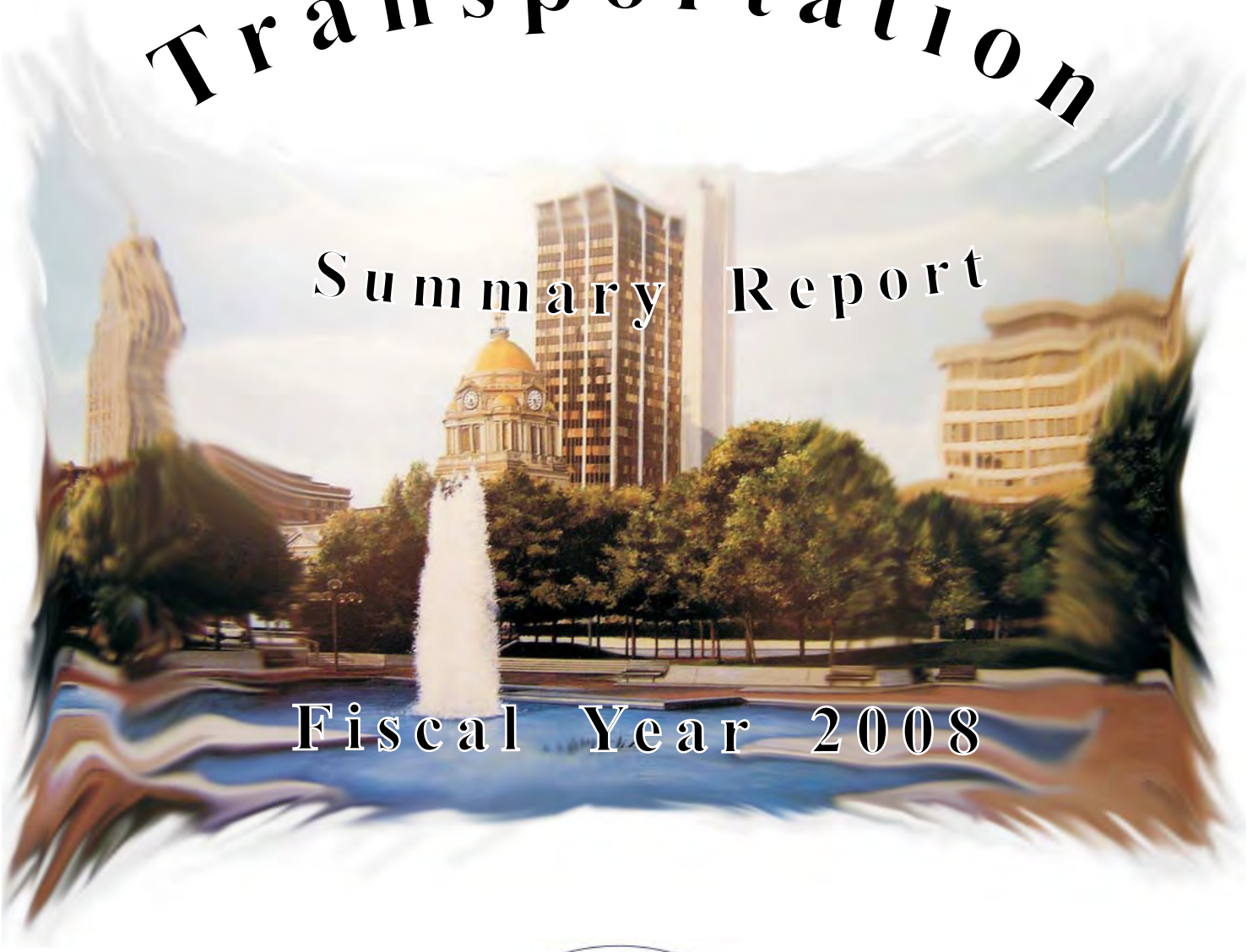
Transportation



Summary Report

Fiscal Year 2008

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, 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 2008. Included in this report is a summary of the traffic surveillance activities, intersection and arterial analyses, corridor studies, travel time and delay studies; Fiscal Year 2009-2012 Transportation Improvement Program (TIP) Projects for the Fort Wayne-New Haven-Allen County Metropolitan Planning Area, Safety Management System (SMS) activities, and bicycle/pedestrian planning activities. 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.

Traffic Surveillance

Studies completed by the Northeastern Indiana Regional Coordinating Council

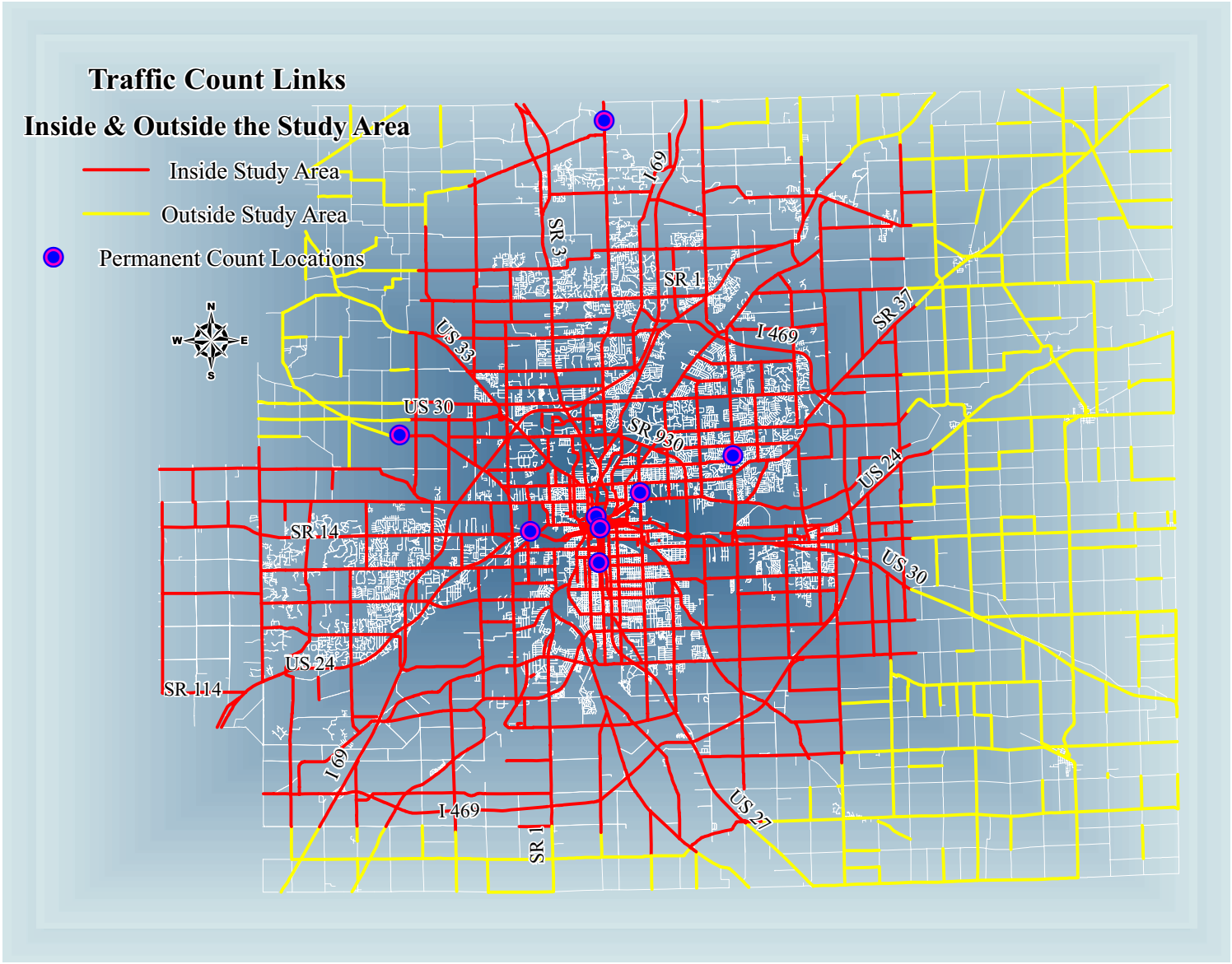
Transportation Summary Report Fiscal Year 2008

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, as illustrated in Figure 1. 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 areas of Fort Wayne and Allen County. The Indiana Department of Transportation maintains permanent counting stations on Interstate 69 and State Road 930. The data from these stations, collected each month, is used to

Figure 1



develop monthly count factors. Monthly count factors are important to determine because traffic volumes vary from one season to 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

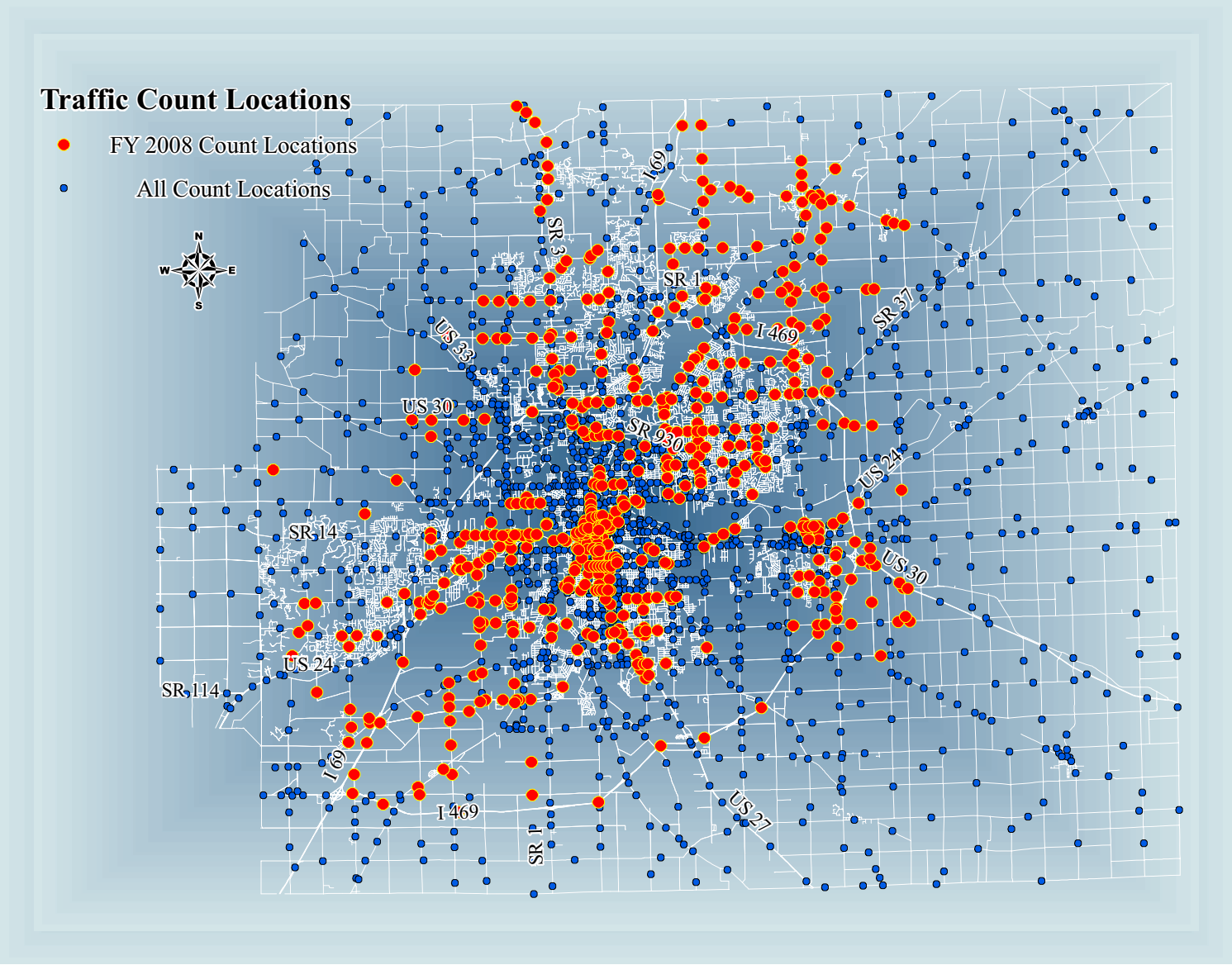


Figure 2

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 2007 (April - November), data was collected at 568 locations, as illustrated in Figure 2. 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 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

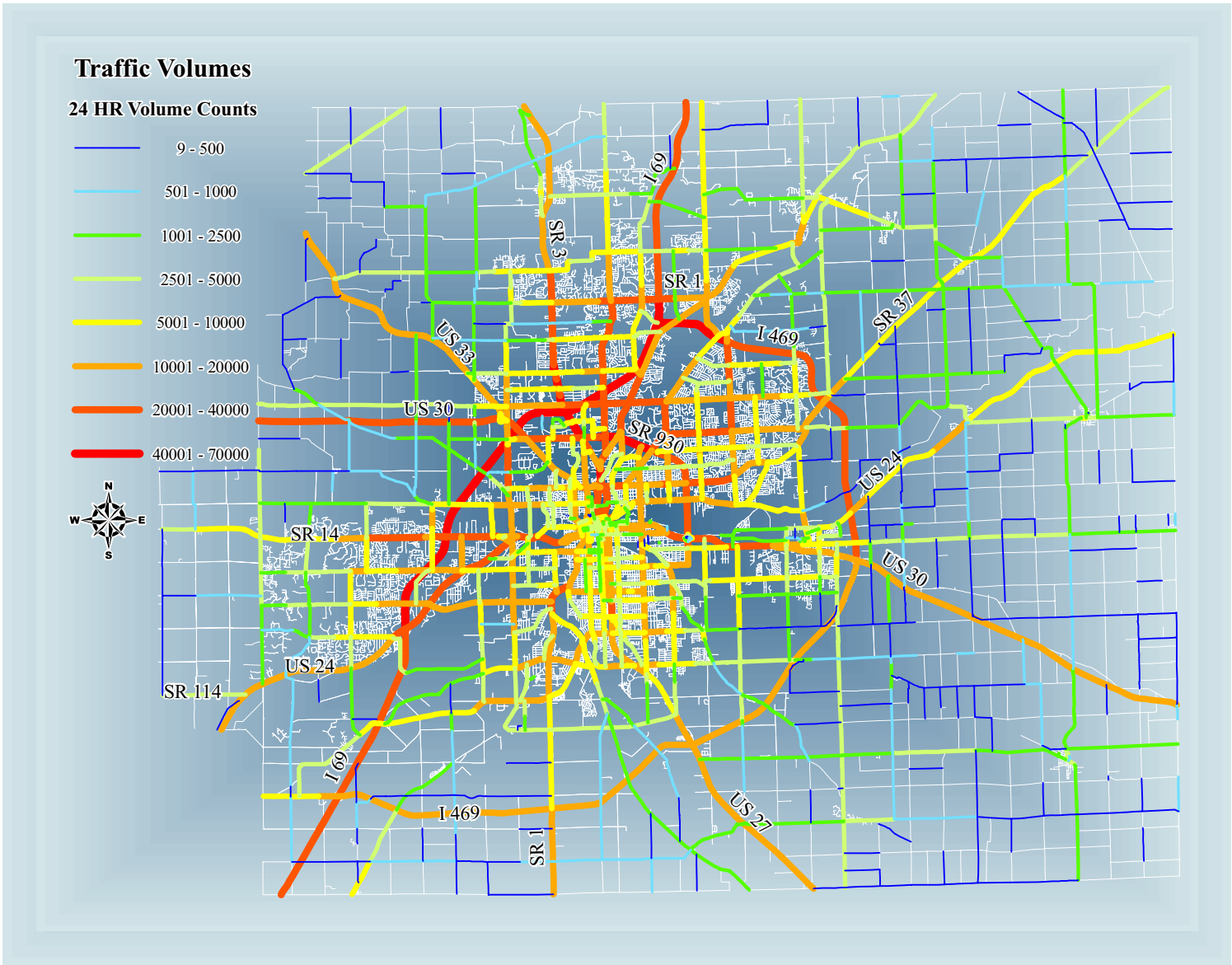


Figure 3

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

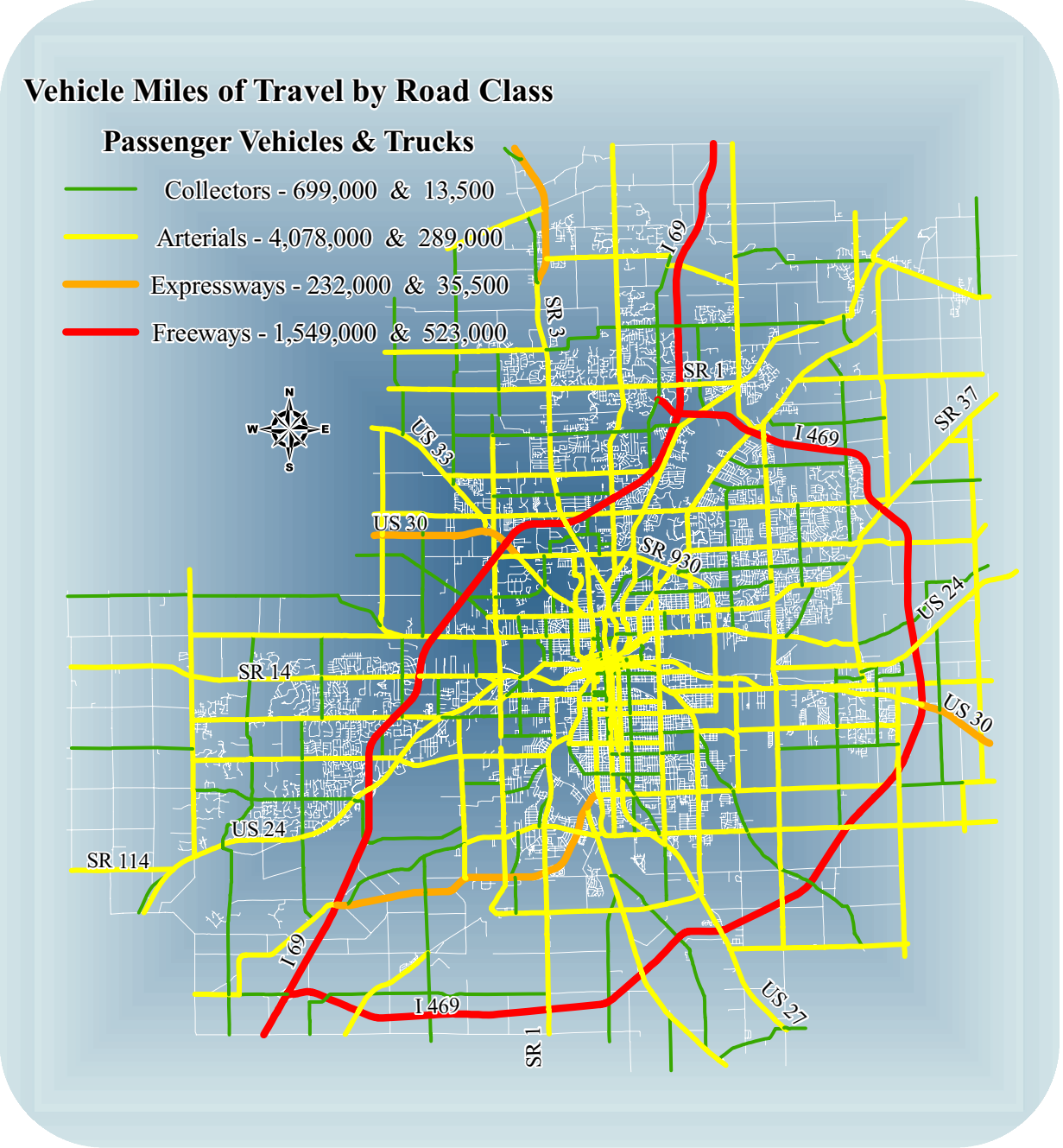
Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2008

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 7,410,562 million in 2006 to 7,418,167 million in 2007. This represents an increase of 0.10 percent. The VMT increased on expressways (5.43%), decreased on arterial streets (2.21%), and decreased on collector streets (1.63%) from 2006. The VMT is illustrated for 2007 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 ten year time period spanning from 1997 to 2007 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. With some exceptions, the general trend shown on the chart shows an increasing total VMT throughout the ten year period as well as 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 have slightly changed the growth patterns of VMT, there still seems to be factors that keep the VMT increasing a little. 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
Vehicle Miles of Travel 1997 - 2007

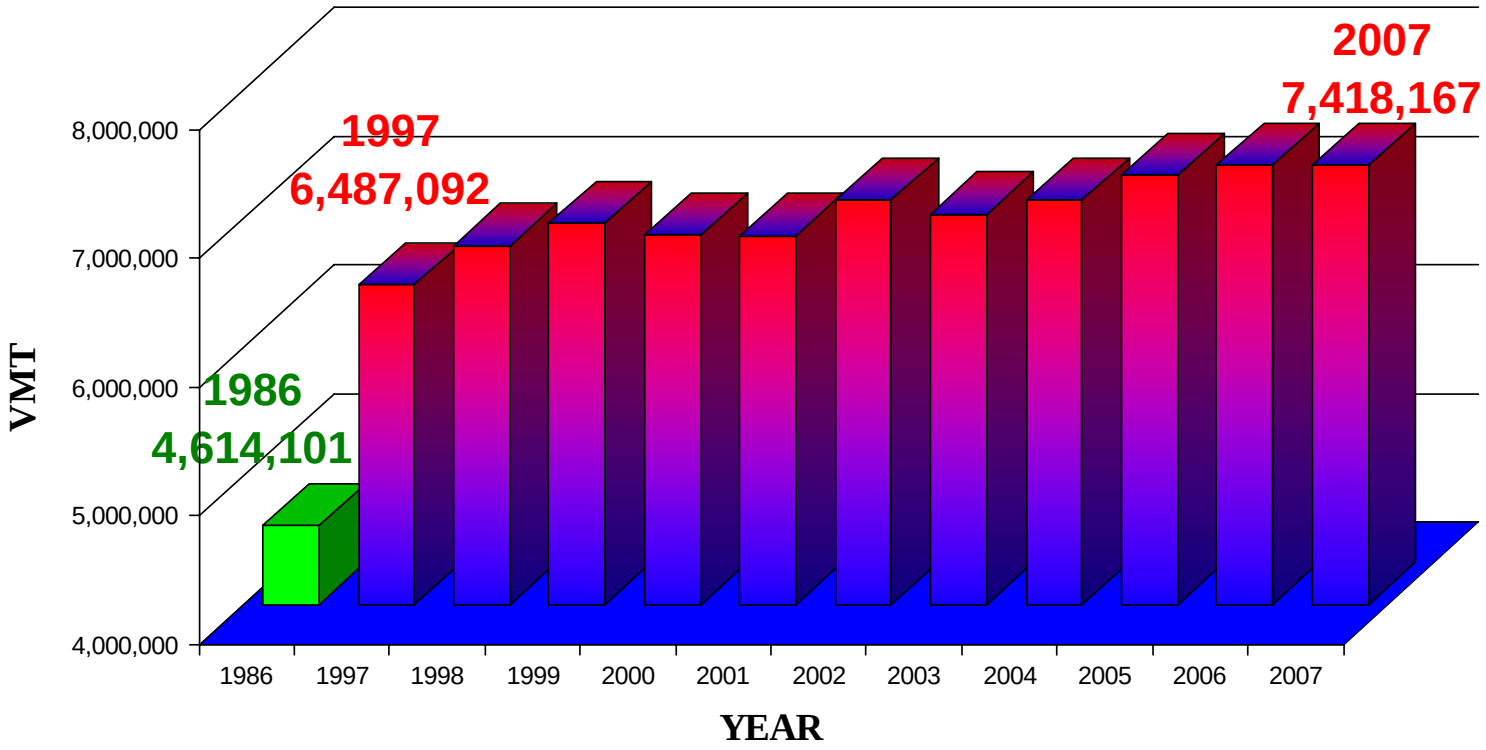
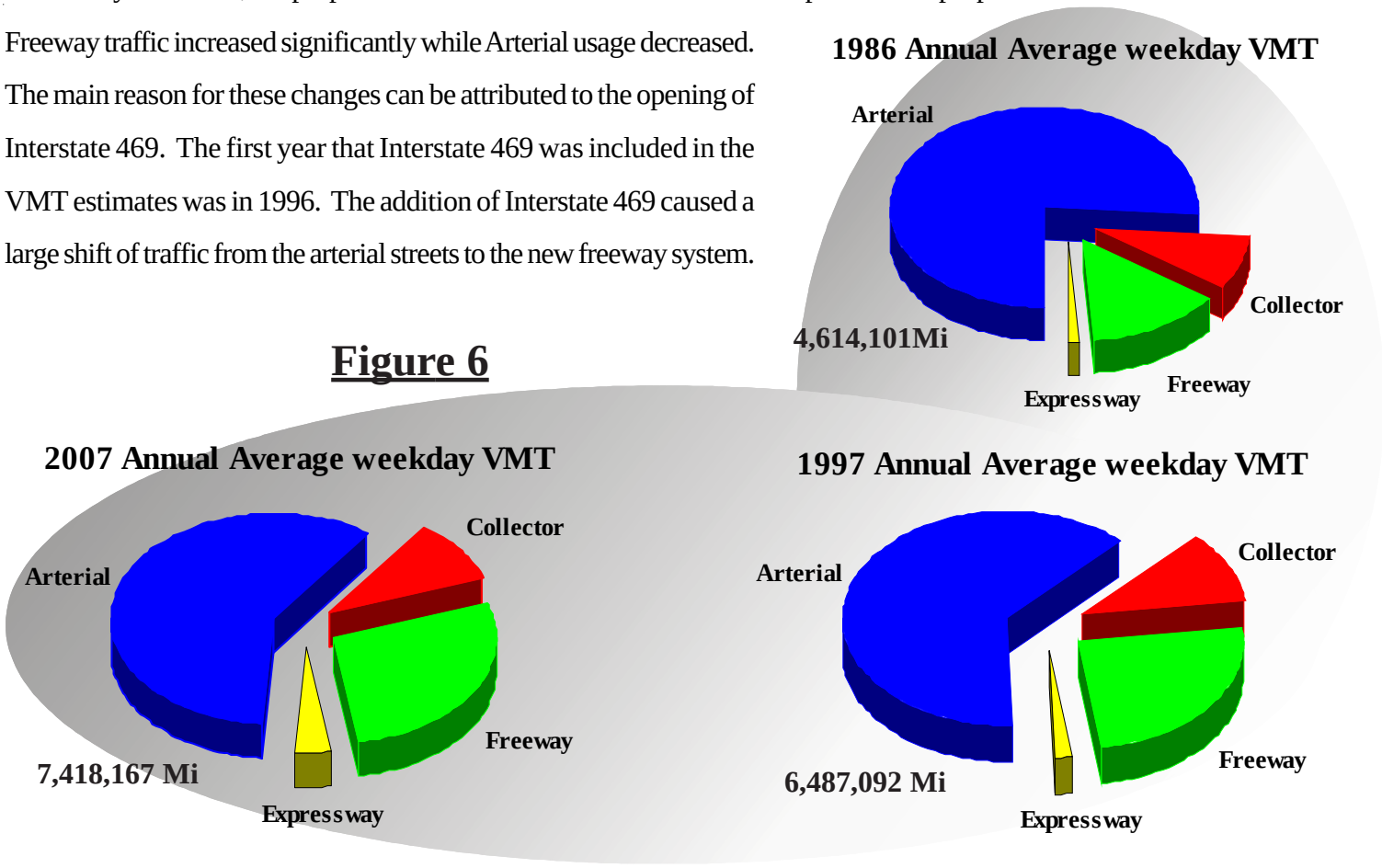


