2030 Transportation Plan

Technical Report Fort Wayne-New Haven-Allen County Metropolitan Planning Area

> April 2005 Amended May 2007

Northeastern Indiana Regional Coordinating Council

RESOLUTION

A RESOLUTION OF THE NORTHEASTERN INDIANA REGIONAL COORDINATING COUNCIL,
CERTIFYING THAT THE 2030 TRANSPORTATION PLAN AS AMENDED FOR THE FORT WAYNE-NEW
HAVEN-ALLEN COUNTY METROPOLITAN PLANNING AREA, ALLEN COUNTY, INDIANA CONFORMS
TO THE REQUIREMENTS SET FORTH IN THE 1990 CLEAN AIR ACT (CAAA)

WHEREAS, The Northeastern Indiana Regional Coordinating Council is the Metropolitan Planning Area representing the Fort Wayne Urbanized areas, as well as Allen, DeKalb and Wells Counties in Indiana.

WHEREAS, Allen County is currently designated as a maintenance area for ozone by operation of the law under the 1990 Clean Air Act,

WHEREAS, The Northeastern Indiana Regional Coordinating Council is designated as the Lead Agency for air quality planning as it relates to transportation planning and mobile source emissions,

THEREFORE BE IT RESOLVED, that the Northeastern Indiana Regional Coordinating Council herewithin certifies that the 2030 Transportation Plan as Amended conforms to the broad intentions of achieving and maintaining the National Ambient Air Quality Standards (NAAQS).

That the 2030 Transportation Plan as Amended conformity determinations is based upon the most recently available estimates of emissions and which have been determined from the most recently available population, employment, travel and congestion estimates as determined by the NIRCC using its Travel Demand Forecasting Model and VMT estimation procedures.

That no project in the 2030 Transportation Plan as Amended will cause delay in the implementation of any required and identified TCM.

That the 2030 Transportation Plan as Amended for the Fort Wayne-New Haven-Allen County Transportation Management Area contributes to the annual emission reductions consistent with sections 182(b) (1) and 187 (1) and 187 (a) (7) of the 1990 Clean Air Act.

That the MPO is aware of no goal, directive, recommendation, or project identified in the 2030 Transportation Plan as Amended which contradicts in a negative manner any specific requirements or commitments of the applicable state implementation plan (SIP) for the plan.

THEREFORE BE IT RESOLVED, that the Urban Transportation Advisory Board on May 1, 2007 and the Northeastern Indiana Regional Coordinating Council on May 2, 2007, find the 2030 Transportation Plan as Amended to conform in all aspects to the requirements of the 1990 Clean Air Act Amendment.

RESOLVED THIS 1ST and 2ND DAY OF MAY, 2007.

THE NORTHEASTERN INDIANA REGIONAL COORDINATING COUNCIL

Daniel S. Avery, Executive Director

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Chapter 1

INTRODUCTION

As changes occur in the Fort Wayne-New Haven-Allen County Metropolitan Planning Area, the transportation system must be improved to respond to new and increasing travel demands. This report is the culmination of a process that has resulted in the update of the Year 2025 Transportation Plan which effectively responds to these changing needs. The update is titled the 2030 Transportation Plan and this technical report summarizes the work performed and the recommendations developed in the preparation of the transportation plan update. A 2030 Transportation Plan Brochure is also available for distribution.

Historical Background

The Fort Wayne Urbanized Area's geographical location is of prime importance to its significant role in providing a comprehensive transportation system. Located in the northeastern corner of Indiana, the urbanized area serves as the major transportation center for northeastern Indiana, northwestern Ohio and southern Michigan.

The importance of Fort Wayne's location was understood by the earliest settlers who took advantage of the access afforded them by the junction of three major rivers - the St. Mary's, St. Joseph, and Maumee. The early development of the transportation system in Fort Wayne focused on the utilization of the three rivers as the primary means of travel. The eventual development of canals through Fort Wayne in the early 1840's further solidified the transportation importance of this area. The river and canal systems attracted businesses and industries in search of affordable accessibility to existing and expanding markets.

When railroads were developed during the period from 1850 to 1870, they added a new dimension to travel. The use of the rivers and canals for transportation declined. The railroads began to take

over as the major factor affecting commercial and industrial development as well as the growth of the urban area itself. During this period of the city's history, its population was growing by 35 percent every 10 years.

Although the central city was growing rapidly, the road network as developed in its earliest days remained basically the same, with transportation movement within the city aided by a light rail system. In the city's earliest days the river and rail systems were an asset to its growth and development, but with the introduction of the automobile and truck, the very facilities which had once aided travel now hampered it with structures built for an earlier era.

The post-World War II era saw the establishment of federal loan mortgage insurance programs. The city then began to expand outward, pushing away from the solidarity of the central city. One response to the city's increasing size was to construct a bypass around the northern edge in the 1950s. The bypass re-routed US 30, a historically important route originally developed as the Lincoln Highway. This route remains critically important not only to the local area, but also serves as a regionally significant corridor.

The bypass attracted many commercial and industrial developments north of the central city. This highway is known locally as Coliseum Boulevard (SR 930). Rural roads in the north quickly turned into major thoroughfares for residential and commercial traffic. This trend continues, although at a reduced pace.

The transportation plan for the Fort Wayne-New Haven-Allen County Transportation Planning Area is designed around a "bypass plus arterial" highway network and expansion of the radial transit system. In previous transportation plans, a major highway improvement project was proposed to develop a "bypass" around the eastern portion of the urbanized area. This project, now known as Interstate 469, was completed in 1995. The completion of Interstate 469 has significantly improved traffic flow around the urbanized area. The "arterial" component includes various improvements to the primary arterials such as Hillegas Road, Ardmore Avenue, Maplecrest Road and Adams Center Road.

In 2005, the Fort Wayne urbanized area continues to be faced with a variety of transportation

problems associated with the growth of the past few decades. The street system within the urbanized area is located on narrow rights-of-way. An insufficient number of bridges combined with a predominantly radial thoroughfare system result in a majority of traffic traveling through the central business district of Fort Wayne.

The radial system also has created hazardous diagonal intersections with acute entry angles. Many of the major arterials flowing north to south and east to west lack continuity. Narrow bridges and narrow railroad underpasses have served to restrict traffic flow in the urbanized area. Acknowledged to be a major industrial center, Fort Wayne has a large number of heavy trucks and trucking terminals. The area is also emerging as a warehousing and distribution center. These types of facilities place additional burdens on the transportation system. Figure 1 displays the current railroad system and rivers that affect mobility in the Metropolitan Planning Area.

Several major socioeconomic changes have occurred in the community during the nineteen seventies and eighties. The closing of two International Harvester production facilities that for years served as a major employment base for the Metropolitan Planning Area seriously affected the economic base. The International Harvester facility was a major anchor to the East End Industries located between the Cities of Fort Wayne and New Haven. In the mid 1980's, General Motors built a light duty truck assembly plan in southwest Allen County near the interchange of Interstates 69 and 469. This location was in an area where farming and other agriculturally related land uses were dominant. The 1.8 million square foot assembly plant and accessory developments quickly altered the surrounding landscape and impacted the transportation system.



Figure 1

Railroad System and Rivers in Metropolitan Planning Area The City of Fort Wayne has also, and continues to, redevelop the downtown area through a Downtown Development Plan. Beginning in the early 1980's Fort Wayne's skyline changed with the construction of Summit Square, a multi-story office building. The Grand Wayne Convention Center and adjacent Hilton Hotel was a successful redevelopment project. The Botanical Conservatory and Midtown commercial development and housing project further complemented the revitalization of the downtown area. Several new office buildings and numerous building renovations have contributed to the redevelopment efforts. The downtown redevelopment efforts have gained additional momentum in the past few years. The Grand Wayne Convention Center and Allen County Public Library are both undergoing major expansion projects in downtown Fort Wayne. Additional projects to attract housing and commercial developments are currently in the planning phase.

Other significant developments within the Metropolitan Planning Area have also affected socioeconomic growth and travel patterns. The Allen County War Memorial Coliseum and Exhibition Center continues to expand both physically and in the number of events held each year. The Indiana University Purdue University at Fort Wayne and Ivy Tech campuses continue to expand their facilities and educational programs. A major regional retail center that includes Jefferson Pointe, Apple Glen and Park West located at the intersection of Jefferson Road and Illinois Road, west of the Fort Wayne Central Business District, has grown significantly in the last few years and has developed into a major traffic generator.

The construction of new housing in southwest and northern Allen County has been significant. New industrial parks have developed in several areas including northwest Fort Wayne and Allen County, the City of New Haven, and around the Fort Wayne International Airport. Commercial and retail development has proliferated along the Interstate-69 and continues to develop. A substantial commercial and retail area along Coliseum Boulevard (SR 930), Coldwater Road and Clinton Street, that includes Glenbrook Square, Northcrest, Coldwater Crossing, Glenbrook Commons and other shopping centers, continues to be a major shopping, entertainment, and employment destination. A major medical center at the Interstate-69 and US 24 interchange has had a major impact on traffic and serves as a catalyst for future growth. Several large medical facilities have also been completed

Interstate-69 and Dupont Road (SR 1) Interchange. These medical facilities and related medical support services are expected to substantially expand in the area surrounding these two interchanges.

The Community's vibrant growth and socioeconomic change fosters the need to reconsider and reevaluate the future needs of the transportation system. A transportation plan serves as the dynamic
tool necessary to guide decision making concerning project selection, implementation, and
community growth. Therefore, it must be flexible enough to accommodate change, yet provide a
solid base as decisions are made about our present and future transportation system. The long range
transportation planning process, as administered for the Fort Wayne/New Haven/Allen County
Metropolitan Planning Area, strives to achieve such a balance between flexibility and commitment
(see Figure 2).

