Transportation

I. INTRODUCTION

Purpose

This chapter provides an overview of the current transportation system. Existing and potential modes of transportation in the Allen County/Fort Wayne area are discussed and evaluated. The status and trends of local transportation characteristics and planning efforts are described.

Transportation Planning and Data Sources

Transportation planning in the Allen County/Fort Wayne area is a continuous effort led primarily by the Northeast Indiana Regional Coordinating Council (NIRCC). NIRCC is the Metropolitan Planning Organization (MPO) for the Fort Wayne Urbanized Area and all of Allen County. The latest Transportation Plan for the Allen County/Fort Wayne area was published in 2000 for the planning horizon year of 2025 (1).

NIRCC has been the primary source for transportation data for this report. Other sources that have provided information and input for this report are the City of Fort Wayne, Citilink, Fort Wayne International Airport, Community Transportation Network, Aboite New Trails, The Greenway Consortium, City of New Haven, and the Indiana Department of Transportation (INDOT)

Transportation planning is a complex and ongoing process. This comprehensive planning effort will serve to bring together current transportation planning efforts and evaluate their status and direction from a community-planning standpoint. This effort is not to override or minimize the excellent efforts of those who plan the area's transportation system on a day-to-day basis. Nearly all of the planning issues, ideas, and data are included in existing local transportation planning documents.

Historical Background

NIRCC's *2025 Transportation Plan* documents the timeline of major transportation events in Allen County/Fort Wayne (1):

Early Settlers – The junction of the St. Mary's, St Joseph, and Maumee Rivers.
1840s – Canals developed.
1850 to 1870 – Railroads developed.
Early 1900s – Central city grows
1950s – I-69 constructed. SR 30 bypass constructed around center city (SR 930/Coliseum Boulevard).
1995 – I-469 completed around eastern portion of urbanized area.

Today – Major transportation center for northeastern Indiana, northwestern Ohio, and southern Michigan.

II. KEY FINDINGS

The following is a summary of the key findings contained within this report. Please see the pertinent chapter of this report for additional information.

- Fort Wayne and Allen County have excellent regional connections to the interstate highway system that connect the area to major cities in Indiana, Ohio, Michigan, Illinois, and Kentucky.

- Due to moderate traffic demands Fort Wayne and Allen County do not experience the long daily periods of severe traffic congestion of many larger urban areas.

- Current transportation system challenges include: narrow rights-of-way, insufficient number of bridges, radial system with majority of traffic traveling through central business district, hazardous diagonal intersections, lack of north-south continuity on major arterials, large number of heavy trucks, serving new housing development southwest and north of Fort Wayne, serving new industrial parks in northwest, the City of New Haven and around the Fort Wayne International Airport, serving commercial and retail development along I-69, and serving large medical facilities at I-69/US 24 and I/69/Dupont Road interchanges.

- Current and anticipated capacity-deficient roadways are primarily located in the developing areas to the southwest, northwest, and northeast, and the arterials that connect those areas to the central city.

- Streets and highways located to the southeast of the central city, and I-469 have excess capacity based on current and projected traffic volumes.

- Travel will likely become less oriented to the central urban core as major suburban activity centers continue to be developed.

- Travel patterns will become less dependent on the radial highway system and suburban-to-suburban activity will likely increase.

- The largest numbers of crashes occur away from the central city along heavily traveled corridors leading to the central city, and at I-69 interchanges. Future crash problems are anticipated on rural roadways in quickly developing areas, roadways with poor access control and high volumes, and highly congested roadways.

- Fort Wayne and Allen County's location and good interstate highway access place it in Cargo Alley, making it a prime area for freight movement.

- Allen County has recently been designated as a nonattainment area for the pollutant ozone, which will impact future transportation planning decisions.

- Citilink has experienced a recent trend (since 1999) in increased bus ridership and has aggressive plans for increased service.

- Fort Wayne International Airport anticipates a steady and significant increase (40 percent over 15 years) in passenger and cargo operations.

- INDOT and Amtrak have recently selected a high-speed rail alternative from Chicago to Cleveland that passes through Fort Wayne/Allen County.

- Bicycle and pedestrian facilities are not readily accessible and are in inadequate supply.

- The Rivergreenway, while maintenance and upgrades are needed, creates an excellent "spine" for bikeway expansions.

- Current transportation barriers to creating a "livable" community are a lack of a comprehensive system of paths and trails, a lack of pedestrian connections between neighborhoods, under use of public transit, inadequate or lack of sidewalks, high-speed traffic on local roadways, and attitudes about sharing the roadway.

1. STREETS AND HIGHWAYS

General Characteristics

Fort Wayne and Allen County have excellent interstate and highway connections throughout the City and county. Interstate 69 bisects the northwesterly portion of Fort Wayne and is the primary north-south highway in Northeastern Indiana. Interstate 469 provides interstate access to the eastern and southeastern portions of Fort Wayne and connects to I-69 immediately to the north and southwest of the city. U.S. Highway 27 bisects Fort Wayne as does U.S. Highway 30 via State Highway 930.

From Fort Wayne, Interstate 69 extends northward through Flint, Michigan and into Ontario, Canada. It extends southward from Fort Wayne to Indianapolis. The interstate provides northern connections to interstates I-80/I-90, and I-94, and southern connections to interstates I-70 and I-74. The combined interstates I-80/I-90 serve as a toll-road and run parallel to the northern Indiana border, where they connect to Interstate 75 (to the east) and to Interstate 65 (to the west). Interstate 94 traverses Michigan and connects Detroit (to the east) with I-196 (to the west).

The southerly portion of Interstate 69 terminates at Interstate 465, which serves as a perimeter interstate to Indianapolis. Interstates I-65 and I-70 bisect Indianapolis and traverse the State of Indiana, where Interstate 65 connects Louisville, Kentucky (to the south) with Gary, Indiana (to the north), and Interstate 70 connects Richmond, Indiana (to the east) with Terre Haute, Indiana (to the west). Interstate 74 truncates at I-465 and connects Indianapolis to Cincinnati, Ohio (to the east), and Peoria, Illinois (to the west) (2).

Figure 1.1: Regional Interstate Connections

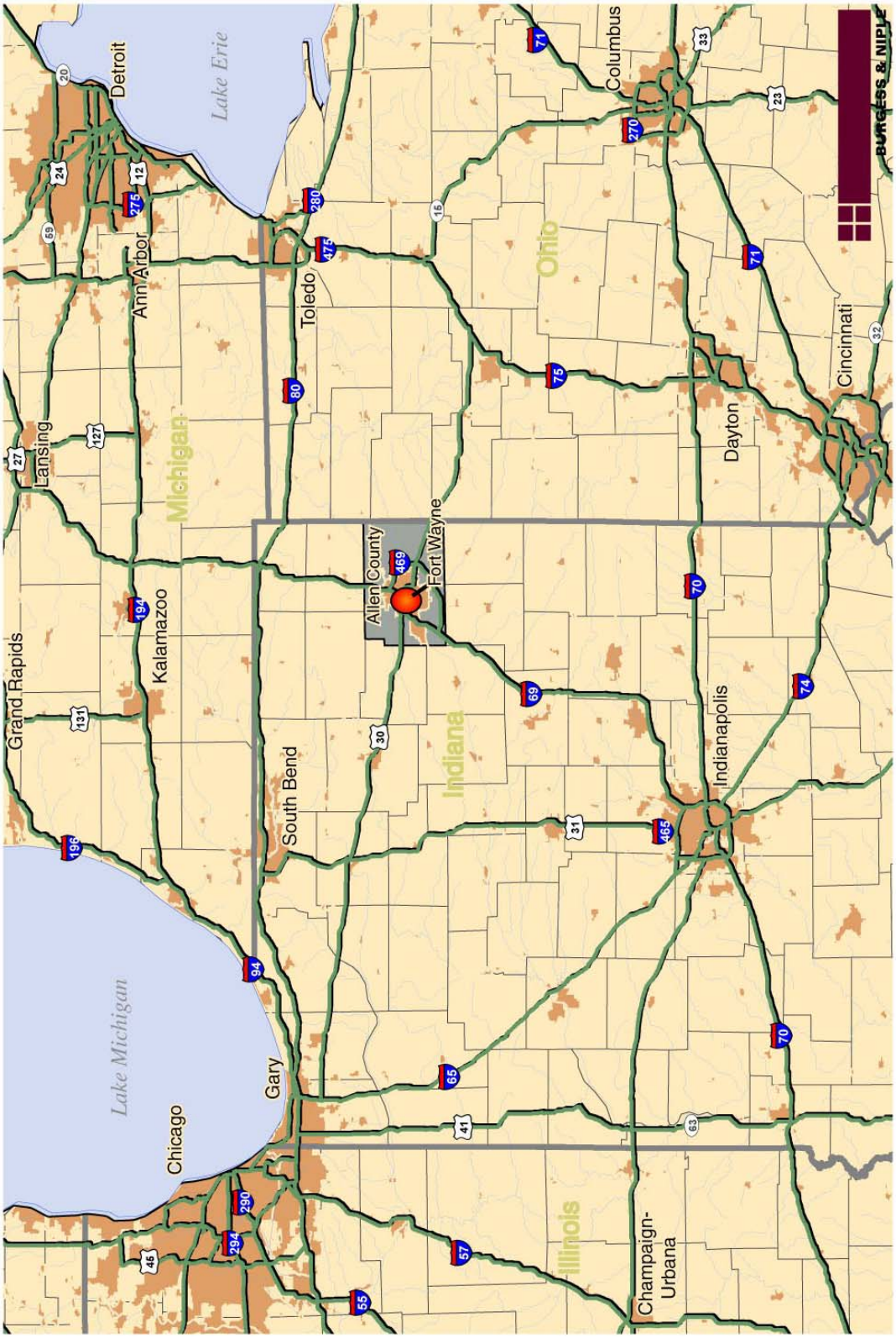
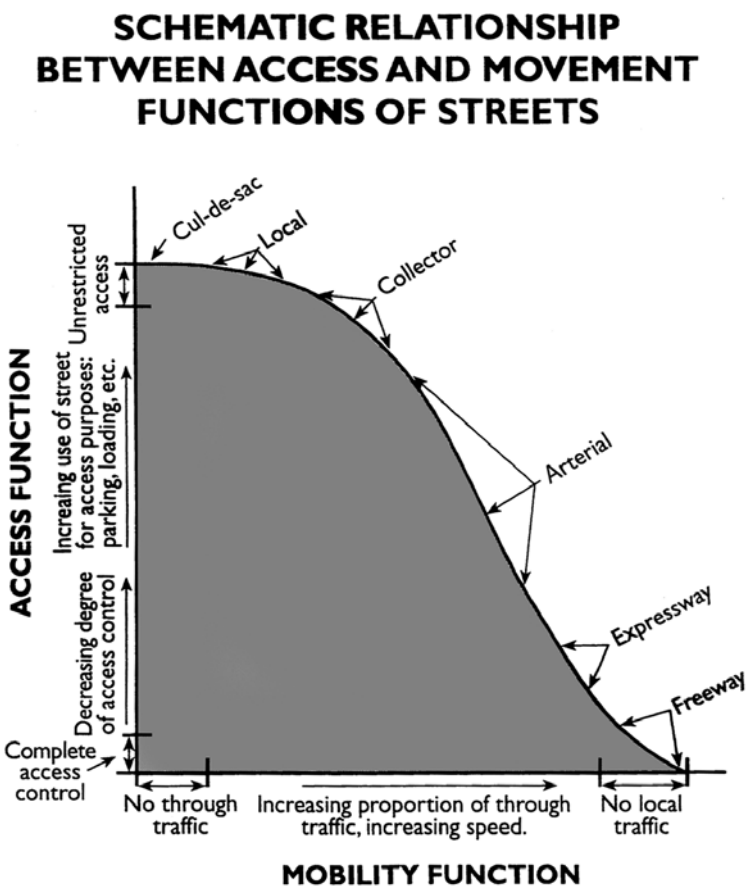


