

Transportation Plan

(Update)

DeKalb County

2014

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 will 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 in 2000 to the smaller urban communities and rural portions of Allen and DeKalb Counties outside of the Metropolitan Planning Area. These two counties were selected for the first rural planning initiative in NIRCC's region based on the extensive interaction of their social, economic, and transportation systems. The potential of expanding this transportation planning service to other counties remains a viable option. The objective of these activities was to facilitate a cooperative, coordinated and comprehensive transportation planning process for all areas within the region. The process 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. This report documents the planning activities conducted in DeKalb County in 2000 and updates that have occurred in the years following the original Transportation Plan.

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 area of DeKalb 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.

In 2011 the Northeastern Indiana Regional Coordinating Council collected and recorded traffic data, roadway characteristics. Staff updated demographic data and land use variables within the urban communities and rural areas. Analyses were performed to reviewed identified problems, assess current conditions, and develop viable solutions. A comparison of traffic data assisted in assessing additional needs or changes in priority of projects previously identified. This report documents the transportation planning activities including the data collected, the analyses performed, and the recommended transportation improvements. This report serves as a multi-year plan for the urban communities and rural area in DeKalb County.

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. Forty-eight hour counts were collected at 186 locally owned locations and 152 state locations in DeKalb County including counts conducted in Auburn, Butler, Garrett, and Waterloo. The traffic counting effort was focused on roadways classified on the Federal Functional Classified System, unclassified roadways identified by local officials as concern areas and at 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.

Classification counts were conducted at 73 local locations and 95 state 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. 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

The 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, and other pertinent data. This information was checked against the railroad crossing inventory data for accuracy. Traffic volumes collected at these railroad

crossings are provided to the Indiana Department of Transportation to assist in the update of the railroad-crossing inventory.

Demographic Data and Land Use Inventory

Demographic data assists planners by identifying where residents live in addition to where they travel to for work, shopping, education, or to pursue recreational activities. Comparing information from various years establishes trends to show where growth is occurring and provides insight on where future growth has a potential to 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 in DeKalb County. Census information including 2010 base information on population and housing units was utilized in 2014. Meetings were held with local representatives to obtain existing and proposed land uses. The land use inventories were reviewed. Maps were prepared based upon the information collected. 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 DeKalb 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 original recommendations for improvements and new were reviewed by local governments and the Northeastern Indiana Regional

Coordinating Council. Upon approval, the plan update 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. 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.

Safety Management

Crash records from 2011, 2012 and 2013 were obtained through the Indiana State Police database. The Automated Reporting Information Exchange System (ARIES) is an electronic database that the Northeastern Indiana Regional Coordinating Council can access through the internet to extract crash records. All crashes that occurred in DeKalb County are sent to the Indiana State Police and input into this database. Staff extracted, summarized and mapped all the crashes the database has coded in DeKalb County to provide a location summary. A crash summary is included as an appendix in the Transportation Plan to provide information for local officials and planning staff to identify and track hazardous locations.

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.

The Northeastern Indiana Regional Coordinating Council established a template to follow for identifying, documenting, analyzing and developing a solution to 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 performed 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 includes updated information for locations identified in the previously adopted transportation plan and new projects identified during the update process. The listing will address all of the current locations identified in DeKalb County including the City of Auburn, Town of Butler, City of Garrett, and Town of Waterloo.

DEKALB COUNTY

1. County Road 61 between Butler and Hamilton

PROBLEM

An increase in the number of trucks between Butler and Hamilton related to a new agricultural use facility.

FINDINGS

County Road 61 is a 2-lane road that has a bituminous surface and a lane width of 9 feet in each direction. The Northeastern Indiana Regional Coordinating Council conducted multiple traffic volume counts and classification counts north of County Road 16. As a result of these traffic counts, the AADT (annual average daily traffic) has slightly decreased. In addition, the truck percentage has also decreased from 5.08% in 2000 to 2.50% in 2011.

Count History - CR 61 north of CR 16

2011 AADT = 656 (0.4 mile north of CR 16) 2.5% trucks

8/25/2009 AADT = 610 (0.1 mile north of CR 16) 4.42% trucks

6/30/2009 AADT = 513 (0.1 mile north of CR 16) 6.67% trucks

2006 AADT = 982 (0.3 mile north of CR 16) 4.07% trucks

2000 AADT = 759 (400 feet north of CR 16) 5.08% trucks

ANALYSIS

The traffic volume on this roadway does not appear to be unusually high for a rural road. The percent of truck traffic indicates that approximately forty trucks use this roadway each day. The classification study shows that two percent of the total volume, or fifteen trucks, were present. "Trucks" include all "heavy trucks", ranging in size from a typical dump truck to tractor-trailer semis. The nine-foot lane width on this road is narrow for these types of vehicles.

RECOMMENDATION

Continue to monitor the traffic volume growth and truck percentages on County Road 61.

2. County Road 29 between Auburn and County Road 60

PROBLEM

The traffic volume on County Road 29 is increasing due to growth in the area. Local officials feel that improvements will be needed in the future to address the increase in traffic.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted a traffic volume count as well as a classification count on County Road 29. The 2009 count showed an AADT of 2,090 and a 2011 count showed the volume at 1,860. The 2011 AADT went up by 23% from 2000 AADT of 1,512. The percentage of trucks went up from 2.68% in 2000 to 4.9% in 2011. Staff also collected two counts south of County Road 52. The 2008 count showed an AADT of 993 and a 2011 count showed the volume at 962. Since 2000 the traffic volume went down from an AADT of 1,768 in 2000 to an AADT of 962 in 2011. Staff noted that the roadway is bituminous and is 20 feet in width, 10-foot lanes in each direction. County Road 29/Center Street is currently classified as a rural minor collector local road south of County Road 52 an Urban Minor Arterial north of County Road 52.

CR 29 north of CR 52

2011 AADT = 1,860 (0.3 mile south of Auburn Drive – 200' n/o RR) 4.9% trucks
2009 AADT = 2,090 (0.3 mile south of Auburn Drive – 150' n/o RR) 2.23% trucks
2006 AADT = 1,733 (0.3 mile south of Auburn Drive – 100's/o RR) 1.59% trucks
2000 AADT = 1,512 (0.4 mile north of CR 52 – 100' n/o RR) 2.68% trucks

CR 29 south of CR 52

2011 AADT = 962 (0.3 mile north of CR 60) no truck % available
2008 AADT = 993 (0.1 mile north of CR 60) no truck % available
2000 AADT = 1,768 (100 feet south of CR 52) no truck % available

ANALYSIS

Residential growth has occurred within this area at Bear Creek Subdivision in the past 10 years. South of County Road 52, Lakewood Baptist School has also increased enrollment which has resulted in additional traffic. A sixty-acre parcel of land on the southeast corner of the CSX railroad at County Road 29 is available for development as an industrial site. Upon development of this site, the traffic volume and truck percentage on County Road 29 would increase. The City of Auburn has extended water and sewer utilities along this corridor from Auburn Drive to County Road 62. Based on these proposed and planned developments the future traffic volume projections will range from 2,500 to 6,200 vehicles per day on various sections. County Road 29/Center Street is gaining importance as a corridor linking residential, educational, and industrial developments in DeKalb County and the City of Auburn.

RECOMMENDATION

Developable areas near this roadway are abundant and local officials feel that future development will occur at which time roadway improvements will be necessary. NIRCC will continue to work with local officials and collect needed traffic information to determine what improvements will be needed on this roadway as development and traffic increase.

3. County Road 52 between Old State Road 427 and County Road 35

PROBLEM

County Road 52 is being affected by the growth of residential development and local officials feel that improvements will be needed in the future to address the increase in traffic.

FINDINGS

County Road 52 is a 2-lane road that has a bituminous surface and a lane width of 10 feet in each direction. County Road 52 is currently classified as an Urban Collector. The Northeastern Indiana Regional Coordinating Council conducted two traffic volume counts on County Road 52. On County Road 52 east of Wayne Street (Old SR 427), the 2009 count showed an AADT of 956 and a 2011 count showed the volume at 1,260. Since 2000, the traffic volume has slowly increased with an exception of 2009 where the volume dropped to 956. The roadway west of County Road 35 shows the 2009 had an AADT of 568 and the 2011 count showed an AADT of 1,233. From 2000 to 2006 the volume went up by almost half but by 2009 it went back down to what it used to be in 2000. By 2011 the volume increased back to what it used to be in 2006.

CR 52 east of Old SR 427

10/6/2011 AADT = 1,260 (0.2 mile west of CR 29) no truck % available
9/15/2011 AADT = 1,310 (0.2 mile east of Old SR 427) no truck % available
2009 AADT = 956 (0.4 mile west of CR 29) no truck % available
2006 AADT = 1,219 (0.15 mile west of CR 27) no truck % available
2000 AADT = 1,183 (0.1 mile east of Old SR 427) no truck % available
2000 AADT = 989 (0.4 mile east of Old SR 427) 7.25% trucks

CR 52 west of CR 35

10/6/2011 AADT = 1,233 (0.1 mile east of CR 31) no truck % available
9/13/2011 AADT = 1,166 (0.1 mile east of CR 31) no truck % available
2009 AADT = 568 (0.4 mile west of CR 35) no truck % available
2008 AADT = 518 (0.1 mile east of CR 31) no truck % available
2006 AADT = 1,050 (0.1 mile east of CR 31) no truck % available
2000 AADT = 626 (0.2 mile west of CR 35) no truck % available

ANALYSIS

The area surrounding County Road 52 in DeKalb County south of Auburn is changing from agricultural to residential and commercial/industrial land uses. County Road 52 provides a direct connection to Old SR 427 and County Road 29. Utilizing Old SR 427 and County Road 11a, access to Interstate 69 is easily attainable from County Road 52. Staff feels that this connectivity to other routes will continue to encourage growth along this corridor. The Bear Creek Subdivision on County Road 52 between County Road 31 and County Road 35 is still constructing homes with plans to potentially expand further south. The City of Auburn has extended water and sewer utility services south on County

Road 29 to County Road 52 and east on County Road 52 to the Bear Creek Subdivision. When completed, the proposed developments in this area will increase traffic volumes 2,000 to 3,000 vehicles per day. It is estimated that the proposed developments will be completed within the next five to seven years.

RECOMMENDATION

As the development continues to occur near County Road 35, staff will monitor the impact on the roadway to identify needed improvements.

4. Intersection of County Road 46A/Old Brick Road and County Road 35

PROBLEM

The distance between the at-grade railroad crossing on Old Brick Road/County Road 46A and the intersection with County Road 35 presents an issue of congestion and safety.

FINDINGS

The volume of traffic on Old Brick Rd south of Auburn Drive was slightly decreasing from 2000 to 2009 but began to increase again in 2011. Traffic on County Road 35 south of County Road 46A has remained consistent since 2006. The 2009 count showed an AADT of 2,626 with 4.76% trucks and the 2011 count showed an AADT of 2,434 with 3.35% trucks compared to the 2006 AADT of 2,578 with 4.02% trucks.

The CSX railroad is an active line that can carry up to seventy-four trains per day. No new intersection counts have been conducted since 2000. The 2000 intersection counts identified the south through movement on County Road 35 and the eastbound to southbound right turn from County Road 46A to County Road 35 as the predominant movements. Recent crash data does not show a history of crashes at this location at this time. There have been 5 crashes near this location in the past 5 years.

CR 46A south of Auburn Drive

2011 AADT = 1,861 (0.3 mile south of Auburn Drive) 1.52%
2009 AADT = 1,494 (0.3 mile south of Auburn Drive) 9.92%
2006 AADT = 1,713 (0.3 mile south of Auburn Drive) 5.99%
2000 AADT = 2,304 (400 feet south of Auburn Drive) no truck % available

CR 35 south of CR 46A

2011 AADT = 2,434 (0.1 mile south of CR 46A – 400 feet s/o RR) 3.35% trucks
2009 AADT = 2,626 (0.2 mile south of CR 46A – 0.1 mile s/o RR) 4.76% trucks
2006 AADT = 2,578 (0.2 mile north of CR 52 – 300 feet s/o RR) 4.02% trucks

CR 35 north of CR 46A

2011 AADT = 2,165 (200 feet south of SR 8) 2.17% trucks
2008 AADT = 1,957 (400 feet south of SR 8) no truck % available
2005 AADT = 2,018 (400 feet south of SR 8) no truck % available
2003 AADT = 1,973 (300 feet south of SR 8) no truck % available
2000 AADT = 1,738 (0.15 mile south of SR 8) no truck % available

CR 35 south of CR 56

2011 AADT = 1,987 (0.4 mile north of CR 60) 3.48% trucks

2009 AADT = 1,976 (0.1 mile north of CR 60) 5.03% trucks

2000 AADT = 2,193 (0.2 mile south of CR 56) no trucks % available

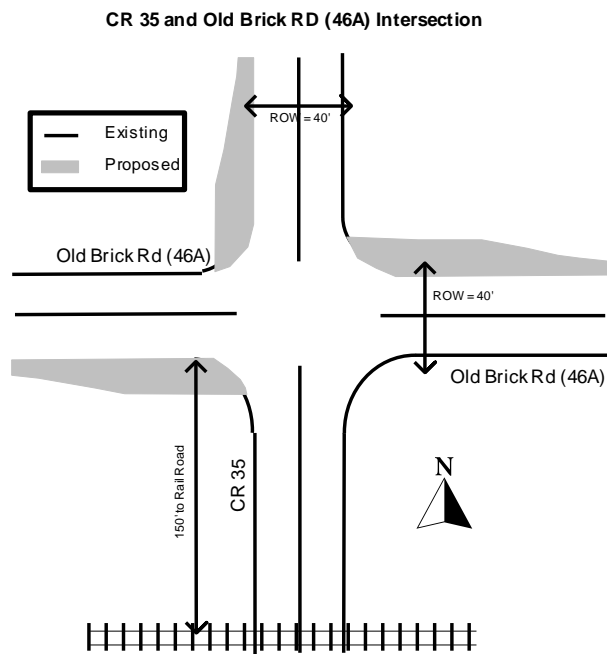
ANALYSIS

County Road 35 is classified as a Rural Major Collector. County Road 46A is classified as an Urban Minor Arterial west of County Road 35 and Rural Minor Collector east of County Road 35. Recent housing development within the area has had little impact on this intersection. Future growth is still projected to increase the entering number of vehicles by an additional 1000 vehicle trips per day. The high frequency of rail traffic (average of three trains per hour) will cause significant traffic flow disruption as additional development occurs and traffic volumes increase.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends the installation of additional lanes at this intersection to allow traffic movements through the intersection regardless of a train delay. The intersection count data indicates that the eastbound approach would benefit the most from an additional lane. The current configuration of the intersection is shown below in Figure 1 as well as the shaded areas that show the proposed lane additions.

Figure 1



5. County Road 35 from County Road 34 to County Road 52

PROBLEM

There has been an increase in traffic on County Road 35 due to development. There has also been an increase in the number of trucks. Local officials desired base data to monitor this growing corridor.

FINDINGS

The Northeastern Indiana Regional Coordinating Council collected two updated counts on County Road 35 south of County Road 56. The 2009 count showed an AADT of 1,976 and a 2011 count showed the volume at 1,987. The 2011 AADT went down by 9% from the 2000 AADT of 2,193. The percentage of trucks has been consistent since 2000; the 2011 truck percentage was 3.48% compared to the truck percentage of 3.68% in 2000. Staff also collected two counts north of County Road 40A. The 2009 count showed an AADT of 3,026 and a 2011 count showed the volume at 3,498. Since 2000 the traffic volume has stayed consistent with an exception of the 2009 count showing the AADT of 3,026 compared to other counts showing the AADT of 3,567 (2000), 3,586 (2006), and 3,498 (2011). The traffic volume on County Road 35 south of State Road 8 has slowly increased since 2000. County Road 35 is a bituminous road with a pavement width of approximately 19 feet providing for two 9½-foot lanes.

CR 35 south of CR 56

2011 AADT = 1,987 (0.4 mile north of CR 60) 3.48% trucks
2009 AADT = 1,976 (0.1 mile north of CR 60) 5.03% trucks
2000 AADT = 2,193 (0.2 mile south of CR 56) no trucks % available

CR 35 north of CR 40A

2011 AADT = 3,498 (0.2 mile north of CR 40A) 2.66% trucks
2009 AADT = 3,026 (0.4 mile south of CR 40) 5.85% trucks
2006 AADT = 3,586 (0.3 mile north of CR 40A) 4.72% trucks
2000 AADT = 3,567 (400 feet north of CR 40A) no truck % available

CR 35 south of SR 8

2011 AADT = 2,165 (200 feet south of SR 8) 2.17% trucks
2008 AADT = 1,957 (400 feet south of SR 8) no truck % available
2005 AADT = 2,018 (400 feet south of SR 8) no truck % available
2003 AADT = 1,973 (300 feet south of SR 8) no truck % available
2000 AADT = 1,738 (0.15 mile south of SR 8) no truck % available

ANALYSIS

Due to the amount of housing development that is occurring in this area the future traffic volumes are estimated to be between 3,250 and 4,000 between State Road 8 and County Road 52. The future traffic volume north of State Road 8 could increase to between 6,000 and 7,000 depending on the intensity of commercial development in the area.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that this corridor be monitored to maintain adequate information on the changing travel characteristics of this corridor. In addition, the Northeastern Indiana Regional Coordinating Council feels that special attention should be placed on monitoring the intersections of County Road 35 with State Road 8, County Road 40A, and County Road 46A as development occurs along this corridor.

6. County Road 56 between State Road 205/State Road 327 Intersection & County Road 17

PROBLEM

The roadway is too narrow for the volume of traffic and drainage problems are occurring along this section of roadway. There are plans for future development that Garrett feels will deteriorate the current roadway conditions and operating levels.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted two updated counts on County Road 56 east of SR 205/327. The 2008 count showed an AADT of 3,098 and a 2011 count showed the volume at 3,026. The 2011 AADT is consistent with the 2000 count which had an AADT of 2,980. Staff also collected two updated counts on CR 11A west of Interstate 69. The 2008 count showed the volume at 4,719 and a 2011 count showed an AADT of 4,717. Since 2000, the traffic volume has gone up by 23% from an AADT of 3,900 in 2000 to an AADT of 4,717 in 2011. County Road 56 has a bituminous surface twenty feet wide providing for one ten-foot travel lane in each direction.

CR 56 east of SR 205/327

2011 AADT = 3,026 (0.2 mile east of SR 327) 6.76% trucks
2008 AADT = 3,098 (150 feet east of SR 327) no truck % available
2005 AADT = 3,523 (0.1 mile east of SR 327) no truck % available
2003 AADT = 3,453 (200 feet east of SR 327) no truck % available
2002 AADT = 3,454 (0.15 mile east of CR 17) no truck % available
2000 AADT = 2,980 (0.2 mile east of SR 327) no truck % available

CR 11A west of Interstate 69

2011 AADT = 4,717 (200 feet west of Interstate 69) no truck % available
2008 AADT = 4,719 (0.1 mile west of Interstate 69) no truck % available
2005 AADT = 4,901 (0.15 mile west of Interstate 69) no truck % available
2003 AADT = 4,845 (100 feet west of Interstate 69) no truck % available
2002 AADT = 4,617 (150 feet west of Interstate 69) no truck % available
2000 AADT = 3,900 (400 feet west of Interstate 69) no truck % available

CR 11A southwest of CR 56

2011 AADT = 1,392 (0.6 mile northeast of CR 64) no truck % available

2008 AADT = 1,471 (0.1 mile northeast of CR 60) no truck % available

2002 AADT = 1,536 (100 feet southwest of CR 56) no truck % available

ANALYSIS

Recent improvements at the interchange of County Road 11A and Interstate 69 along with proposed developments on County Road 11A may continue to impact the traffic on County Road 56.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council proposes that County Road 56 and County Road 11A should continue to be monitored for traffic volume increases. The drainage concerns on County Road 56 should also be investigated. Since the predominant traffic flow to and from Interstate 69 appears to be between County Road 11A and County Road 56, consideration should be given to improving the intersection of these roads to support those movements. This would involve aligning the northwest leg of County Road 11A with County Road 56 and bringing the southwest leg of County Road 11A to County Road 56 at a right angle with stop control.

7. Intersection of State Road 8 and County Road 19

PROBLEM

The westbound traffic on State Road 8 has poor visibility upon approaching the intersection of County Road 19 due to a hill. State Road 8 was improved in 2012 by INDOT and part of the hill was lowered however the sight distance is still an issue. The intersection is also increasing in traffic due to new development in the area which may warrant a signal.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted a traffic volume count 0.3 miles south of State Road 8. The 2011 AADT was 1,653. An eight-hour intersection count was also conducted in 2011 at the intersection of County Road 19 and State Road 8. Traffic counts conducted by the Indiana Department of Transportation in 1997 indicated the traffic volume on State Road 8 was 11,360 west of County Road 19 and 15,440 east of County Road 19.

ANALYSIS

An intersection analysis was performed by INDOT in 2011 at this intersection. Signal warrants were not satisfied at that time. There were 10 crashes from 2009 to 2013 at this intersection. There were no crashes reported in 2012 for the intersection which was the year the INDOT improvement occurred

RECOMMENDATION

This location should continue to be monitored for crash data and signal warrants.

8. Intersection of US 6 and County Road 61

PROBLEM

This intersection has had numerous accidents, one that resulted in a fatality. The community would like to see the intersection improved, possibly even signalized. It was also noted that at night the intersection is dark causing additional safety concerns.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted a traffic volume counts on County Road 61 south of US 6. The 2008 count showed the volume at 2,474 and a 2011 count showed an AADT of 2,369. Since 2000, the traffic volume has gone down by 43% from an AADT of 4,116 in 2000 to an AADT of 2,369 in 2011. We began collecting truck data at this location in 2008. The 2008 count showed the truck percentage at 46.05% while the 2011 count showed the truck percentage at 46.25%. Since 2008 the truck percentage has remained consistent. There were 6 crashes at this intersection from 2009 to 2013. All of the crashes were property damage crashes.

CR 61 south of US 6

2011 AADT = 2,369 (0.1 mile south of US 6) 46.25% trucks
8/12/2008 AADT = 2,474 (0.4 mile south of US 6) 46.05% trucks
8/27/2008 AADT = 2,509 (100 feet south of US 6) 40.14% trucks
2005 AADT = 4,393 (0.3 mile south of US 6) no truck % available
2003 AADT = 3,943 (200 feet south of US 6) no truck % available
2000 AADT = 4,116 (0.4 mile south of US 6) no truck % available

ANALYSIS

County Road 61 between State Road 8 and US 6 is surrounded by industrially zoned land establishing a major industrial corridor which has continued to develop over recent years. The current industrial facilities are primarily engaged in steel processing and fabrication. Several of these manufacturers are currently expanding their facilities and plan to hire additional employees within the next six to twelve months. Additional truck traffic will also be associated with these expansions.

All major utilities including electric, natural gas, and sanitary sewer are available to the industrially zoned sites. A large aquifer provides ample fresh water. Development of the industrially zoned acreage will increase travel on County Road 61 by 7,000 to 10,000 vehicles per day depending on the intensity and type of industrial growth.

RECOMMENDATION

The Indiana Department of Transportation has made some improvements to the intersection markings to help delineate traffic movements. The Northeastern Indiana Regional Coordinating Council recommends that this intersection continue to be monitored for crash experience and signal warrants.

9. State Road 8 between County Road 35 and State Road 101

PROBLEM

State Road 8 is narrow with minimal shoulders. The vertical and horizontal alignment contributes to potential safety concerns along this corridor. Traffic volumes will continue to increase including additional trucks.

FINDINGS

Staff collected two updated counts on State Road 8 east of County Road 35. The 2009 count showed the volume at 2,466 (7.06% trucks) and a 2011 count showed an AADT of 3,929 (9.5% trucks). Since 2005, the traffic volume has gone down by more than 50%. In 2011 then the volume increased back up to 3,929. Staff also collected two updated counts for east of and west of the intersection at State Road 8 and County Road 59. West of the intersection the 2008 count was 3,180 (14.84% trucks) and the 2011 count was 3,093 (10.35% trucks). East of the intersection the 2008 count was 2,474 (20.04% trucks) and the 2011 count was 2,485 (17.68% trucks). The traffic volume hasn't showed much change since 2005. This data indicates that additional traffic is utilizing State Road 8 to access the industrialized areas on County Road 59/61 which showed an AADT of 1,879 (28% trucks) in 2006. Staff has collected two updated counts since then. In 2010 the count showed an AADT of 2,560 (48.52% trucks) and the 2011 count showed an AADT of 2,319 (43.2% trucks). This showed a 23% increase in AADT since 2006 with a 52% increase in truck traffic. Crash records show 93 crashes from 2009 to 2013 in this section of roadway not including intersections. Of the 93 crashes 16 involved an injury to one or more persons involved. No fatal crashes were reported during this time period.

SR 8 east of CR 35

11/8/2011 AADT = 3,929 (0.1 mile east of Auburn Drive) 9.5% trucks
10/26/2011 AADT = 4,152 (0.2 mile east of Auburn Drive) 9.18% trucks
2009 AADT = 2,466 (0.2 mile west of CR 39) 7.06% trucks
2008 AADT = 2,476 (0.2 mile east of CR 35) 5.39% trucks
2005 AADT = 4,069 (300 feet west of CR 39) 11.21% trucks
2003 AADT = 3,716 (100 feet west of CR 39)

SR 8 west of CR 59

2011 AADT = 3,093 (0.4 mile east of CR 51) 10.35% trucks
2008 AADT = 3,180 (0.6 mile east of CR 51) 14.84% trucks
2005 AADT = 3,450 (0.5 mile east of CR 51) 11.8% trucks
2003 AADT = 3,460 (0.3 mile west of CR 55)

SR 8 east of CR 59

2011 AADT = 2,485 (0.3 mile east of CR 59) 17.68% trucks
2008 AADT = 2,474 (0.3 mile east of CR 59) 20.04% trucks
2005 AADT = 2,522 (0.3 mile west of SR 1) 18.12% trucks
2003 AADT = 2,444 (0.2 mile west of SR 1)

CR 59/61 north of SR 8

2011 AADT = 2,319 (0.5 mile north of CR 44 – 150 feet n/o RR) 43.2% trucks

2010 AADT = 2,560 (0.15 mile north of CR 44 – 50 feet n/o RR) 48.52% trucks

2006 AADT = 1,879 (0.2 mile north of CR 44 – 100 feet n/o RR) 28.33% trucks

ANALYSIS

Recent and continued growth on the western edge of Auburn will contribute to increased traffic volumes on State Road 8. The completion of Auburn Drive and its connection to State Road 8 east of County Road 35 will improve mobility around Auburn and increase the attractiveness for travel on State Road 8. The industrial corridor on County Road 61 between State Road 8 and US 6 has over 1000 acres available to develop. The industrial corridor has seen continuous growth since Steel Dynamics Incorporated (SDI) constructed their facility in 1994-95. State Road 8 provides good access to County Road 61 from the southern portion of DeKalb County and northern portions of Allen County. The utilization of State Road 8 and Auburn Drive will provide a secondary access route from the industrial corridor to Interstate 69.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends improving State Road 8 to include wider travel lanes and shoulders. Mitigating the impacts of hills and curves along this section to improve vertical and horizontal alignment should also be considered where feasible.

10. Intersection of County Road 19 and County Road 48

PROBLEM

County Road 19 forms two slightly offset “T” intersections with County Road 48. The proximity of these two intersections will create a safety concern as travel continues to increase on both County Road 48 and County Road 19. A railroad crossing located immediately north of County Road 48 on County Road 19 further complicates the operation of these intersections.

FINDINGS

County Road 19 is offset by approximately 95 feet as it intersects County Road 48 Street from the north and south. A rail line crosses County Road 19 approximately 260 feet north of County Road 48. The Northeastern Indiana Regional Coordinating Council conducted two updated counts on County Road 19 north of County Road 48. The 2009 count showed an AADT of 1,130 and the 2011 count showed an AADT of 1,017. Traffic volume has remained consistent since 2006 (the 2006 count showed an AADT of 1,070). The rail traffic is approximately seventy-four trains per day. From 2009 to 2013 there were 8 crashes (4 involved injuries) at this intersection.

CR 19 north of CR 48

2011 AADT = 1,017 (300 feet north of South Rd) no truck % available
2009 AADT = 1,130 (0.1 mile north of South Rd) no truck % available
2006 AADT = 1,070 (0.6 mile north of South Rd) no truck % available
2000 AADT = 1,653 (0.3 mile south of SR 8) no truck % available

CR 48 west of CR 19

2012 AADT = 5,473 (100 feet west of CR 15) 2.7% trucks
2000 AADT = 5,980 (100 feet east of CR 15) no truck % available

CR 48 east of CR 19

2011 AADT = 4,181 (0.3 mile west of CR 23) 3.04% trucks
2008 AADT = 4,094 (0.15 mile east of CR 19) no truck % available
2005 AADT = 4,757 (0.3 mile east of CR 19) no truck % available
2003 AADT = 4,905 (0.3 mile east of CR 19) no truck % available
2000 AADT = 5,737 (0.3 mile east of CR 19) no truck % available

ANALYSIS

Scott Industries has located near these intersections adding to the traffic. As development continues and traffic volumes increase through these intersections, the service levels will begin to diminish and the offset intersections will contribute to congestion and safety problems. Train movements crossing the northern section of County Road 19 will continue to contribute to the congestion and confusion at this intersection.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that County Road 19 should be aligned to eliminate the offset intersections. Right-of-way should be acquired to allow for exclusive left, through, and right lanes for the westbound and northbound approaches. When signal warrants are satisfied, signalization of a re-align intersection will be more practical. The design of the aligned intersection should include provisions for the future additional lanes on County Road 48 to stack vehicles during train related delays. The addition of a westbound right turn lane and a eastbound left turn lane would help to store vehicles during train delays and still allow the other intersection movements to continue unimpeded. This project should be a companion project with the realignment and corridor improvement project for County Road 17 and County Road 19.