The reality that limited resources and environmental concerns will not support massive highway improvement projects is a recognized concept of the transportation planning process. The emphasis on maximizing the efficiency of the existing system is evident in the policies and programs resulting from such a process. The development and implementation of the Year 2030 Transportation Plan seriously considers transportation policies that reduce congestion and improve system efficiency through non-traditional measures. Policies aimed at reducing congestion through better management of traffic operations, access management, bicycle\pedestrian facilities, and enhanced transit services were formulated. These policies are components of the Congestion Management System.

A complete and comprehensive review of previous transportation plans was undertaken as a component of the 2030 Transportation Plan update. Each project was scrutinized on its own merit as well as its ability to contribute to the efficiency of the overall plan. The plan represents a cooperative effort by the state, local governments, public transportation, and area residents. We are proud to present the "2030 Transportation Plan."

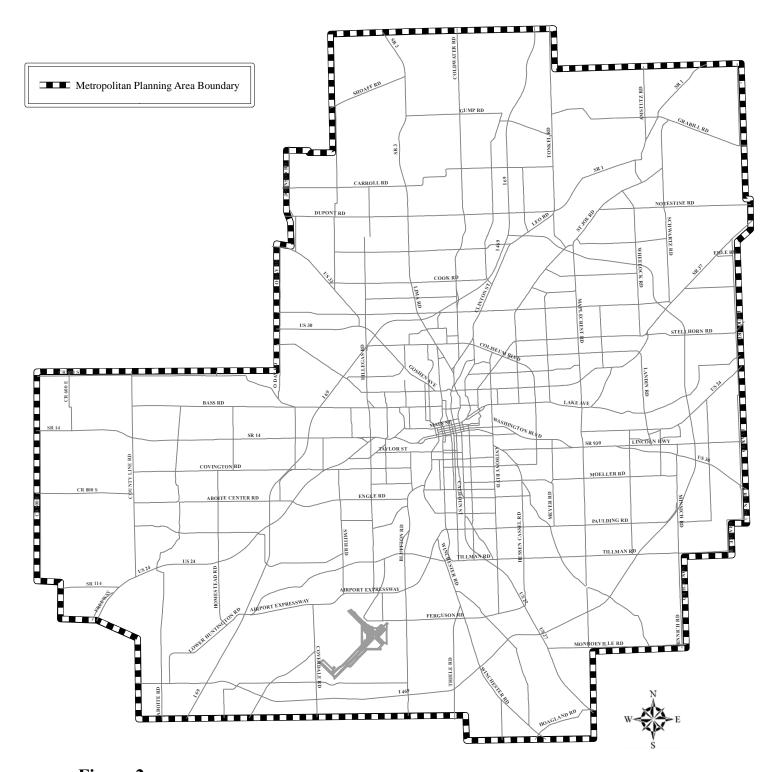


Figure 2

Fort Wayne/New Haven/Allen County Metropolitan Planning Area

Goal of the Transportation Plan

The goal of the transportation plan is to achieve an efficient and safe transportation system for the movement of people and goods while simultaneously improving the economic and environmental conditions of the community. The implementation of such a system will minimize energy consumption and reduce air pollution. Reductions in vehicle hours of delay, vehicle miles of travel, accident rates, and accident severity are measures by which the system can be evaluated.

Study Process

The study process used to develop the long-range transportation plan update was based upon the following work phases.

- 1. Forecast of Socioeconomic Data Year 2030
- 2. Forecast Year 2030 travel Demand
- 3. Develop and Evaluate Alternative Projects
- 4. Refine the Selected Plan
- 5. Selection of the Recommended Plan

An inventory and analysis was conducted of existing and future socioeconomic data necessary to set the stage for plan development. The projected socioeconomic data allowed for the forecasting of future travel demands. These demands were analyzed on the transportation system as adopted in the 2025 Transportation Plan and ultimately on the transportation system as proposed by the selected 2030 Transportation Plan.

As a result of these analyses, several projects were identified which would eliminate or significantly improve problems with the existing road and transit networks. The list of projects were reviewed and screened by the Urban Transportation Advisory Board (UTAB). Alternative plans and concepts were developed and evaluated. Based upon the findings of this evaluation and the planning, policy, and engineering judgements of the Urban Transportation Advisory Board, Transportation Technical Committee, and Transit Planning Committee, a final plan was selected.

The technical work phases of the 2030 Transportation Plan are documented more thoroughly in the following chapters. This report serves as a guide to, and a summary of, the technical background

information produced during the plan update. For a comprehensive review of the long-range transportation planning process as it has evolved for the Fort Wayne/New Haven/ Allen County area, please consult the 2025 Transportation Plan, Technical Report for the Fort Wayne-Allen County-New Haven Planning Area, May 2000, 2015 Transportation Plan, Technical Report for the Fort Wayne-Allen County-New Haven Planning Area, June 1996; Allen County 2010: A Transportation Plan for the Metropolitan Area, Technical Report, May 1992; Fort Wayne/New Haven/ Allen County Long-Range Transportation Study Update(2005 Plan), Final Report, June 1986; Fort Wayne/New Haven/ Allen County Long-Range Transportation Study Update (2000 Plan), Final Report, April 1981; and the Fort Wayne-New Haven-Allen County Transportation Study,(1990 Plan), 1971. All of these reports were prepared by the Northeastern Indiana Regional Coordinating Council as part of the metropolitan transportation planning process.

Report Organization

The technical report documents the process for the long-range transportation plan as well as the plan itself. The report is organized into seven chapters:

Chapter 2 - discusses the base year and planning year socioeconomic data used to forecast future transportation needs and to identify improvements to meet those needs.

Chapter 3 - presents the travel forecasting procedures for the year 2030 transportation system. It describes in detail how these travel forecasts were developed and the significance of the findings.

Chapter 4 - documents the evaluation of the alternative transportation sketch plans. This section includes a discussion of new road projects and transit proposals, and the results of the network testing of the alternatives.

Chapter 5 - discusses the public and government agency input obtained throughout the development of the plan update. Factors that affected the selection of the recommended plan are presented. This chapter includes sections on public participation, environmental justice, TEA-21 seven broad areas, and liveable communities.

Chapter 6 - presents the selected 2030 long-range transportation plan and recommended policies and improvements. This chapter includes the Pedestrian and Bicycle Plan and a discussion on Intelligent Transportation System technology for the metropolitan area.

Chapter 7 - presents some future implications and effects of the long-range transportation plan, status of previous plan implementation, and discusses new strategies for managing urban congestion.

Appendix A - Congestion Management System Plan

Appendix B – Air Quality Transportation Conformity Analysis/Determination

Appendix C – 2000 Socioeconomic Data

Appendix D – 2030 Socioeconomic Data

Appendix E – Roadway Design Standards

Appendix F – Local Project Cost

Appendix G – Public Participation – Comments and Responses

Chapter 2

BASE YEAR AND PLANNING YEAR SOCIOECONOMIC DATA

Reliable data for the base year (2000) and estimates of the planning year (2030) socioeconomic data are essential to the transportation planning effort. The travel demand models were initially tested and calibrated utilizing 1979 data. The model was subsequently re-evaluated for accuracy utilizing 1980, 1985 and 1995 socioeconomic conditions. As part of the development of the 2030 Transportation Plan, the model was evaluated using the 2000 base year data. Reasonable results were obtained from modeling the 2000 data.

The planning year estimates were used to forecast future transportation needs and to identify transportation improvements necessary to meet those needs. The socioeconomic data developed for this study included estimates of population, dwelling units, auto ownership, and employment. Existing and projected land uses are an important input to the transportation plan due to the close relationship between land use and travel demands. The growth and location of future employment was determined utilizing existing employment as a template. The location of employment is one of the critical pieces of demographic information used for transportation planning purposes. The location of existing employment is shown in Figure 3.

The aggregate socioeconomic estimates were made for small areas within the Metropolitan Planning Area for planning purposes. These areas are referred to as traffic analysis zones (TAZs). Traffic analysis zones are designed to represent similar land uses and are utilized for travel demand forecasting. The traffic analysis zones are displayed in Figure 4. There are a total

