

# 2013

# Allen County Rural

# Transportation

# Plan

Technical Report  
Allen County Rural Planning

November 2013



Northeastern Indiana Regional Coordinating Council

## INTRODUCTION

The Northeastern Indiana Regional Coordinating Council has conducted the transportation planning activities for the Fort Wayne Metropolitan Planning Area for many years. The remaining portion of rural Allen County and the adjacent surrounding counties, including the smaller urban areas, do not meet the traditional requirements for transportation planning activities. However, an interdependent relationship exists between the smaller urban communities, the rural areas, and the Metropolitan Planning Area. These areas have a symbiotic relationship with each benefiting from the resources and socioeconomic composition of the other. A planning decision in one community can influence the planning decisions in the surrounding communities. In addition, air quality concerns and issues require an expanded role by the Metropolitan Planning Organization involving data collection and planning efforts. Coordination, cooperation, and an understanding of the problems each area faces help to support a well designed and efficient transportation system.

In an effort to promote an efficient transportation planning process, the Northeastern Indiana Regional Coordinating Council (NIRCC) extended its transportation planning activities to the smaller urban communities and rural areas within its jurisdiction. The objective of these activities is to facilitate a cooperative, coordinated and comprehensive transportation planning process for all areas within the region. The process has resulted in a program of projects designed to solve transportation problems, improve the safety and efficiency of the transportation system, and meet the desires and needs of the citizens, businesses, and local officials of these communities.

The Small Urban / Rural Area transportation plan was established through cooperation with the Indiana Department of Transportation (INDOT) and NIRCC in 2000. NIRCC accepted the responsibility of preparing and maintaining an updated transportation plan for rural areas within NIRCC's jurisdiction. Since 2000, NIRCC has continued to monitor locations identified in the short-range transportation plan and collected needed data to support the projects. This report includes a summary of problem areas; data collected, and recommended solutions. The report serves as the short-range transportation plan for the rural portion of Allen County.

## **TRANSPORTATION PLANNING ACTIVITIES**

The objective of the rural transportation planning initiative is to facilitate and coordinate transportation planning activities and improvements in the urban communities and rural areas of Allen County. The coordination of these activities with local governments, the Indiana Department of Transportation, and other interested agencies will promote a safe and efficient transportation system that supports and encourages economic development.

NIRCC collected and recorded traffic data, roadway characteristics, demographic data, and land use variables within the urban communities and rural areas. Analyses were preformed to identify problems, assess current conditions, and develop viable solutions. This report documents the transportation planning activities including the data collected, the analyses preformed, and the recommended transportation improvements. This report serves as a multi-year plan for the urban communities and rural areas in Allen County outside of the Fort Wayne Metropolitan Planning Area.

## **Transportation Planning Tasks**

### **Traffic Counting**

Traffic counting is the primary method for collecting information on the transportation system. The traffic counting activity includes three different types of traffic counts: ground counts; selected intersection counts; and classification counts. These three components constitute the framework of the traffic counting/classification program to obtain traffic volumes, traffic flow movements, and vehicle classification information for use in transportation planning and analysis. Ground counts are the standard technique for collecting traffic volume data on roadway sections. From these counts, twenty-four hour average daily traffic volumes are derived for the sampled locations. Intersection counts are conducted at selected intersections to collect the necessary information to assess potential problems, traffic control, and level of service. Classification counts are conducted at strategic locations to determine the mix of various vehicle types. The principal piece of data obtained from classification counts is the percentage of truck traffic on a given roadway.

A considerable amount of work was concentrated on obtaining traffic volume data. Approximately 240 locations were sampled in rural Allen County including counts conducted in Monroeville and Woodburn. The traffic counting effort was focused on roadways classified on the Federal Functional Classified System and near railroad crossings on roadways not functionally classified. The counts were conducted for a forty-eight hour period from Monday to Wednesday or from Wednesday to Friday. An average of the two-day period was derived from the forty-eight hours to obtain a twenty-four hour average daily traffic volume. Axle correction and seasonal factors were applied as appropriate.

Two intersection counts were collected at selected locations in rural Allen County. The intersection counts provide turning movement volumes necessary to assess intersection capacity and level of service. The intersection counts also provide information needed to conduct traffic control warrant analyses. Classification counts were conducted at strategic locations. Classification counts identify vehicles by type (e.g. motorcycles, passenger cars, van/pick-up trucks, buses, and various sizes of trucks), allowing a determination of the frequency and percentage for various types of vehicles utilizing a given roadway.

The combination of ground counts, intersection counts, and classification counts provides information on traffic volumes, traffic flow movements, and vehicle classification information for use in transportation planning and analysis. The traffic count information assists in the identification and clarification of problem areas, assessing the magnitude of the problem, and developing viable solutions to mitigate the problem.

### **Intersection and Arterial Analysis**

The efficiency of a transportation system often is hindered due to the poor performance of highway intersections. Congestion is a growing concern in small urban and rural areas. Data collection and evaluation in these areas assists local transportation planners and engineers in developing solutions to resolve traffic conflicts. Various types of information are collected on selected intersections and arterials to conduct level-of-service and capacity analysis. Pertinent data includes peak hour directional volumes and turning movements, signal timings and phasing, intersection geometrics, fleet mix, and other travel characteristics. Capacity and level-of-service

analysis performed on the selected intersections and arterials helps identify problem areas and develop viable solutions.

Information was collected on specific intersections and arterials to evaluate their performance. Analyses were primarily performed at intersections to determine the level of service, capacity problems, and to conduct warrant checks for various types of traffic control. Intersections with offsetting approaches and roadways that have curves with safety concerns were also identified and evaluated. In addition, arterials were reviewed for traffic flow and the impacts from planned and proposed developments were analyzed. The results obtained from these analyses provide valuable information for developing and refining strategies to mitigate congestion and solve traffic conflicts. The results of these analyses are incorporated in the findings and analysis sections for specific problem areas.

### **Railroad Crossing Inventory**

Maintenance of information on highway and railroad at-grade crossings is important for assessing the need for safety improvements. The at-grade crossings are monitored to collect highway traffic volume data. Information contained in the railroad-crossing inventory is reviewed. The information is updated and forwarded to the Indiana Department of Transportation. Based on this information, the Indiana Department of Transportation prioritizes railroad crossings on a statewide basis. The Indiana Department of Transportation then selects railroad crossings with the highest priorities for safety improvements.

Information was collected at all at-grade highway and railroad crossings in the rural and small urban communities. The type of information collected includes crossing identification number, type of crossing protection, number of tracks, number of highway travel lanes, pavement widths, crossing widths, and other pertinent data. This information was checked against the railroad crossing inventory data for accuracy. Photographs from both approaches of each crossing were also taken for the NIRCC railroad-crossing inventory. Traffic volumes were conducted at railroad crossings which are not protected by flashing lights and crossing gates or for which this type of protection is not scheduled. The collected information is provided to the Indiana Department of Transportation to assist in the update of the railroad-crossing inventory.

Several additional characteristics were reviewed at the rural rail-highway crossings. These included identifying locations with substandard crossing widths (less than 18 feet) and humpback crossing. These types of crossing were identified to help solve potential sight distance and approaching traffic conflicts. The Allen County Highway Department is reviewing all rural railroad crossings, collecting physical data such as roadway, shoulder, and crossing pavement widths. The list will be updated when the Allen County Highway Department completes their review.

### **Safety Management System**

Transportation planning activities involve numerous components of traffic data and analyses. Incorporating safety as a component of planning requires detailed information to be effective in the process. The primary element in safety management is the identification of problem areas or types. To be successful in this objective accurate data is required. With this information it is possible to identify problem areas and work toward finding solutions to mitigate or eliminate crashes. NIRCC has established a safety management system structured around accurate data. The system has been designed to provide a variety of informational data sets to various users from planners, engineers, law enforcement agencies and even social advocacy groups.

The safety management system activities are conducted for the entire county as part of the Fort Wayne Metropolitan Planning Area. All problem areas are identified for the rural planning areas as part of this process. Identified projects in the rural area will be listed in this report.

### **Demographic Data and Land Use Inventory**

Demographic data assists planners by identifying where people live, work, shop, go to school, and pursue recreational activity. Comparing information from different year's shows where growth is occurring and provides insight on where future growth will take place. Knowing the demographic profiles and land uses helps to understand the travel needs, desires, and traffic patterns of a community. Census data is a primary source for demographic data. Building permits and local knowledge supplements the census information. Land use information obtained from local planning commissions provides valuable information on existing and future development.