11. County Road 17 and County Road 19 from State Road 8 to County Road 56

PROBLEM

County Road 17 and County Road 19 serve as a north-south corridor between the Cities of Auburn and Garrett. These roads are offset approximately 650 feet where they intersect with County Road 52. County Road 19 is offset approximately 95 feet at its

intersections with County Road 48. County Road 17 and 19 should be aligned and improved to form a continuous corridor from County Road 56 to State Road 8.

FINDINGS

County Road 17 and County Road 19 are classified as local roads south of County Road 48. County Road 19 north of County Road 48 to State Road 8 is classified as a Rural Major Collector. From State Road 8 north to the DeKalb County Line, County Road 19 is classified as a Rural Major Collector. Staff collected two updated counts on County Road 19 north of County Road 48. The 2009 count showed an AADT of 1,130 and the 2011 count showed an AADT of 1,017. Traffic volume has remained consistent since 2006 (the 2006 count showed an AADT of 1,070). Staff also collected two updated counts on County Road 17 south of County Road 52. The 2008 count showed the volume at 618 while the 2011 count showed the volume at 724. Staff also collected two updated counts on County Road 19 south of County Road 48. The 2008 showed an AADT of 207 while the 2012 count showed an AADT of 392. Both locations showed a slightly increase in traffic volume since 2008.

CR 19 north of CR 48

2011 AADT = 1,017 (300' n/o South Rd – 25 feet north of RR) no truck % available
2009 AADT = 1,130 (0.1 mile n/o South Rd – 0.1 mile n/o RR) no truck % available
2006 AADT = 1,070 (0.6 mile n/o South Rd – 50 feet n/o RR) no truck % available
2000 AADT = 1,653 (0.3 mile south of SR 8) no truck % available

CR 17 south of CR 52

2012 AADT = 724 (0.3 mile south of CR 52)
2008 AADT = 618 (0.2 mile south of CR 52)

CR 19 south of CR 48

6/20/2012 AADT = 392 (0.6 mile south of CR 48)
5/30/2012 AADT = 469 (0.2 mile south of CR 48)
2008 AADT = 207 (100 feet north of CR 52)

ANALYSIS

County Roads 17 and 19 provide a north-south corridor through an area that will develop as the Cities of Auburn and Garrett grow. The land use plans for these communities include a mixture of industrial, commercial, and residential land uses for the area surrounding this corridor. As these two communities grow closer together the importance of this corridor, as a major component of the transportation system, will continue to increase. This corridor will also serve as an alternate route for local north-south trips, eliminating the need to rely solely on Interstate 69. A project designed to serve local trips through this area is needed, unlike the interstate that is intended for longer through trips. When the area becomes urban, County Roads 17 and 19 between County Roads 48 and 56 should be added to the Urban Functional Classification System.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that County Road 17 and County Road 19 should be aligned to create a continuous north-south corridor. The major realignment projects will occur at County Roads 48 and 52. The realignment of the County Road 19 and County Road 48 intersections is also discussed separately in this report. The travel lanes should be widened and adequate shoulders provided where necessary to improve safety. As part of the corridor improvement, special consideration should be given to all intersections to ensure acceptable operating conditions and service levels can be maintained. When the area becomes urban, County Roads 17 and 19 between County Roads 48 and 56 should be added to the Urban Functional Classification System.

11. Intersection of County Road 47 and US 6

PROBLEM

The proximity of the railroad crossing south of the intersection of County Road 47 and US 6 has created safety issues for motorists. The railroad crossing traverses parallel with US 6 immediately south of the intersection. An agricultural facility is located at this location which generates a significant amount of truck traffic throughout the year especially during the harvest season. Trucks utilizing this crossing also carry fertilizers and other hazardous materials. Train traffic at this location includes both freight trains and passenger trains for Amtrak.

FINDINGS

County Road 47 is classified as a Rural Minor Collector while US 6 is classified as a Rural Other Principal Arterial. Crash records show that there have been 3 crashes reported in the past three years. Staff collected two updated counts on County Road 47 south of US 6. The 2009 count showed an AADT of 1,120 (8.83% trucks) and the 2011 count showed an AADT of 1,074 (11.22% trucks). The traffic volume has declined by 11% since 2006 but the truck percentage has increased from 7% in 2006 to 11.22% in 2011. Staff collected two updated counts on US 6 east of County Road 47 and two updated counts on US 6 west of County Road 47. For east of the intersection, the 2008 count showed the volume at 6,359 (33.91% trucks) and the 2011 count showed the volume at 6,226 (25.82% trucks). For west of the intersection, the 2008 count showed the AADT of 5,918 (35.61% trucks) and the 2011 count showed the AADT of 5,863 (27.16% trucks). Both side of the intersection showed a decline in traffic volume since 2005.

CR 47 south of US 6

2011 AADT = 1,074 (300 feet north of CR 28 – 150 feet s/o RR) 11.22% trucks

2009 AADT = 1,120 (0.15 mile south of US 6 – 300 feet s/o RR) 8.83% trucks

2006 AADT = 1,204 (200 feet south of US 6 – 100 feet s/o RR) 7% trucks

US 6 east of CR 47

2011 AADT = 6,226 (0.2 mile east of CR 55) 25.82% trucks

2008 AADT = 6,359 (0.2 mile west of CR 57) 33.91% trucks

2005 AADT = 7,275 (0.3 mile west of CR 57) 29.26% trucks

US 6 west of CR 47

2011 AADT = 5,863 (0.1 mile east of Cedar Drive) 27.16% trucks

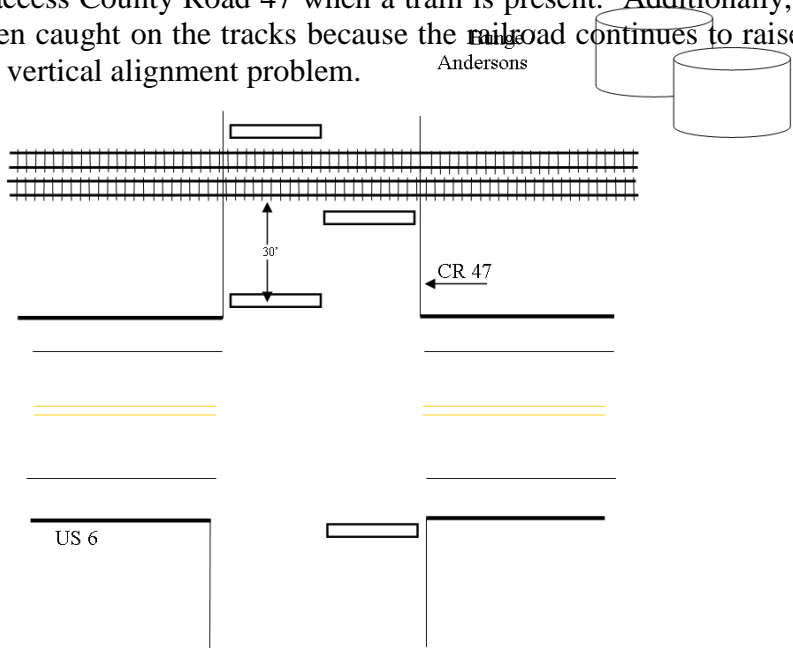
8/27/2008 AADT = 5,758 (0.2 mile east of Cedar Drive) 31.7% trucks

8/14/2008 AADT = 5,918 (0.2 mile east of Cedar Drive) 35.61% trucks

2005 AADT = 7,763 (300 feet east of Cedar Drive) 28.12% trucks

ANALYSIS

NIRCC has met with representatives from surrounding businesses, the Indiana Department of Transportation, County officials and Waterloo officials regarding this intersection. The potential for further development is also being reviewed by planners in DeKalb County. An ethanol plant has indicated an interest in the area that would add to traffic at the intersection. The current geometrics of the intersection are shown below. The intersection can accommodate one semi truck between the intersection and the railroad crossing. Given the radius of the intersection, eastbound trucks have a difficult time turning southbound onto County Road 47 from US 6. An additional safety issue is the absence of turn lanes or passing blisters on US 6 to allow a staging area for trucks attempting to access County Road 47 when a train is present. Additionally, a number of trucks have been caught on the tracks because the railroad continues to raise the rail bed and it creates a vertical alignment problem.



Intersection Diagram
*Not to scale

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend a combination of solutions to address the concerns at this location. The best solution would involve a complete intersection improvement at County Road 47 and US 6 including turning lanes for US 6 and improved turning radii. The improvement would require additional right of way for US 6 and County Road 47 to relocate US 6 north of the existing alignment, creating more distance between the at-grade railroad crossing and the intersection. Interim solutions should be considered to address the existing safety concerns including innovative Intelligent Transportation System (ITS) applications. These improvements to improve safety are needed pending a major investment by the Indiana Department of Transportation for an intersection improvement.

County officials are considering improvements to County Road 41 which is west of this intersection. These improvements would serve as a temporary alternate route for truck traffic to access the agriculture facility. This improvement would allow more distance between the railroad crossing and US 6. Improvements to the unclassified roadway would be needed at the intersection of US 6 and the at-grade railroad crossing (vertical alignment). The roadway would need to be upgraded with improved surface and wider travel lanes to meet the needs of heavy truck traffic. Improvements to County Road 41 would only serve motorists as a temporary access to the agriculture facility while improvements at the intersection of County Road 47 and US 6 are planned and constructed. NIRCC also recommends that a future development approved at this location should consider requesting participation in improvements to the intersection to safely accommodate the additional traffic.

13. County Road 59 at Norfolk Southern Railroad Crossing (478161T)

PROBLEM

County Road 59 at the Norfolk Southern railroad crossing has vertical and horizontal alignment problems. The horizontal alignment of the roadway shifts from the west to the east at the crossing. The vertical alignment of the crossing contributes to the problems as motorists are unable to recognize that the roadway shifts immediately after crossing the railroad.

FINDINGS

County Road 59 is classified as a rural minor collector. The two lane roadway has 10 foot chip and seal lanes in both directions. Staff collected two updated counts. The 2009 count showed the volume at 830 (8.1% trucks) and the 2011 count showed the volume at 1,052 (2.79% trucks). The traffic volume has declined since 2006. The current crossing has full protection including lights and gates. The elevation of the railroad and horizontal alignment of the roadway is prominent to unfamiliar motorists.

CR 59 at RR crossing

2011 AADT = 1,052 (0.2 mile south of SR 8 – 150 feet s/o RR) 2.79% trucks

2010 AADT = 1,042 (0.4 mile south of SR 8 – 0.1 mile s/o RR) 2.75% trucks

2009 AADT = 830 (0.3 mile south of SR 8 – 100 feet s/o RR) 8.1% trucks

2006 AADT = 1,411 (0.2 mile south of SR 8 – 0.1 mile n/o RR) 3.29% trucks

ANALYSIS

County officials are concerned about the safety at the County Road 59 and Norfolk Southern at-grade railroad crossing. NIRCC conducted a site survey of this location and found problems with the horizontal and vertical alignments of the crossing. The horizontal alignment is being affected by the vertical alignment of the rail line. County Road 59 at this location seems to be experiencing an increase in traffic based on recent traffic data. Staff feel that the trend will continue based on the continued industrial and commercial development occurring further north on County Road 59/61. Crash records do not indicate a high frequency of crashes at this crossing. Damaged guardrails and skid marks indicate crashes have occurred but may not have been reported.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend a that County Road 59 be reconstructed at the Norfolk Southern railroad crossing (478161T) to correct the vertical and horizontal alignment issues. Current crash records do not support improvements based on crash frequency. Staff will continue to monitor crash data at this location and work with local officials to seek future improvements

14. Intersection of County Road 11A and County Road 60

PROBLEM

County officials are concerned about the safety of County Road 11A at County Road 60. The intersection is skewed and there are some sight distance issues that have been identified as potentially hazardous.

FINDINGS

County Road 11A is classified as a rural minor collector. County Road 60 was removed as a classified roadway in the recent update of the Federal Functional Classification System because of the low impact on the transportation network. County Road 60 carries approximately 400 vehicles per day through the intersection of County Road 11A.

Staff collected one updated count on County Road 11A near County Road 60. The 2011 count showed an AADT of 1,392. The traffic volume has decreased by 5% since 2008.

Staff collected crash data at this location and found that there were no crashes from 2011 to 2013 reported at this intersection.

CR 11A

2011 AADT = 1,392 (0.6 mile south of CR 64) no truck % available

2008 AADT = 1,471 (0.1 mile north of CR 60) no truck % available

ANALYSIS

Staff conducted a site survey of this location and met with a County Sheriff to look at this location. Staff determined that the speed of vehicles traveling on County Road 11A to be a contributing factor in the safety of the intersection. The skewed angle and vertical alignment at the intersection make it difficult for County Road 60 traffic to cross or access County Road 11A.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend that county officials consider posting and enforcing a lower speed limit on County Road 11A to increase safety. Staff will continue to monitor the traffic at this intersection and crash data to determine whether any geometric improvements are needed in the future.

15. Intersection of County Road 27 and US 6

PROBLEM

The recent development of a concrete block facility at this intersection has exaggerated existing safety issues at this intersection. County officials are concerned with the change to the flow of traffic at the intersection from the concrete block facility.

FINDINGS

County Road 27 is classified as an urban minor collector and US 6 is classified as an urban other principal arterial. This intersection is located approximately half a mile west of the interchange of Interstate 69. Staff collected two updated counts on US 6 east of County Road 27. The 2008 count showed the volume at 9,393 and the 2011 count showed the volume at 9,734. The traffic volume has declined by 11% since 2005. Staff also collected two updated counts for US 6 west of County Road 27. The 2009 count showed an AADT of 6,913 (26.54% trucks) and the 2011 count showed an AADT of 7,789 (19.52% trucks). Traffic volume has been consistent since 2005. Staff collected two updated counts for County Road 27 north of US 6. The 2009 count showed an AADT of 1,318 (6.89% trucks) and the 2011 count showed an AADT of 1,447 (9.22% trucks). Traffic volume hasn't changed much since 2006. Staff also collected two updated counts for County Road 27 south of US 6. The 2009 count showed the volume at 1,400 (7.42% trucks) and the 2011 count showed the volume at 1,770 (3.82% trucks). Traffic volume has increased slightly since 2006 but traffic percentage has declined greatly from 24.79% in 2006 to 3.82% in 2011.

Crash records confirmed that 14 crashes have occurred from 2011 to 2013 at this intersection. Staff will review local records to ensure the safety analysis at this location is accurate.

US 6 east of CR 27

2011 AADT = 9,734 (300 feet west of Interstate 69) no truck % available
2008 AADT = 9,393 (300 feet west of Interstate 69) no truck % available
2005 AADT = 10,954 (200 feet west of Interstate 69) no truck % available

US 6 west of CR 27

2011 AADT = 7,789 (0.2 mile west of CR 27) 19.52% trucks
2009 AADT = 6,913 (0.2 mile west of CR 27) 26.54% trucks
2005 AADT = 7,910 (100 feet west of CR 9) 23.19% trucks

CR 27 north of US 6

2011 AADT = 1,447 (0.5 mile north of US 6) 9.22% trucks
2009 AADT = 1,318 (0.5 mile north of US 6) 6.89% trucks
2006 AADT = 1,468 (0.1 mile north of US 6) 12.43% trucks

CR 27 south of US 6

2011 AADT = 1,770 (0.7 mile north of CR 28 – 0.1 mile n/o RR) 3.82% trucks
2009 AADT = 1,400 (0.2 mile south of US 6 – 0.1 mile n/o RR) 7.42% trucks
2006 AADT = 1,663 (0.3 mile south of US 6 – 300 feet n/o RR) 24.79% trucks

ANALYSIS

Staff conducted a site survey of the intersection to review how traffic flowed through the concrete block facility and the intersection of County Road 27 and US 6.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council will continue to monitor this location. Staff would recommend periodic turning movement counts to assess warrants for signalization. Staff will also continue to collect crash data for this location to ensure any increase in crash frequency or severity is addressed. Staff agrees that the number of trucks turning at the location and the speed of traffic on US 6 creates safety issues that should be addressed. NIRCC will continue to work with officials to collect crash data, identify specific deficiencies and potential solutions at this location.

16. County Road 29 from County Road 60 to County Road 62

PROBLEM

The DeKalb County Airport is planning to expand the runway to the east. In order to facilitate the expansion County Road 29 will be removed between County Road 60 and 62. County officials would like to extend County Road 62 to County Road 35.

FINDINGS

County Road 29 is not a classified roadway between County Roads 60 & 62. Staff collected one updated count for County Road 29 south of County Road 60. The 2012 count showed the volume at 536. Traffic volume has declined by 14% since 2008.

CR 29 south of CR 60

6/20/2012 AADT = 536 (200 feet north of CR 62) no truck % available

5/30/2012 AADT = 504 (150 feet north of CR 62) no truck % available

2008 AADT = 623 (0.2 mile south of CR 60) no truck % available

ANALYSIS

Staff reviewed the number of trips projected to be diverted onto other roadways from County Road 29. The impact of the additional trips will not have a negative impact on the transportation network in the area.

RECOMMENDATION

Upon completion of closing County Road 29 the Northeastern Indiana Regional Coordinating Council would recommend County Road 62 be extended from County Road 29 to County Road 35. The new roadway should be built to accommodate future trips and meeting local design standards.

17. Intersection of County Road 35 and County Road 72 (North County Line Road)

PROBLEM

The intersection of County Road 35 and County Road 72 has sight distance issues due to the vertical alignment of County Road 35 north of the intersection. The combination of vegetation and vertical alignment of the roadway creates safety issues for vehicles attempting to cross or access County Road 35 from County Road 72.

FINDINGS

County Road 35 is classified as a rural major collector while County Road 72 is not classified. Staff collected one updated count for County Road 35 north of County Road 72. The 2011 count showed an AADT of 1,725. Traffic volume has increased by approximately 60 vehicles since 2008. Staff also collected an updated count for County Road 72 west of County Road 35. The 2012 count showed an AADT of 715. The traffic has increased by 12% since 2008. Staff collected an updated count for County Road 72 east of County Road 35. The 2012 count showed the volume at 832. Traffic on that section of roadway has declined by 5% since 2008.

CR 35 north of CR 72

2011 AADT = 1,725 (0.2 mile south of CR 68) no truck % available

2008 AADT = 1,668 (0.1 mile north of CR 72) no truck % available

CR 72 west of CR 35

2012 AADT = 715 (0.3 mile east of CR 29) no truck % available

2008 AADT = 635 (0.6 mile west of CR 35) no truck % available

CR 72 east of CR 35

2012 AADT = 832 (0.1 mile east of CR 35) no truck % available

2008 AADT = 878 (0.1 mile east of CR 35) no truck % available

ANALYSIS

Current traffic volumes and crash records do not warrant a turning movement analysis or crash review. Staff has collected the traffic volumes and reviewed crash records to establish preliminary information to continue to monitor the performance of the intersection.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend that future intersection improvements be considered for this location to address the vertical alignment and sight distance issues as traffic increases. The current geometrics of the intersection create safety deficiencies when combined with speed and increasing traffic. Staff will continue to monitor the traffic volume and crashes at this location to determine specific needs in the future.

18. Intersection of SR 327 with County Road 11 and County Road 34

PROBLEM

There are two “jogs” on SR 327 at County Road 34 and County Road 11. The turns create unnecessary delay for motorists and safety issues. County officials have requested that the Indiana Department of Transportation improve the location to smooth the curves to reduce the delay for motorist traveling SR 327.

FINDINGS

Staff collected two recent counts on SR 327 north of County Road 34. The 2009 count showed an AADT of 1,968 (2.88% trucks) and the 2011 count showed an AADT of 2,275 (4.16% trucks). Traffic volume on SR 327 has gone down by 14% since 2005. Staff also collected two updated counts for County Road 34 west of SR 327. The 2009 count showed the volume at 388 and the 2011 count showed the volume at 403. Traffic volume on County Road 34 has increased by 24% since 2006.

In the last three years, 2011 to 2013, there have been 5 crashes identified at this intersection.

SR 327 north of CR 34

2011 AADT = 2,275 (0.5 mile south of CR 28) 4.16% trucks

2009 AADT = 1,968 (0.6 mile south of CR 28) 2.88% trucks

2005 AADT = 2,656 (300 feet north of CR 32) 7.91% trucks

CR 34 west of SR 327

2011 AADT = 403 (0.7 mile west of SR 327) no truck % available

2009 AADT = 388 (0.1 mile west of SR 327) no truck % available

2006 AADT = 326 (0.45 mile east of CR 1) no truck % available

ANALYSIS

Crash records suggest that the motorists utilizing this intersection are aware of the deficiencies and are able to negotiate them. The roadway unnecessarily forces through traffic on SR 327 to negotiate two 90 degree turns and increase the distance traveled.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend that improvements be considered to allow for free flow of north south travel on SR 327 to minimize the delay, decrease the vehicle miles traveled and improve safety by minimizing potential conflict points.

19. Intersection of County Road 62 and SR 101

PROBLEM

County officials have approved a proposed development of a lumber treatment facility on County Road 62 east of SR 101.

FINDINGS

Crash records show no crashes at this location in 2011 to 2013. County Road 62 is not classified on the Federal Functional Classification System. The roadway is gravel and has two 7 feet wide lanes. Staff collected one updated count on SR 101. The 2011 count showed an AADT of 2,257. Traffic volume on that section of roadway near the railroad tracks has increased slightly. There are no updated traffic data available for County Road 62 east of SR 101.

SR 101 at the RR crossing

2011 AADT = 2,257 (100 feet north of CR 60 – 50' s/o RR) no truck % available

2009 AADT = 2,029 (0.2 mile south of CR 60 – 0.2 mile s/o RR) 13.43% trucks

2006 AADT = 2,264 (150 feet north of CR 60 – 50' s/o RR) no truck % available

CR 62 east of SR 101 – there is no updated traffic data available for this report

ANALYSIS

The additional trips generated by the proposed lumber treatment facility will have no significant impact on SR 101. County officials are anticipating approximately 30 to 40 additional employees and 10 truck deliveries per day. This projected number of new trips would result in an AADT of less than 200 vehicles per day.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend improvements on County Road 62 from the proposed development access to SR 101 to accommodate truck traffic. The improvements should be consistent with local roadway design standards for lane width and shoulders. Traffic volumes on County Road 62 and SR 101 do not indicate a current need for dedicated turn lanes for either roadway.

20. County Road 35 from Waterloo to County Road 72 (North County Line Road)

PROBLEM

County Road 35 continues to experience increasing traffic volumes from Waterloo to the DeKalb / Allen County line. County officials are concerned with the capability of the existing roadway design to facilitate the increased traffic.

FINDINGS

County Road 35 is classified as a rural major collector and an urban minor arterial between Waterloo and the DeKalb / Allen County line. County Road 35 had an AADT ranging from 1,700 to 3,700 in 2011. Narrow lane widths and deteriorating shoulders are also contributing concerns in regard to safety. Minor surface improvements to County Road 35 have been made to maintain sections that have begun to deteriorate. The lane width averages 9 feet from Waterloo to CR 72. There are vertical alignment issues on County Road 35 north of the DeKalb / Allen County line.

ANALYSIS

Staff reviewed traffic volumes on County Road 35 and found the traffic volumes to be increasing north of SR 8 to Waterloo and immediately south of SR 8 to County Road 56. Staff has no historical data south of CR 56 to determine the amount of increase in traffic.

RECOMMENDATION

The potential for future developments and increasing traffic volumes on County Road 35 support the need for improvements. The Northeastern Indiana Regional Coordinating Council would recommend that this roadway be considered for roadway improvements to improve the surface of the roadway and provide improved shoulders. Additional considerations may be needed to address hill cuts and turn lanes specific locations.

Auburn

1. County Road 29 at the CSX Railroad Crossing (155319K)

PROBLEM

The vertical and horizontal alignments of County Road 29 as it approaches the intersection with the CSX Railroad create a visibility problem at the crossing. There are also a number of trucks that utilize this crossing and local officials feel that a grade separation should be considered.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted traffic volume counts and classification counts at this crossing. The 2009 count showed an AADT of 2,090 (2.23% trucks) and the 2011 count showed an AADT of 1,860 (4.9% trucks). Traffic on that roadway section showed 7% increase in volume since 2006. The US DOT Crossing Inventory states 55 trains per day utilize this crossing. The contour of the land surrounding this rail-highway crossing may be conducive for a grade separation of County Road 29 over the CSX Railroad. According to the Indiana Department of Transportation, there are up to seventy-four trains per day.

CR 29 at the RR crossing

2011 AADT = 1,860 (0.3 mile south of Auburn Drive – 200 feet n/o RR) 4.9% trucks
2009 AADT = 2,090 (0.3 mile south of Auburn Drive – 150feet n/o RR) 2.23% trucks
2006 AADT = 1,733 (0.3 mile south of Auburn Drive – 100 feet s/o RR) 1.59% trucks
2000 AADT = 1,512 (0.4 mile north of CR 52 – 100 feet n/o RR) 2.68% trucks

ANALYSIS

The Northeastern Indiana Regional Coordinating Council projects a five-year AADT of 3,000-3,500 vehicles per day along this corridor if vacant land is developed in areas identified by local officials. City utilities have been extended south of this railroad crossing along County Road 29 to County Road 52. The provision of these utilities will lead to additional developments along this corridor, further adding to the projected traffic volume.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that this location continue to be monitored for rail and highway traffic increases. This location could be a candidate for a grade separation by bridging County Road 29 over the CSX Railroad.

2. Indiana Avenue between County Road 36A and Betz Road

PROBLEM

Request for a traffic volume due to growth on Indiana Avenue.

FINDINGS

The 2009 count showed the volume at 3,806 (1.23% trucks) and the 2011 count showed the volume at 4,175 (0.84% trucks). Traffic has increased since 2006 (2006 count showed an AADT of 3,800) but truck percentage has gone down from 2.28% in 2006 to 0.84% in 2011.

Indiana Ave north of CR 36A

2011 AADT = 4,175 (0.4 mile north of CR 36A) 0.84% trucks

2009 AADT = 3,806 (0.3 mile north of CR 36A) 1.23% trucks

2006 AADT = 3,800 (0.3 mile north of CR 36A) 2.28% trucks

2000 AADT = 4,487 (0.4 mile north of CR 36A) no truck % available

RECOMMENDATION

NIRCC will continue to monitor the volumes and determine if any additional improvements are needed as traffic in the area increases.

3. Morning Star Road between Main Street and County Road 35

PROBLEM

Request for a traffic volume due to growth on Indiana Avenue.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted traffic volume counts on this corridor. The recent traffic counts indicate that this road carries 572 vehicles each day. Morning Star Road is a 2-lane road that has a bituminous surface with a lane width of 9 feet in each direction. This road is currently classified as a local road.

Morning Star Rd east of Main St

2011 AADT = 572 (0.3 mile west of CR 35) no truck % available

2008 AADT = 527 (200 feet east of Main St) no truck % available

2000 AADT = 839 (250 feet east of Main St) no truck % available

ANALYSIS

The land uses surrounding Morning Star Road are changing from agricultural to primarily residential developments. Bridgewater, a major residential subdivision, is currently under development and will include 450 homes when completed. Morning Star Road is the only east-west corridor serving the northern portion of the City of Auburn. As urban

development continues in this area, the importance and utilization of this facility will increase. Approximately one-third of this road is currently within the urbanized area.

RECOMMENDATION

The existing and proposed developments along this section of road will significantly rely on this corridor as a transportation link. NIRCC will continue to monitor this corridor and development in the area.

4. Grandstaff Drive/Betz Road from North Street to N Main Street

PROBLEM

The City of Auburn is in the process of extending Grandstaff Drive north to Betz Road and improving Betz Road from the new Grandstaff Drive to N Main Street.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted traffic volume counts on Betz Road. The AADT on Betz Road was 1,803 in 2011. The traffic volume on Betz Road has been consistent since 2000.

Betz Rd east of CR 27

2011 AADT = 1,803 (0.3 mile east of CR 27) 1.04% trucks

2009 AADT = 1,661 (0.3 mile east of CR 27) 3.18% trucks

2006 AADT = 1,761 (0.3 mile east of CR 27) 2.03% trucks

2000 AADT = 1,899 (100 feet west of Main St) no truck % available

ANALYSIS

The intersection of Grandstaff Drive and State Road 8 is surrounded by a high concentration of commercial/retail development. Traffic counts conducted by the Indiana Department of Transportation on State Road 8 in 1997 indicate a volume of 20,000 west of Grandstaff Drive and approximately 19,000 east of Grandstaff Drive. The attractiveness of this area includes its proximity to the interchange of State Road 8 and Interstate 69. Grandstaff Drive serves commercial/retail development, light industrial facilities, and provides a secondary access to a mobile home park.

An extension of Grandstaff Drive from North Street to Betz Road would have a number of benefits to the overall transportation system within Auburn. The extension would provide an alternate north-south corridor diverting vehicular trips from sections of State Road 8, Main Street/Old State Road 427, and Indiana Avenue. The alternate route would reduce congestion and travel time while promoting accessibility to Interstate 69. The extension of Grandstaff Drive would also promote economic development north of the existing commercial/industrial developments. The diversion of vehicles from State Road 8 east of Grandstaff Drive would help mitigate congestion on State Road 8, Indiana Avenue and Main Street / Old State Road 427. The extension would also relieve some of the traffic utilizing the Auburn Central Business District. This extension would facilitate work and shopping trips from residential developments in the northwestern portion of

Auburn along Indiana Street and Main Street/Old State Road 427 to the commercial/retail developments near Grandstaff Drive and State Road 8. Access to the interstate from these areas would also be improved.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council supports this improvement to Grandstaff and that it should be extended to Betz Road west of Indiana Avenue. Improvements to Betz Road east of Indiana Avenue would be needed in conjunction with the extension. This extension would improve mobility and accessibility for employment and shopping trips in northwestern areas of Auburn.