Figure 6 presents three pie charts that represent the proportions of VMT by street classification for the years 1986, 1997, and 2007. As you can see, the proportions of traffic in 1986 are different compared to the proportions of traffic in 1997 and 2007. Freeway traffic increased significantly while 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



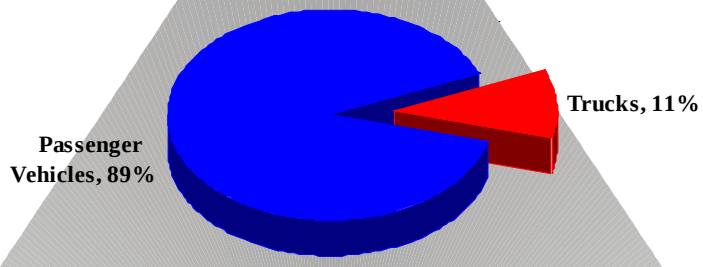
The VMT is also broken down to show the annual average VMT for passenger vehicles and trucks. The pie charts contained in Figure 7 illustrate the VMT for 1986 and 2007. The proportion of truck traffic compared to passenger vehicle traffic is almost identical in 1986 and 2007. A further breakdown of the proportionate usage of passenger vehicles versus trucks on the different road classifications shows some interesting differences between 1986 and 2007. 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 2007 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 2007. 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

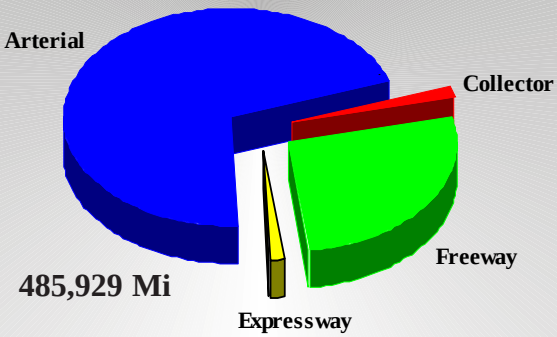
Figure 7

1986

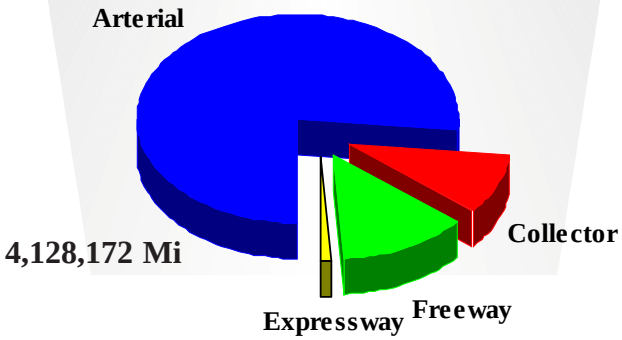
1986 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



1986 Annual Average weekday VMT for Trucks

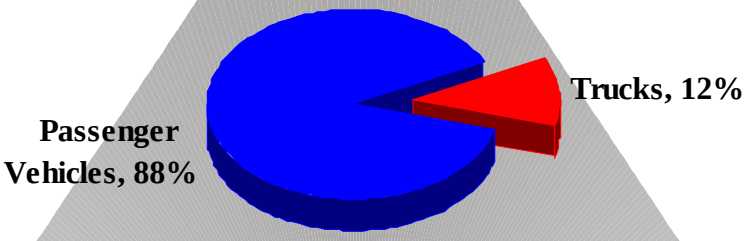


1986 Annual Average weekday VMT for Passenger Vehicles

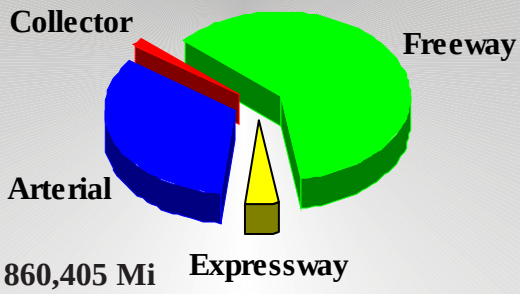


2007

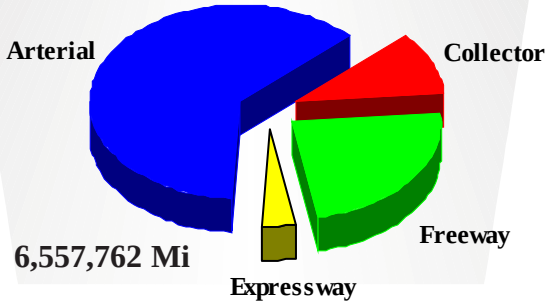
2007 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



2007 Annual Average weekday VMT for Trucks



2007 Annual Average weekday VMT for Passenger Vehicles

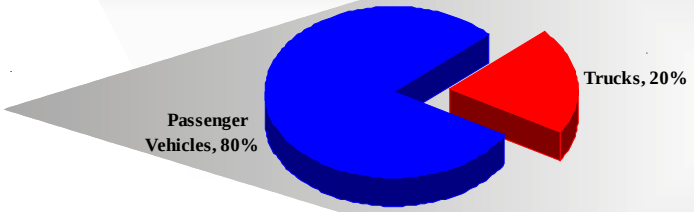


for some of the road classifications, the proportions of passenger vehicles and trucks for each road classification remained very similar between 1986 and 2007.

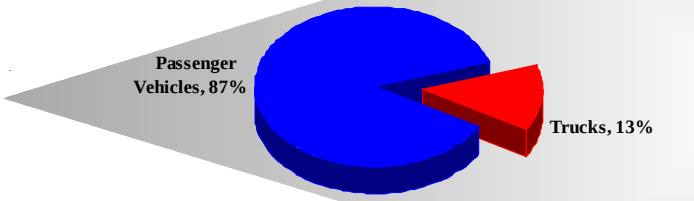
Figure 8

1986

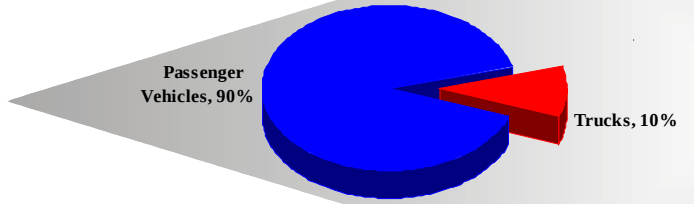
Freeways
Percentage of 1986 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



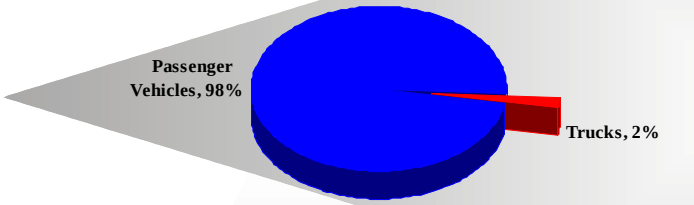
Expressways
Percentage of 1986 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



Arterials
Percentage of 1986 Annual Average weekday VMT for Passenger Vehicles compared to Trucks

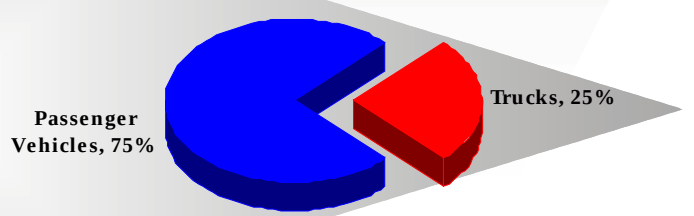


Collectors
Percentage of 1986 Annual Average weekday VMT for Passenger Vehicles compared to Trucks

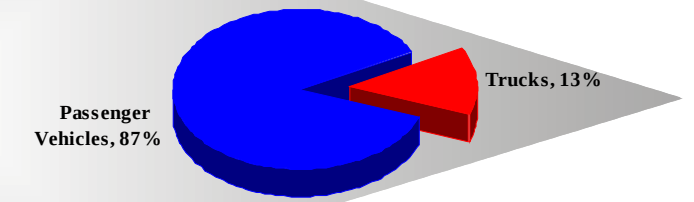


2007

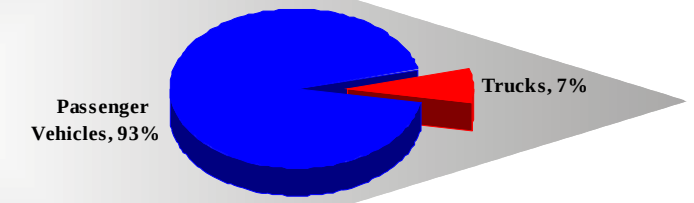
Freeways
Percentage of 2007 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



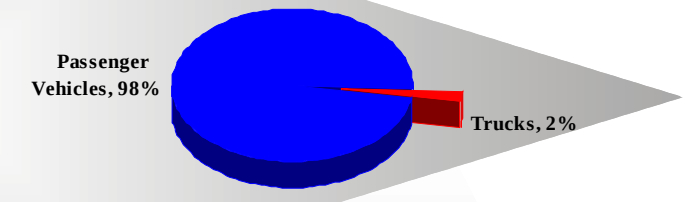
Expressways
Percentage of 2007 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



Arterials
Percentage of 2007 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



Collectors
Percentage of 2007 Annual Average weekday VMT for Passenger Vehicles compared to Trucks



Intersection and Arterial Analysis

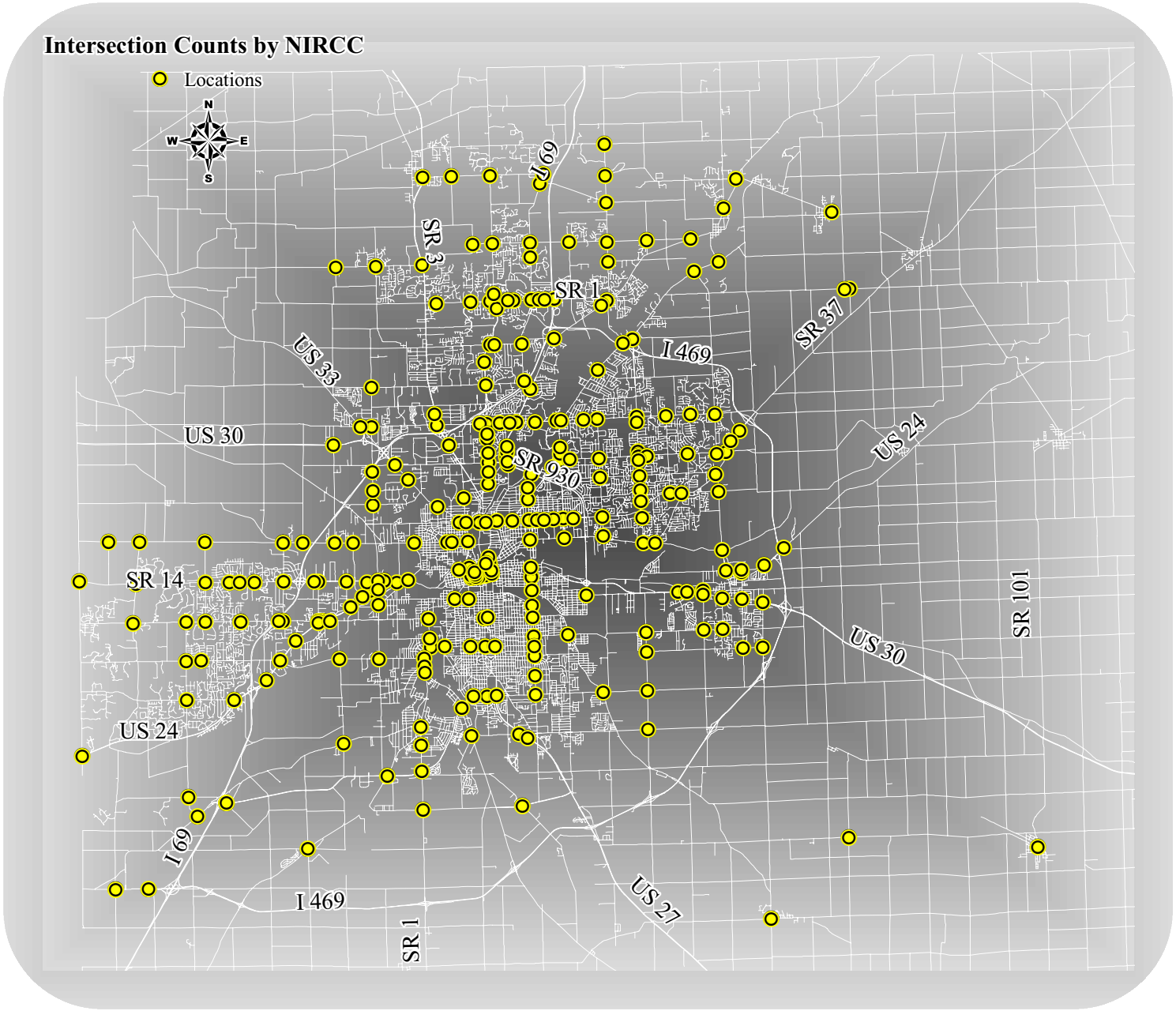
Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2008

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.

Figure 9



In fiscal year 2008, NIRCC evaluated 35 intersections which are listed in the table contained in Figure 10. Out of these 35 intersections, 25 were signalized and 10 were unsignalized.

Figure 10

Signalized Intersections	Unsignalized Intersections	Unsignalized All-way Stops
Anthony Blvd / State Blvd	Aboite Rd / Lafayette Ctr Rd	Covington Rd/ Scott Rd
Anthony Blvd / Crescent Ave	Airport Expressway / Ernst Rd	Hoagland Rd / Minnich Rd
Anthony Blvd / St Joe River Dr	Coldwater Rd / Till Rd	St Joe Ctr Rd / Wheelock Rd
Apple Glen Blvd / W Jefferson Blvd	Dunton Rd / Gump Rd	
Avenue of Autos / Illinois Rd	Homestead Rd / Lwr Huntington Rd	
Beacon St / State Blvd	Hursh Rd / Tonkel Rd	
Canterbury Blvd/ St Joe Rd	Sawmill Woods Blvd / St Joe Ctr Rd	
Carew St / State Blvd		
Coldwater Rd / Dupont Rd		
Coldwater Rd / Northwest Passage Trl		
Crescent Ave / State Blvd		
Dupont Rd / Kroger Shopping Center		
Dupont Rd / La Cabreah Ln		
Dupont Rd / Pine Mills Rd		
Dupont Rd / Radbourne Dr		
Freeman St / W Jefferson Blvd		
Getz Rd / Illinois Rd		
Hadley Rd / State Road 14		
Hobson Rd / State Blvd		
Illinois Rd S / Jefferson Pointe		
Illinois Rd S / W Jefferson Blvd		
Oxford St / Wayne Trace		
Parnell Ave / State Blvd		
Randalia Dr / State Blvd		
W Jefferson Blvd / Jefferson Pointe		

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 2008 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 2003 Edition. The intersections reviewed for signal warrants along with other types of intersection analyses in Fiscal Year 2008 are illustrated in Figure 15.

Figure 11

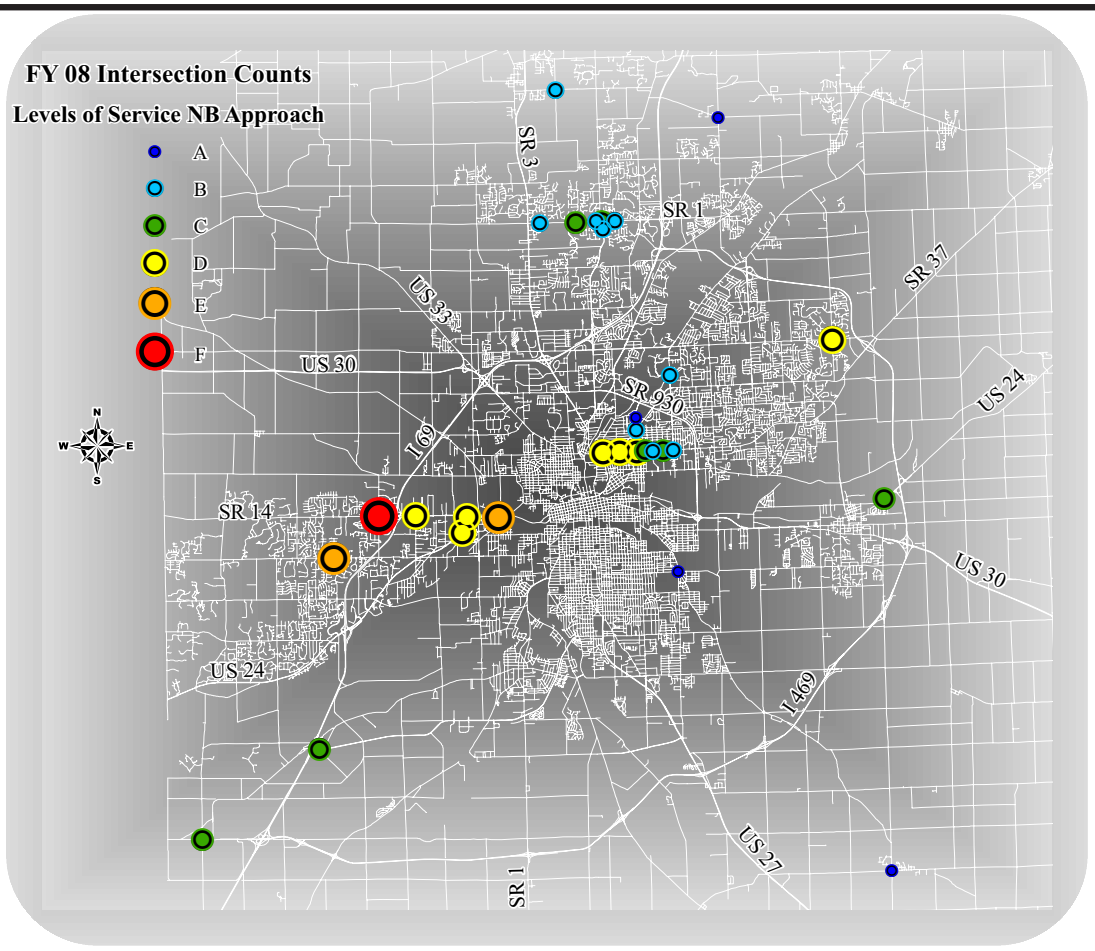
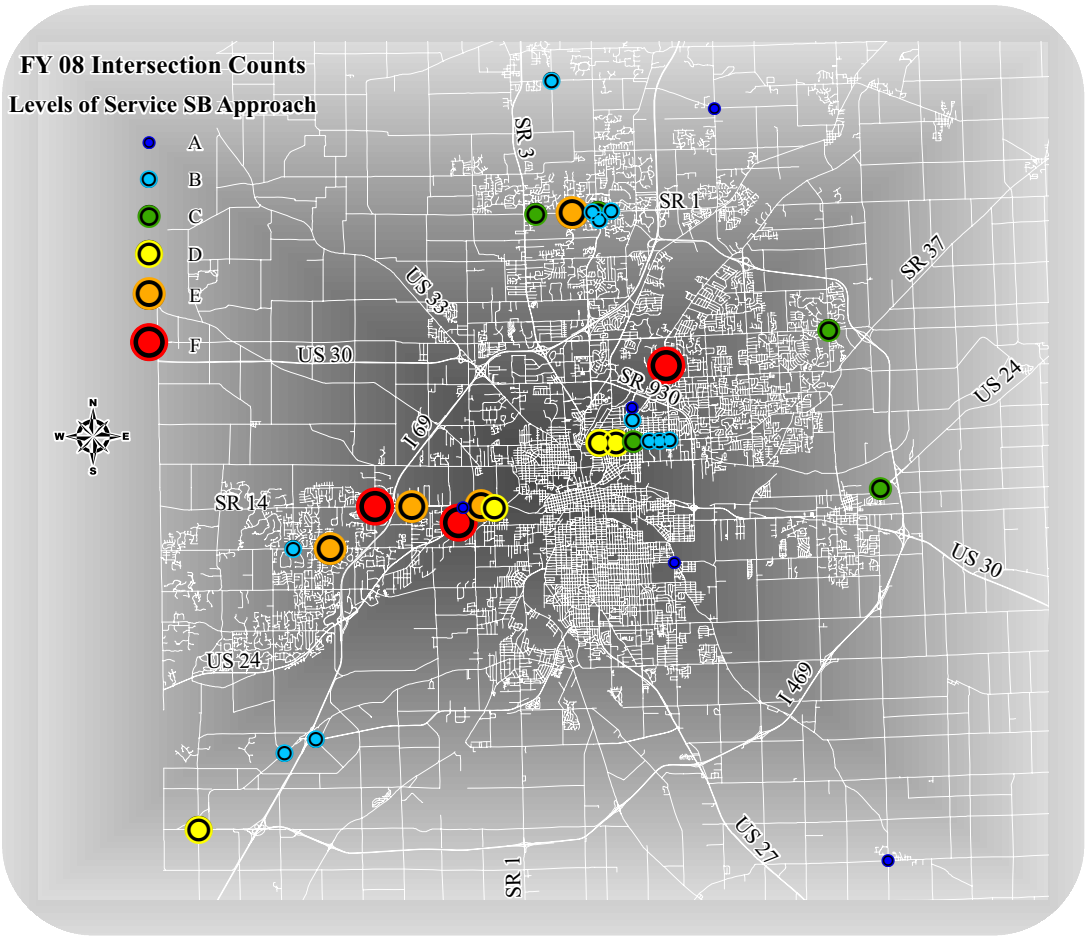


Figure 12



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

Figure 13

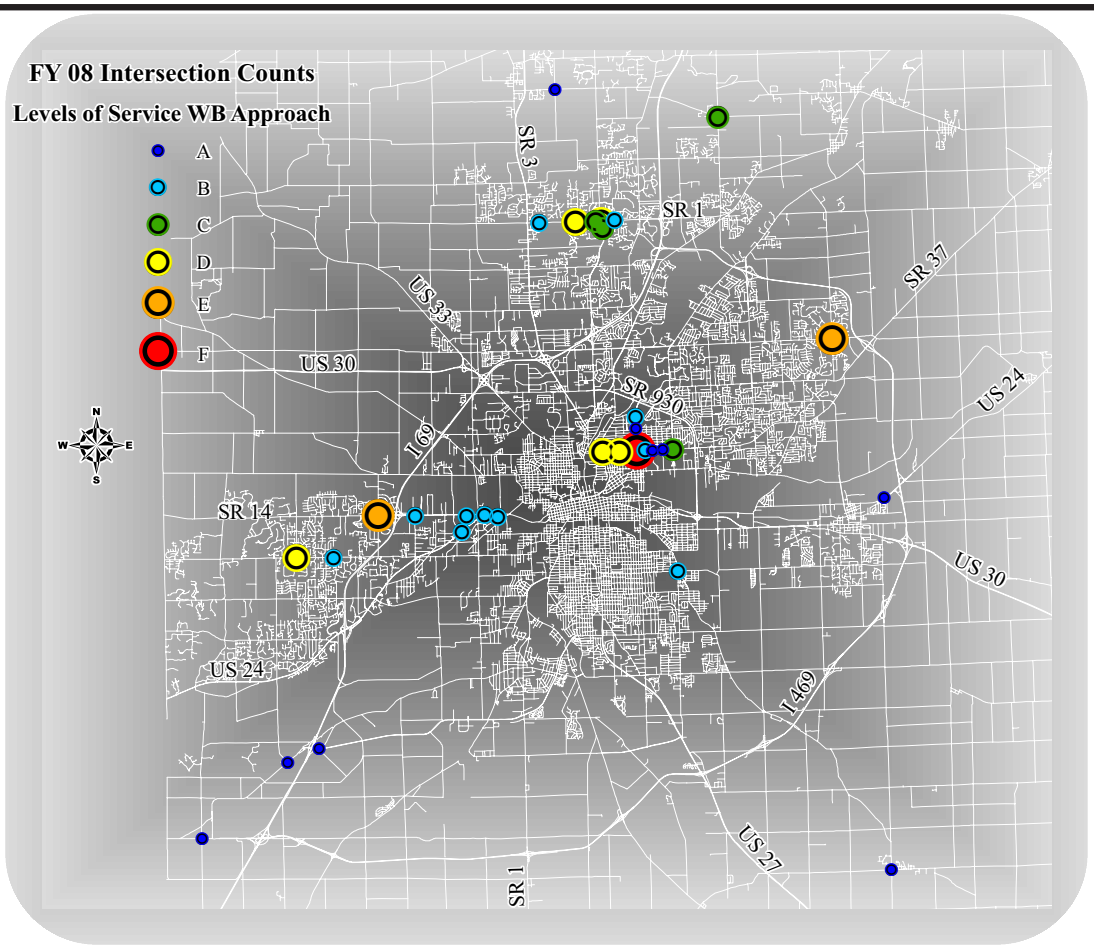
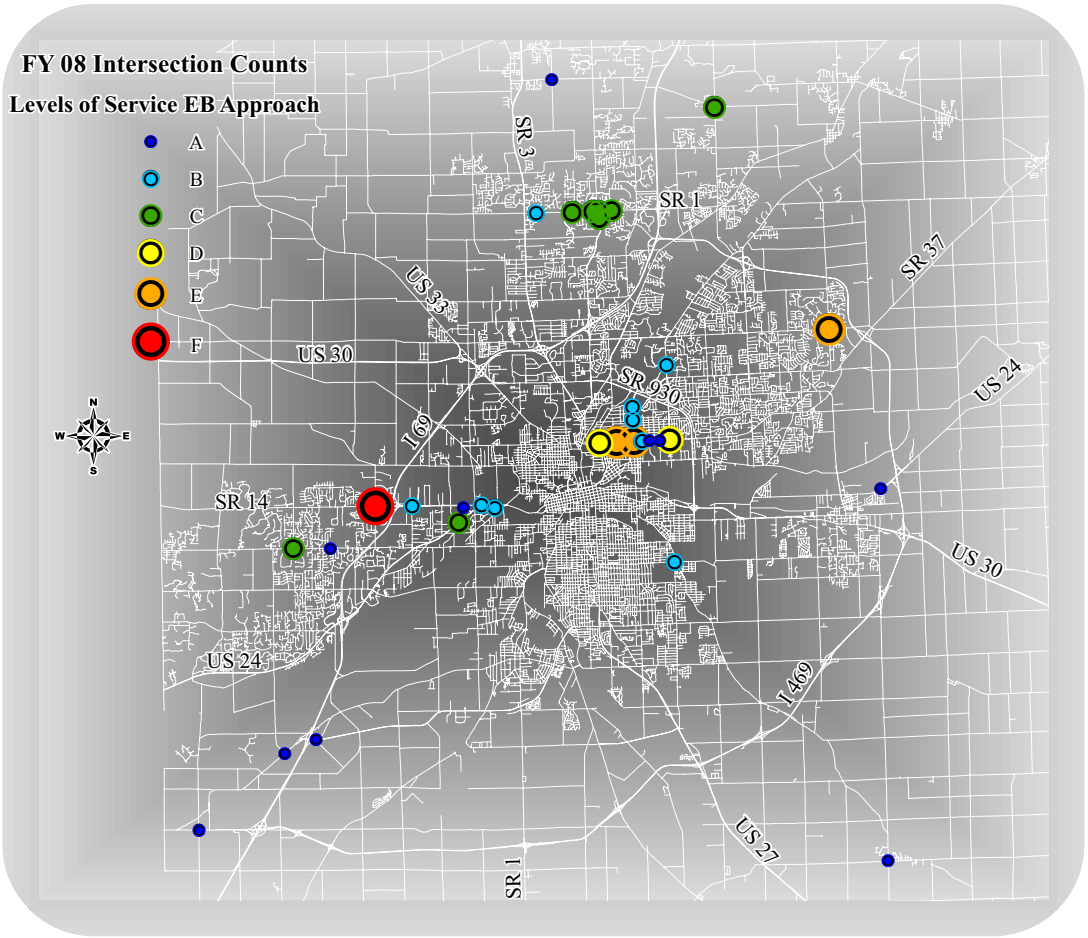
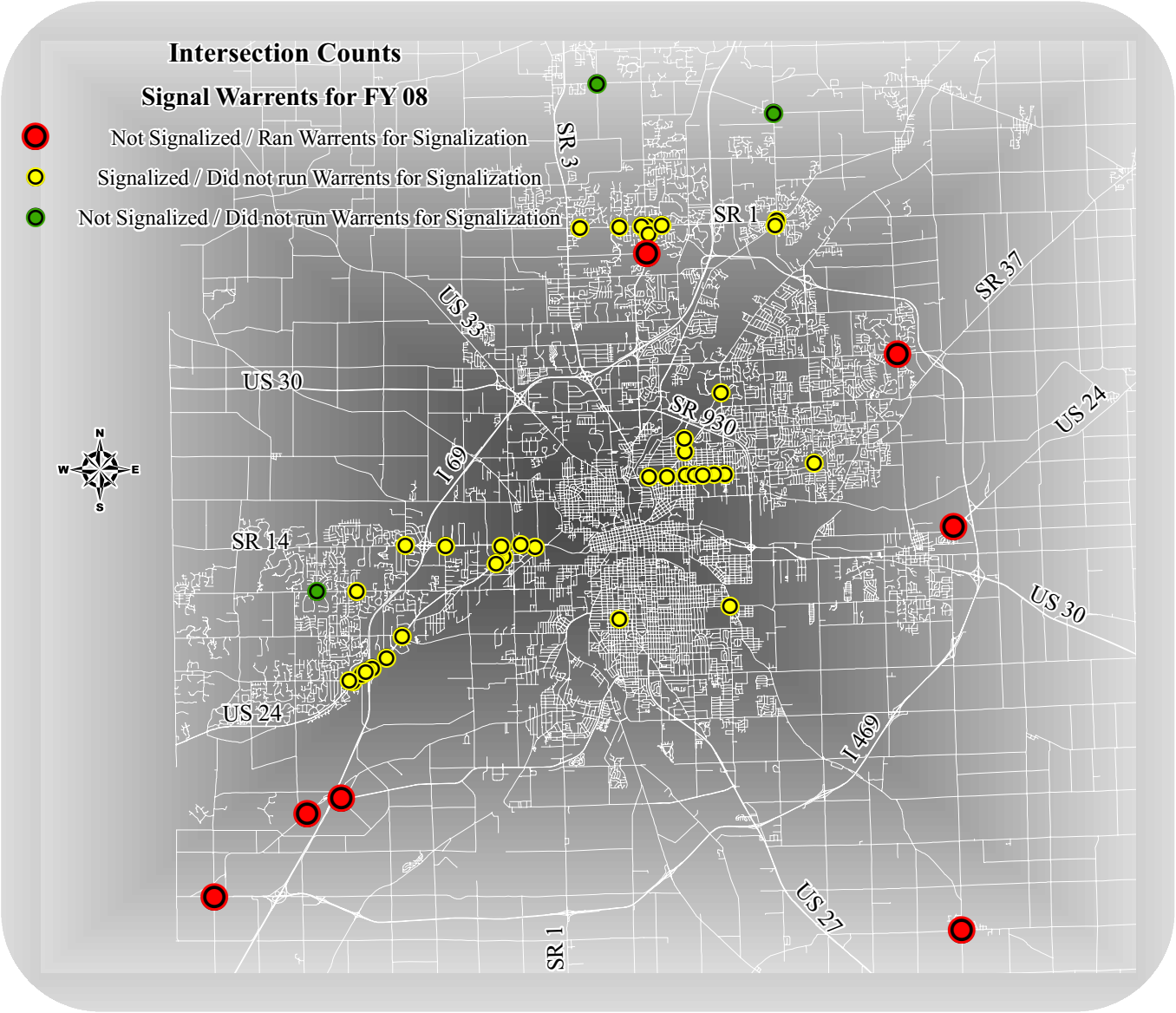