Demographic data was collected for the rural and urban communities outside the metropolitan planning area in Allen County. Census information including 1990 base information on population and housing units was utilized. Meetings were held with local representatives to obtain existing and proposed land uses. The land use inventories were reviewed. Agricultural, commercial, industrial, institutional, open space/park, and residential land uses were identified. The land use information provides important information necessary to identify and address current and future transportation needs.

### **Identify Problem Areas and Recommend Improvements**

The culmination of data collection, analysis, and review of problem areas as part of the transportation planning process is documented in this plan for Allen County. The plan identifies the problem areas, provides information and analysis specific to each problem location, and recommends a transportation strategy or improvement project designed to mitigate the identified problem. The recommended improvements were reviewed by local governments and NIRCC. Upon approval, the plan becomes a tool for implementing specific projects to increase the safety and efficiency of the transportation system.

The rural transportation planning process worked closely with local elected and appointed officials, and the Indiana Department of Transportation District Office. Several meetings were also held with Allen County Highway Department personnel to identify and develop solutions. This process insured that reasonable and acceptable projects were developed in a coordinated manner. The plan is submitted to the Indiana Department of Transportation to provide early information on projects for planning and programming needs. This transportation planning process will help facilitate better management of the entire transportation system.

## **IDENTIFICATION OF PROBLEM AREAS AND RECOMMENDED SOLUTIONS**

The Northeastern Indiana Regional Coordinating Council (NIRCC) initiated the rural transportation planning process by first, identifying the primary roadways. These roadways were identified through the use of the Federal Functional Classification System combined with input from local officials and staff knowledge. The transportation planning activities were focused on this roadway system. Areas of concern were identified through meetings with various county, city, and town officials to gain insight into problem areas within their respective jurisdictions.

NIRCC established a template to follow for identifying, documenting, analyzing and developing a solution for specific problem areas. As problem areas were discussed, each location was identified by an appropriate description such as a highway section or intersection. The specifics of the problem were documented. Available data was reviewed and any additional information necessary to assess the problem was collected. This information was consolidated into findings for each identified problem area. Based upon the findings, analyses were preformed to further assess the problem, identify specific characteristics and operating conditions, and help in developing a strategy to remedy the problem.

The following list of problem areas will address all of the locations that were identified in the rural portion Allen County (outside the Metropolitan Planning Area) including the City of Woodburn and the Town of Monroeville.

# ALLEN COUNTY

## 1. Monroeville Road between Monroeville and US 27

### PROBLEM

The speeds traveled are too high on Monroeville Road.

### FINDINGS

The current speed limits are posted between US 27 and 1500' east of Trentman Road (45 mph) and near Heritage High School (25 mph "When Children Present"). The remaining portions of roadway are not posted which allows drivers to travel at 55 miles per hour. The annual average daily traffic volume ranges from 1,250 to 1,923 on this section of Monroeville Road. These volumes have not increased over the past three years.

There were 61 crashes throughout this corridor from 2005-2007 which included 17 personal injury crashes and no fatalities. From 2009-2011 the same corridor experienced 49 crashes with 13 resulting in personal injuries and one fatality. Overall the crash frequency has decreased 19.67 percent while the personal injury crashes have decreased by 23.52 percent. The fatal crash occurred at the intersection Monroeville Road from Wayne Trace. A northbound vehicle making a left turn and did not see a westbound vehicle. The westbound vehicle struck the northbound vehicle causing it to roll over. The driver of the westbound vehicle was not wearing a seatbelt and was ejected.

### ANALYSIS

The speed limits are appropriate based upon the findings of the Allen County Highway Department. The Allen County Highway Department prefers not to post the 55 miles per hour signs to allow motorists the discretion of driving at a reasonable speed. The Allen County Highway Department would consider posting a sign west of Monroeville if requested. The 2009 to 2011 crash data from this segment of roadway included 1 left turning collision, 2 other – explain in narrative collisions, 16 off road collisions, 6 rear end collisions, 21 right angle collisions, and 3 head-on collisions. The primary factor for crashes listed by officers included only 12 crashes that were from unsafe speed for weather conditions. The most common causes for crashes listed as the primary factor for the 49 crashes recorded in 2009-2011 was; Animal/Object in Roadway (9) and Failure to Yield Right of Way (11).

### RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that the speed of traffic on Monroeville Road continue to be monitored and periodic target enforcement by the Allen County Sheriff's Department be conducted.

## **2. Monroeville Road at CSX Railroad Crossing (ID#532328Y)**

*Between Wayne Trace and Minnich Rd*

### **PROBLEM**

The CSX at-grade railroad crossing appears dangerous.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted a traffic volume count at this railroad crossing. The annual average daily traffic volume is 1,300 at this location. The average number of trains is two per day. The railroad crossing has a series of warning devices including pre-warn signs, pavement markings, overhead illumination, and cross-bucks. The peripheral vision severely obstructed for eastbound traffic and impaired for westbound traffic. Monroeville Road is classified as a Rural Major Collector. According to the 2006 Indiana Department of Transportation "At-Grade Railroad Crossing Inventory" this crossing had a PAR (Potential Accident Ratio) of 0.0836. The 2012 inventory has calculated a new PAR of 0.0087. There have not been any reported crashes involving motor vehicles at this crossing in the past 6 years. The last crash occurred in 2003 which involved a vehicle that ran into the side of a train stopped train that was blocking the crossing due to a derailment in the heavy fog. Since this crash, rumble strips, yield signs and overhead illumination have been added to aid drivers in seeing the presence of a train.

### **ANALYSIS**

Approximately 1,300 vehicles cross this rail line on Monroeville Road each day. The proximity of this crossing to Heritage High School (approximately 2.5 miles) indicates that a number of young motorists navigate this crossing each weekday during the school year. The Indiana Department of Transportation identifies and prioritizes the improvement projects for railroad crossings on a statewide basis. This crossing has not met the qualifying criteria to be eligible for a crossing safety improvement project. A peripheral vision problem has been noted at this location prohibiting motorists from seeing approaching trains until they are relatively close to the crossing. The peripheral vision for eastbound motorists is blocked by a stand of trees on private property. A partial clearing of this property was made but has not improved the sight distance for motorists traveling at the legal speed limit. Trees and brush still prevents motorists from viewing an oncoming train. Staff conducted a field study and noted that motorists did not stop nor adequately reduce speed at the crossing to ensure no trains were coming prior to crossing. The removal of all the vegetation to improve the sight distance would be considerably expensive.

### **RECOMMENDATION**

The low frequency of trains at this crossing contributes to the low priority for full protection of gates and flashers. However, the Northeastern Indiana Regional Coordinating Council would recommend that full protection of the crossing be considered to ensure safety of motorists crossing the railroad. Interim steps should be pursued to clear as much vegetation at this location to improve sight distance. The Northeastern Indiana Regional Coordinating Council will continue to monitor the safety at this location.

### **3. US 33 from O'Day Road to the Allen County Line**

#### **PROBLEM**

The primary roadway to connect Fort Wayne and Churubusco is US 33. The roadway is projected to have a volume that will warrant additional travel lanes to provide sufficient capacity and improve safety. The improvements should also address the design of the roadway to improve vertical alignment issues that.

#### **FINDINGS**

US 33 is classified as a Rural Other Principal Arterial on the Federal Functional Classification System. This corridor is also included on the National Highway System. The current traffic volume on US 33 is between 10,500 and 11,700 on this corridor. Classification studies conducted on US 33 indicate that commercial vehicles comprise approximately 14% of the traffic on this corridor.

Crash data was also reviewed to determine the current safety conditions of the corridor. Records show that 64 crashes occurred throughout this 4.9 miles section of US 33 in 2005-2007. The data includes all crashes that occurred at the intersections and at mid block locations. There were 16 crashes that resulted in personal injury and 2 that resulted in death. From 2009 to 2011 the same section of roadway produced 58 crashes that included 16 crashes with injuries and 4 resulted in a fatality.

#### **ANALYSIS**

US 33 is a major highway in the northern portion of Indiana connecting the Fort Wayne and South Bend/Elkhart/Goshen metropolitan areas. Within northeast Indiana, this roadway provides connection with numerous small urban areas such as Churubusco, Albion, Ligonier, and Syracuse with Fort Wayne. Many of these small urban areas are experiencing economic growth and utilize US 33 for receiving and shipping goods. US 33 is a major route used by commuters between the lake communities of Kosciusko and Noble Counties and the Fort Wayne Metropolitan Area. The traffic growth along this corridor has slowed from the two to three percent increase it was experiencing in past years to a stagnant rate. The decrease in growth is primarily attributed to the economic issues and fuel/gas costs. National records showed that vehicle miles of travel have decreased throughout the country. NIRCC maintains that traffic growth is anticipated to begin increasing in the future.

