima Rd/SR3 to Coral Springs Dr/Shearwater Run	PE	Road Reconstruction
St Joe Ctr/Wash Ctr Road: Clinton St to Campus Ct	CN	Intersection Imp/Added Turn Lanes
South County Line Rd Bridge #271	PE	Bridge Rehabilitation or Repair
State Blvd: Clinton St to Cass St	CN	Added Travel Lanes/Bridge/Ped
UPWP HSIP Funds	PE	Work Program Activities

FY 2020 TIP Federally and Locally Funded Projects

Project	Phase	Improvement Type
Allen County Bridge Inspection	PE	Bridge Inspection
Amstutz Road: Hosler Rd to Leo Rd/SR 1	PE	Road Reconstruction
Bass Road: Clifty Parkway to Thomas Rd	CN	Road Reconstruction
Bass Road: Thomas Rd to Hillegas Rd	CN	Road Reconstruction
Fogwell Parkway	PE	Road Reconstruction
Maplecrest Road: State Blvd to Stellhorn Rd - Phase 1	CN	Road Reconstruction
State Blvd: Clinton St to Cass St	CE	Added Travel Lanes/Bridge/Ped
UPWP HSIP Funds	PE	Work Program Activities

FY 2021 TIP Federally and Locally Funded Projects

Project	Phase	Improvement Type
Allen County Bridge Inspection	PE	Bridge Inspection
Amstutz Road: Hosler Rd to Leo Rd/SR 1	RW	Road Reconstruction
Bass Road: Clifty Parkway to Thomas Rd	CE	Road Reconstruction
Bass Road: Thomas Rd to Hillegas Rd	CE	Road Reconstruction
Broadway/St/Landin Rd: North River Rd to Powers St	CN	Intersection Imp/Road Reconstruct
Carroll Road: e/o Bethel Rd to Millstone Dr; Lima Rd/SR3 to Coral Springs Dr/Shearwater Run	RW	Road Reconstruction
Hillegas Road: State Blvd to Coliseum Blvd	PE	Added Travel Lanes
Maplecrest Road: State Blvd to Stellhorn Rd - Phase 2	CN	Road Reconstruction

FY 2022 TIP Federally and Locally Funded Projects

Project	Phase	Improvement Type
Amstutz Road: Hosler Rd to Leo Rd/SR 1	CN	Road Reconstruction
Broadway/St/Landin Rd: North River Rd to Powers St	CN	Intersection Imp & Rd Reconstruct
Carroll Road: e/o Bethel Rd to Millstone Dr; Lima Rd/SR3 to Coral Springs Dr/Shearwater Run	CN	Road Reconstruction
Hillegas Road: State Blvd to Coliseum Blvd	PE	Added Travel Lanes

FY 2018 Fort Wayne Public Transportation Corporation

Four (4) Replacement Minibus (Body on Chassis) ACCESS
Capitalization of Maintenance Costs

Complimentary Paratransit Costs
5307 Special Rule Operations

FY 2019 Fort Wayne Public Transportation Corporation

Two (2) Heavy Duty Replacement Hybrid Buses
Three (3) Replacement Minibus (Body on Chassis) ACCESS

Capitalization of Maintenance Costs
Complimentary Paratransit Costs
5307 Special Rule Operations

FY 2020 Fort Wayne Public Transportation Corporation

One (1) Heavy Duty Replacement Hybrid Buses
Three (3) Replacement Minibus (Body on Chassis) ACCESS

Capitalization of Maintenance Costs
Complimentary Paratransit Costs
5307 Special Rule Operations

FY 2021 Fort Wayne Public Transportation Corporation

Two (2) Heavy Duty Replacement Hybrid Buses
Capitalization of Maintenance Costs

Complimentary Paratransit Costs
5307 Special Rule Operations

FY 2018 Human Services Agencies

Community Transportation Network
Operating Funds
One (1) Small Transit Vehicle w/Lift
Two (2) Medium Transit Vehicle w/Lift

Easter Seals
One (1) Small Transit Vehicle w/Lift

*The following are Locally Funded Projects only.

FY 2018 - 2021 TIP Locally Funded Projects

Project	Phase	Improvement Type
Ardmore Ave: Airport Exp to Second St	CN	Trail
Bluffton Rd: Lower Huntington Rd to W Foster Park (3 phases)	CN	Trail
Clay St at SR 1 (Leo-Cedarville)	CN	Intersection Improvement
Coldwater Rd: Union Chapel Rd to Pion Rd	CN	Add southbound Right Turn Lane
Covington Rd: Hadley Rd to Getz Rd	CN	Trail
Diebold Rd: N Clinton St to Berger Automotive (Phase II)	CN	Reconstruction, Sidewalk & Trail
Dupont Rd: Coldwater Rd to Pine Mills	CN	Trail
Goshen Rd: State Blvd to Cambridge Blvd (Phase I)	CN	Reconstruct,Roundabout,Sidewalks
Goshen Rd: Cambridge Blvd to Butler/Harris Rds (Phase II)	CN	Reconstruction, Sidewalks
Goshen Rd: Butler/Harris Rds to Coliseum Blvd (Phase III)	CN	Reconstruction, Sidewalks
Greenmoor Dr: Scarborough Dr to Green Dr (New Haven)	CN	Reconstruction
Hanna St: Berry St to Tillman Park/Southtown Cntr (5 Phases)	CN	Trail
Hathaway Rd: at Corbin Rd and at Union Chapel Rd	CN	Intersection Improvement
Illinois Rd: Rockhill Park to Magnovox Way (2 Phases)	CN	Trail
Kirklynn Dr: Moeller Rd to Greenmoor Dr (New Haven)	CN	Reconstruction
Lake Ave: Randalia Ave to Coliseum Blvd	CN	Trail
Landin/Maysville/Trier Intersection	CN	Roundabout, Sidewalk & Trail
Leesburg Rd: Main St to W Jefferson Blvd	CN	New Road, Sidewalk & Trail
Ludwig Rd: Brotherhood Way to Coldwater Rd	CN	Road Relocation
Main St Bridge #601 (New Haven)	CN	Bridge Rehabilitation
Maysville Rd: Landin Rd to Meijer Dr (2 Phases)	CN	Trail
Norland Ln: Moeller Rd to Greenmoor Dr (New Haven)	CN	Reconstruction
Old Lima Rd Bridge #52 (Huntertown)	CN	New Bridge
Old Lima Rd: Willow Creek Ditch to SR3 (Huntertown)	CN	Resurfacing
Pawnee Way: west cul-de-sac to ~165' e/o Shawnee Tr (NH)	CN	Resurfacing
St Joe Center Rd: Meijer Dr to Chiswell Run	CN	Trail
Shawnee Tr: Pawnee Way to Arrow Pass (New Haven)	CN	Resurfacing
E State Blvd: between Maysville Rd to Lahmeyer Rd	CN	New Bridge #319 & New Sidewalk
Washington/Jefferson Blvds: St Mary's River Br to Garden St	CN	Streetscape
West Hamilton Rd Bridge #221	CN	New Bridge and Trail extension
Wheelock Rd: St Joe Ctr Rd to Mill Ridge Run	CN	Trail
Winters Rd: I-69 to Lower Huntington Rd	CN	Road Extension to GM

Quarterly Review Meetings

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

QUARTERLY REVIEW MEETINGS

Each quarter the Northeastern Indiana Regional Coordinating Council (NIRCC) schedules a quarterly review meeting for all federally funded Local Public Agency (LPA) projects in the Transportation Improvement Program (TIP). The reports are due on the 20th of the month following the end of the quarter. NIRCC's quarterly review meeting is scheduled typically two weeks after this date.

NIRCC has created a report, along with the Indiana Department of Transportation (INDOT) that is filled out by the LPAs. Once the LPA completes the report it is then sent to NIRCC for approval. After approval from NIRCC, the report is then sent to INDOT.

At the quarterly review meeting each project is allotted 15 minutes for review. The LPA and consultant are requested to attend the meeting. If the consultant is located outside of Fort Wayne they are able to call into the meeting rather than attend. Others attending the quarterly meeting include INDOT representatives with Planning and Programming, INDOT Right of Way, and Federal Highway Administration staff. We have an excellent turnout and feel this really increases communication and understanding of the project.

Important information to review at the meetings include cost totals, federal funding and LPA match funds, permits needed, right of way parcels needed, schedule updates, utility relocations, items completed, and any potential problems. Many issues are resolved at the quarterly review meeting, thus saving time and money.

The information received at the quarterly review meetings allows staff to determine if projects are progressing on schedule and on budget. This information is then used to help program the projects in the Transportation Improvement Program. Figure 50 gives an example of a quarterly review.

Figure 50

Maplecrest Rd: State Blvd to Stellhorn Rd - #1173162

TIP	Phase	Total Cost	Year	Federal	Local	% Split
2018-2021	PE	1,193,900	2016	955,100	238,800	80/20
	RW	2,750,000	2017	2,200,000	550,000	80/20
1801666	CN - Phase I	4,875,000	2020	3,900,000	975,000	80/20
	CN - Phase II	6,520,000	2021	5,216,000	1,304,000	80/20
	Total	15,338,900		12,271,100	3,067,800	

Project Cost	*Initial Report* Apr-14	*Previous Report* Jan-19	*Current Report* Apr-19	*Federal Funds* Apr-19	*Local Match* Apr-19
Preliminary Engineering (PE)	$1,120,000	$1,284,735	$1,284,735	$1,027,788	$256,947
Right of Way Acq (RW)	$1,000,000	$2,690,000	$2,690,000	$2,152,000	$538,000
Utilities & Railroad	n/a	$0	$0	n/a	n/a
CN - Phase I	$9,000,000	$10,531,450	$6,200,000	$4,960,000	$1,240,000
CN - Phase II			$4,331,450		
Construction Engineering (CE)	$1,350,000	$1,620,000	$1,620,000	$1,296,000	$324,000
Total cost	$12,470,000	$16,126,185	$16,126,185	$9,435,788	$2,358,947

POs & Invoices	PE	RW
Funding Programmed	$0	$2,200,000
PO Amt Programmed	$0	$0
Additional Funding Avail	**$0**	**$2,200,000**
Total Invoiced	$9,119	$0
Current Avail Funding	**-$9,119**	**$0**

Last Invoices	#	date
PE	48	10/15/19
RW	30	9/25/19

Land acquisition

completion date: 3/28/18
total parcels: 112

Jan-19	Apr-19
# secured	# secured
112	

Utilities

Name of Utility w/Contact Info	confirm w/in project limits	location verified on plans	request work plan	work plan approved	final plans to utility
American Elelectric Power	yes	9/10/2014	2/2/17		
Comcast Cablevision	yes	1/13/2015	2/2/17		
City of Fort Wayne	yes	1/24/2014	2/2/17		
Frontier	yes	12/15/14	2/2/17		
Indiana Fiber Network	yes	1/30/17	2/2/17		
NIPSCO Gas	yes	12/11/14	2/2/17		
US Signal	yes	3/16/15	2/2/17		
Zayo Broadwidth	yes	2/27/15	2/2/17		

Permits	Rule 5	Section 401	Section 404			
required	yes	yes	yes			
applied	yes	no	no			
approved	yes	no	no			
expires	6/23/23					

ERC LPA: *Patrick Zaharako* patrick.zaharako@cityoffortwayne.org 260-427-2789 Last A-133 Audit:
Consultant: *Chanchai Hocharoen* chocharoen@az-engineering.net 260-485-7077

Milestones	Actual Start Date	Completion Phase I	Completion Phase II	% Complete	Comments
Request for Proposals					
NTP to consultant		n/a	n/a		
Start Plan Develop	7/18/13	n/a	n/a	100%	
Stage 1 Design	4/11/14	12/10/14	12/10/14	100%	
Utility Locations Verified					
Prelim Field Check	4/11/14	n/a	n/a	100%	
Environmental Doc.	4/11/14	11/22/16	11/22/16	100%	**CE Level 3**
Hearing Certification					
Stage 2 Design					
Pavement Design		6/29/17	6/29/17	100%	
FMIS for RW phase					
Utility Work Plans App					
Gantt Chart for Utilities					
6 mo prior to RW Clear					
RW Clear	2/11/15	**3/15/19**	**3/13/20**		
NTP to Utilities					
CE contracts					
Stage 3 Design	12/2/14	**3/15/19**	**3/13/20**		
Final Tracings		**4/29/19**	**4/27/20**		
Ready for Contracts	4/22/16	**5/29/19**	**5/27/20**		
Letting		**8/7/19**	**8/5/20**		

Comments

Phase I letting date is 8-7-19, Phase II letting date is 8-5-20

Note: total construction Cost does not include"Z item" (100% Local cost= $350,000)

Utility Contact Info

Utility	Contact	Phone #	Email Address
AEP	Corey Noble	260-749-3076	cenoble@aep.com
Comcast Cablevision	Buddy Cabiness	765-622-2904	buddy_cabiness@cable.comcast.com
City of Fort Wayne	Mario Trevino	260-427-1136	mario.trevino@cityoffortwayne.org
Frontier	Oscar Rodriquez	260-461-0111	oscar.j.rodriquez@ftr.com
Indiana Fiber Network	Shawn Wright	317-777-7119	swright@ifncom.net
NIPSCO Gas	Jon Stroud	260-439-1236	jstroud@nisource.com
US Signal	Rob Fisher	616-862-7102	rfisher@tkns.net
Zayo Broadwidth	Jason Gilpin	260-570-5677	jason.gilpin@zayo.com

TITLE VI & ADA (Americans with Disabilities Act)

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

TITLE VI & ADA (AMERICANS WITH DISABILITIES ACT)

The Federal Highway Administration (FHWA) Division Offices are responsible for ensuring that all Recipients (State Transportation Agencies) have an approved Title VI/Nondiscrimination Plan and submit Annual Update Reports. Additionally, the Division Offices are responsible for ensuring that the State Transportation Agencies are implementing an effective Monitoring Program of their Subrecipients' (Local Public Agencies) efforts to effectively implement Title VI and the additional Nondiscrimination requirements.

The Indiana Department of Transportation (INDOT) has made LPAs aware that they must have a Title VI Implementation Plan and an ADA Transition Plan in place (or working towards this) to remain eligible for Federal funding.

During FY 2013 the Northeastern Indiana Regional Coordinating Council (NIRCC) reached out to help LPAs (Local Public Agencies) become familiar with ADA requirements and assisted them with creating ADA Transition Plans. To remain eligible for federal transportation funding, LPAs were reminded that they need to be in compliance and have updated their transition plans. The goal was to ensure that LPAs had a specific plan of action and had reviewed and completed their updated ADA Transition Plans. NIRCC continues to assist LPAs with their ADA Transition Plans to remain compliant.

In FY 2015 NIRCC began assisting LPAs with their Title VI Implementation Plan. Most LPAs were practicing nondiscrimination, however, they did not have all the information and documents compiled into an Implementation Plan. Similar to the process taken in FY 2013 with the ADA requirements, NIRCC reached out to the LPAs to offer assistance.