Figure 14



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

Figure 15


Intersection Counts
Signal Warrents for FY 08
Not Signalized / Ran Warrents for Signalization
Signalized / Did not run Warrents for Signalization
Not Signalized / Did not run Warrents for Signalization
N
W
E
S
SR 3
SR 1
US 33
SR 37
US 30
SR 930
US 24
I 69
SR 14
US 30
US 24
I 469
US 27
SR 1

Corridor Studies

Studies completed by the Northeastern Indiana Regional Coordinating Council

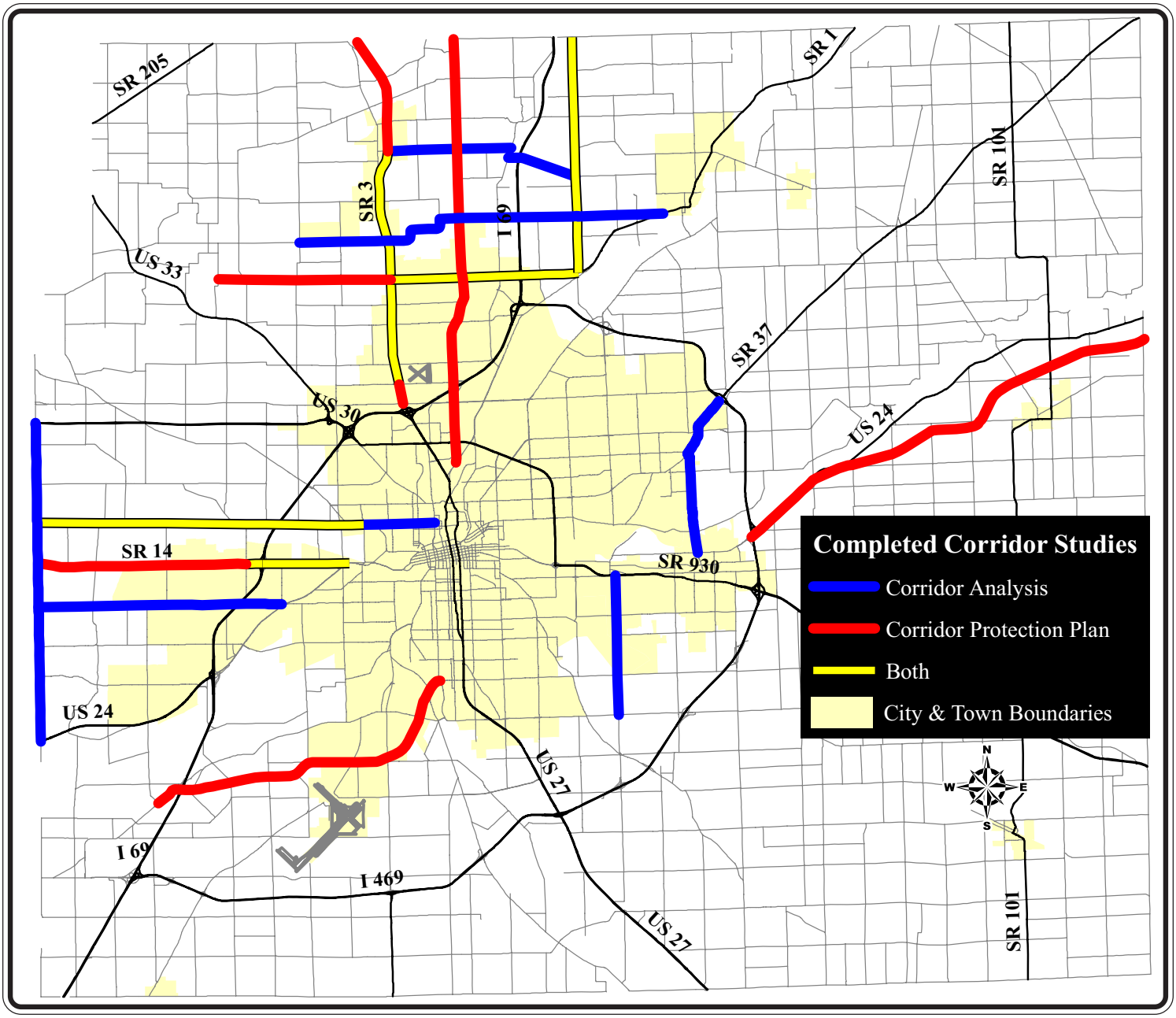
Transportation Summary Report Fiscal Year 2008

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 accommodate future traffic and relieve

Figure 16



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.

In Fiscal Year 2008, NIRCC did not conduct any corridor and impact analysis studies or corridor protection studies and plans. Instead, NIRCC focused their attention on producing a sub-area analysis which analyzes a number of corridors within a given area or development. Information and materials produced by this type of analysis will 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 developing 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.

Sub-area Analysis

The area surrounding Indiana University Purdue University Fort Wayne (IPFW), Ivy Tech Community College (Ivy Tech), the Northeast Indiana Innovation Center (NIIC), the War Memorial Coliseum, and the Fort Wayne State Developmental Center (FWSDC)

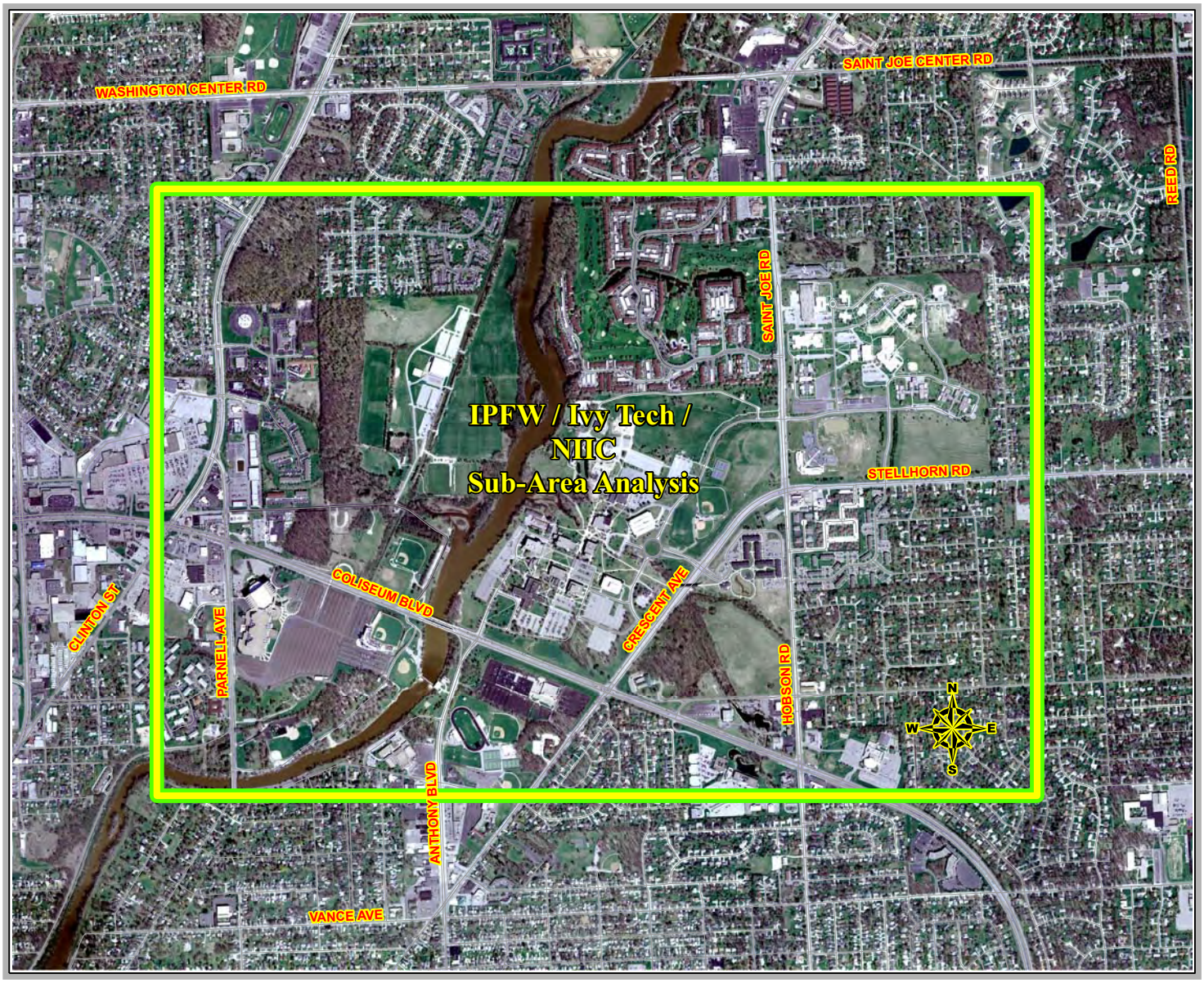


Figure 17

Sub-area Analysis

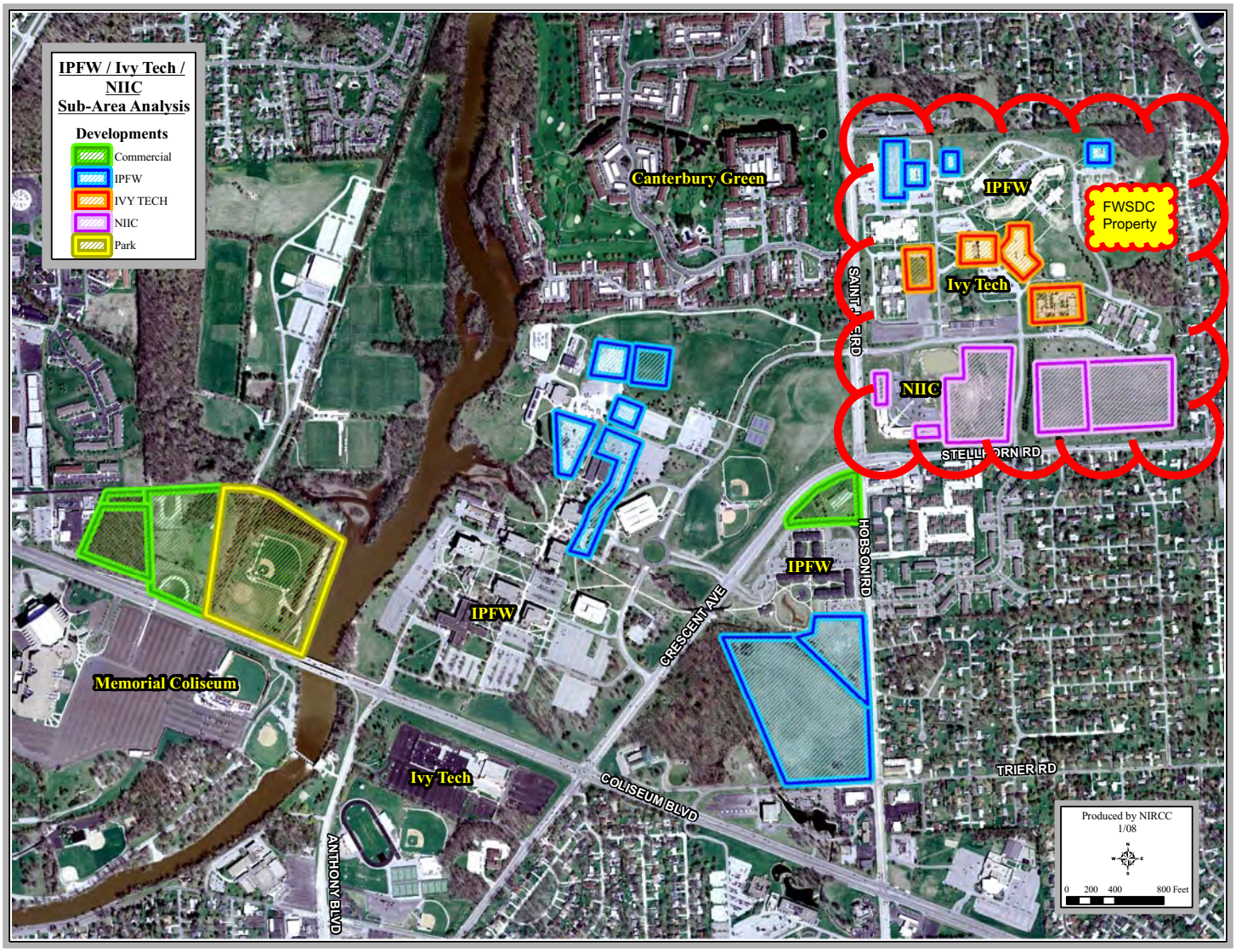
The area surrounding Indiana University Purdue University Fort Wayne (IPFW), Ivy Tech Community College (Ivy Tech), the Northeast Indiana Innovation Center (NIIC), the War Memorial Coliseum, and the Fort Wayne State Developmental Center (FWSDC)

A sub-area analysis was initiated by the Northeastern Indiana Regional Coordinating Council (NIRCC) based on discussions with Indiana-Purdue Fort Wayne University (IPFW), Ivy Tech Community College (Ivy Tech), Northeast Indiana Innovation Center (NIIC), and the Allen County War Memorial Coliseum (Memorial Coliseum) and their collective desire to improve connectivity between campuses and the surrounding area. Additional input was received from City of Fort Wayne's Greenways Manager and Division of Community Development. The Fort Wayne State Developmental Center (FWSDC) property which includes the Northeast Indiana Innovation Center (NIIC) is also part of the study area (See Figure 17). In addition to land under the control of IPFW, Ivy Tech, NIIC, and Memorial Coliseum, the study area also includes the North Anthony Boulevard Campus Corners, Market Place of Canterbury Shopping Center, new commercial area north of Coliseum Boulevard (including hotel, out-lots and planned park), and area apartment complexes that cater to university students. Information and materials produced by this analysis will provide local policymakers with an additional tool for assessing the impacts of new and expanding development.

The analysis focuses on assessing the current and future operating characteristics of the corridors and developing alternative strategies to improve safety, connectivity, and mitigate congestion. Staff evaluated the highway, transit, pedestrian and bicycle transportation systems as the major components of the analysis as well as the future development of the old 140 acre FWSDC site which has been subdivided into three large tracts allowing IPFW, Ivy Tech, and NIIC each a share (See figure 18). Staff also reviewed how the educational facilities interact with each other through student programs, activities, and transportation opportunities.

IPFW's main campus is approximately 210 acres with approximately 12,000 students. There is also 50 acres east of the main campus on property bounded by Crescent Avenue, Trier Road and Hobson Road which is primarily reserved for student housing with 570 units currently occupied. IPFW has approximately 150 additional acres with an indoor soccer facility, and numerous outdoor soccer fields located west of the main campus across the St Joseph River. Ivy Tech's main campus is approximately 25 acres and consists of a 194,000 sq/ft building with approximately 7,000 students. In 2006 Ivy Tech built a 22,000 sq/ft classroom building on their portion of the FWSDC site. The NIIC site currently consists of a 40,000 sq/ft facility that has 100 employees on their section of the FWSDC site. Construction is actively underway on the former FWSDC site by Ivy Tech and NIIC.

Figure 18



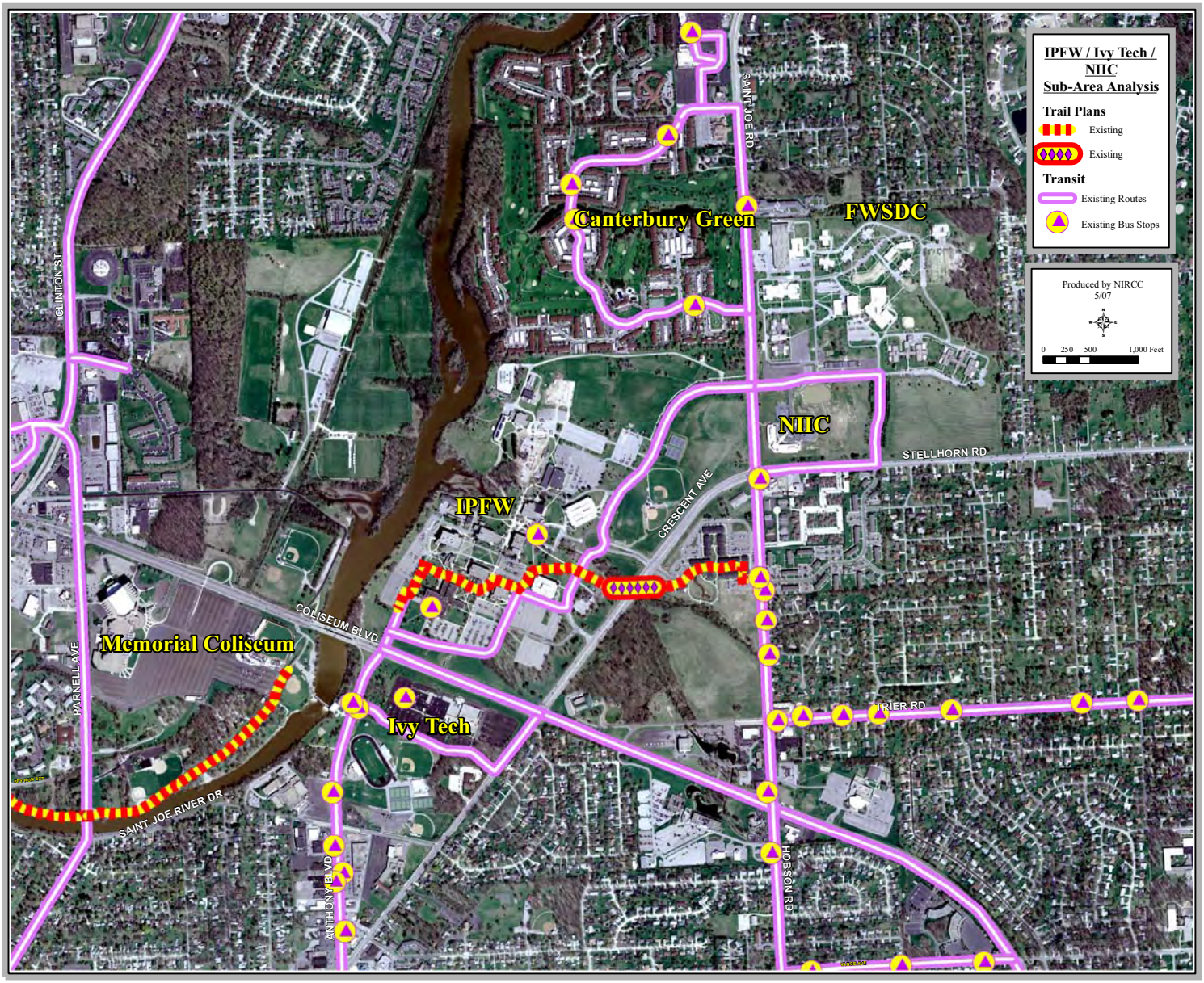
The study was facilitated by input from administrators of the universities, representatives from the Memorial Coliseum, NIIC, and Citilink, the local transit provider. Information regarding improvements to North Anthony was provided by the City of Fort Wayne Division of Planning and information on trail development was provided by the Greenways Manager. Trip patterns, trip generations, and growth projections were analyzed to provide a foundation for the study. Special trip generation formulas were developed for IPFW and Ivy Tech. Existing transit routes, bus stops, and existing and planned bicycle/pedestrian facilities were also determined as part of the initial data collection process (see figure 19).

IPFW has recently completed a 105,000 sq/ft Music building, and is building a 43,000 sq/ft Medical building on their main campus. They plan on constructing parking facilities, classroom buildings, services buildings, and more student housing in the future. They also have an intricate pedestrian system on the main campus and a pedestrian bridge over Crescent Avenue connecting it with student housing. A pedestrian bridge over the St. Joseph River is currently under construction and will

connect IPFW's main campus to their property west of the river. This bridge will connect to the new Hotel and tie in with the Fort Wayne Rivergreenway system. As of this time though, the system lacks good connectivity to the Ivy Tech campus and surrounding amenities.

The Ivy Tech's main campus is virtually built out with little room for expansion. All of their future growth within the study area is anticipated to be on the FWSDC site. The separation of these two Ivy Tech sites presents some transportation and scheduling challenges for students. Without direct transit service and a safe bicycle/pedestrian passage between these sites, students and faculty who will travel between campuses will be forced to travel by automobile.

Figure 19



The Northeast Indiana Innovation Center nurtures technology businesses through start-up, early development, and the various growth stages. NIIC has a 60,000 sq/ft expansion to their existing facility under construction. The expansion includes an "emerging growth" area that will accommodate approximately 2000 additional employees. In addition, a 500 employee corporate anchor manufacturing facility is also in the planning stages. Approximately 15 acres of the NIIC site will remain for additional expansions.

Property west of the St. Joseph River and north of Coliseum Boulevard was also reviewed by staff. A 150 room hotel is currently under constructed. The hotel provides a place close to the Memorial Coliseum for overnight stays during special events and will provide lodging for persons doing business with IPFW, Ivy Tech and NIIC. The hotel will also be utilized by IPFW and Ivy Tech for its large meeting rooms and for educational activities in the way of culinary and hotel management programs.