NIRCC will continue to monitor the safety on the corridor. The current analysis using the Hazard Analysis Tool Software shows the index of crash frequency and index of crash cost to be at acceptable levels.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating recommends that US 33 be considered for widening as traffic volumes grow and additional capacity is warranted. Safety concerns should be addressed through target enforcement efforts by law enforcement agencies.

## 4. Antwerp Road and Cuba Road Intersection

### PROBLEM

The intersection approaches are narrow and the turning radius needs to be improved. A ditch located at the intersection traverses from the northwest corner to the southeast corner creating safety concerns.

### FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume is 443 on Antwerp Road east of Cuba Road and 514 west of Cuba Road. The volume on Cuba Road is 1,232. Cuba Road is classified as a Rural Major Collector on the Federal Functional Classification System, while Antwerp Road is a local road. Allen County Highway Department stated that they have had problems maintaining this intersection because of the corner radii and proximity of the ditch.

### ANALYSIS

The intersection was reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that the radii need to be improved and the ditch needs to be relocated.

### RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that the culvert and ditch be relocated along with improving the intersections radii.

## 5. Wayne Trace and Hoffman Road Intersection

### PROBLEM

The intersection has a visibility problem when traveling northbound and southbound. The curve radius and approach angles need improved.

### FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume is 1,051 on Wayne Trace northwest of Hoffman Road and 673 south of Hoffman Road. The volume on Hoffman Road east of Wayne Trace is approximately 300. Wayne Trace is classified as a Rural Minor Collector on the Federal Functional Classification System, while Hoffman Road is a local road. Wayne Trace runs in a southeasterly direction that has two curves with Hoffman Road intersecting at the eastern most section of the curve at a 45-degree angle. There are numerous houses on all sides of this area.

### ANALYSIS

The intersection was reviewed with the Allen County Highway Department for project scope and feasibility. Given existing development, improvements to mitigate the western curve must occur on the north side of Wayne Trace. The south approach of Wayne Trace should be modified to improve sight distance and safety concerns.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the south approach of Wayne Trace be realigned to form a T-intersection with Hoffman Road. The south approach of Wayne Trace would then be modified to a stop, yielding to east and west bound traffic on Hoffman Road. Additional right-of-way may need to be acquired on the north side to improve the curve radius.

## **6. Webster Road and Gar Creek Road Intersection**

#### **PROBLEM**

The north and south approach centerlines of Webster Road are offset by approximately 80 feet creating a large intersection. The alignment and size of the intersection creates safety concerns.

#### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Webster Road north of Gar Creek Road is 871 and south of Gar Creek Road is 971. The volume on Gar Creek Road east of Webster Road is 186 and 102 west of the intersection. Webster Road is classified as a Rural Major Collector on the Federal Functional Classification System, while Gar Creek Road is a local road. Structures are located on the northeast, southeast, and southwest corners.

#### **ANALYSIS**

The intersection was reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that to improve traffic flow and eliminate a future traffic and safety problem the north and south approaches of Webster Road should be aligned.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the north approach, because of the vacant farm land on the northwest corner of Webster Road, should be realigned to the west to form a safer intersection with Gar Creek Road.

## **7. Simon Road between State Road 3 and Lima Road**

#### **PROBLEM**

Simon Road runs in an east-west direction that has an s-curve. The s-curve creates a safety concern on this roadway.

#### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Simon Road west of State Road 3 is 170. According to crash records there have not been any reported crashes on this curve in the past 6 years. Simon Road is a local road in the jurisdiction of the Allen County Highway

Department. There is a heavily wooded area and three residential structures located on the north side of the road on the curve.

#### **ANALYSIS**

The s-curve was reviewed with the Allen County Highway Department for project scope and feasibility. The residents in this area submitted concerns to the Allen County Highway Department about the curve problems. It was determined that the curves radii need to be improved to eliminate the safety hazards on this section of Simon Road.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the s-curve be eliminated, reconstructing a portion of the roadway slightly to the south, making the section of road relatively straight.

## **8. McComb Road and Wappes Road Intersection**

#### **PROBLEM**

The intersection is located at the crest of a hill, creating a visibility problem for all approaches. In addition, the east and west approaches have sharp slopes, creating a hazardous intersection when snow and ice are present.

#### **FINDINGS**

McComb Road and Wappes Road are both local roads in the jurisdiction of the Allen County Highway Department. There are three driveways within 100 feet of the intersection; creating special safety and visibility concern. Wappes Road carries 363 vehicles per day south of the intersection. McComb Road carries 72 vehicles per east of the intersection.

#### **ANALYSIS**

The intersection was reviewed with the Allen County Highway Department for project scope and feasibility. It was agreed that the intersection should be lowered and that all the approaches be improved.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that all approaches be improved and that the hill be lowered to create a safer intersection.

## **9. McNabb Road between SR 1 and North County Line Road**

#### **PROBLEM**

McNabb Road runs in a north-south direction that has an s-curve, approximately 1600 feet north of State Road 1.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on McNabb Road north of State Road 1 is 364 in 2012 which has increased from 275 in 2001. McNabb Road is a local road within the jurisdiction of the Allen County Highway Department. A house and two driveways are located adjacent to the northern most part of the curve. There is also a driveway located on the southern most part of the curve.

### **ANALYSIS**

The s-curve was reviewed with the Allen County Highway Department for project scope and feasibility. To improve safety, it was determined that the s-curve needs to be improved.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the s-curve be improved, reconstructing a portion of the roadway slightly to the west. This improvement would increase the radius of the s-curve and improve safety.

## **10. Hoagland Road between US 27 and Mill Road**

### **PROBLEM**

Hoagland Road runs in an east-west direction that has two curves west of US 27 that creates potential safety concerns.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Hoagland Road west of US 27 in 2012 was determined to be 946. The volume in 2006 was 1,105 which is a 14% decrease. Hoagland Road is classified as a Rural Major Collector on the Federal Functional Classification System. There are two driveways located on the eastern curve. There are also ponds located on the west side and east side of the roadway between the curves. There were three crashes on these curves between 2009 and 2011 that resulted in 1 injury.

### **ANALYSIS**

The curves were reviewed with the Allen County Highway Department for project scope and feasibility. This section of Hoagland Road carries heavy truck traffic to a stone quarry that is located just west of the curves. It was determined that, because of the two ponds, only the radii of both curves can be improved.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the radii of both curves be improved to create a safer transition of the roadway.

## **11. Roberts Road and Notestine Road Intersection**

### **PROBLEM**

The north and south approaches of Roberts Road are offset by approximately 320 feet creating two intersections on Notestine Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Roberts Road north of Notestine Road is 334 (2011). The volume has varied from 477 in 2008 to 390 in 2001. The volume on Notestine Road is 1,283 (2011). Prior counts showed a volume of 1,398 in 2008. Notestine Road is classified as a Rural Major Collector on the Federal Functional Classification System, while Roberts Road is a local road. Black Creek and a power sub-station are located between the two intersections. A house is also located on the northwest corner of the north approach. Crash records from 2005 to 2007 showed four crashes at this location and from 2008 to 2011 there were only two crashes. All of the crashes involved property damage only except a crash in 2009 that involved one personal injury.

### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. Originally it was determined that it is most feasible to reconstruct the south approach to the east realigning it with the north approach of Roberts Road. Recent improvements were made at the power sub-station which included expansion of the facility to the east. This improvement now extends entirely across the property of the southern approach of the eastern intersection. Future improvements will have to consider relocation of the north approach with the southern approach due to the expansion of this sub-station.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the north and south approaches of Roberts Road be realigned to form one intersection with Notestine Road. Special consideration will be needed in the design address the Black Creek and power sub-station located adjacent to the intersection.

## **12. Ward Road and Bull Rapids Road Intersection**

### **PROBLEM**

The east and west approaches of Ward Road are offset by approximately 210 feet creating two intersections on Bull Rapids Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Ward Road east of Bull Rapids Road is 120. The volume on Bull Rapids Road is 901. The previous count on Bull Rapids Road was done in 2008. This count showed a volume of 1,113 which is a 19% reduction in traffic. Bull Rapids Road is classified as a Rural Major Collector on the Federal Functional Classification System, while Ward Road is a local road. No crashes occurred at this intersection from 2005 to 2011.

#### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. Because of the vacant farmland on both sides of each approach, it was determined that both approaches should be realigned equally making one new intersection.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that both approaches of Ward Road should be realigned to form one intersection with Bull Rapids Road.

### **13. Wesley Chapel Road between Miller Road and Heffelfinger Road**

#### **PROBLEM**

Wesley Chapel Road has vertical alignment concerns at a driveway creating safety problems.

#### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Wesley Chapel Road south of Miller Road is 306 (2011) which is decreased by 16% from 365 in 2008. Wesley Chapel Road is classified as a Rural Minor Collector on the Federal Functional Classification System.

#### **ANALYSIS**

The intersection was reviewed with the Allen County Highway Department for project scope and feasibility. It was determined to improve the safety of this section of roadway that the hill should be reduced.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the hill be lowered to improve safety.

### **14. Barkley Road and Minnich Road Intersections**

#### **PROBLEM**

The east and west approaches of Barkley Road are offset by approximately 180 feet creating two intersections on Minnich Road.

#### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Barkley Road west of Minnich Road is 23 and 42 to the east. The volume on Minnich Road is 1,829. The volume was 2,077 in 2008. Minnich Road is classified as a Rural Minor Collector on the Federal Functional Classification System, while Barkley Road is a local road. A pond is located on north side of the west approach. 2005 to 2007 crash data includes 4 crashes related to this intersection. One crash

resulted in death and one resulted in a personal injury. Between 2008 and 2011 there was one crash at this location that resulted in a personal injury.

#### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was determined, because of the pond, that the east approach should be reconstructed. The current crash data does not indicate a high index of crash frequency or cost. NIRCC will continue to monitor future growth in traffic and crash data to assess the operation of the intersection.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the east approach of Barkley Road should be realigned to form one intersection with Minnich Road.

### **15. Gerardot Road and Maples Road Intersections**

#### **PROBLEM**

The north and south approaches of Gerardot Road are offset by approximately 220 feet creating two intersections on Maples Road.

#### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Gerardot Road south of Maples Road is 7 vehicles per day. The volume on Maples Road is 56 vehicles per day. Maples Road is classified as a Rural Minor Collector on the Federal Functional Classification System, while Gerardot Road is a local road. Gerardot Road crosses Hoffman Ditch approximately 300 feet north of Maples Road. CSX Railroad Line crosses Gerardot Road approximately 200 feet south of Maples Road. There has been one reported crash at this location in the past seven years (2005-2011).

#### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that it was most feasible to reconstruct the north approach to the west because of the location of the CSX Railroad Line.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the improvements should occur on the north approach of Gerardot Road, because of the proximity of the railroad crossing south of the intersection. The north approach should be relocated 220 feet west to form one intersection with Maples Road. The Allen County Highway Department stated that this improvement could occur when the bridge over the Hoffman Drain is replaced.

### **16. Fackler Road and Maples Road Intersections**

### **PROBLEM**

The north and south approaches of Fackler Road are offset by approximately 330 feet creating two intersections on Maples Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Fackler Road south of Maples Road is 26 and 31 north of the intersection. The volume on Maples Road is also 56 vehicles per day. Maples Road is classified as a Rural Minor Collector on the Federal Functional Classification System, while Fackler Road is a local road. Two residences are located on the southeast corner. No crashes have been reported at this intersection in the past seven years (2005-2011).

### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that to improve traffic flow and eliminate a future traffic and safety problem, the north and south approaches of Fackler Road should be aligned.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the improvements should occur on the north approach of Fackler Road because of the two residences on the southeast corner. The north approach should be relocated 330 feet west to form one intersection with Maples Road.

## **17. Wilson Road and Maples Road Intersections**

### **PROBLEM**

The north and south approaches of Wilson Road are offset by approximately 240 feet creating two intersections on Maples Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Wilson Road south of Maples Road is 68. The volume on Maples Road is 33 east of the intersection and 56 west of the intersection. Maples Road is classified as a Rural Minor Collector on the Federal Functional Classification System, while Wilson Road is a local road. Woods are located on the southeast corner. No crashes have been reported at this intersection in the past seven years (2005-2011).

### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was agreed that the north approach should be realigned to the west.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the improvements should occur on the north approach of Wilson Road because of the woods on the southeast

corner. The north approach should be relocated 240 feet west to form one intersection with Maples Road.

## **18. Snyder Road and Maples Road Intersections**

### **PROBLEM**

The north and south approaches of Snyder Road are offset by approximately 130 feet creating two intersections on Maples Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Snyder Road south of Maples Road is 66 and 68 north of the intersection. The volume on Maples Road is 33. Maples Road is classified as a Rural Minor Collector on the Federal Functional Classification System, while Snyder Road is a local road. Two houses are located on the northwest corner. No crashes have been reported at this intersection in the past seven years (2005-2011).

### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that the south approach should be realigned to the east.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the improvements should occur on the south approach of Snyder Road because of the residence on the northwest corner. The south approach should be relocated 130 feet east to form one intersection with Maples Road.

## **19. Brush College Road and Darling Road Intersections**

### **PROBLEM**

The north and south approaches of Brush College Road are offset by approximately 230 feet creating two intersections on Darling Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Brush College Road south of Darling Road is 214. The volume on Darling Road east of the intersection has increased from 140 in 2001 to 225 in 2008. In 2012 the volume was recounted and determined to be 65. This is a decrease of 71%. Brush College Road and Darling Road are local roads that are within the jurisdiction of the Allen County Highway Department. Houses are located on three of the corners. Brush College Road crosses Black Creek approximately 700 feet south of the intersection. One crash was reported at this intersection in the past three years (2009-2011) which included a person that was injured in the collision.

### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that to improve traffic flow and eliminate future safety concerns and improve traffic flow, the north and south approaches of Webster Road should be aligned.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the improvements should occur on the north approach of Brush College Road, to minimize right of way and relocation costs. The north approach should be relocated 230 feet east to form one intersection with Darling Road.

## **20. Brobst Road and Gar Creek Road Intersections**

### **PROBLEM**

The north and south approaches of Brobst Road are offset by approximately 350 feet creating two intersections on Gar Creek Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current traffic volume on Brobst Road south of Gar Creek Road is approximately 38 vehicles per day. The volume on Gar Creek Road west of the intersection is 46. Brobst Road and Gar Creek Road are both local roads in the jurisdiction of the Allen County Highway Department. A house is located on the northeast corner. No crashes have been reported at this intersection in the past seven years (2005-2011).

### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was agreed that the south approach should be realigned to the west.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the improvements should occur on the north approach of Brobst Road, to minimize right of way acquisition. The north approach should be relocated 350 feet west to form one intersection with Gar Creek Road.

## **21. Berthaud Road and Gar Creek Road Intersections**

### **PROBLEM**

The north and south approaches of Berthaud Road are offset by approximately 150 feet creating two intersections on Gar Creek Road.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Berthaud Road south of Gar

Creek Road is 82 which is a decrease of 28% from the 2008 volume of 114. The volume on Gar Creek Road east of the intersection is 102 (2012) which is down from 120 in 2008. Berthaud Road and Gar Creek Road are both local roads the jurisdiction of the Allen County Highway Department. A house is located on the northwest corner. Bandelier Ditch follows along the south approach of Berthaud Road then heads east and crosses under Gar Creek Road approximately 600 feet east of the intersection. No crashes have been reported at this intersection in the past seven years (2005-2011).

#### **ANALYSIS**

These intersections were reviewed with the Allen County Highway Department for project scope and feasibility. It was determined the ditch will have to be relocated and that the south approach should be realigned to the east.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the improvements should occur on the south approach of Berthaud Road, to minimize impacts on the residence. The south approach should be relocated 150 feet east to form one intersection with Gar Creek Road. As part of the road relocation, the Bandelier Ditch will need to be relocated.

## **22. Valentine Road between US 33 and Dupont Road**

#### **PROBLEM**

Valentine Road runs in a north-south direction that has two 90-degree curves, approximately 450 feet apart.

#### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Valentine Road north of US 33 is 197. Valentine Road is a local road in the jurisdiction of the Allen County Highway Department. A house and two driveways are located adjacent to the western curve. Felger's Peat Moss business is located south and a pond southeast of the curves. Sutorious Ditch crosses under Valentine Road approximately 330 feet north of the curves. The road has a slight jog where it crosses the ditch. One crash was reported on the western curve in the past three years (2009-2011). The crash involved a northbound vehicle that did not negotiate the curve and ran off the roadway and struck a tree resulting in minor injuries to the driver.