A Title VI Implementation Plan consists of the following items:

- Policy Statement
- Organization and Staffing
- Title VI Coordinator Contact Information and Responsibilities
- Department Head (Liaisons) Responsibilities
- Department Head Reporting
- Title VI Training
- Complaint Process
- Complaint Investigation Procedures
- Public Participation and Outreach
- Limited English Proficiency (LEP) Plan
- Title VI Goals
- Title VI Reporting and Accomplishments

- Standard US DOT Title VI Assurances
- Title VI Compliance Review Form
- Training Log
- Complaint Log
- Voluntary Public Involvement Survey
- LEP Report
- Language Identification Flashcards

During FY 2019 NIRCC assisted with the development of the Town of Grabill and the Town of Leo-Cedarville Title VI Implementation Plans and updating the Leo-Cedarville ADA Transition Plan.

In FY 2019 a bus stop inventory update began. The original bus stop inventory was conducted in FY 2014 for Citilink. The inventory update will be used to assist in prioritizing bus stops for improvement to meet ADA requirements.

Safety Management System

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

SAFETY MANAGEMENT SYSTEM

NIRCC maintains a Safety Management System (SMS) for the entire Allen County Area. A SMS is a systematic process that has the goal of reducing the number and severity of traffic accidents by ensuring that all opportunities to improve safety (i.e. highway planning, design, construction, maintenance, and operation) are identified, considered, implemented where appropriate, and evaluated.

Safety in transportation planning and project development is a high priority. The increase in available funds for safety improvements supports the importance of safety projects. Improved crash information sources and new analytical tools have created better evaluation tools to identify problematic areas. NIRCC is responding to these changes with additional resources applied to crash data analysis and GIS applications. The goal for transportation planners is to find where the problems exist, make recommendations for improvements and seek funding to implement projects. The first step is often the most difficult, which is to identify what locations are most hazardous within the community.

In Fiscal Year 2019 NIRCC obtained all crash records that occurred in Allen County during 2018. The data was extracted from the Indiana State Police database ARIES (Automated Reporting Information Exchange System). Staff worked to "code" each crash location with like descriptions to ensure that all crashes occurring at a specific site were grouped together. Crash descriptions were reviewed for spelling and alphabetical order resulting in a listing of crashes that could be summarized to identify a total number of crashes at various geographical points. All crash information is included in the database to aid in various types of analysis. The final summary for each year is provided to local technical representatives to aid in review of locations and to respond to citizen requests for improvements at a location for safety reasons. Officials can review the data provided to determine the crash experience and other variables that may be present.

Once staff completed the "coding" process for the 2018 crash data and included it in the crash database, NIRCC combined the 2018 crash data with the 2016 and 2017 crash data to create a three year comparison. These crashes were also input into mapping software to be used with GIS (Geographical Information Systems). Figures 51, 52, and 53 display the densities of crash frequencies for the Fort Wayne, New Haven, and the Allen County area.

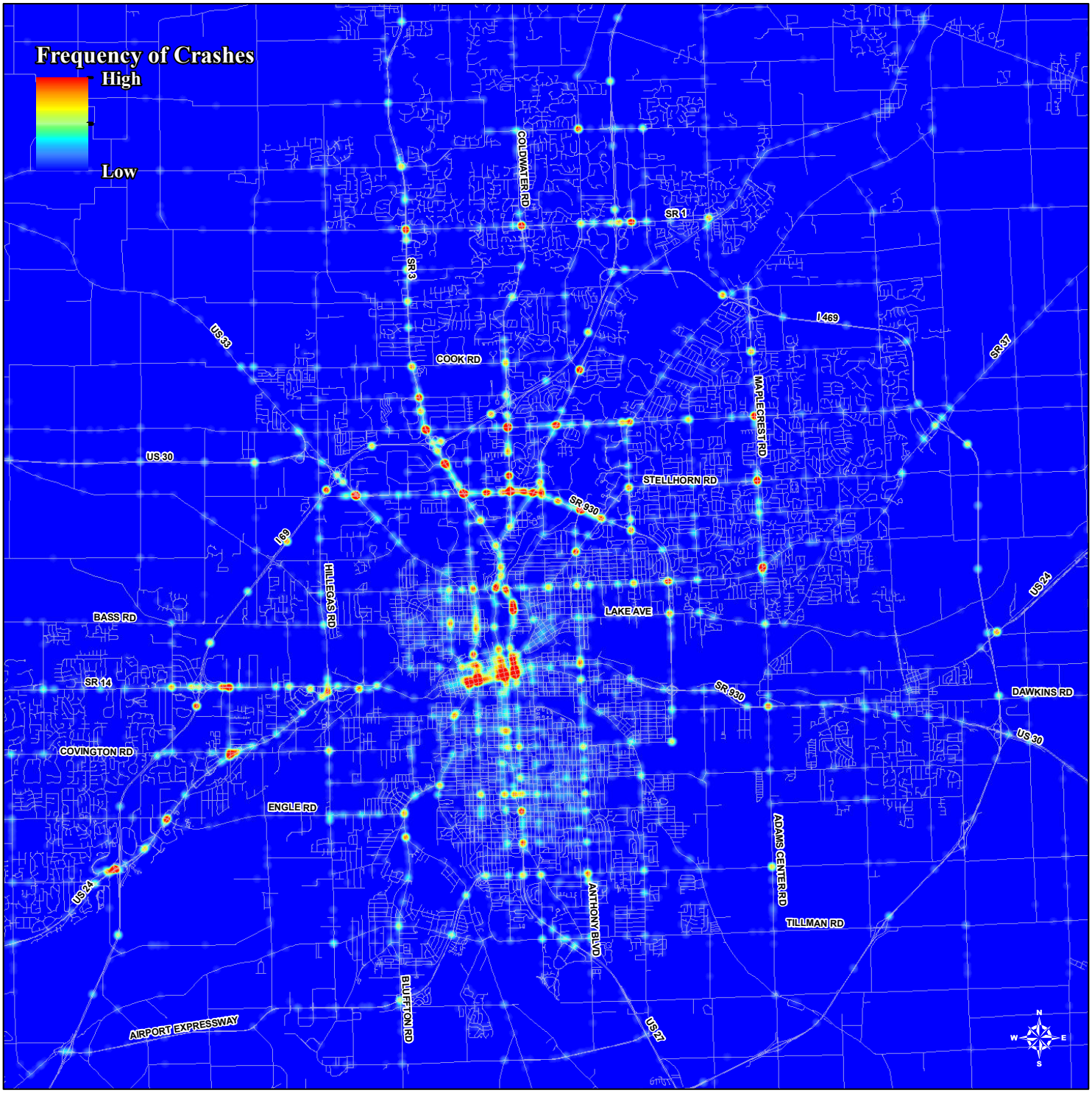
Annual Summary and Listing of Crash Locations

The annual crash record database is first used to provide an annual crash summary report for local jurisdictions (Allen County - all cities and towns, Fort Wayne, and Allen County - outside incorporated areas). The summaries include statistical data that focuses on detailed crash information from the crash reports. The information provides engineers,

planners and law enforcement with a summary of information from the crash reports. The information includes specific data about the circumstances involved with crashes including environmental circumstances, driver information, vehicle information and other important data for all the annual crashes.

The second product from annual crash data is a summary or listing of the hazardous crash locations from the previous year. Every year staff utilizes two procedures to identify crash locations with a higher frequency of crashes and another

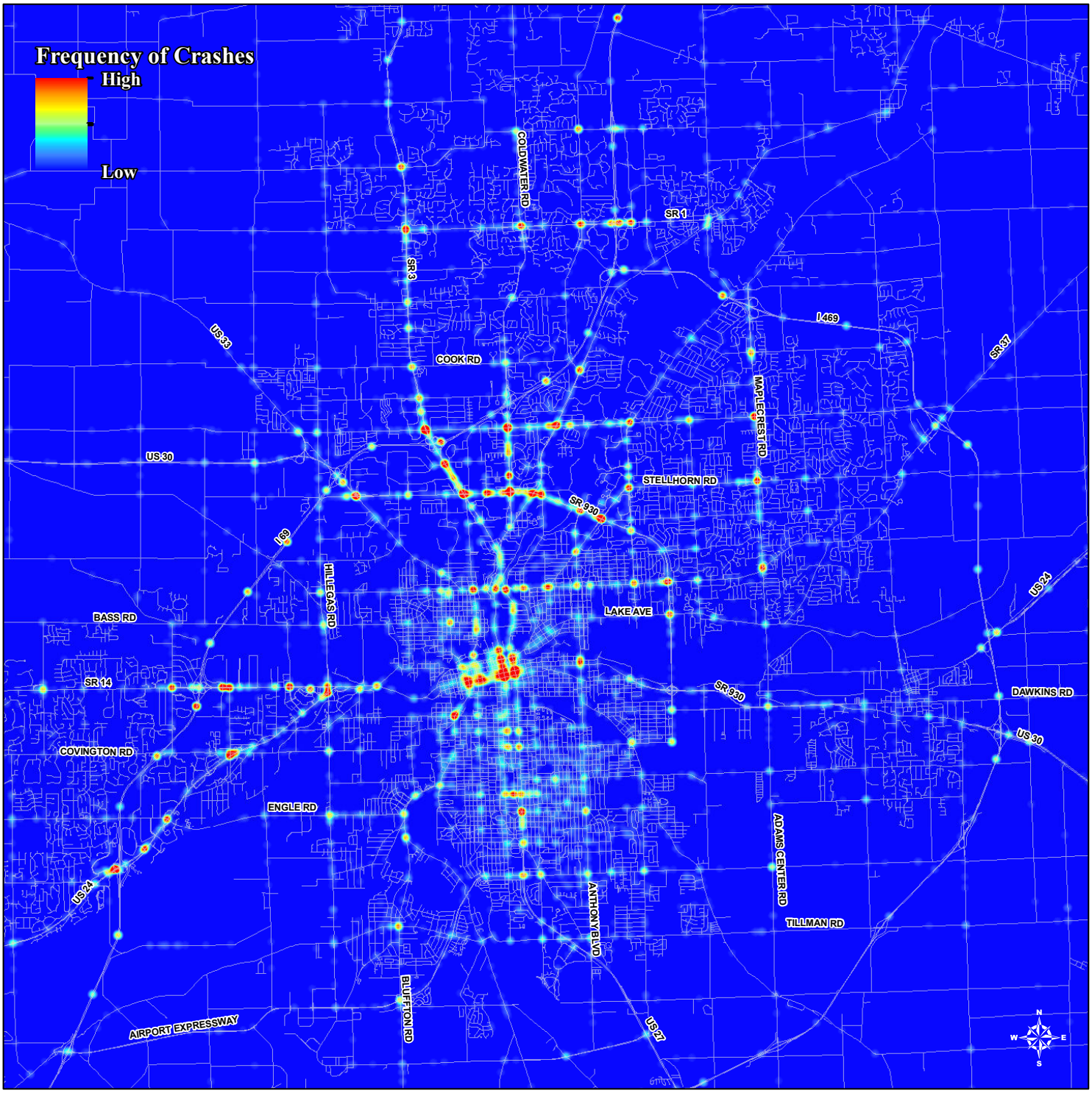
Figure 51 - 2018 Crash Data



for locations with a lower crash frequency. Identification of crash frequency is provided through use of GIS software that creates buffers around intersection crash locations. The buffers are created using a 250 foot radius around each crash location and grouping all crashes within itself. This process resulted in crash locations that reflect crashes that occurred at approaches to intersections in addition to crashes within an intersection.

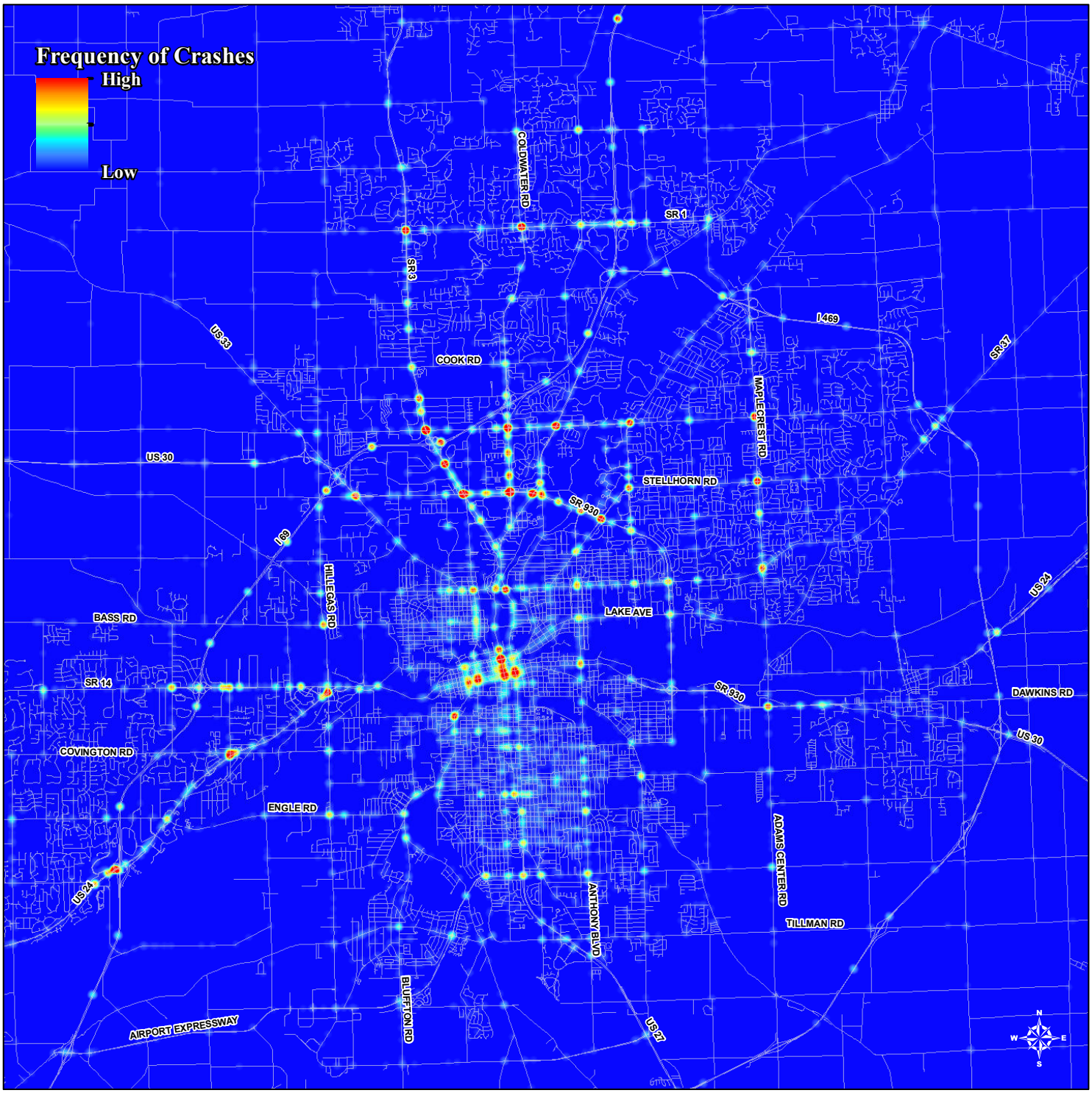
High frequency crash locations were defined as those with an annual crash frequency greater than or equal to seven (7).