5. Intersection of Auburn Drive and Wayne Street

PROBLEM

This intersection has poor radii for turning as well as stacking deficiencies. It is also located near a busy CSX railroad crossing which increases stacking problems. The increase in the traffic volume on both Auburn Drive and Wayne Street has also intensified the problems.

FINDINGS

Staff collected three recent counts for Auburn Drive east of Wayne Street. The 2006 count showed an AADT of 6,962 (5.56% trucks), the 2009 count showed an AADT of 6,144 (14.33% trucks), and the 2011 count showed an AADT of 7,043 (5% trucks). Traffic volume on Auburn Drive has remained consistent since 2000 with an exception of 2009 count data which showed a big drop. High fuel prices in 2009 impacted the traffic.

Auburn Drive east of Wayne St

2011 AADT = 7,043 (0.1 mile east of Wayne St) 5% trucks
2009 AADT = 6,144 (0.1 mile east of Wayne St) 14.33% trucks
2006 AADT = 6,962 (0.1 mile east of Wayne St) 5.56% trucks
2000 AADT = 6,985 (100 feet east of Wayne St) no truck % available

Wayne St south of Auburn Drive

2011 AADT = 6,892 (0.4 mile north of CR 50 – 150 feet s/o RR) 5.12% trucks
2009 AADT = 6,983 (0.4 mile north of CR 50 – 50 feet s/o RR) no truck % available
2006 AADT = 7,157 (0.4 mile south of Auburn Dr – 0.1 mile s/o RR) 7.43% trucks

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends increasing the turning radii at this intersection to accommodate the high percentage of truck traffic. The level of service and peak hour queues should continue to be monitored. The future increase of traffic on Wayne Street and Auburn Drive will likely warrant intersection improvements such as extending turn lanes to provide additional stacking and adding right-turn lanes to the intersection approaches.

6. Wayne Street at the CSX At-Grade Railroad Crossing (155320E)

PROBLEM

Local officials feel that a grade separation at the CSX railroad crossing is needed due to the number of trains that utilize this crossing and the traffic volume on Wayne Street.

FINDINGS

The Northeastern Indiana Regional Coordinating Council collected updated counts for Wayne Street south of Auburn Drive. The 2009 count showed the volume at 6,983 and the 2011 count showed the volume at 6,892 (5.12% trucks). Traffic volume has remained consistent since 2006. The 2013 US DOT Railroad Inventory shows that 55 trains utilize the two tracks at this crossing each day. The previous inventory stated that 74 daily trains utilized this crossing.

Wayne St south of Auburn Drive

2011 AADT = 6,892 (0.4 mile north of CR 50 – 150 feet s/o RR) 5.12% trucks

2009 AADT = 6,983 (0.4 mile north of CR 50 – 50 feet s/o RR) no truck % available

2006 AADT = 6,916 (0.4 mile south of Auburn Dr – 0.1 mile s/o RR) 7.43% trucks

ANALYSIS

The proposed developments on Wayne Street/Old State Road 427 near County Road 11A could increase traffic crossing the railroad by 3,000 to 4,000 vehicles per day. The projected traffic volume and increased train activity will result in numerous delays and safety concerns at this rail highway crossing.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends constructing a grade separation at this location.

7. Auburn Drive at CSX At-Grade Railroad Crossing (155322T)

PROBLEM

Local officials feel that a grade separation at the CSX railroad crossing is needed due to the number of trains that utilize this crossing and the importance of the Auburn Drive corridor to the transportation system.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted recent traffic volume counts west of the railroad crossing. The 2009 count showed the volume at 5,434 (4.93% trucks) and the 2011 count showed the volume at 5,358 (4.33% trucks). Traffic on Auburn Drive has remained consistent since 2006 but truck traffic has increased from 2.95% in 2006 to 4.33% in 2011. According to the US DOT Railroad Inventory 55 trains go through this crossing on Auburn Drive each day. Previous reports stated that 74 trains per day utilized this crossing. .

Auburn Drive at RR crossing

2011 AADT = 5,358 (0.1 mile west of Grandstaff Dr – 100' e/o RR) 4.33% trucks

2009 AADT = 5,434 (0.3 mile east of CR 23 – 100' e/o RR) 4.93% trucks

2006 AADT = 5,545 (0.2 mile west of Grandstaff Dr – 50' w/o RR) 2.95% trucks

ANALYSIS

The primary corridor linking the communities of Auburn and Garrett together is the Auburn Drive/County Road 48/South Road. These three roads form one continuous corridor with South Road in the City of Garrett, Auburn Drive in the City of Auburn, and County Road 48 connecting the two cities between their corporate limits. The Cities of Garrett and Auburn are two thriving communities. New development along this corridor is anticipated as these communities continue to grow. The land use plans include a mixture of industrial, commercial, and residential land uses for the area surrounding this corridor. In addition, the extension of Auburn Drive to State Road 8 on the East Side of Auburn will increase the attractiveness and utilization of this corridor. As the area surrounding this corridor develops, the importance of this corridor as a major link between the Cities of Auburn and Garrett will continue to increase.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends constructing a grade separation at this railroad crossing location.

8. County Road 52 from County Road 31 to County Road 35

PROBLEM

Auburn officials want to review what improvements are needed in response to continued housing development on County Road 52 near the subdivision Bear Creek. Recent industrial zoning north of County Road 52 near the intersection with County Road 427 is also a concern for future growth.

FINDINGS

Staff collected two recent counts on County Road 52 east of County Road 31. The 2008 count showed an AADT of 518 and the 2011 count showed an AADT of 1,233. Traffic on County Road 52 has gone down and up since 2006. From 2006 to 2008, traffic had gone down by 50%; however, by 2011 the traffic volume had gone back up by more than 50%. The years of 2008 and 2009 experienced high gas prices and a poor job economy which impacted the traffic. The roadway has two lanes that are 10 feet in width. From 2011 to 2013, there have been no crashes on this section of County Road 52.

CR 52 east of CR 31

10/6/2011 AADT = 1,233 (0.1 mile east of CR 31) no truck % available

9/13/2011 AADT = 1,166 (0.1 mile east of CR 31) no truck % available

2009 AADT = 568 (0.4 mile west of CR 35) no truck % available

2008 AADT = 518 (0.1 mile east of CR 31) no truck % available

2006 AADT = 1,050 (0.1 mile east of CR 31) no truck % available

ANALYSIS

Future development is anticipated and traffic accessing developments on County Road 29 are utilizing this roadway to avoid train delays. Traffic accessing Lakewood Park School also utilizes County Road 52. As residential development in Bear Creek, located between County Road 31 and County Road 35, continues it will add traffic to this corridor. The additional number of trips generated on to County Road 52 is anticipated to increase.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend future improvements to County Road 52 from County Road 427 (Wayne Street) to County Road 35. As traffic warrants, the roadway should be improved to provide 12 foot travel lanes and improve the shoulders to 4 foot. NIRCC will continue to monitor traffic data to support the proposed improvements.

9. Construction of Bicycle and Pedestrian Facilities

PROBLEM

Auburn officials would like to improve access for bicycles and pedestrians to Rieke Park.

FINDINGS

Rieke Park opened in 2009 and is attracting many residents for multiple sporting events and recreational activities. Bicycle and pedestrian facilities are needed to connect populated residential areas to the park.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend bicycle and pedestrian facilities be considered to connect Rieke Park to surrounding areas of Auburn. Conceptual ideas for facilities in Auburn have been included as part of the Regional Bicycle and Pedestrian Plan for Northeast Indiana. NIRCC will work with local officials to determine specific projects and seek funding to support the projects.

10. Diehl Drive (CR 23) from CR 11A to Auburn Drive

PROBLEM

Auburn officials feel future improvements will be needed on this roadway given proposed development.

FINDINGS

Two traffic counts were taken on this corridor in 2011 that showed volumes of 1,194 (4.38% truck traffic) north of County Road 11A and 1,448 (5.33% truck traffic) south of Auburn Drive.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council will continue to monitor this corridor for future traffic growth and development.

Butler

1. Intersection of State Road 1/Broadway and RE Jones Road/County Road 30

PROBLEM

The traffic volumes on State Road 1 and County Road 30 have increased due to new development in the southern portion of Butler. Additional development along these two corridors may require intersection improvements.

FINDINGS

The Northeastern Indiana Regional Coordinating Council has maintained traffic data at this location for the past 13 years. The traffic volumes have remained steady in recent years.

CR 30 east of SR 1

10/19/2011 AADT = 2,079 (150 feet east of SR 1) no truck % available
9/21/2011 AADT = 2,430 (100 feet east of SR 1) no truck % available
2008 AADT = 1,170 (100 feet east of SR 1) no truck % available
2000 AADT = 2,142 (0.1 mile east of SR 1) no truck % available

SR 1 north of CR 30

2011 AADT = 4,324 (25 feet south of Walnut St – 100' n/o RR) no truck % available
2008 AADT = 4,037 (50 feet south of Walnut St) no truck % available
2005 AADT = 4,687 (200 feet south of Walnut St) no truck % available
2003 AADT = 4,851 (50 feet south of Walnut St) no truck % available
1997 AADT = 3,800

SR 1 south of CR 30

2011 AADT = 3,126 (0.3 mile north of CR 34) 9.06% trucks
2008 AADT = 2,764 (0.3 mile south of CR 32) 13.84% trucks
2005 AADT = 3,141 (0.1 mile south of CR 32) 11.45% trucks
2003 AADT = 3,001 (.02 mile north of CR 34) no truck % available
1997 AADT = 2,730

ANALYSIS

As development occurs along these two corridors the traffic volumes will continue to increase. Industrial development is likely to occur on County Road 30. The school district owns 160 acres of land at the intersection of County Road 30 and will likely develop some type of educational facility at this location within the next ten years. Residential development is occurring near the intersection with access from State Road 1. A manufactured housing community is currently under development and will include 258 homes when completed. The housing community will place approximately 1,150 additional vehicle trips on State Road 1. The school district property could place 300 to 1075 additional trips depending on the type and size of facility to be built. Industrial development in the area is less predictable but will continue to add both passenger

vehicle and truck traffic. An intersection level of service analysis was conducted based upon the intersection count information. The analysis indicated that the intersection is currently operating at an acceptable level of service.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that the intersection of State Road 1 and County Road 30 should continue to be monitored. As development continues in this area, intersection improvements will likely be necessary to maintain efficient traffic flow. The addition of left-turn lanes and traffic control options should be considered as development occurs.

2. Intersection of US 6 and High Street

PROBLEM

High Street will have an increasing traffic volume due to the development of a residential subdivision. Safe and efficient traffic flow may become an issue at this intersection.

FINDINGS

Staff conducted a traffic count on High Street north of US 6. The 2012 count showed the volume at 720. Staff also collected updated traffic counts on US 6 near High Street. The 2008 count showed an AADT of 8,225 and the 2011 count showed an AADT of 8,947. Traffic on US 6 has increased by 16% since 1997 (1997 showed an AADT of 7,700).

US 6

2011 AADT = 8,947 (50 feet west of Commerce St) no truck % available
2008 AADT = 8,225 (0.1 mile west of Commerce St) no truck % available
2005 AADT = 9,287 (200 feet west of Commerce St) no truck % available
2003 AADT = 9,841 (30 feet west of Commerce St) no truck % available
1997 AADT = 7,700

High St north of US 6

2012 AADT = 720 (200 feet north of US 6) no truck % available

ANALYSIS

A new housing development north of US 6 will have access from High Street and Basket Factory Road/County Road 61A. The residential subdivision is planned to include 88 single-family homes. When fully developed, this subdivision will generate approximately 850 total trips that will utilize the two access points.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that the US 6 and High Street intersection be monitored and assessed to determine if any improvements are needed.

3. Intersection of US 6 and Basket Factory Road/County Road 61A

PROBLEM

Basket Factory Road will have an increasing traffic volume due to the development of a residential subdivision. Safe and efficient traffic flow may become an issue at this intersection.

FINDINGS

Staff conducted a traffic count on County Road 61A. The 2011 count showed the volume at 726 (5.92% trucks). Traffic on County Road 61A has decreased since the 2009 count was collected (AADT was 1,005). Truck percentage has also decreased from 11.52% in 2009 to 5.92% in 2011. Staff also collected updated traffic counts on US 6 near County Road 61A. The 2008 count showed an AADT of 8,225 and the 2011 count showed an AADT of 8,947. Traffic on US 6 has increased by 16% since 1997 (1997 showed an AADT of 7,700).

US 6

2011 AADT = 8,947 (50 feet west of Commerce St) no truck % available
2008 AADT = 8,225 (0.1 mile west of Commerce St) no truck % available
2005 AADT = 9,287 (200 feet west of Commerce St) no truck % available
2003 AADT = 9,841 (30 feet west of Commerce St) no truck % available
1997 AADT = 7,700

CR 61A north of US 6

10/19/2011 AADT = 726 (0.1 mile north of US 6) 5.92% trucks
8/11/2011 AADT = 720 (0.1 mile north of US 6) 4.22% trucks
2009 AADT = 1,005 (200 feet south of CR 24) 11.52% trucks

ANALYSIS

A new housing development north of US 6 will have access from High Street and Basket Factory Road/County Road 61A. The residential subdivision is planned to include 88 single-family homes. When fully developed, this subdivision will generate approximately 850 total trips that will utilize the two access points.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that the US 6 and Basket Factory Road/County Road 61A intersection be monitored and assessed to determine if any improvements are needed.

4. Intersection of SR 1 and US 6

PROBLEM

Increase in turning truck traffic through this intersection has raised concerns from local officials. Turning radius improvements and turning lanes are needed.

FINDINGS

Staff has conducted traffic counts at this intersection and found the total number of entering vehicles to be 10,800 based on 2011 count data. This intersection does not have any dedicated turning lanes and has narrow turning radii for trucks that are utilizing the intersection to access industry in Butler.

US 6 west of SR 1

2011 AADT = 7,258 no truck % available
2008 AADT = 7,886 no truck % available
2005 AADT = 11,614 no truck % available
2003 AADT = 12,091 no truck % available

US 6 east of SR 1

2011 AADT = 6,280 no truck % available
2008 AADT = 6,200 no truck % available
2005 AADT = 9,156 no truck % available
2003 AADT = 9,685 no truck % available

SR 1 south of US 6

2011 AADT = 5,198 no truck % available
2008 AADT = 4,427 no truck % available
2005 AADT = 5,611 no truck % available
2003 AADT = 5,608 no truck % available

SR 1 north of US 6

2011 AADT = 2,872 no truck % available
2008 AADT = 3,268 no truck % available
2005 AADT = 3,514 no truck % available
2003 AADT = 3,250 no truck % available

ANALYSIS

INDOT is scheduled to resurface US 6 through this intersection in 2014 and resurfacing SR 1 through the intersection in 2015. At this time there are no plans to improve the intersection as part of the resurfacing projects.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that the US 6 and SR 1 be improved to address truck traffic and increased traffic. Staff will continue to collect traffic and development data for this location and work with INDOT officials to seek funding for future improvements.

Garrett

1. At-Grade Railroad Crossings on County Road 15 and County Road 19

PROBLEM

Garrett would like improvements on both railroad crossings.

FINDINGS

The Northeastern Indiana Regional Coordinating Council conducted a site tour to both locations and then researched Indiana Department of Transportation records. The railroad crossings on County Road 15 and County Road 19 are both currently protected by flashing lights and crossing gates.

RECOMMENDATION

No Recommendation

2. Intersection of South Road and Taylor Road

PROBLEM

Taylor Road forms two slightly offset “T” intersections with South Road. The proximity of these two intersections creates confusion, congestion, and safety concerns. A railroad crossing located immediately north of South Road on Taylor Road contributes to problems with these intersections.

FINDINGS

Taylor Street is offset approximately 85 feet as it intersects South Road from the north and south. The rail line crosses Taylor Street approximately 170 feet north of South Road. Approximately seventy-four trains utilize this rail line each day. Staff conducted a traffic count on South Road / County Road 48 west of Taylor Road / County Road 15. The 2012 count showed the volume at 5,473 (2.7% trucks). Traffic on South Road / County Road 48 west of Taylor Road / County Road 15 has increased since the last updated count was collected (AADT was 5,004). Staff also collected two updated traffic counts on South Road / County Road 48 east of Taylor Road / County Road 15. The 2008 count showed an AADT of 4,094 and the 2011 count showed an AADT of 4,181 (3.04% trucks). Traffic has decreased by 30% since 2000 (2000 showed an AADT of 5,980). Staff collected a traffic count on Taylor Road south of South Road. The 2012 count showed the volume at 2,140. Traffic on that section of roadway has increased by 14% since 2000 (2000 count showed the volume at 1,880). Staff also collected two updated counts for Taylor Rd north of South Road. The 2009 count showed the volume at 1,714 and the 2011 count showed the volume at 1,544. Traffic on that section of roadway has decreased by 25% since 2000 (2000 count showed the volume at 2,050). The Northeastern Indiana Regional Coordinating Council conducted traffic counts on Taylor Road and South Road. Prior turning movement studies showed the two highest

turning movements are the northbound Taylor Street to eastbound South Road and the westbound South Road to southbound Taylor Street.

South Rd/CR 48 west of Taylor Rd/CR 15

2012 AADT = 5,473 (100 feet west of CR 15) 2.7% trucks

2000 AADT = 5,004 (100 feet west of CR 15) no truck % available

South Rd/CR 48 east of Taylor Rd/CR 15

2011 AADT = 4,181 (0.3 mile west of CR 23) 3.04% trucks

2008 AADT = 4,094 (0.15 mile east of CR 19) no truck % available

2005 AADT = 4,757 (0.3 mile east of CR 19) no truck % available

2003 AADT = 4,905 (0.3 mile east of CR 19) no truck % available

2000 AADT = 5,980 (100 feet east of CR 15) no truck % available

Taylor Rd/CR 15 south of South Rd

2012 AADT = 2,140 (75 feet south of South Rd/CR 48) no truck % available

2000 AADT = 1,880 (30 feet south of South Rd) no truck % available

Taylor Rd north of South Rd

2011 AADT = 1,544 (75 feet north of South Rd – 50' s/o RR) no truck % available

2009 AADT = 1,714 (100 feet north of South Rd – 50' s/o RR) no truck % available

2006 AADT = 1,419 (200 feet north of South Rd – 50' n/o RR) no truck % available

2000 AADT = 2,050

ANALYSIS

As development continues and traffic volumes increase through this intersection, the service levels of the northbound and southbound approaches will diminish. In the future, a traffic signal will likely be warranted at this intersection. Train movements crossing the northern section of Taylor Road will continue to contribute to the congestion and confusion at this intersection.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that Taylor Road be realigned to eliminate the offset intersections. Based on field observation, it appears the southern section of Taylor Road will be the least costly approach to re-align. Right-of-way should be acquired to allow for exclusive left, through, and right lanes for the westbound and northbound approaches. When signal warrants are satisfied, signalization of a realigned intersection would be more practical. Additional lanes should be considered on South Road to stack vehicles during train related delays. The addition of a westbound right turn lane and a eastbound left turn lane would help to store vehicles during train delays and still allow the other intersection movements to continue unimpeded.

3. Quincy Street transition to South Road at Second Street

PROBLEM

The alignment of Quincy Street and South Road are offset requiring motorists to negotiate two ninety-degree curves utilizing Second Street to continue along the east-west corridor. The intersection of Quincy Street and Second Street further complicates this transition.

FINDINGS

Staff conducted a traffic count on South Road west of Taylor Road. The 2012 count showed the volume at 5,473 (2.7% trucks). Traffic on South Road, west of Taylor Road, has increased since the 2000 count was collected (AADT was 5,004). Staff also collected updated counts for Quincy Street. For Quincy Street, between 2nd Street and Britton Street, the 2008 count showed an AADT of 3,350 and the 2011 count showed an AADT of 3,367. For Quincy Street, west of Taylor Road, the 2012 count showed the volume at 424. Traffic volumes on Quincy Street have remained consistent.

Quincy St between 2nd St and Britton St

2011 AADT = 3,367 (0.1 mile east of Britton St) no truck % available
2009 AADT = 3,513 (150 feet east of Britton St) no truck % available
2008 AADT = 3,350 (300 feet east of Britton St) no truck % available
2006 AADT = 3,671 (300 feet east of Britton St) no truck % available
2000 AADT = 5,682 (200 feet east of Britton St) no truck % available

Quincy St west of Taylor Rd

2012 AADT = 424 (150 feet west of Taylor Rd) no truck % available
2000 AADT = 427 (200 feet west of Taylor Rd) no truck % available

South Rd/CR 48 west of Taylor Rd/CR 15

2012 AADT = 5,473 (100 feet west of CR 15) 2.7% trucks
2000 AADT = 5,004 (100 feet west of CR 15) no truck % available

ANALYSIS

Quincy Street and South Road combine to form a major east-west arterial providing access into the downtown business district of Garrett. The predominant east-west travel on Garrett's eastside utilizes this corridor. This corridor also serves as a major route connecting the Cities of Garrett and Auburn. The land uses on Quincy Street, from Randolph Street to Second Street, is primarily commercial/industrial with some residential. This section is classified as an Urban Minor Arterial. Quincy Street, from Second Street to Taylor Road, is lined primarily with single family homes and is classified as a local street. South Road, from Second Street to Taylor Road, has a mixture of adjoining residential and commercial/industrial land uses. This section of roadway is classified as an Urban Minor Arterial. As traffic continues to increase along this corridor, the transition from Quincy Street to South Road will become congested and create potential safety concerns. Motorists will circumvent the area, utilizing local residential streets, which is not desirable.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council recommends that Quincy Street and South Road should be aligned to provide a smooth transition. This improvement will assist east-west travel through this area of Garrett. Several streets that currently intersect Quincy Street and South Road including Quincy Street to the east, Second Street, and Third Street, will be impacted by this recommended improvement. Consideration of these impacts to the surrounding streets and the desires of the community must be incorporated into the project design.

4. Intersection of State Road 327 and Warfield Street

PROBLEMS

Volume of traffic from the high school and a hill at the intersection causes congestion at the intersection.

FINDINGS

Staff collected traffic counts for Warfield Street east of State Road 327. The AADT at this location was 2,466 in 2006, 2,489 in 2008, and 2,883 in 2011. Traffic on Warfield Street has increased by 17% since 2006. Staff also collected traffic counts on State Road 327 near Warfield Street. The AADT at this location was 10,806 in 2003, 10,190 in 2005, 8,614 in 2008, and 8,385 in 2011. Traffic on State Road 327 has declined by 22% since 2003.

Warfield St east of SR 327

2011 AADT = 2,883 (250 feet east of SR 327) no truck % available

2008 AADT = 2,489 (300 feet east of SR 327) no truck % available

2006 AADT = 2,466 (300 feet east of SR 327) no truck % available

SR 327

2011 AADT = 8,385 (20 feet south of 1st St) no truck % available

2008 AADT = 8,614 (100 feet south of 1st St) no truck % available

2005 AADT = 10,190 (50 feet south of 1st St) no truck % available

2003 AADT = 10,806 (100 feet south of 1st St) no truck % available

RECOMMENDATION

NIRCC would recommend that local officials continue to seek possible improvements to balance community needs at this location and work with INDOT to investigate potential solutions for southbound through traffic during peak hours. NIRCC will continue to monitor traffic data and coordinate with local officials and INDOT to identify potential solutions.

5. Intersection of Fuller Drive and State Road 8

PROBLEM

Garrett officials are anticipating additional growth at this intersection. They are concerned that the increase in traffic at this intersection combined with additional development will create safety and congestion issues.

FINDINGS

Staff collected two updated counts for State Road 8 east of County Road 15. The 2008 count showed the volume at 13,093 and the 2011 count showed the volume at 11,015. Traffic volumes on State Road 8 have gone up and down in the past 10 years. Staff also collected updated counts for Fuller Drive south of State Road 8. The 2009 count showed an AADT of 614 and the 2011 count showed an AADT of 741. Traffic on Fuller Drive has decreased by 56% since 2002 (2002 count showed an AADT of 1,697).

SR 8 east of CR 15

2011 AADT = 11,015 (0.2 mile east of CR 15)
2008 AADT = 13,093 (0.1 mile west of CR 19)
2005 AADT = 11,880 (0.2 mile east of CR 15)
2003 AADT = 13,211 (0.1 mile west of CR 19)

Fuller Dr south of SR 8

2011 AADT = 741 (100 feet south of SR 8)
6/23/2009 AADT = 614 (0.1 mile south of SR 8)
4/14/2009 AADT = 508 (0.1 mile south of SR 8)
2002 AADT = 1,697 (150 feet south of SR 8)

ANALYSIS

The completion of Forrest Park Drive, from Fuller Drive to Taylor Road, appears to have relieved some of the traffic at this intersection.

RECOMMENDATION

NIRCC will continue to monitor this intersection periodically to determine if any future improvements are needed.

6. Intersection of SR 327 and State Road 8

PROBLEM

Officials would like to ensure safety and capacities are being addressed at this intersection. A 30,000 square foot strip mall has been proposed that would impact the number of vehicles entering the intersection in the future.

FINDINGS

Two recent counts for State Road 8 east of State Road 327 have been obtained by staff. The 2008 count showed the volume at 10,547 with 5.57% trucks and the 2011 count

showed the volume at 9,727 with 6.52% trucks. Traffic on State Road 8 has declined by 11% since 2005 (2005 count showed the volume at 10,966 with 9.17% trucks). Staff also collected two updated counts for State Road 327 south of State Road 8. The 2008 count showed an AADT of 6,715 with 8.17% trucks and the 2011 count showed an AADT of 7,042 with 3.03% trucks. Traffic on State Road 327 has declined by 16% since 2005 (2005 count showed an AADT of 8,347 with 3.04% trucks).

SR 8 east of SR 327

2011 AADT = 9,727 (0.2 mile east of SR 327) 6.52% trucks
2008 AADT = 10,547 (0.1 mile east of SR 327) 5.57% trucks
2005 AADT = 10,966 (0.2 mile east of SR 327) 9.17% trucks

SR 327 south of SR 8

2011 AADT = 7,042 (150 feet north of Edgewater Dr) 3.03% trucks
2008 AADT = 6,715 (0.1 mile south of SR 8) 8.17% trucks
2005 AADT = 8,347 (400 feet south of SR 8) 3.04% trucks

ANALYSIS

Crash data shows 20 collisions at this intersection from 2011 to 2013. INDOT installed flashers at this all way stop in 2010 to reduce the number of right angle crashes. Based on the 2011 to 2013 crash data 8 of the 20 crashes were right angle collisions.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend this intersection be monitored to ensure future improvements to address capacity and safety issues are pursued with the Indiana Department of Transportation.

7. Bicycle / Pedestrian Facilities

PROBLEM

Local officials would like to provide a bicycle / pedestrian facility to connect residential areas near Iron Horse subdivision, located southeast of the State Road 8 and State Road 327 intersection, to the existing sidewalk on State Road 327 (Randolph Street) near Covell Street.

FINDINGS

This proposed project would provide connectivity to the local elementary, middle and high schools in Garrett. Residential development north of the existing sidewalks has no connection to the downtown area or schools at this time.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend that a project be developed to provide bicycle and pedestrian facilities to this area. NIRCC will work with local officials to obtain funding and implement a project in the future as development continues.

Waterloo

1. US 6 east of Interstate 69.

PROBLEM

Proposed development on the southeast section of the interchange of Interstate 69 and US 6 has been considered in the past however, no development has occurred at this time. Local officials would like this area monitored and future developments reviewed to ensure the impacts on the interchange and access to US 6 do not negatively impact the area.

FINDINGS

Staff collected two updated counts for US 6 east of Interstate 69. The AADT at this location was 9,896 with 34.53% trucks in 2009 and 9,435 with 21.06% trucks in 2011. Traffic volumes have declined by 12% since 2005 (2005 count was 10,782 with 27.86% trucks).

US 6 east of Interstate 69

2011 AADT = 9,435 (0.1 mile east of Interstate 69) 21.06% trucks

2009 AADT = 9,896 (200 feet east of Interstate 69) 34.53% trucks

2005 AADT = 10,782 (0.12 mile east of Interstate 69) 27.86% trucks

ANALYSIS

Staff reviewed the traffic impact study and level of service for the access to the proposed truck stop but the project was not feasible. A development with less intensive truck and vehicle traffic would be more suitable for this location.

RECOMMENDATION

This location will continue to be monitored for traffic and developments. Staff would recommend that any proposed development access US 6 no less than 1000 feet from the interchange ramps at Interstate 69.

2. Intersection of North Commerce Drive (County Road 31) and US 6

PROBLEM

A Transfer Recycling Center on the west side of County Road 31 and other businesses in the Waterloo Industrial Park has prompted a need for improved access.

FINDINGS

Waterloo officials have renamed County Road 31 to North Commerce Drive from US 6 to the railroad and South Commerce Drive from the railroad to County Road 28. This roadway is classified as an urban collector. Staff collected two updated counts for County Road 31 south of US 6. The AADT at this location showed an AADT of 773 with 10.23% trucks in 2009 and 680 with 5.33% trucks in 2011. Traffic on County Road

31 has declined by 16% since 2006 (2006 count showed an AADT of 810). Since this count additional trips have been added from recent developments.