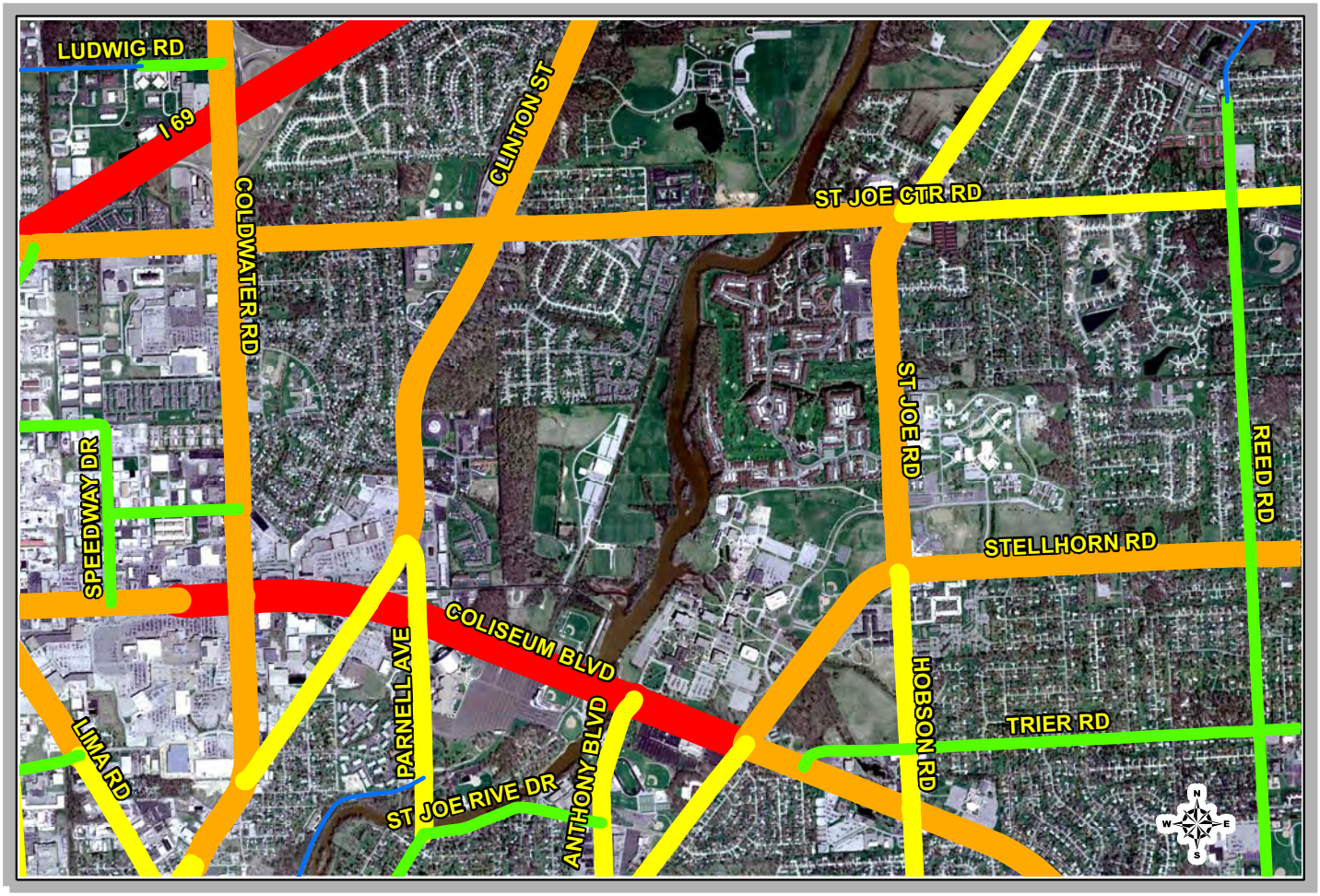
Information was collected for the current and planned land-use developments and development types for all of the IPFW, Ivy Tech, NIIC and Memorial Coliseum properties within the study area. The potential for additional development was also assessed for each location. Current employment data and student enrollment information was gathered for each location. Based on planned growth at each site and historic trends, employment and enrollment figures were forecasted for future years. Staff surveyed surrounding apartment complexes to estimate how many students reside at each complex. Student information regarding place of residence was identified by zip code areas. This information was used to evaluate transit and bicycle/pedestrian alternatives and help determine how student trips will access the various campus sites.

The proposed developments are used in determining the generated traffic volumes, distributions, and assignment of these newly generated trips to the study area. The ITE Trip Generation Manual 7th edition was used to forecast the number of new trips from developments. Current traffic conditions can be seen in figure 20.

Also, intersection turning movement data was collected at 12 intersections within the study area including eight signalized, and four unsignalized intersections. The intersections were analyzed for the existing conditions and the 2020 horizon year. The analysis produced from this study estimates the number of new trips from anticipated developments that will be added to an existing facility to examine the changes in the level of service (LOS) and determine if improvements will be needed to maintain acceptable traffic flow.

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

Figure 20



Traffic Volumes

24 HR Volume Counts

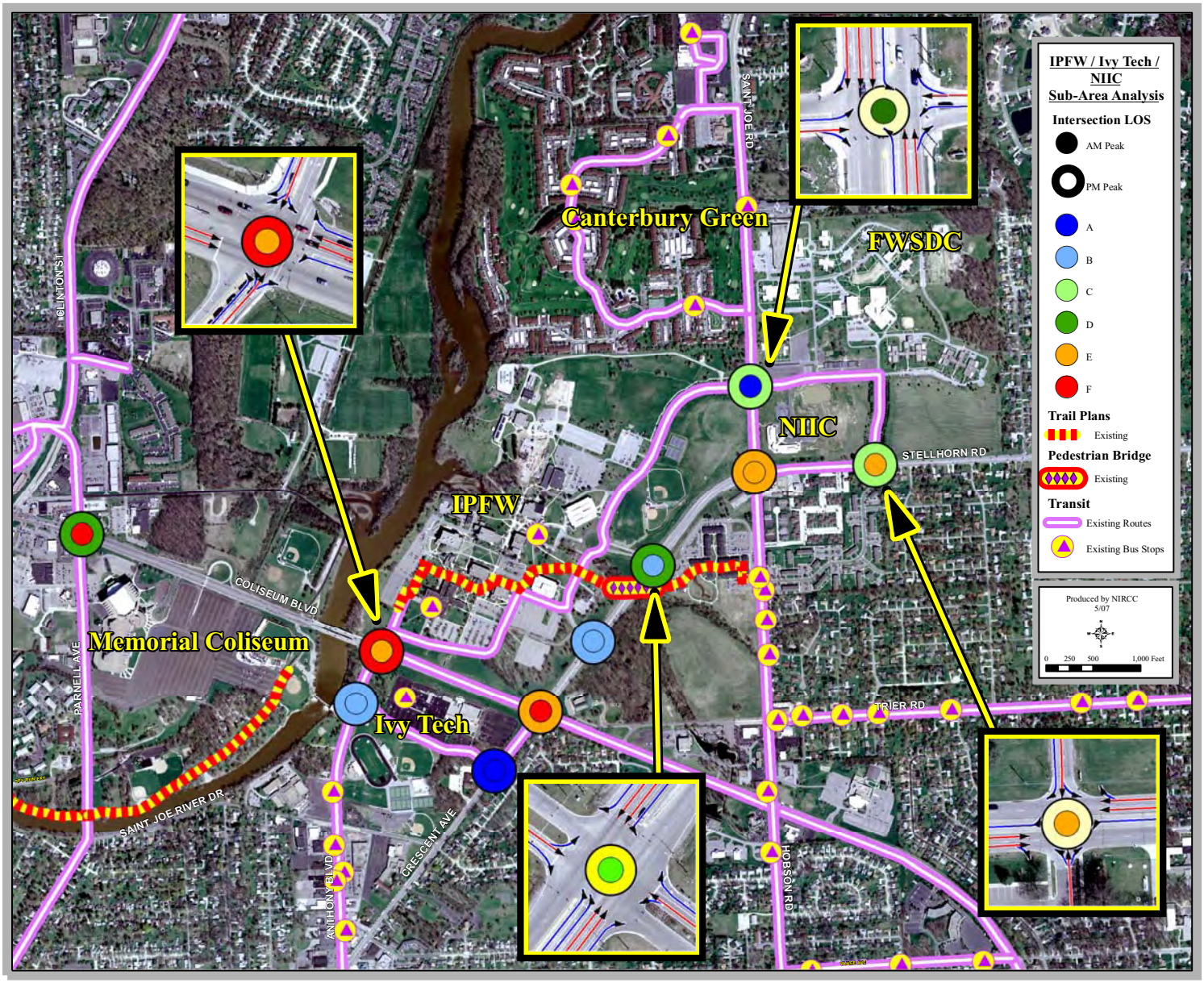
- 2,500 - 5,000
- 5,001 - 10,000
- 10,001 - 20,000
- 20,001 - 40,000
- 40,001 - 70,000

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, or if specific movements of the intersections are exceeding capacity. When service levels fall below acceptable levels, recommendations are tested to accommodate future traffic and relieve anticipated congestion problems.

Current LOS for the intersections included with this study along with diagrams of the actual intersection movements can be seen in figure 21. The smaller inner circles shown on the map represent current levels of service for the AM peak periods while the outer rings of the circles show levels of service for the PM peak periods.

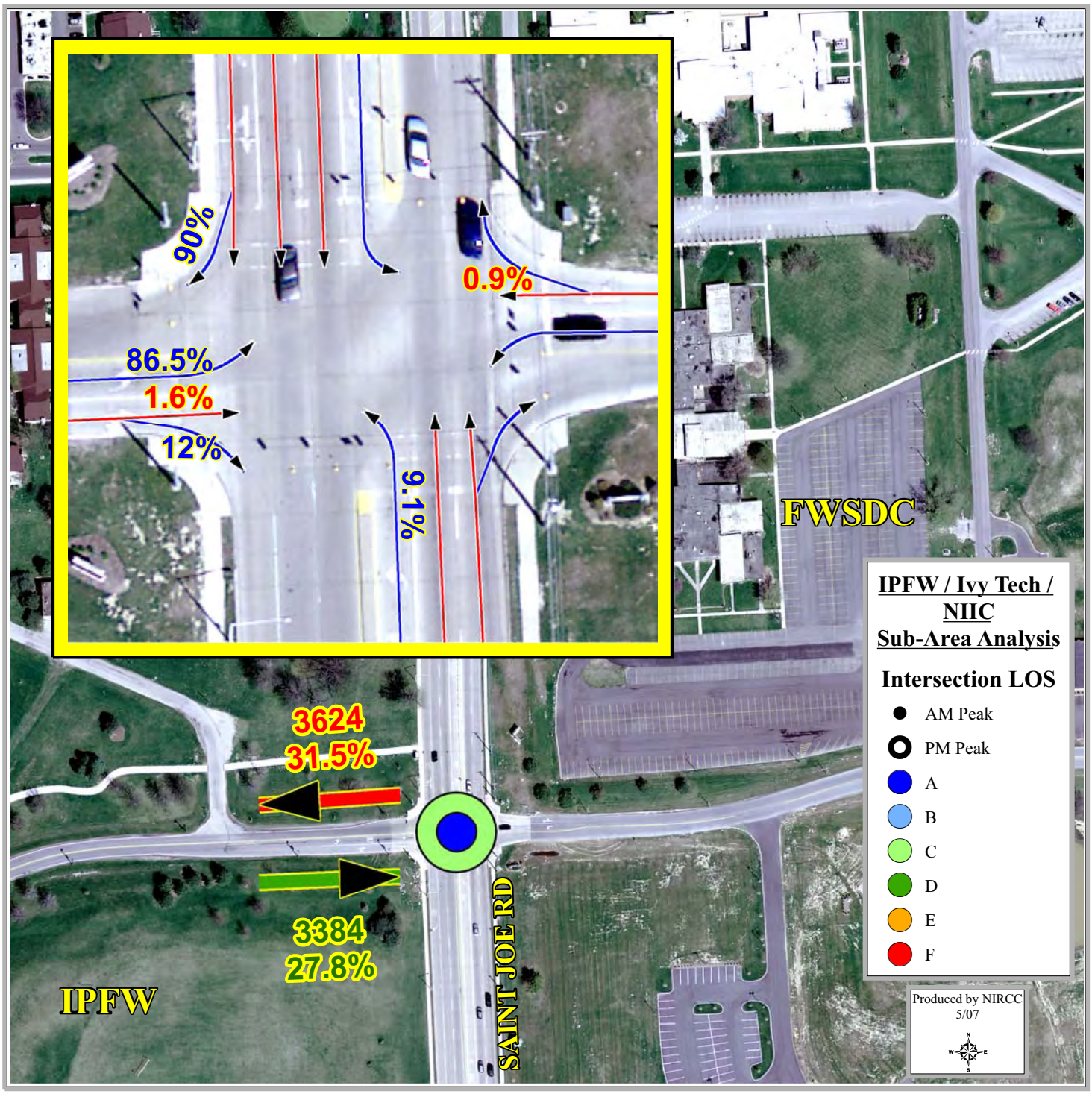
Figure 22 gives an example of what NIRCC diagrams at each intersection to understand the traffic patterns and volumes. This particular entrance to IPFW accounts for 31.5 % of the total traffic entering IPFW throughout the day. Out of these 3,624 vehicles, the percentages of where they enter from are shown with the arrow lines and percentages in the intersection diagram.

Figure 21



During FY 2008 NIRCC began the recommendation phases of this study as well as finalized and collected more information to base their findings. In FY 2009 NIRCC will complete the recommendation phases and submit the final report. Findings in this report will include a specific list of roadway improvements that has been developed to address safe and efficient traffic flow along corridors and through intersections within the sub-area analysis study area. In addition, this analysis will contain recommendations for pedestrian and bicycle connectivity (proposed and underway) provided by NIRCC, IPFW, Ivy Tech, and City of Fort Wayne. Also, transit and shuttle alternatives are being established to provide options for students to get around campus and the surrounding areas.

Figure 22


90%
0.9%
86.5%
1.6%
12%
9.1%
FWSDC
IPFW / Ivy Tech / NIIC
Sub-Area Analysis
Intersection LOS
AM Peak
PM Peak
A
B
C
D
E
F
3624
31.5%
3384
27.8%
IPFW
SAINT JOE RD
Produced by NIRCC
5/07

Travel Time and Delay Studies

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2008

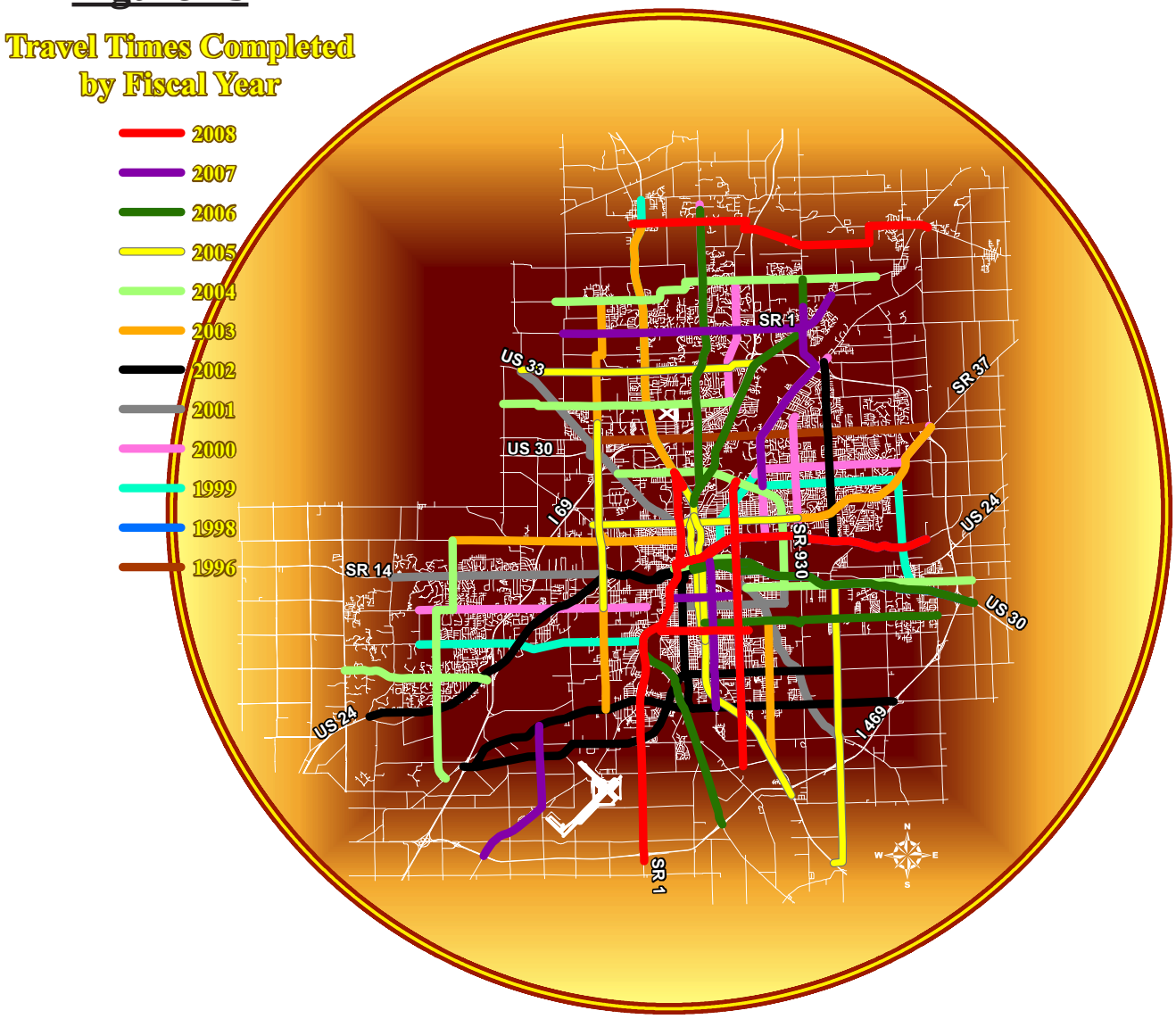
TRAVEL TIME & DELAY STUDIES

Another activity conducted by NIRCC is the travel time and delay studies. Figure 23 illustrates the travel time and delay studies that have been completed since Fiscal Year 1996. Since all the travel times from fiscal year 1997 have been redone, that year is not displayed. 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.

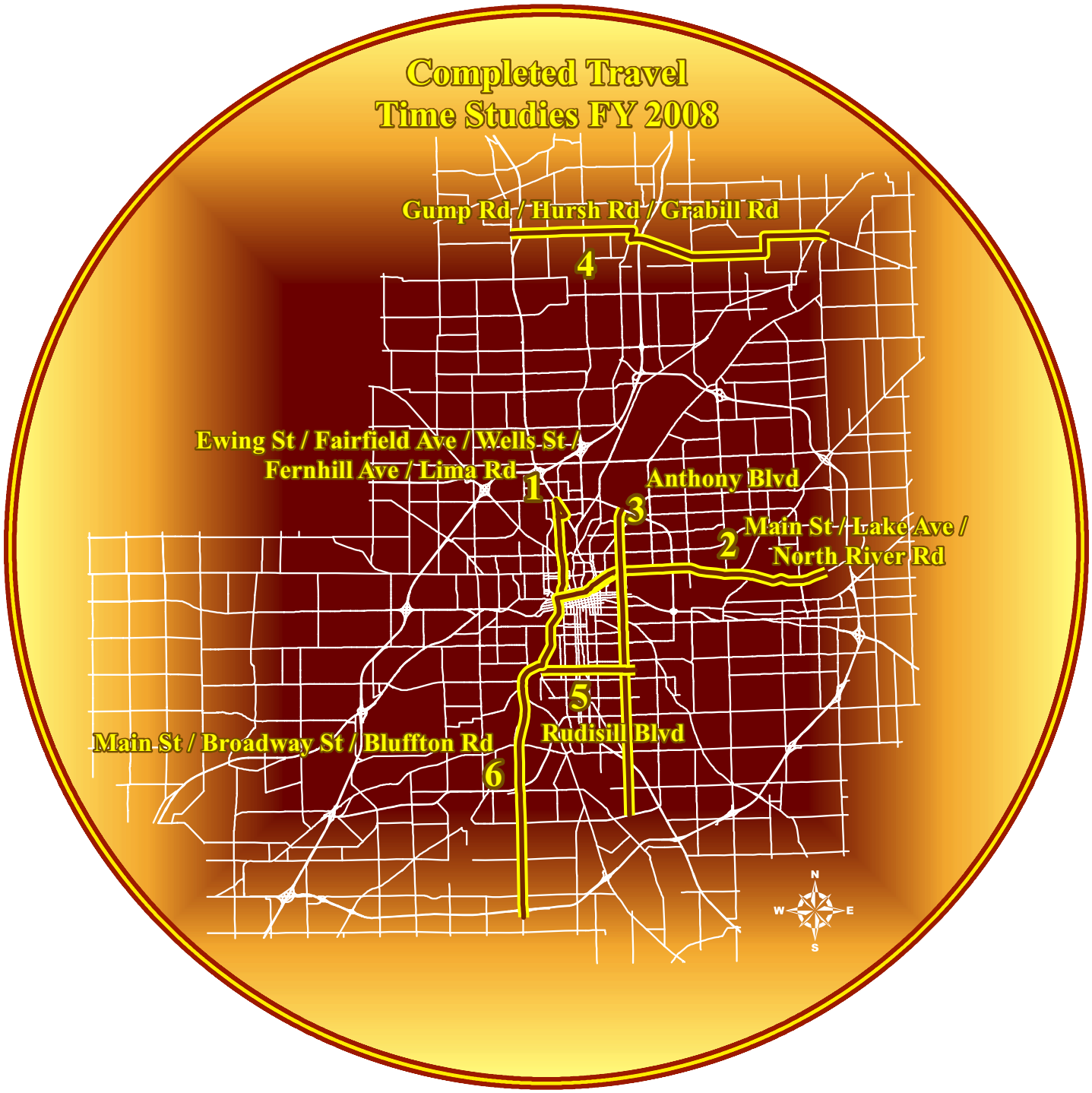
- *Identification of problem locations on facilities by virtue of high travel times and delay.*
- *Measurement of arterial level of service.*
- *Input into transportation planning models.*
- *Evaluations of route improvements.*
- *Input to economic analysis of transportation alternatives.*

Figure 23



NIRCC studied six (6) corridors during Fiscal Year 2008 including: **1) Ewing Street / Fairfield Avenue / Wells Street / Fernhill Avenue / Lima Road** from Main Street to Coliseum Boulevard, **2) Main Street / Columbia Avenue / Lake Avenue / North River Road** from Calhoun Street to Helen Drive, **3) Anthony Boulevard** from Ferguson Road to Coliseum Boulevard, **4) Gump Road / Auburn Road / Hursh Road / Halter Road / Hosler Rd / Grabill Road** from Lima Road to Schwartz Road, **5) Rudisill Boulevard** from Broadway to Abbott Street, and **6) Main Street / Broadway / Bluffton Road** from Brooks Road to Clinton Street. The travel time studies completed during Fiscal Year 2008 are illustrated in Figure 24 below.

Figure 24



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 25 - 38 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 six corridors studied in fiscal year 2008. 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.

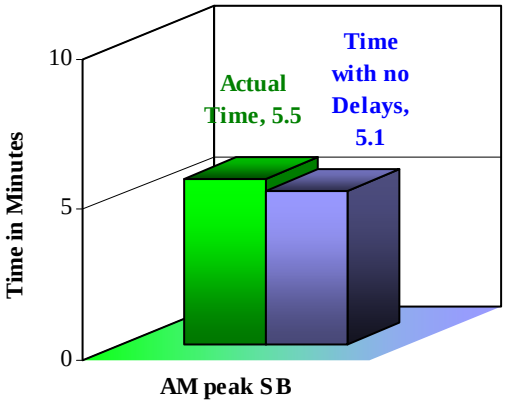
The other two bar charts display the average speed that NIRCC staff actually encountered from the beginning to the end of the travel time corridor during the time period with the greatest amount of delay, shown in red, and the time period with the least amount of delay, shown in green. These two bar 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 2008

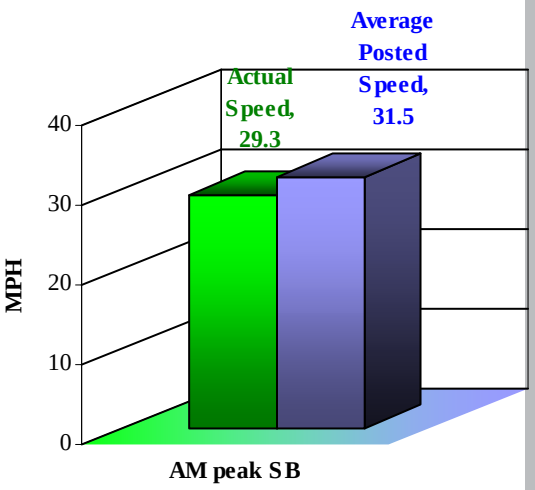
Figure 25

Ewing Street / Fairfield Avenue / Wells Street / Fernhill Avenue / Lima Road
AM Peak

Travel Time with the Least Amount of delay



Travel Speed with the Least Amount of delay



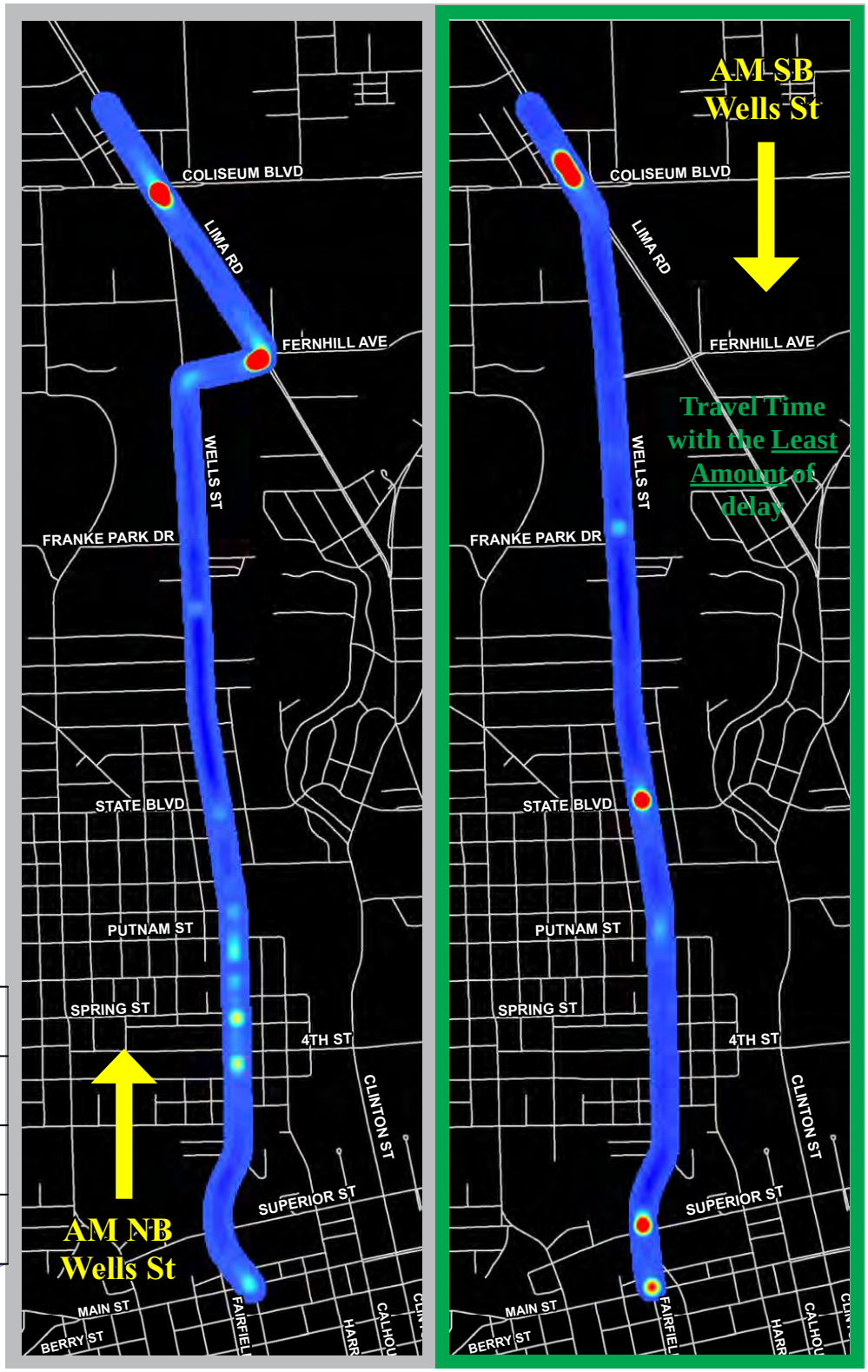
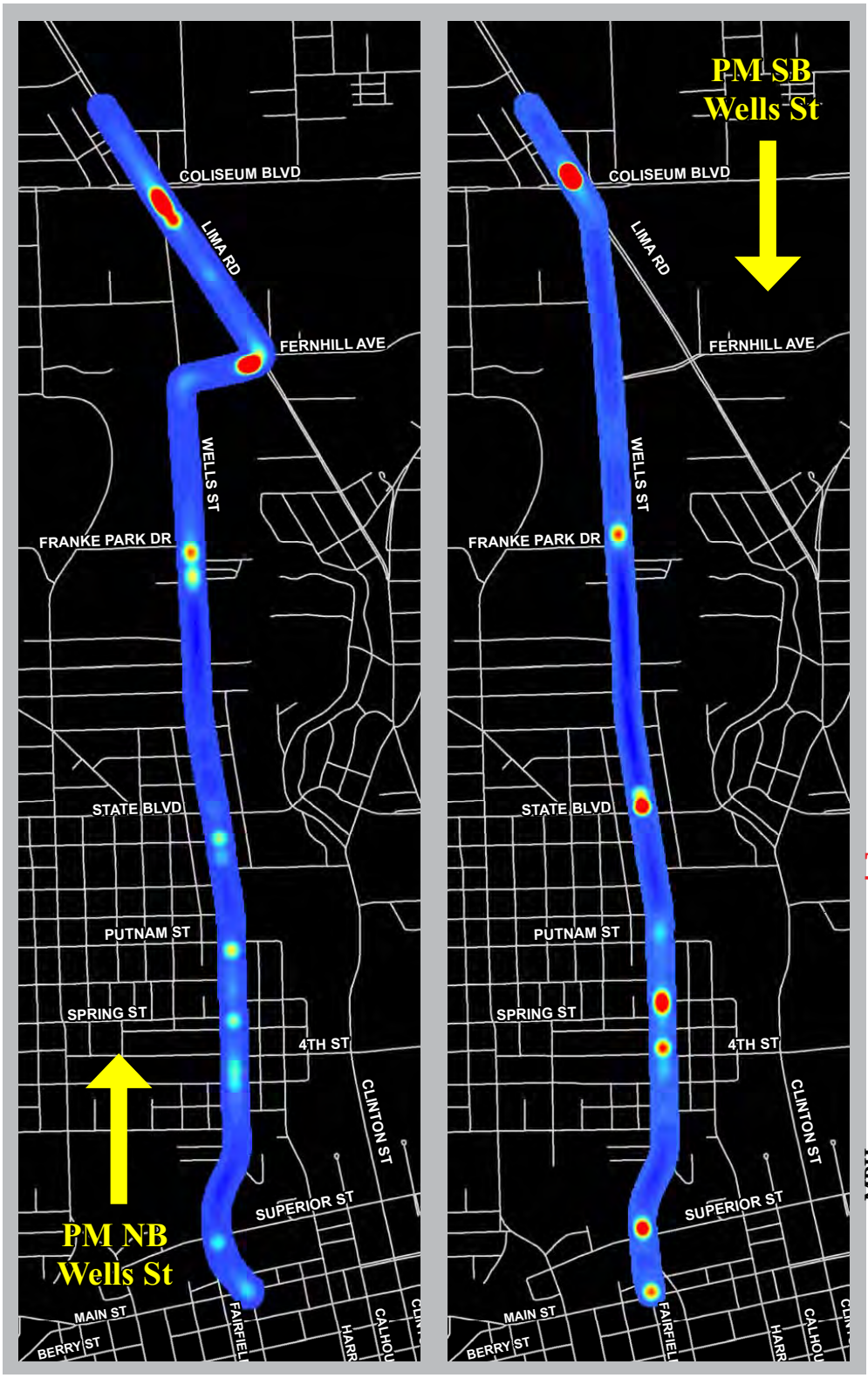