Figure 52 - 2017 Crash Data



Locations identified with this frequency are listed and traffic volumes are applied to each of the locations to determine the RMV (rate per million entering vehicles). The RMV value is then used to sort locations. Locations that have a RMV greater than or equal to 2.00 for one year remain in the listing for further review. Additional locations are also added to the listing of crashes with a frequency greater than or equal to seven (7) if they are locations with a high crash severity or result in a high percentage of injuries or fatalities.

Figure 53 - 2016 Crash Data



Staff reviewed crash locations and recorded the total number of crashes that resulted in injury or fatality. This information was used to determine the percentage of total crashes at each location that were property damage only and the percentage that resulted in injury or fatality. Staff and the Transportation Technical Committee agreed to include any location that experienced an injury or fatality percentage greater than 66% in the annual list for further review.

A process to review crash locations with a lower crash frequency was also established to ensure that locations with a low volume of traffic are not experiencing a consistently high percentage of crashes based on the number of vehicles using a location. The lower crash frequency crashes were also included where the percentage of injury or fatal crashes was higher. Crash locations with an annual crash frequency of 6, 5, 4, or 3 were included in the annual listing of locations for further review if the rate per million entering vehicles was greater than or equal to 1.00 and the percentage of injuries and fatalities exceeded the following thresholds;

Frequency	Percentage of I/F
6	100% to 33 %
5	100% to 40%
4	100% to 50%
3	100 % to 66%

Hazardous Location Identification

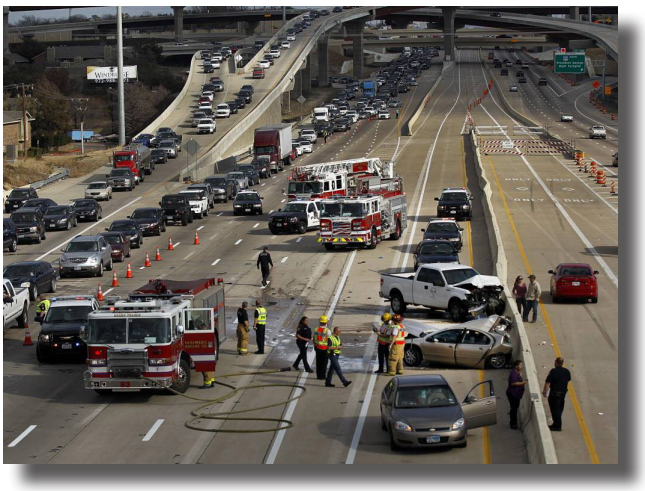
In Fiscal Year 2019 staff reviewed all the crash location listings created for 2016, 2017, and 2018 based on the approved process described above. In the past, staff worked with TTC to determine the most accurate manner to identify hazardous locations from data collected for a three year period. TTC members and staff agreed that crash locations identified annually were not necessarily hazardous unless the location experienced similar patterns over the previous two years. Staff created a listing of locations that met the hazardous criteria for 2016, 2017, and 2018. These locations were then reviewed using crash rates and HAT (Hazard Analysis Tool) software developed by the Indiana Department of Transportation and Purdue University.

HAT software considers the total number of crashes, traffic volume, total number of injury/fatal crashes, facility type and location type (US Route, State Route, Rural or Urban). The software was developed to compare the number of crashes and severity of the crashes at a location being reviewed to other locations that are similar throughout the state. A crash frequency index and crash cost index is determined with the software to determine if a location is operating above or below what is anticipated. Locations with an index greater than or equal to 1.00 are considered to be operating below an acceptable level.

The final step in identifying the hazardous locations was to determine how to select locations from the listing for further review. Representatives from TTC provided input to staff on methods to screen the final listing of the three years.

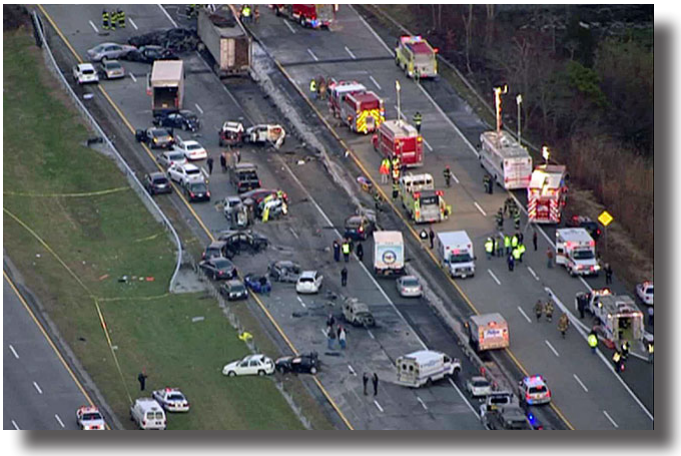
Staff will review the locations selected to determine the cause of all the crashes and provide collision diagrams to TTC to determine what course of action to take to mitigate crashes at each location. The listing of locations will continue to be updated annually to review trends and previously identified hazardous locations. Additional locations that meet the approved criteria will also be added.

Traffic Incident Management (TIM)



In 2007 the Indiana Quick Clearance Working Group was created to research and develop Quick Clearance practices in the State of Indiana. In 2008 the In-TIME initiative was implemented and in 2009 the Indiana Quick Clearance Working Group was changed to IN-TIME (Indiana Traffic Incident Management Effort). The purpose of the INdiana-Traffic Incident Management Effort (IN-TIME) is to have first responders, from all disciplines follow agreed upon multi-lateral policies and procedures focusing on an "Open Roads Philosophy". The Open Roads Philosophy is "Having all First Responders, after ensuring their own personal safety and the safety and security of any incident victims, to have as their top priority reducing congestion and the increased risks of secondary incidents for public/motorist safety". The IN-TIME group also works to provide a common framework for development of traffic incident management (TIM) policies and training programs for the various responder disciplines. TIM is a planned and coordinated program process to detect, respond to, and remove traffic incidents and restore traffic capacity as safety and quickly as possible.

In 2013 the Northeastern Indiana Regional Coordinating Council (NIRCC) assisted in forming a committee of local representatives to implement Traffic Incident Management (TIM) strategies in Northeast Indiana called the Northeast Indiana Traffic Incident Management Committee (NE IN TIM). NIRCC identified local public and private sector stakeholders that were interested in the concepts and fundamental mission of the initiative. The purpose of the committee is to develop and recommend policy and operational protocols for the safe and efficient mitigation of traffic incidents through training and education of all first responders.



The committee is currently comprised of 41 representatives from multiple disciplines that include both public and private agencies. Disciplines represented on the committee include:

- 911 Communications/Dispatch
- Law Enforcement
- Safety & Environmental Affairs
- Fire Departments
- Coroner's Office
- Environmental Clean Up
- Health Department
- Tow Operator
- Homeland Security
- Paramedic / Medical Transport
- Prosecutors Office
- Department of Transportation
- Transportation Planning

The NE IN TIM Committee has 34 local representatives certified to conduct training to first responders. NIRCC has assisted in organizing 44 four hour TIM training sessions since December 2013.

Congestion Management Process

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

CONGESTION MANAGEMENT PROCESS

In December 1993, final interim guidelines were developed which established general requirements for the Congestion Management Process - CMP (previously known as the Congestion Management System - CMS) and identified deadlines for work plan submission and for the CMP to become operational. In August 1994, Purdue University, INDOT and FHWA published the draft final report for development of a prototype congestion management system for the State of Indiana as a Joint Highway Research Project. The study delineated a comprehensive set of guidelines and a nine-element work plan to be undertaken in developing the CMP in a consistent manner statewide.

NIRCC developed the initial CMP by following the guidelines provided by the Congestion Management Process Work Plan developed for the State of Indiana. That plan specified that each CMP include the following elements:

- Define CMP Network
- Establish Performance Measures
- Establish System Performance Standards
- Establish Data Collection and Monitoring Program
- Identify Roadway and Transit System Deficiencies
- Analyze and Evaluate Congestion Mitigation Strategies
- Implement Strategies
- Evaluate the Effectiveness of Implemented Strategies
- Establish CMP Update Process

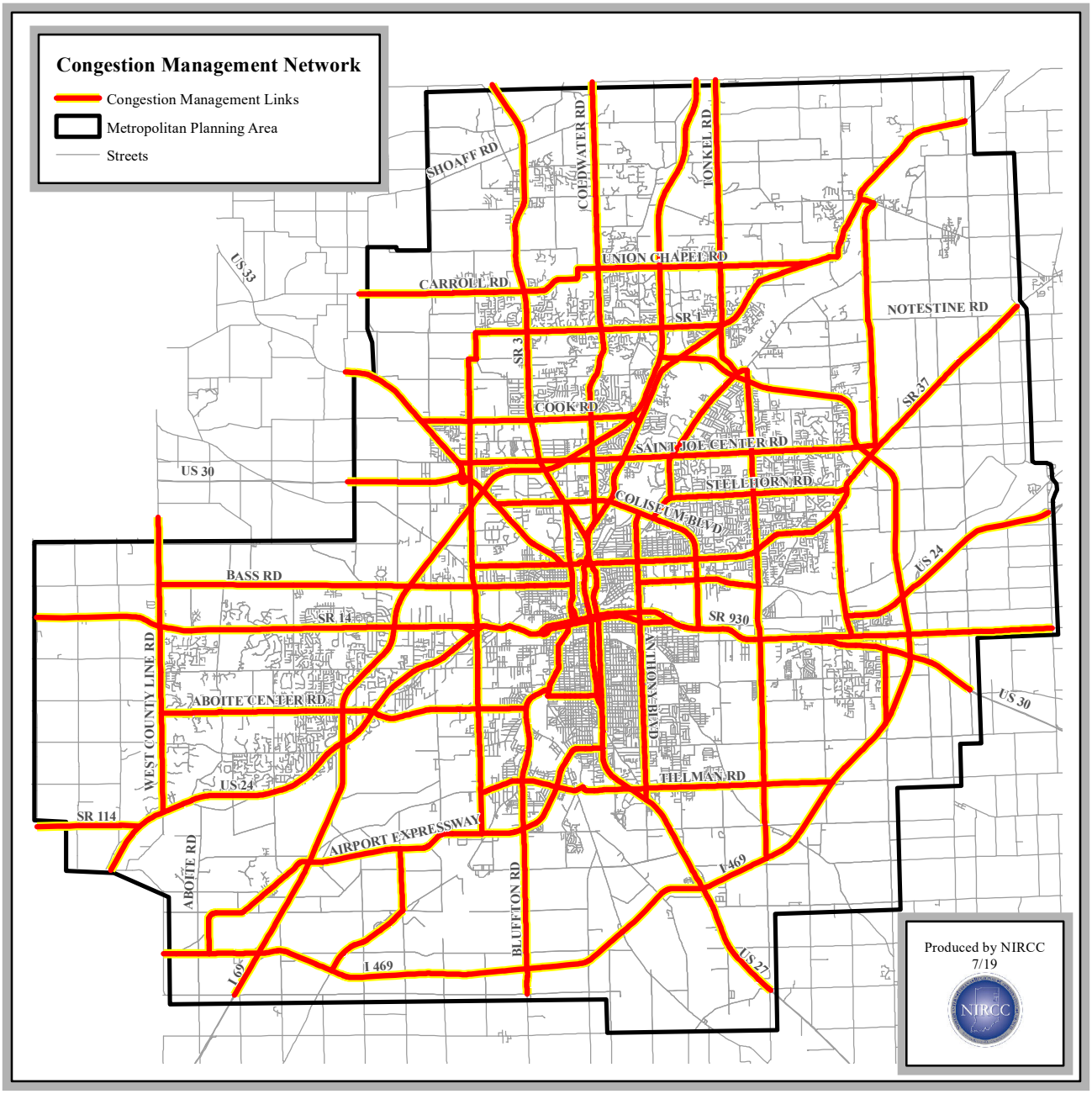
NIRCC's original Congestion Management Process Work Plan was completed in May 1995 and adopted by the Urban Transportation Advisory Board at its June 6, 1995 meeting. The work plan was submitted to the Indiana Department of Transportation, and an updated work plan was submitted at the conclusion of Fiscal Year 1996 and adopted in Fiscal Year 1997. The Fiscal Year 2019 CMP continues to utilize the work plan elements listed above to ensure all federal requirements are met.

The Fort Wayne / New Haven / Allen County Metropolitan Planning Area or Transportation Management Area boundaries were established as the geographic study area for the Congestion Management Process. Urban areas with populations over 200,000 have been directed to use the Metropolitan Planning Area boundaries for the Congestion Management Network. The current congestion management network is displayed in Figure 54.

The CMP is designed to be a dynamic process. As new information on the transportation system is collected, analyzed, and reviewed, strategies are developed and evaluated for mitigating congestion. Implemented strategies are evaluated providing feedback on their success at reducing congestion. This information is documented in annual updates to the CMP report. Comprehensive reviews of the CMP takes place in conjunction with the scheduled update of the Transportation Plan.

The implementation of congestion mitigation strategies occurs within the TMA through a number of different agencies and programs. NIRCC attempts to include all projects and policies involved with congestion mitigation strategies in the transportation planning process. These projects and policies are, and will continue to be documented in the

Figure 54



Transportation Plan. These projects and policies will continue to be included in future Transportation Plan updates.

The transportation planning process has routinely reviewed existing congestion and projected travel demands to assess the potential for future congestion on the transportation system. Strategies, including both transit and highway projects and policies, have been developed, implemented, and evaluated. These strategies have been identified and documented in Transportation Plans and Transportation System Management Programs.

Additional projects and policies implemented to help mitigate congestion and improve overall mobility on the transportation system include Access Management, Transit Improvements, ITS/Signalization Improvements, Incident Management, Safety Management, and Pedestrian/Bicycle Access Improvements. Many of these items are described throughout the Transportation Summary Report as many of the elements summarized are used in conjunction with the CMP and utilize these elements.

NIRCC also has an extensive traffic monitoring program which collects: traffic volume and vehicle classification information; intersection turning movements and geometrics; signal phasing and timing information; travel time and delay data; crash data; and other types of traffic characteristic data. NIRCC also maintains a roadway characteristic database, which includes traffic volumes, length, number of lanes, indicates transit routes, facility classifications, and much more for specified road segments within the TMA. Data is collected annually for these programs in accordance with the Overall Work Program (OWP).