CR 31 south of US 6

2011 AADT = 680 (0.1 mile south of CR 26 – 0.1 mile s/o RR) 5.33% trucks

2009 AADT = 773 (0.2 mile south of CR 26 – 200' s/o RR) 10.23% trucks

2006 AADT = 810 (0.15 mile south of CR 26 – 0.1 mile s/o RR) no truck % available

ANALYSIS

The Northeastern Indiana Regional Coordinating Council has reviewed the impacts from the transfer recycling facility on County Road 31 and the intersections of US 6 and County Road 28.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend improvements at the intersection of North Commerce Drive (County Road 31) and US 6 to accommodate the additional traffic accessing the transfer recycling facility. Local road improvements include the recent reconstruction and widening of S. Commerce Drive. The Town also received funds from the Indiana Department of Transportation to make improvements to the intersection of N. Commerce Drive and US 6. Planned improvements include a dedicated right turn for the eastbound approach on US 6, a dedicated left turn on the westbound approach for US 6 and a dedicated left turn on Commerce Drive for the northbound approach. The project is in final design and right-of-way acquisition, construction is expected to begin in late 2014. Signalization is not warranted at this time.

3. Intersection of Albright Street and Walnut Street

PROBLEM

The proposed housing addition, Country Village on Albright Street, has increased from 20 homes to 66 homes.

FINDINGS

Waterloo officials stated that the proposed number of homes for the development has increased and want to ensure no improvements are needed to the affected roadways as a result of the increase. Albright Street and Walnut Street are the primary roadways affected by the additional trips from the Country Village addition. The additional 46 homes would have a minimal impact on the overall performance of the roadway increasing the daily traffic by approximately 450 vehicles per day. Staff collected traffic counts for Walnut Street east and west of Albright Street. For east of Albright Street, the 2009 count showed an AADT of 1,704 with 5.23% trucks and the 2011 count showed an AADT of 1,301 with 11.2% trucks. West of Albright Street, the 2012 count showed an AADT of 2,133. Staff also collected a traffic count for Albright Street south of Walnut Street. The AADT at this location was 562.

Walnut Street/CR 28 east of Albright St/CR 37

2011 AADT = 1,301 (0.6 mile west of CR 41) 11.2% trucks

2009 AADT = 1,704 (0.3 mile east of SR 427) 5.23% trucks

Walnut St/CR 28 west of Albright St/CR 37

2012 AADT = 2,133 (0.1 mile west of CR 37) no truck % available

Albright St/CR 37 south of Walnut St/CR 28

2012 AADT = 562 (0.1 mile south of CR 28) no truck % available

CR 28 from SR 427 to CR 41 is classified as an Urban Collector and from CR 41 to CR 47 is classified as a Rural Minor Collector. CR 37 is still classified as a local roadway.

ANALYSIS

Albright Street and Walnut Street were not classified roadways in 2005 and 2006 when traffic data was collected. Local roadways commonly carry 1000 or less vehicles per day. The Northeastern Indiana Regional Coordinating Council assumed 1000 vehicles per day for both roadways and added the additional trips from the housing to review the impacts.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council would recommend that this roadway be counted in the future to determine the amount of traffic on Walnut Street east and west of Albright Street. Staff does not feel that the projected number of 1,450 vehicles per day on Albright Street and Walnut Street warrants any improvements at this time. Staff would recommend the traffic volumes be monitored in the future to ensure the roadway is operating at an acceptable level of service.

4. Amtrak Railroad Station

PROBLEM

The historic Waterloo Depot was rehabilitated in 2008 with the intention of restoring it for train passenger use. The Town receives many complaints about the quality of the current shelter waiting area. Local officials received a TIGER II grant in 2010 to make the Depot accessible and to improve the platforms and parking for passengers. Amtrak offered more funding to the project to increase the platforms and overall scope of the project, but complications from Amtrak's loss of funding in 2013 stalled the project.

FINDINGS

The loss of funding from Amtrak caused the boarding platform to be removed from the project. Local officials have submitted a proposal to revise the original TIGER II grant with the US Department of Transportation in order to utilize the Depot as a passenger waiting area and improve parking, sidewalks and lighting. If approved, the project would

be completed by September 2015. The boarding platform and small shelter near the boarding area would remain in place.

RECOMMENDATION

The Northeastern Indiana Regional Coordinating Council will work with local officials on this project. At this time the project is pending approval.

SUMMARY

The Northeastern Indiana Regional Coordinating Council engaged in a rural transportation planning initiative that has been extremely successful. The original planning efforts have been complemented by continued data collection and identification of problem areas, analysis, and development of solutions. The process has brought a clearer understanding of the transportation system to all participants. The first initiative in rural transportation planning developed an awareness of the need for a continuous planning process. As development has occurred, additional potential problem areas and changes to other problem areas have been addressed in the planning process. The Northeastern Indiana Regional Coordinating Council will continue to participate in monitoring the status of problem areas and work with local officials to ensure a safe and efficient transportation system for DeKalb County.




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

APPENDIX A



SUPPORTING MATERIALS - MAPS

Dekalb County, IN Rural Plan Projects

Improvement Types

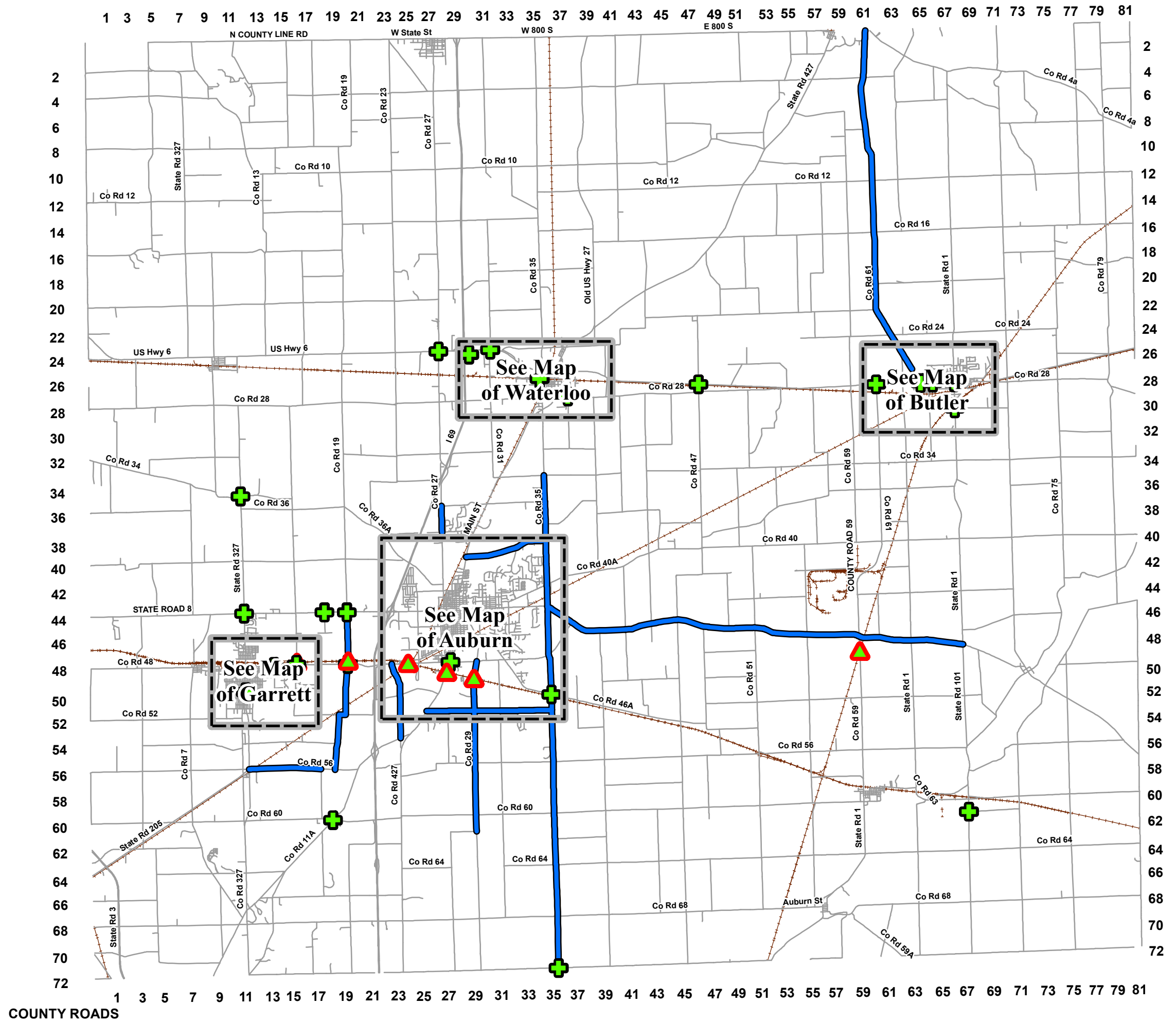
-  Intersection
-  Railroad Crossing
-  Roadway

Other Map Features

-  Streets
-  Railroad





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Auburn, IN Rural Plan Projects

Improvement Types

-  Intersection
-  Railroad Crossing

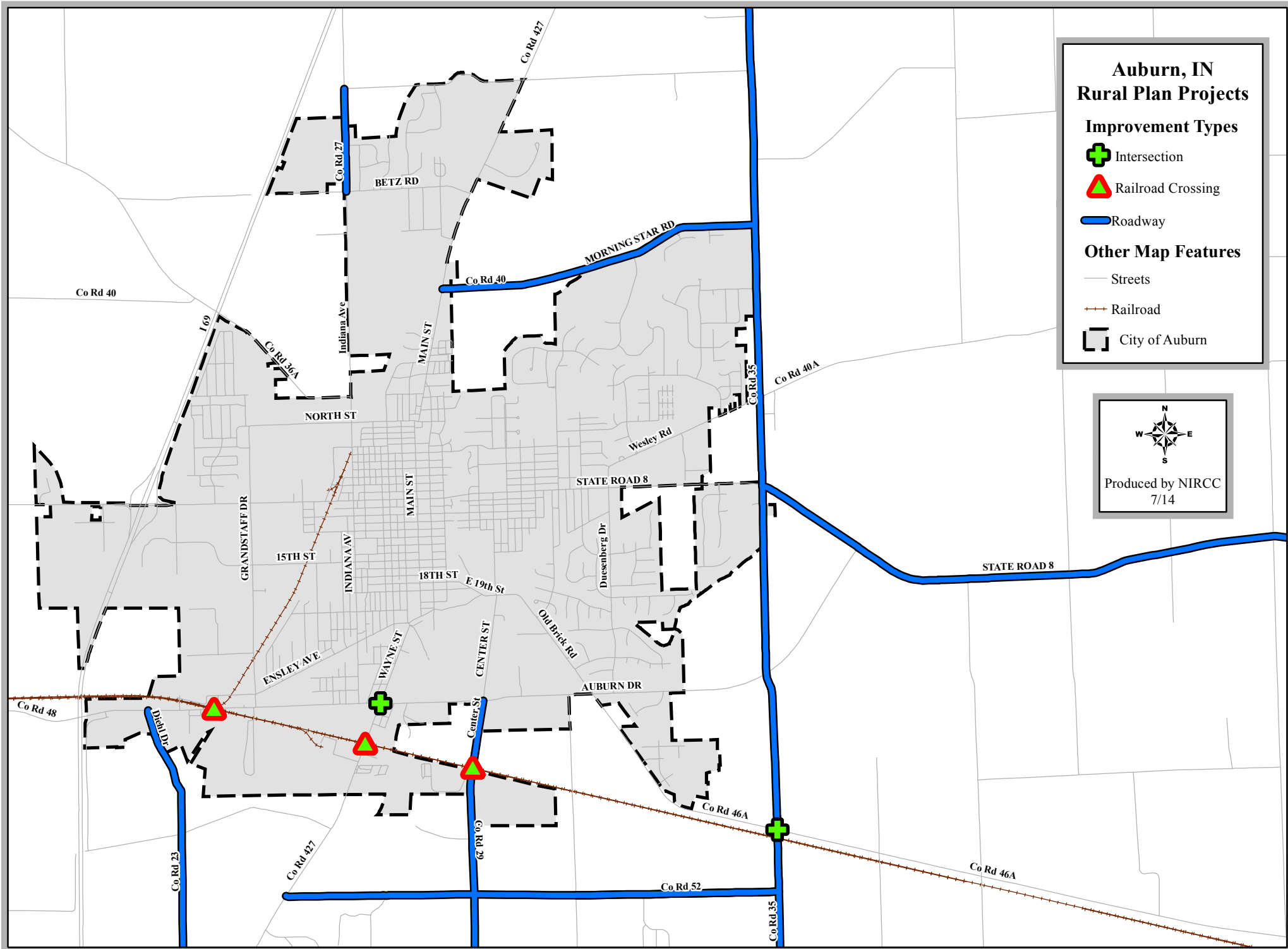
-  Roadway

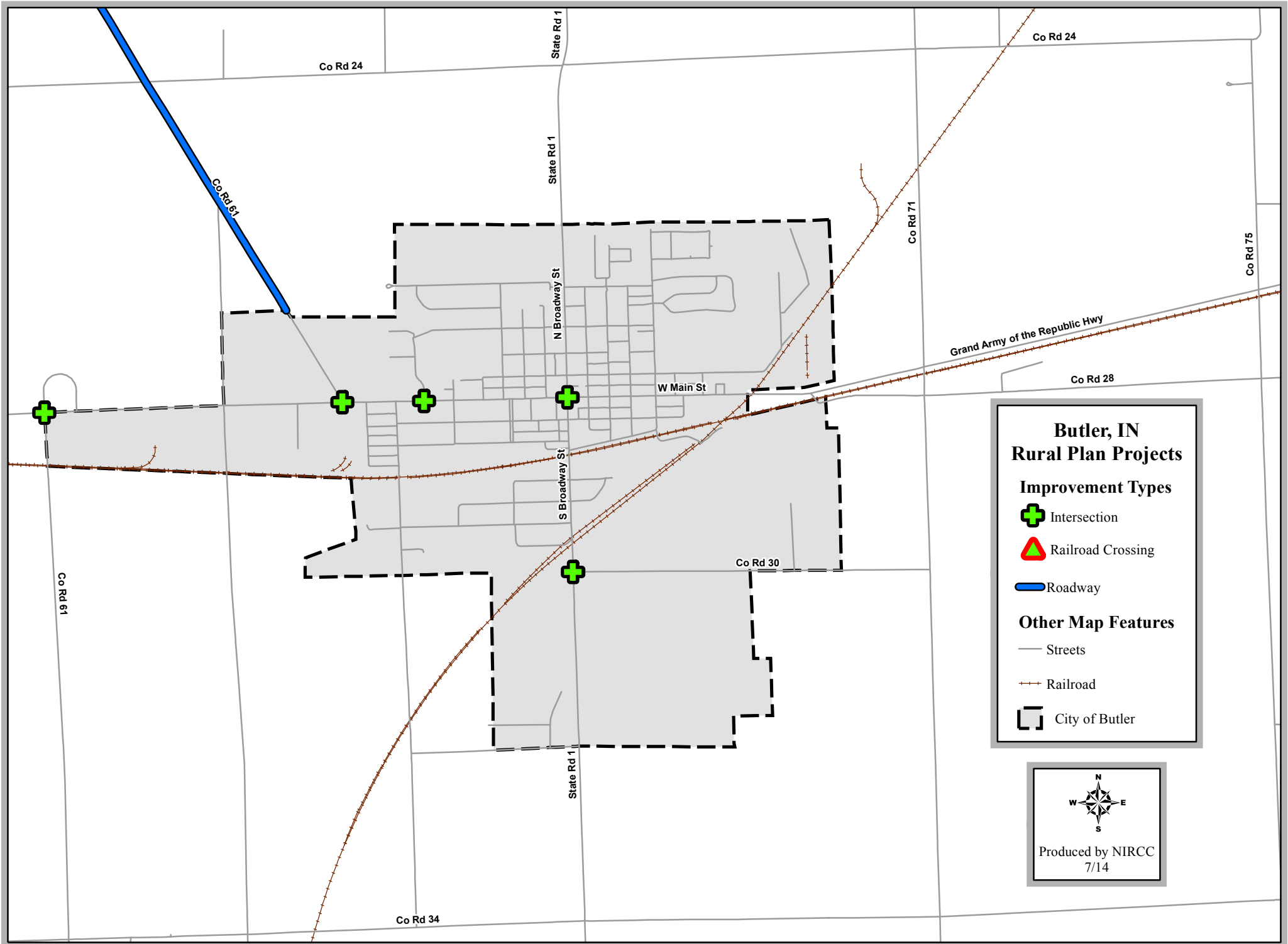
Other Map Features

-  Streets
-  Railroad
-  City of Auburn






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**Butler, IN
Rural Plan Projects**

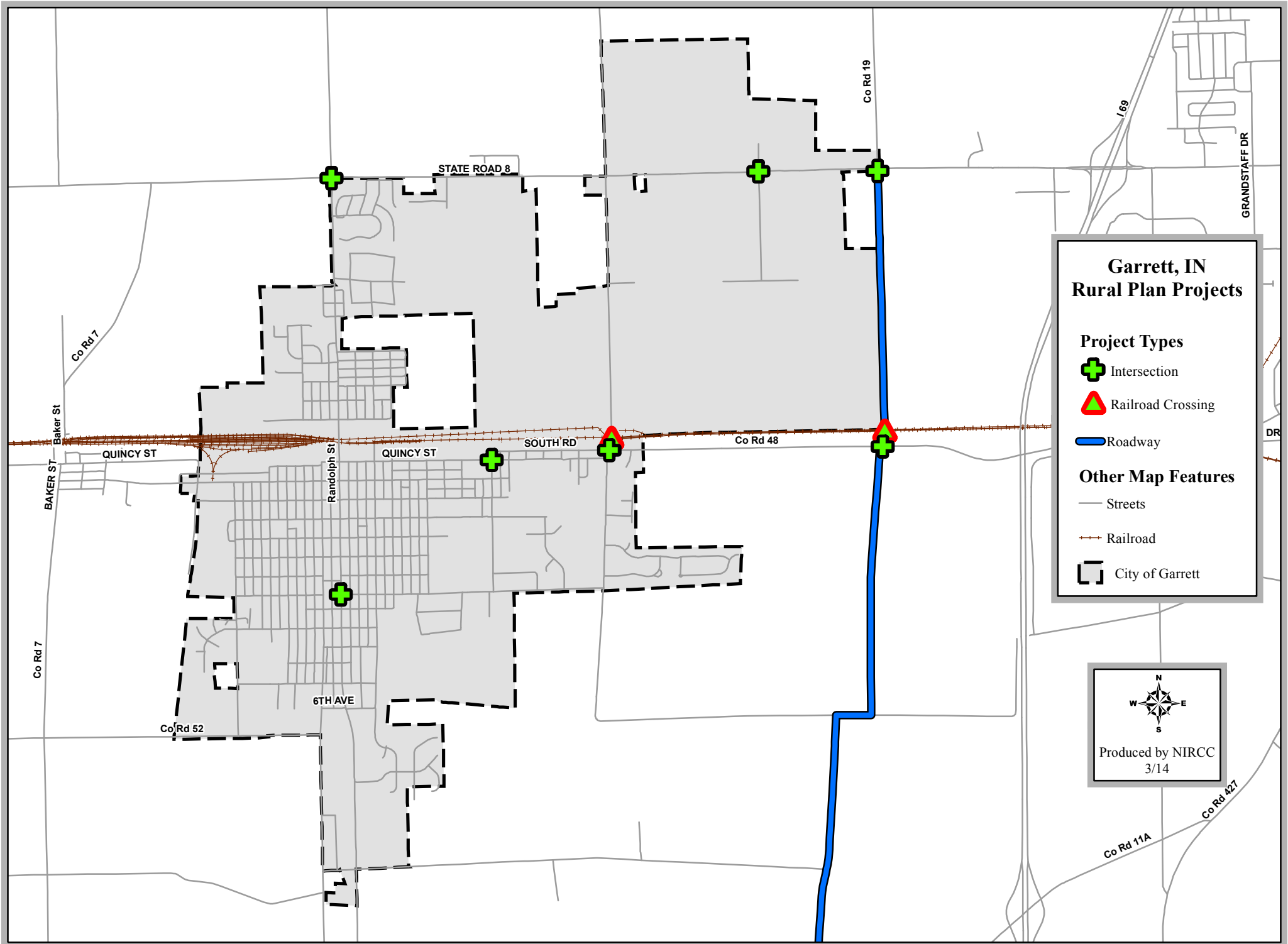
Improvement Types

-  Intersection
-  Railroad Crossing
-  Roadway



Other Map Features

-  Streets
-  Railroad
-  City of Butler


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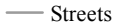




Garrett, IN Rural Plan Projects

- Project Types**
-  Intersection
 -  Railroad Crossing

 Roadway

Other Map Features

-  Streets
-  Railroad
-  City of Garrett


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Waterloo, IN Rural Plan Projects


Improvement Types

 Intersection


 Railroad Crossing

 Roadway

Other Map Features

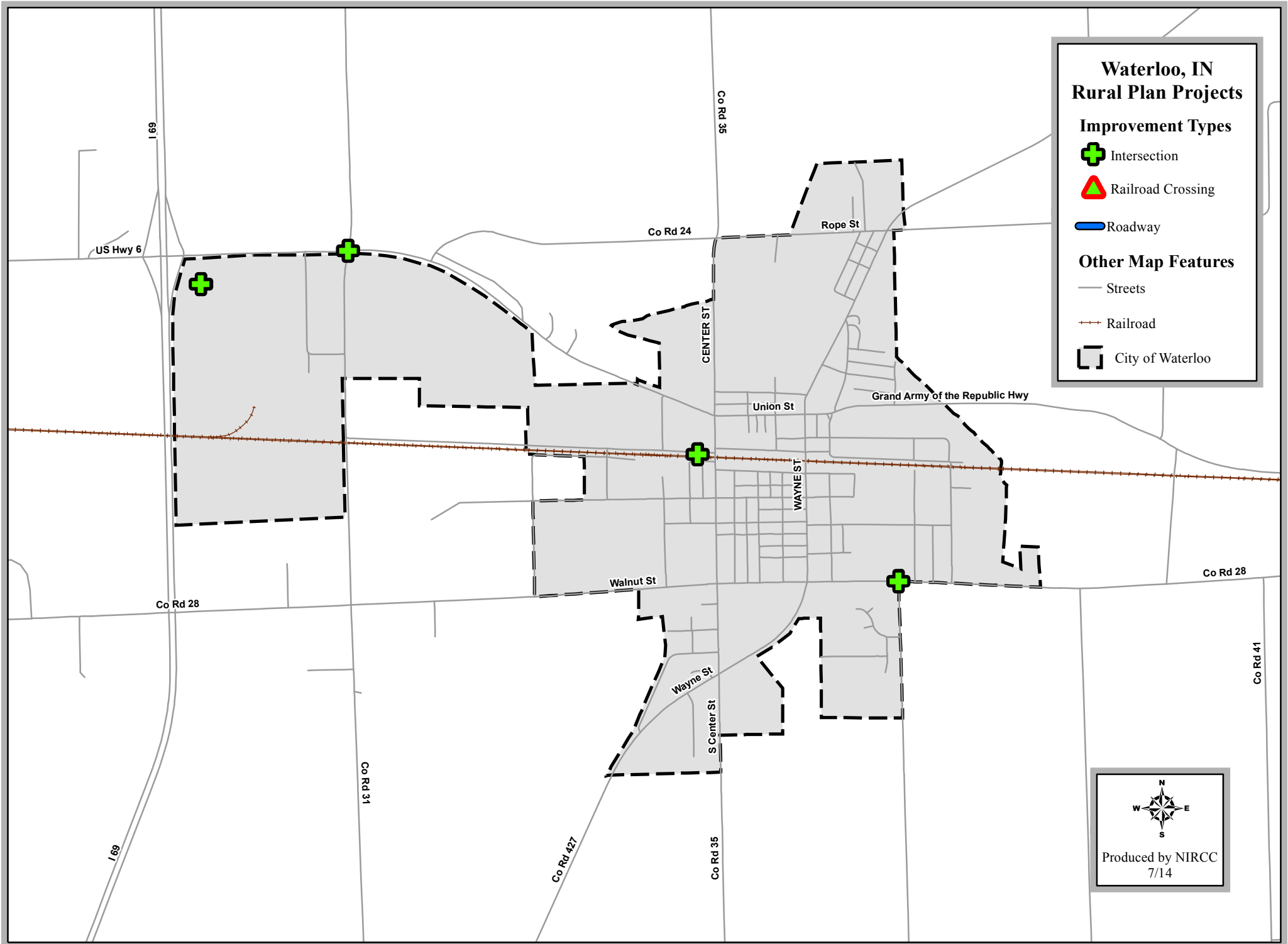
 Streets

 Railroad

 City of Waterloo










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EXISTING FUNCTIONAL CLASSIFICATION SYSTEM MAPS

**EXISTING
FUNCTIONAL CLASSIFICATION
SYSTEM FOR
DEKALB COUNTY, IN**



URBAN FUNCTION CLASSIFICATION

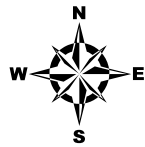
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-  URBAN OTHER FREEWAY/EXPRESSWAY
-  URBAN OTHER PRINCIPAL ARTERIAL
-  URBAN MINOR ARTERIAL
-  URBAN COLLECTOR
-  PROPOSED URBAN MINOR ARTERIAL
-  PROPOSED URBAN COLLECTOR

RURAL FUNCTION CLASSIFICATION

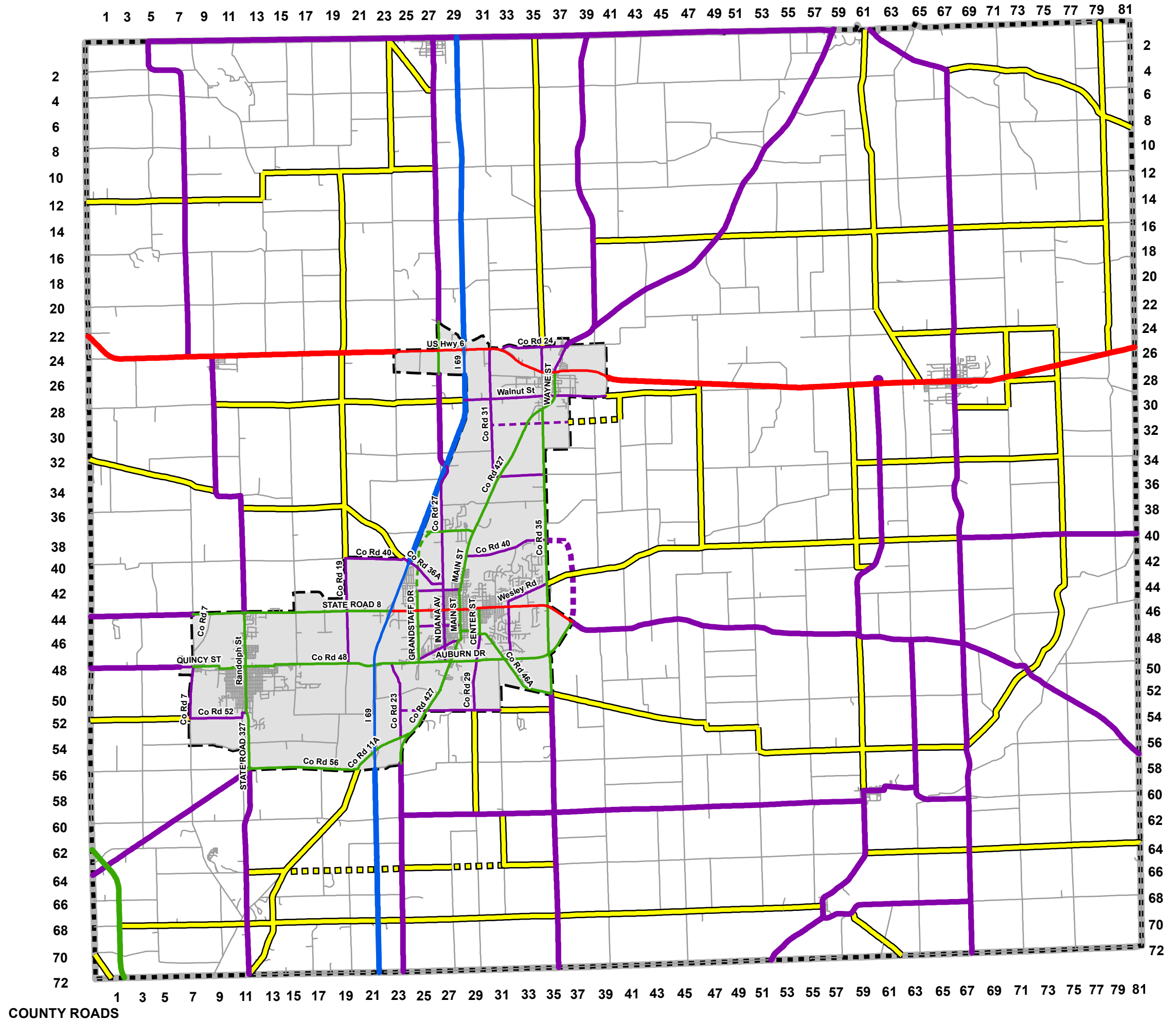
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-  RURAL OTHER PRINCIPAL ARTERIAL
-  RURAL MINOR ARTERIAL
-  RURAL MAJOR COLLECTOR
-  RURAL MINOR COLLECTOR
-  PROPOSED RURAL MAJOR COLLECTOR
-  PROPOSED RURAL MINOR COLLECTOR