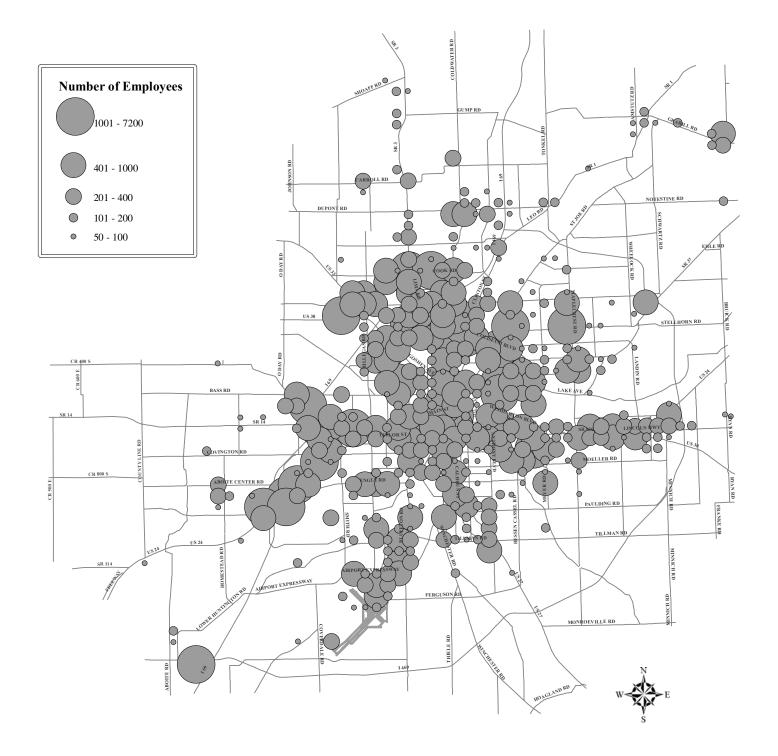


Figure 3

Employment Locations

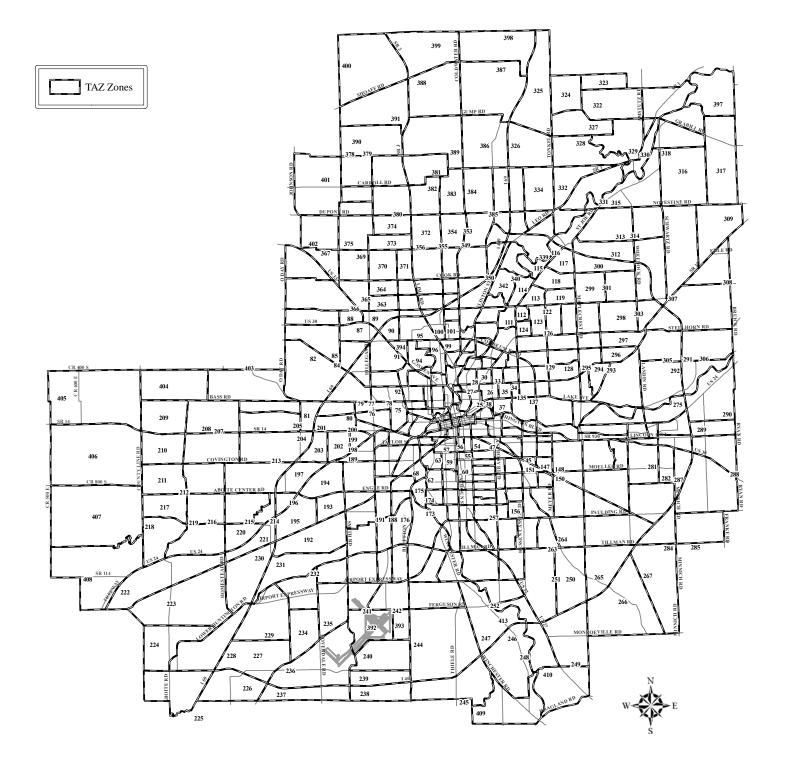


Figure 4
Traffic Analysis Zones

of 413 traffic zones in the Metropolitan Planning Area (MPA). In addition, there are 56 external stations that which represent points of entry and exit around the perimeter of the MPA.

The structure of the traffic analysis zones was based upon the following criteria:

- 1. The location and concentration of population and employment.
- 2. The availability of demographic, economic, land use and natural resource data.
- 3. The ability of the traffic zone boundary alignment to conform to major street alignments.
- 4. The direct allocation of complete census block data without a need for splitting census data.

The accuracy and level of detailed socioeconomic estimates ensure that reliable and efficient transportation service plans can be provided to meet future needs of the metropolitan area.

Base Year 2000 Estimates

The year 2000 was established as the base year for this transportation plan update. Comprehensive socioeconomic data including population, housing units, automobile ownership, and employment data was established for 2000. The socioeconomic data has been collected and monitored since the early 1970's based upon Census information and other data sources. This information is useful in monitoring recent trends and projecting future socioeconomic conditions.

The 2000 Census information provides the most comprehensive and accurate population and housing data available. Based on Census Tract and Census Block statistics, data for both Allen County and the Metropolitan Planning Area can be obtained. The MPA is primarily within the geographical area of Allen County and is mainly influenced by the development activity in Fort Wayne and Allen County. The portion of the Metropolitan Planning Area in Allen County includes approximately 94% of the total population and housing units residing within Allen County.

The 2000 Census information indicated that the Fort Wayne Urbanized Area in Allen County had expanded west to the boundary with Whitley County. In addition, Census criteria designated a small portion of Huntington County in the Fort Wayne Urbanized Area. This area is actually very rural in nature but due to the population density and proximity to the adjacent urban area, it was defined

as urban. Therefore portions of Whitley and Huntington County have been included in the MPA for analysis purposes.

Census data served as the foundation for developing reliable population, housing and automobile ownership estimates for the 2000 base year. Recent trends in population growth estimated by the U.S. Census Bureau shows Allen County with a 2000 population of 331,849, and increase of 31,013 from the 300,836 population in 1990. This represents a 10.3% increase over the ten-year period and correlates to an average annual growth rate of approximately one- percent.

The 2000 Census reported 138,905 housing units in Allen County. This represents an increase of 15,982 new housing units over the ten-year period from 1990. This represents a 13% increase that correlates to an average annual growth rate of 1.01 percent. The overwhelming majority of housing growth was in new suburban subdivisions and apartment complexes within the MPA. The estimates of the 2000 socioeconomic variables for each traffic zone are presented in Appendix C. The methodology used for preparing these estimates is discussed in the following narrative.

Population

The population figures for base year 2000 were derived from 2000 census block statistics for the Metropolitan Planning Area. The 2000 census block statistics were aggregated to represent the population of individual traffic zones within the Metropolitan Planning Area.

Dwelling Units

The primary source for base year dwelling-unit data for the Metropolitan Planning Area was the 2000 census block information. This data was compiled exactly like the population figures to determine the extent of housing activity within each traffic zone.

Automobile Ownership

Vehicle ownership information for metropolitan area was obtained from the Indiana Bureau of Motor Vehicles for the 2000 base year. The number of automobiles per traffic zone was calculated using vehicle per household ratios based on historical data and census information. The ratios were

reviewed and refined based on the relationship of household incomes specific to individual traffic zones and automobile ownership. Each zone was evaluated and compared to an aggregate control total to ensure a fair distribution of vehicles.

Employment

The primary source of 2000 employment data was information obtained from the Indiana Department of Workforce Development. The Indiana Department of Transportation assisted in obtaining this information for planning purposes. The employment locations were allocated to the proper traffic zone. A list of employment by category and by traffic zone was derived from this inventory for the Metropolitan Planning Area.

The employment data was further stratified by Standard Industrial Classification (SIC) Codes. Based on these codes, employment was grouped into three major categories: industrial, retail and other. Industrial employment includes construction, manufacturing, warehousing, and wholesale trades. The retail category includes: food, bakery, and dairy stores; eating and drinking establishments; general merchandise retailing; motor vehicle retailing; service stations and repair services; and other retail trades. All remaining employment classifications are included in the "other employment" category such as medical and legal services, banking and investment institutions, and numerous other types of businesses and services.

Planning Year 2030 Projections

General planning assumptions based upon current and historical trends are developed to guide the projected socioeconomic conditions for the horizon year, 2030. Planning assumptions were utilized in estimating the socioeconomic conditions for all previously developed Transportation Plans. Similar assumptions have been developed to predict how the metropolitan area will grow and change through the year 2030.

The Northeastern Indiana Regional Coordinating Council transportation planning staff met with various planning groups and reviewed demographic data to assist in drafting the planning assumptions. Areas of discussion and review included: downtown Fort Wayne re-development

efforts; area housing plans and neighborhood revitalization efforts; economic development activities, issues and target areas; socioeconomic forecasts; utility infrastructure plans; housing and business development trends; floodplain, wetland, and ground water concerns; and land use development strategies. The comprehensive development plans, re-development plans, and economic development plans were reviewed as part of this process and provided direction in the distribution of socioeconomic data. This process helps to reinforce and/or re-write the planning guidelines and assumptions for the transportation plan. The following narrative describes the basic assumptions governing the anticipated growth and change in the metropolitan area during the next 25 years.

- 1. Information released from the U.S. Bureau of the Census indicates that nationally, the average number of persons per dwelling unit has steadily decreased over the last thirty years. As the nation slows in population growth, it is assumed that the ratio will level off and remain fairly constant. According to 1970 census data, the ratio of people per dwelling unit for the City of Fort Wayne was 2.9 and for the remaining portion of Allen County was 3.55. The 1980 census indicated a decrease in this ratio to 2.61 and 3.18 respectively. The 1990 census revealed a continuing decline for this ratio with the City of Fort Wayne reporting in at 2.24, the City of New Haven at 2.64, and the remaining portion of Allen County at 2.81. The 2000 census shows the ratio for Fort Wayne at 2.26, New Haven at 2.41, and the remaining portion of Allen County at 2.59. It is anticipated that the persons per dwelling unit ratio is beginning to stabilize. The average ratio for Allen County is estimated to be 2.48 in 2030. The ratio for the Metropolitan Planning Area will be slightly lower. The persons per dwelling unit ratio for the year 2030 will be approximately 2.37 for the Metropolitan Planning Area.
- 2. Planning efforts within Allen County including the Cities of Fort Wayne and New Haven will be able to influence the direction and magnitude of development. The communities of Grabill, Huntertown, and Leo-Cedarville will also impact development in the Metropolitan Planning Area. The majority of all development will occur in, or immediately adjacent to the urban area. This pattern of urban development will serve to limit sprawl and help preserve prime agricultural land. Development will take place in areas with suitable soil types.
- 3. Population growth within the current corporate limits of Fort Wayne will occur primarily in areas currently undeveloped and zoned for residential use. Moderate population growth is also anticipated in neighborhoods where revitalization actions are implemented. It is assumed that all usable residentially zoned property currently within Fort Wayne will be developed by the year 2030.
- 4. Downtown Fort Wayne revitalization efforts will continue throughout the central business district and surrounding area. The Fort Wayne Downtown Development Plan provides the blueprint for how new and revitalized development will occur. Residential development and re-development will be encouraged in specific areas of the central business district and central city. The New Haven downtown business district will continue to provide business

and limited retail opportunities.