#### **ANALYSIS**

This section of road was reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that both curve radii and the jog need to be improved.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the radii of both curves be increased to improve the operating conditions of this roadway. As part of the project, the jog and ditch alignment should be addressed and corrected.

## **23. Hathaway Road between Johnson Road and Hand Road**

### **PROBLEM**

Hathaway Road runs in an east-west direction that has a s-curve, this section of road is unsafe. The s-curve creates a safety concern on this roadway.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Hathaway Road east of Johnson Road is 317 which is an increased from 160 vehicles per day in 2001. Hathaway Road is a local road in the jurisdiction of the Allen County Highway Department. No crashes have been reported at this curve in the past seven years (2005-2011).

### **ANALYSIS**

This section of Hathaway Road was reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that both curve radii need to be improved.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the radius both curves be increased to create a safer roadway.

## **24. Houk Road between Maples Road and Rohrbach Road**

### **PROBLEM**

Houk Road runs in a north-south direction that has a s-curve, this section of road is unsafe. The Houk Road and Maples Road intersection is also located within 20 feet of the CSX Railroad Line.

### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The 2011 average daily traffic volume on Houk Road south of Maples Road was determined to be 22. The volume collected in 2008 was 77 which is a 71% decrease in traffic. Houk Road is a local gravel road in the jurisdiction of the Allen County Highway Department. The CSX Railroad Line crosses Houk Road approximately 20 feet south of Maples Road, allowing stacking for only one vehicle. No crashes have been reported on this curve in the past seven years (2005-2011).

### **ANALYSIS**

This section of Houk Road was reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that the curve radii need to be improved. It was also agreed that the Maples Road and Houk Road intersection needs reconstructed.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that both curve radii should be improved to create a safer roadway. Maples Road should also be reconstructed further north to allow space for more stacking between the intersection and the railroad.

### **25. Ehle Road between Bull Rapids Road and Brush College Road**

#### **PROBLEM**

Ehle Road runs in an east-west direction that has a s-curve, that may pose a potential safety concern.

#### **FINDINGS**

The Northeastern Indiana Regional Coordinating Council conducted traffic counts along this section of roadway. The current average daily traffic volume on Ehle Road east of Brush College Road is 81. Ehle Road is a local gravel road in the jurisdiction of the Allen County Highway Department. Two houses and woods are located on the north side of the road. No crashes have been reported at this location in the past seven years (2005-2011).

#### **ANALYSIS**

Staff reviewed this section of road with the Allen County Highway Department for project scope and feasibility. It was agreed that the radius of the s-curve needs to be improved.

#### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the s-curve radii are improved to create a safer roadway.

### **26. Massilon Road between Barkley Road and Hoagland Road**

#### **PROBLEM**

Massilon Road runs in a north-south direction that has two 90° curves, approximately 200 feet apart.

#### **FINDINGS**

Massilon Road is a local gravel road in the jurisdiction of the Allen County Highway Department. A house is located on the west side of the road just north of the curves. A second house is located west side of the road just south of the curves. The traffic volume on Massilon Road is approximately 10 vehicles per day. No crashes have been reported at this location in the past seven years (2005-2011).

#### **ANALYSIS**

This section of roadway was reviewed with the Allen County Highway Department for project scope and feasibility. It was determined that both curve radii need to be improved.

**RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that both curve radii be improved to create a safer roadway.

# MONROEVILLE

## 1. State Line Road and Monroeville Road

### PROBLEM

Trucks from US 30 are using State Line Road and Monroeville Road to access Monroeville instead of using State Road 101.

### FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted classification counts on State Line Road, Monroeville Road, and State Road 101. These counts indicate that State Line Road south of US 30 has an average daily traffic volume of 604 with a total of 6.5% commercial vehicle traffic. Monroeville Road east of Lortie Road has an average daily traffic volume of 551 with a total of 4.1% commercial vehicle traffic including 4.4% heavy truck. For comparison purposes, a classification count was conducted on State Road 101 north of Monroeville Road. This count indicates an average daily traffic volume of 2205 with a total of 11.76% commercial vehicle traffic.

### ANALYSIS

In recent years there has been a shift in truck traffic to State Road 101 based on traffic count data and classification data. The unusually high number of trucks utilizing State Line Road and Monroeville Road are currently more acceptable.

### RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that this area should continue to be monitored for traffic volume growth with a focus on the pattern of truck traffic.

## 2. Monroeville Road/South Street and Washington Street Intersection

### PROBLEM

This intersection appears to have a higher than anticipated number of crashes.

### FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted traffic counts on Monroeville Road/South Street in Monroeville. The section of Monroeville Road/South Street between Whittern Road and Washington Street has an average daily traffic volume of 1,700. The section between Washington Street and Main Street (State Road 101) has an average daily traffic volume of 2,100. Accident records housed at the Allen County Highway Department were reviewed. These records indicate that two accidents have occurred at this intersection during the last ten years. A field observation at this site found no significant visibility obstructions at the intersection. The angle of intersection is less than ninety degrees but not extremely acute. The angle may require motorists to turn their head slightly more than usual to adequately check for on-coming traffic on South Street.

### **ANALYSIS**

Crash data shows 4 crashes in 2008 and one crash each year in 2010 and 2011. Of the 6 total crashes from the past 3 years there were no injuries or fatalities reported as a result of the collisions.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the crash data for this intersection continue to be monitored. If a problem becomes apparent in the frequency of crashes, an investigation should be initiated to determine and address the issue.

## **4. State Road 101 between Monroeville and US 30**

### **PROBLEM**

This roadway surface needs to be improved.

### **FINDINGS**

State Road 101 between Monroeville and US 30 is an asphalt roadway with an average daily traffic volume of approximately 2,500 on this section. A classification count indicates this section of roadway carries a total of 9.87% commercial vehicle traffic including 7.96% heavy truck. The roadway is narrow with limited shoulders. The road surface is rough in some locations. State Road 101 north of US 30 has been significantly rehabilitated with improved pavement, pavement width, and improved shoulders. State Road 101 is classified as a Rural Major Collector.

State Road 101 is a north-south route connecting the Town of Monroeville with US 30. This section of State Road 101 serves as a primary access route to surrounding communities such as New Haven, Woodburn, and the eastern and northern portions of Fort Wayne. To the south, State Road 101 connects Monroeville to Decatur, two communities with strong economic ties. The Monroeville Industrial Park is located on the north edge of town at the intersection of State Road 101 and Monroeville Road. Improving State Road 101 would help economic development efforts in the Monroeville area.

### **ANALYSIS**

The Indiana Department of Transportation placed chip and seal surface over this section of roadway in 2009. Another application of chip and seal is scheduled to occur in fiscal year 2015-2016.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council recommends that the Indiana Department of Transportation consider a rehabilitation project on this section of State Road 101 to include wider travel lanes and improved shoulders.

## **5. Whittern Road and Monroeville Road**

### **PROBLEM**

This intersection is prone to flooding when heavy rains occur creating a safety issue for motorists. Flooding also occurs periodically during winter months, which increases the safety concerns.

### **FINDINGS**

The intersection at Monroeville Road and Whittern Road carries approximately 1,350 vehicles per day. Crash data was reviewed to and determined there were 3 crashes at this intersection during 2009 through 2011.

### **ANALYSIS**

Crash history does not appear to indicate that crashes are occurring at this intersection due to the standing water. The potential for crashes exists when the roadway becomes covered with water or ice. The lack of crash history may be a result of motorists being aware of this potential hazard.

### **RECOMMENDATION**

Improvements to correct drainage at this location should be considered. Interim actions to pre-warn motorists of standing water or ice should continue until improvements are made.

## **6. Forest Avenue and Water Street (SR 101)**

### **PROBLEM**

Drainage at this location does not work properly and floods the roadway during rain storms. This creates safety issues for motorists.

### **FINDINGS**

Water Street (SR 101) carries approximately 2,487 vehicles per day. Forest Street is a local roadway that has not been analyzed for traffic volume. Staff has estimated the volume of traffic to be approximately 500 vehicles per day. Crash data was reviewed and found that two crashes at this location in the past three years. Both crashes were during dry and clear weather conditions with no mention of standing water.

### **ANALYSIS**

Potential safety issues exist at this location when conditions are favorable for flooding. Water Street (SR 101) serves this community as the primary arterial for both local and through traffic.