OTHER MAP FEATURES

-  COUNTY BOUNDARY
-  URBAN BOUNDARY










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EXISTING FUNCTIONAL CLASSIFICATION SYSTEM FOR THE AUBURN AREA



URBAN FUNCTION CLASSIFICATION

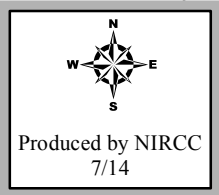
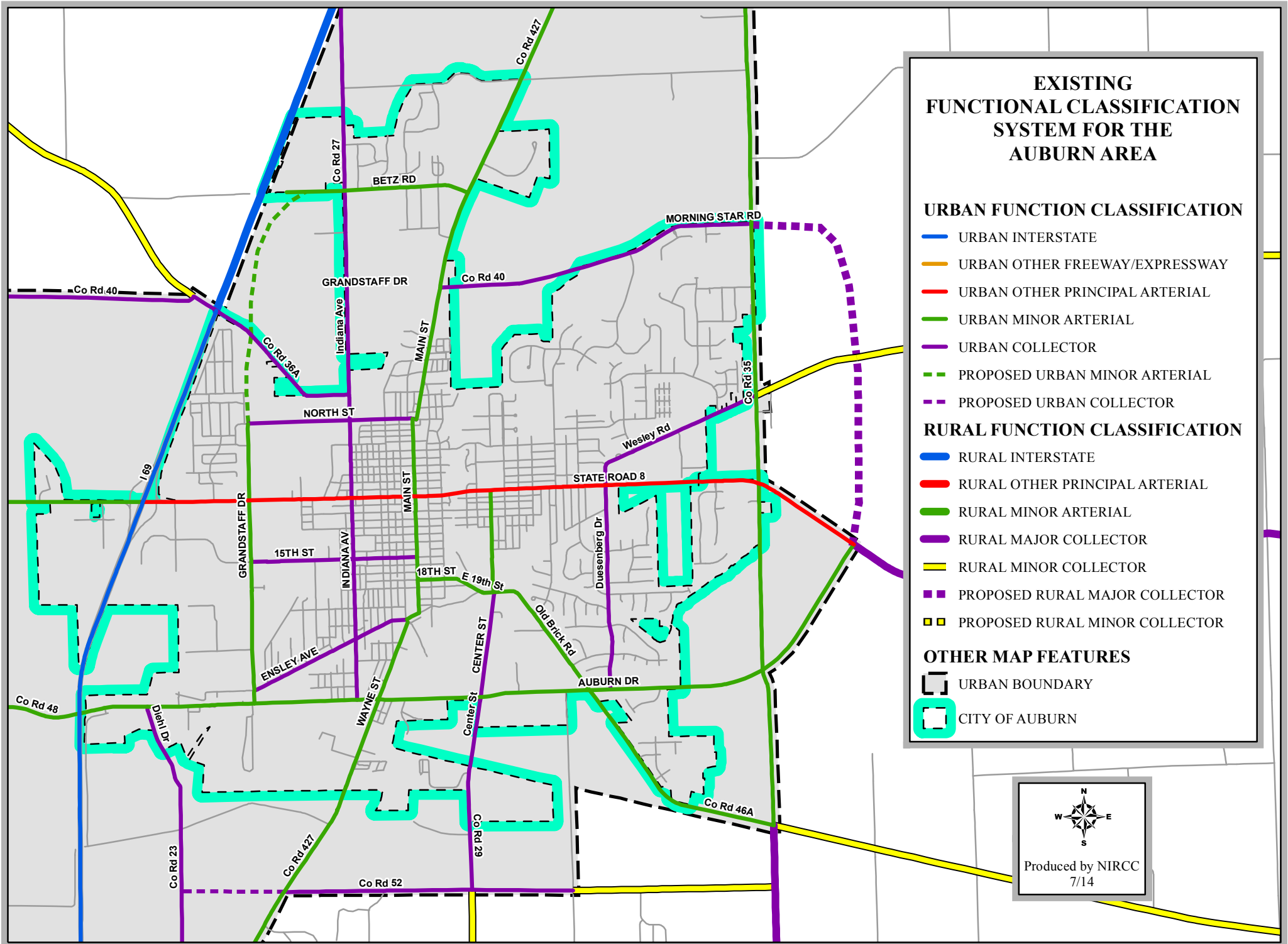
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-  URBAN OTHER FREEWAY/EXPRESSWAY
-  URBAN OTHER PRINCIPAL ARTERIAL
-  URBAN MINOR ARTERIAL
-  URBAN COLLECTOR
-  PROPOSED URBAN MINOR ARTERIAL
-  PROPOSED URBAN COLLECTOR

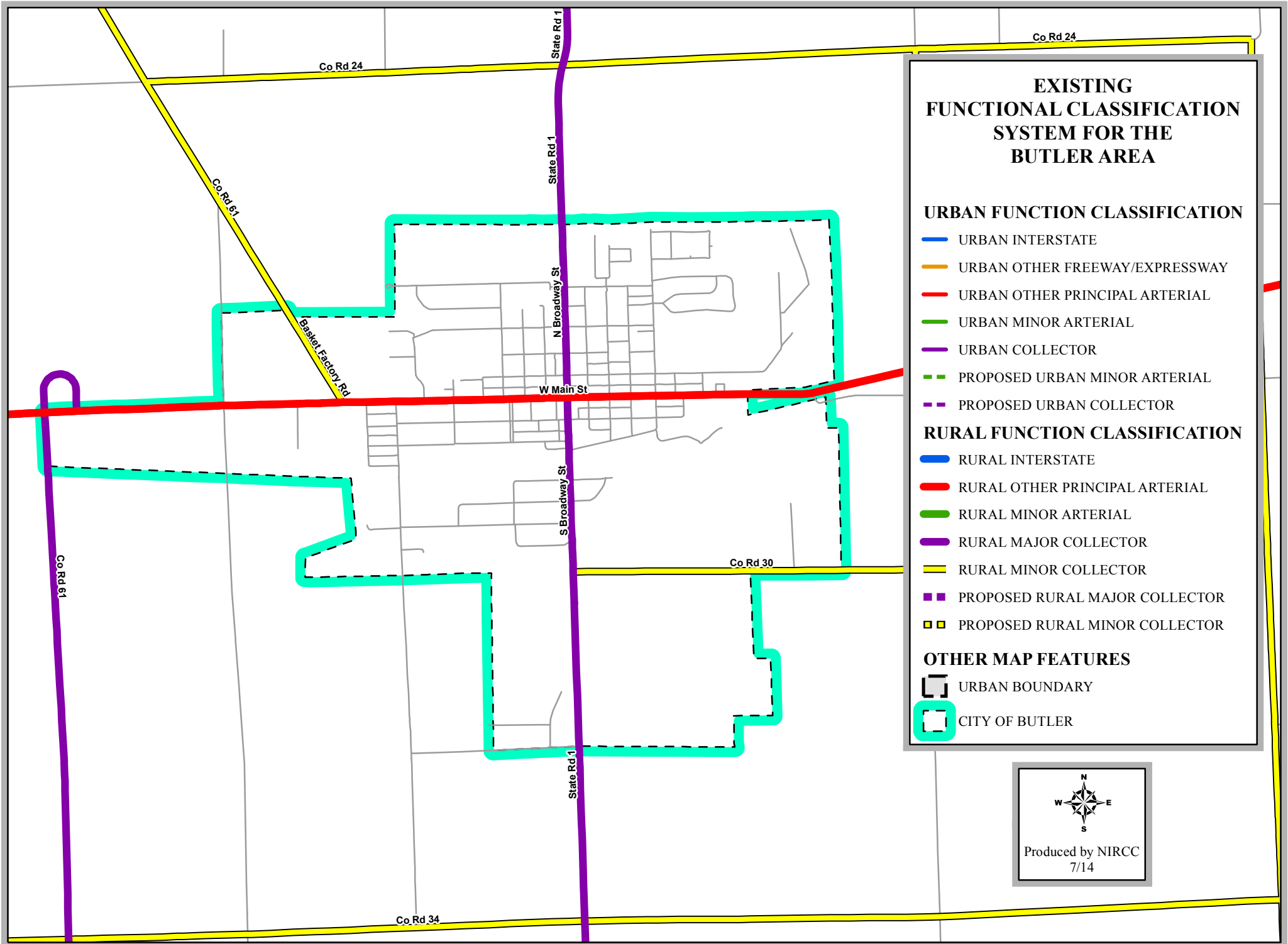
RURAL FUNCTION CLASSIFICATION

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

OTHER MAP FEATURES

-  URBAN BOUNDARY
-  CITY OF AUBURN





EXISTING FUNCTIONAL CLASSIFICATION SYSTEM FOR THE BUTLER AREA

URBAN FUNCTION CLASSIFICATION

- URBAN INTERSTATE
- URBAN OTHER FREEWAY/EXPRESSWAY
- URBAN OTHER PRINCIPAL ARTERIAL
- URBAN MINOR ARTERIAL
- URBAN COLLECTOR
- PROPOSED URBAN MINOR ARTERIAL
- PROPOSED URBAN COLLECTOR

RURAL FUNCTION CLASSIFICATION

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

OTHER MAP FEATURES








- URBAN BOUNDARY
- CITY OF BUTLER










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EXISTING FUNCTIONAL CLASSIFICATION SYSTEM FOR THE GARRETT AREA



URBAN FUNCTION CLASSIFICATION

-  URBAN INTERSTATE
-  URBAN OTHER FREEWAY/EXPRESSWAY
-  URBAN OTHER PRINCIPAL ARTERIAL
-  URBAN MINOR ARTERIAL
-  URBAN COLLECTOR
-  PROPOSED URBAN MINOR ARTERIAL
-  PROPOSED URBAN COLLECTOR

RURAL FUNCTION CLASSIFICATION

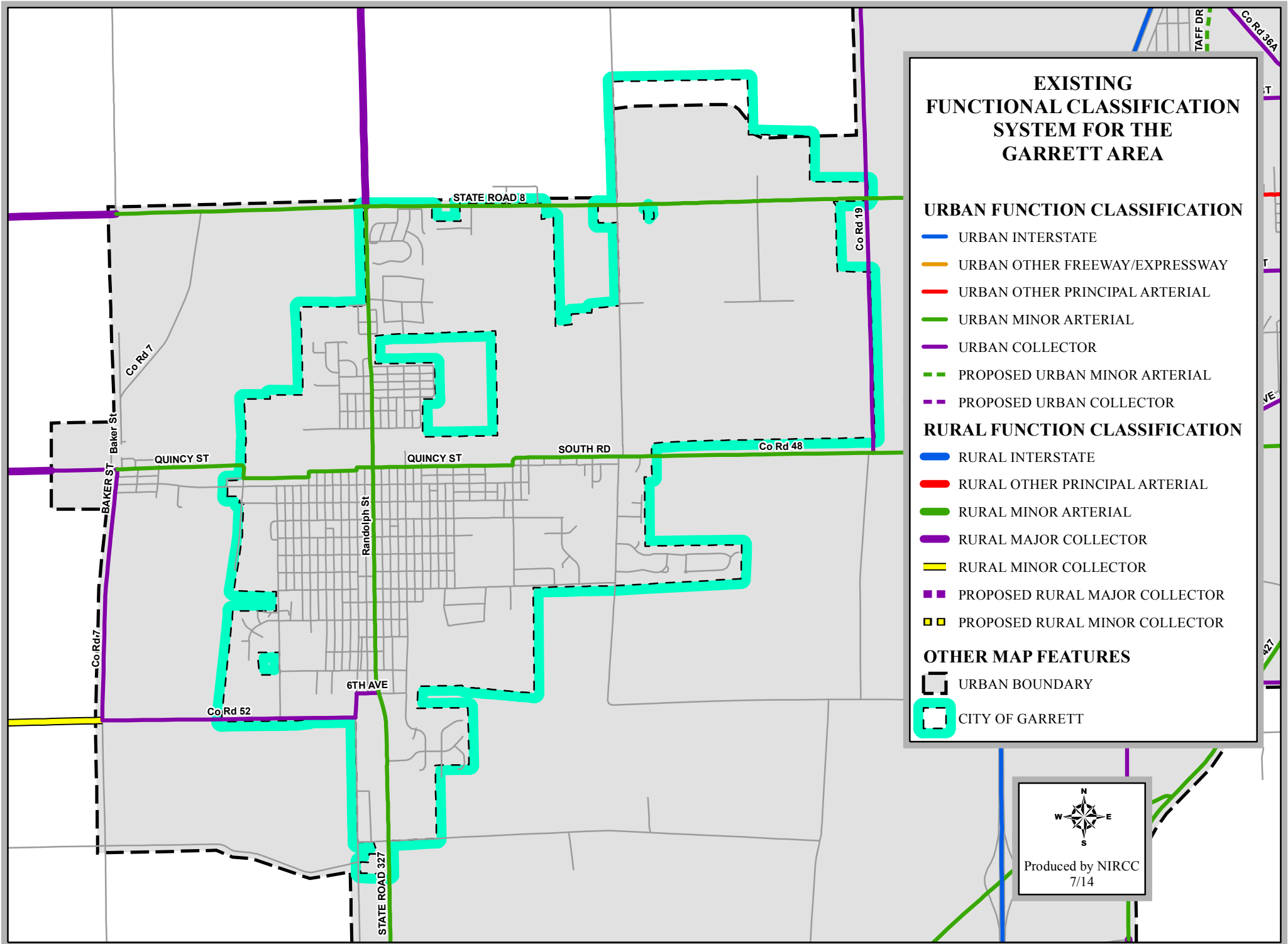
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-  RURAL MAJOR COLLECTOR
-  RURAL MINOR COLLECTOR
-  PROPOSED RURAL MAJOR COLLECTOR
-  PROPOSED RURAL MINOR COLLECTOR

OTHER MAP FEATURES

-  URBAN BOUNDARY
-  CITY OF GARRETT










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EXISTING FUNCTIONAL CLASSIFICATION SYSTEM FOR THE WATERLOO AREA



URBAN FUNCTION CLASSIFICATION

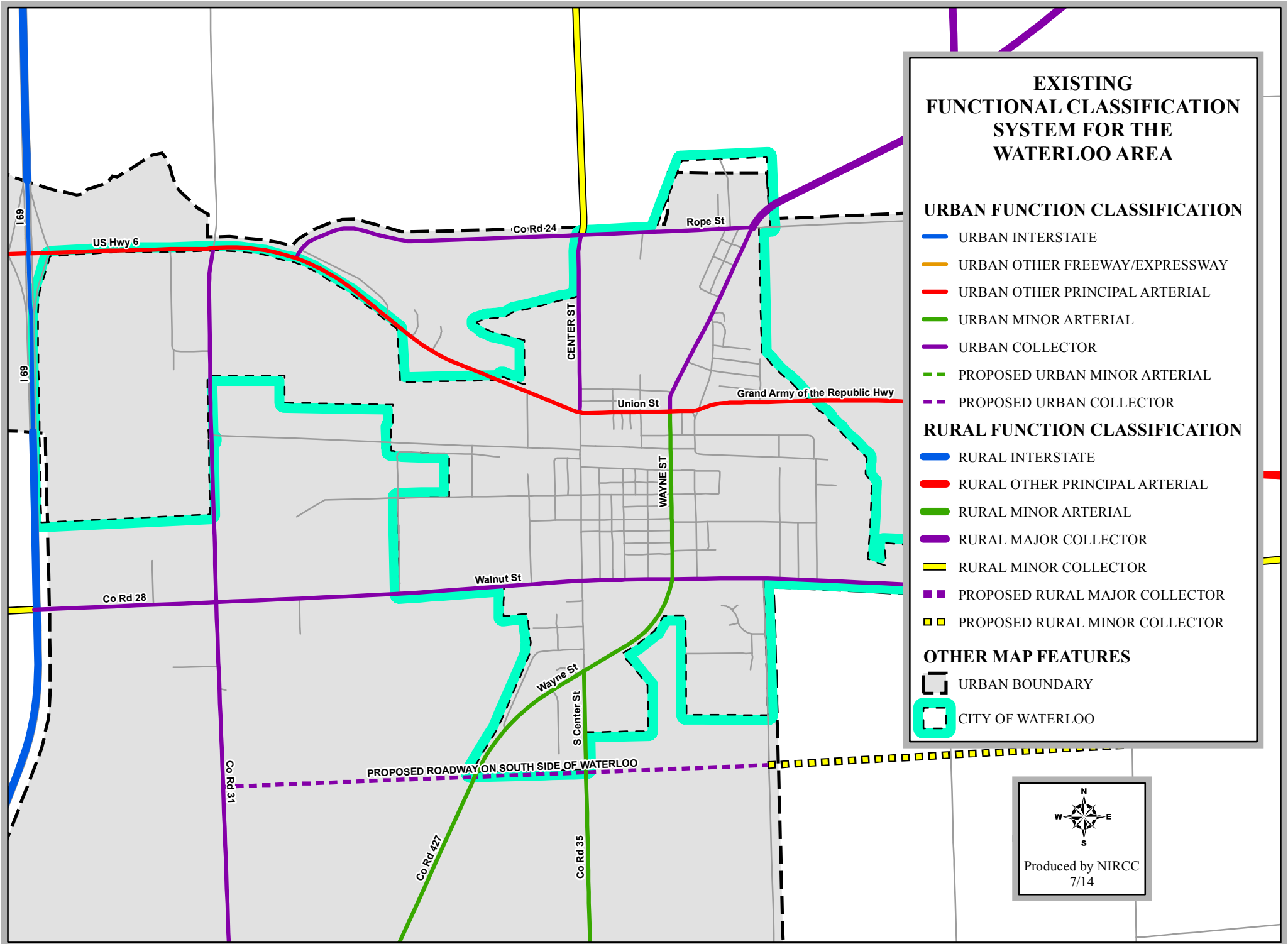
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-  URBAN OTHER PRINCIPAL ARTERIAL
-  URBAN MINOR ARTERIAL
-  URBAN COLLECTOR
-  PROPOSED URBAN MINOR ARTERIAL
-  PROPOSED URBAN COLLECTOR

RURAL FUNCTION CLASSIFICATION

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

OTHER MAP FEATURES

-  URBAN BOUNDARY
-  CITY OF WATERLOO



UPDATED FUNCTIONAL CLASSIFICATION SYSTEM MAPS

**UPDATED
FUNCTIONAL CLASSIFICATION
SYSTEM FOR
DEKALB COUNTY, IN**

URBAN FUNCTION CLASSIFICATION

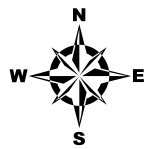
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RURAL FUNCTION CLASSIFICATION

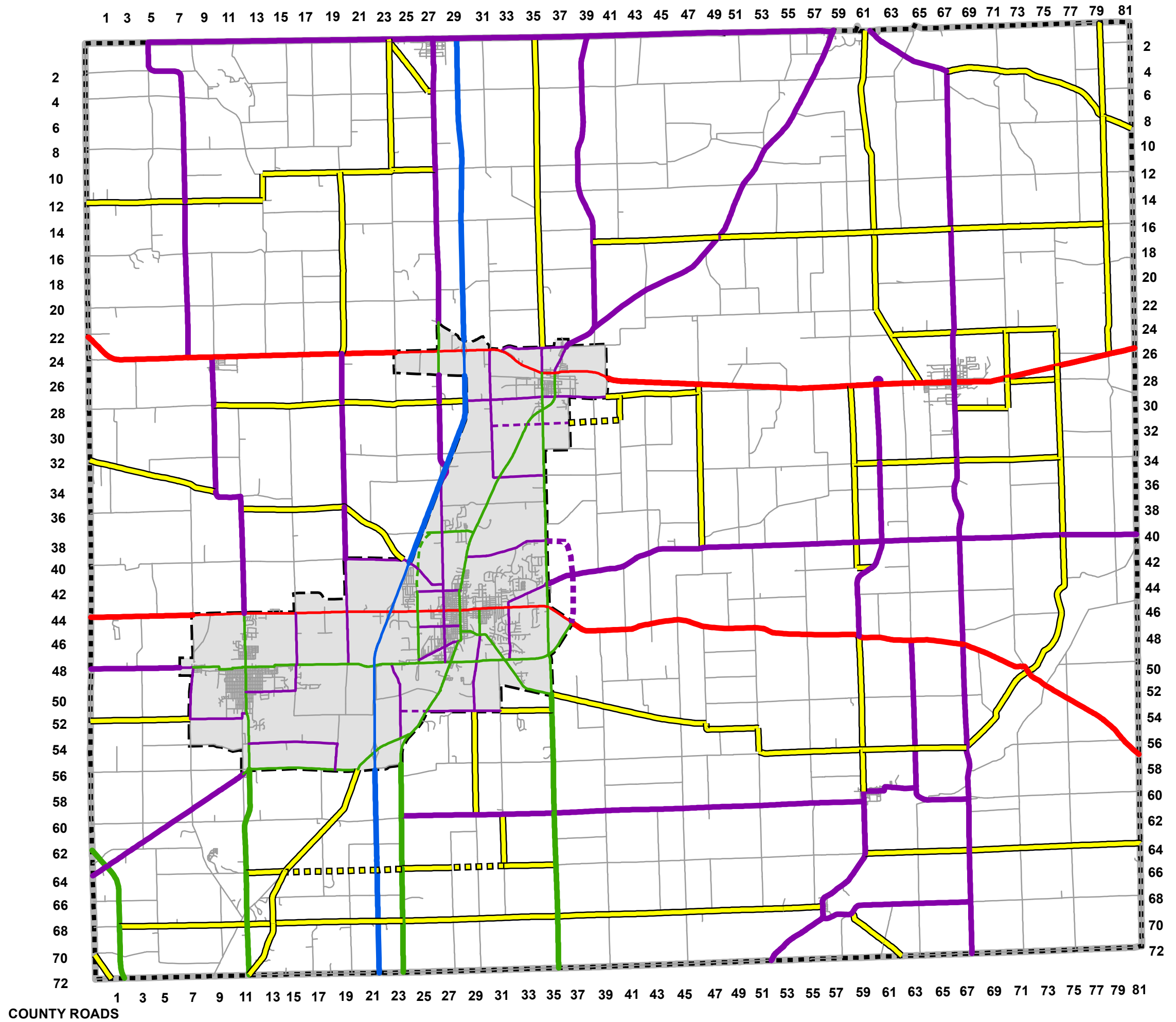
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- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- PROPOSED RURAL MAJOR COLLECTOR
- PROPOSED RURAL MINOR COLLECTOR

OTHER MAP FEATURES

- COUNTY BOUNDARY
- URBAN BOUNDARY



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COUNTY ROADS

UPDATED FUNCTIONAL CLASSIFICATION SYSTEM FOR THE AUBURN AREA

URBAN FUNCTION CLASSIFICATION

- URBAN INTERSTATE
- URBAN OTHER PRINCIPAL ARTERIAL
- URBAN MINOR ARTERIAL
- URBAN COLLECTOR
- - - PROPOSED URBAN MINOR ARTERIAL
- - - PROPOSED URBAN COLLECTOR

RURAL FUNCTION CLASSIFICATION

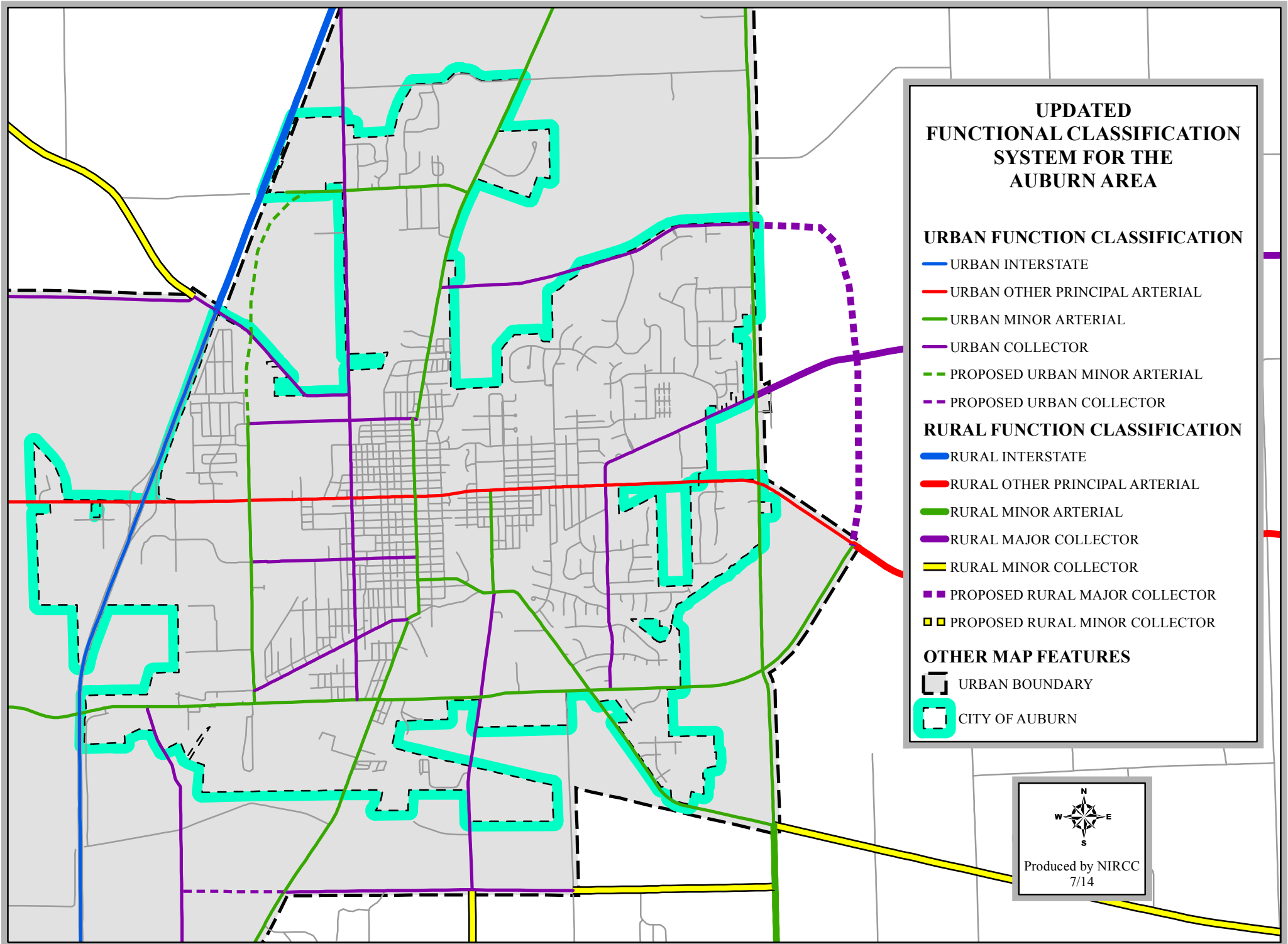
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- - - PROPOSED RURAL MAJOR COLLECTOR
- ▣ PROPOSED RURAL MINOR COLLECTOR

OTHER MAP FEATURES

- ▣ URBAN BOUNDARY
- ▣ CITY OF AUBURN



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UPDATED FUNCTIONAL CLASSIFICATION SYSTEM FOR THE BUTLER AREA

URBAN FUNCTION CLASSIFICATION

- URBAN INTERSTATE
- URBAN OTHER PRINCIPAL ARTERIAL
- URBAN MINOR ARTERIAL
- URBAN COLLECTOR
- - PROPOSED URBAN MINOR ARTERIAL
- - PROPOSED URBAN COLLECTOR

RURAL FUNCTION CLASSIFICATION

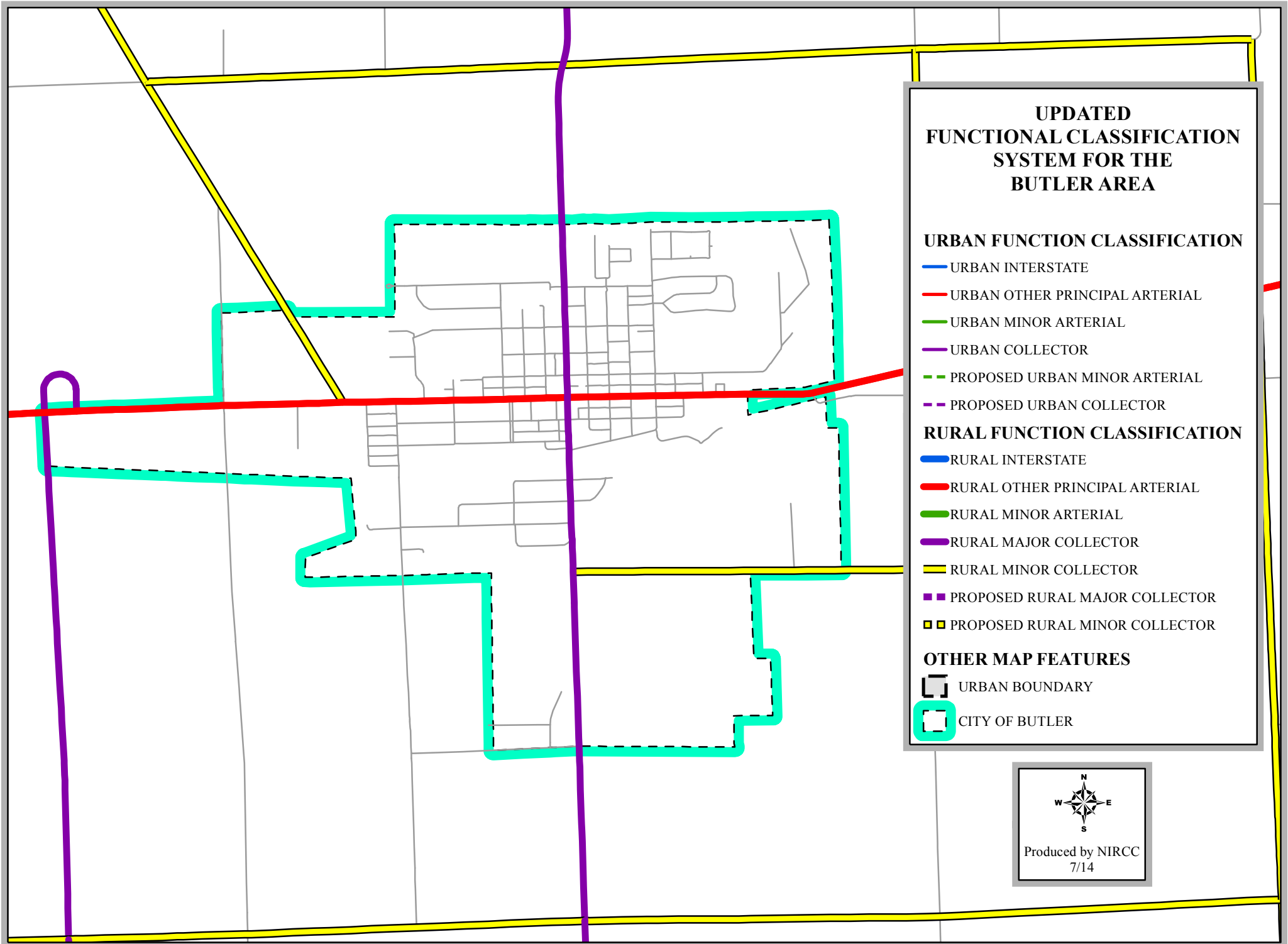
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- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- PROPOSED RURAL MAJOR COLLECTOR
- PROPOSED RURAL MINOR COLLECTOR