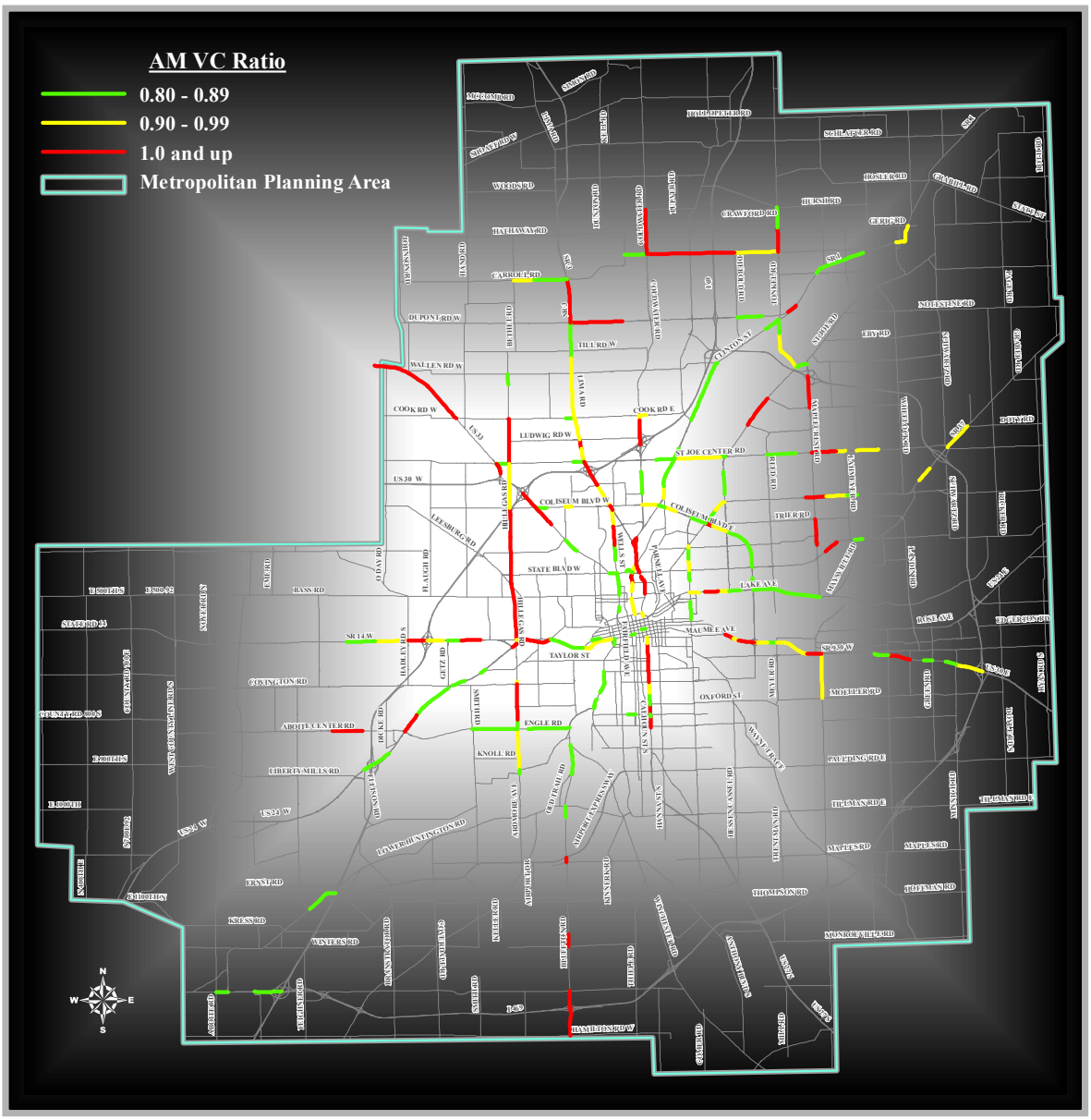
When analyzing the highway system for roads classified as collector or higher, the traffic monitoring program provides the majority of the data needed for a macro analysis. Existing traffic count data for all links within the study area is analyzed according to lane capacities. Roadway volume to capacity (V/C) ratios were calculated using morning and evening peak hour volumes. Actual directional peak hour volumes were used if available. When directional data was not available, average daily traffic (ADT) volumes, and default “D” and “K” factors were used to determine volume to capacity ratios for peak periods. Based upon the recommended benchmark V/C ratios, staff identified which road segments exhibited V/C ratios above the acceptable limits.

The volume to capacity ratio is a key indicator of the degree to which the highway system is being utilized, and is somewhat sensitive to demand responsive strategies. The vehicle miles of travel (VMT) estimate is used primarily as a weighting factor across hours and geographic areas. Total VMT is primarily a base to which changes in the percent VMT can be referenced. If the total VMT increases significantly, but the percent VMT at a given V/C ratio remains constant, the system is accommodating increases in travel demand without increased congestion.

All road segments in the TMA with V/C ratios greater than 0.80 (the most restrictive ratio) were identified, mapped, and color-coded according to levels of congestion (0.80 - 0.89; 0.90 - 0 .99; 1.0 +). The macro-level analysis identified some road segments not included on the congestion management network. As a result of the analysis, all roadways in the TMA exhibiting V/C ratios exceeding 0.80 were considered as additional components of the congestion management network. The roadways with AM and PM V/C ratios exceeding 0.80 of their respective lane capacities based upon the macro analysis are displayed in Figures 55 and 56. Segments that have V/C ratios greater than 0.80; 0.90; and 1.0 have been separated by color.

In evaluating changes in congestion over time, it is important that each hour be evaluated, not just the peak hour. In locations where the V/C threshold has been exceeded, congestion generally worsens through the spreading of the peak. If hourly information is not provided, the ability to evaluate changes in congestion over time is lost. An

Figure 55



analysis was completed to identify the duration of the congestion beyond the peak hours. Several corridors within the congestion management network were identified for experiencing high levels of congestion (V/C ratios greater than 0.90) an extended number of hours (Figures 57 and 58). Corridors where V/C ratios were found for multiple hours were reviewed to determine the number of continuous hours. These corridors have been designated as "high risk" for congestion issues and will be monitored closely. Micro-level analysis will be performed on these corridors when warranted.

Intelligent Transportation Systems

Another part of the Congestion Management Process is updating Allen County's Regional ITS (Intelligent Transportation Systems) architecture. ITS is the use of communications, electronics and information processing to help improve the efficiency and safety of surface transportation systems. Due to the nature of information technology being most

Figure 56

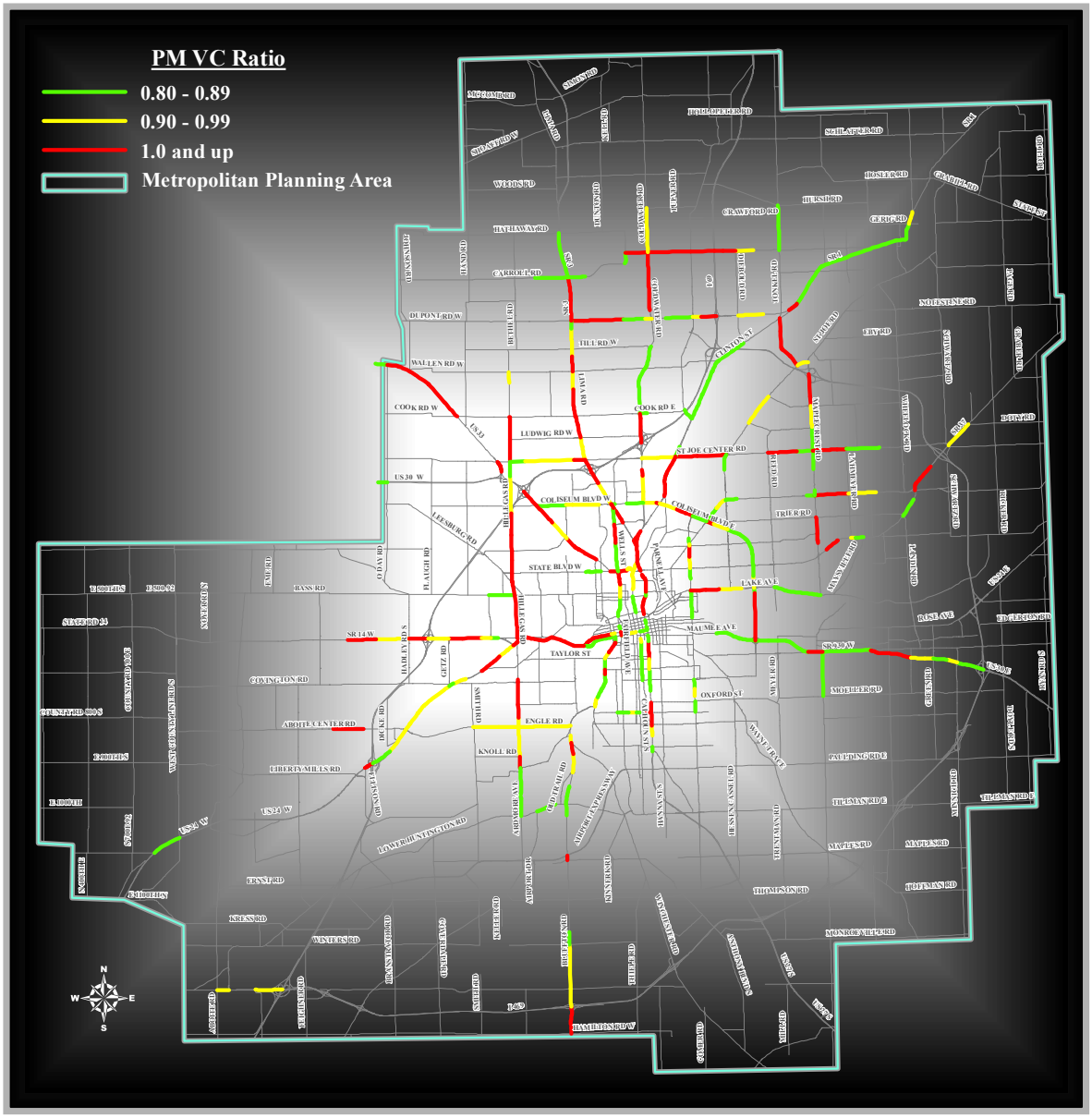
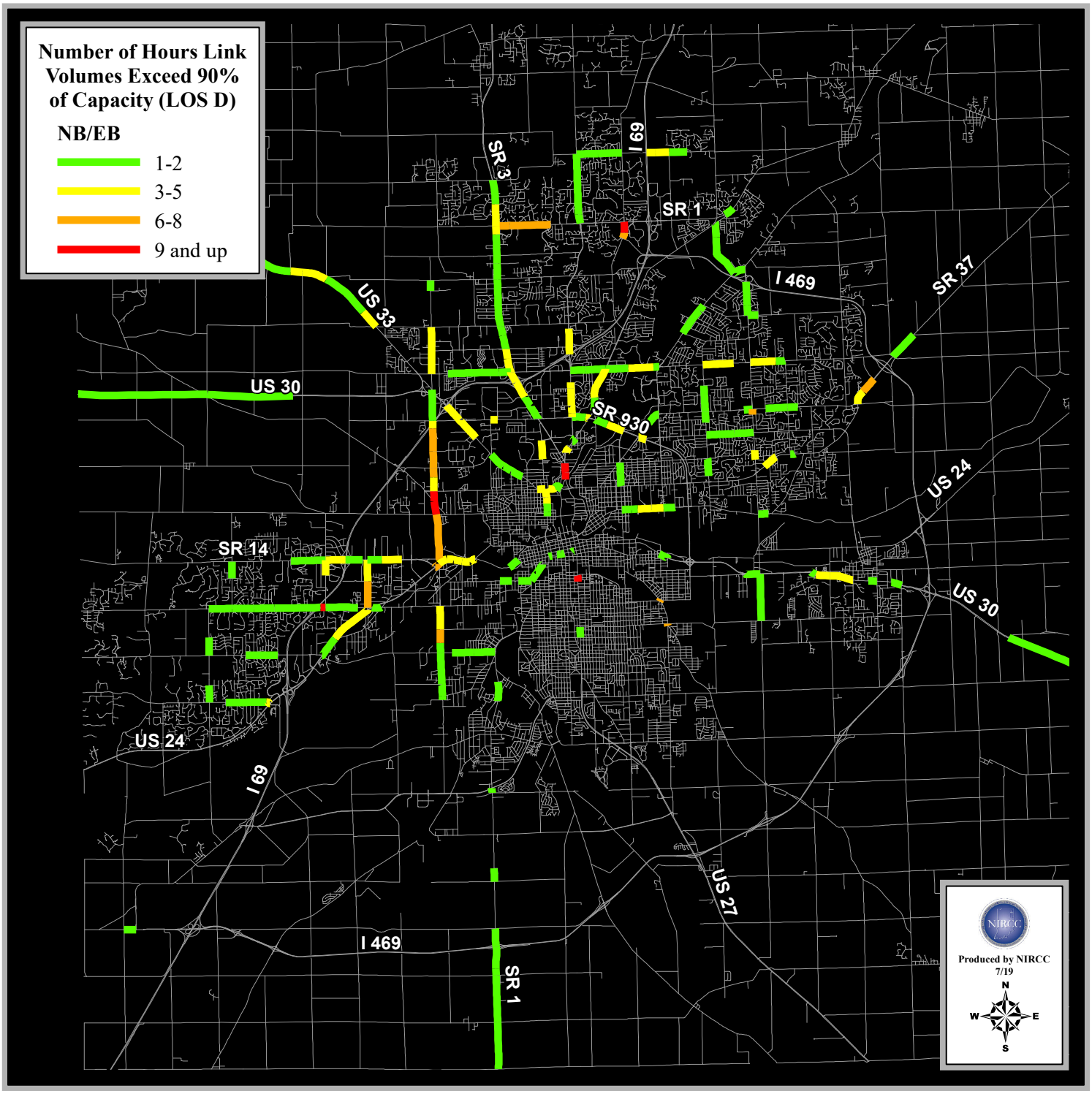
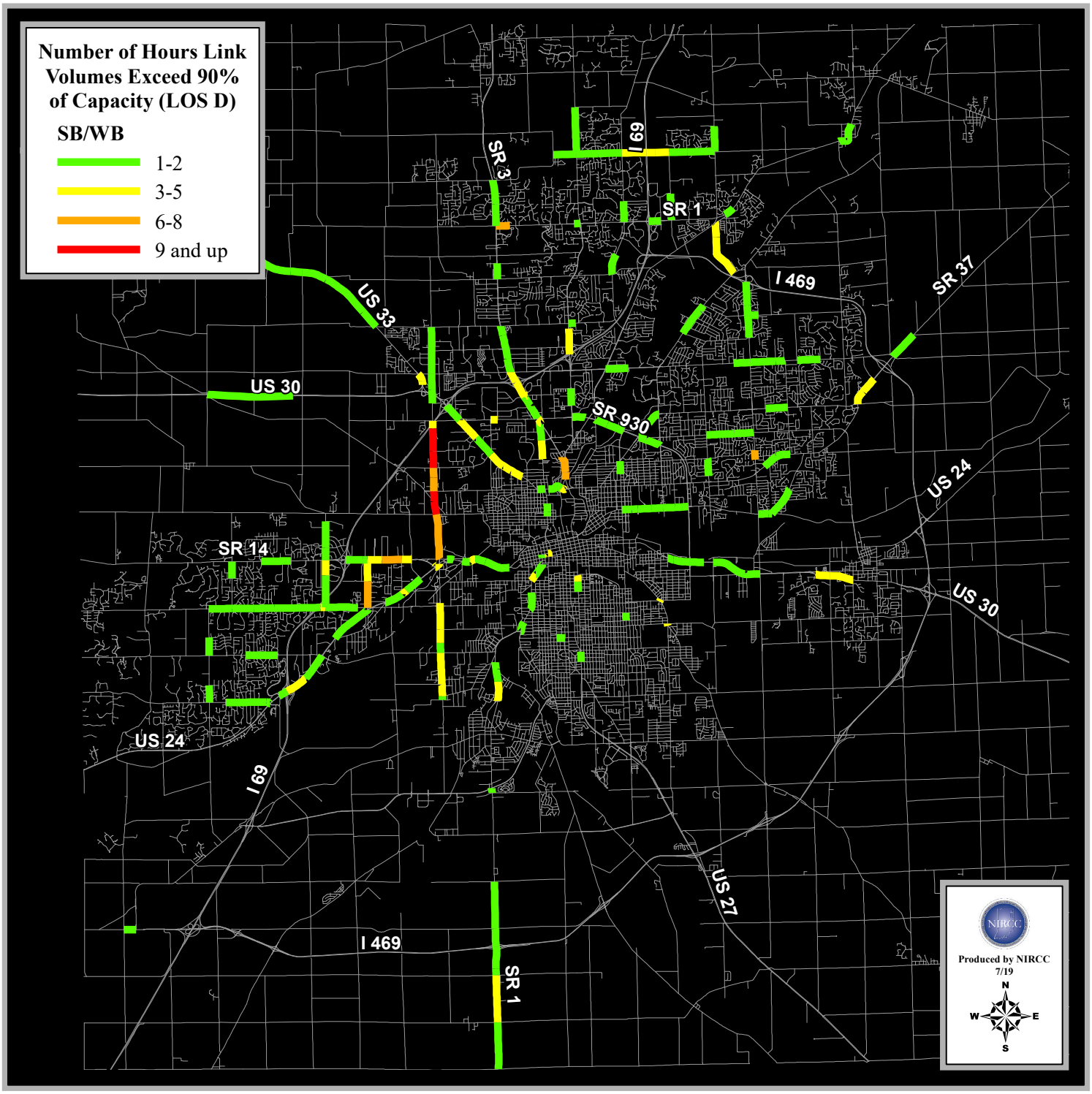