Figure 1.2 illustrates the continuum of roles for the various classified roadways. A Functional Classification has been assigned to each roadway by NIRCC as shown on Figure 1.3. The purpose of this system is to establish a hierarchy of roadways. This hierarchy of roadways is based on the level of the roadway's function for serving mobility versus access. Interstates and other limited access highways are obviously intended to provide high-speed mobility. Minor collectors and unclassified roads serve the primary purpose of providing access. Arterials and collectors serve a dual role of providing mobility and access.

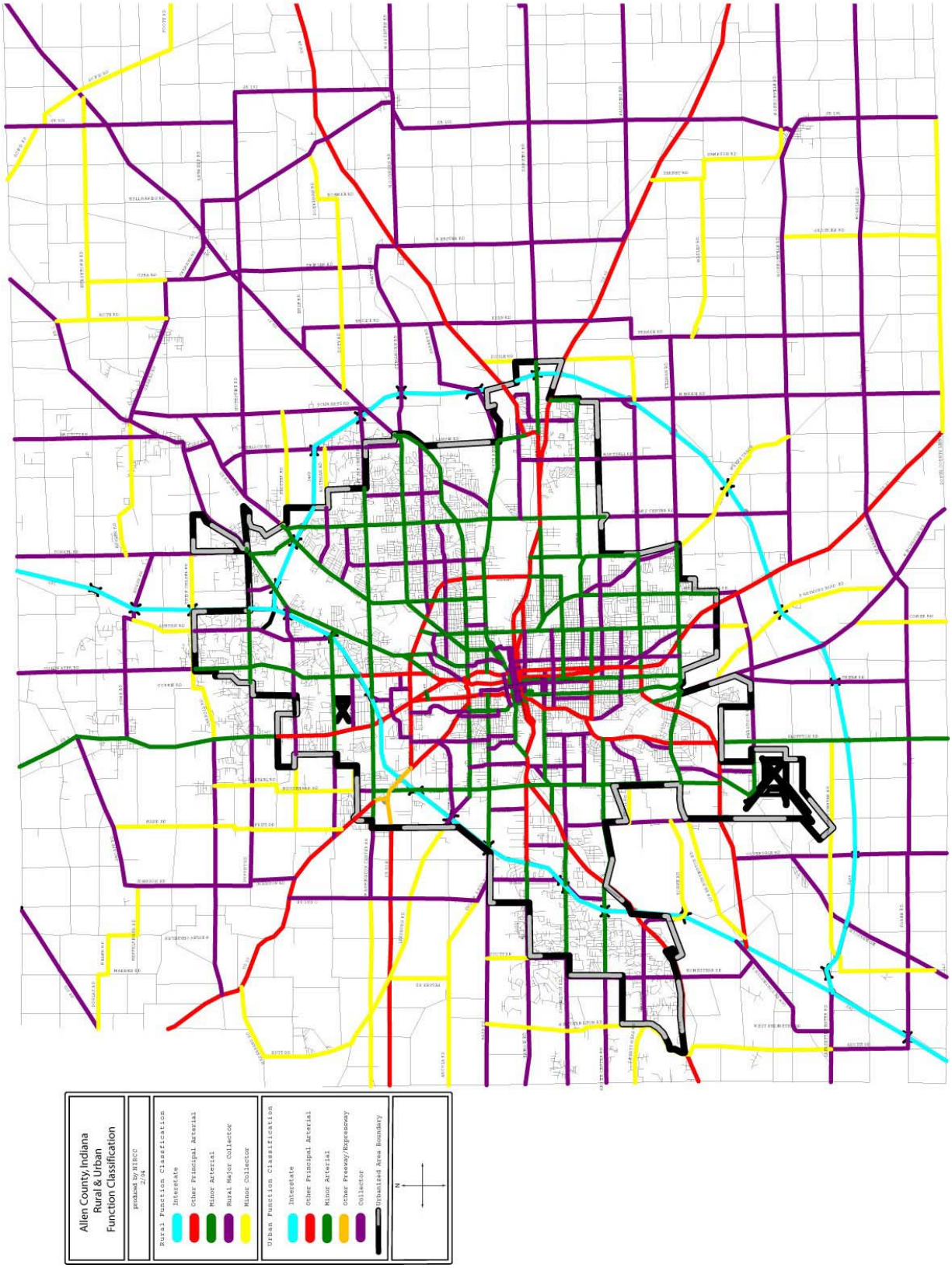
Figure 1.2: Hierarchy of Roadways



Source: U.S. Department of Transportation Federal Highway Administration publication #FHWA-IP-82-3, *Access Management for Streets and Highways.*

Preservation of the mobility function of arterial streets is important to pursue through access management and good development practice.

Figure 1.3: Functional Classifications



Current Street/Highway Issues

Although Fort Wayne is not plagued with the severe traffic gridlock that is experienced in some larger metropolitan areas, there are significant issues that face the community. The following are a few of the current challenges and constraints of the area's street/highway system as documented in the *2025 Transportation Plan* (1):

- Narrow rights-of-way
- Insufficient number of bridges
- Radial system with majority of traffic traveling through central business district of Fort Wayne
- Hazardous diagonal intersections
- Major arterials lack north-south and east-west continuity
- Narrow bridges and narrow railroad underpasses restrict traffic flow
- Large number of heavy trucks and trucking terminals
- Serving new housing development southwest and north of Fort Wayne
- Serving new industrial parks in northwest, the City of New Haven, and around the Fort Wayne International Airport
- Serving commercial and retail development that has proliferated along the I-69 corridor
- Serving large medical facilities at I-69 and US 24 and Dupont Road interchanges

Predicted Traffic Growth

Major conditions and trends with respect to anticipated traffic demand predicted in the NIRCC 2025 Transportation Plan (1) are as follows:

- Prime agricultural land will be preserved and development will take place in areas with suitable soil types.
- The majority of all development will occur in the urbanized area or immediately adjacent to the urban area.
- Population growth within Fort Wayne will occur primarily in areas currently undeveloped and zoned for residential use.
- Moderate population growth will occur in neighborhoods where revitalization actions are implemented.
- All usable residentially zoned property currently within Fort Wayne will be developed by the year 2025.
- Residential development and redevelopment will be encouraged in specific areas of the central business district and central city.
- Areas adjoining the rivers will be affected by a decline in population and housing due to restrictions on construction and reconstruction in floodplains.
- Aboite Township will continue to grow with new residential and limited commercial development.