OTHER MAP FEATURES

- ▣ URBAN BOUNDARY
- ▣ CITY OF BUTLER



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UPDATED FUNCTIONAL CLASSIFICATION SYSTEM FOR THE GARRETT AREA

URBAN FUNCTION CLASSIFICATION

- URBAN INTERSTATE
- URBAN OTHER PRINCIPAL ARTERIAL
- URBAN MINOR ARTERIAL
- URBAN COLLECTOR
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RURAL FUNCTION CLASSIFICATION

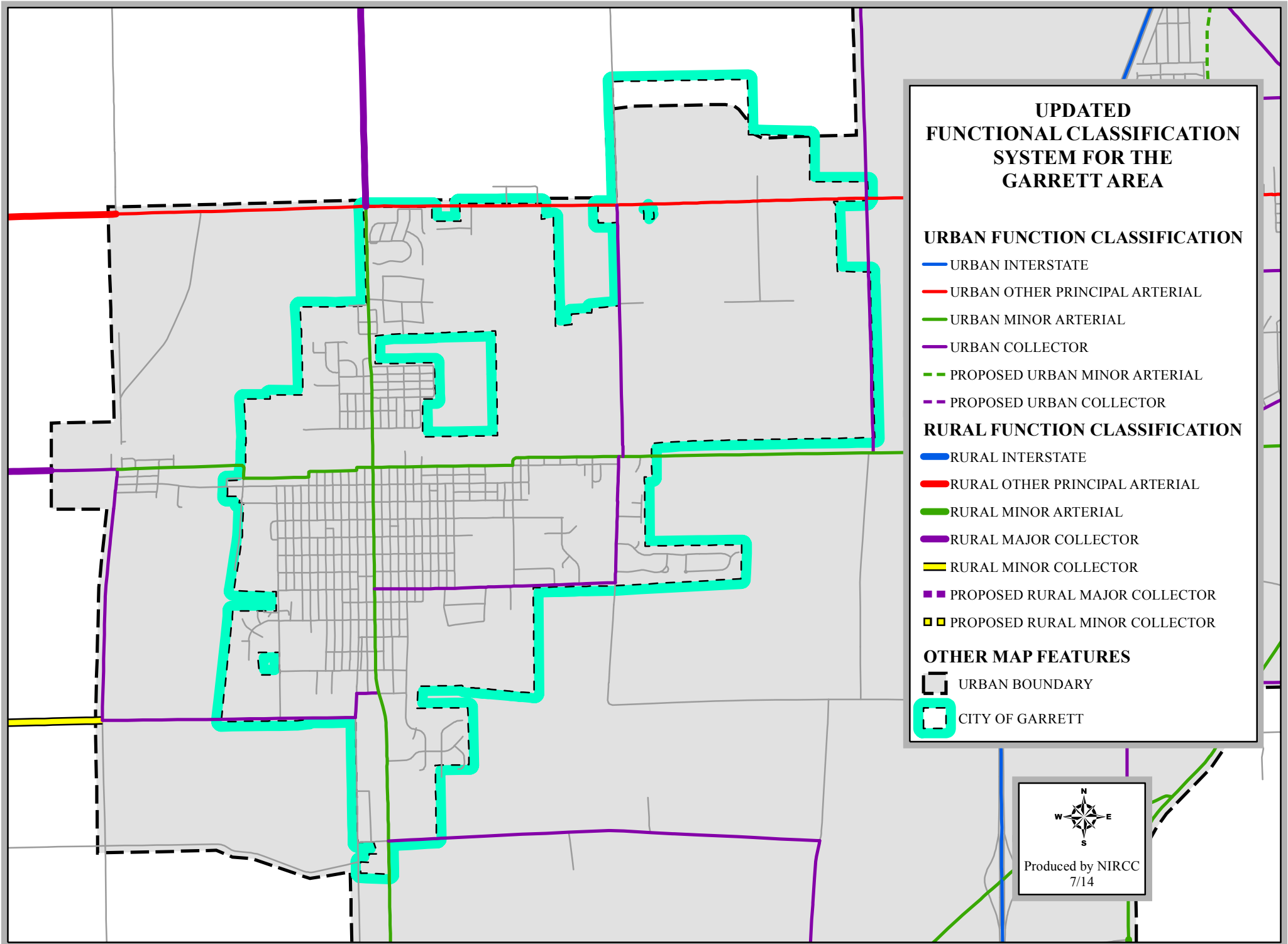
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- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- - PROPOSED RURAL MAJOR COLLECTOR
- - PROPOSED RURAL MINOR COLLECTOR

OTHER MAP FEATURES

- ▭ URBAN BOUNDARY
- ▭ CITY OF GARRETT



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UPDATED FUNCTIONAL CLASSIFICATION SYSTEM FOR THE WATERLOO AREA

URBAN FUNCTION CLASSIFICATION

- URBAN INTERSTATE
- URBAN OTHER PRINCIPAL ARTERIAL
- URBAN MINOR ARTERIAL
- URBAN COLLECTOR
- - PROPOSED URBAN MINOR ARTERIAL
- - PROPOSED URBAN COLLECTOR

RURAL FUNCTION CLASSIFICATION

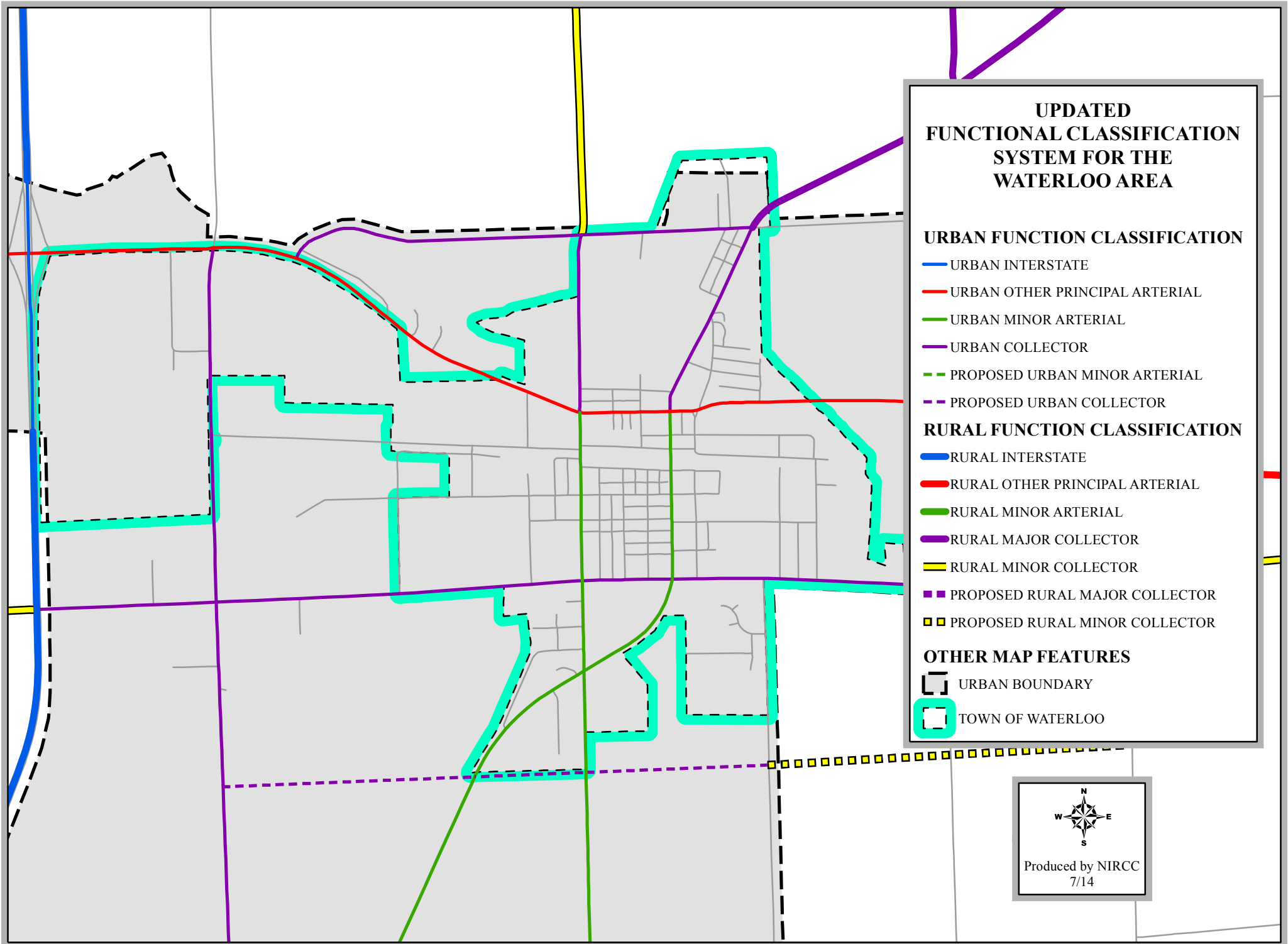
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- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- - PROPOSED RURAL MAJOR COLLECTOR
- - PROPOSED RURAL MINOR COLLECTOR

OTHER MAP FEATURES

- ▣ URBAN BOUNDARY
- ▣ TOWN OF WATERLOO



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7/14



LAND USE MAPS

Existing Land Use for Dekalb County

Land Use Class

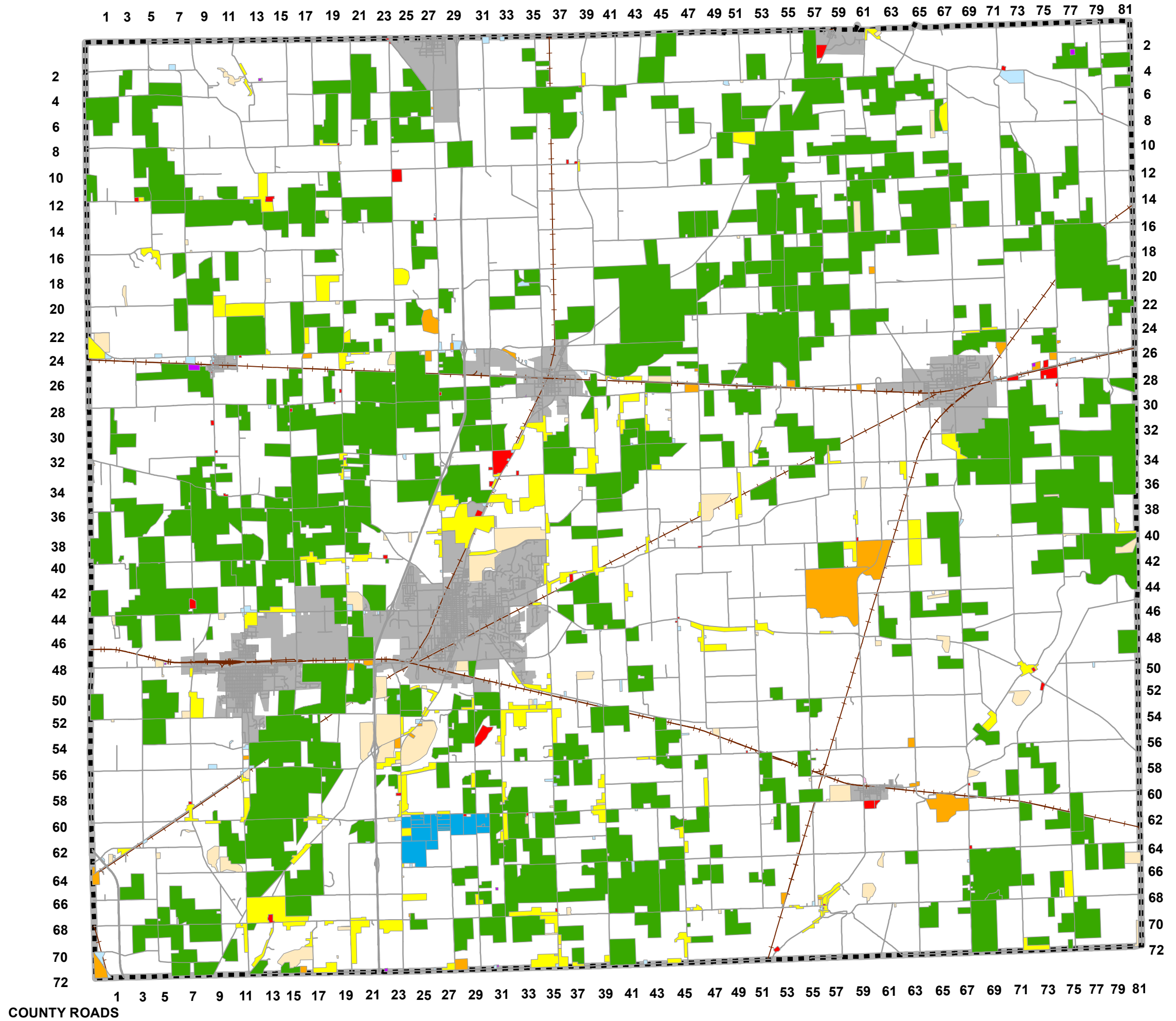
- Large Agricultural and Confined Feeding Operations
- DeKalb County Airport
- Special Uses
- Commercial Uses
- Industrial
- Public Utility/Communications
- Public Parks
- Instutions and Churches
- Heavy Residential Area

Other Map Features

- Cities and Towns
- County Boundary
- Streets
- Railroad



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7/14



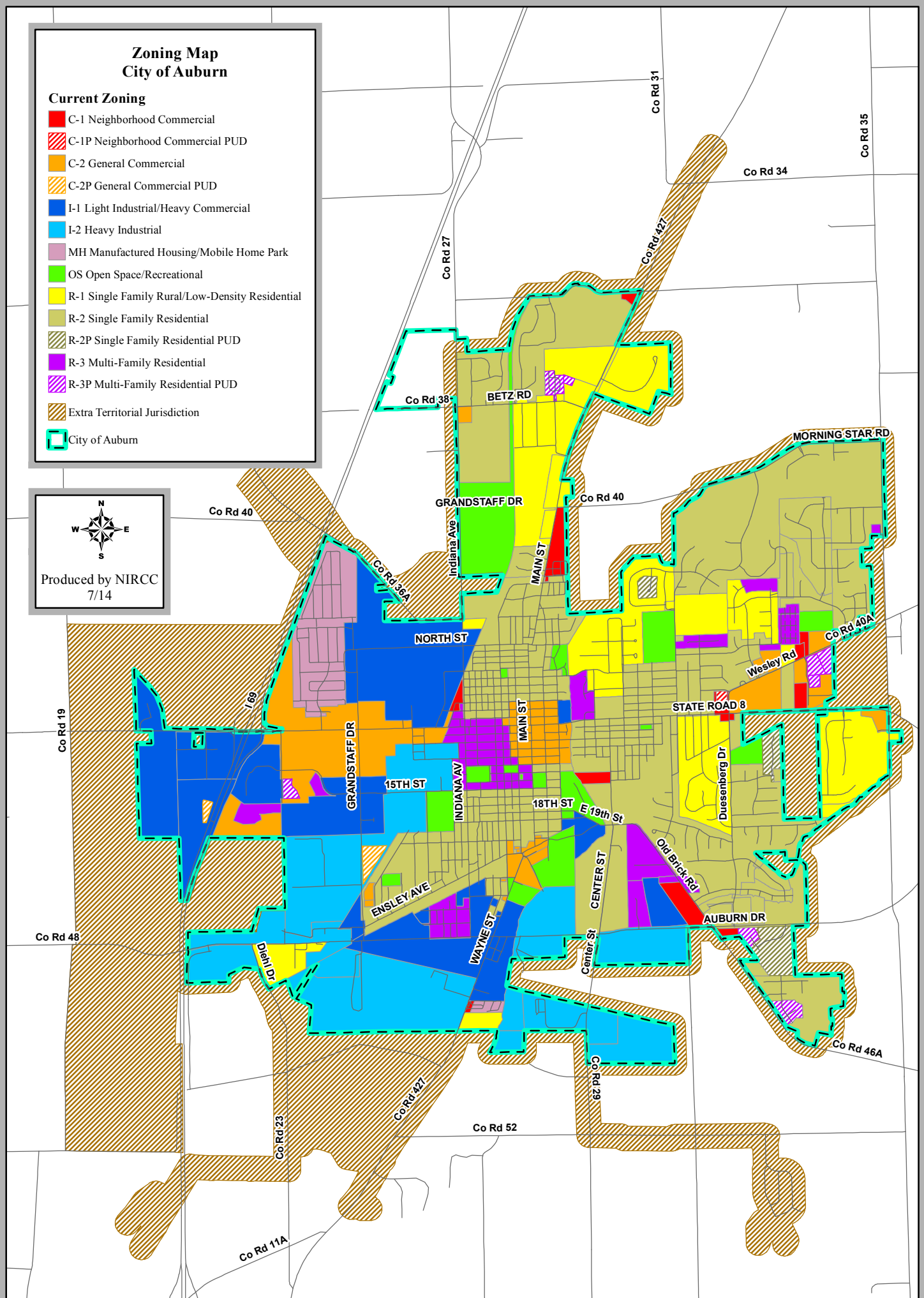
Zoning Map City of Auburn

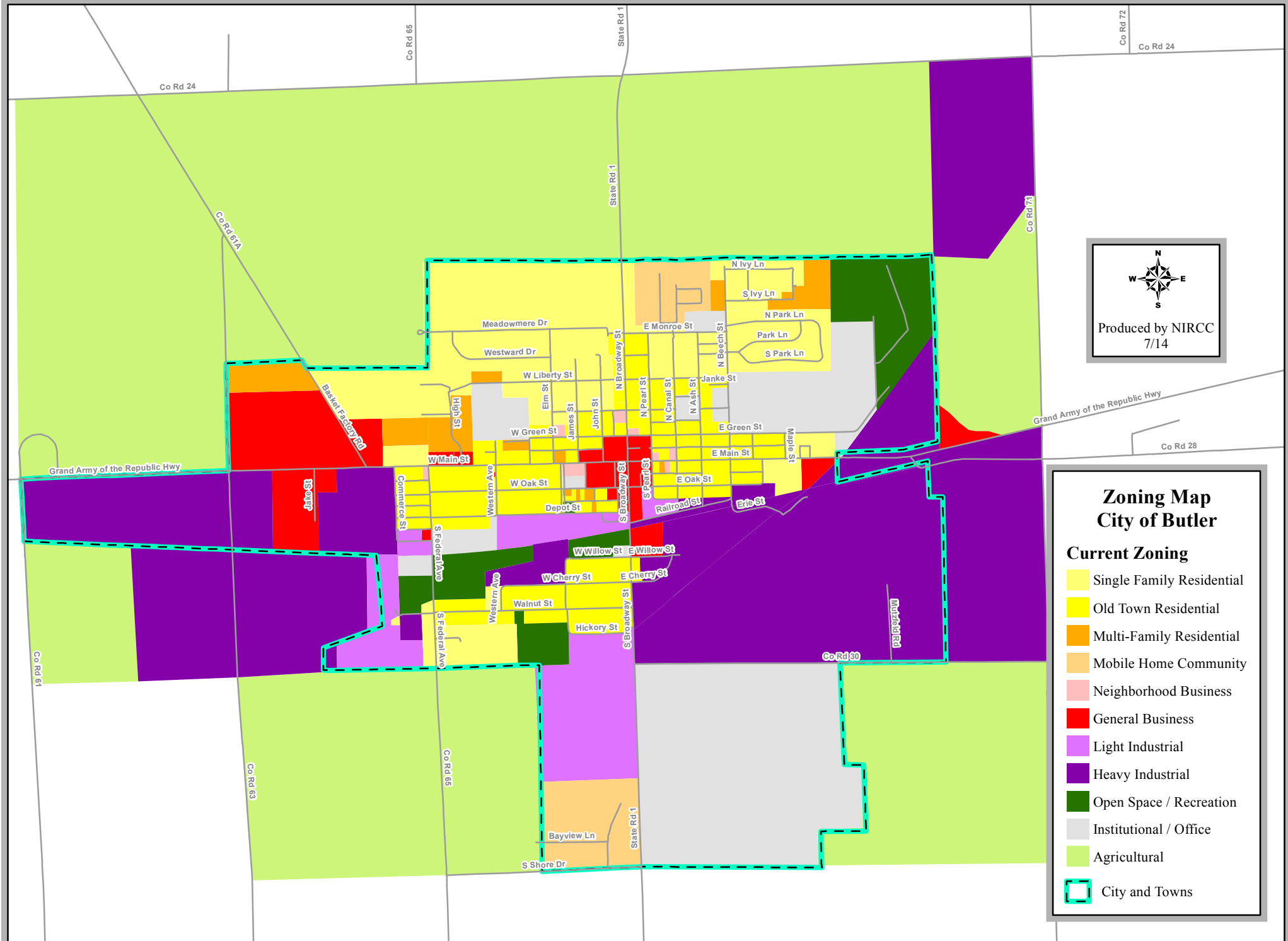
Current Zoning

- C-1 Neighborhood Commercial
- C-1P Neighborhood Commercial PUD
- C-2 General Commercial
- C-2P General Commercial PUD
- I-1 Light Industrial/Heavy Commercial
- I-2 Heavy Industrial
- MH Manufactured Housing/Mobile Home Park
- OS Open Space/Recreational
- R-1 Single Family Rural/Low-Density Residential
- R-2 Single Family Residential
- R-2P Single Family Residential PUD
- R-3 Multi-Family Residential
- R-3P Multi-Family Residential PUD
- Extra Territorial Jurisdiction
- City of Auburn



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 Produced by NIRCC
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Zoning Map City of Butler

Current Zoning

- Single Family Residential
- Old Town Residential
- Multi-Family Residential
- Mobile Home Community
- Neighborhood Business
- General Business
- Light Industrial
- Heavy Industrial
- Open Space / Recreation
- Institutional / Office
- Agricultural
- City and Towns

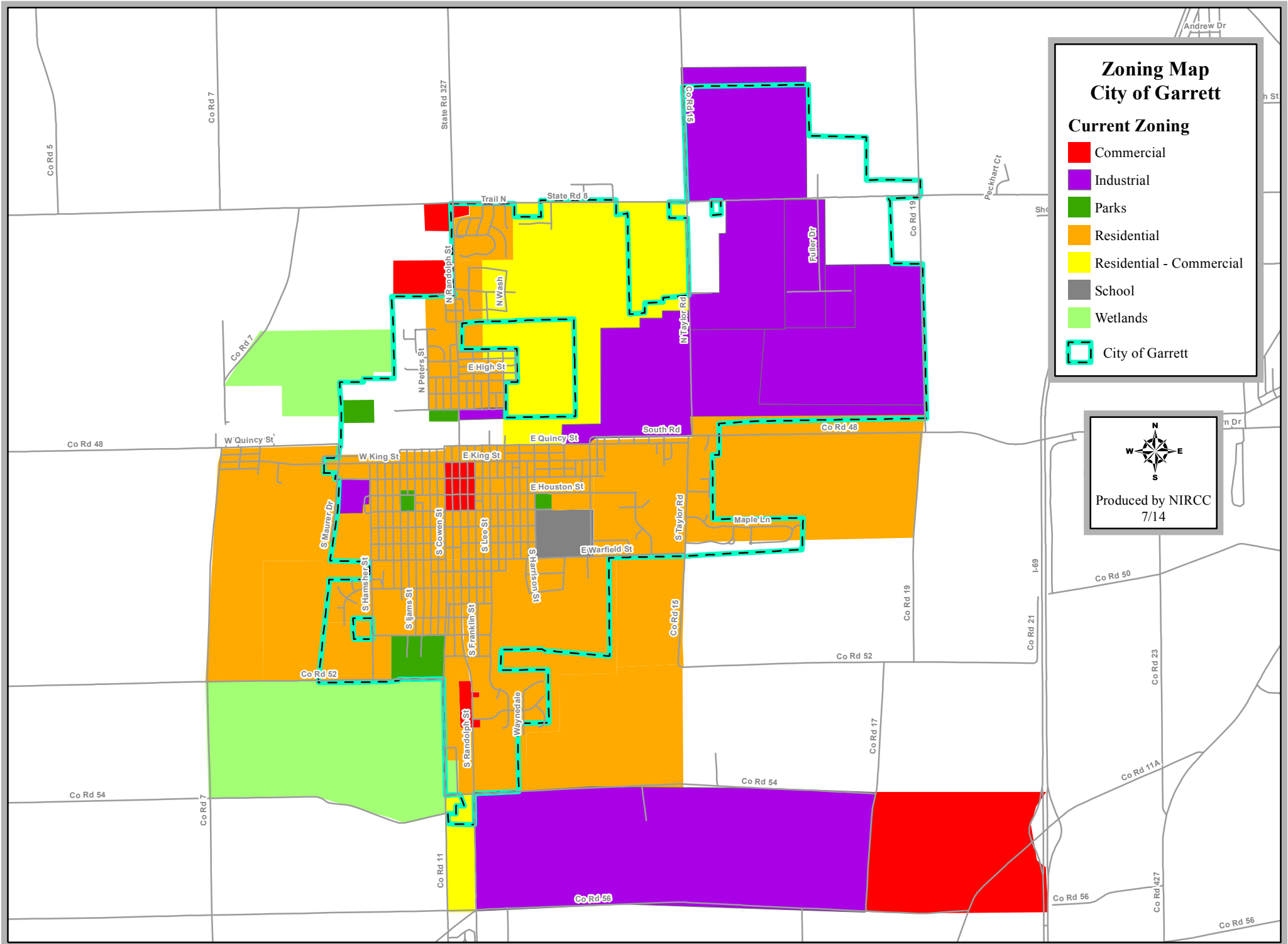
Zoning Map City of Garrett

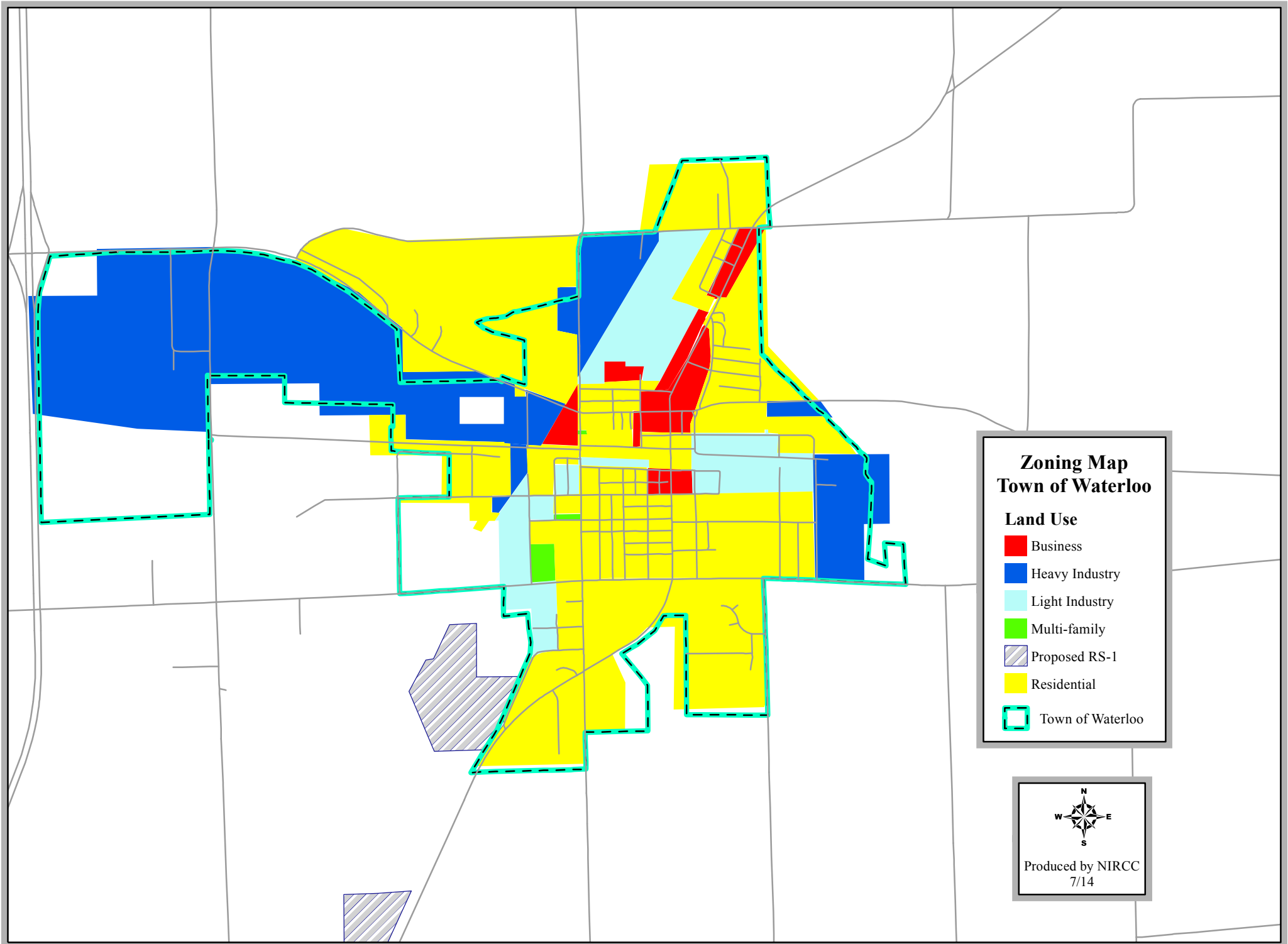
Current Zoning

-  Commercial
-  Industrial
-  Parks
-  Residential
-  Residential - Commercial
-  School
-  Wetlands
-  City of Garrett