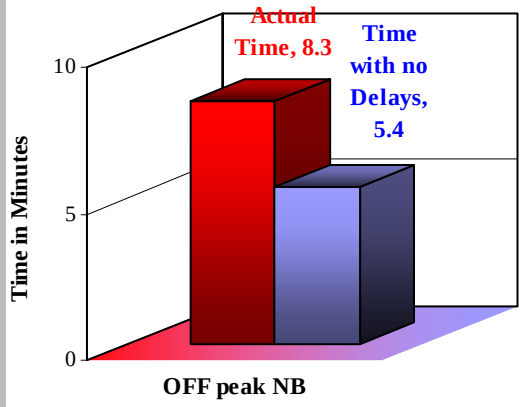
Figure 26

Ewing Street / Fairfield Avenue / Wells Street / Fernhill Avenue / Lima Road
PM Peak



*Off Peak Travel Times are not shown graphically.

Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

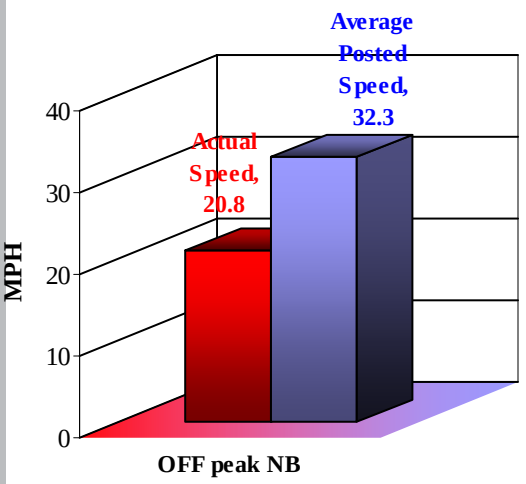
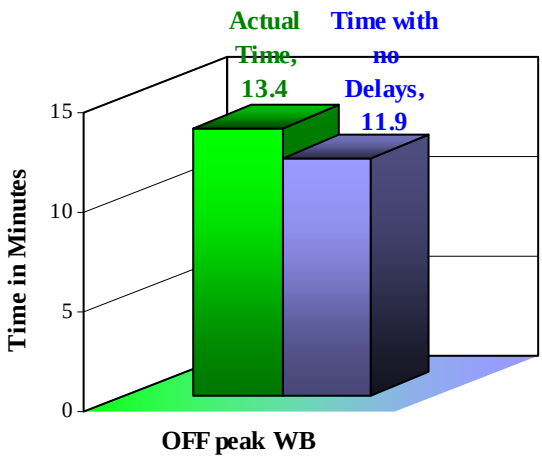


Figure 27

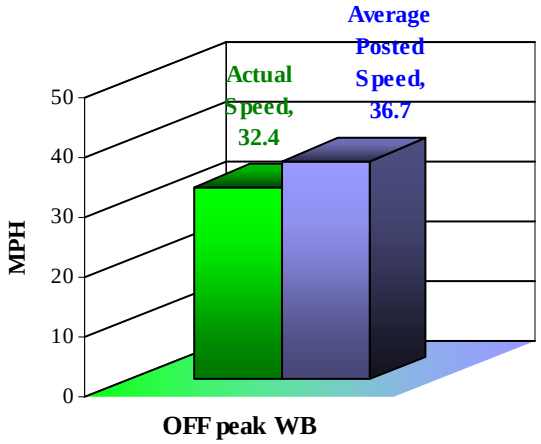
Main Street / Clay Street / Columbia Avenue / Lake Avenue / North River Road
AM Peak

Travel Time with the Least Amount of delay



*Off Peak Travel Times are not shown graphically.

Travel Speed with the Least Amount of delay

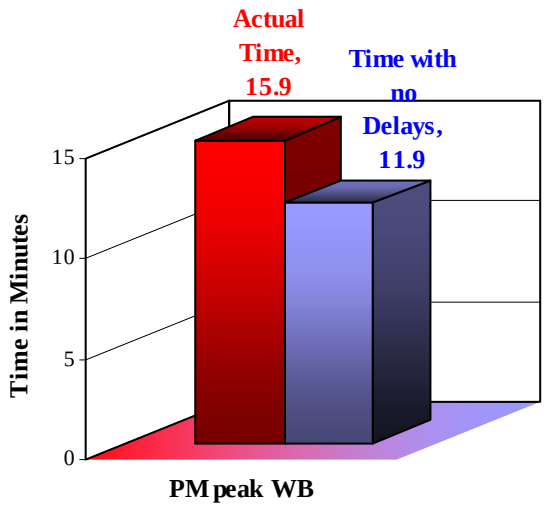


*Off Peak Travel Times are not shown graphically.

Figure 28

Main Street / Clay Street / Columbia Avenue / Lake Avenue / North River Road
PM Peak

Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

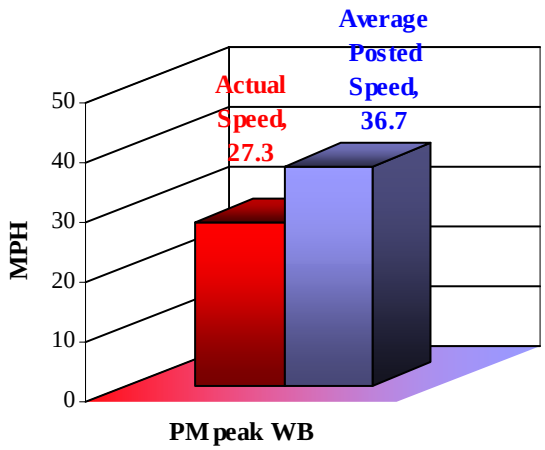
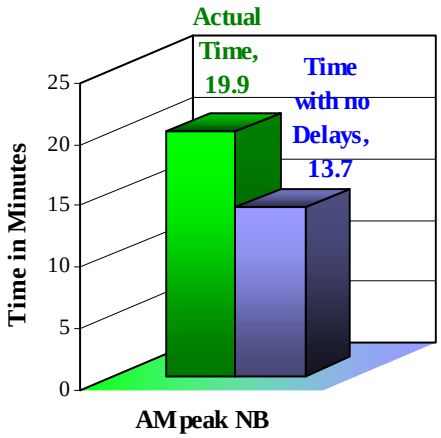


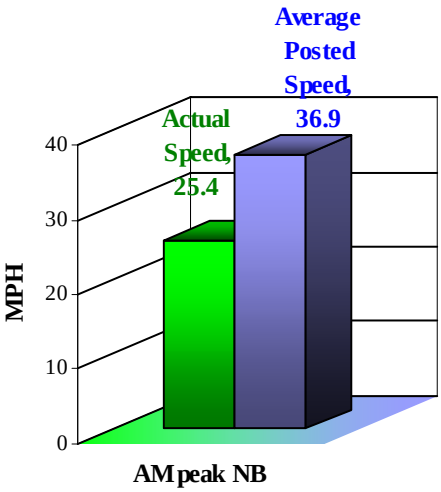
Figure 29

Anthony Blvd
AM Peak NB

Travel Time with the Least Amount of delay



Travel Speed with the Least Amount of delay



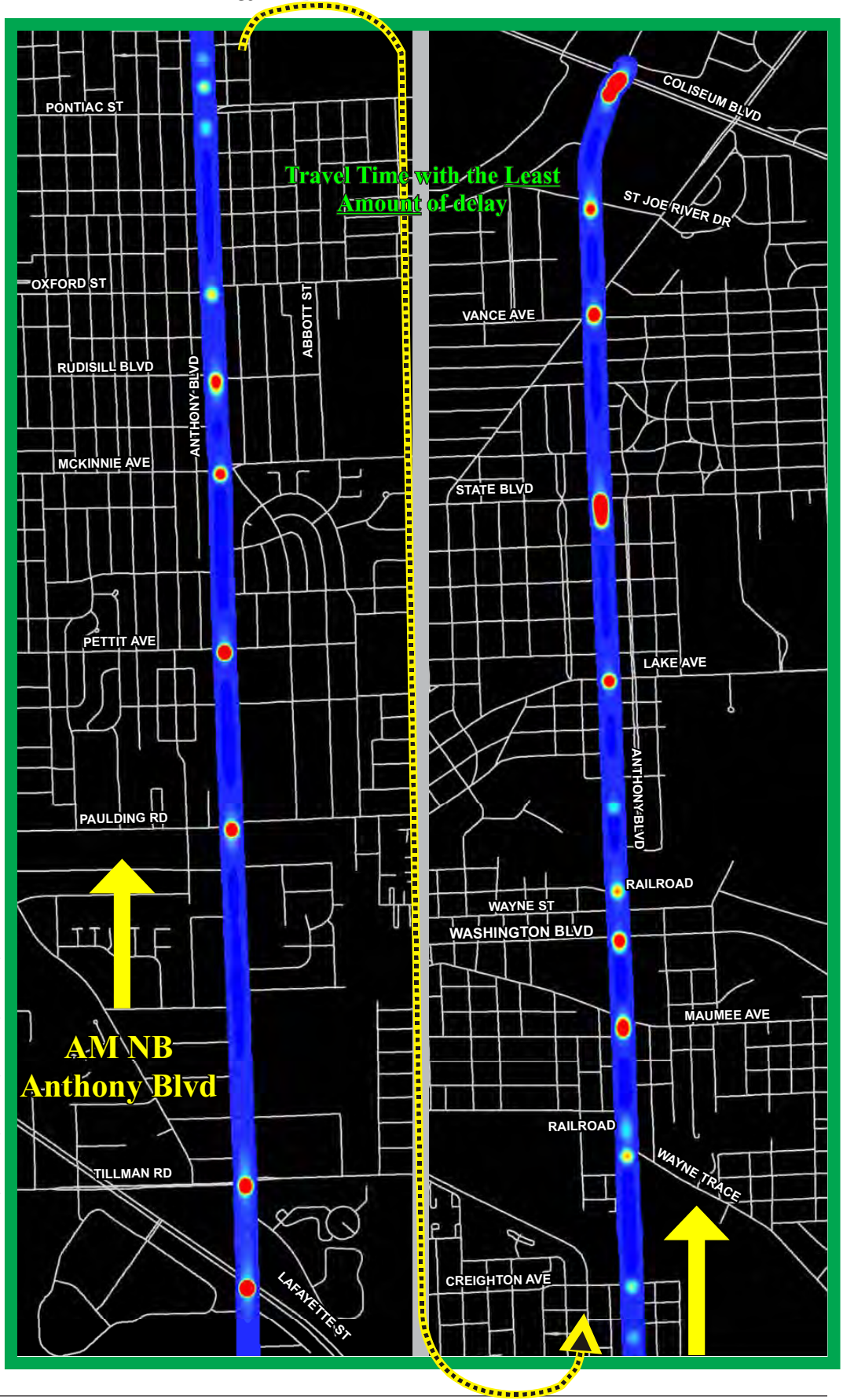


Figure 30

Anthony Blvd
AM Peak SB

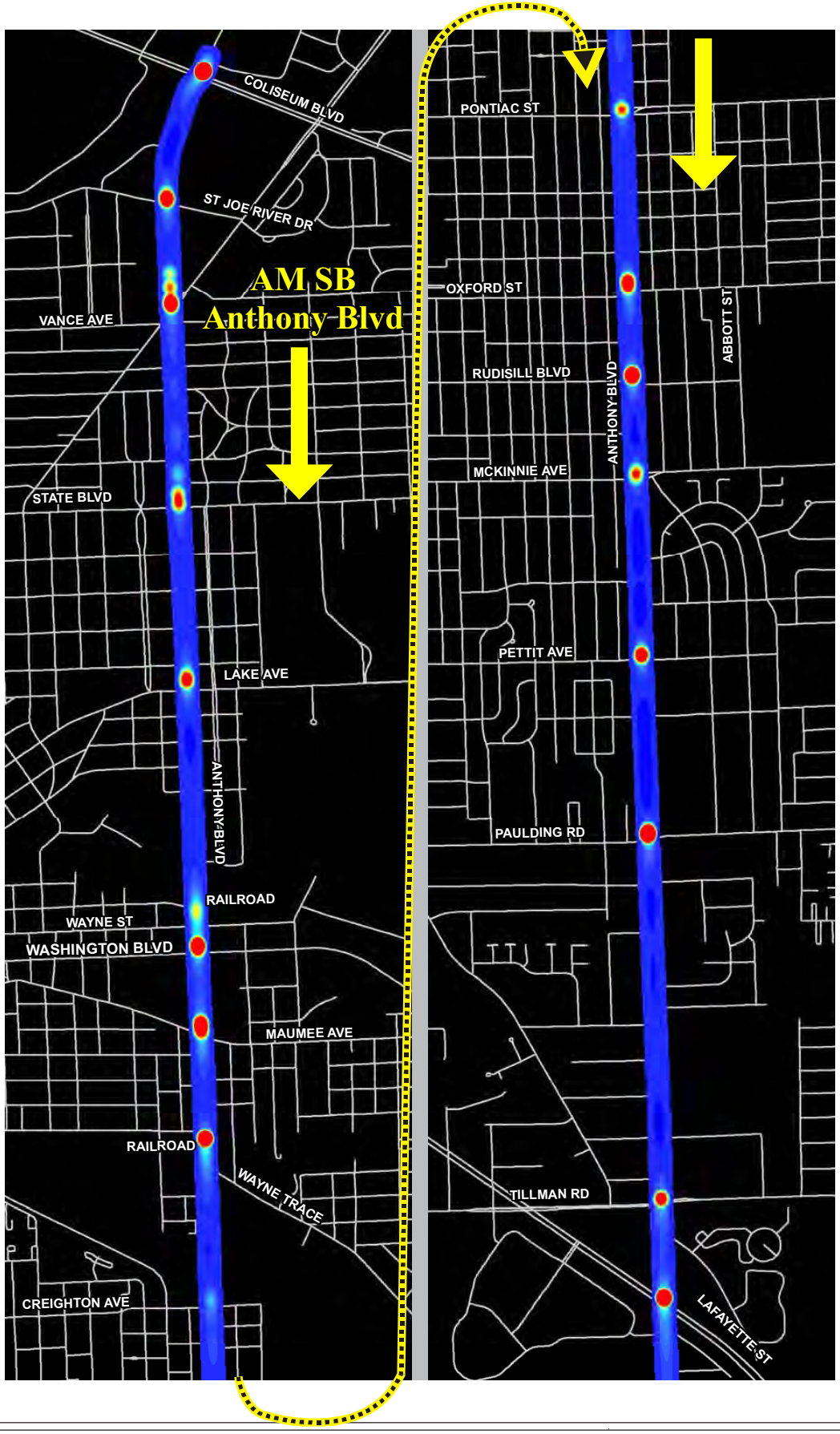


Figure 31

Anthony Blvd
PM Peak NB

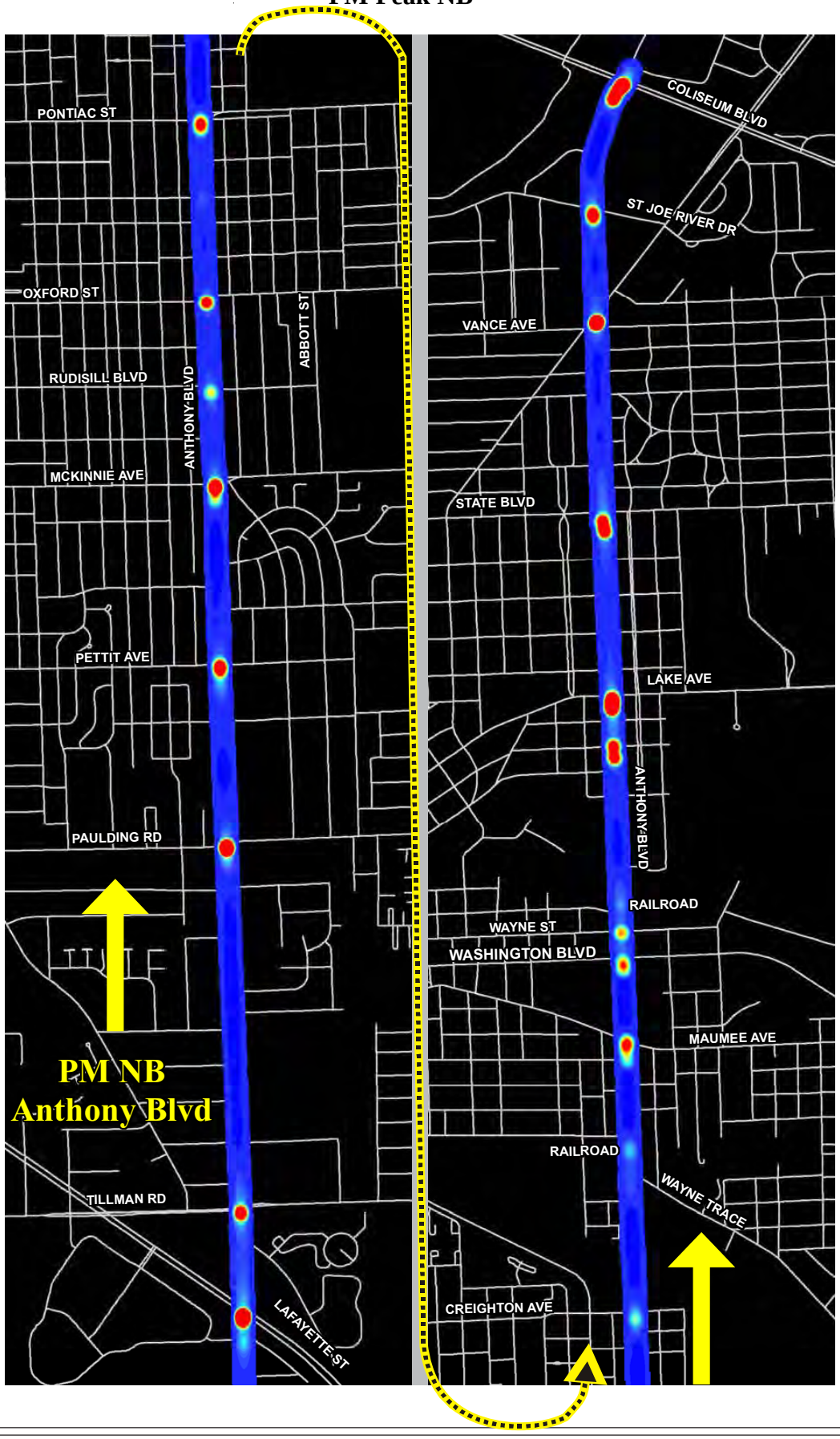
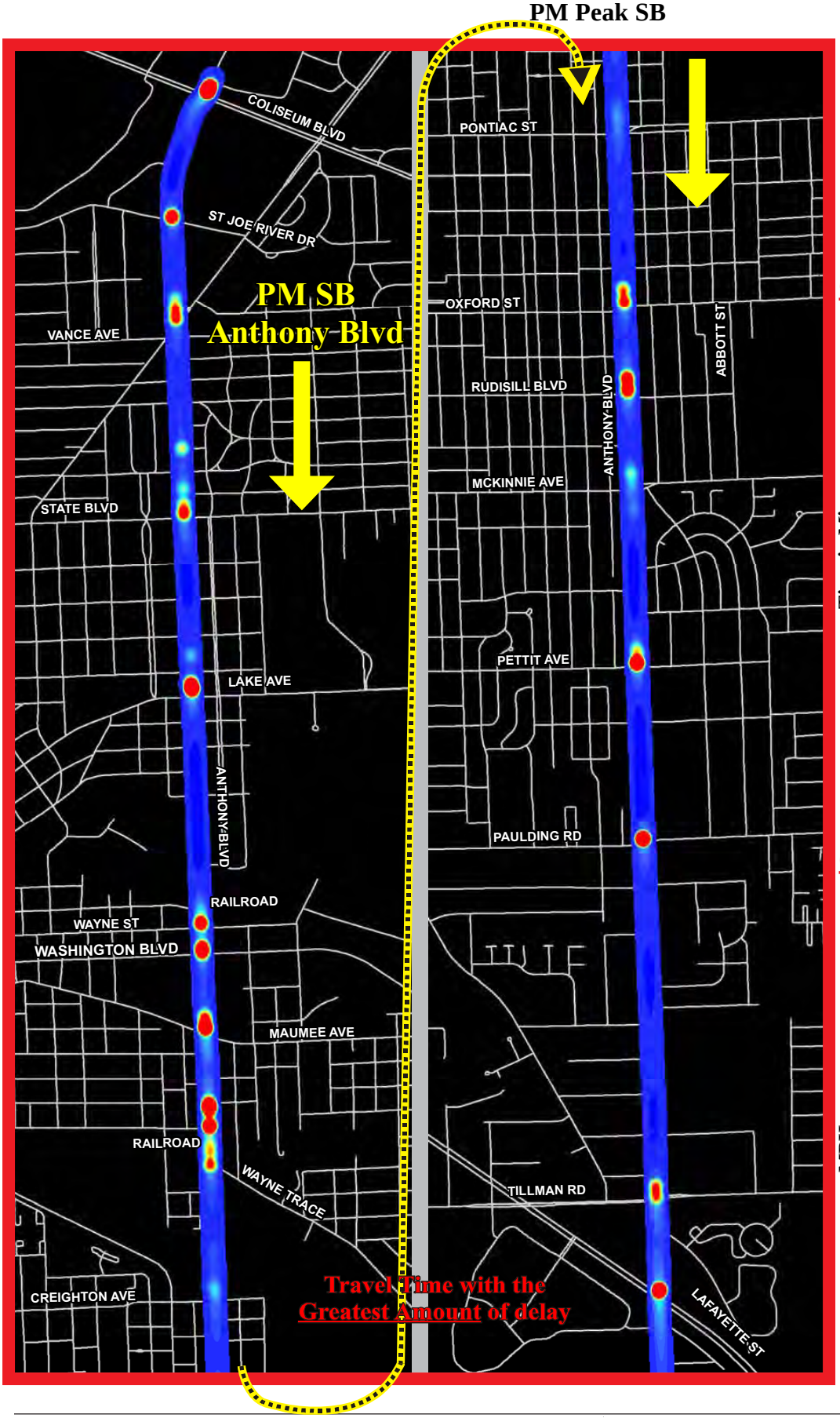
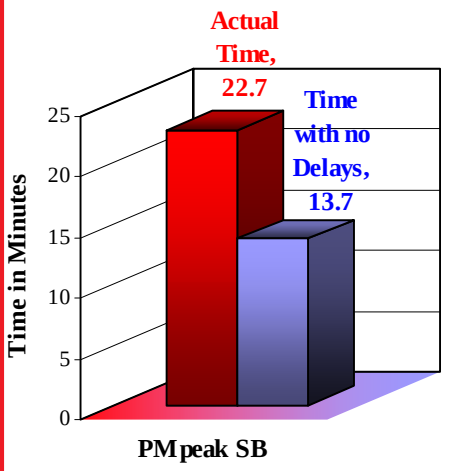


Figure 32

Anthony Blvd
PM Peak SB



Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

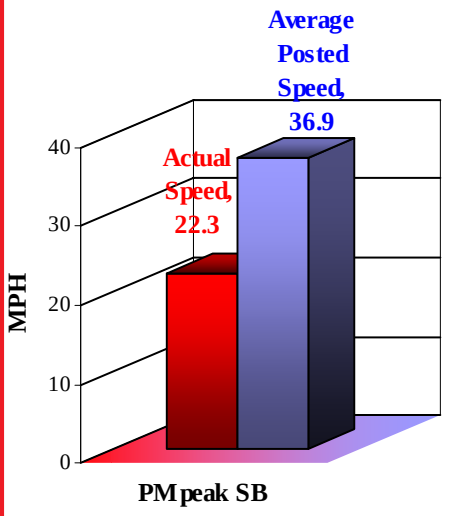
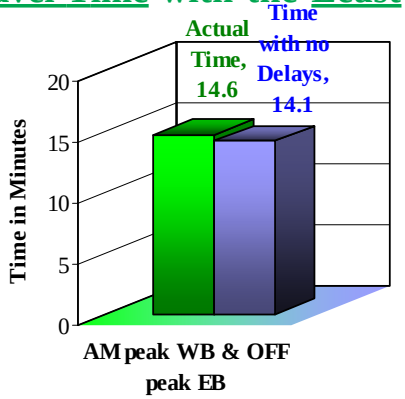