### **RECOMMENDATION**

NIRCC will work with local officials and INDOT representatives to evaluate this issue and identify an appropriate corrective action.

# WOODBURN

## 1. Bull Rapids Road between US 24 and Woodburn

### PROBLEM

The volume of traffic on this section of roadway and potential for development concerns local officials.

### FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted several traffic counts on Bull Rapids Road between US 24 and Main Street in Woodburn. The annual average daily traffic volume north of Hickory Street in 2012 was determined to be 1,087. This volume was obtained after the new alignment of US 24 was opened to SR 101. Prior to the new roadway the volume on this section of roadway was 2,100 (2008). The second count was taken between Hickory Street and Main Street which was determined to be 1,672. The 2008 volume on this section was 2,355. This section of Bull Rapids Road has a pavement width of approximately 20 – 21 feet. Bull Rapids Road is classified as a Rural Major Collector.

### ANALYSIS

The traffic volume does not appear to be unusually high for a two-lane roadway. As development occurs in Woodburn and the surrounding area, the volume of traffic will likely return to the levels seen prior to the new alignment of US 24.

### RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends the traffic volume should be monitored on this roadway as well as crash data.

## 2. Hickory Street from Lynwood Street to Woodburn Road New Road Construction from Bull Rapids Road to Woodburn Road/Hickory Street

### PROBLEM

Recent utility improvements have been made along this corridor. Officials would like to extend this street to improve access for the City of Woodburn in conjunction with the proposed storm drain project. In addition, local officials feel a new road from Hickory Street north to Bull Rapids Road is also needed to provide a route from Woodburn Road to Bull Rapids Road that does not have to cross the railroad alignment.

### FINDINGS

The Northeastern Indiana Regional Coordinating Council does not have any projected traffic counts for this roadway.

## **ANALYSIS**

No analysis of this project was conducted. Staff recognizes the benefit of the extension Hickory Street and the new roadway to provide additional access for residents that would not involve crossing an at-grade railroad crossing. The new alignment would also relieve some issues at the intersection of Bull Rapids Road and Main Street (SR 101)

## **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council will work with INDOT to include eligible portions of the proposed roadway on the Federal Functional Classification System. The City of Woodburn should seek funding sources for this project and begin communication with INDOT officials and the public about this project.

## **3. Stenger Street from Becker Road to Oak Street**

### **PROBLEM**

Officials would like to construct sewers lines, storm drains and curbs along Stenger Street.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council supports the proposed improvements to existing infrastructure to maintain the existing transportation network.

## **4. Ash Street, Sunview Drive, and Coverdale Drive**

### **PROBLEM**

These streets are deteriorating and need to be reconstructed.

### **RECOMMENDATION**

The Northeastern Indiana Regional Coordinating Council supports the proposed improvements to existing infrastructure to maintain the existing transportation network.

## **5. Bicycle and Pedestrian Facilities**

### **A. Community Park (Southeast Corner of Fahlsing Road and Main Street)**

The city of Woodburn is in the process of developing plans for a 28 acre community recreation center at this location. Northeastern Indiana Regional Coordinating Council would recommend that a trail be considered on Fahlsing Road from the intersection at Main Street south to the access of the park. An additional trail should also be added from the Main Street intersection east to the intersection of Homestead Trail. These two connections would provide access to the park for residents within the area. A complete internal trail should be included within the park. These two trail sections and internal park section will be added to the Northeastern Indiana Regional Coordinating Council Regional Bicycle and Pedestrian Plan.

### **B. Main Street Trail: Union Street to Fahlsing Road**

The City of Woodburn is planning to reconstruct utilities along Main Street (State Road 101) from the intersection of Union Street to Fahlsing Road. This project will require the existing sidewalks to be removed to accommodate the construction of the utilities. The Northeastern Indiana Regional Coordinating Council would recommend that the existing sidewalks be replaced with a trail. Special consideration will need to be given to the proposed trail between Center Street and Union Street because of the “Main Street” design. Various options could be considered to accommodate pedestrians, bicycles, streetscape, and parking. The “Main Street Design” should consider bicycle and pedestrian components. This trail section will be added to the Northeastern Indiana Regional Coordinating Council Regional Bicycle and Pedestrian Plan.

### **C. Woodburn Road: Main Street to Webster Road (Woodland School Complex)**

Woodburn Road is under the jurisdiction of Allen County officials however it provides a significant amount of access to residents of the City of Woodburn. Officials would like to see a facility on this corridor to provide bicyclist and pedestrians with a safe connection between the City of Woodburn and the schools located at the intersection with Webster Road. Northeastern Indiana Regional Coordinating Council would recommend that efforts be made to construct shoulder lanes on Woodburn Road throughout this corridor. Coordination with Allen County and City of Woodburn officials will be necessary to implement this project. Future resurfacing or reconstruction of this roadway should consider incorporation of this improvement. This trail section will be added to the Northeastern Indiana Regional Coordinating Council Regional Bicycle and Pedestrian Plan.

## **Summary**

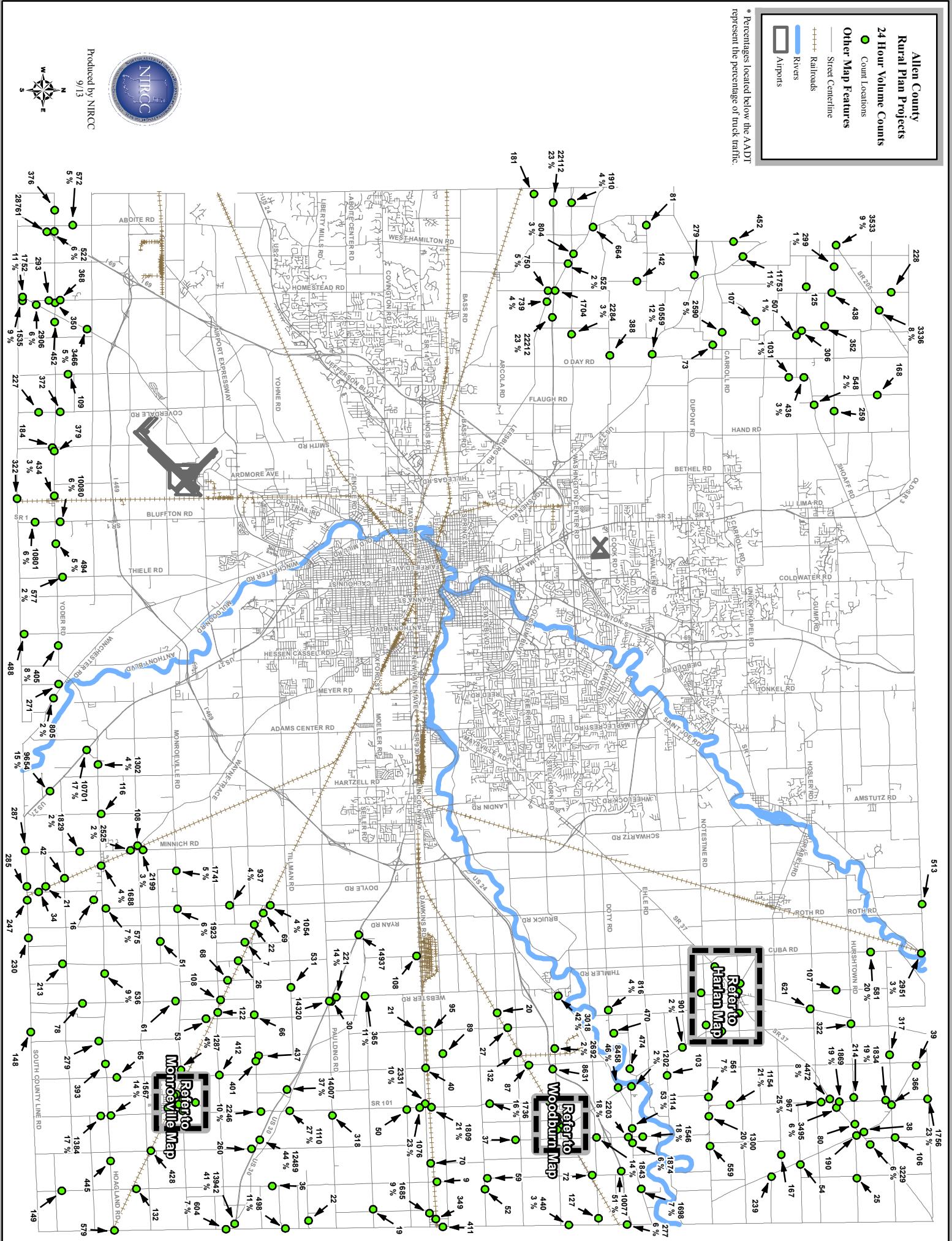
The Northeastern Indiana Regional Coordinating Council engaged a rural transportation planning initiative that has been extremely successful. The identification of problem areas, data collection and analysis, and developing of solutions brought a clearer understanding of the transportation system to all participants. It was anticipated that only a small number of problem areas would be identified and a short list of improvement projects be developed. The number of problem areas identified in the rural and urban communities was much higher than envisioned. This first initiative in rural transportation planning developed an awareness of the need for a continuous planning process. As development occurs, potential problem areas need to be monitored. A periodic review of pending projects to reexamine and adjust project priorities would ensure the most urgent projects get implemented. An analysis measuring the success of implemented projects would provide useful information to decision-makers of the most effective strategies for improving the transportation system.