Produced by NIRCC
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**Zoning Map
Town of Waterloo**

Land Use

- Business
- Heavy Industry
- Light Industry
- Multi-family
- Proposed RS-1
- Residential
- Town of Waterloo



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7/14

TRAFFIC COUNT MAPS

PROVIDED AS AN ATTACHMENT OR PRINTED FORMAT

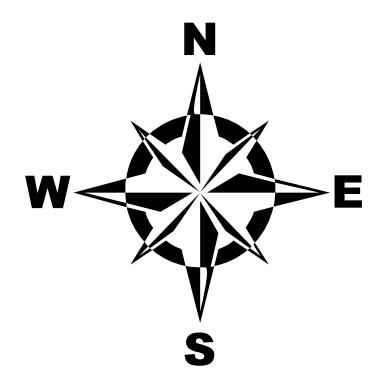
**2011 Dekalb County
Counts,
Average Annual
Daily Traffic (AADT)**

- AADT Location
- Streets
- Highways
- Railroad
- Water
- City/Town Boundary

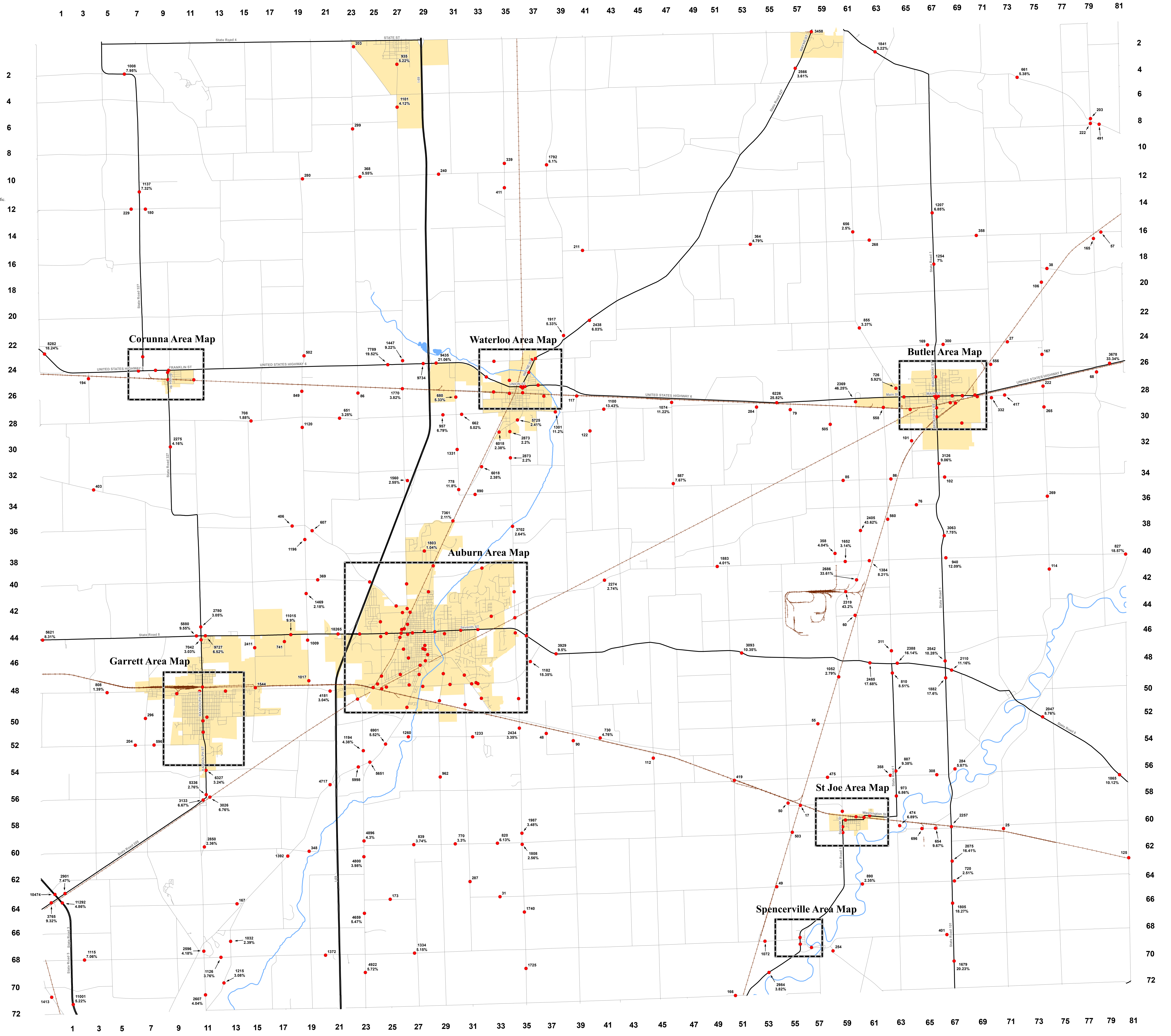
*Percentages located below the AADT represent the percentage of truck traffic.



Produced 2012



0 0.5 1 2 Miles



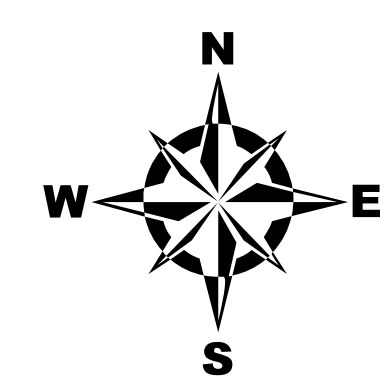
COUNTY ROADS

**2011 Dekalb County
Counts,
Average Annual
Daily Traffic (AADT)**

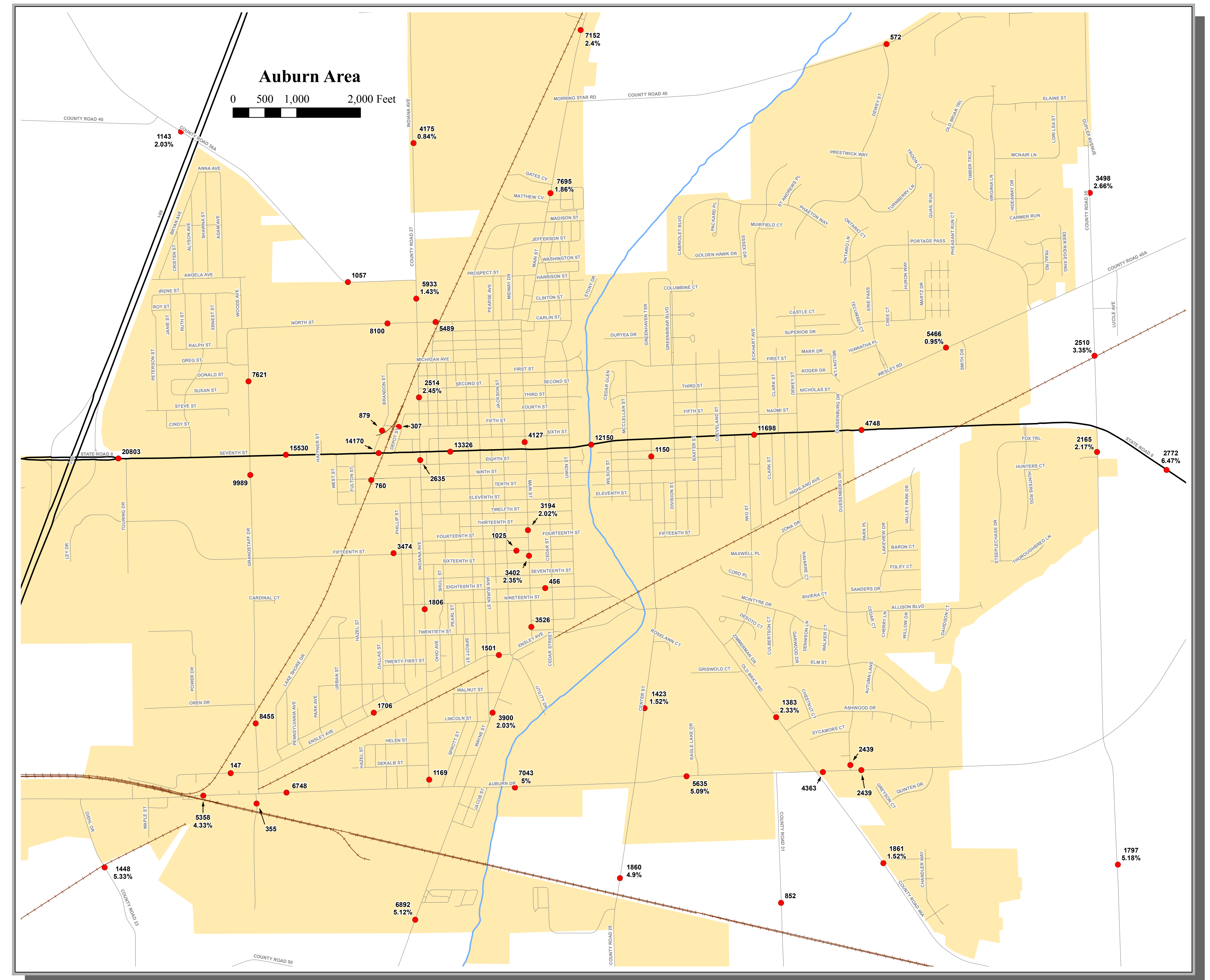
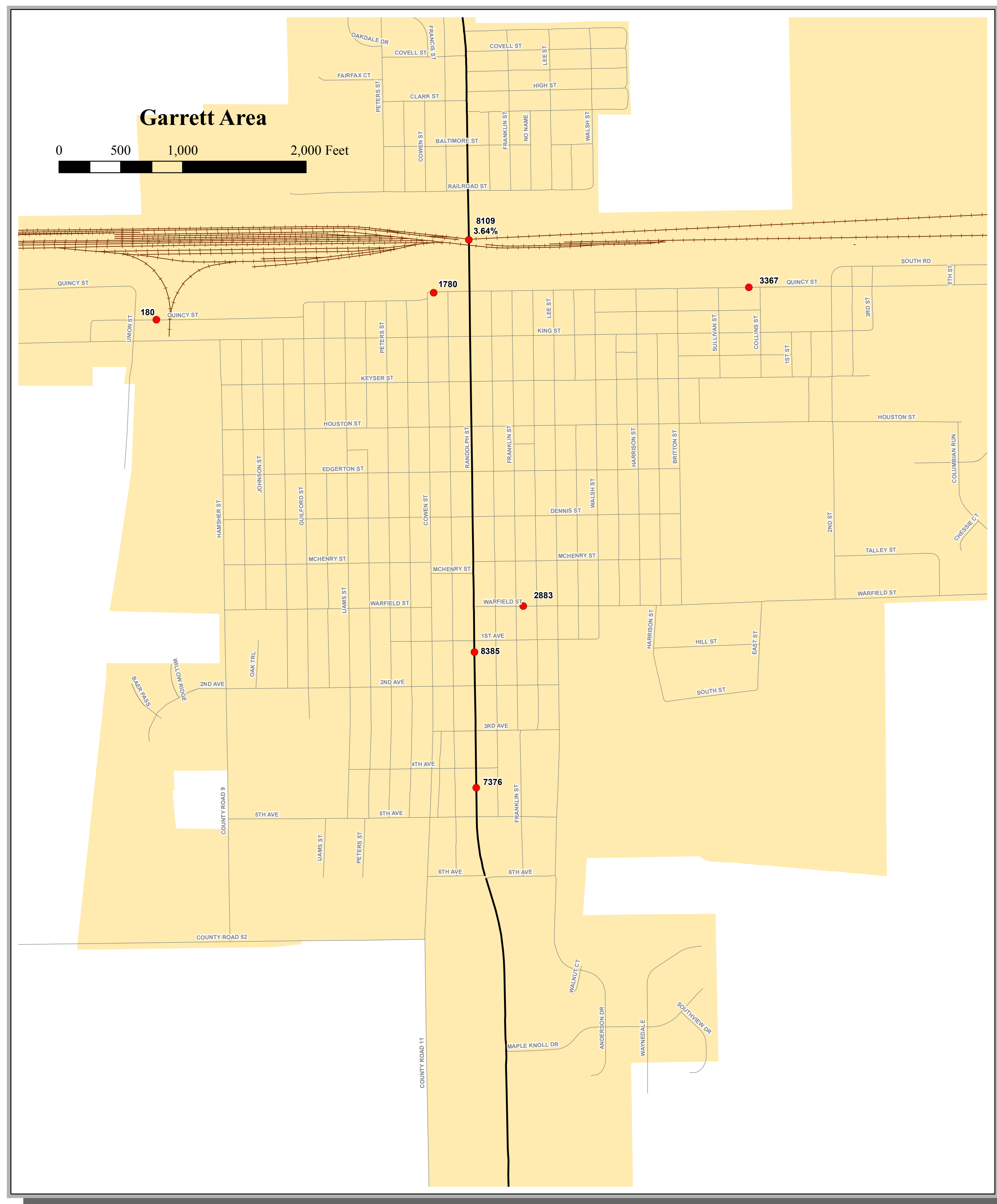
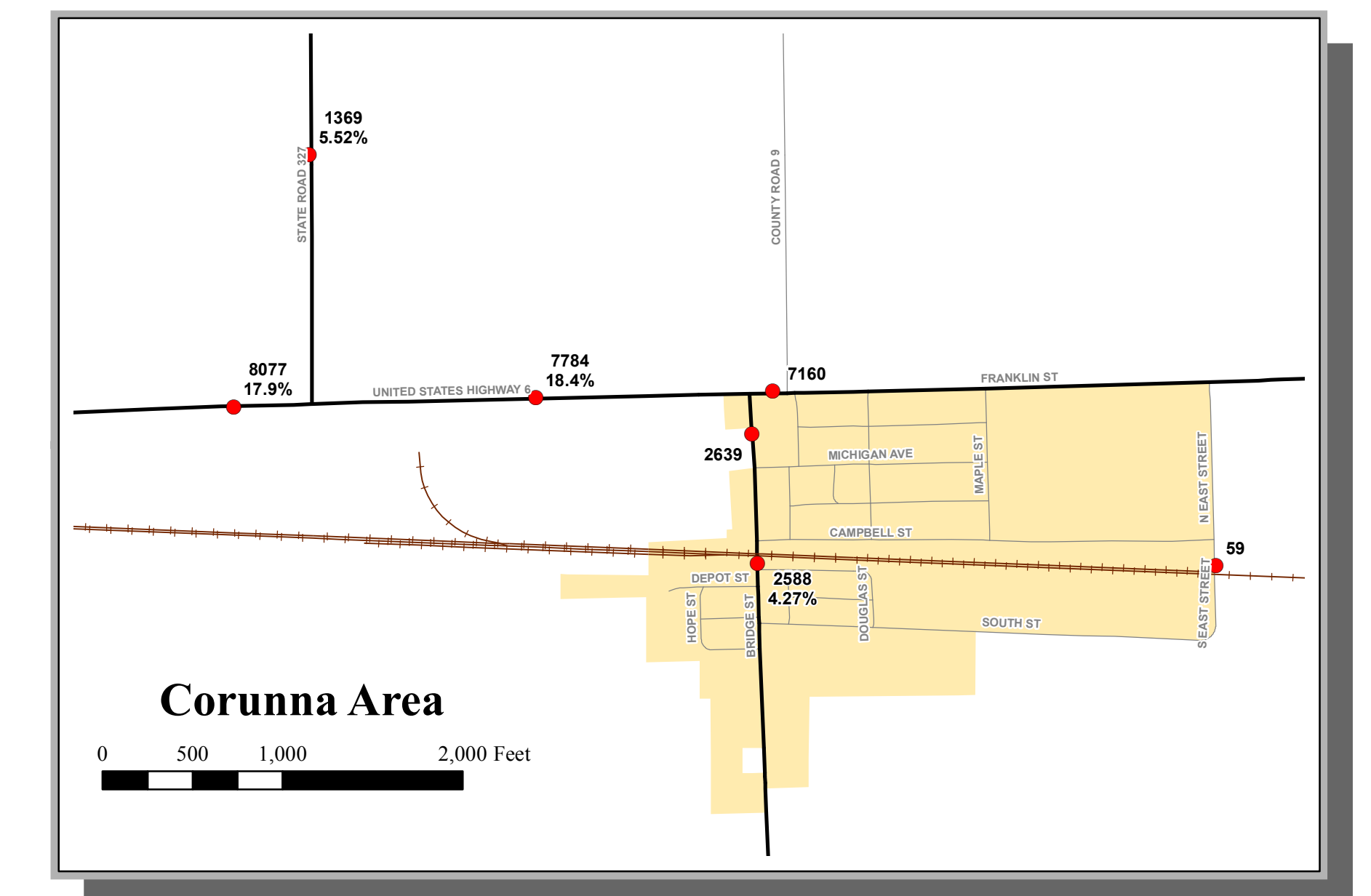
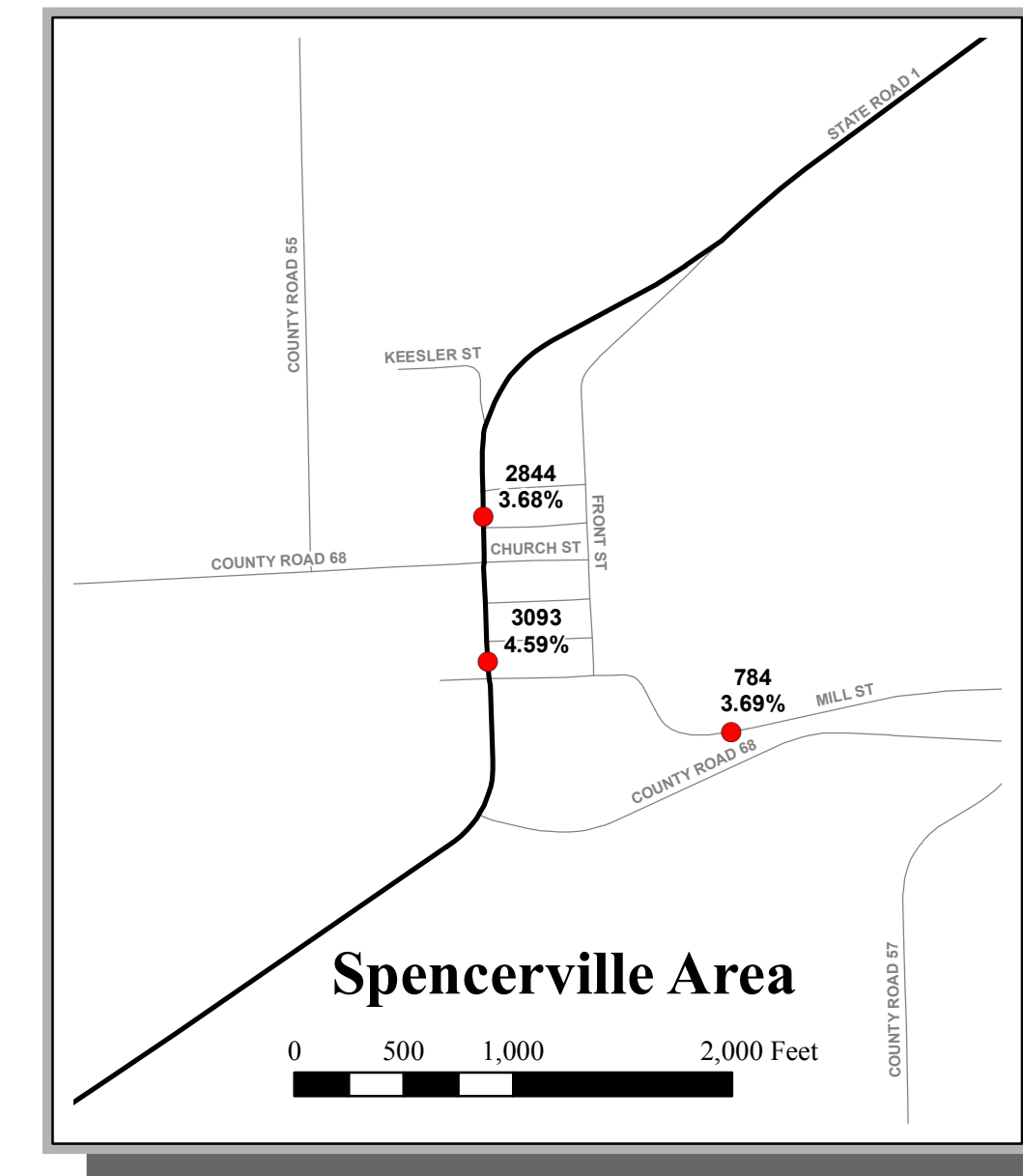
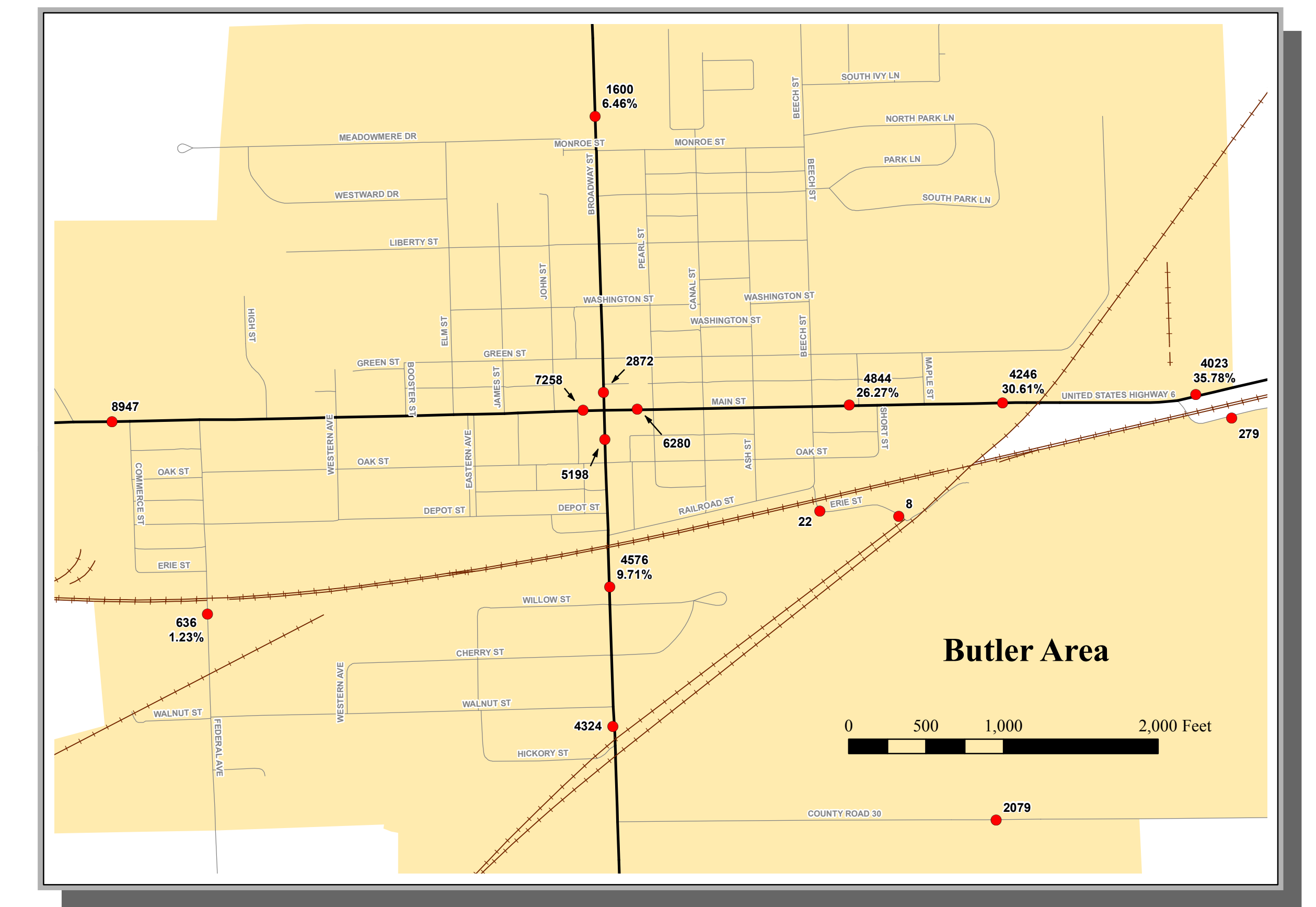
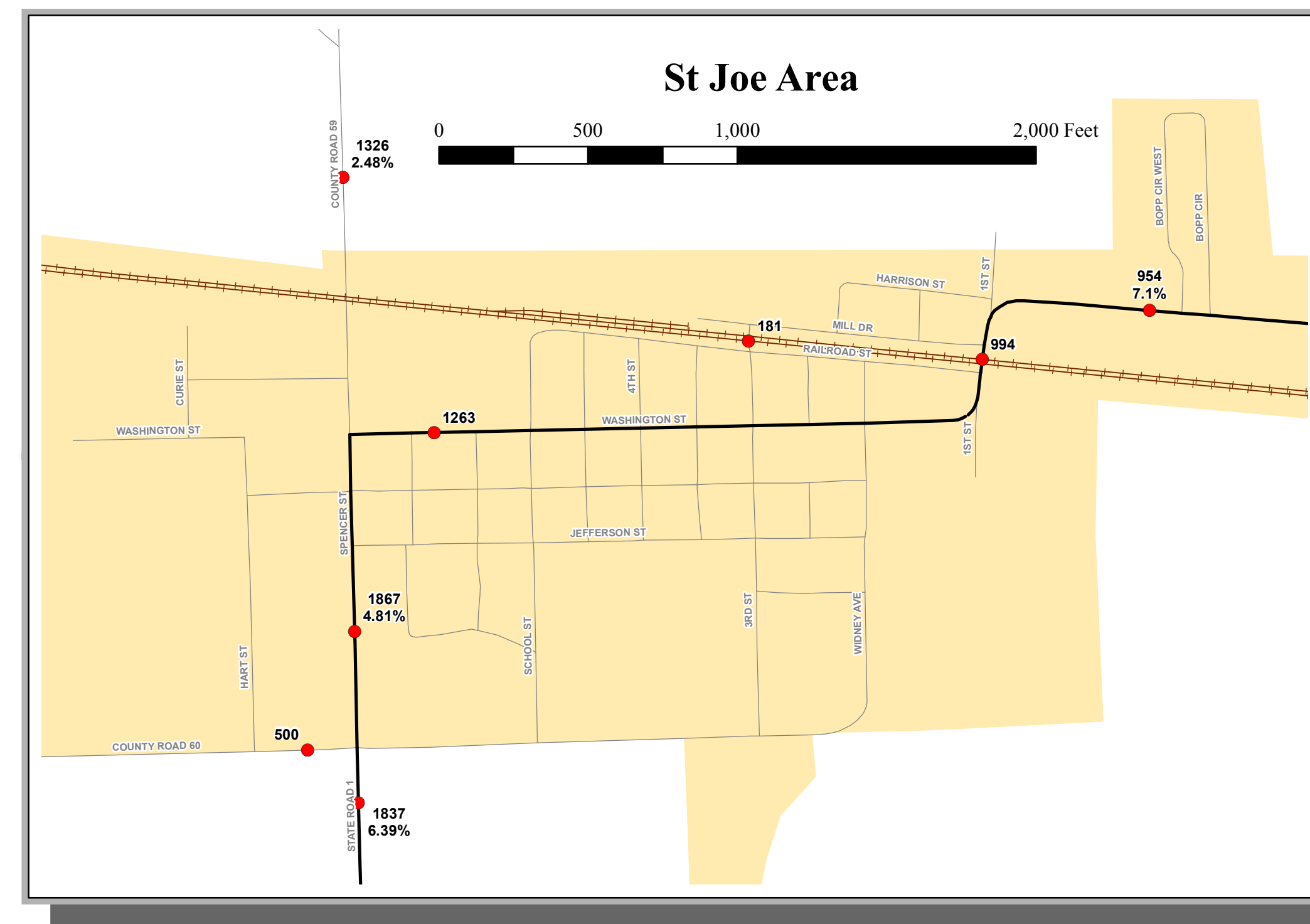
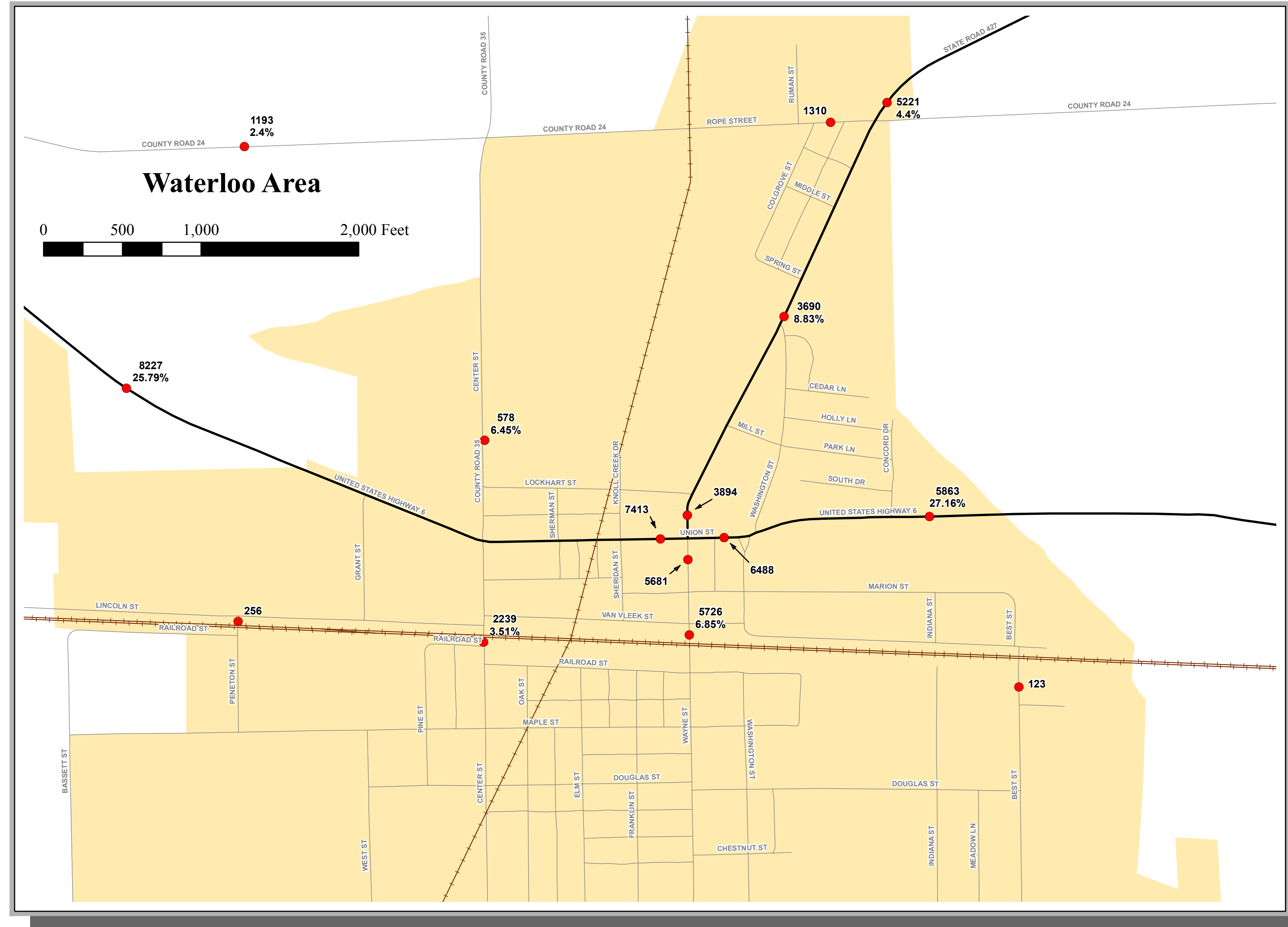
- AADT Location
- Streets
- Highway
- Railroad
- Water
- City/Town Boundary



Produced by NIRCC
2012



* Percentages located below the AADT represent the percentage of track traffic.