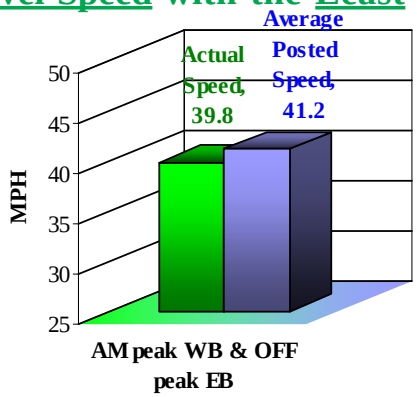
Figure 33

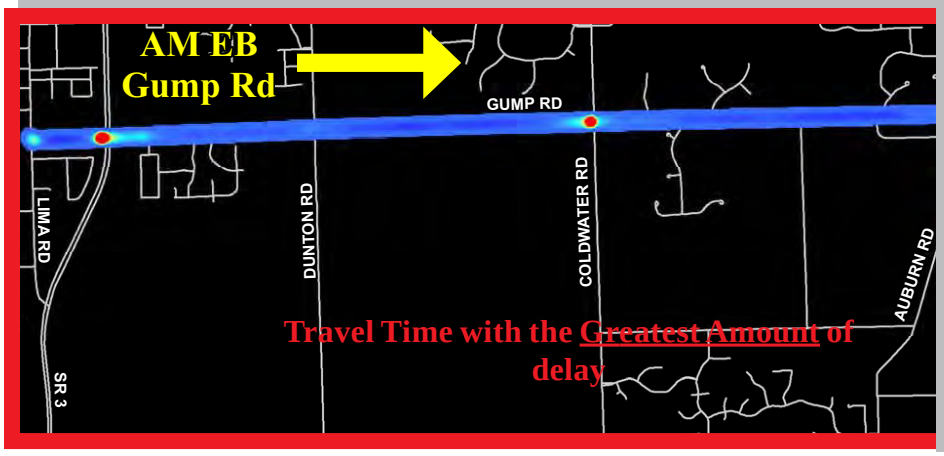
Gump Rd / Hursh Rd / Hosler Rd / Grabill Rd
AM Peak & PM Peak

Travel Time with the Least delay

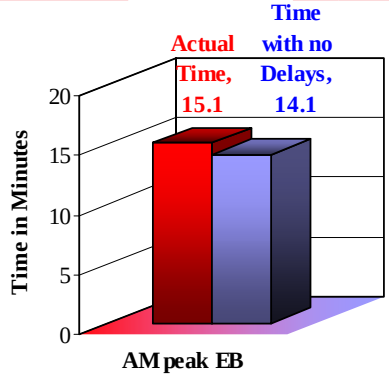


Travel Speed with the Least delay

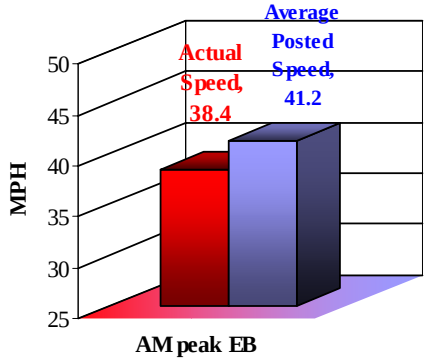


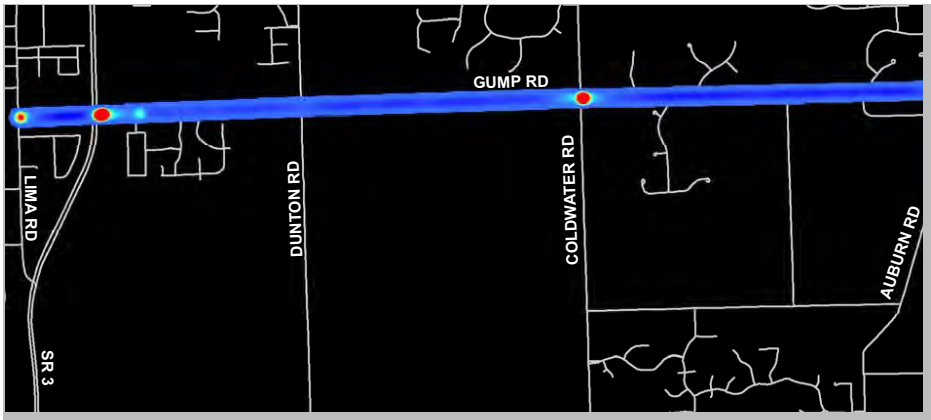


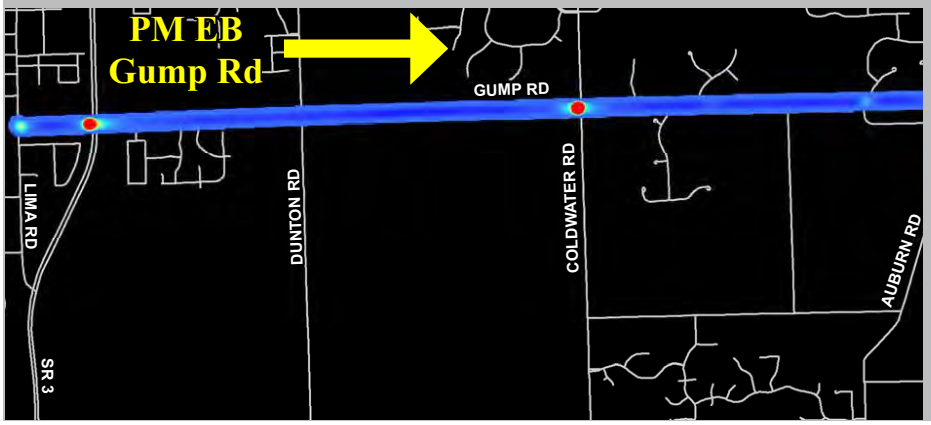
Travel Time with the Greatest delay



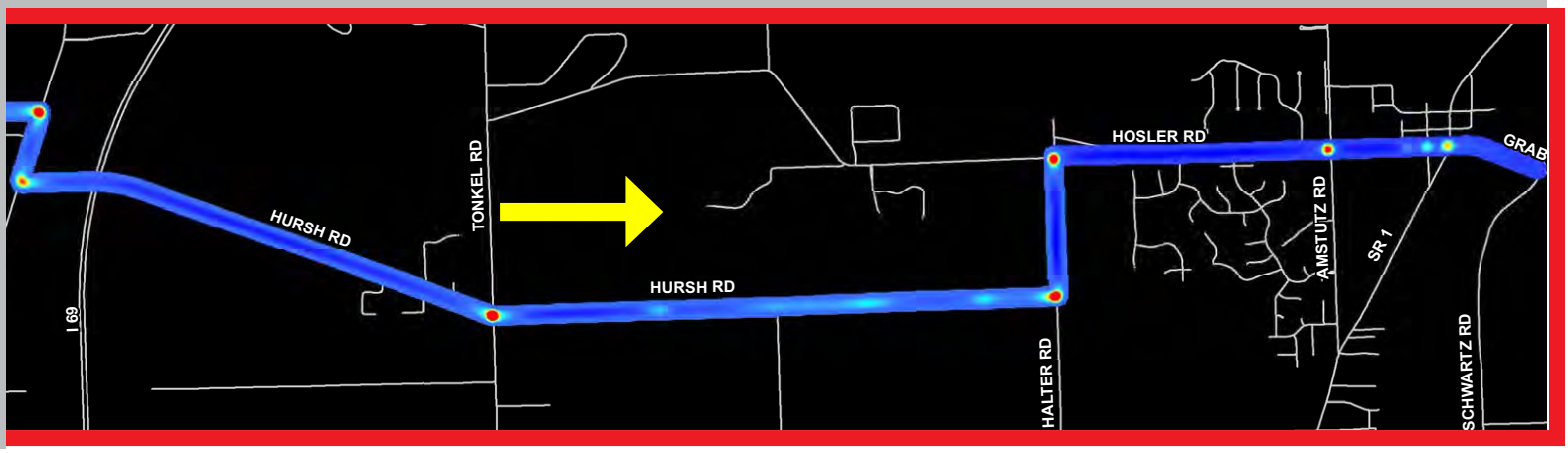
Travel Speed with the Greatest delay








HURSH RD
TONKEL RD
HURSH RD
HOSLER RD
AMSTUTZ RD
SR 1
SCHWARTZ RD
HALTER RD
I 69
AM WB
Gump Rd


HURSH RD
TONKEL RD
HURSH RD
HOSLER RD
AMSTUTZ RD
SR 1
SCHWARTZ RD
HALTER RD
I 69


HURSH RD
TONKEL RD
HURSH RD
HOSLER RD
AMSTUTZ RD
SR 1
SCHWARTZ RD
HALTER RD
I 69
PM WB
Gump Rd

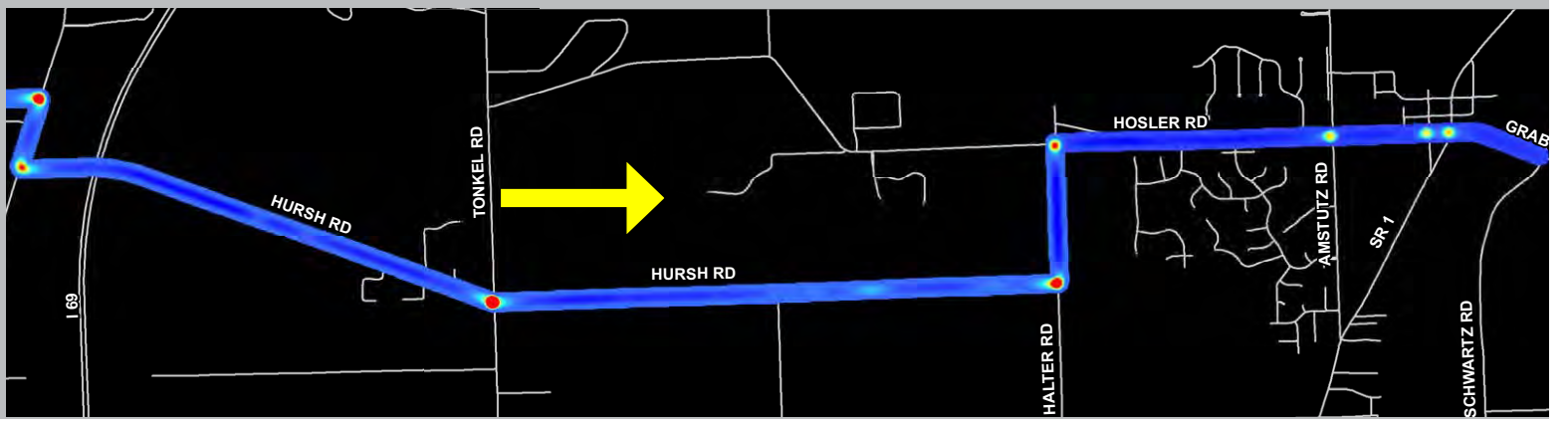
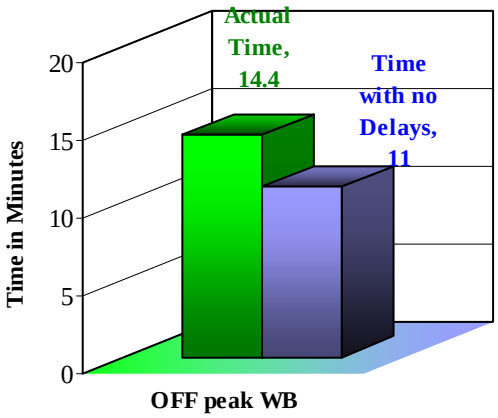

HURSH RD
TONKEL RD
HURSH RD
HOSLER RD
AMSTUTZ RD
SR 1
SCHWARTZ RD
HALTER RD
I 69

Figure 34

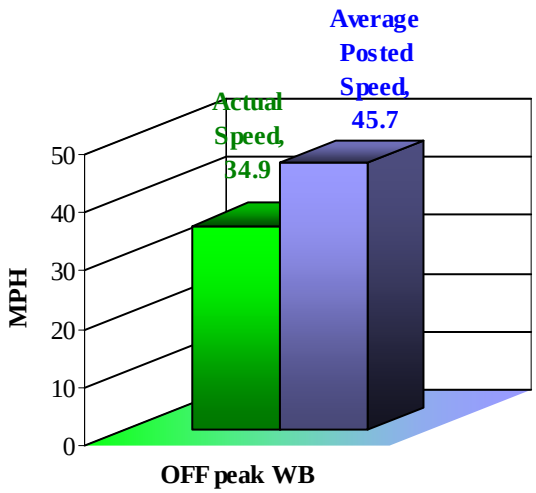
Rudisill Blvd
AM Peak & PM Peak

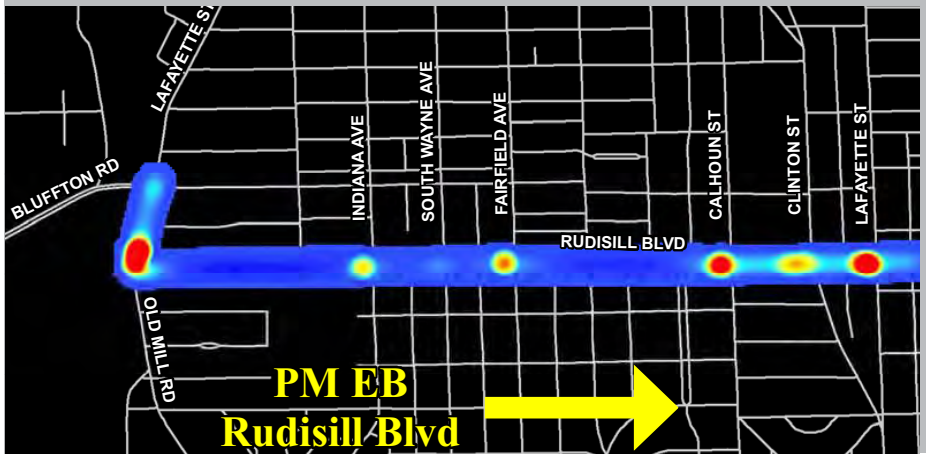
***Off Peak Travel Times are not shown graphically.**

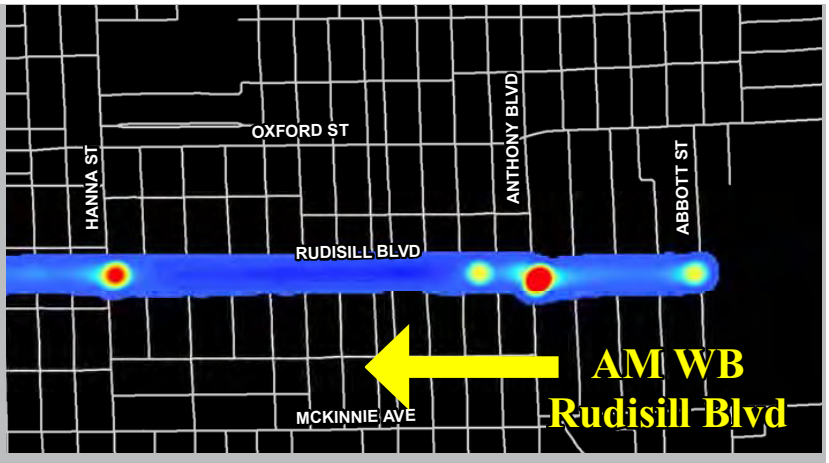
Travel Time with the Least Amount of delay

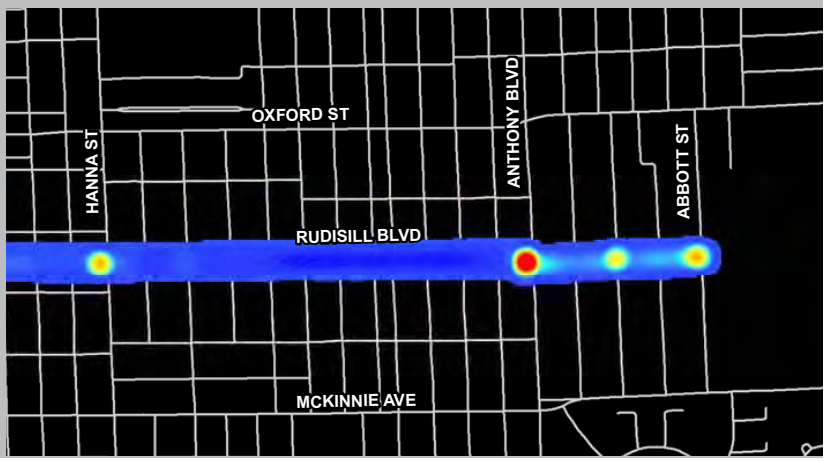


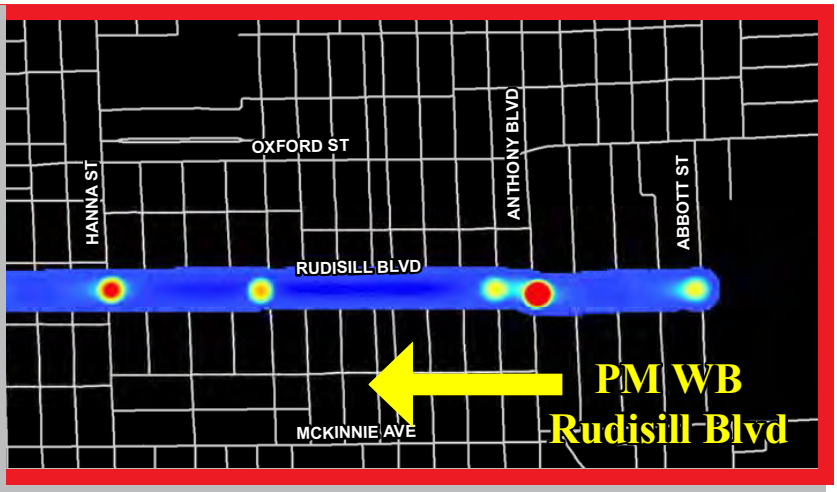
Travel Speed with the Least Amount of delay

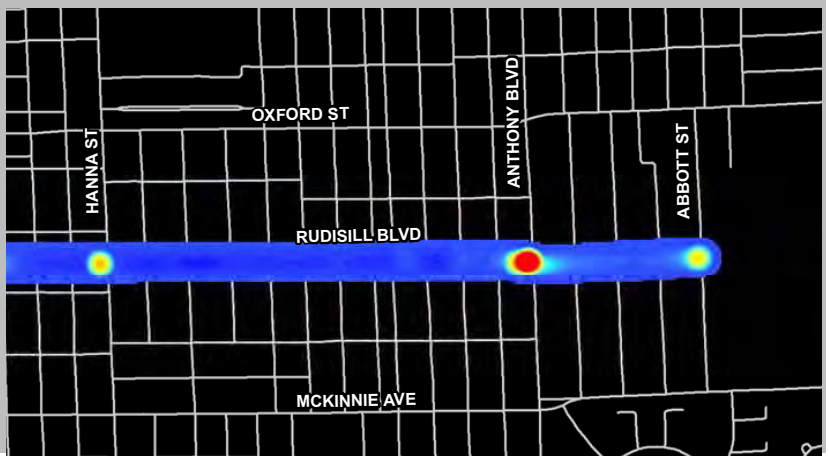




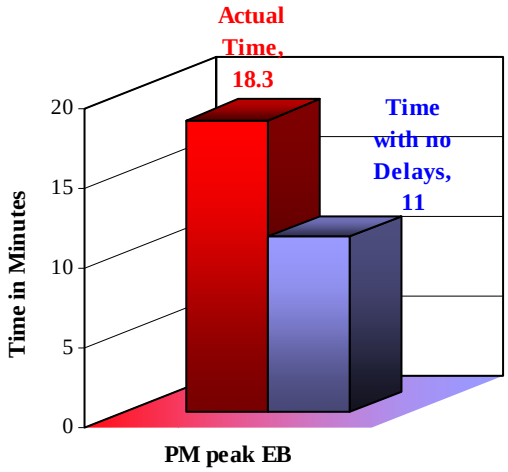








Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay

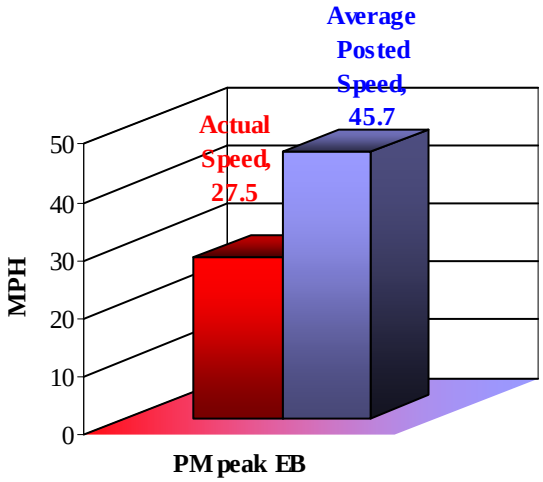


Figure 35

Main Street / Broadway Street / Bluffton Road
AM Peak NB / EB

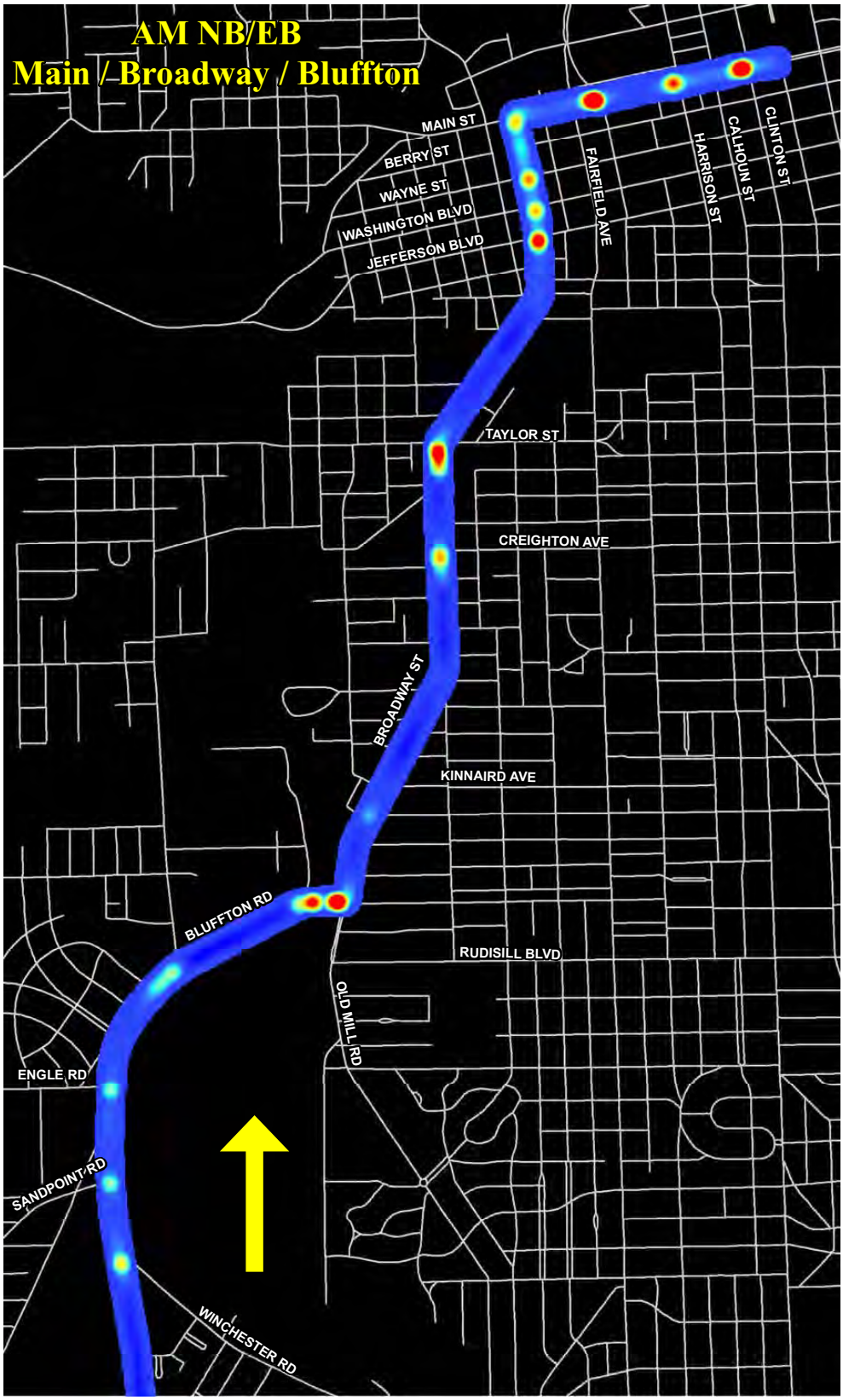
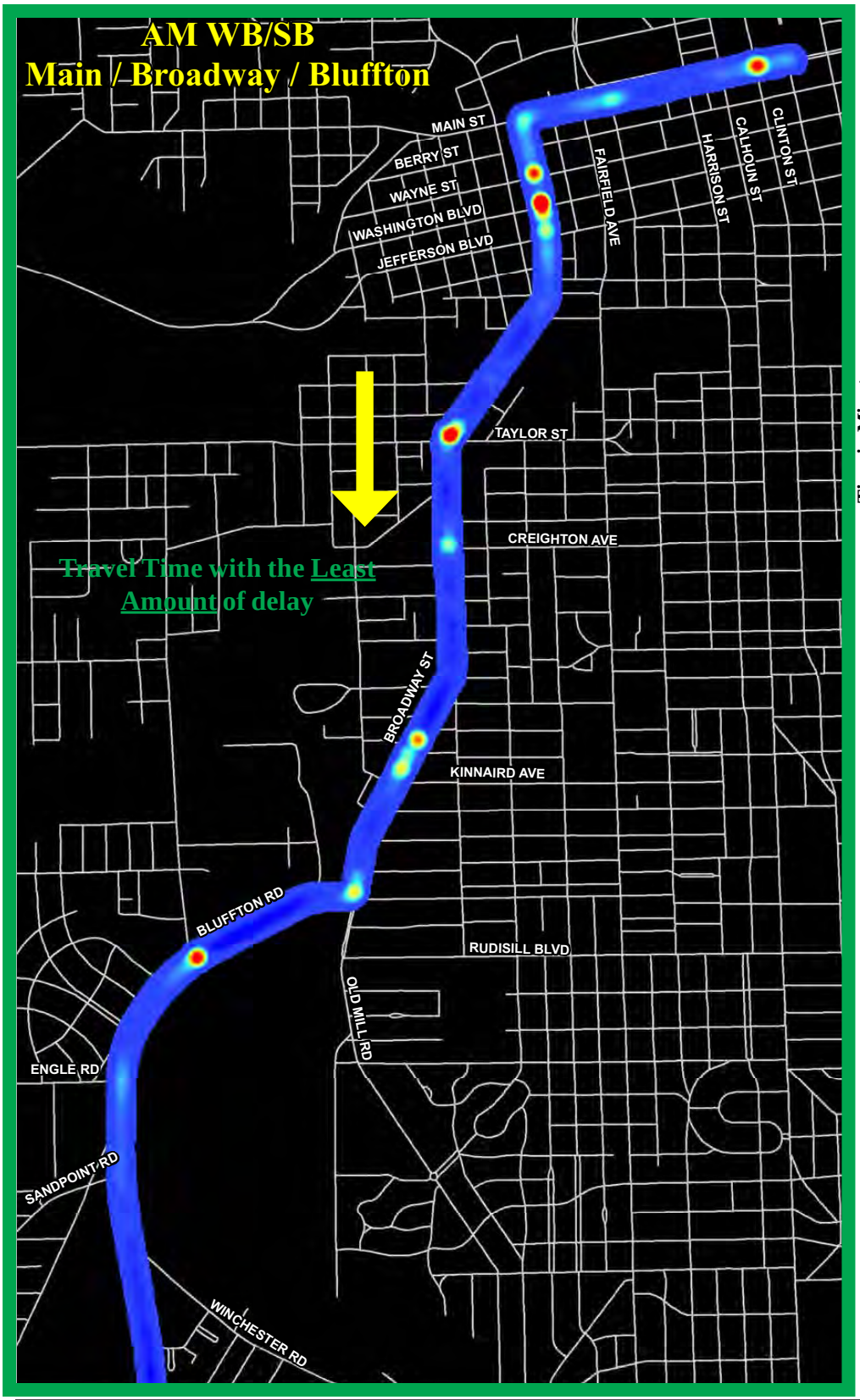
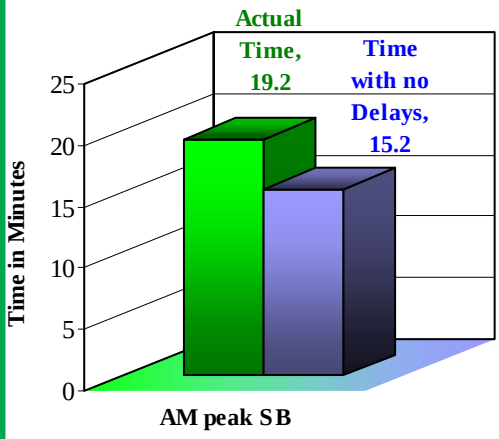