The transportation planning process and program of projects will provide the different divisions of the Indiana Department of Transportation with early information on projects for planning and programming needs. This will help facilitate better management of the entire transportation system.



## Appendix A

### *Traffic Count Maps*



Harlan, IN  
Traffic Counts

24 Hour Volume Counts

Count Locations

Other Map Features

Street Centerline

\* Percentages located below the AADT  
represent the percentage of truck traffic.



Produced by NIRCC  
9/13

CUBA RD

TRAMMEL RD

ANTWERP RD

THIMILAR RD

SR 37  
7364  
6%

1273  
5%

1383  
5%

2ND ST

SCHOOL ST

SPENCERVILLE RD

REEP RD

ANTWERP RD

334

STOPHER RD

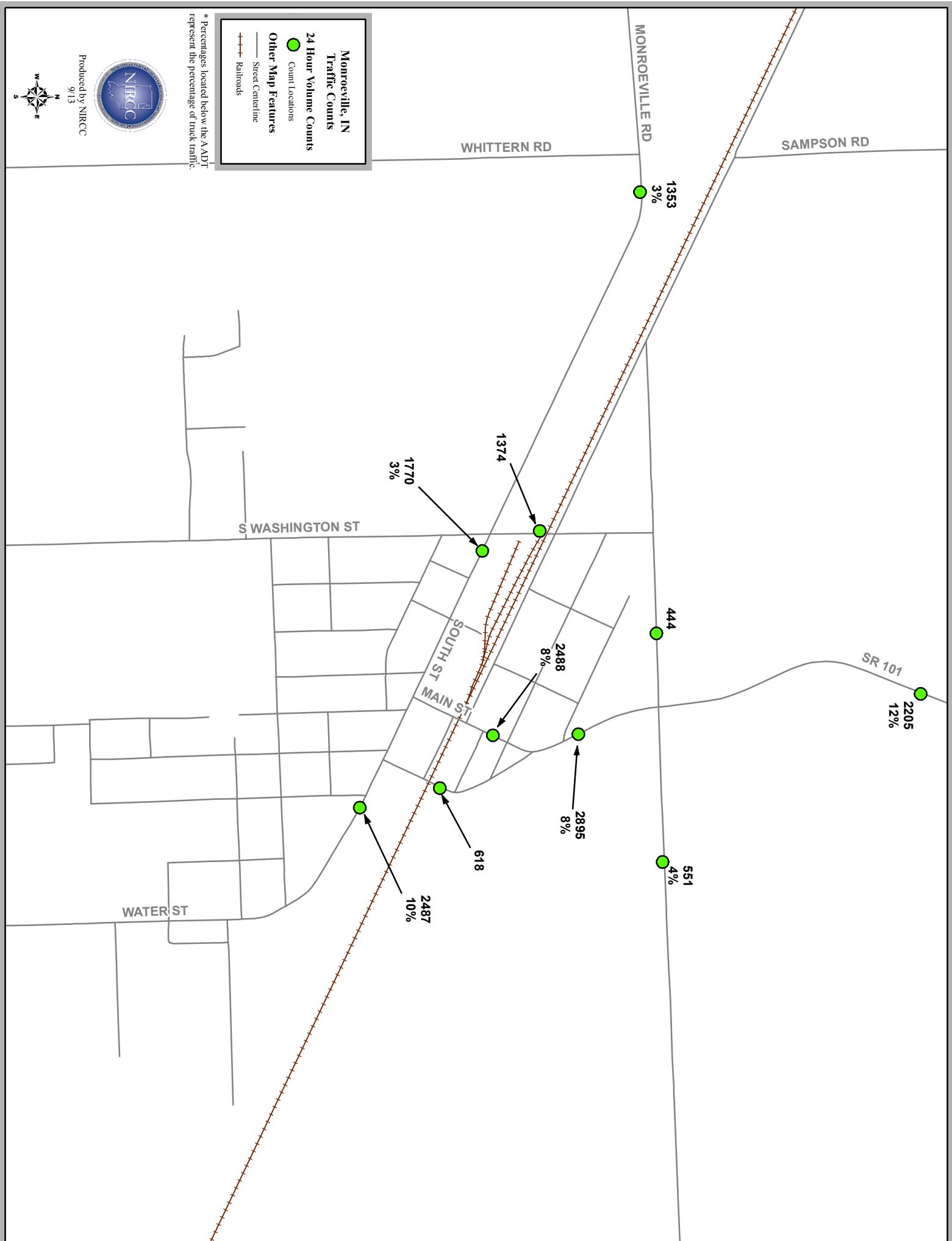
HAMM RD

NOTESTINE RD

1283  
3%

BULL RAPIDS RD

406  
3%



Woodburn,IN  
Traffic Counts

24 Hour Volume Counts

Count Locations

Other Map Features

Street Centerline

Railroads

\* Percentages located below the AADT  
represent the percentage of truck traffic.



Produced by NIRCC  
9/13



357

SR-101

WOODBURN RD

5136

3538  
10 %

3037  
2 %

1671  
3 %

701

910  
2 %

MAIN ST

FAHLSING RD

WOODBURN RD

BULL RAPIDS RD

SR 101



## Appendix B

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### *Functional Classification Maps*

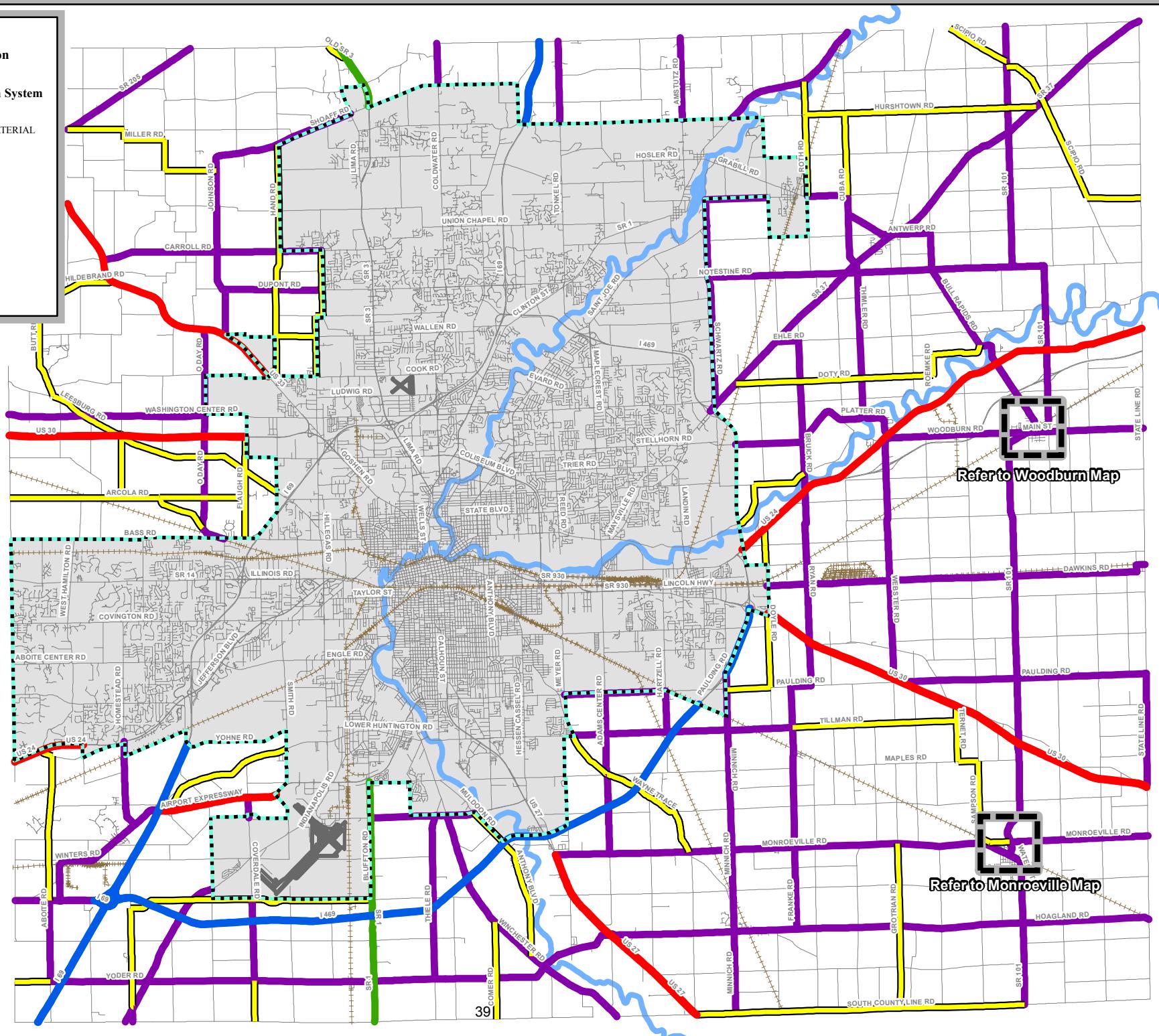
**Allen County  
Functional Classification  
System**