Figure 57

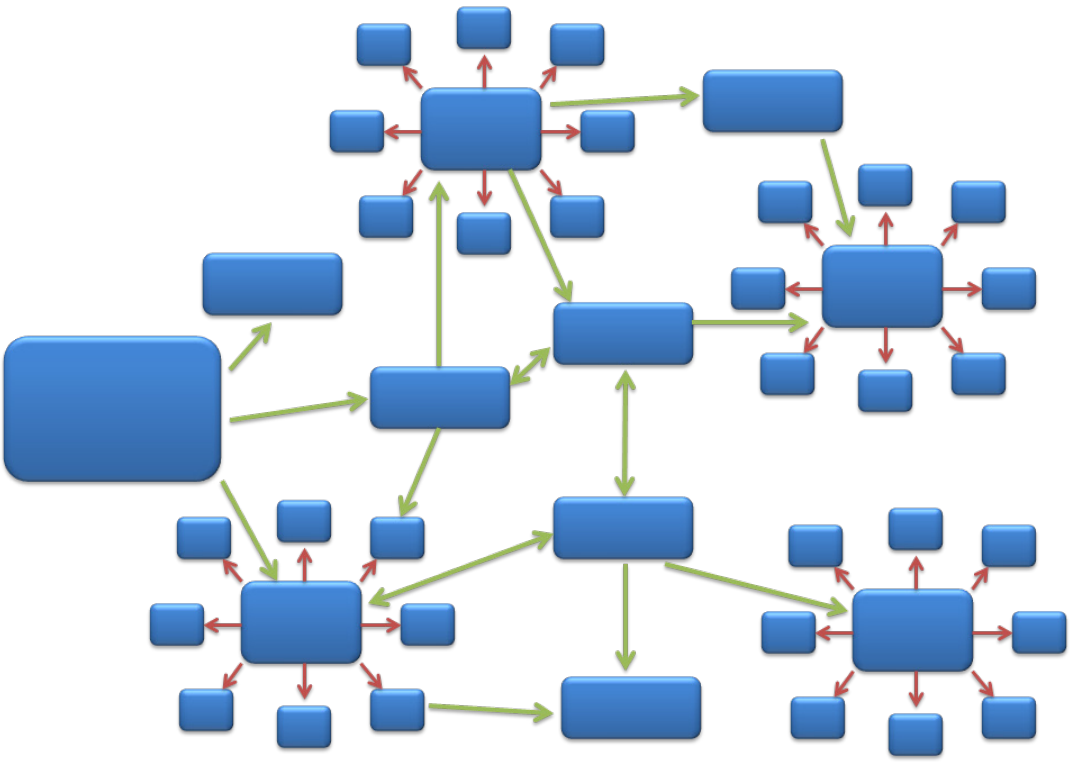


effective when systems are integrated and interoperable the USDOT developed the National ITS Architecture. When referring to architecture, it is best described as a tool that assists in organizing complex entities and relationships. It helps identify system functions and informational flows, and guides development of functional requirements for new systems and improvements.

Figure 58



The National ITS Architecture is designed to provide a common structure for which ITS projects could be based on. The National Architecture specifies what type of interface could exist between the many different components of ITS and also to show the different types of information exchanged. Processes and data flows are grouped to form particular transportation management functions and are represented graphically by data flow diagrams, or bubble charts, which decompose into several levels of detail. In these diagrams, processes are represented as bubbles and data flows as arrows.



The Allen County Regional ITS Architecture details the communications and interactions between 10 primary systems (centers) over a 10-year period (2017-2027). These systems are associated with traffic management, emergency management, maintenance and construction management, transit management, or data management. Each system is associated with a specific stakeholder (anyone with a vested interest or "stake" in the regional ITS architecture) or group of stakeholders.

The original Allen County Regional ITS architecture was completed in March 2005 to meet the requirements of TEA-21. There was an update to the architecture 2008 so that it would meet the requirements outlined in SAFETEA-LU, as well as changes in technologies that had occurred in those three years.

In the spring of 2012, the regional architecture went through another update so that it could be approved and submitted to the Federal Highway Administration. This update was included in the 2035 Long Range Transportation Plan. In 2017 the regional architecture was updated to be included with the 2040 Long Range Transportation Plan.

The ITS architecture is continually monitored for updates by NIRCC Staff. In FY 2018 the ITS Architecture was converted to the latest version using FHWA's new RAD-IT software.

Bicycle and Pedestian Planning

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

BICYCLE AND PEDESTRIAN PLANNING

NIRCC has a significant involvement in area bicycle and pedestrian planning activities. The need and desire for bicycle and pedestrian facilities has dramatically increased over recent years. The four county region represented by NIRCC has many individuals and organizations advocating improvements to the existing bicycle and pedestrian transportation system as well as expanding the system in the future. The Fort Wayne, New Haven, and Allen County area has been at the forefront for local advocacy groups to begin their planning efforts. Local government has begun taking a more active role in their planning efforts to include bicycle and pedestrian amenities.

To better coordinate local efforts, NIRCC began sponsoring the Northeastern Indiana Regional Bicycle and Pedestrian Forum which met from 2002 to 2007. This forum represented a task force comprised of governmental parks, planning and highway agencies, advocacy groups, and special project organizations. The forum increased the communication and coordination between these groups. In addition, the forum played an integral part in developing and completing the Allen County Comprehensive Bicycle-Pedestrian Transportation Plan in 2006. Since 2007 NIRCC has relied on the Greenway Coalition for guidance as well as governmental and public input towards bicycle and pedestrian planning. The coalition is also made up of governmental parks, planning and highway agencies, advocacy groups, and special project organizations. The coalition has been meeting since April of 2005.

Since the adoption of the Comprehensive Bicycle and Pedestrian Plan in 2006, NIRCC has continued to update and improve the plan as needed. In 2007 NIRCC incorporated the "Regional Bicycle and Pedestrian Plan for Northeast Indiana" (Figure 59). Through the years following 2007, recommendations were incorporated into the plan which included the needs expressed by public input and local advocacy groups such as Aboite New Trails, the Greenway Consortium, Little River Wetlands, Northwest Allen Trails, and Fort Wayne Trails Inc. Other plans and recommendations from Allen County, Fort Wayne, New Haven, Leo-Cedarville, Grabill, Monroeville, and Woodburn have provided input or have been included in the plan as well.

Throughout the year NIRCC periodically updates the Comprehensive Bicycle and Pedestrian Transportation Plan for Allen County as well as the Northeast Indiana Regional Bicycle and Pedestrian Plan. Local government and local trail groups are continually planning and completing their trail projects. Also, new opportunities develop and some corridors may need to slightly shift their priorities to create the most practical options for developing a realistic and cost effective bicycle and pedestrian system.

In fiscal year 2013 NIRCC spent a significant amount of time updating the bicycle and pedestrian plan as part of the

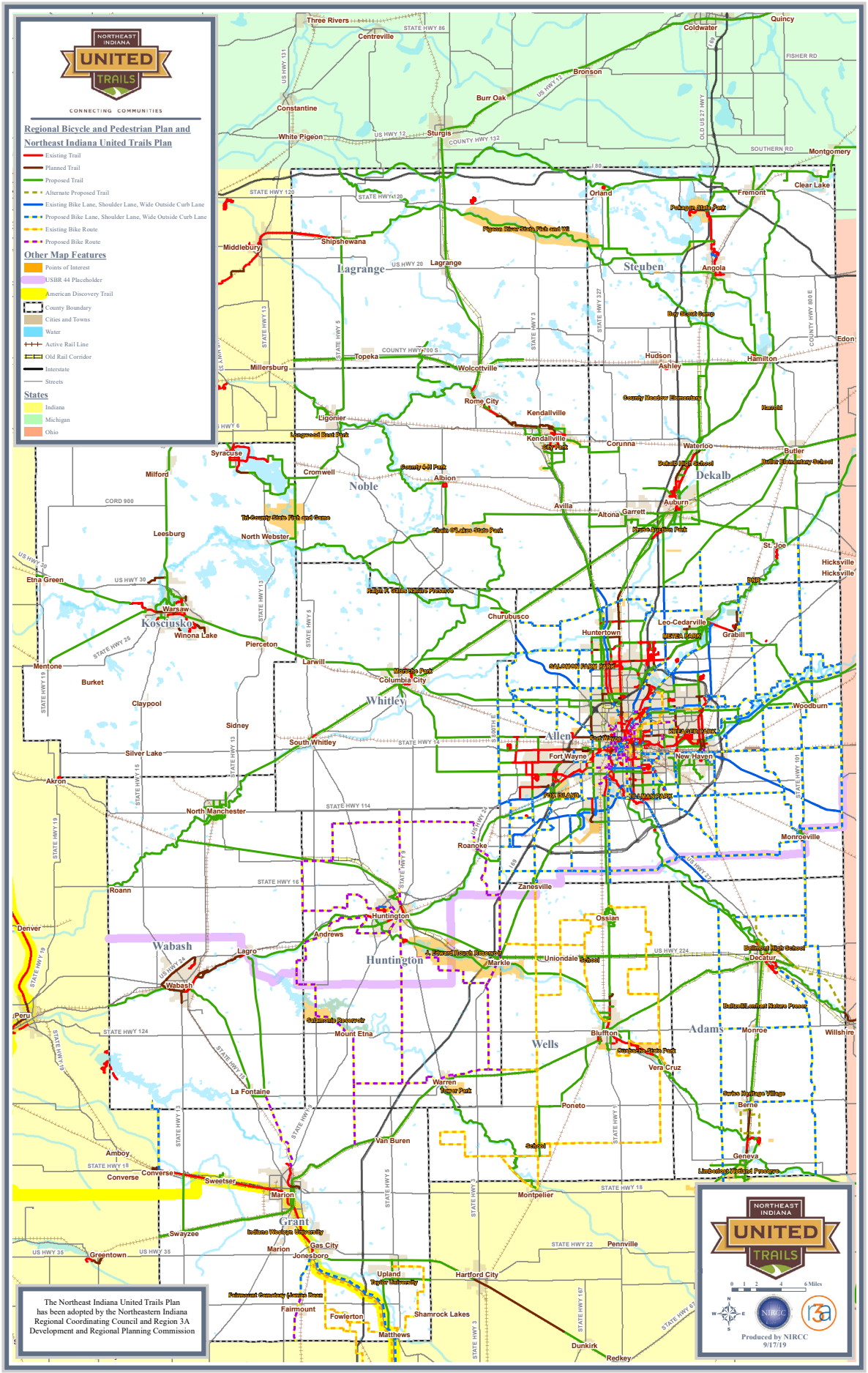


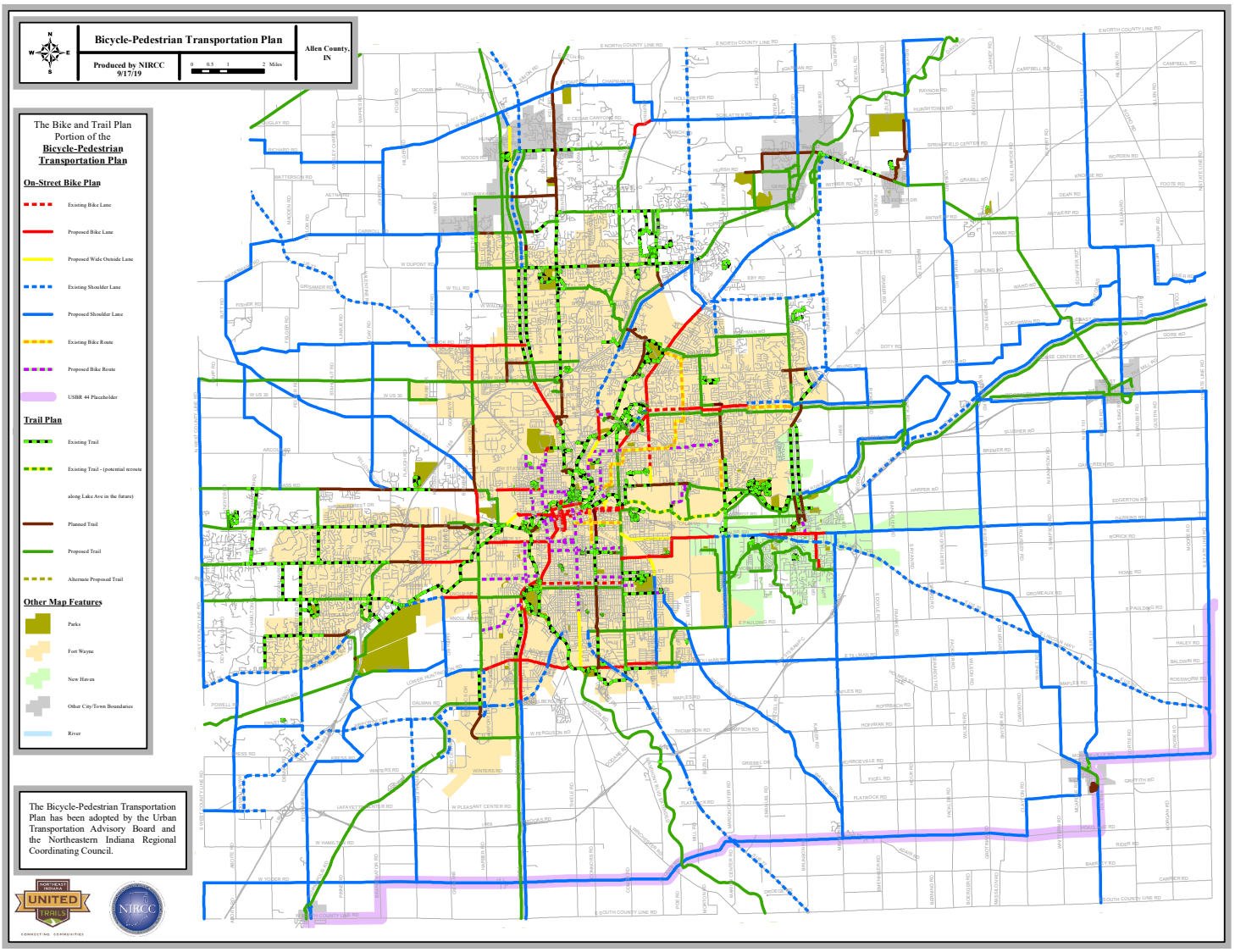
Figure 59

Regional Bicycle and Pedestrian Plan

2035 Long Range Transportation Plan update. To create a more usable and detailed plan that update took what used to be one map, which included all bicycle and pedestrian infrastructure, and separated it into three individual plan maps. These three maps consist of a bike plan (Figure 60) which includes trails and on-street bike infrastructure, a trail plan (Figure 61), and a sidewalk plan (Figure 62). The combination of these three maps, which has continued to be updated in the same way, must be used to find out what is planned, proposed, or already exists for each corridor or alignment identified. For example, some corridors may only include proposed sidewalks while others may propose bike lanes in the street, a sidewalk on one side, and a trail on the other. Some corridors in the plan also identify which side of the street sidewalks and/or trails are proposed for.