Figure 36

Main Street / Broadway Street / Bluffton Road
AM Peak WB / SB



Travel Time with the Least Amount of delay



Travel Speed with the Least Amount of delay

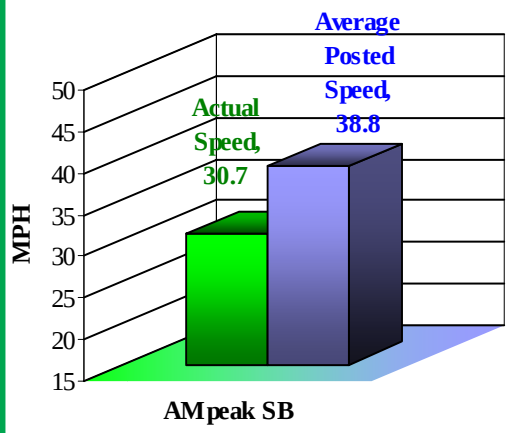
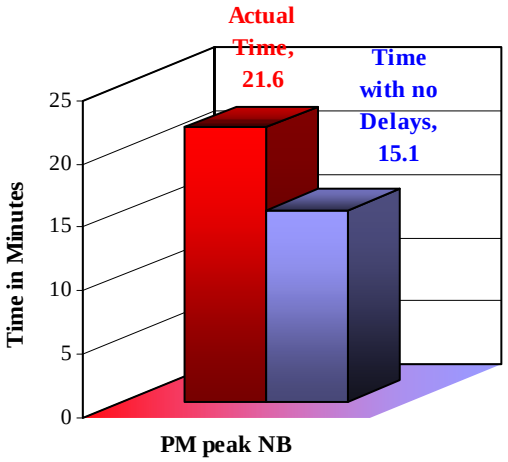


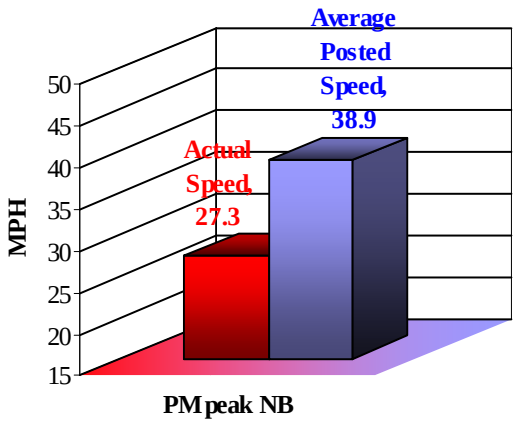
Figure 37

Main Street / Broadway Street / Bluffton Road
PM Peak NB / EB

Travel Time with the Greatest Amount of delay



Travel Speed with the Greatest Amount of delay



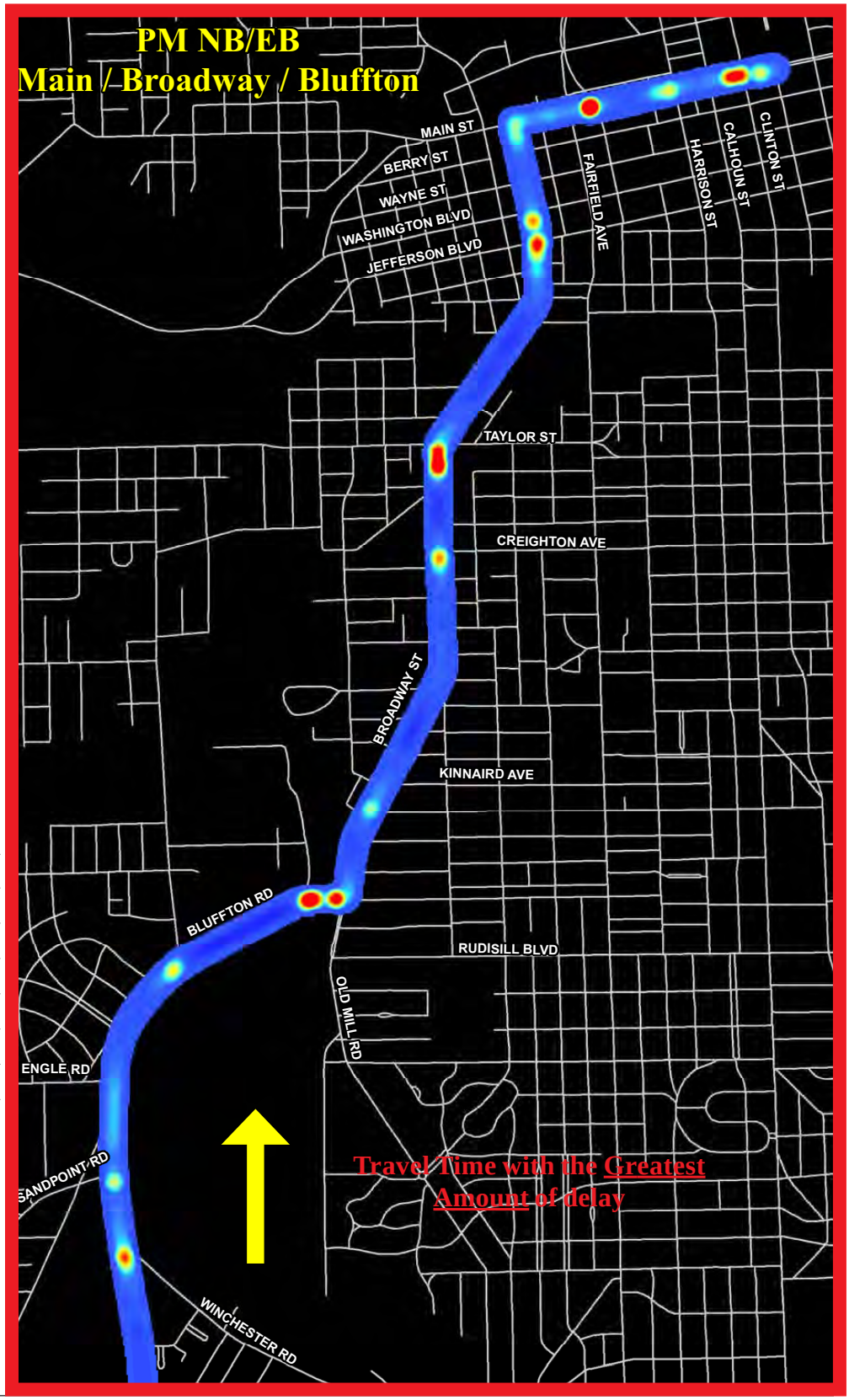
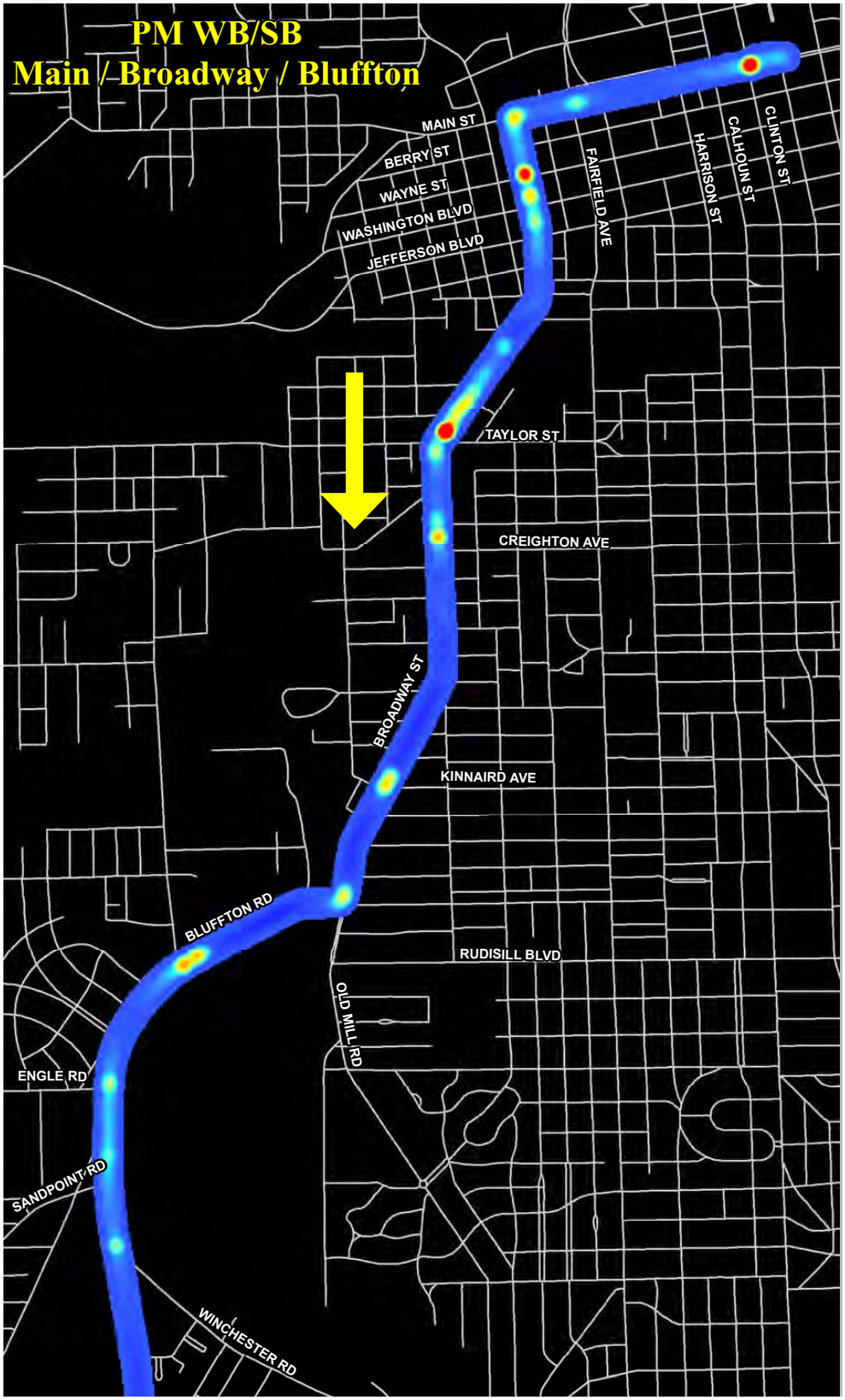


Figure 38

Main Street / Broadway Street / Bluffton Road
PM Peak WB / SB



Transportation Improvement Program

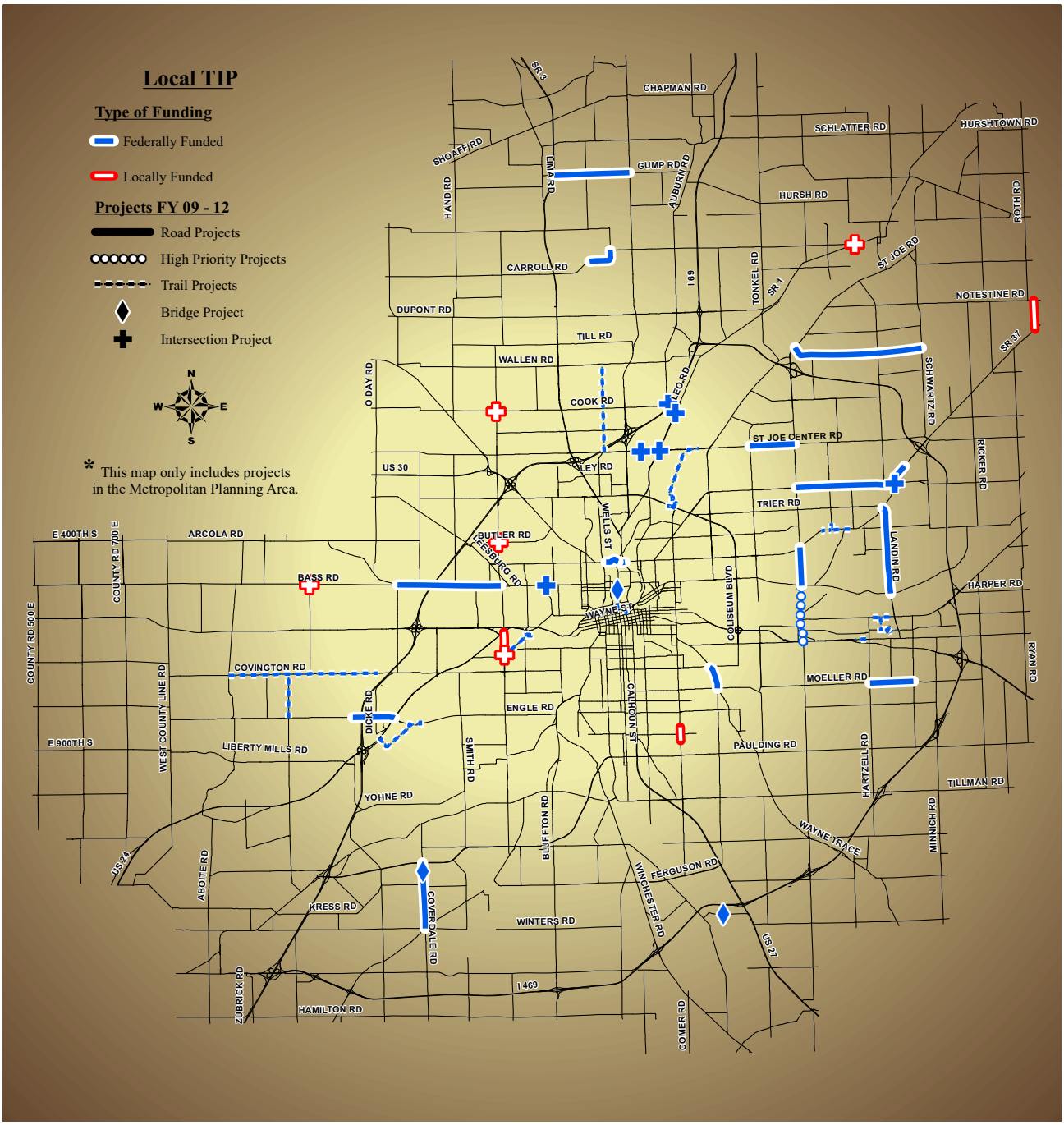
Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2008

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) PROJECTS

NIRCC prepared the Fiscal Year 2009-2012 Transportation Improvement Program. NIRCC has published a Transportation Improvement Program each year since 1977. 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 updated yearly and is used to guide the expenditure of federal funds in our area. Short range and long range (2030) transportation plans including the Indiana Department of Transportation's Capital 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

Figure 39



New Haven, and Allen County to utilize and match federal funds. The Indiana Department of Transportation projects listed in the TIP represents commitments that the State makes to improve the transportation system in the Metropolitan Planning Area.

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).

Figure 40

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 three-year period.

Figure 41

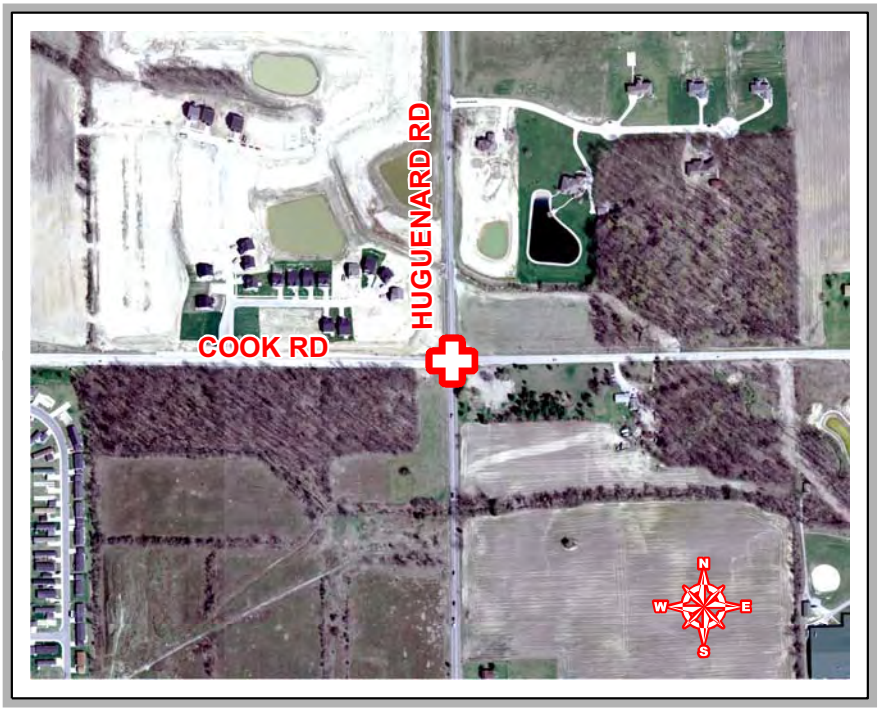


Figure 39 shows the locations of local TIP projects throughout the Metropolitan Planning Area. The local TIP map identifies projects that fit into two different categories. The projects that are colored red identify projects that utilize only local funds whether it is City of Fort Wayne, City of New Haven, or Allen County. The projects colored blue identify projects that utilize matching local funds with federal aid funds. Figures 40 and 41 provide aerial views to show examples of a project utilizing federal aid and a locally funded project. The following pages provide a listing of projects for each fiscal year and the phase for each project. Highway projects are listed on pages 63 through 65, and transit funding is listed on pages 66 and 67.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) PROJECTS LISTED

FY 09 TIP Local Highway Projects

ROAD PROJECTS-AREA OVER 200,000

PROJECTS FUNDED WITH STP (33C) / EB

Project	Phase
Aboite Ctr Rd - Coventry Ln to Jefferson Blvd	CN
Auburn Rd - Cook Rd & Clinton St	PE
Auburn Rd - Cook Rd & Clinton St	RW
Bass Rd - Hillegas Rd to Hadley Rd	PE
Clinton St & Washington Center Rd	PE
Clinton St & Washington Center Rd	RW
Clinton St & Washington Center Rd	CN
Dartmouth Dr & Washington Center Rd	CN
Flutter Rd - from Schwartz Rd to Maplecrest Rd	RW
Maysville/Stellhorn Rd - Koester to Maplecrest Rd	PE
Maplecrest Rd - Lake Ave to SR 930	CN
Maplecrest Rd - from Lake Ave to State Blvd	PE
Marketing / Education for Ozone Awareness	-
Moeller Rd - Green Rd to Hartzell Rd	RW
New Haven Pedestrian Walkways 3 & 5	CN
Spring St Bridge over NS Railroad	RW
State Blvd - from Spy Run Ave to Cass St	PE
Wayne Trace - Pontiac St to Oxford Ave	CN

PROJECTS FUNDED WITH STP (33E) Group IV

Coverdale Rd - from Indianapolis Rd to Airport Exp	CN

PROJECTS FUNDED WITH STP Group IV Bridge

Bostick Rd - Bridge over St. Mary's River	CN
Coverdale Rd - Bridge #231 over Robinson-Brindle Ditch	CN
Dawkins Rd bridge #187 over Litzenburg Drain	CN
Monroeville Rd Br #276- Over Hoffman-Lepper Drain	CN

TRANSPORTATION ENHANCEMENT (TE)

Covington Rd Trail - from West Hamilton Rd to w/o I-69	CN
Fort Wayne Urban Trails (Phase 1)	CN
Johnny Appleseed Park to Shoaff Park Trail (Phase 1)	CN
New Haven Depot & Corridor Project	CN
Railroad Corridor Acquisition	RW
Towpath Trail & Homestead Rd Trails (Phase IV)	CN

FY 09 TIP Local Highway Projects continued…..	
RECREATION TRAILS PROGRAM (RTP)	
Towpath Trail- Rockhill Park to Ardmore/Taylor Int.	CN
SAFE ROUTES TO SCHOOL (SRTS)	
State Blvd, Lahmeyer Rd & Maysville Rd Sidewalk	CN

FY 10 TIP Local Highway Projects

ROAD PROJECTS-AREA OVER 200,000

PROJECTS FUNDED WITH STP (33C) / EB

Project	Phase
Auburn Rd - Cook Rd & Clinton St	CN
Carroll Rd - Corbin Rd to .5 mi w/o Corbin Rd	PE
Clinton St (US 27) - Bridge over St Mary's River	CN
Gump Rd - SR 3 to Coldwater Rd	RW
Landin Rd - North River Rd to Maysville Rd	PE
Maplecrest Rd - Lake Ave to State Blvd	RW
Maysville Rd & Stellhorn Rd	RW
St. Joe Center Rd - Reed Rd to Maplecrest Rd	PE
Spring St - Bridge over NS Railroad	CN
State Blvd - Spy Run Ave to Clinton St	RW

FY 11 TIP Local Highway Projects

ROAD PROJECTS-AREA OVER 200,000

PROJECTS FUNDED WITH STP (33C) / EB

Project	Phase
Bass Rd - Hillegas Rd to Hadley Rd	RW
Carroll Rd - Corbin Rd to .5 mi w/o Corbin Rd	RW
Flutter Rd - Maplecrest Rd to Schwartz Rd	CN
Gump Rd - SR 3 to Coldwater Rd	CN
Landin Rd - North River Rd to Maysville Rd	RW
Moeller Rd - Green Rd to Hartzell Rd	CN
State Blvd - Spy Run Ave to Clinton St	CN

FY 12 TIP Local Highway Projects

ROAD PROJECTS-AREA OVER 200,000

PROJECTS FUNDED WITH STP (33C) / EB

Project	Phase
Carroll Rd - Corbin Rd to .5 mi w/o Corbin Rd	CN
Maysville Rd & Stellhorn Rd	CN
St. Joe Center Rd - Reed Rd to Maplecrest Rd	RW
State Blvd - Clinton St to Cass St	CN

Locally Funded Highway Projects FY 09-12 TIP

ROAD PROJECTS-AREA OVER 200,000

PROJECTS FUNDED WITH LOCAL FUNDS

Project	Phase
Anthony Blvd - Fairfax ave to Capital Ave	CN
Ardmore Ave & Taylor St Intersection	CN
Ardmore Ave - Jefferson Blvd to Taylor St	CN
Barnett Rd - SR 37 to Notestine Rd	CN
Bass Rd & Scott Rd Intersection	CN
Butler Rd & Hillegas Rd Intersection	CN
Cook Rd & Huguenard Rd Intersection	CN
Union Chapel Rd & Leo Rd/SR 1 Intersection	CN

Federal Transit Administration	
Section 5307 / Section 5309 - Funds	
Fort Wayne Public Transportation Corporation	
FY 2009	
Capital Equipment Purchases (Section 5307 Funds)	
	Six (6) Heavy Duty Replacement Buses 35'
	Four (4) Replacement Minibuses (Body on Chassis)
	AVL/Communication Hardware/Subscription Cost
	Other Maintenance Equipment
Capital Equipment Purchases (Section 5309 Funds)	
	Hybrid Option for Replacement Six (6) Buses (funds requested)
Previously Approved Funding Projects	
	JARC
	New Freedom
	CMAQ - Transit Awareness
	CMAQ - Fare Free Ozone Alert Days
	CMAQ - Additional Peak Hour Service (1/2 Hour Peak Hour Service)
	CMAQ - Biodiesel Alternative Fuel Cost Differential
Operating Funds and Preventative Maintenance Expenses	
	Capitalization of Maintenance Costs (Section 5307)
	Complimentary Paratransit Costs (Section 5307)

FY 2010	
Capital Equipment Purchases (Section 5307 Funds)	
	Six (6) Heavy Duty Replacement Buses 35'
	One (1) Replacement Supervisor Vehicle
	One (1) Replacement Maintenance Truck
	Computer/ Office Equipment
	AVL/Communication Hardware/Subscription Cost
	Other Maintenance Equipment
Capital Equipment Purchases (Section 5309 Funds)	
	Hybrid Option for Replacement Six (6) Buses (funds requested)
Operating Funds and Preventative Maintenance Expenses	
	Capitalization of Maintenance Costs (Section 5307)
	Complimentary Paratransit Costs (Section 5307)

Federal Transit Administration	
Section 5307 / Section 5309 - Funds	
Fort Wayne Public Transportation Corporation	
FY 2011	
Capital Equipment Purchases (Section 5307 Funds)	
	Four (4) Heavy Duty Replacement Buses
	AVL/Communication Hardware/Subscription Cost
	Other Maintenance Equipment
Capital Equipment Purchases (Section 5309 Funds)	
	Hybrid Option for Four (4) Replacement Buses (funds requested)
Operating Funds and Preventative Maintenance Expenses	
	Capitalization of Maintenance Costs (Section 5307)
	Complimentary Paratransit Costs (Section 5307)

FY 2012	
Capital Equipment Purchases (Section 5307 Funds)	
	Eight (8) Replacement Minibuses (body on chassis)
	Rehab/Renovate Administration/Maintenance Facility
	Computer/Office Equipment
	AVL/Communication Hardware/Subscription Cost
	Other Maintenance Equipment
Operating Funds and Preventative Maintenance Expenses	
	Capitalization of Maintenance Costs (Section 5307)
	Complimentary Paratransit Costs (Section 5307)

Federal Transit Administration	
Section 5310 Funds	
FY 2009	
2008 Funding Cycle	
1. Community Transportation Network	
	Two (2) Modified Passenger Vans w/ lift - Type C (Replacement Vehicles)

Safety Management System

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2008

SAFETY MANAGEMENT SYSTEM

NIRCC also 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.