- Cedar Creek and Perry Townships in northern and northwestern sections of the urban area are expected to experience intense development through the year 2025.
- The majority of new industrial development will occur in designated industrial parks, identified industrial sites, and economic development areas. Some of these areas are: available land adjacent to and surrounding the Fort Wayne International Airport; southeast of the east-end industries; north of I-69 in the Huguenard Road, Cook Road area; an area east of New Haven near I-469, US 24 and US 30; and expansions of existing industrial areas within the metropolitan area.
- The urbanized area will continue to be the focal point for residential, commercial, and industrial growth.
- Development will occur along I-469, with concentrations of intense development near the major interchanges.
- The northwest will be placed under more intense development pressure, a trend already underway.
- The general growth patterns of the socioeconomic variables indicate that the existing travel corridors will remain important to the basic travel patterns of the year 2025.
- The new residential and employment centers will intensify the travel demand on existing corridors and create the need for managing congestion through improving traffic operation, widening facilities, extending new roads, improving transit service, implementing intelligent transportation system strategies, and controlling access more efficiently.
- Travel will become less oriented to the central urban core as major suburban activity centers continue to be developed.
- Travel patterns will become less dependent on the radial highway system.
- Suburban-to-suburban activity will increase.

Current Roadway Capacities

The following figures (Figures 1.4 and 1.5) depict the ratios of current roadway traffic demand to current roadway capacity (today's roads with today's traffic). Volume-to-capacity ratios near 1.0 indicate that the roadway can handle the traffic but is experiencing some level of traffic congestion. When ratios are above 1.25, the roadway will likely not be able to process that level of traffic, resulting in traffic demand that is unmet. Deficient roadways are located primarily in the developing areas to the southwest, northwest, and northeast, and the roadways that connect those areas to the central city. Downtown feeders such as Lima Road, Broadway, and Lafayette Street also appear to be deficient from a traffic-carrying standpoint. Additionally, Washington Boulevard (SR 930 through New Haven is over capacity.

Most roadways located in and to the southeast of the central city appear to have excess capacity and are somewhat under used. Also, I-469 appears to be well under capacity at this point in time.

Figure 1.4: AM Peak Hour Congestion

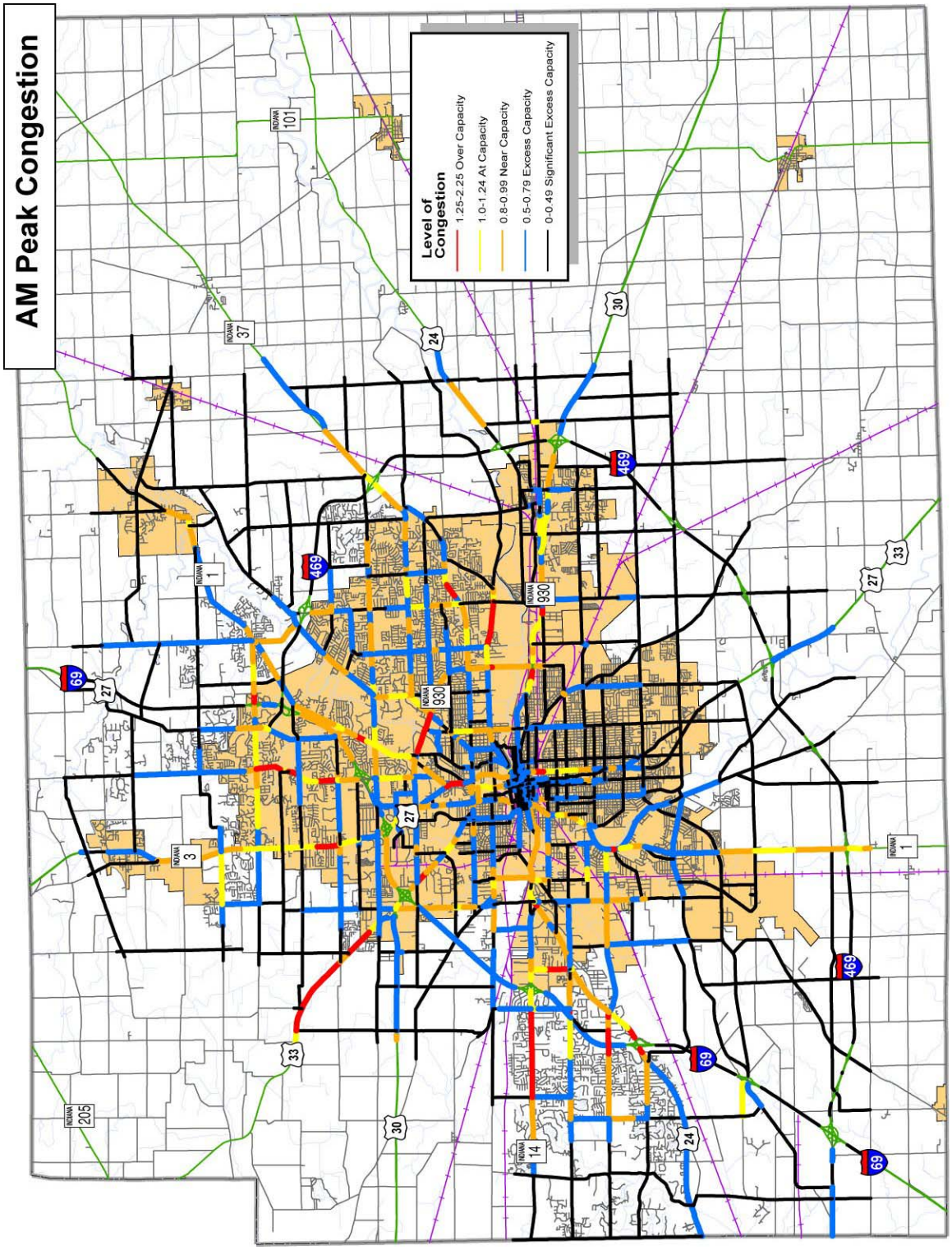
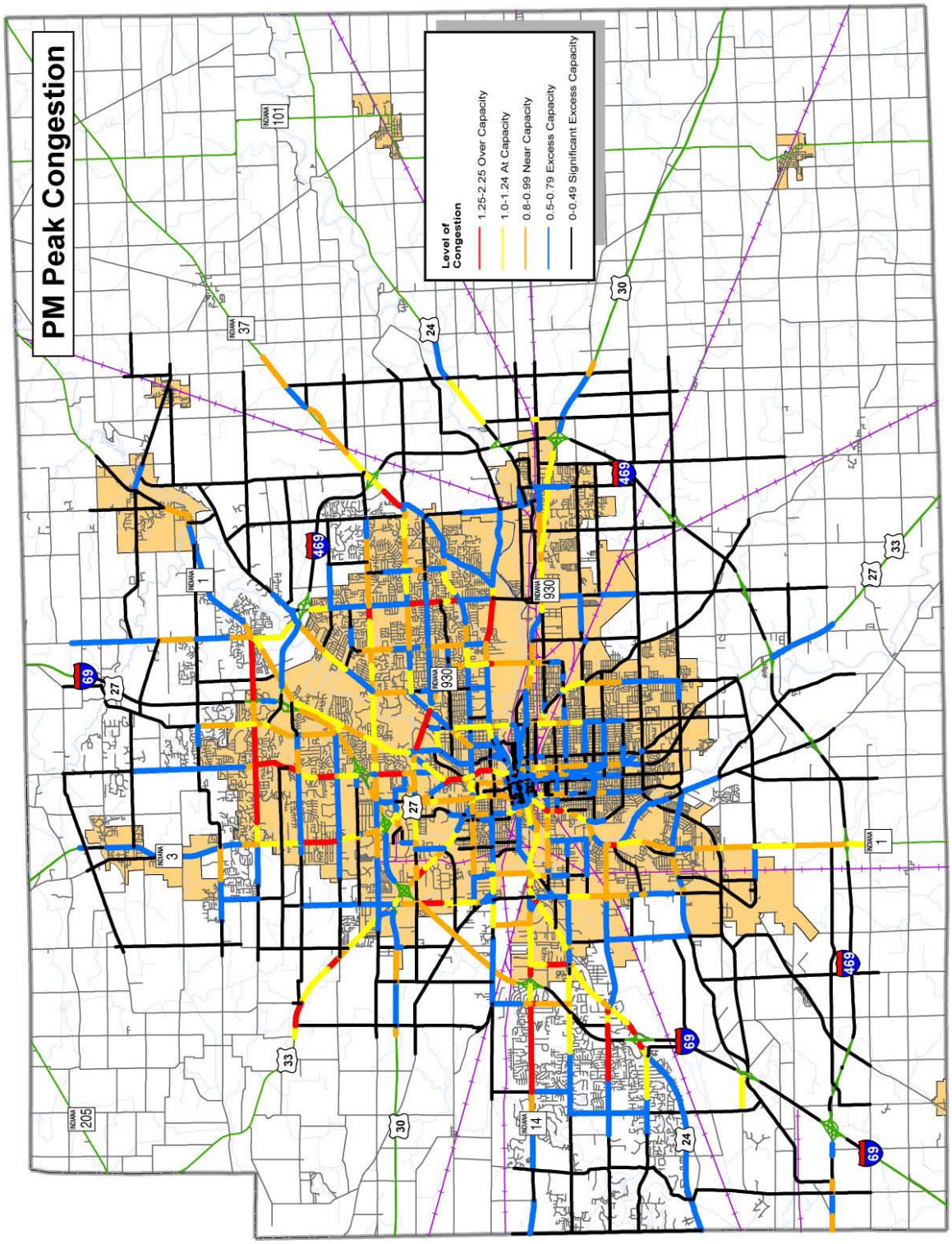


Figure 1.5: PM Peak Hour Congestion



Future Roadway Capacities

A systematic modeling process was undertaken by NIRCC to model traffic flows into the future. This modeling process takes a comprehensive look at socioeconomic and land use for the region. The following tables indicate the anticipated trend in vehicular trips as taken from the NIRCC Travel Demand Model (1).