Figure 60

Bicycle-Pedestrian Transportation Plan: Bike and Trail Plan

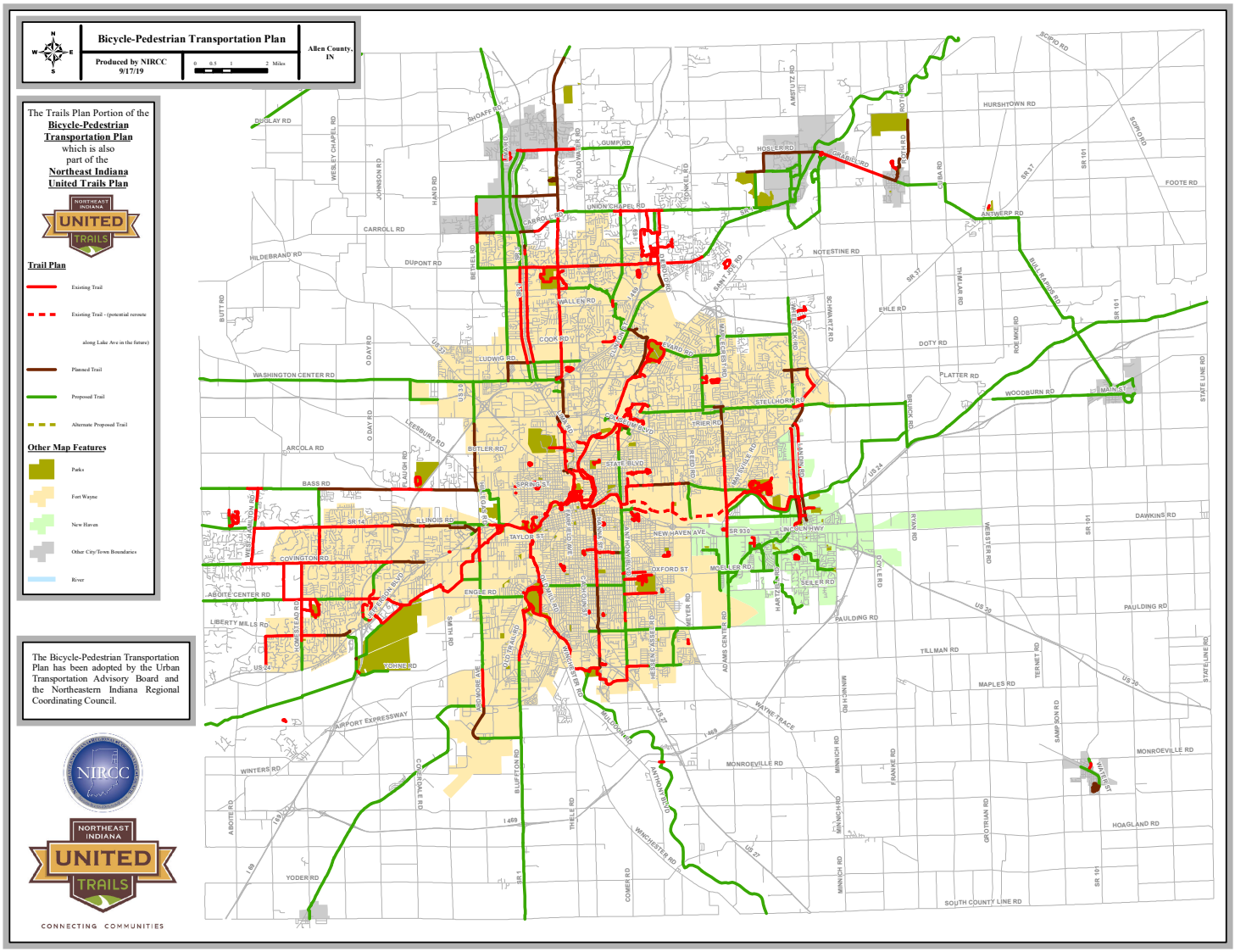


The Bike and Trail Plan (Figure 60) is really intended to show an overall bike network along with the trails plan. Since bicyclists use a combination of on-street infrastructure and trails this map includes both to show how the entire network works together. This map displays a wide range of proposed and existing infrastructure for bicycling. The

proposed and existing facilities displayed include bike lanes, widened outside curb lanes, shoulder lanes, sharrows, bike routes, and trails.

Figure 61

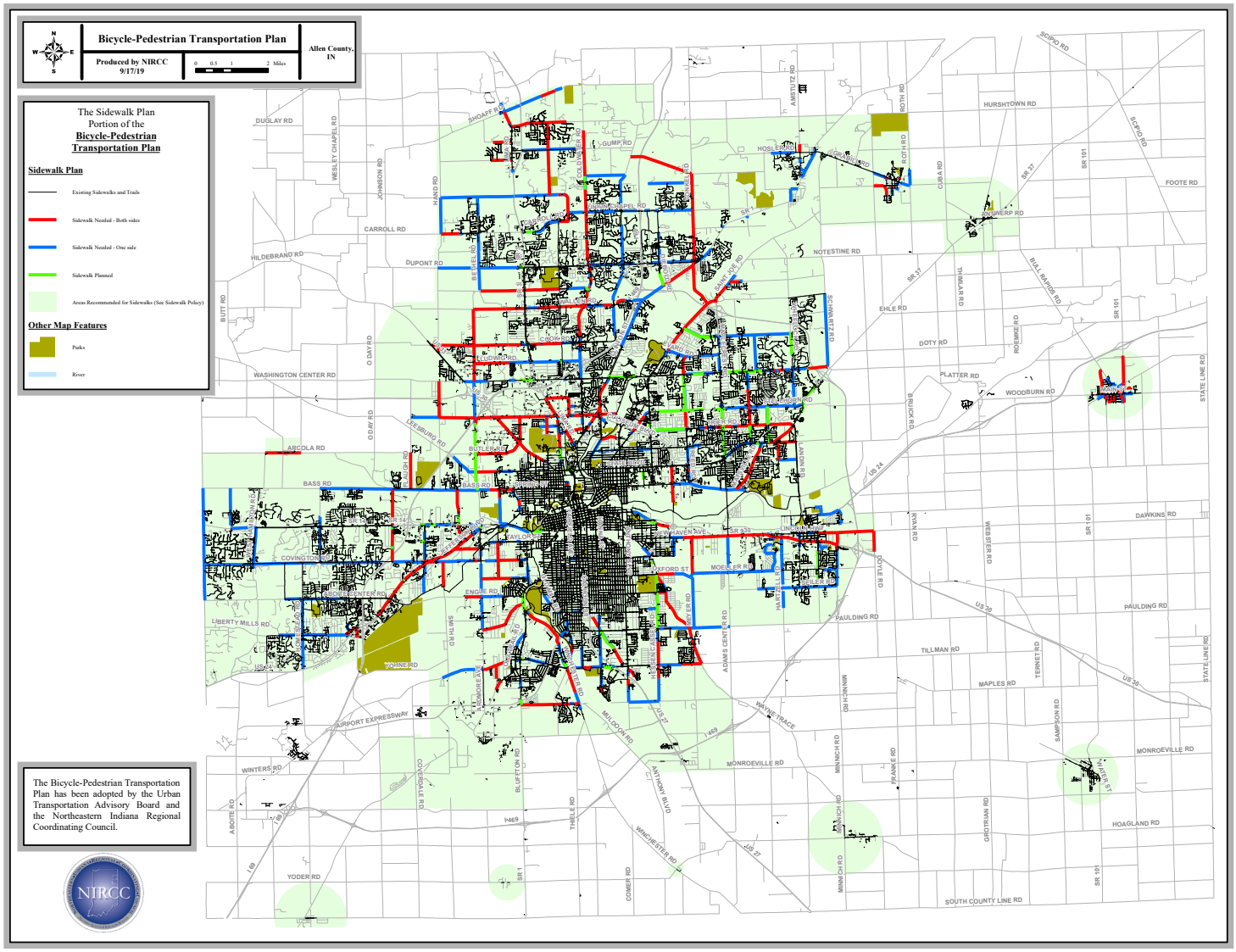
Bicycle-Pedestrian Transportation Plan: Trail Plan



The Trails Plan (Figure 61) shows the entire existing trail system for Allen County as well as how it will tie in with what is planned to occur over the next several years and into the future. The Trail Plan for Allen County is also part of the "Northeast Indiana United Trails" which covers the 12 county trail network in Northest Indiana. The trails identified as "Planned" are facilities that are being built along with road projects or are standalone projects that have all or most of their funding and we are confident they will be constructed in the near future. The trails identified as "Proposed" vary in their stage of development. These trails may be very conceptual or may currently be in some stage of development but lack the funds to really push them forward to construction.

Figure 62

Bicycle-Pedestrian Transportation Plan: Sidewalk Plan



The Sidewalk Plan (Figure 62) identifies sidewalk needs along all major roadways in the urban area and some outside the urban area. This map displays all existing sidewalks and trails within Allen County and specifically identifies corridors or sections of roadways that need sidewalks on one side or both sides depending on existing features and proposed trails that parallel. The sidewalk needs identified on the map will be used to prioritize sidewalk improvements and identify the need for sidewalks as development spreads throughout the urban area. The map also includes a green shaded area that refers to the sidewalk and bicycle parking recommendations policy included in the 2040 Transportation Plan. Other than what is specifically identified on the map, these areas should always consider sidewalks and bicycle parking amenities as needed depending on development patterns and opportunities that arise.

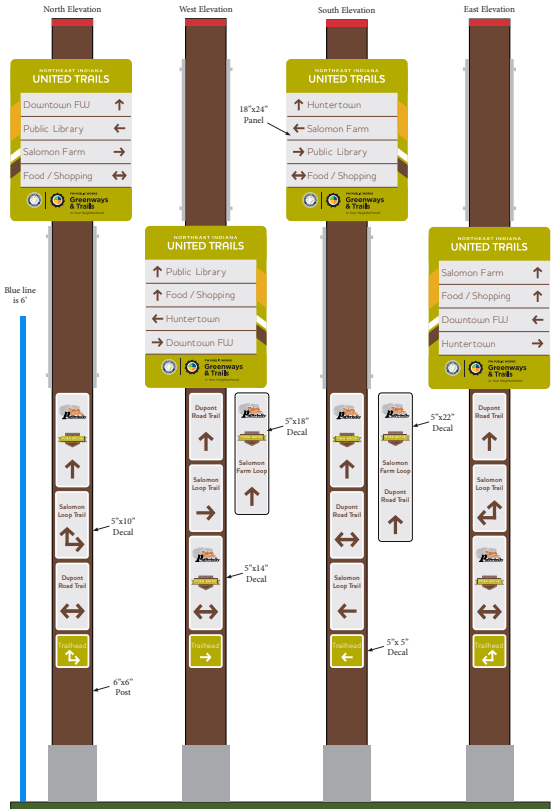
This past fiscal year NIRCC participated in a variety of bicycle and pedestrian planning activities. Some of the common tasks NIRCC participated in or completed for bicycle and pedestrian planning include but are not limited to the following:

- Making updates to the Allen County Bicycle and Pedestrian transportation Plan.
- Making updates to the Allen County Sidewalk and Trail Inventory.
- Updating NIRCC's website with bicycle and pedestrian planning documents.
- Meeting or talking with citizens about bicycle and pedestrian planning issues.
- Working with local advocacy groups.
- Creating maps and supporting documents or reports for bicycle and pedestrian planning.
- Working with other governmental departments and providing ideas, facts, recommendations or any other information related to bicycle and pedestrian planning upon request.
- Researching bicycle and pedestrian facility design, funding types and availability, educational information, safety information, laws and ordinances concerning bicycle and pedestrian subjects.
- Tracking progress on bicycle and pedestrian projects throughout the area.
- Reviewing development plans and transportation projects that are underway or in some stage of design to ensure bicycle and pedestrian connectivity and coordination with the Bicycle-Pedestrian Transportation Plan.
- Checking potential trail and sidewalk projects for environmental conflicts.
- Extracting and analyzing bicycle and pedestrian crash data from NIRCC's crash database.
- Making updates to various bicycle and pedestrian related plans.
- Attending meetings for bicycle and pedestrian issues.
- Creating planning documents, reports, or maps for meetings and governmental agencies.
- Assisted various local groups, governmental departments, agencies, and public with bicycle and pedestrian planning.
- Updating performance measures.

In Fiscal Year 2019 NIRCC continued to work on the branding and wayfinding initiative for the pilot project that would showcase the new signs along an existing trail corridor. A section of the Pufferbelly Trail from Washington Center Rd to Life Bridge Church was selected. The Pufferbelly Trail is also a section of the Poka-Bache Connector. This corridor will help showcase a wide range of sign types. Locations for different sign types were mapped out and renderings of what the signs would look like at each location have been made. On the next page (figure 63) you will see examples of what some of the wayfinding signs will look like. The new signs should be installed sometime in 2020.