- 5. A decline in population and housing due to federal restrictions on construction and reconstruction in floodplains will affect areas adjoining the rivers. Local floodplain management activities will conform to the federal specifications. Limited development will occur in floodplain areas. A floodplain map is displayed on Figure 5.
- 6. The limited amount of available land in St. Joseph Township will be developed for residential and commercial purposes. Aboite Township will continue to grow with new residential and limited commercial development in the western portion of Allen County. Cedar Creek and Perry Townships in the northern and northwestern sections of the urban area are expected to experience intense development through the year 2030. Residential development will also occur in the southern portion of Lake Township.
- 7. The majority of new industrial development will occur in designated Industrial Parks, identified Industrial Sites, and Economic Development Areas. This includes significant industrial development on available land adjacent to and surrounding the Fort Wayne International Airport. Other areas where significant industrial development is anticipated to occur include: southeast of the east-end industries along Adams Center Road; northwest of Interstate-69 in the Huguenard Road/Cook Road area; and east of New Haven and Interstate 469 along the Dawkins Road Corridor. The Metropolitan area will continue to attract new industry, however growth will also occur from the expansion of existing facilities. Industrial Parks and Industrial Sites are displayed on Figure 6.



Figure 5

Floodplains

- 8. People will be energy and environmentally conscious and purchase vehicles that yield higher mile per gallon fuel efficiency ratios and lower emissions. The national average ratio of automobiles per household increased significantly throughout the 1980's and 1990's. It is expected that this ratio will soon stabilize and remain fairly constant. The current ratio for the Metropolitan Planning Area as a whole is approximately 1.8 vehicles per household. The anticipated ratio for the year 2030 will remain basically the same.
- 9. The urbanized area will continue to be the focal point for residential, commercial and industrial growth. It is anticipated that the urban area population will continue to grow at a higher rate than the surrounding rural portions of Allen County. Population statistics show that in 1970, 91 percent of Allen County's population lived in the Metropolitan Planning Area. This statistic has increased over time to approximately 92 percent in 1990 and 93 percent in 2000. The urban area share of total population will continue to increase slightly through the year 2030.
- 10. Development will occur along Interstate 469, with concentrations of intense development near the major interchanges. The accessibility afforded by Interstate 469 is attractive for business development. The projected development along this corridor is associated with interstate type facilities. Development will also occur along the new Airport Expressway corridor and near the Fort Wayne International Airport. Development will be attracted to this area to take advantage of the Airport and Interstate accessibility.

The 2030 socioeconomic conditions for the Metropolitan Planning Area were developed following these basic assumptions. The preliminary projections of future conditions were developed for the planning period with a horizon year of 2030. Control totals were established as reasonable ceilings for socioeconomic variables such as population, dwelling units, and employment. The projections were adjusted to reflect the characteristics of individual areas within the Metropolitan Planning Area. The methodology for preparing these projections is contained in the following discussion. A table displaying the year 2030 socioeconomic data is provided in Appendix D.

Population

The history of establishing population control totals for the transportation plans provides some insight into the methods and modifications that have transcended from plan to plan. The development of a population control total for the Year 2000 Plan was conducted using the Cohort Survival method. This process was jointly completed in the late 1970's by the Allen County Plan Commission, Fort Wayne Community Development and Planning Department, and Northeastern Indiana Regional Coordinating Council. Through these efforts, a year 2000 population control

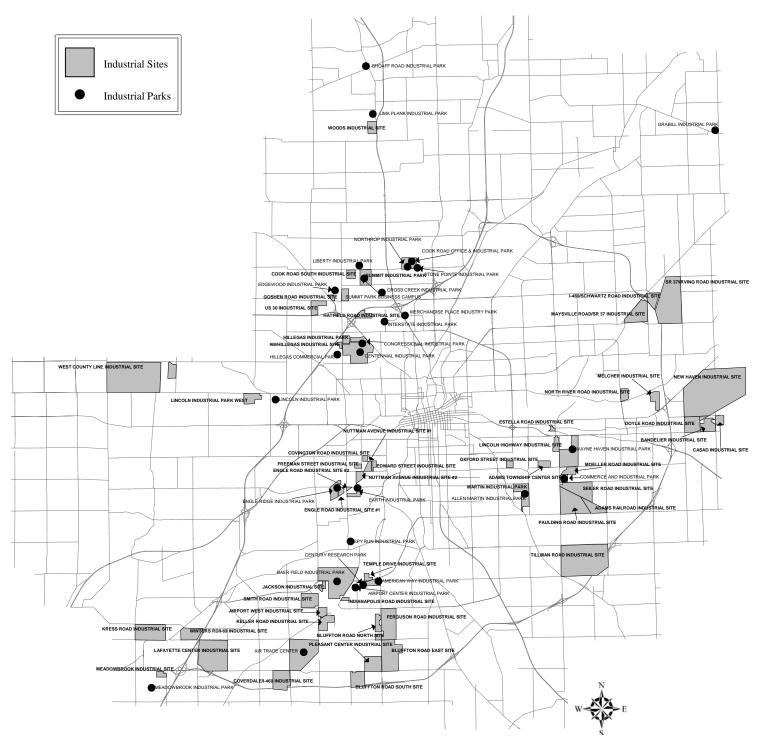


Figure 6

Industrial Parks and Sites

total of 388,953 was established for the metropolitan area. Upon completion of the 1980 census, the population projection was revised due to less than anticipated growth. The control total was scaled down to 338,313.

A population control total of 340,492 was developed in 1986 for preparation of the Year 2005 Transportation Plan. This figure was considered somewhat conservative at this time estimating an average yearly population growth of approximately 1.3 percent. The 1990 census information indicated population growth in the metropolitan area had diminished further than anticipated. In 1992, the need to further scale down future population projections led to the development of a year 2010 population control total of 315,289 for the Metropolitan Planning Area. The population control total of 333,724, set for 2015, followed the assumption of moderate growth. This assumption provided for a relatively stable conservative growth rate of less than one percent per year.

The population projection for the 2025 Transportation Plan employed the same basic assumption that resulted in a fairly conservative estimate. After the release of actual 2000 Census population numbers, a review of the MPA population indicated that is was approximate 311,000. This represented more population growth than what had been anticipated, over a ten-percent increase from 1990. For purposes of estimating the population growth to the 2030 horizon year, a 0.8% annual growth rate was derived from historical trend data and population estimates. This represents a relatively consistent and conservative rate. The established population control total for 2030 is 395,890.

Population projections for individual traffic zones within the MPA were developed by first comparing current demographic data based upon housing growth from 1990 to 2000. The recent housing growth was then compared to the 2025 traffic zone population estimates. Through assistance from staff of the land-use division of the Allen County Department of Planning Services and Fort Wayne Community Development and Planning Department, zones were individually analyzed for their development potential. Each zone was judged for its suitability for development based upon criteria such as utility availability (water, sewer, etc.), current rates of development,

density thresholds, soil types, and topography.

This analysis yielded the expected number of new dwelling units to be constructed by the year 2030 for each zone. The persons per dwelling unit factors were applied to calculate the additional population per zone for the entire metropolitan area. The additional population figures were added to the base year 2000 figures to gain a 2030 projected population total for each traffic zone. Final adjustments were made to match the population projections with the control total. Special attention was place on traffic zones which may reach their density thresholds, and individual zones with unusual characteristics such as floodplain zones, central business district zones, and zones in high growth townships.

Dwelling Unit

Dwelling unit figures were determined through a similar process as described for the population estimates. Each zone was individually analyzed for its residential development potential based upon criteria such as available land, public and private water/sewer utilities, and current housing development. Once estimated dwelling units were established, a ratio of persons per households was used to help establish zonal population figures and then checks were made against control totals. Adjustments were made and figures were rechecked until a balance of dwelling unit and population estimates was obtained. In general, the average ratio of 2.3 was used for city zones and 2.6 for the zones outside the City of Fort Wayne.

Automobile Ownership

Automobile ownership projections were derived by applying ratios of automobiles per dwelling unit to the 2030 dwelling unit figures. The assumption was made that these ratios would remain fairly constant through the year 2030 in the Metropolitan Planning Area. An average ratio of 1.8 automobiles per dwelling unit was used as a guide, with certain zones receiving a higher or lower value depending on individual characteristics and historical information. The 2000 census data, including vehicles per household and average household income, guided the allocation of vehicles for each traffic analysis zone.

Employment

A land-use estimation process was used to derive the projections of employment for each zone in the metropolitan area. The staff of the Allen County Department of Planning Services, Fort Wayne Economic Development, Fort Wayne Re-Development and Alliance evaluated the Metropolitan Planning Area for development potential. Based upon this information, each zone was analyzed for potential commercial development and employment growth. The employment projections were divided into three major categories: industrial, retail, and other.

The estimations were based upon past development trends and specific characteristics of each zone. Soil type, topography, zoning restrictions, access to utilities, and surrounding land uses were the major criteria used to evaluate the potential for development. The control guide for estimating future land development was based upon the assumptions discussed earlier in this chapter. Control totals for employment estimates were based on employment projections conducted by the U.S. Department of Commerce, Bureau of Economic Analysis and a study conducted by Woods & Poole Economics for Allen County.

The 2000 employment data served as the base for the zonal employment estimates. The 2000 data was obtained through the Indiana Department of Workforce Development and allocated to traffic zones. The additional employment figures were added to the base 2000 figures to derive zonal employment data for the year 2030.

Summary

The socioeconomic data for the base year coupled with historic trends provides for reliable estimates of the 2030 horizon planning year socioeconomic activity. The planning year estimates were used to forecast future transportation needs and to identify transportation improvements necessary to meet those needs. The socioeconomic data developed for this study included estimates of population, dwelling units, auto ownership, and employment. Existing and projected land uses are an important input to the transportation plan due to the close relationship between land use and travel demands.