BICYCLE AND PEDESTRIAN PLAN MAP

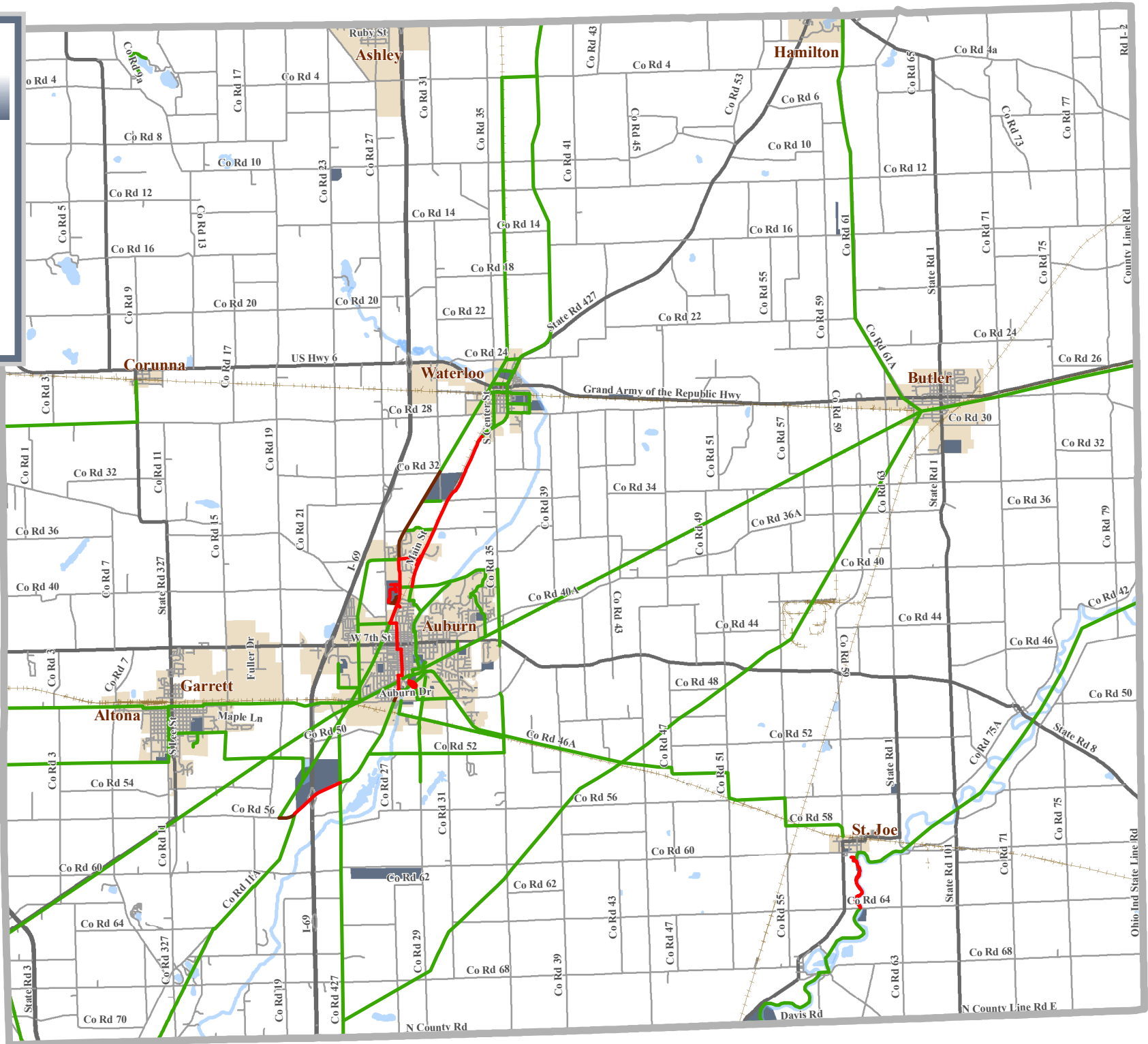
Northeast Indiana Regional Bicycle and Pedestrian Plan (DeKalb County)

TRAILS PLAN

-  Existing Trail
-  Planned Trail
-  Proposed Trail

OTHER MAP FEATURES

-  Points of Interest
-  City or Town
-  County Boundary
-  Highway
-  Street
-  Railroad
-  Water



Produced by NIRCC
7/14



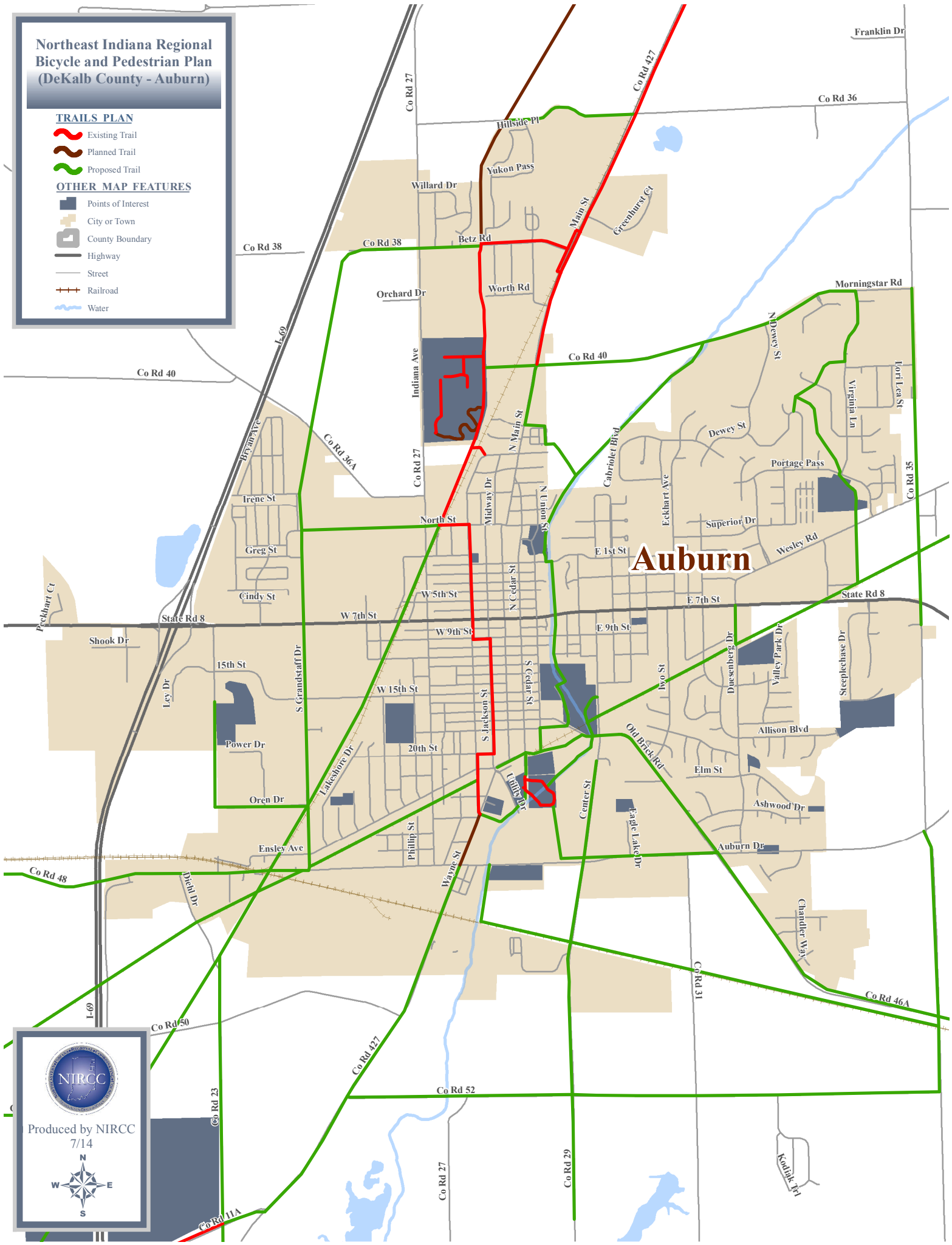
Northeast Indiana Regional Bicycle and Pedestrian Plan (DeKalb County - Auburn)

TRAILS PLAN

-  Existing Trail
-  Planned Trail
-  Proposed Trail

OTHER MAP FEATURES

-  Points of Interest
-  City or Town
-  County Boundary
-  Highway
-  Street
-  Railroad
-  Water



Auburn



Produced by NIRCC
7/14



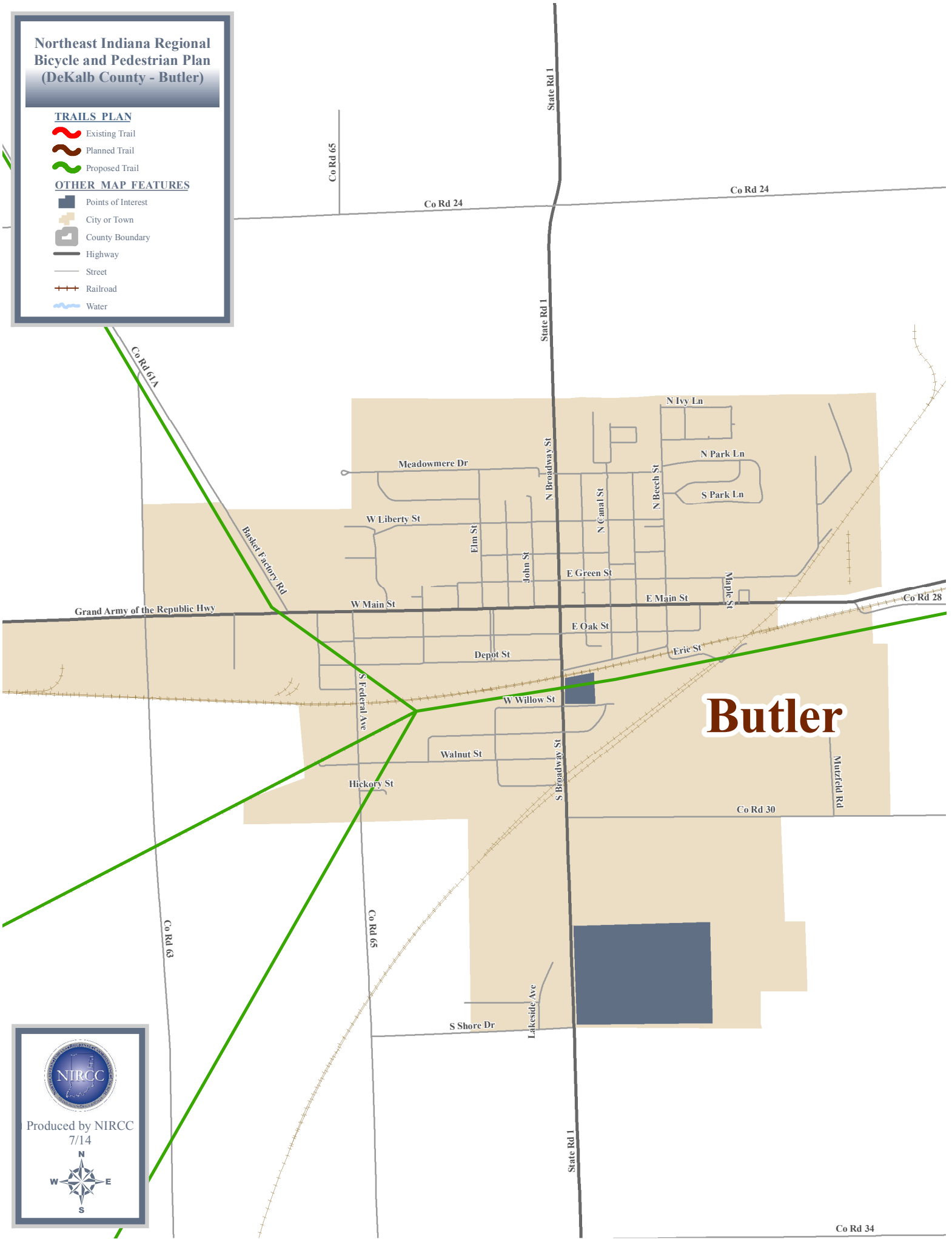
**Northeast Indiana Regional
Bicycle and Pedestrian Plan
(DeKalb County - Butler)**

TRAILS PLAN

-  Existing Trail
-  Planned Trail
-  Proposed Trail

OTHER MAP FEATURES

-  Points of Interest
-  City or Town
-  County Boundary
-  Highway
-  Street
-  Railroad
-  Water



Butler



Produced by NIRCC
7/14



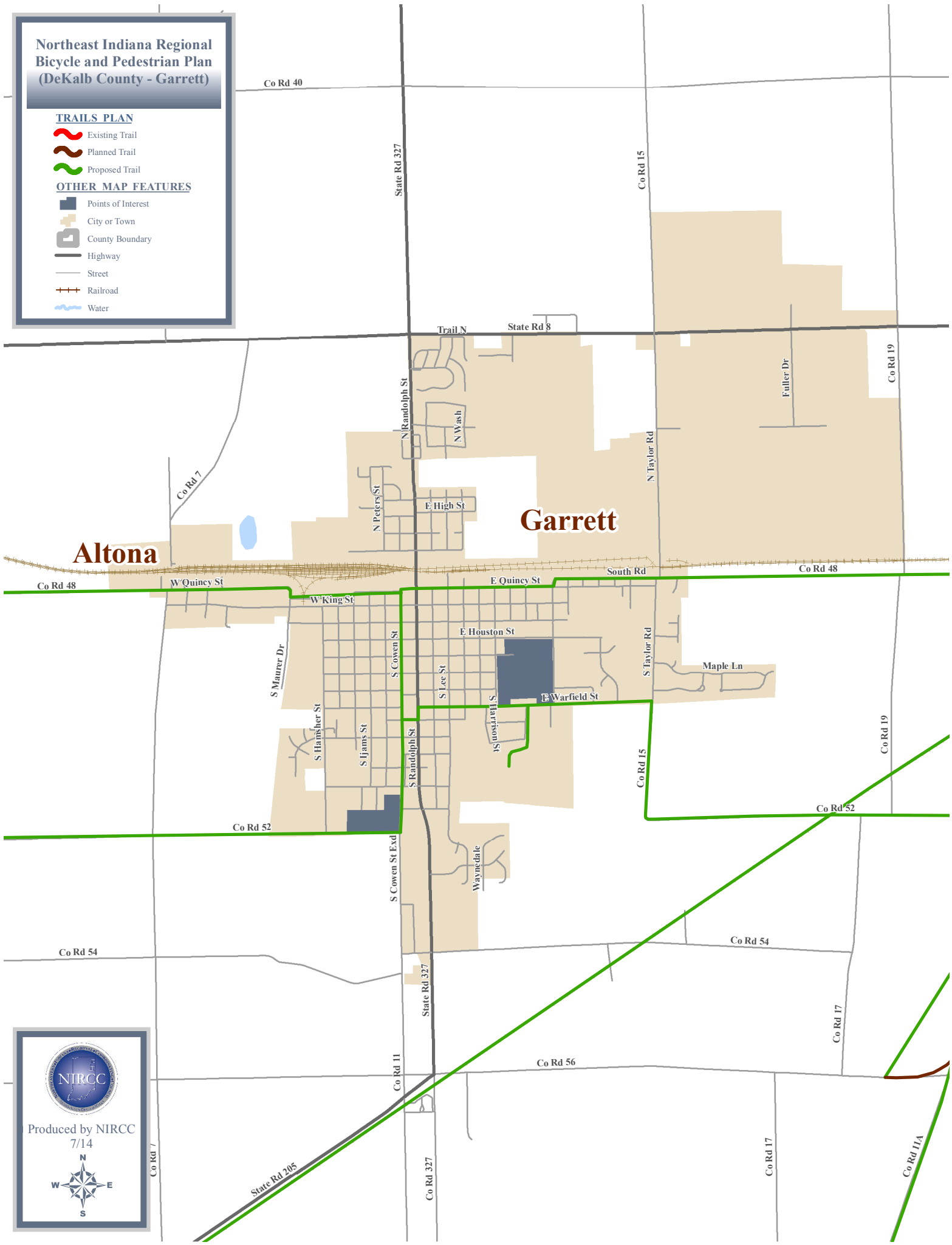
**Northeast Indiana Regional
Bicycle and Pedestrian Plan
(DeKalb County - Garrett)**

TRAILS PLAN

-  Existing Trail
-  Planned Trail
-  Proposed Trail

OTHER MAP FEATURES

-  Points of Interest
-  City or Town
-  County Boundary
-  Highway
-  Street
-  Railroad
-  Water




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Northeast Indiana Regional Bicycle and Pedestrian Plan (DeKalb County - Waterloo)

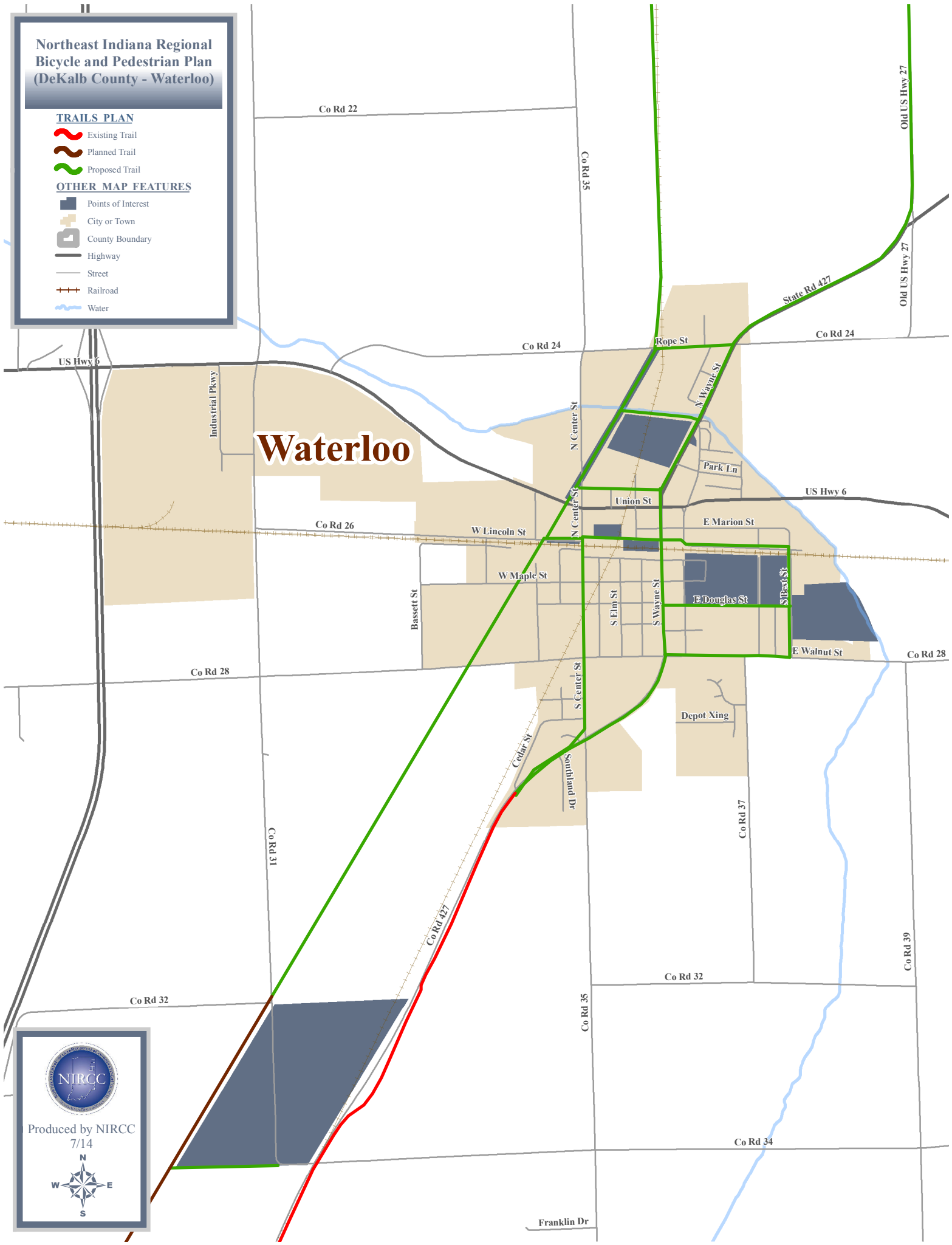
TRAILS PLAN

-  Existing Trail
-  Planned Trail
-  Proposed Trail

OTHER MAP FEATURES

-  Points of Interest
-  City or Town
-  County Boundary
-  Highway
-  Street
-  Railroad
-  Water

Waterloo



Produced by NIRCC
7/14



Franklin Dr

APPENDIX B

CRASH SUMMARY

CRASH LOCATION <i>(250 ft. Radius of Intersection)</i>	TOTAL CRASH 2011-2013	TOTAL INJURY	TOTAL FATAL	% INJ/FAT
W 7th St & N Grandstaff Dr	68	6	0	8.82%
W 7th St & Touring Dr	64	14	0	21.88%
I-69 & 129 MM	38	6	0	15.79%
I-69 & 329 MM	38	6	0	15.79%
I-69 & State Rd 8	38	6	0	15.79%
I-69 & 328 MM	37	8	0	21.62%
I-69 & 325 MM	35	5	1	17.14%
I-69 & 322 MM	30	7	0	23.33%
I-69 & 333 MM	30	8	1	30.00%
I-69 & 323 MM	28	3	0	10.71%
I-69 & 324 MM	28	0	0	0.00%
I-69 & 332 MM	26	4	0	15.38%
I-69 & 334 MM	26	3	0	11.54%
CR 27 & CR 32	25	3	0	12.00%
I-69 & 326 MM	23	2	0	8.70%
I-69 & 339 MM	21	1	0	4.76%
State Rd 8 & State Rd 327	20	3	0	15.00%
I-69 & 327 MM	18	1	0	5.56%
I 69 RAMP A/B & State Rd 8	18	3	0	16.67%
E Keyser St & S Randolph St	17	2	0	11.76%
W 7th St & Depot St	17	3	1	23.53%
W 7th St & W Edge Park Dr	17	1	0	5.88%
I-69 & 336 MM	16	2	0	12.50%
I-69 & 337 MM	16	4	0	25.00%
Auburn Dr & Wayne St	15	1	0	6.67%
I-69 & 330 MM	15	2	0	13.33%
I-69 & 338 MM	15	2	0	13.33%
CR 27 & US Hwy 6	14	5	0	35.71%
E 7th St & Duesenberg Dr	14	1	0	7.14%
E 7th St & N Main St	14	1	0	7.14%
E 8th St & S Cedar St	14	1	0	7.14%
US HWY 6 & CR 27	14	5	0	35.71%
W 7th St & N Indiana Ave	14	0	1	7.14%
W 8th St & S Van Buren St	14	4	0	28.57%
E 6th St & N Main St	13	1	0	7.69%
E 7th St & Eckhart Ave	13	5	0	38.46%
E 7th St & Iwo St	13	5	0	38.46%
I-69 & 331 MM	13	1	0	7.69%
E Auburn Dr & State Rd 8	12	3	0	25.00%
E QUINCY ST & N RANDOLPH ST	12	2	0	16.67%
N Randolph St & E Quincy St	12	2	0	16.67%
E 7th St & N Cedar St	11	1	0	9.09%

CRASH LOCATION <i>(250 ft. Radius of Intersection)</i>	TOTAL CRASH 2011-2013	TOTAL INJURY	TOTAL FATAL	% INJ/FAT
W 7th St & N Van Buren St	11	4	0	36.36%
W 8th St & S Jackson St	11	2	0	18.18%
Auburn Dr & S Grandstaff Dr	10	1	0	10.00%
E 10th St & Main St	10	0	0	0.00%
E King St & N Randolph St	10	1	0	10.00%
I 69 RAMP C & State Rd 8	10	0	0	0.00%
I 69 RAMP D & State Rd 8	10	0	0	0.00%
Smaltz Way & State Rd 8	10	0	0	0.00%
STATE RD 8 & SMALTZ WAY	10	0	0	0.00%
W 15th St & S Grandstaff Dr	10	1	0	10.00%
W 15th St & Touring Dr	10	2	0	20.00%
W 7th St & N Jackson St	10	1	0	10.00%
W 7TH ST & S JACKSON ST	10	1	0	10.00%
CR 15 & State Rd 8	9	2	0	22.22%
CR 19 & State Rd 8	9	3	0	33.33%
Dekko Dr & State Rd 8	9	2	0	22.22%
E Railroad St & N Randolph St	9	0	0	0.00%
N Broadway St & E Main St	9	1	0	11.11%
State Rd 3 & State Rd 205	9	4	1	55.56%
STATE RD 8 & CR 15	9	2	0	22.22%
STATE RD 8 & CR 19	9	3	0	33.33%
STATE RD 8 & DEKKO DR	9	2	0	22.22%
Betz Rd & Main St	8	1	0	12.50%
CR 34 & CR 427	8	0	0	0.00%
CR 34 & State Rd 327	8	3	0	37.50%
E 16th St & Main St	8	2	0	25.00%
E 1st St & N Cedar St	8	2	0	25.00%
E 2nd St & N Cedar St	8	2	0	25.00%
E 9th St & Main St	8	0	0	0.00%
N 2ND ST & SOUTH RD	8	0	0	0.00%
State Rd 1 & State Rd 8	8	5	0	62.50%
CR 56 & STATE RD 205	7	2	0	28.57%
CR 56 & State Rd 327	7	2	0	28.57%
E 15th St & Main St	7	2	0	28.57%
Greenhurst Ct & Main St	7	0	0	0.00%
I-69 & 135 MM	7	2	0	28.57%
I-69 & 335 MM	7	2	0	28.57%
N Cowen St & W King St	7	0	0	0.00%
State Rd 205 & State Rd 327	7	2	0	28.57%
W 6TH ST & N JACKSON ST	7	1	0	14.29%
W 9th St & S Jackson St	7	1	0	14.29%