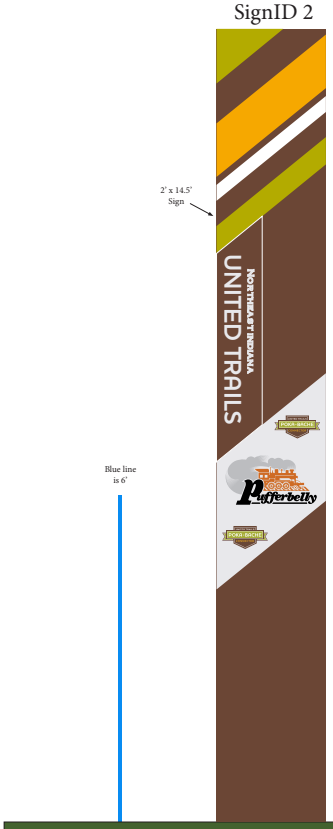
Figure 63

Pufferbelly Trail @ Dupont Road Trail Intersection SignID 23



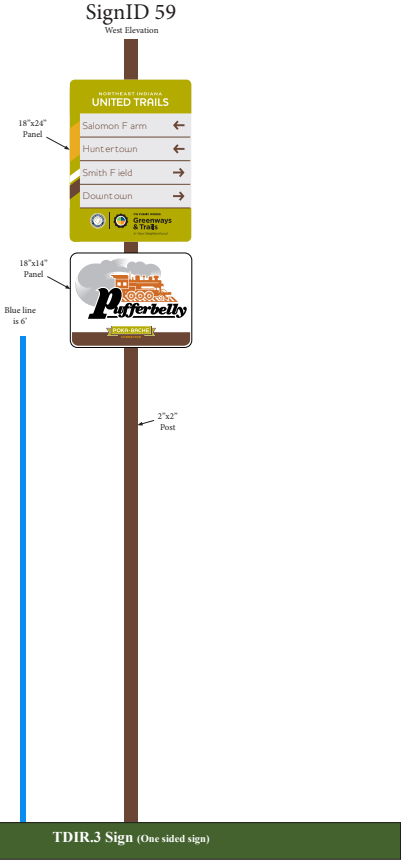
TDIR.3 Sign (This example is a single sign post location showing all 4 sides of the sign)

Union Chapel at Corbin Rd - Life Bridge Church Property SignID 2



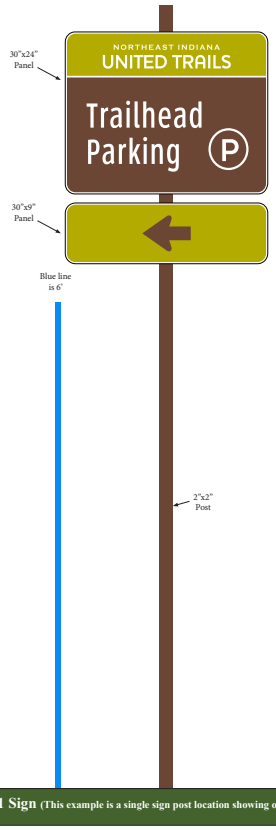
Trail_ID.1 Sign

Pufferbelly Trail @ Hearthstone Village Sidewalk Intersection SignID 59



TDIR.3 Sign (One sided sign)

Life Bridge Church Entrance SignID 3



Park.1 Sign (This example is a single sign post location showing only 1 side of the sign)

NIRCC also assisted the City of Auburn with installing wayfinding signs along the Poka-Bache Connector. Auburn installed signs along the Poka-Bache Connector near Rieke Park at North St, Betz Rd, and along CR 427 towards Waterloo. Pictured below is the dedication of a wayfinding sign at the intersection of Betz Rd and CR 427.

The brand and wayfinding signage guidelines manual is provided to the public on NIRCC's website. Files of sign designs and templates are available upon request from NIRCC.

Red Flag Environmental Investigations

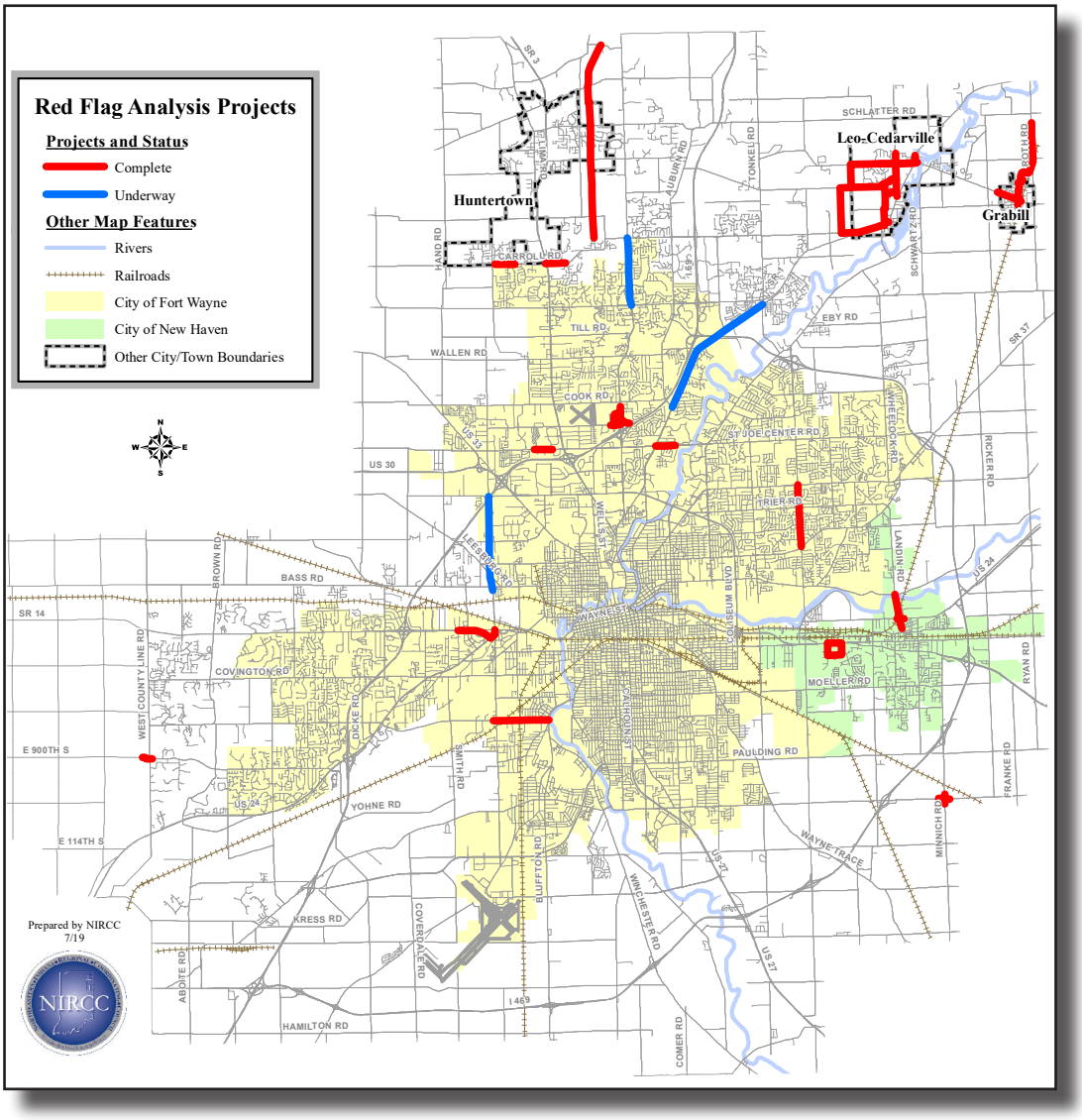
Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

RED FLAG ENVIRONMENTAL INVESTIGATIONS

When federal funds are used for projects, agencies are responsible for complying with certain guidelines and requirements throughout the project process. One of the requirements when there is a federal undertaking is that, by all practicable means, the action taking place will identify and either mitigate or avoid any adverse harm to the natural or cultural environment. The National Environmental Policy Act (NEPA) is what establishes these national environmental policies and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals.

Figure 64



As part of this process agencies conduct investigations during or before the project development phase to see what kinds of environmental effects may be caused as a result. In order to identify locations and issues of concern, or "red flags", an initial report is completed and referred to as a Red Flag Investigation (RFI). The report identifies these red flags that may require additional study coordination in future steps of the project development process. They may also prompt creative management or design approaches which may increase right of way and construction costs. The report also identifies any "fatal flaws" in the study area which are locations that must be avoided all together.

In FY 19 NIRCC completed work on twelve Red Flag Investigations (RFIs) which included, the updates to the Amstutz Road/Hosler Road RFI in the town of Leo-Cedarville, the Carroll Road RFI in Huntertown, the Hillegas Rd RFI in Fort Wayne, the Clinton St RFI in Fort Wayne, the Coldwater Rd RFI in Fort Wayne, the Coldwater Road/Ludwig Road

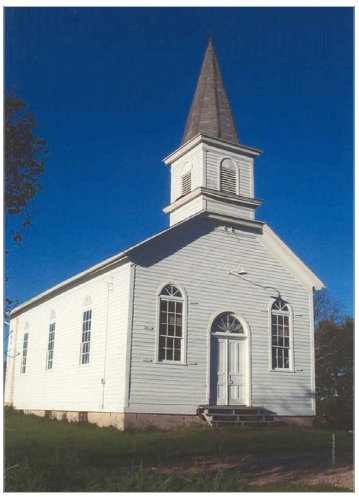
RFI summary in Fort Wayne, the Grabill Stellar RFI summary, The Haifley Ditch to Hurshtown Reservoir Stellar RFI summary, the Illinois Rd Trail RFI summary, the Leo-Cedarville Stellar RFI summary, the New Haven Stellar RFI summary, and the Pufferbelly Trail RFI Summary. The update to Amstutz Road/Hosler Road RFI, the Carroll Road RFI, and all the RFI summaries were completed in FY 19. The Coldwater Road RFI, Clinton St RFI, and the Hillegas Rd RFI will be completed in FY 20. The RFIs NIRCC has completed to date are shown in figure 64. Throughout the Fiscal Year NIRCC also commented on a number of projects for Early Coordination which requires referencing the same data used to complete Red Flag Investigations. Also, NIRCC continued to update analysis data for future Red Flag Investigations and Early Coordination efforts.

Red Flag Investigations analyze projects to find out what types of environmental red flags may be present. To do this NIRCC utilized GIS (Geographical Information Systems) to search areas within half a mile of the project limits to identify any items that may fall within any of the six main sections of the report. Here is a list of the six sections in the report with examples of what is being identified within each:

1. Infrastructure – Examples include airports, cemeteries, schools, hospitals, parks, utilities, religious facilities, etc.

2. Water Resources – Examples include rivers, streams, special interest waterways, wetlands, floodplain, etc.

3. Mining/Mineral Exploration – Examples include mines, petroleum wells, and petroleum fields.



4. Hazmat Concerns – Examples include underground storage tanks, different types of waste sites, cleanup sites, remediation sites, dumps, etc.

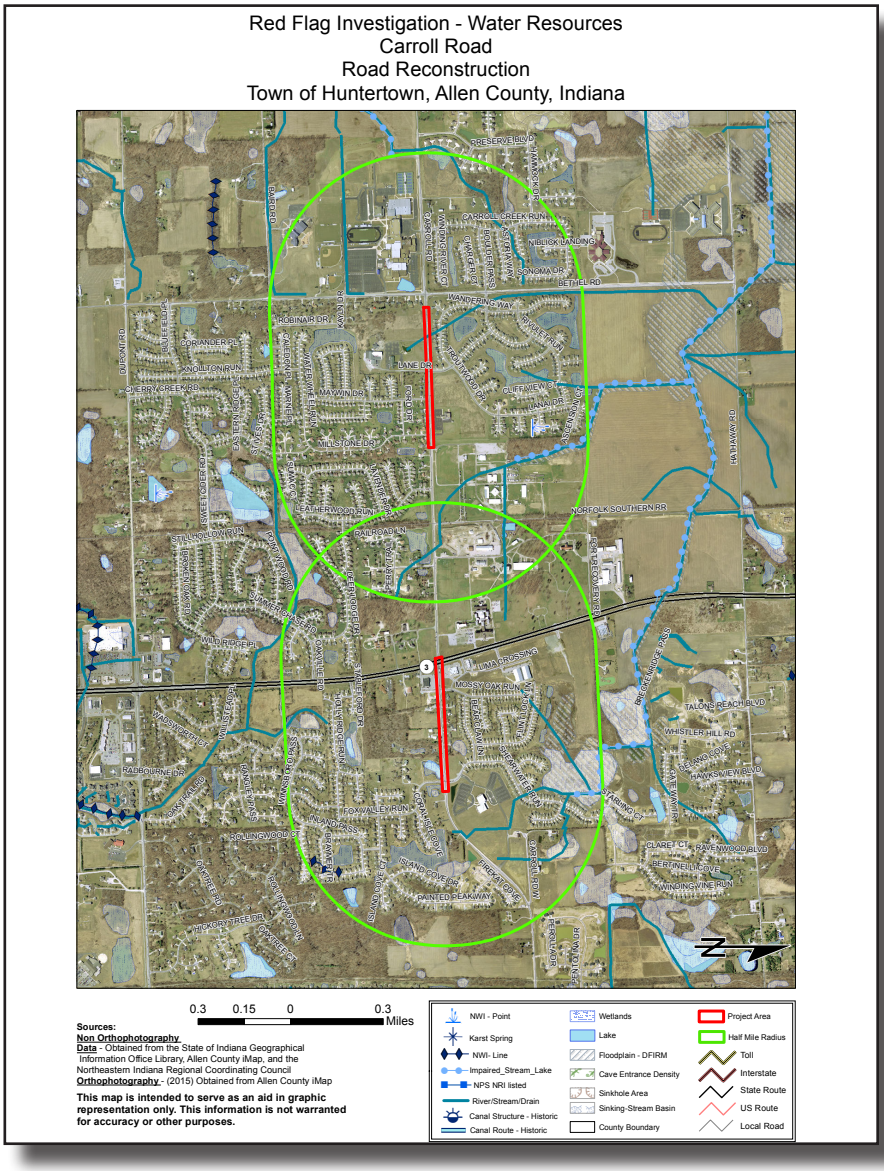
5. Ecological Information – Identifies endangered, threatened, or rare species.

6. Cultural Resources – Examples include historic sites and districts, potential historical sites and districts, select and non-select bridges, and properties identified in interim reports.

Besides the sections listed above, NIRCC also completes a section identifying bicycle and pedestrian facilities, existing and proposed, throughout the project area and specific locations that may need special consideration for ADA compliance. For each RFI there are also maps providing visuals of each project's location and individual maps for each section listed above identifying all red flags within the half mile radius.

Figures 65 and 66 give you examples of two maps included in the report NIRCC worked on this past fiscal year for Carroll Road. Figure 65 is the map which identifies "Water Resources"

Figure 65



near the project area and Figure 66 displays "Infrastrucure" items identified in the red flag analysis.

Along with the maps NIRCC also creates a table for each of the six sections. These tables show everything that is considered when conducting the red flag analysis and how many items of each are found within a half mile radius of the project. You will see an example of the "Water Resources" table and "Infrastructure" table from the Carroll Road project in Figures 67 and 68. Once the tables are complete NIRCC includes a summary of findings for each item with a description in the report that also states whether or not each item will be affected by the project. To find out further information about Red Flag Analysis or detailed information about a specific Red Flag Analysis already completed please contact NIRCC for assistance.