The 2000 base year socioeconomic data and the projected 2030 data provided for the interpolation

of socioeconomic data necessary for air quality analysis. The socioeconomic data for the baseline 2002 and analysis years 2010 and 2020 were interpolated in a straight linear distribution. The individual variables including population, dwelling-units, automobiles, and employment data were interpolated for each traffic analysis zone. This information was used to forecast travel for the analysis years and develop vehicle miles of travel.

This information is essential to the transportation planning effort. Consideration of available housing, land use, redevelopment, recreation, and economic development plans and efforts supports the comprehensive approach encompassed throughout the development of this transportation plan. This atmosphere sets the stage for the formulation of planning assumptions guiding the transportation planning process and development of the plan. The forecast of future travel demands is built upon this foundation of solid socioeconomic guidelines.

Chapter 3

TRAVEL FORECAST: 2030 TRAVEL DEMANDS

The principal function of the year 2030 transportation plan update is to develop forecasts of the 2030 travel demands in the Fort Wayne-New Haven-Allen County region. The travel forecasting process loaded the 2030 travel demands on the recommended 2025 transportation system to assess deficiencies. The travel demands are based upon the projected socioeconomic data representing future activity within the Metropolitan Planning Area.

The 2030 socioeconomic projections were input to generate travel demands on the 2025 highway network. The purpose of analyzing the 2025 system with 2030 demands was to evaluate additional deficiencies beyond those addressed in the 2025 Transportation Plan. The 2025 Transportation Plan recommended highway and transit improvements needed to meet projected travel needs in the year 2025. The evaluation of 2030 travel demands on the 2025 transportation system allowed for the review the those highway and transit projects and assumptions, and to develop additional improvements and policies to address the identified deficiencies. Through this series of analyses, future deficiencies were analyzed and evaluated, and project justification was developed.

Travel Forecasting Process

The methodology used to forecast travel demands for the year 2030 is similar to that which was used for all previous Transportation Plans. Figure 7 displays a flow chart that schematically describes the forecasting process. The forecasting or modeling process used for this study and all previous studies follows a standard transportation/planning forecasting approach.

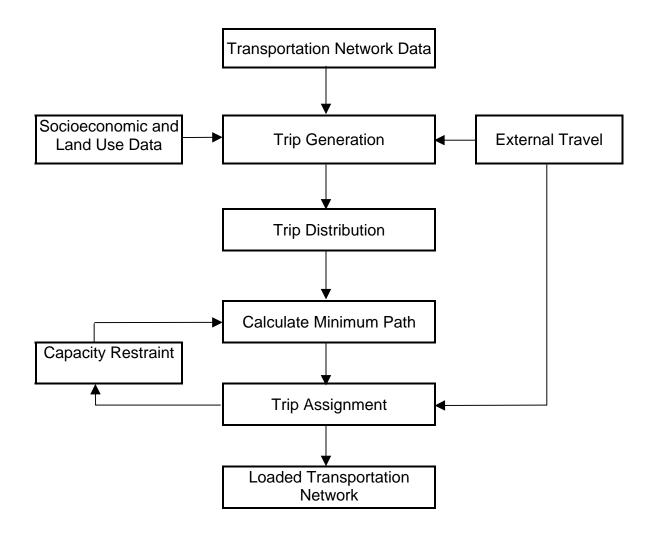


Figure 7

Travel Forecasting Procedure

The travel demand-forecasting model used for the Metropolitan Planning Area follows standard guidelines, yet it is specially tailored for this area. Trips are loaded onto the highway system with a capacity restraint trip assignment procedure. This procedure replicates how drivers choose an alternative route when their preferred route becomes congested. Only the general approach to the modeling process will be described in this section to set the context for discussions regarding results of the travel forecasting procedure.

The travel forecasting procedure is composed of a series of sequential mathematical models that describe the separate but related aspects of travel patterns. A trip generation model is used to estimate the number of trips starting and ending at various locations in the region. This model develops trip estimates for seven different types of trips including: home-based work; home-based business; home-based social; non home-based; truck; external local; and external to external. These are referred to as trip purposes and represent virtually all types of trips people make on a normal day.

The trip distribution models *connect* the trip origin and destinations. The pattern of distribution is accomplished by allocating trip origins among available destinations according to the *gravity concept*. The gravity concept states that the number of trip movements (origins) distributed to a given destination is proportional to the size of the trip destination and inversely proportional to the time (or distance) separating the origin and destination. This means that their respective proximity, accessibility, and degree of attractiveness relate trip origins and destinations to one another.

The trip assignment procedures follow trip generation and trip distribution models completing the forecasting process. The trip assignment model allocates trips to the highway system based on minimum travel time paths between origin and destination. As trips are loaded on the highway system, the trip assignment model recalculates traveling speed based upon the level of congestion, and re-selects minimum paths of travel.

The initial travel demand forecasts for the year 2030 were prepared from activity based upon the future socioeconomic estimates as described in Chapter 2. The trips generated by this urban activity forecast were distributed to obtain travel patterns and split among the available modes. This forecast

was assigned to the year 2025 transportation system. This process permitted the assessment of how well the level-of-service and capacity provision of the 2025 system performed under the strain of the 2030 travel demands. The assigned trips on the highway system were examined to evaluate the deficiencies on various portions (links and corridors) of the 2025 system.

Preliminary sketch plans were developed as a result of this process. The sketch plans were developed as solutions to address specific deficiencies or clusters of deficiencies on the transportation system. The solutions, identified as improvement projects, were reviewed by the community at numerous public sessions and by the Northeastern Indiana Regional Coordinating Council's advisory committees. The revisions proposed during this review were included in the evaluation process for development of a final plan.

Analysis of Regional Activity Forecasts

Regional control totals were established for each variable as the first step in the projection of year 2030 socioeconomic conditions. Table 1 compares base year (2000) and forecast year (2030) regional control totals for each of the key variables influencing travel demands. Socioeconomic data was interpolated from these forecast to establish the socioeconomic variables for the analysis years needed for the air quality analysis. Table 2 provides the interpolated socioeconomic conditions for the analysis years 2002, 2010, 2020 and 2030.

The socioeconomic projections reveal modest increases in all the major socioeconomic variables for the Metropolitan Planning Area. The projections for population and dwelling units indicate relatively steady and comparable growth. The projected population growth slightly out-paces the housing growth. This is due primarily to new housing starts growing at a faster rate than the population in the MPA from 1990 to 2000. It is assumed that these growth rates will stabilize.

Table 1.
Summary of Regional Socioeconomic Variables

| Socioeconomic | 2000 | 2030 | Percent | Annual |
|----------------|-----------|---------------|----------|--------------|
| Variable | Base Year | Forecast Year | Increase | Percent Rate |
| Population | 311,288 | 395,890 | 27.18 | 0.80 |
| Dwelling Units | 131,801 | 167,045 | 26.74 | 0.79 |
| Automobiles | | | | |
| Ownership | 239,389 | 302,644 | 26.42 | 0.785 |
| Per Household | 1.82 | 1.81 | | |
| Employment | | | | |
| Retail | 47,460 | 67,882 | 43.03 | 1.20 |
| Industrial | 63,950 | 79,878 | 24.91 | 0.74 |
| Other | 81,558 | 109,306 | 34.02 | 0.98 |
| Total | 192,968 | 257,066 | 33.22 | 0.96 |

Table 2.
Summary of Regional Socioeconomic Variables-Air Quality Analysis Years

| Socioeconomic | 2002 | 2010 | 2020 | 2030 |
|----------------|---------------|---------------|---------------|--------------|
| Variable | Baseline Year | Analysis Year | Analysis Year | Horizon Year |
| Population | 316,924 | 339,497 | 367,682 | 395,890 |
| Dwelling Units | 134,137 | 143,543 | 155,305 | 167,045 |
| Automobiles | | | | |
| Ownership | 243,613 | 260,473 | 281,562 | 302,644 |
| Per Household | 1.82 | 1.82 | 1.81 | 1.81 |
| Employment | | | | |
| Retail | 48,852 | 54,287 | 61,094 | 67,882 |
| Industrial | 65,007 | 69,264 | 74,583 | 79,878 |
| Other | 83,429 | 90,827 | 100,070 | 109,306 |
| Total | 197,288 | 214,378 | 235,747 | 257,066 |

The overall population and housing assumption reflects a stabilization of average persons per household. Population growth has gradually slowed since 1970 within the Metropolitan Planning Area. Housing growth has remained fairly consistent with some short periods of slow growth during the past twenty-five years. Since 1985 the area has experienced active housing development. The 2000 Census indicated that the ratio of persons per dwelling unit was 2.36 for the Metropolitan Planning Area. The 2030 persons per dwelling unit ratio indicates the stabilization of this value.

In the late seventies and early eighties assumptions concerning auto ownership, based on recent fuel shortages, anticipated that limited energy resources and increasing costs would induce a reduction in automobile ownership. This phenomenon never occurred. Automobiles became more fuel-efficient and their size was reduced. Fuel prices dropped and stabilized. Auto ownership continued to rise. It is anticipated that this trend will stabilize in the near future as we reach saturation levels of vehicles per household and as households decrease in size. The forecasted automobile ownership values for 2030 are consistent with the existing ratio of automobiles per household.

Retail and service industry employment has been the fastest growing source of employment in the Fort Wayne area since the 1970's. A steady growth rate in these employment categories is expected to continue but will level off and begin to increase more gradually. The 2000 employment figures indicate continued growth in both retail and service industry employment.

Overall employment growth slowed during the early 1980's impacted by the departure of International Harvester and economic recession. Employment data for 1985 indicated a reduction in both retail and industrial employment from 1980. In the mid to late 80's, the local economy began to rebound and show signs of solid employment growth.

The industrial employment has remained fairly consistent over time with a conservative growth pattern. The loss of International Harvester and related industrial employment in the early eighties was partially offset by the new General Motors assembly plant and associated manufacturing facilities built in the mid nineteen-eighties. Warehousing and distribution centers have also contributed to continued growth in this category.