Table 1.1
Travel Demand Forecast Regional Summary (1)

Trip Purpose	2010 Trips	2010 %	2015 Trips	2015 %	2025 Trips	2025 Percent
HBW	281,129	24.6	300,836	24.3	330,154	24.6
HBB	160,430	14.0	171,664	13.8	188,527	14.0
HBS	316,202	27.6	338,460	27.3	371,747	27.7
NHB	316,539	27.7	351,208	28.4	370,380	27.6
TRK	69,707	6.1	77,326	6.2	81,547	6.1
Total	1,144,007	100.0	1,239,494	100.0	1,342,355	100.0

HBW = Home-Based Work Trips
NHB = Non-Home-Based Trips
HBB = Home-Based Business Trips
TRK = Truck Trip
HBS = Home-Based Social Trips

A moderate but steady growth (approximately 1.0 percent per year) in vehicle trips is anticipated. No changes in the proportion of the types of trips (home-based work, etc.) are predicted. NIRCC makes the following observations about the increase: "The general trends appear similar (to the 2015 Plan) with suburban to suburban activity continuing to increase. The attractiveness between suburban areas and the central urban core will remain important and increase proportionately with redevelopment activity (1)."

The modeling results for the 2025 volumes indicate that arterials feeding the central city (Fort Wayne) from the north, northeast, northwest, and southwest continue to be deficient. While the problem is most serious between the central city and these fringe development areas, some downtown streets such as Washington and Jefferson Boulevards, and Clinton and Lafayette Streets also show future deficiencies.

Existing Crash Problem Areas

Figure 1.6 indicates the intersections where the highest number of crashes occurred on roadways in the region. Although this map does not paint a complete picture of the safety issues, since the crash rate (crashes/volume of traffic) and the number of injuries/fatalities must be considered, it does indicate the locations where the most crashes are occurring.

It is clear that the locations where the most crashes are occurring are away from the downtown core. Highest pockets of concentration are seen in fringe areas and areas with the heaviest development.

Potential Future Crash Problem Areas

As growth and development occur, areas that could recur as problems are:

- **Rural Roads (Especially Intersections) In Quickly Developing Areas -** Today these roadways may not pose a serious safety concern, but when loaded with a level of traffic for which they are not geometrically designed to handle, they will likely become problematic.

- **Poorly Access-Controlled Roadways** - On roadways where driveways and intersections are allowed to propagate uncontrolled, it is inevitable that crashes will become prevalent. Areas around the interchanges will be especially susceptible.

- **Highly Congested Roadways** - On heavily congested roadways, crashes are caused due to slowing, swerving, and stopped vehicles.

Planned Transportation Projects

In order to address the deficient congestion and safety problems, and to meet other transportation goals, NIRCC has developed a Transportation Plan. 2025 Transportation Plan includes the projects shown on Figure 1.7. **It should be noted that there are numerous other maintenance and enhancement projects planned by local jurisdiction that do not appear on this map.**

New construction is limited to two projects. One is a north-south connection of Maplecrest Road and Adams Center Road from Lake Avenue to SR 930 which will provide a continuous four-lane arterial along the east side of Fort Wayne and through New Haven. A second project is the extension of Ardmore Avenue from Indianapolis Road to Lower Huntington Road, which will extend the north-south arterial on the west side of Fort Wayne and provide direct access to the Fort Wayne International Airport.

Figure 1.6: High Crash Locations

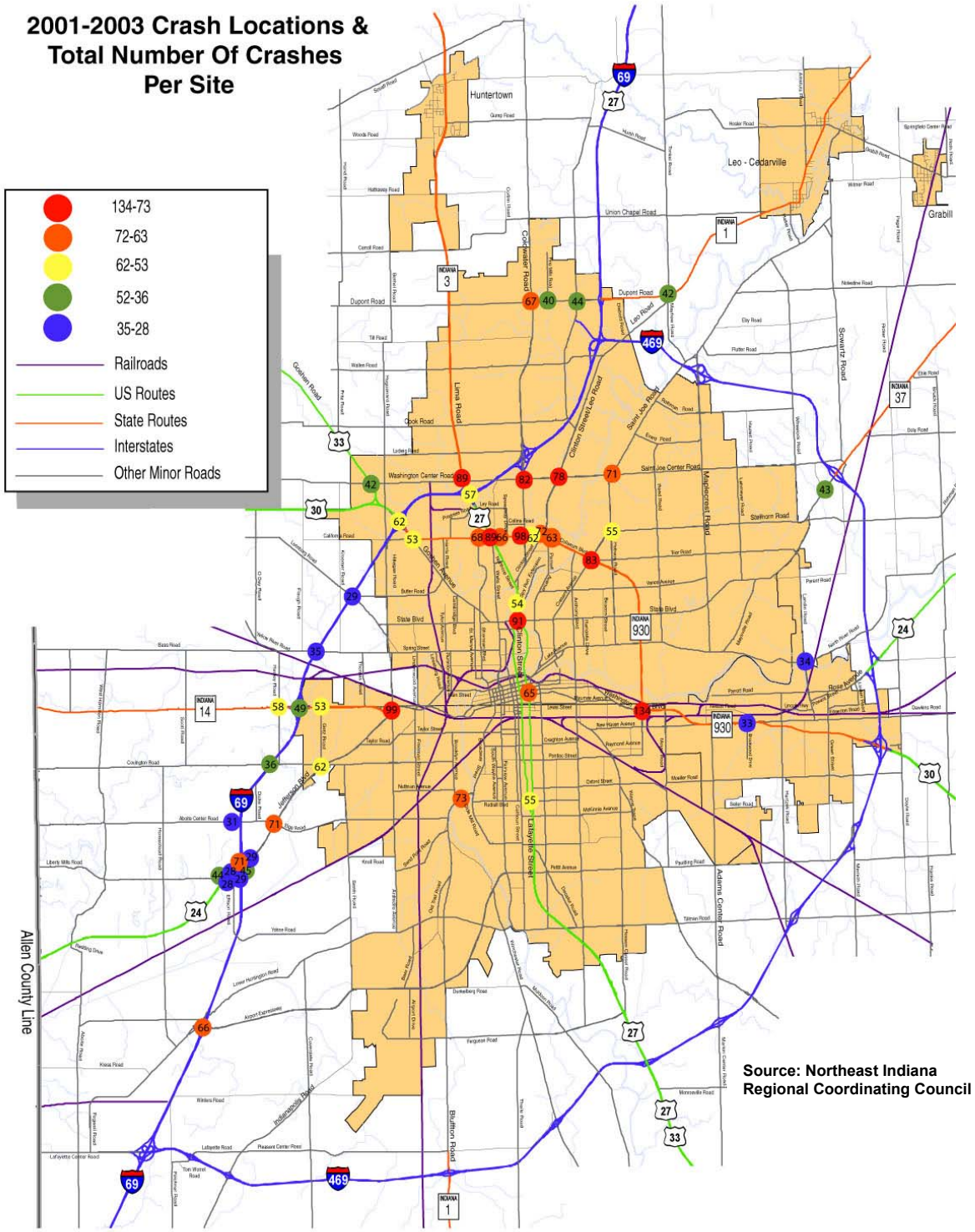
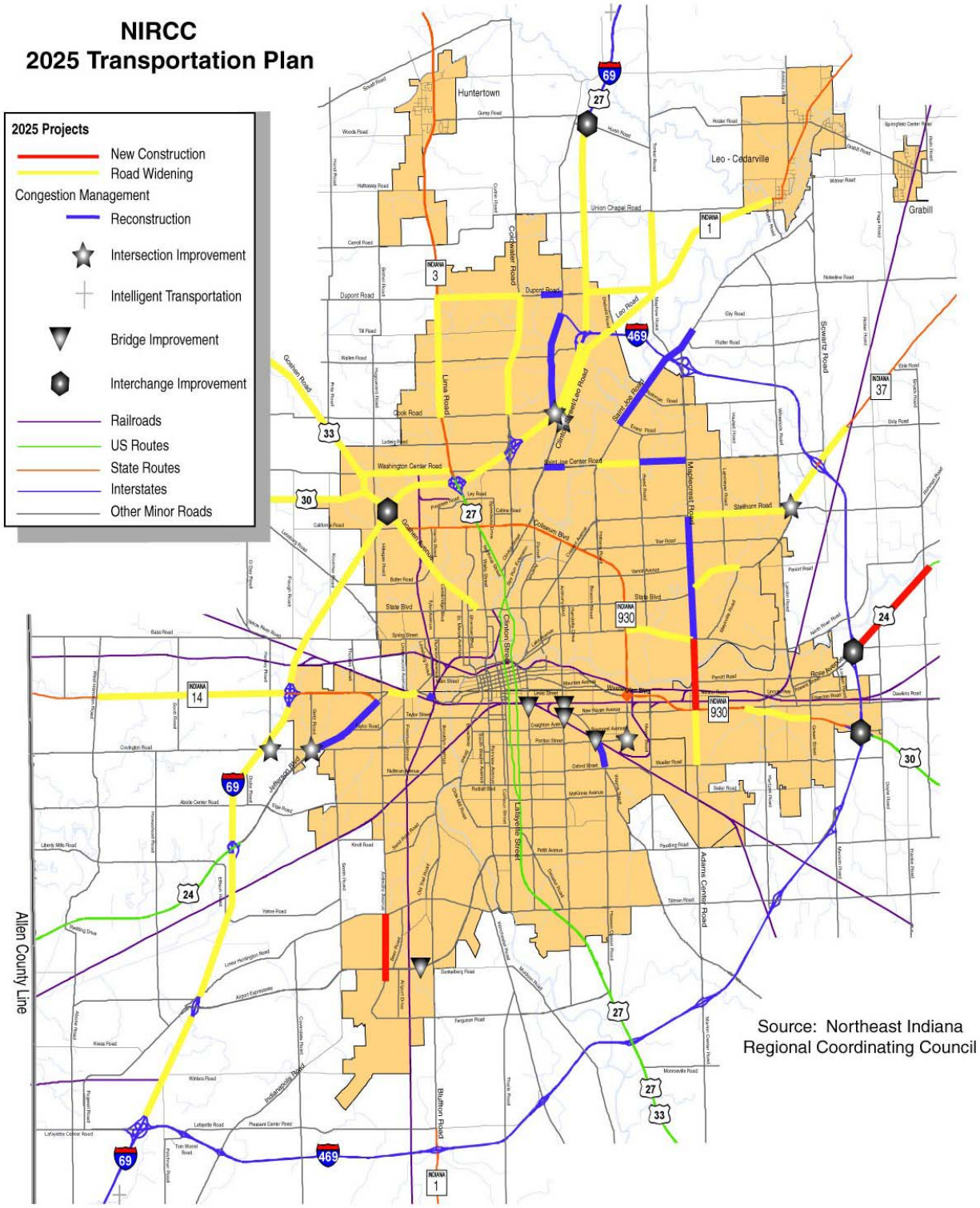