**Rural Functional Classification System**

- RURAL INTERSTATE
- RURAL OTHER PRINCIPAL ARTERIAL
- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR

**Other Map Features**

- Street Centerline
- Railroads
- Rivers
- Airports
- Urban Boundary



Produced by NIRCC



Allen County  
Functional Classification  
System  
Harlan, IN

Rural Functional Classification System

- RURAL INTERSTATE
- RURAL OTHER PRINCIPAL ARTERIAL
- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR

Other Map Features

- Street Centerline
- Railroads
- Rivers



Produced by NIRCC



CUBARD

TRAMMEL RD

ANTWERP RD

SR 37

ANTWERP RD

BULL RAPIDS RD

SR 37

THIMLER RD

NOTESTINE RD

SR 37

SAMPSON RD

WYBURN RD

SR 101

MONROEVILLE RD

MONROEVILLE RD

MAIN ST (SR 101)

(SR 101)

WATER ST

SR 101

**Allen County  
Functional Classification  
System  
Monroeville, IN**

**Rural Functional Classification System**

- RURAL INTERSTATE
- RURAL OTHER PRINCIPAL ARTERIAL
- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR

**Other Map Features**

- Street Centerline
- +— Railroads
- River



Produced by NIRCC



Allen County  
Functional Classification  
System  
Woodburn, IN

Rural Functional Classification System

- RURAL INTERSTATE
- RURAL OTHER PRINCIPAL ARTERIAL
- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR

Other Map Features

- Street Centerline
- Railroads
- Rivers



Produced by NIRCC



WOODBURN RD

SR 101

BULL RAPIDS RD

MAIN ST

FAHLSING RD

WOODBURN RD

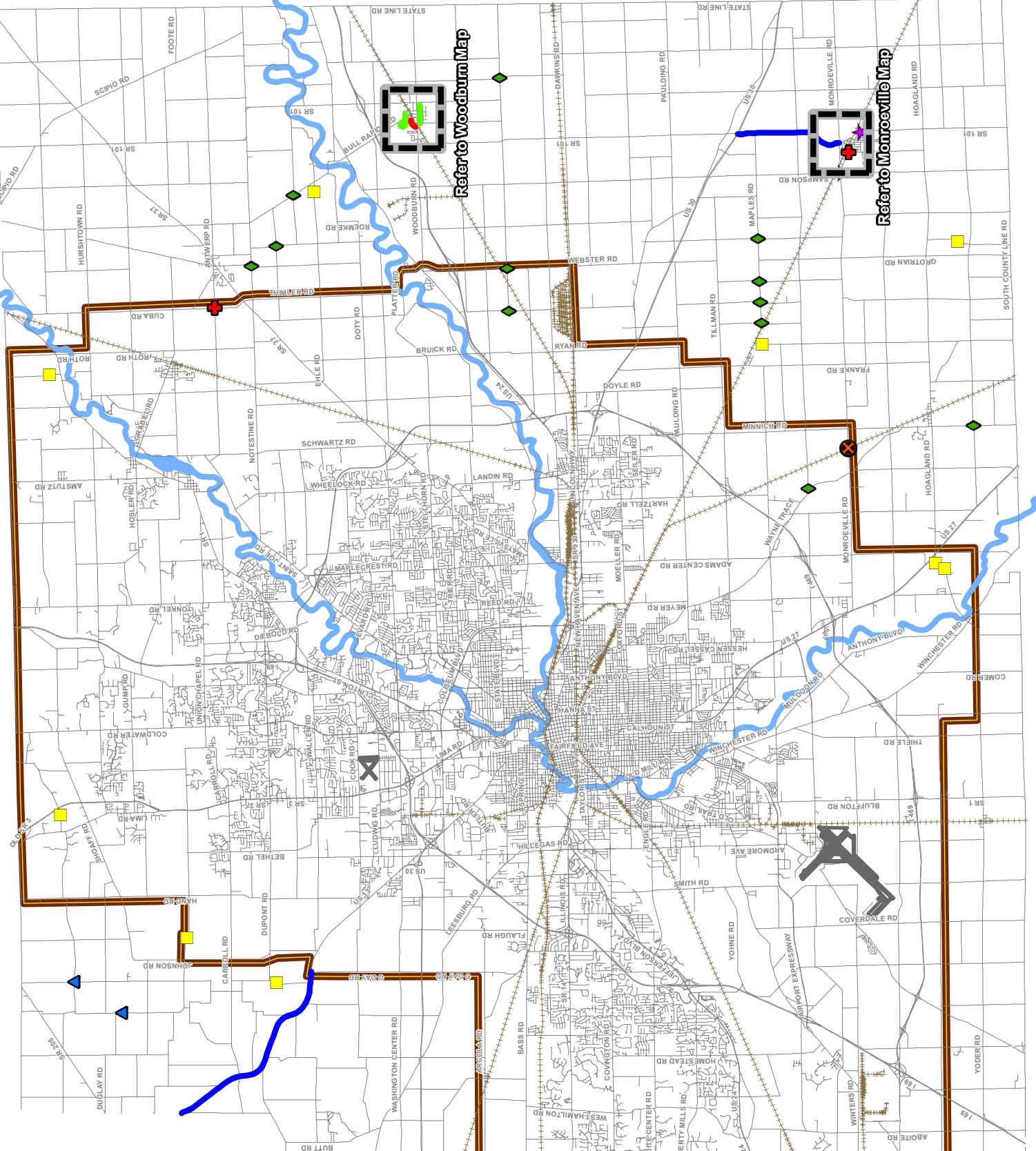
SR 101



## Appendix C

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### *Project Maps*



**Harlan, IN**  
Rural Plan Projects

**Road Project Types**

Intersection

Realignment

Proposed Shoulder Lane

Proposed Trail

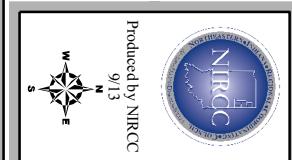
Other Map Features

— Street Centerline



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9/13



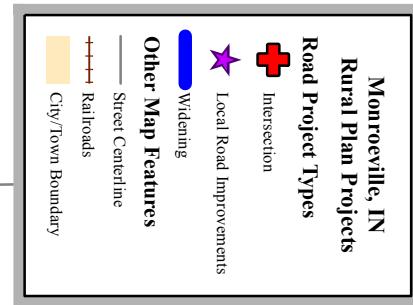


Produced by NIRCC

9/13



WHITTERN RD



MCARDLE RD

S WASHINGTON ST

MAIN ST

SOUTH ST

W FOREST ST

E FOREST ST

WATER ST

SR 101

MONROEVILLE RD

SAMPSON RD

MONROEVILLE RD

Woodburn, IN  
Rural Plan Projects

Road Project Types

Proposed Trail

Proposed New Construction

Local Road Improvements

On Street Bike and Trail Facility Types

Proposed Shoulder Lane

Street Centerline

Railroads

City/Town Boundary

Produced by NIRCC



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