The "Other" employment category has remained fairly consistent with respect to its rate of growth over the years. This category is expected to rival the retail sector for new growth in upcoming years. The information service and high technology trades are represented by this category.

The general growth patterns of the socioeconomic variables indicate that existing travel corridors will remain important to the basic travel patterns of the year 2030. The northeast and southwest areas of the region will remain active in terms of socioeconomic growth. The northwest will be placed under more intense development pressure, a trend already underway. The areas around major interchanges of Interstate 469 remain attractive for development. Major housing and retail developments are currently under construction near the Interstate 469 and SR 37/Maysville Road Interchange.

The new residential and employment centers will intensify the travel demands on existing corridors and create the need for managing congestion through traffic operation improvements, widening facilities, extending new roads, improving transit service, implementing intelligent transportation system strategies, and controlling access more efficiently. It is apparent that 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.

Trip Generation

The trip generation model used population, dwelling unit, employment and automobile ownership forecasts for the year 2030 to estimate the number of trips starting and ending (trip ends) in each zone. The socioeconomic data utilized for trip generation is provided in Appendix D. Trip ends were estimated for five different internal purposes: home-based work, business, and social; non home-based; and truck trips.

Special generator analysis is also a component of the trip generation model. Special trip generation is applied to traffic zones with unique trip-making characteristics. Normal trip generation equations do not adequately reflect the travel desires to and from these zones. These zones are those which may contain hospitals, universities, and major retail developments.

Table 3 summarizes the regional level results of the application of the trip generation models to the projected socioeconomic characteristics. The productions and attractions by trip purpose are

Table 3.

Travel Demand Forecast Regional Summary

Productions

| Trip Purpose | 2015 Trips | 2015 Percent | 2025 Trips | 2025 Percent | 2030 Trips | 2030 Percent |
|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
| HBW | 300,836 | 24.3 | 330,154 | 24.6 | 357,660 | 24.1 |
| HBB | 171,664 | 13.8 | 188,527 | 14.0 | 204,017 | 13.7 |
| HBS | 338,460 | 27.3 | 371,747 | 27.7 | 402,125 | 27.1 |
| NHB | 351,208 | 28.4 | 370,380 | 27.6 | 428,269 | 28.8 |
| TRK | 77,326 | 6.2 | 81,547 | 6.1 | 94,229 | 6.3 |
| Total | 1,239,494 | 100.0 | 1,342,355 | 100.0 | 1,486,300 | 100.0 |

Attractions

| Trip Purpose | 2015 Trips | 2015 Percent | 2025 Trips | 2025 Percent | 2030 Trips | 2030 Percent |
|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
| HBW | 300,836 | 24.3 | 330,154 | 24.6 | 357,660 | 24.1 |
| НВВ | 171,664 | 13.8 | 188,527 | 14.0 | 204,017 | 13.7 |
| HBS | 338,460 | 27.3 | 371,747 | 27.7 | 402,125 | 27.1 |
| NHB | 351,208 | 28.4 | 370,380 | 27.6 | 428,269 | 28.8 |
| TRK | 77,326 | 6.2 | 81,547 | 6.1 | 94,229 | 6.3 |
| Total | 1,239,494 | 100.0 | 1,342,355 | 100.0 | 1,486,300 | 100.0 |

HBW= Home-Based Work Trips

HBB= Home-Based Business Trips

HBS= Home-Based Social Trips

NHB= Non Home-Based Trips TRK= Truck Trips

provided for the years 2015, 2025, and 2030. The relative proportion of trips by purpose show little change between the forecasted years.

The number of trip productions and attractions for 2030 are logically higher than those forecasted for 2015 and 2025. This increase in trips is directly attributed to the increase in socioeconomic variables. The primary variables affecting the increased number of trips include dwelling units,

automobile ownership, and employment.

Trip Distribution

The production and attraction trip-ends, estimated for each traffic zone for the year 2030, were matched using a trip distribution model. This model gives the second dimension to travel patterns by connecting trip productions and attractions (trip ends) to form trips. The model works zone by zone, allocating trips produced in one zone to trip attractions in other zones. The distribution is generally based upon the number of attractions of a zone and the distance between zones. The general form of the model is:

$$T_{ij} = P_i \underline{A_j F_{ij}}$$
$$\sum A_j F_{ij}$$

Trips from zone i to zone j are calculated by proportioning all trips produced in zone i (P_i) according to the accessibility ratio in which A_i is the total trip attractions in zone j and the separation between zone i and j is represented by F_{ij} . The separation is a function of the distance, time or cost to travel between zone i and j, raised to a variable power:

Separation = (distance, time or cost)ⁿ where: n = f(distance, time or cost) and is usually negative

The ratio of A_iF_{ij} for a given zone j to that for all zones (A_iF_{ij}) is generally treated as the relative accessibility of the given zone j, and trips are prorated according to relative accessibility. This formulation is generally called a "gravity model" because it is similar to Newton's principle, defining attractiveness as proportional to mass (A_iP_i) and inversely proportional to a power of separation between bodies (zones).

The results of the 2030 trip distribution of forecasted travel desires indicate an increase over the 2025 distribution. This is expected due to the increase in socioeconomic activity. The general trends appear similar 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.

Evaluation of the 2025 Transportation System

The year 2030 travel desires were assigned to the 2025 transportation system. The 2025 transportation system includes all improvements identified in the 2025 Transportation Plan. A number of these improvements have either been implemented or are currently under construction.

2025 Highway System

The 2025 highway system utilized for evaluation included the existing highway system plus the improvements identified in the 2025 Transportation Plan. The 2025 highway system is displayed in Figure 8. The 2030 travel demands were assigned to the 2025 highway system using a capacity restraint feature of the modeling process. The capacity restraint feature allocates trips to the highway network through three iterations of peak hour restraint. This provides a final assignment reflective of capacity limitations and simulates route selection decision-making processes.

The capacity restraint feature requires as input the practical capacity per hour for each travel lane of a road or highway. The relationship of facility type (i.e. freeway, arterial, collector, etc.) and geographic area (i.e. central business district, suburban, rural, etc.) are important determinates of lane capacity, and categories were developed based upon these criteria.

The *practical* capacity for a given lane was defined at *Level-of-Service D*. Table 4 contains the basic lane capacities used for the capacity restraint assignment. Exceeding the *level-of-service D* lane capacities (defined as a ratio of volume to capacity greater than 1.0) indicates situations of *level of service "E" or" F"* representing severe congestion and failure of the system to efficiently meet travel demands. These lane capacities are consistent with the Congestion Management System.



Figure 8

2025 Highway System

Table 4.
Basic Lane Capacities
(Vehicles per hour per lane)

| Geographic Area | Freeway | Expressway | Two-Way Arterial | One-Way Arterial | Collector |
|-------------------------------|---------|------------|---------------------|---------------------|-----------|
| Central Business District | 1,800 | 745 | 605 | 650 | 480 |
| CBD Fringe Area | 1,800 | 790 | 715 | 715 | 575 |
| Outlying Business District | 1,800 | 790 | 715 | 715 | 575 |
| Suburban Area | 1,800 | 865 | 715 | 805 | 575 |
| Rural Area | 1,800 | 820 | 590 | N/A | 540 |

The lane capacities as noted in Table 4 represent **vehicles** per hour per lane (VPHPL) for the various facility types. The use of vehicles in this situation includes a mixture of passenger cars, light-duty trucks, heavy-duty trucks, tractor-trailers, buses, and recreational vehicles. The capacities established represent travel characteristics within and near urban areas.

The assignment of 2030 travel demands through the capacity restraint process allows for analysis that identifies highway corridors where capacity problems will arise. These locations will be referred to as capacity deficient or deficient corridors. Simply stated, this translates into congestion and congested corridors. This evaluation is conducted using a link-by-link analysis. The results of this evaluation will be discussed in the conclusion of this chapter.

Transit System

The transit system was not included as part of the travel forecasting process for this transportation plan update. The transit system currently carries less than five thousand trips per day. This accounts for less than one percent of the total trips. At this performance level, the modeling procedures cannot be accurately calibrated to replicate transit usage. Meaningful results from the forecasting procedures for transit trips are difficult to attain and their value is questionable.

The evaluation of the transit system and recommendations for future improvements are based upon historical trends and recent transit studies. The existing transit system and route structure serves as the base for the evaluation process. Recommended improvements are derived from the results of the transit studies and surveys. These studies identify deficiencies of the transit system, assess the level of unmet needs, and include comments and suggestions for transit improvements. This process is documented in the *Citilink Transportation Development Plan* Final Report prepared in Fiscal Year 2004. The projects identified in the Transportation Development Plan are included as a component of this plan.

The current transit system has nineteen routes. Most of these routes utilize the Fort Wayne Central Business District as a hub and transfer point. Two point-deviation routes currently operate to provide access to suburban medical and retail facilities. The majority of the routes run on sixty-minute headways. Five routes run on thirty-minute headways providing more frequent service on heavily used routes. The existing transit route network is displayed in Figure 9.