Figure 1.7: Planned Roadway Improvements



Improvements

Numerous widening projects are included in the plan, most of which are focused on serving the newly developing areas north of the central city. I-69 through most of Allen County is being widened to six-lanes. Numerous spot congestion and safety improvements (turn lanes and intersection/road realignments) are included. A few intelligent transportation system projects, including Motorist Information-Changeable Message Signs on I-69 and US 30, and an upgraded traffic signal system for Fort Wayne, will help with alleviating congestion. Five railroad grade separation projects are included to improve safety and mobility. One new interchange is proposed at I-69 and Hursh Road to improve freeway access north of the central city, and reduce the need for back-tracking to access the freeway from north of Dupont Road. The plan also includes several interchange modifications are also included.

It is apparent that there is a trend toward major transportation needs radiating away from the central city.

Some identified deficiencies could not be addressed. "As the recommended 2025 plan began to solidify, testing continued to reveal deficiencies for which a feasible solution is difficult to develop. Previous plans had similar difficulties, partially due to narrow rights-of-way and a reluctance to disturb viable neighborhoods. In certain cases, solutions have been difficult or too expensive to be practical. The primary areas of such deficiencies are currently the Fort Wayne Central Business District, the north central section of Fort Wayne, and within the intense concentration of commercial and retail development along Coliseum Boulevard (SR 930) and Coldwater Road. Traffic operation improvement, intelligent transportation systems, and improved transit service may help alleviate some travel pressure in this area. These areas will continue to be studied to determine what are the most feasible solutions. The capacity deficiencies that could not be addressed are:

- Coliseum Boulevard from Goshen Road to Leo Road
- Anthony Boulevard just south of Lake Avenue
- Lake Avenue just west of Anthony Boulevard

Intermodal Transportation

"Fort Wayne lies within 'Cargo Alley,' where the movement of cargo via aircraft and roadway trucking constitutes the majority of all cargo distribution within the United States. 'Cargo Alley' is an approximate 275 mile-wide corridor, which is defined by a number of Midwestern and Southern cities. The significance of 'Cargo Alley' is that an overnight movement of air cargo may be easily made to either national coast. Additionally, Fort Wayne lies within overnight truck travel (300 miles) of 21% of the U.S. population.

The Fort Wayne area is served by nearly 40 common and contract motor carriers, which maintain local terminals. On a truckload basis, overnight delivery is available to most of the Midwest, Midsouth, and Canada. Triple Crown Intermodal hub is headquartered in Fort Wayne.

This provides challenges for the transportation system to accommodate significant truck traffic, but more importantly provides opportunities for economic development.

2. FUTURE DEVELOPMENT FROM TRANSPORTATION PERSPECTIVE

Transportation-Rich Areas

Two areas appear to be the most attractive for development from a purely transportation perspective.

- Adjacent to the beltway created by I-69 and I-469, especially around existing and future interchange areas appear to have potential for growth and development. The ease of access to these high-speed, high-capacity facilities will be attractive for residential, office, and commercial developments. A certain amount of this development may be healthy and will use these currently capacity-rich facilities. Ultimately though, a proliferation of this type of development will likely result in the need for expensive upgrades to those perimeter freeways and connecting arterials.

- Areas south and southeast of the center city appear to be served by a well-established grid of surface streets. With some spot improvements for capacity and safety, this area appears to have adequate capacity to accommodate future in-fill type growth from a transportation standpoint.

Assuming that the major employment centers continue to be located inside the beltway, the more distance from the urban core residential development occurs, the more expensive will be the needed transportation improvements. In addition, the further development is from the Fort Wayne city core, the more difficult it becomes to provide adequate public transit.

Transportation Challenged Areas

Areas that appear to face the greatest transportation challenges are the areas that may likely see the greatest development pressures. These areas are currently undeveloped near or outside the beltway. Accommodating large growth in these areas with roadway extensions, widening, and new facilities could be very expensive. Historically, development has outpaced the ability to upgrade the transportation infrastructure, thus resulting in significant travel delays to those who live in the fringe areas wishing to travel to the city core for employment.

Also, assuming population shifts to these areas, funding becomes spread more thinly to maintain and improve roadway facilities.

Development Policies

In order to preserve the capacity of existing roadways and protect the investment in new infrastructure, solid access management and development policies are critical. Fort Wayne and Allen County currently have Access Management guidelines that are primarily applied through the development plan review process. These guidelines help assure that the proliferation of driveways and intersections does not severely impede the flow of traffic and create traffic crash problems. NIRCC has also published a guide for developers entitled *Coordinating Development and Transportation Services, A Guide for Developers, Engineers, and Planners*, which provides guidance in incorporating transit friendly designs into developments which is also considered at the time of development plan review. In order to preserve the capacity of existing roadways and protect the investment in new infrastructure, solid access management and development policies are critical.

Indiana adopted enabling legislation in 1991 for local governments to levy impact fees. Such fees must be directly linked to a current comprehensive plan. Currently, no local agencies are pursuing impact fee policies.

3. TRANSPORTATION ENVIRONMENTAL ISSUES

Noise Pollution

Trucks and high-speed traffic are the primary causes of highway-related noise pollution. In order for a project to qualify for federal funding, the need to mitigate noise pollution (noise barriers) must be investigated during the environmental process if there is an expressed public concern regarding noise. Since federal funding will likely be needed for every major project in the area, all projects that increase the number of lanes and are adjacent to sensitive receptors (i.e., homes, schools, churches, hospitals, hotels, etc.) may have noise considerations. There are current plans to include noise barriers on several sections of the I-69 widening projects, where noise analysis has indicated that noise levels at sensitive receptors exceed the FHWA guidelines.

Noise problems on current roadways where no improvements are planned are a more difficult issue to address. FHWA has limited funding or Type II noise barriers that are not associated with a roadway improvement, but are related to sensitive receptors adjacent to areas of increased traffic volumes. The Type II funds are not available for new construction. Noise barriers have been installed as part of major local projects, most notably along West Jefferson Boulevard as part of the Jefferson Pointe Shopping Center Project.

Air Pollution

Allen County has been recently designated as a nonattainment area for the pollutant ozone. The air quality in Allen County is just over the threshold that places the area in the nonattainment status. This status will require NIRCC to demonstrate that the issue is being adequately addressed. Thus, air quality issues will influence future transportation decisions, although exactly what influence it will have has not been determined. Fortunately, the modern fleet of vehicles continues to produce fewer emissions than their predecessors, which will help to reduce air pollution.