Figure 66

Red Flag Investigation - Infrastructure
Carroll Road
Road Reconstruction
Town of Huntertown, Allen County, Indiana

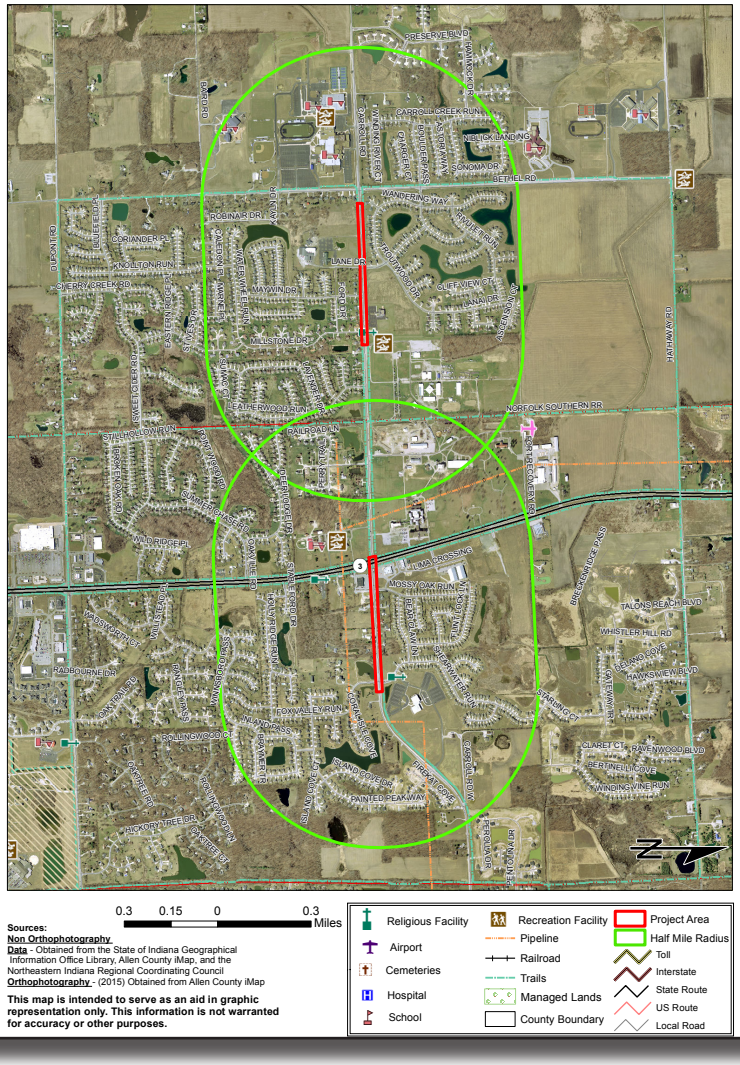


Figure 67

Water Resources

Indicate the number of items of concern found within the 0.5 mile search radius. Items in ( ) are the number of items that are adjacent to or within the project area. If there are no items, please indicate N/A:

NWI - Points	**1**	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	**42**(3)
Canal Structures – Historic	N/A	Lakes	**8**(1)
NPS NRI Listed	N/A	Floodplain - DFIRM	**2**
NWI-Lines	**1**	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	**2**	Sinkhole Areas	N/A
Rivers and Streams	**16**(1)	Sinking-Stream Basins	N/A

Figure 68

Infrastructure
Indicate the number of items of concern found within the 0.5 mile search radius. Items in ( ) are the number of items that are adjacent to or within the project area. If there are no items, please indicate N/A:

Religious Facilities	**3** (2)	Pipelines	**2**
Airports[1]	0	Railroads Active	N/A
Cemeteries	**1**	Railroads Abandoned	**1**
Hospitals	N/A	Managed Lands	N/A
Schools	**5**	Trails Existing	**4**(1)
Recreational Facilities	**5** (2)	Trails Proposed/Planned	**8**(4)

[1]In order to complete the required airport review, a review of public airports within 3.8 miles (20,000 feet) is required.

Transit Planning Activities

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

TRANSIT PLANNING ACTIVITIES

NIRCC has an integral role in the transit planning activities that occur within Allen County. NIRCC has a working relationship with most of the areas transit providers. These providers, along with representatives from local government, social service agencies, and consumers, serve on committees overseen by NIRCC that focus on transit related activities within Allen County.

There are two committees that deal with transit related activities in Allen County, the Transit Planning Committee (TPC) and the Transportation Advisory Committee (TAC). The TPC meets monthly and the TAC meets quarterly. The TPC was established in 1993 as a working committee of the Urban Transportation Advisory Board (UTAB). The main focus of the TPC is to assist in coordinating and facilitating local public transit and para-transit services. The TAC serves as a sub-committee of the TPC focusing mainly on the local transportation issues faced by persons with disabilities and low income individuals. The TPC has been integral in projects such as the Coordinating Development and Transportation Services Guide, the Citilink Transit Development Plan and updates, and the Coordinated Public Transit-Human Services Transportation Plan for Allen County. TPC also takes the lead role in the facilitation and evaluation of the local Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Operational Funding Program. The TAC takes the lead role in the facilitation and evaluation of the local Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Capital Funding Program and is responsible for maintaining the local Transportation Resource Guide.

In Fiscal Year 2019, Transit Planning Activities completed by NIRCC staff included the facilitation of the Section 5310 Local Capital Funding program and providing assistance to Citilink to complete new Comprehensive Operations Analysis (COA) and Transit Development Plan (TDP). A summary of each of these activities is provided below.

Federal Transit Administration's Section 5310 Program

The Federal Transit Administration's (FTA) Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program provides capital and operating funding to support the provision of transportation services to meet the specific needs of seniors and individuals with disabilities. Transportation providers within the Fort Wayne Allen County Urbanized Area serving the senior and disabled populations utilize Section 5310 funding to purchase vehicles and operate services. The current Federal legislation which authorizes funding for transportation is Fixing America's Surface Transportation Act, known as the FAST Act. The FAST Act requires the establishment of a locally

developed, coordinated public transit-human services transportation plan for the Section 5310 program. NIRCC has developed a Coordinated Public Transit-Human Services Transportation Plan for Allen County (available at www.nircc.com). All projects selected for funding from this FTA program must be derived from this coordinated plan and be competitively selected.

NIRCC, in coordination with Citilink (designated recipient of the Section 5310 funds for the Fort Wayne Allen County Urbanized Area), has established an application process to select projects to receive capital and operational funding from the Section 5310 Program. Capital and Operational funding rounds are held separately. A Section 5310 Capital funding round is held on an annual basis. While the Section 5310 Operational funding round is held on a semi-annual basis. Any project(s) selected for funding requires the responsible agency / party to enter into a contractual agreement with Citilink (designated recipient).

The annual Section 5310 Capital program awards vehicles to area non-profit agencies providing transportation to seniors and individuals with disabilities. A call for projects was issued in February 2019 with awards announced in June 2019. The capital program provides 80% of the total vehicle cost, requiring a 20% local match from the applicant. In Fiscal Year 2019, approximately $146,000 in Section 5310 Capital funding to the Community Transportation Network to purchase a total of 3 vehicles. All of the awarded vehicles were lift equipped and had wheelchair tie-downs.

The semi-annual Section 5310 Operational program provides operating support for eligible two (2) year (24 month) operating projects targeted toward meeting the transportation needs of seniors and individuals with disabilities. A call for projects is issued every other July with awards announced every other October. The operational program provides 50% of the total project cost, requiring a 50% local match from the applicant. An operational funding round was not held in Fiscal Year 2019.

Citilink Comprehensive Operations Analysis and Transit Development Plan

Every five to ten years, Citilink completes a process of updating the Transit Development Plan (TDP). The purpose of the plan is to assess the state of the current system, review where future development is expected to occur, and identify service changes to enhance the choices people have in getting to/from work, school, shopping, medical appointments or simply visiting family and friends. This time around, Citilink will also be completing a Comprehensive Operational Analysis (COA) as the data collection and analysis component of the TDP. The COA will provide Citilink with a more in depth analysis of current service and future needs compared to the analysis typically included within a TDP.

Between now and 2040, there is the expectation population will increase by 67,800 people and 41,000 new jobs will be added to Allen County. For transit to be a viable option to support growth, coordinated efforts between where new development is located, and current service areas is critical. One of the primary purposes of the COA/TDP is to provide a forum for these coordination discussions.

The process of conducting the COA/TDP is divided into four primary steps:

- Evaluate Current Service – Which includes both the fixed route services and paratransit (Access). The product of this step will be a description of how well the system performs relative to other similar systems and industry guidelines.
- Assessment of Current Services to Meet Local Needs – Through surveys and review of where routes run relative to customer's needs, a picture of how well needs are being supported will be developed.
- Service Plan Alternatives – Where change is needed, the plan development process will investigate alternatives, including new/expanded service and revision of current.
- Develop a Plan – The final product of the process will be a detailed plan of where changes are needed and what changes make sense and are supported by the community.

NIRCC staff has been involved in the COA/TDP process from day 1. Beginning in early fall 2017, NIRCC staff assisted Citilink in procuring a qualified transit consultant to complete the COA/TDP. In early 2018, Citilink selected and entered into a contract with SRF Consulting. The COA/TDP originally had an anticipated 18-month time frame, however due to internal changes at Citilink during the project, the time frame has been extended and the project is anticipated to be complete in early 2020. Below is a summary of the progress through the end of Fiscal Year 2019 and the anticipated next steps.

Progress:

- Consultant Procurement: August 2017 – January 2018
- Initiated in February 2018
- Data Collection: February 2018 - June 2019
    - Existing Conditions
        - Service, routes, ridership, fleet, funding, peer review, etc.
    - Ride Counts: March 2018
    - Surveys
        - Fixed Route: March 2018

        - Access: June 2018
        - Community Survey: June 2018 – July 2018
    - SWOT Analysis: June Transit Planning Committee
    - Interviews – Community Leaders / Stakeholders: March 2018 – June 2019
- Meetings
    - Advisory Committee
        - In person and phone/web conference - monthly
    - Transit Planning Committee and Transportation Advisory Committee
        - April 2018 Intro and June 2018 SWOT Analysis
    - Public
        - July 2018 – 1st round
        - November 2018 – 2nd round
- Developed and discussed draft service recommendations, draft goals/objectives and performance measures, and draft funding level assumptions: July 2018- June 2019

Next Steps: July 2019 through January 2020– not necessarily in order

- Finalize existing conditions, service recommendations, goals/objectives, performance measures, and funding level assumptions.
- Prepare draft COA/TDP
- Hold final (3rd) round of public meetings
- Finalize COA/TDP

Creating Livable Communities and Ladders of Opportunity

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2016

CREATING LIVABLE COMMUNITIES AND LADDERS OF OPPORTUNITY

The purpose of this program is to encourage community-based transportation and land use projects that support infill development in the urban area and revitalization efforts of downtown areas, neighborhoods, commercial cores and transit corridors. The primary intent is to advance community sustainability and overall access to essential services such as employment, healthcare, education and recreation.

The program will concentrate on energy conservation, climate change and lowering infrastructure operating costs with a goal of more efficiently using existing infrastructure to reduce emissions, energy use and personal transportation costs. The process will focus on transit and non-motorized transportation in Northeast Indiana. Advancing the objectives of the Transit and Bicycle-Pedestrian components of the Transportation Plan will be a primary objective.

NIRCC will develop and implement analytical methods to identify connectivity gaps of the transportation system between residential neighborhoods and essential services. Strategies will be developed to improve connectivity within the region to these services utilizing transit, bicycle, pedestrian and other non-traditional infrastructure and programs. Activities will also include reviewing development plans to recommend access control, transit friendly designs and opportunities for pedestrian and bicycle facilities. A blueway system will be defined in collaboration with the regional trail system to promote improved water quality through the use of local waterways for transportation and recreational purposes.

Northeast Indiana Water Trails Initiative

The Northeast Indiana Water Trails Initiative (NEIWTs), housed under the NIRCC, is a regional partnership working to increase recreation opportunities on our waterways by promoting boat access, water safety and stewardship, and the development of regional water trails that will empower our citizens to become more active and unified. It began in early 2015, and has had several accomplishments working toward its mission since its inception.

Some of the NEIWTs accomplishments include developing and printing waterproof water trail maps for the Indiana portion of the Western Lake Erie Basin in 2016; development and launch of a website which includes all things paddling in northeast Indiana (neiwatertrails.com) in 2017; facilitating the installation of a new boat access site on the St. Joseph River north of Fort Wayne with a land transfer from the Allen County Highway Department to the Indiana Department of Natural Resources in 2018; developing a water access – trailhead sign template and the installation of the first sign at Guldlin Park in Fort Wayne in 2019.

The water trailhead signs developed in 2019 include vital information to ensure a safe and enjoyable paddle such as a map showing approximately six hours of paddling, basic water safety and etiquette, and how to check water levels to ensure the rivers are safe to paddle. The backside of the signs shows local information such as water quality, wildlife, fish, and historical information. The sign template and NIRCC's services will be offered to other organizations promoting water trails within their jurisdiction.

2019 hosted the fourth annual Pedal, Paddle, Play which is the NEIWTs annual community event and fundraiser. The event was a success with 194 people out on the water trails and adjacent greenway, many of whom have never been on the Fort Wayne Rivers before. Funds raised from the event will be used to continue the trailhead sign program throughout northeast Indiana.

SUMMARY

The Transportation Summary Report provides an overview of some of the transportation planning activities performed by the Northeastern Indiana Regional Coordinating Council (NIRCC) during Fiscal Year 2019. The Summary Report highlights a majority of the transportation planning activities conducted and the products produced by NIRCC during Fiscal Year 2019. The document provides a basic overview of the transportation planning activities, data and products produced as part of the transportation planning process. Various types of traffic data integral to the planning process are collected and processed. Traffic volume and classification data are two examples of this basic information. The vehicle miles of travel provides a mechanism for assessing travel demand growth within the region.

Traffic studies help monitor the transportation system, identify problem areas and assist in the development of viable solutions. Crash analyses, intersection analyses, and different types of corridor studies serve to improve safety and efficiency. Through a cooperative and coordinated process the cities of Fort Wayne and New Haven, Allen County, Citilink, and the State of Indiana review the information and recommend improvements. The multimodal nature of the planning process includes public transit, para-transit, bicycle and pedestrian travel. The projects listed in the Fiscal Year 2018-2021 Transportation Improvement Program (TIP) represent the improvements selected for implementation. The Fiscal Year 2018-2021 TIP can be found on NIRCC's website.

The staff of the Northeastern Indiana Regional Coordinating Council will continue to monitor the transportation system striving to provide a complete transportation system. A system that enhances efficiency, promotes safety, and maintains a conscious regard for the quality of life. For this goal to become a reality, constant monitoring of the existing system must occur. Staff is continually collecting data on the existing system to support the short-range planning process and to identify the challenges and opportunities of the future.

The primary purpose of this report is to familiarize the readers with the techniques used by NIRCC and the resulting products to promote a more functional transportation process in our community. However, this report only provides a summary of the wide variety of activities conducted by NIRCC and its staff. NIRCC is constantly striving to provide relevant information to the public and communities it serves to support a decision-making process that improves the transportation system.

If you would like additional information concerning the studies and reports referenced in this document or have questions regarding the transportation planning process, please contact NIRCC staff at (260) 449-7309. NIRCC also maintains a website that contains many of the transportation planning documents and products at www.nircc.com. The site also contains an amended Transportation Improvement Program (TIP), 2040 Transportation Plan, and many other documents and staff contact information.

Transportation Summary Report Fiscal Year 2019

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2019

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