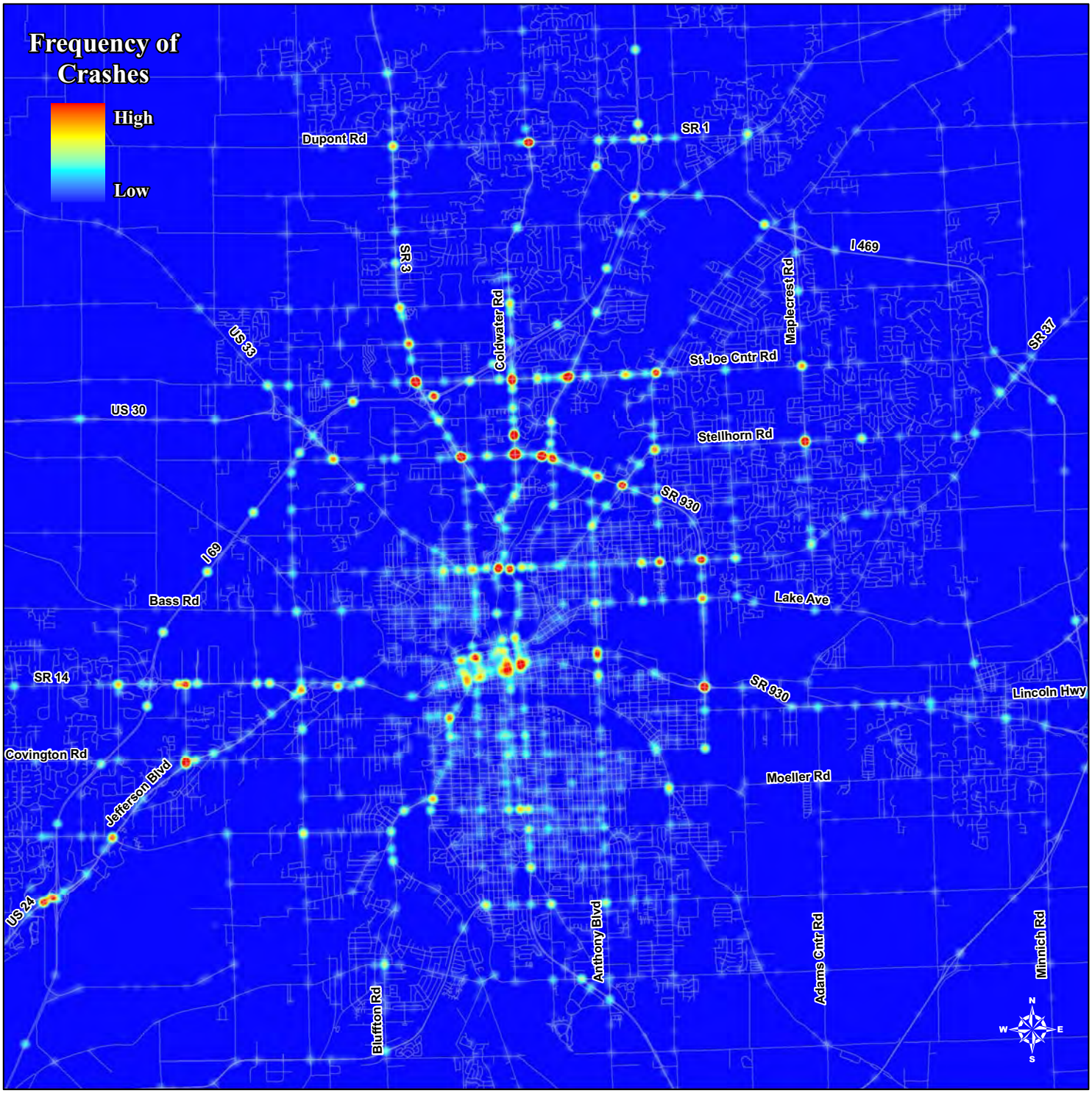
Fiscal year 2008 was devoted to obtaining all crash records that occurred in Allen County during the past three years. The data was extracted from the Indiana State Police database ARIES (Automated Reporting Information Exchange System). Staff worked throughout the year to "code" each crash location 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 request 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.

Staff worked to code all crashes for 2005, 2006, and 2007 within Allen County to create a three year database. These crashes were then input into mapping software to be used with GIS (geographical information systems). Figures 42, 43, and 44 display the densities of crash frequencies for the Fort Wayne, New Haven, and Allen County area. The data was then presented to the Northeastern Indiana Regional Coordinating Council's transportation technical committee (TTC). Staff proposed various alternative methods that included crash frequency, crash rate, and crash severity to identify hazardous locations. The alternatives were discussed and a process was established that was used to identify hazardous locations in Allen County for the past three years. The technical committee and staff defined hazardous locations and developed the process to identify them that took into consideration crash frequency, rate per million entering vehicles and crash severity (injuries and fatalities).

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

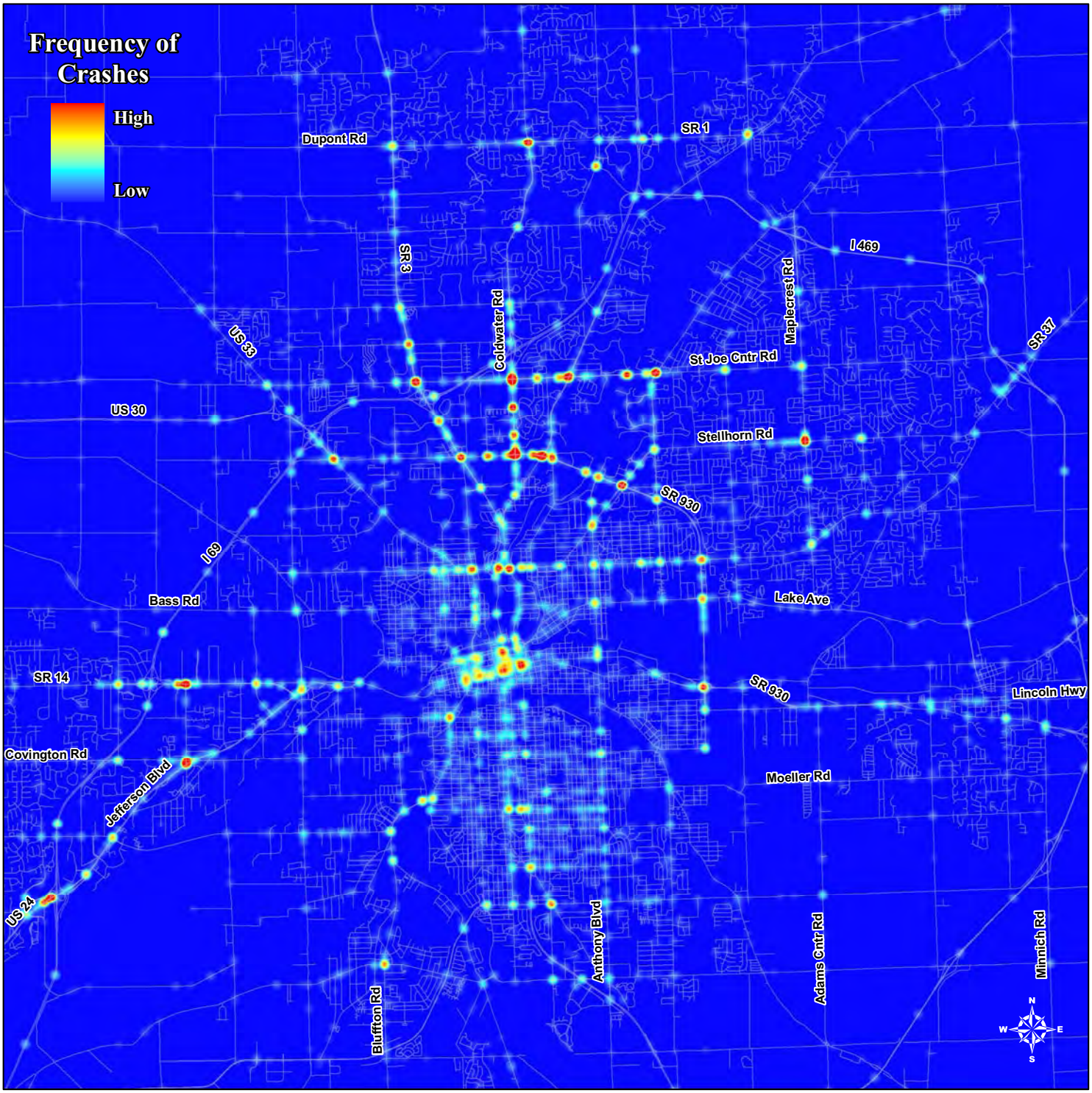
Figure 42 - 2007 Crash Data



with crashes including environmental circumstances, driver information, vehicle information and other important data for all the annual crashes.

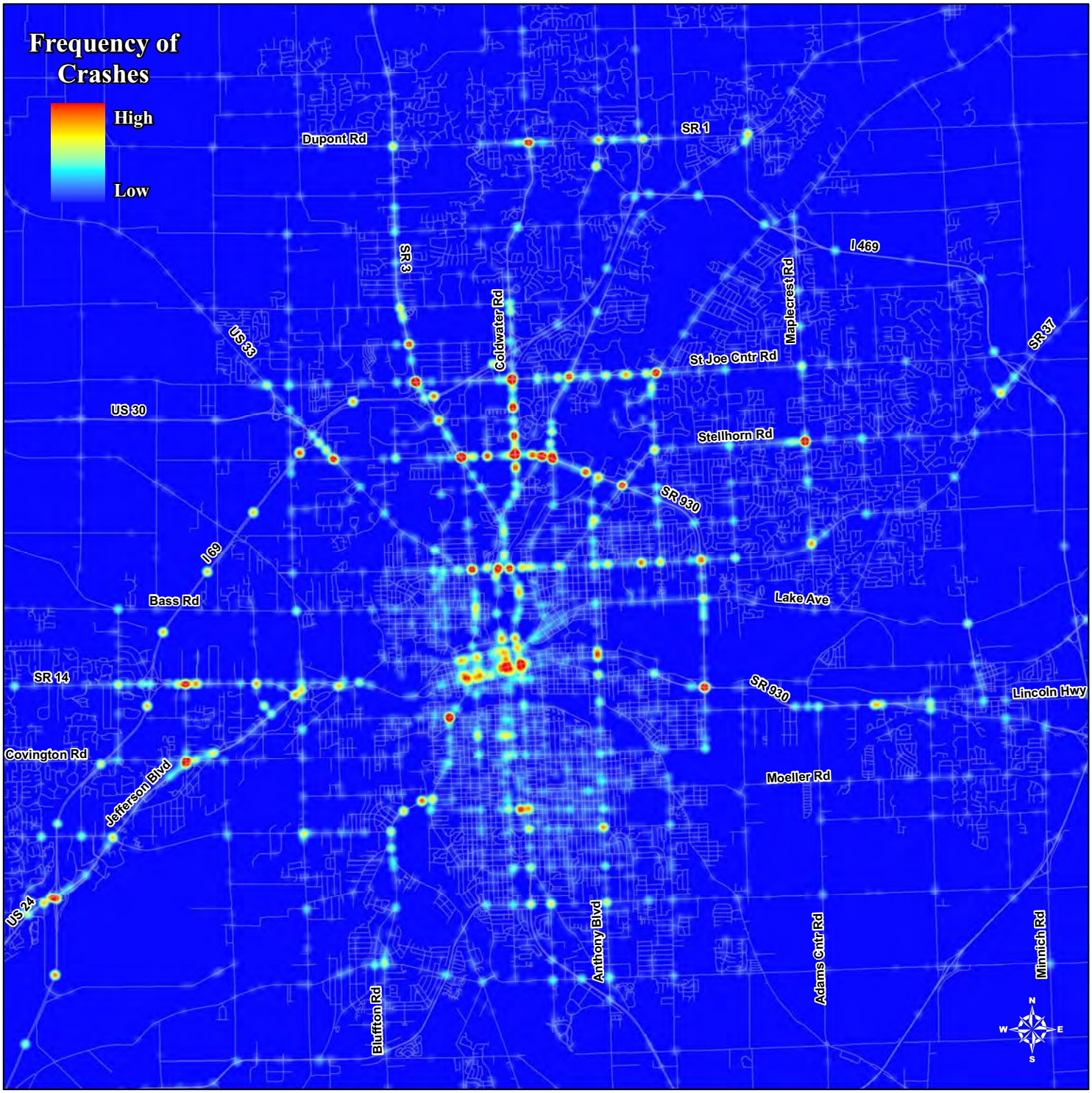
The second product from annual crash data is a summary or listing of the hazardous crash locations from the previous year. This fiscal year staff utilized two procedures to identify crash locations with a higher frequency of crashes and another for

Figure 43 - 2006 Crash Data



locations with a lower crash frequency. Identification of crash frequency is provided through utilization 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.

Figure 44 - 2005 Crash Data



High frequency crash locations were defined as those with an annual crash frequency greater than or equal to seven (7). 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). Locations with a high crash severity or crash locations that result in a high percentage of injuries or fatalities are included.

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 2008 staff reviewed all the crash location listings created for 2005, 2006, and 2007 based on the approved process described above. Staff worked with TTC to determine the most accurate manner to identify hazardous locations from data collected from the previous thee years. TTC members and staff agreed that crash locations identified annually were not necessarily hazardous unless the location experienced similar patterns over at least two of the previous three years. Staff created listings of locations that included all three years of data. The data was sorted using rate and severity. All locations that appeared in two of the three year annual listings were reviewed using 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. The first locations selected for further review were those locations that met the criteria for all three years. The second group of locations selected were those that had a crash frequency index and crash cost index greater that 2.00 (twice the acceptable value for the standard deviation) based on the data input in the HAT software.

Staff will review the location 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 be updated annually to review trends and previously identified hazardous locations. Additional locations that meet the approved criteria will also be added.

Bicycle and Pedestian Planning

Studies completed by the Northeastern Indiana Regional Coordinating Council

Transportation Summary Report Fiscal Year 2008

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-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 began 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 in 2002. This forum represents a task force comprised of governmental parks, planning and highway agencies, advocacy groups, and special project organizations. The forum has 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 and Pedestrian Transportation Plan in 2006. This plan (shown in figure 47) was included in the 2030 Long Range Transportation Plan. Staff continues to update the plan annually. The plan is available on the NIRCC website at www.nircc.com.

During Fiscal Year 2008, NIRCC continued these efforts. One of the projects NIRCC assisted with was prioritizing streets for bike lane recommendations. After contacting the local bike group, holding and attending several meetings, there were a few streets chosen from the Bicycle and Pedestrian Transportation Plan that would be

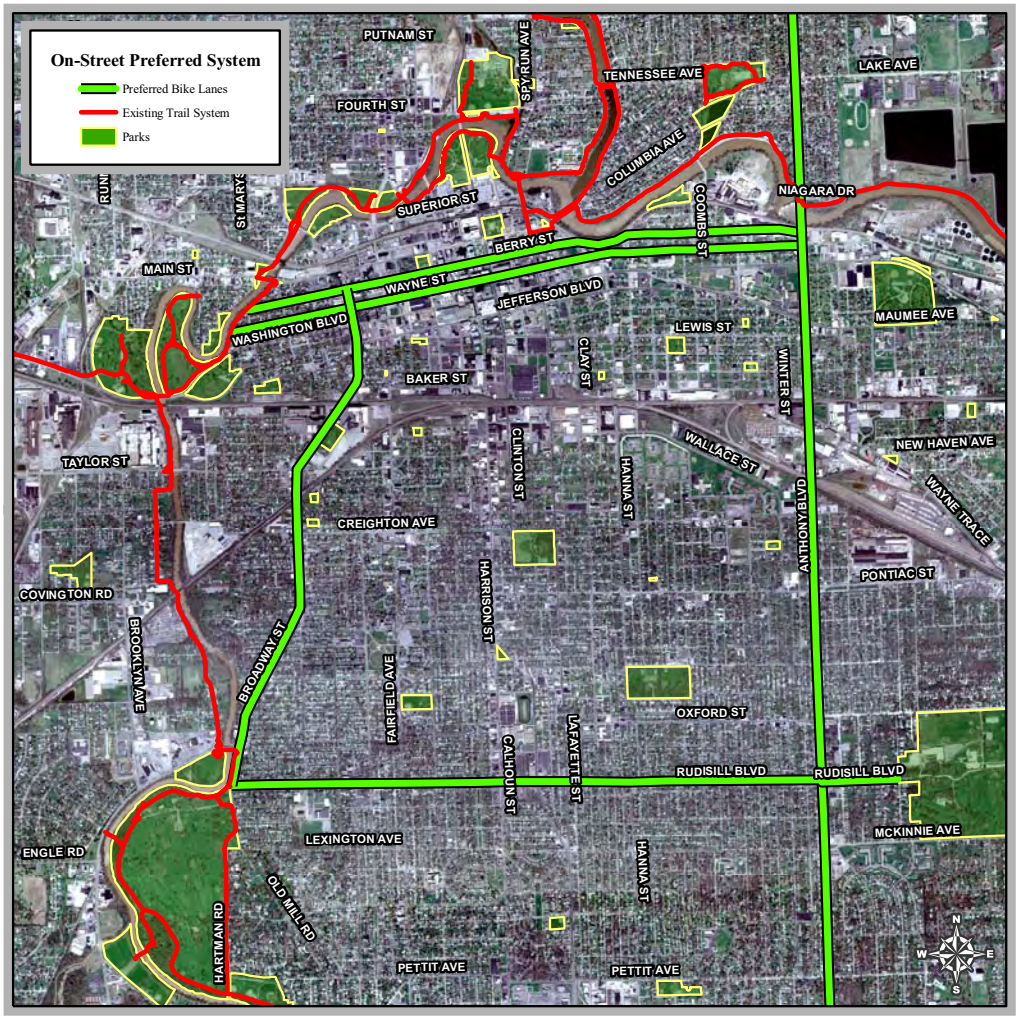


Figure 45

examined for the possibility of adding bike lanes. The streets chosen were Anthony Blvd, Rudisill Blvd, Broadway St, Wayne St, and Berry St (shown in fugure 45). These corridors would function as the central bike system in Fort Wayne that would eventually extend outward to the suburbs and county.

Figure 46

Another project NIRCC worked on in fiscal year 2008 was setting up a study to identify gaps in sidewalk connectivity along functionally classified roadways (Federal Function Classification maps are available on NIRCC's website, www.nircc.com). Utilizing the sidewalk GIS layer NIRCC created, sidewalk gaps will be identified with information included in a new GIS layer that will allow studies to be conducted to select and prioritize sidewalk projects. An example of the work in progress is shown in figure 46.

Throughout the year NIRCC periodically updates the Comprehensive Bicycle and Pedestrian Transportation Plan for Allen County as well as the 2007 Regional Bicycle and Pedestrian Plan for northeast Indiana. 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. The most current plans can be seen in Figures 47 and 48.

Figure 47 shows the updated Comprehensive Bicycle and Pedestrian Transportation Plan. The Comprehensive Bicycle and Pedestrian Transportation Plan is a component of the Regional Bicycle and Pedestrian Plan and provides a detailed look at Allen County. Displayed on the comprehensive plan for Allen County is the preferred bicycle and pedestrian facilities for the off-street and on-street system. The on-street system consists of bike lanes, shoulder lanes, and wide outside curb lanes. The off-street system consists of trails and some sidewalks.

Figure 47

The Comprehensive Bicycle and Pedestrian Transportation Plan

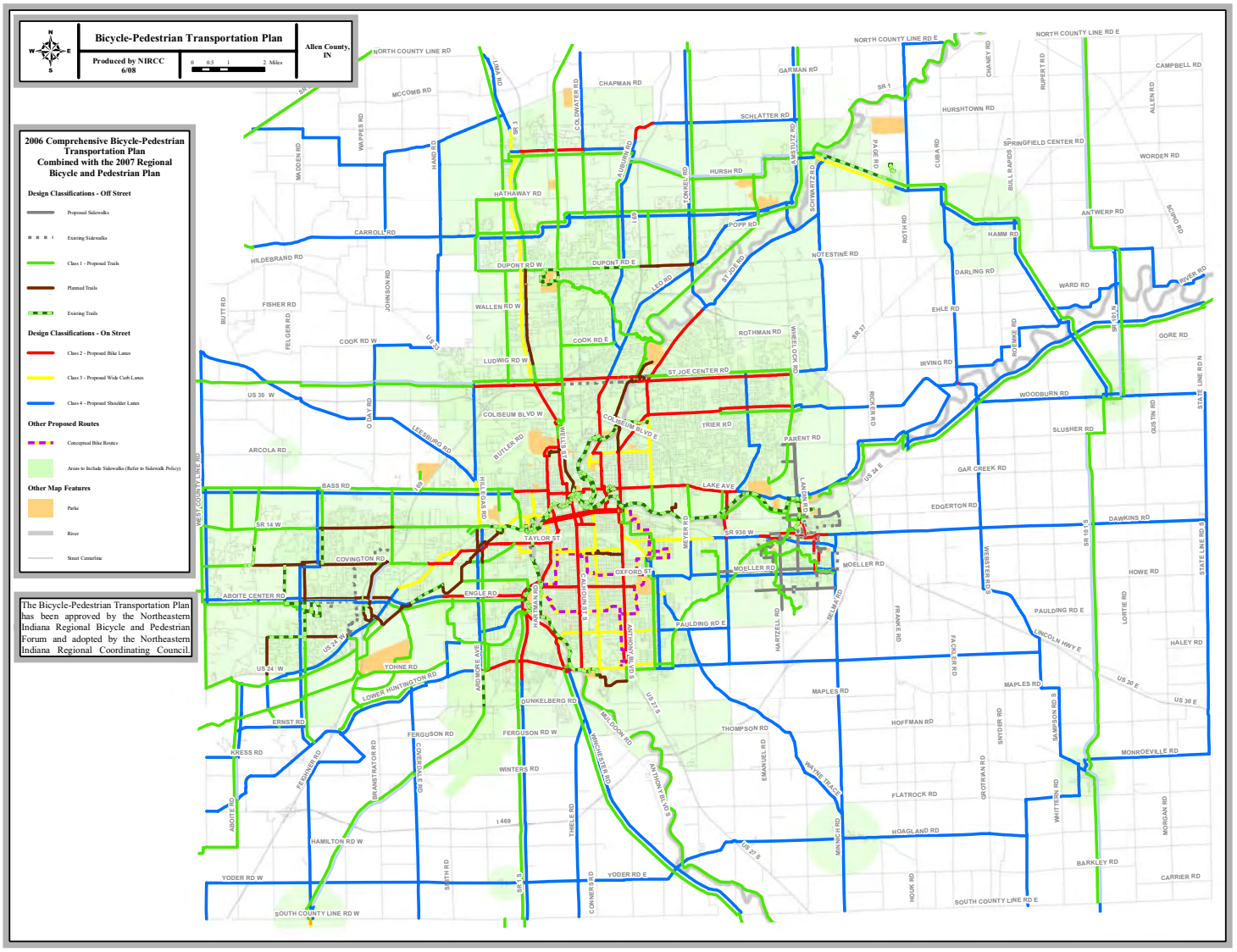


Figure 48 shows the updated 2007 Regional Bicycle and Pedestrian Plan. This regional plan was produced in fiscal year 2007 when NIRCC, along with Region III-A Economic Development District and Regional Planning Commission, held a regional charrette that included 11 counties in northeast Indiana. Participating counties included Adams, Allen, Dekalb, Grant, Huntington, Lagrange, Noble, Steuben, Wabash, Wells, & Whitley.

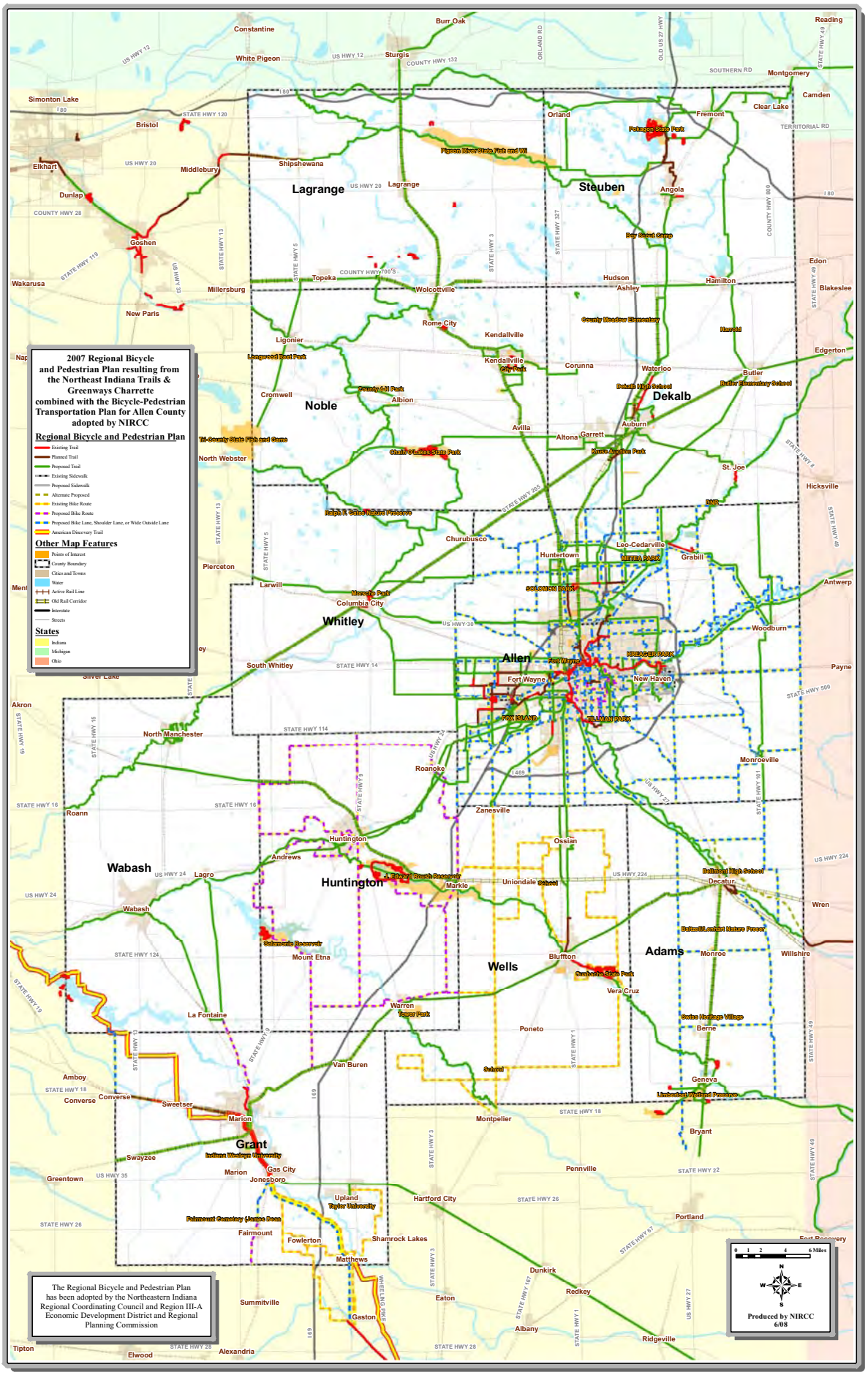


Figure 48

2007 Regional Bicycle and Pedestrian Plan

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 2008. The Summary Report highlights a majority of the transportation planning activities conducted and the products produced by NIRCC during Fiscal Year 2008. 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 2009-2012 Transportation Improvement Program (TIP) represent the improvements selected for implementation.

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), 2030 Transportation Plan, and many other documents and staff contact information.

Transportation Summary Report Fiscal Year 2008

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