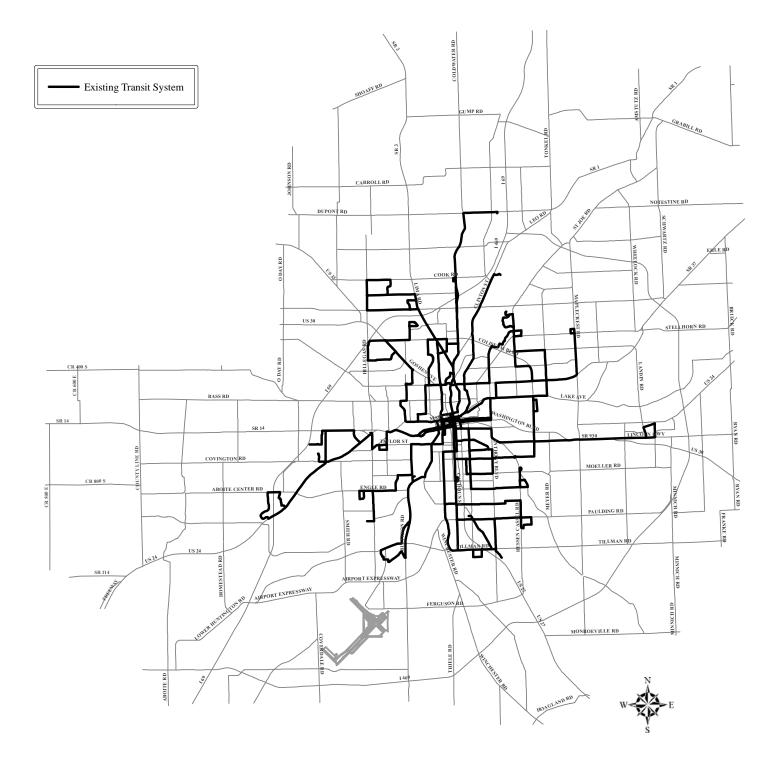


Figure 9

Existing Transit System

Conclusion

The evaluation of the 2025 transportation system allowed the identification of any additional deficient corridors beyond those identified in the 2025 plan when burdened with the year 2030 travel demands. The resulting analysis of the 2025 highway system capacity deficiencies is displayed in Figure 10.

The locations identified in Figure 10 represent major deficiencies of available capacity established for a level-of-service "D". The deficiencies are based upon peak hour volume to capacity ratios greater than 1.25. A ratio of 1.0 represents capacity saturation at level-of-service "D". As the ratio increases, so does the intensity of the congestion it represents. In this analysis, a ratio greater than 1.25 indicates the corridor is at or exceeding level-of-service "E". Levels "E" and "F" represent significant congestion and vehicle delay, with level "F" the more severe. These levels represent undesirable traveling conditions.

The analysis of the travel demand forecast indicates that additional improvements, beyond those identified in the 2025 transportation Plan, are necessary to meet the projected 2030 travel demands. Highway and transit system improvements will need to be implemented to mitigate congestion and maintain desirable traveling conditions. This analysis sets the stage for developing and analyzing alternative strategies for improving the deficient corridors. The evaluation of the 2025 transportation system establishes the foundation for developing alternative scenarios of highway and transit improvements designed to maintain acceptable levels-of-service and meet the projected year 2030 travel desires.



Figure 10

Deficiencies on the 2025 System

Chapter 4

EVALUATION OF ALTERNATIVE TRANSPORTATION SKETCH PLANS

Chapter 4 discusses the development and evaluation of alternative transportation sketch plans for the target year 2030. The highway and transit alternatives considered as the 2030 plan evolved are presented along with the results of the analytical evaluations. The evolution and evaluation of the alternative plans were formulated through extensive interaction between the public, the Urban Transportation Advisory Board, Transportation Technical Committee, Transit Planning Committee, and Northeastern Indiana Regional Coordinating Council staff members. The result of this process is the selection of a fiscally constrained transportation plan that effectively responds to the regional travel needs and desires for the year 2030.

The recommended Transportation Plans for the Fort Wayne-New Haven-Allen County Metropolitan Area have been based upon a combined arterial roadway improvement concept with a high-level bypass facility. The transit component of these plans has been developed and recommended as a radially-oriented bus route network. These two systems were designed to complement each other through improvements to the existing highway system and the level of transit service provided.

The development and testing of the transportation alternative sketch plans were based on these previously adopted plans and policies. The completion of Interstate 469 (the high-level bypass facility) in 1995 has shifted the highway planning focus for development of the 2025 and 2030 transportation plans away from the bypass concept. The new highway oriented focus is on improving the arterial system. The transit planning effort has also been tempered to establish realistic strategies and levels of service for the 2030 target year. The priority for transit is focused on improving service for transit dependent populations while maintaining reliable and efficient

service to the urbanized area. Consideration is given to identifying transit corridors that will provide a higher level of transit service through amenities and travel speed. The transit provider, Citilink, is also exploring non-traditional non-fixed route service delivery strategies to improve service. These suppositions guided the formation of the sketch plans.

Alternative Network Testing

The evaluation of the 2025 transportation system under 2030 travel demands provided for the selection of specific alternatives aimed at relieving deficient corridors and increasing transit ridership. The deficient corridors (see Figure 11) were identified through link analysis targeting roads where volume to capacity ratios exceeded 1.25 for service level "D".

Transit improvements were directed at reinforcing current strengths of the local transit system and developing strategies to enhance service efficiency. The evaluation process included a review of the 2025 Transportation Plan recommendations to assess their continued viability.

Roadway Design Standards

The roadway design standards documented in previous Transportation Plans were modified in conjunction with the revision of the Access Standards Manual utilized for the Congestion Management System Access Management Program. The revised standards were maintained in the development of this plan and are provided in Appendix E. The roadway design standards have been formulated to meet future highway requirements.

Highway Alternatives

The highway alternatives, as developed through a consorted effort of public participation and decisions of the Urban Transportation Advisory Board, were intended to improve mobility, accessibility, and/or alleviate congestion on the highway system. The alternatives evolved as packages of specific projects aimed at meeting these objectives. The improvements were stratified into project categories including system modifications, congestion management strategy implementation, and other highway improvements. The project categories do not represent

independent improvement strategies, but are complementary towards maximizing efficiency on the highway system and mitigating congestion.

The identification of deficient corridors stimulated discussion of strategies to meet the future travel demands. The system modifications category represents projects that enhance mobility through new road construction or capacity expansion through road widening projects. The congestion management strategy implemention projects represent improvements to the existing highway system to improve safety and mitigate congestion. These include projects that preclude expansion type projects such as center turn lanes, intersection improvements, road realignment, and intelligent transportation system projects. Railroad grade separation projects and interchange construction/modification are included in the other highway improvement category.

The focus of this plan includes discussion on a wide array of strategies for alleviating future congestion in addition to the traditional solutions of new road construction and widening projects. The new strategies include scaled-down widening projects, such as recommending an additional fifth lane for left-turning traffic instead of widening to six lanes, or similarly a three lane road project instead of a four lane facility. Access control measures and congestion management techniques are additional tools addressed as components of this plan. The inclusion of management systems projects and efforts to combine highway, land use and transit service together to relieve congestion and improve efficiency, represent additional strategies considered in the development of this plan, and are components of the planning process.

The evaluation of the 2025 transportation system identified additional deficiencies on the highway network. Viable solutions and strategies were developed to address selected deficiencies. In addition, suggested improvements from citizens, local elected officials and appointed officials were considered during the testing and evaluation of alternatives.

The evaluation considered all of the proposed 2025 projects to determine if they remained practical under the 2030 travel demands. Remaining deficiencies from the 2030 travel demands on the 2025 system were identified. Solutions were developed and reviewed, including policies and projects, to

determine feasible options addressing the remaining deficiencies. As a result of this process, scenarios were developed, tested, and evaluated. Several 2025 projects were modified as a result of policy changes or changes in travel demands.

Extensive testing of the arterial system was evaluated and re-evaluated as the process moved toward preparing a final list of highway modifications to provide congestion relief. Three, four, five, and six lane highway improvements were considered to determine their ability to solve the corridor deficiencies. Strategies such as access control and congestion management solutions (i.e. intersection improvement, traffic operation improvements, intelligent transportation system improvements, etc.) were also considered. These types of strategies, when implemented properly can solve congestion problems along specific corridors and avoid the need for widening projects. A complete list of the highway projects is provided in Chapter 6.

A comparison of the 2025 transportation system and the recommended 2030 transportation system yields positive results. The comparison utilizes the 2030 travel demands. Table 5 presents a comparison of the two systems. The 2025 alternative will carry an estimated 12.74 million vehicle miles of travel (VMT) on a daily basis. Under the identical travel demands, the recommended 2030 system will carry an estimated 12.71 million vehicle miles of travel. This indicates that the 2030 recommended system performs more efficiently than the 2025 system in terms of lower daily vehicle miles of travel. On an annual basis, this equates to reduction of over 7.82 million daily vehicles miles of travel.

Equally important is the comparison of vehicle hours of travel for the two systems. The 2025 system will induce an estimated 805,177 vehicle hours of travel (VHT) on a daily basis. The same estimate for the recommended 2030 system is 682,910 vehicle hours. This indicates a 15.2 percent reduction in vehicle hours of travel, a significant improvement over the 2025 plan. On an annual basis, this equates to a reduction of approximately 31.8 million hours of travel. A considerable amount of this reduction can be attributed to improved levels of service, less congestion and delay. This indicates the recommended 2030 plan provides better mobility, accessibility, and efficiency.

The amount of vehicle miles of travel and vehicle hours of travel can directly relate to a community's

standard of living and quality of life. The most significant ramification of the transportation system performance is the impacts on safety, air quality, and energy consumption. Air quality is directly affected by the level-of-service and extent of congestion on the highway system.

Carbon monoxide, hydrocarbons (which convert to ozone), and nitrous oxides are pollutants emitted from automobiles. As the amount of vehicle miles of travel and vehicle hours of travel increase, pollution becomes more severe and air quality deteriorates. It becomes easy to understand the related air quality benefits of the recommended 2030 system through the significant reduction in vehicle hours of travel and slight reduction in vehicle miles of travel. The air quality conformity analysis provided in Appendix B presents the formal air quality analysis and conformity determination.