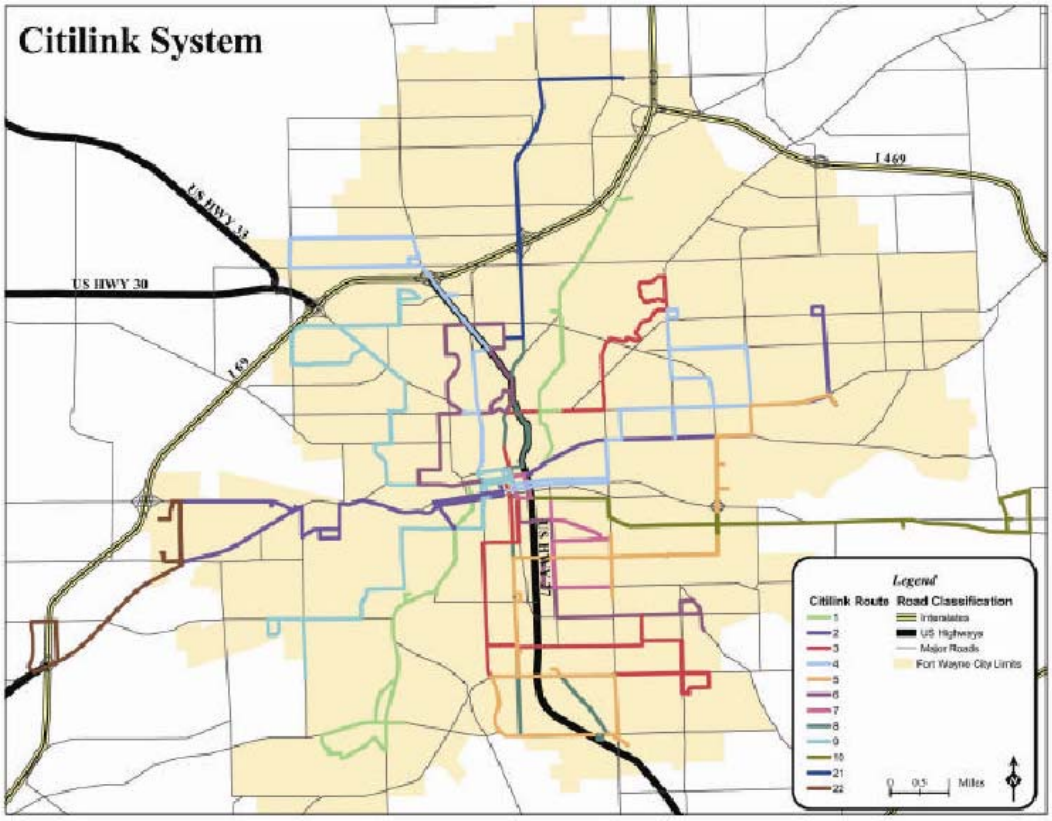
A major goal of NIRCC and all MPOs is to create a transportation system that, for the investment made, achieves the greatest reduction in traffic congestion, and thus fuel consumption. This in turn supports the goal of reducing fuel consumption and air pollution.

4. PUBLIC TRANSPORTATION

Services Available in the City/County

Citilink, previously known as the Public Transit Corporation is the agency that coordinates citywide transit service including bus routes and paratransit. Citilink is not a regional authority and is funded by a property tax levy. "After several years of declining ridership, declining budgets, and numerous management changes, the City of Fort Wayne determined that expert management should be introduced and the agency should move ahead as an important component of the transportation network … changes to bus service in Fort Wayne took place five years ago and have resulted in ridership increases, enhanced perceptions of service, and better faith in the bus service from the community (3)."

Figure 4.1: Citilink Fixed Route System



Source: Citilink

"There are other transportation services available in Fort Wayne, although public transportation is limited. A fairly recent effort, the **Community Transportation Network** (CTN), is intended to consolidate alternative transportation options and provide service to accompany and enhance Citilink service. CTN provides service countywide and is slowly increasing in its services (3)." Medical service transportation has been the focus. CTN owns some vehicles and is primarily funded by foundation grants. "There are also numerous social service agencies that maintain vehicles and provide trips for their clients throughout the Fort Wayne and Allen County areas (3)." Among other agencies providing this service are the Allen County Council on Aging and Turnstone Center.

Ridership Trends

The following table, taken from the recently completed Citilink Transportation Development Plan (3), indicates the recent trend in passenger service for Citilink since 1996. It should be noted that in 1999, routes were added to add service hours to core routes, and to add suburban mobility services.

Table 2-13 Annual Hours & Passengers

Year	1996	1997	1998	1999	2000	2001	2002
Annual Service Hours							
Fixed Route	77,825	76,256	75,613	83,231	88,581	94,062	98,238
Access	14,296	14,254	14,515	11,814	15,606	22,699	22,638
System Wide	92,121	90,510	90,128	95,045	104,187	116,761	120,876
Annual Passengers							
Fixed Route	1,279,561	1,306,886	1,267,889	1,230,399	1,313,037	1,371,681	1,393,485
Access	22,524	24,075	26,654	27,067	30,924	40,664	42,143
System Wide	1,302,085	1,330,961	1,294,543	1,257,466	1,343,961	1,412,345	1,435,628

Citilink's consistent growth since 1999 in passengers and service hours is a positive sign for the area-wide transportation system, both in addressing congestion by diversifying modes, and by providing an important service to those who cannot or do not wish to travel by private automobile. While the share of the total daily trips in the region using transit is relatively small, the annual increase has been significant compared to the national average for similar size metropolitan areas, which saw a slight decrease in 2002, and practically no growth in 2003.

Needs and Challenges

The recently completed Transit Development Plan (3) identified the following issues through field investigation, analysis, public outreach, and the use of GIS technology (3):

Service Design & Coverage – The Citilink system does an excellent job of providing coverage within its core service area throughout the majority of Fort Wayne. The radial design of the service is appropriate and the current pulse system is applicable to the city's needs. These needs, however, are changing and expanding, and this is reflected in efforts to provide nontraditional services such as the deviated routes (Routes 21 and 22). The service plan developed in later chapters will need to address these changes, their impact on the system, and the potential for other nontraditional services. In addition, service design on certain routes may present opportunities to provide better anchors at the route termini, with the intention of promoting ridership, transfers, and system mobility. The issue of service coverage and design relates to many of the issues listed below.

Service Frequency – The majority of Citilink routes currently operate on 60-minute headways for the entire service day, with the exception of Routes 7 and 8, which operate on 30-minute headways. The on-board survey revealed that this is a key issue for riders that should be addressed. In addition, this issue was raised by Citilink staff and stakeholders. Based on local demographics and growth patterns, service frequency will need to be addressed on a systemwide basis, starting with key routes. There are many opportunities for service frequency increases on key routes throughout the system. This strategy may assist Citilink in addressing service to potential markets, as this is a typical complaint of many nonriders.

Service Days - The on-board survey also presented Sunday service and more comprehensive Saturday service as issues that need to be addressed. Survey respondents indicated that they work on Sundays (40 percent) despite the lack of transit service. This is one cause of ridership "churn" for the system. The addition of Sunday service would allow Citilink to retain riders for longer periods based on reliability, and offer a more comprehensive alternative to the personal auto. This alone would increase overall ridership.

Loops – There are several routes in the Citilink system that have nested (within the route) or terminal (at the end of the route) loops. In some cases, these are short loops that are used as a basic turn-back. Others are larger and create longer travel times for patrons. Wherever possible, bidirectional service should be favored over loops.

Changing Travel Patterns – While the radial design of the Citilink system serves Fort Wayne well, travel patterns are becoming more dispersed and less centered on downtown Fort Wayne. Route 5 was designed to address some of these needs. While ridership is lowest among the Citilink routes, redesign may assist in providing better routing to promote the use of the route. In addition, other nonradial route options must be considered as the city continues to change.

Expanding Residential Locations – The recent and projected growth in the City of Fort Wayne and adjacent areas will have an impact on transit needs in the coming years. Citilink will need to make efforts to provide service suitable to residential densities and provide connections to major generators and transfer locations. The current residential expansion is evident in northeast Fort Wayne, an area identified by many riders and stakeholders as in need of service in the near future.

Regional Employment Locations – Employment in the Greater Fort Wayne area has become increasingly regional which has led to new transit needs that cannot be addressed with the current route structure. Regional employment needs will need to be addressed in the service plan for Citilink.

Downtown Hub – The current downtown hub at Superior Street is a convenient location for transfers within the route network. Recent growth in the system has maximized space at this location during the major pulse at 15 minutes past the hour. Citilink is currently planning to move to a new location in downtown. This will need to be considered as part of overall route design in later phases of the planning process.

Secondary Hubs – There are opportunities to promote mobility within the system based on the establishment of secondary hub locations throughout the service area. Southgate Plaza is an example of a major transfer location outside of downtown. The future Hanna-Creighton facility, which will have a transit-friendly design, is an example of the opportunity to promote mobility within the

system through the use of secondary transit hubs. There are additional locations that may be suitable for secondary hubs within the route network, including the area around the Glenbrook Mall and IPFW. These will need to be closely evaluated.

Low-Density Service Needs – The current route deviation services that operate as part of the Citilink system offer innovative service to connect the route structure to transit generators and residential areas that are outside of the core fixed route service area. These needs will continue to grow and offer opportunities for low-density service. This issue is similar to that of expanding population and regional generators. However, this issue is being raised to assist in promoting strategies to offer integrated services to these areas that meet the needs of all transit populations in the area.

Potential Market Service – There are potential transit markets in the Fort Wayne area that should be addressed through service design. These include students, government employees, and employees in areas of dense employers (small or large). These markets may be the best suited for efforts to promote transit usage. There are service design techniques and marketing efforts that can be made to attract riders from these markets.

Pulse Network – While maintaining the pulse at the Superior Street Station facility should be a high priority for Citilink, it does create challenges for extending routes. The Citilink response has been to create point deviation routes that serve areas that, if served by route extensions, would cause the route to be scheduled off the pulse. Having routes on 30-minute headways would be better to facilitate route extensions (3).

Addressing each of these issues is important for the long-term health and growth of the local transit system.

Current Plans and Leadership

Aggressive plans for route expansions and increases in service were developed in the plan (3) to address the issues raised. After year three of the implementation plan, a gap in funding is anticipated to exist that would likely have to be made up by an increase in local contributions in order for Citilink to reach its goals. An important financial issue is that Citilink is not a regional authority and is funded by a levy. The concern is that annexation “waters down” the funding since there is not a proportionate increase in the levy with each annexation.

5. AIR TRANSPORTATION

Fort Wayne International Airport (FWA) is the primary airport serving Fort Wayne and Allen County. FWA is located seven miles south-southwest of the Fort Wayne Central Business District. The following are facts about FWA (taken from the FWA website):

- Owned and operated by the Fort Wayne-Allen County Airport Authority
- The Authority has 62 full time employees
- Lt. Paul Baer Terminal was expanded in 1996 and has four gates down and another four gates on the second-level concourse. The terminal is open 24 hours a day 365 days a year
- The 12,000 foot long runway is one of the longest runways in the United States and is long enough to handle any type of aircraft including the Space Shuttle, Concord, 747s, and Air Buses
- Runways: R5-23 Primary at 12,000 feet long and 150 feet wide
- R14-32 Secondary at 8,000 feet long and 150 feet wide
- R9-27 (Mainly GA traffic) is 4,000 feet long and 75 feet wide
- FWA serves around 650,000 passengers/year
- FWA has the capability to offer 24 Hr. Customs
- FWA FAA Air Traffic Control Tower operates 24-hours daily
- FWA is home to the 122nd Fighter Wing of the Indiana Air National Guard
- FWA was originally named Baer Field in 1941. In 1946, the City of Fort Wayne bought the airport from the federal government for one dollar and renamed the airport Fort Wayne Municipal Airport. In 1991, the Fort Wayne-Allen County Airport Authority renamed the airport to its current name of Fort Wayne International Airport
- FWA's Air Trade Center is located on 450 acres on the southwest side of the FWA complex
- The FWA complex is made up of over 3,400 acres
- FWA is served by six major carriers: American, Continental, Delta, Northwest, U.S. Airways and United
- Daily commercial flights are scheduled to the following gateways: Atlanta, Chicago O'Hare, Cincinnati, Cleveland, Dallas, Detroit, Pittsburgh, and St. Louis
- FWA has recently completed a Master Plan Update (5). That plan contained the following forecasts for activity at FWA

Table 5.1
Summary of Forecasts
Fort Wayne International Airport

	HISTORICAL		FORECAST	
	1998	2005	2010	2020
Annual Enplanements:				
Total Annual Enplanements:	**354,541**	**418,300**	**471,900**	**582,200**
Air Carrier Enplanements:	38,799	66,900	103,800	209,600
Regional/Commuter Enplanements:	315,742	351,400	368,100	372,600
Annual Operations:				
Air Carrier Category:	**12,990**	**29,400**	**38,300**	**52,100**
Passenger Carriers	4,882	4,800	6,300	9,100
Cargo/Charter Carriers	8,108	24,600	32,000	43,000
Air Taxi Category:	**24,674**	**26,100**	**24,900**	**24,700**
Passenger Carriers	23,712	24,900	23,500	22,800
Cargo/Charter Carriers	962	1,200	1,400	1,900
GA:	**63,835**	**66,800**	**70,000**	**78,800**
Local	27,491	38,744	40,600	46,492
Itinerant	26,344	28,056	29,400	32,308
Military:	**5,935**	**6,300**	**6,300**	**6,300**
Local	3,209	3,500	3,500	3,500
Itinerant	2,726	2,800	2,800	2,800

Source: Fort Wayne Allen County Airport Authority

A steady and significant increase is anticipated in passenger and cargo operations based on this recent planning work.

The following are highlights from the Master Plan Update intended to enable Fort Wayne International Airport to meet aviation demands through the year 2020 and beyond.

- Continue to update and rehabilitate existing airfield areas. Continue to follow recommendations for facility enhancement via reports, such as the Pavement Condition Index Study, Storm Water Management Plan, etc.
- The development of a new parallel runway would be located 4300 feet southeast from the centerline of existing Runway 5-23.
- Expand existing terminal and supporting auto parking facilities in the near- and mid-terms.
- In the long-term, a new terminal could be developed between the new parallel runway and Runway 5-23. Entrance into the new terminal will be from the I-469 bypass.

- Continued taxiway development will facilitate efficient movement of aircraft to and from all existing and future runways.
- General aviation and corporate hangar development is projected to continue in the vicinity of the west ramp and in the northwest quadrant, adjacent to Runway 14-32.
- The Air Trade Center will continue to develop.
- Land acquisition and a resident relocation will be required to accommodate the future parallel runway and new terminal.

Smith Field Airport also serves Fort Wayne and Allen County and is owned by Fort Wayne Airport Authority. The longest paved runway is 3110 feet. Smith Field is located about 4 miles from the center of downtown Fort Wayne. While it is an excellent facility for small aircraft, its regional impact is much less than that of FWA. Usage is expected to increase. Current expansion plans are limited to increasing hanger space and improving existing facilities. There are no plans to lengthen existing or construct additional runways.

6. RAIL TRANSPORTATION

General

Founded in 1794, Fort Wayne is a city that came about long before there were any railroads in the United States. The short-lived canal system served Fort Wayne until the railroads came. Eventually the city succumbed completely to the railroads and by the early 20th Century Fort Wayne was truly a railroad town, being served by several lines, most of which are still in service today.

Passenger Rail

Amtrak service began in Fort Wayne on its beginning day; however, it was not to last forever. Amtrak ended passenger train service in Fort Wayne in November 1990 due to Conrail's downgrading of the Pennsy track west of Crestline, Ohio. There were two trains in each direction at that time: The Broadway Limited (Nos. 40 and 41) from Chicago to New York-Penn Station and The Capitol Limited (Nos. 29 and 30) from Chicago to Washington D.C, complete with dome cars. Both trains were rerouted north of Fort Wayne in 1990. The Capitol Limited was placed on the Conrail (now Norfolk Southern) Chicago Line where it still runs today with a stop at Waterloo, Indiana, and the Broadway Limited (now called the Three Rivers) was routed onto the CSX Garrett/Willard Sub, stopping at Garrett. The Garrett passenger stop has since been eliminated, but the train still stops by the yard for crew changes.

While Amtrak currently has no routes that pass through Fort Wayne, INDOT and Amtrak have recently selected, as their preferred alternative, the high-speed rail

alternative route between Cleveland and Chicago that passes through Fort Wayne. The construction and opening of the route is not likely in the near future. Money has been appropriated by the governor to begin the preliminary environment studies.

Figure 6.1: Midwest Regional Passenger Rail System

Source: Midwest Highspeed Rail Association

High speed rail service will help diversify the transportation system by bringing another mode of travel to Fort Wayne, and could potentially spur development and growth around its station and throughout the area. It also helps solidify Fort Wayne's place on the national map. The only cited drawbacks, other than high initial cost, are potential traffic safety issues at crossings, and the potential for being in competition with commuter flights to and from Fort Wayne International Airport.

There are no other current plans to begin Amtrak service or any other passenger rail service to Allen County.

Freight Rail

The Fort Wayne area is interlaced with many tracks, but basically there are three east-west lines, one north-south line, and the remnants of two other lines. Norfolk Southern is the leading rail service provider in Fort Wayne; however CSX operates the former Pennsylvania Railroad east and west of Fort Wayne and has a small yard (Piqua Yard) on the southeast side of town.

Norfolk Southern - Fort Wayne is part of Norfolk Southern's Lake Division and, generally speaking, is a convergence point of three major lines. The east Wayne Yard is used for staging some trains. The majority of NS trains here are through-trains. Fort Wayne is one of the major passing points of NS trains coming from the Southern Region and going to Chicago or Detroit and vice versa. This creates quite a mixture of traffic. Triple Crown's main yard is in Fort Wayne at the west end of Piqua Yard, and all roadrailer trains head for this yard. Local freights operate on all NS lines in the area.

One of the biggest challenges Norfolk Southern faces in Fort Wayne is train saturation. With the convergence of three major lines, the famous statement *"too many trains and not enough track"* certainly applies at times. Often a single problem with one train will have a ripple effect on all 3 lines and will tie them up for long periods of time. The Conrail acquisition in 1999 added many additional trains to the Huntington and Fostoria Districts which created more congestion within the city. NS has done a lot of experimenting with routes since then, consolidating several trains, and they even tried routing a few mail trains on the CSX Fort Wayne Line east of Fort Wayne for a few years.

CSX - CSX runs two through freights west of Fort Wayne, two locals on the Fort Wayne Line, and 1 on the Decatur Secondary. All of these trains originate/terminate at Piqua Yard. Occasionally a unit grain train will pass through town.

7. BICYCLE/PEDESTRIAN TRANSPORTATION

The Northeastern Indiana Regional Bicycle and Pedestrian Forum (NIRBPF) has identified the following as prevalent conditions in northeastern Indiana:

- Bicycle and pedestrian facilities are not readily accessible.
- Road design, construction, and maintenance, as well as motorist attitudes, training, and behavior contribute to reducing the safety of the operating environment for bicyclists and pedestrians.
- Routes and trails are in inadequate supply to satisfy the magnitude and variety of demand for bicycle and pedestrian facilities.
- An Indiana law makes it problematic to acquire abandoned railroad rights-of-way for little or no cost.

A consistent and coordinated effort will be necessary to address these issues. The regional leadership for this effort may come from NIRCC through the NIRBPF. Extensive walkway and bikeway plans have been prepared by both Aboite Township and the City of New Haven, and are being developed for the City of Fort Wayne.

NIRBPF through discussions has stated the following as the goals and objectives for the regional plans it will develop:

Goal #1: Safe – Bicyclists and pedestrians can travel without undue fear or risk of injury.

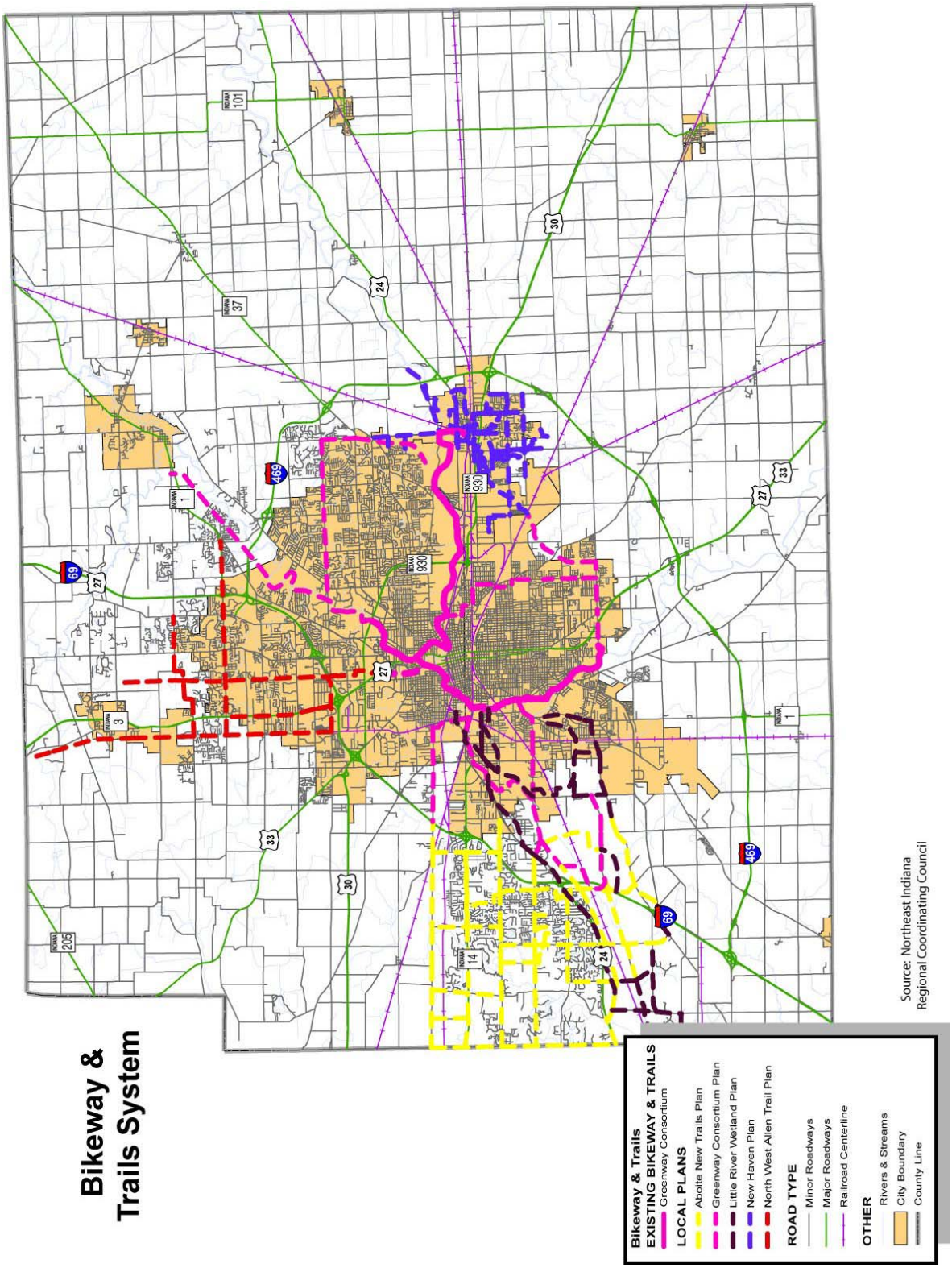
- Objective 1A: Motorists will share the road.
- Objective 1B: Bicyclists will ride safely.
- Objective 1C: The legal system will support safe cycling.

Goal #2: Complete – A network of routes, trails, and sidewalks is developed that connects primary bicycle and pedestrian destinations.

- Objective 2A: Eliminate barriers of all kinds to alternative modes of transportation present in existing routes.
- Objective 2B: Where appropriate and feasible, include bicycle and pedestrian facilities in the specification for new road construction and the improvement of existing roads.
- Objective 2C: In instances where it is deemed infeasible to include bicycle and pedestrian facilities in road projects, the addition of such facilities in the future is accommodated through right-of-way acquisition and/or project design.
- Objective 2D: Encourage units of local government to acquire abandoned rail corridors.
- Objective 2E: Ensure that bicycle and pedestrian facilities are accessible from the most common points of origin; e.g., residential areas.

The following map (Figure 7.1), prepared by NIRCC, shows existing and proposed bikeways and greenways for the Allen County/Fort Wayne area.

Figure 7.1: Current Bikeway Plan



The existing portion of the Rivergreenway (Greeway Consortium Plan), primarily located in Fort Wayne, creates an excellent spine from which future bikeway development can build, or to which it can connect. New Haven has several existing trails including connections to the Rivergreenway, and has recently completed a plan identifying additional trails. Aboite Township has a fairly extensive plan for bikeways, including connections to the Rivergreenway, but no significant portions have been constructed.

Bicycle/pedestrian projects included in the NIRCC 2025 Transportation Plan (1) are as follows:

- The Johnny Appleseed Park to Shoaff Park expansion would complete the basic alignment of the Rivergreenway within the city limits of Fort Wayne, traveling from the northernmost park (Shoaff) to the southernmost park (Tillman). However, much of the current trail is in need of upgrades such as widening to a 10-foot minimum width, improve surface quality, safety improvements, quality way finding and signage throughout, and landscaped and maintained surroundings. In addition, connections to the neighborhoods and all future trails are needed to fully complete the system.

- The anticipated bikeway/pedestrian trail system through New Haven would be blacktop/sidewalks that would connect many of the parks though the City. The trails would use city sidewalks, railroad right-of-way, wooded and floodplain areas. An additional line from the proposed trail would connect the New Haven/Adams Township Park Department's trail to the Fort Wayne Rivergreenway at Kreager (Maumee) Park.

- The proposed connection between Fox Island and the Fort Wayne Rivergreenway would follow the Junk or Fairfield ditch as a connection.

- The Leo-Cedarville, Grabill proposed pedestrian path would connect the town of Leo-Cedarville with the town of Grabill. This would create a pedestrian corridor for the citizens.

8. LIVABILITY

Most communities struggle to mitigate the impacts of transportation systems which were built around the strong public desire for convenient and efficient transportation systems. Fort Wayne and Allen County are included. Livability can often be defined as something you "feel." A safe, attractive, and inviting environment for pedestrians is the key to a "livable" community. Deficiencies in most communities including Fort Wayne/Allen County are:

- Lack of a comprehensive city-county system of paths and trails
- Lack of pedestrian an bicycle facilities along streets and highways
- Lack of pedestrian connections between neighborhoods

- Underutilization of public transit
- Inadequate or lack of sidewalks in residential neighborhoods
- High-speed traffic with little or no "buffer zone" between pedestrians and vehicular traffic on local roadways
- Motorists' attitudes about sharing the roads

There are current efforts to improve livability including the bicycle and transit planning efforts previously discussed. Other efforts are the City of Fort Wayne's are:

1. traffic calming program, where requests from communities for traffic calming measures are considered on a case-by-case basis, and
2. its ADA Transition Plan, where public sidewalks and curbs are improved to better accommodate people with disabilities.

Also, the Transportation Planning Committee has developed *Coordinating and Development and Transportation Services, A Guide for Developers, Engineers, and Planners* (4) that "…is intended to encourage development designs that incorporate transit and paratransit considerations to enhance overall mobility, improve job accessibility, and conserve public and private resources. It outlines transit vehicle operating and physical characteristics and offers design options for transit vehicle accommodation." Citilink staff has indicated that this tool has been effective and has positively affected development designs.

9. SUMMARY AND CONCLUSIONS

The Allen County and Fort Wayne area has a fairly strong transportation system made up of diverse modes of transportation. It appears that there is active leadership for each of the various modes of travel. The street and highway system operates relatively well, with some deficiencies and challenges that are being addressed on a yearly basis through the regional and local planning processes and jurisdictional capital improvement programs. The transit system is healthy and established and positioned for growth. The Fort Wayne International Airport is an important airport from a state and regional perspective, with expansion plans.

The pedestrian and bicycling systems appear to be the weakest components of the existing transportation system. The River Greenway, which includes some existing connections to the east and plans to make additional connections to the east and west, provides a potential spine for the system, but significant improvements are needed. In general, the area's transportation system strongly favors motorized modes of travel over non-motorized modes.

10. REFERENCES

(1) Northeastern Indiana Regional Coordinating Council, *2025 Transportation Plan Technical Report*, 2000

(2) The Fort Wayne – Allen County Airport Authority, *Fort Wayne International Airport, Master Plan Update*, 2003

(3) Citilink and Northeastern Indian Regional Coordinating Council, *Citilink Transportation Development Plan*, March 2004

(4) Northeastern Indiana Regional Coordinating Council, *Coordinating Development and Transportation Services, A Guide for Developers, Engineers, and Planners*, 2002

(5) Aboite New Trails, *New Trails/Aboite Township Walkways and Shared Use Paths*, October 2003

6) City of New Haven, *City of New Haven Comprehensive Trails and Pedestrian Walkways Master Plan*