Table 5.
VMT and VHT Comparison

| Transportation System | Weekday Vehicle Miles of Travel | Yearly Weekday Vehicle Miles of Travel | Weekday Vehicle Hours of Travel | Yearly Weekday Vehicle Hours of Travel |
|--------------------------|---------------------------------------|--|---------------------------------------|--|
| 2025 Plan | 12,738,162 | 3,311,922,120 | 805,177 | 209,346,020 |
| Recommended 2030 Plan | 12,708,076 | 3,304,099,760 | 682,910 | 177,556,600 |

As the recommended 2030 plan began to solidify, testing continued to reveal deficiencies for which feasible solutions are 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 are difficult or too expensive to be practical. The primary area of such deficiencies occur in the Fort Wayne Central Business District, the north central section of Fort Wayne, and the intense concentration of commercial and retail development along Coliseum Boulevard (SR 930). Traffic operation improvements, 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. These deficiencies are displayed in Figure 11.

The deficient locations on the recommended 2030 plan will require further analysis to determine if viable solutions can be developed to help mitigate congestion. It is of course apparent, that the transportation system is not likely to ever be totally congestion free. A certain level of congestion is expected, and will have to be tolerated. The objective is to reduce congestion to acceptable levels and provide for a safe and efficient system.

The final result of the highway alternative evaluation process is a comprehensive list of system modification projects, congestion management strategy implementation, other highway improvements, and policy options. With these tools, the community has the planning support necessary to implement projects and administer policies that will provide for an efficient transportation system for future travel demands within the limitations of fiscal constraint.

Transit Alternatives

Transit alternatives were developed and evaluated through a consorted effort of public participation, Citilink (formerly Fort Wayne Public Transportation Corporation-FWPTC) staff, Transit Planning Committee, and the Urban Transportation Advisory Board. Many of the proposed projects are recommendations from the Citilink Transportation Development Plan completed in 2004. The intentions are to improve mobility and accessibility on the transit system through improved transit service. The highway and transit systems are complementary and mutually dependent. Highway system improvements increase transit mobility and efficiency. Improved transit mobility and efficiency increases transit ridership. Increased transit ridership reduces demands on the highway system helping to mitigate congestion.

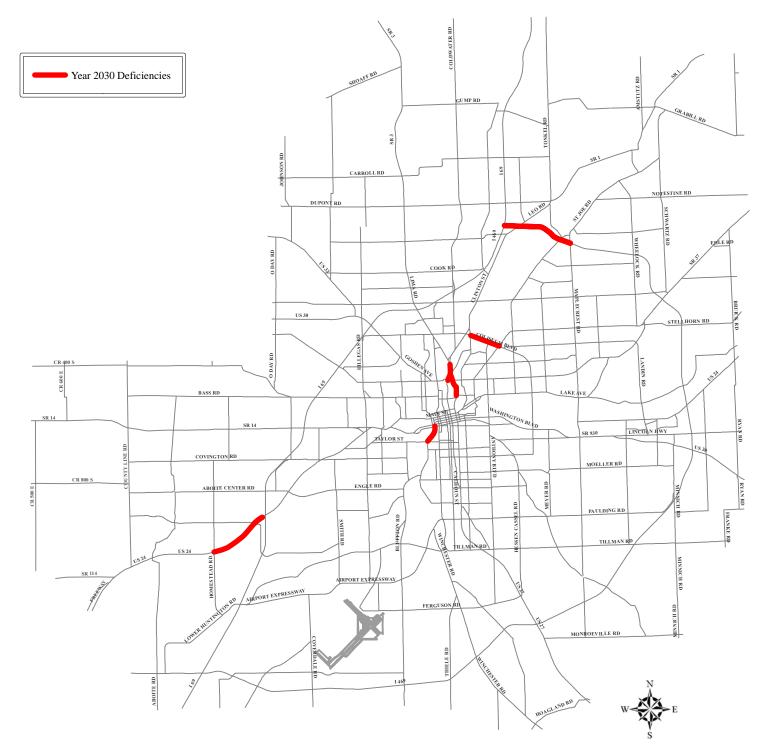


Figure 11

Year 2030 Deficiencies

The fixed-route transit service is based upon a radially-oriented configuration of transit routes. This type of system is often described by comparing its design to a wagon wheel. The Fort Wayne Central Business District represents the hub of the wheel and the transit lines radiate out from the CBD like spokes. The transit alternatives concerning route expansion and modifications are based upon general assumptions for potential improvements. Areas in the Metropolitan Planning Area have been identified where housing and commercial growth indicates the potential for expanding transit service. These areas will be monitored for their transit propensity. The effect of the aging population, access to education and employment centers, and reverse commute issues will guide transit expansion in the Metropolitan Planning Area.

Several capital improvements for transfer centers are more specific in nature. Citilink anticipates developing a centralized transfer facility with potential links to childcare, retail, and job training/education centers. Citilink has two transfer facilities located on northern and southern fringe of the Fort Wayne Central Business District. Currently, only the northern transfer facility is being utilized to maintain sixty-minute headways. To further assist in the reduction of headways and improve the convenience of transit a single centralized transfer facility is desirable and is incorporated in the 2030 transit system.

Citilink continues to improve transit service by implementing strategies identified in the Transit Development Plan. These improvements include reducing headways from sixty minutes to thirty minutes on selected routes and extending service hours. These modifications have improved service and provide a more flexible operating system. Additional headway reductions for selected routes are under consideration. Through improved transit service, ridership is anticipated to increase. The increase in estimated ridership will correlate to an improved level of transit service and enhanced mobility for the entire community.

Citilink recently completed satellite bus stop facility with a customer waiting area in conjunction with a neighborhood redevelopment project near the intersection of Wallace Street and Creighton Avenue. In addition to this project, Citilink continues to upgrade bus shelters, benches, and other customer amenities throughout their service area. Other capital improvements include the

replacement of transit coaches, para-transit coaches, and support/service vehicles as part of a regular vehicle replacement program.

In addition to the transit service and capital improvements, policies were adopted by the Urban Transportation Advisory Board in support of improving transit service in the metropolitan area. These policies are presented in Chapter 6. Augmenting these policies will include continued efforts to explore a wide realm of transit options and incorporate land use and highway design features that compliment transit service. The future transportation system will efficiently serve the community through cooperative and complementary highway and transit networks.

The financial constraint requirement also effects the selection of viable transit solutions. Proposed improvements to the transit system must indicate the financial support for implementation. Due to the uncertainty of transit funding some of the proposed solutions as outlined in this plan may result in trade-offs from service modifications. In essence, this means that less efficient service may be replaced with efforts aimed at improving ridership and mobility with minimal increases in overall operating cost.

Chapter 5

SELECTION OF THE RECOMMENDED PLAN

The Northeastern Indiana Regional Coordinating Council has delegated the responsibility for selecting the transportation plan that best meets the future travel needs of the Fort Wayne-New Haven-Allen County Metropolitan Planning Area to the Urban Transportation Advisory Board (UTAB). The development of the plan involved a magnitude of local, state and federal governmental agencies plus considerable public participation. The factors and events that led to the selection of the plan are the subject of discussion within this chapter. The final adoption of the transportation plan is made by the Northeastern Indiana Regional Coordinating Council.

Documentation of Public Participation

Public officials and local citizens of the metropolitan area have historically provided valuable and comprehensive input throughout the development of transportation plan updates. The development of the 2030 transportation plan also proactively encouraged public input and participation. Local elected and appointed officials were included in meetings and discussions concerning the transportation plan. Presentations were made to the Urban Transportation Advisory Board, and input from the Transportation Technical Committee and Transit Planning Committee were incorporated into the transportation plan. Discussion at these meetings is intended to inform, stimulate participation, and obtain policy guidance at all stages of plan development. A list of the Urban Transportation Advisory Board meetings where topics concerning the plan update were discussed is provided in Table 5. These meetings are open to the public. Notices are sent to all interested persons including the media, the local Chapter of the NAACP, the Fort Wayne Urban League, and the Benito Juarez Cultural Center.

Table 6.
Urban Transportation Advisory Board Meetings*

| April 6, 2004 |
|-------------------|
| May 4, 2004 |
| June 1, 2004 |
| August 3, 2004 |
| September 7, 2004 |
| October 5, 2004 |
| December 7, 2004 |
| January 11, 2005 |
| February 8, 2005 |
| March 1, 2005 |
| April 12, 2005 |

^{*}These meetings were all open to the public

The Urban Transportation Advisory Board began discussing the merits of the Year 2025 Transportation Plan in mid 2004 in preparation of the 2030 update. This discussion familiarized the members to the planning process for developing a transportation plan. Subsequent meetings involved productive dialogue between members and staff, and exceptional policy formulation throughout the evolution of the 2030 plan update. The Transportation Technical Committee, Feasibility Subcommittee, and Transit Planning Committee were also involved in the development of the plan. Through their assistance, a comprehensive plan was developed to meet the future transportation needs of the community.

Citizen participation meetings were conducted to inform area residents of the planning process and status of the plan development. More important, however, was the opportunity through these meetings for discussing and exchanging ideas concerning the future transportation system. Questions and comments were abundant at these meetings. Valuable information was shared and the quality of the plan was significantly enhanced through the community involvement. A list of

these meetings is provided in Table 7. This process is in accordance with the Public Involvement Policy as adopted and revised. The public participation process has been utilized for the development of all previous plans.

Table 7. Citizen Participation Meetings

| Date | Location |
|-------------------|-------------------------|
| October 4, 2004 | Homestead High School |
| October 5, 2004 | Blackhawk Middle School |
| October 6, 2004 | Southside High School |
| October 7, 2004 | Northrop High School |
| February 21, 2005 | Homestead High School |
| February 22, 2005 | Southside High School |
| February 23, 2005 | Northrop High School |
| February 24, 2005 | Blackhawk Middle School |

In addition, numerous other efforts were made to inform and involve the public in developing the 2030 plan update. Citizens are encouraged to visit the office, mail in comments, or contact us by telephone to discuss development of the plan and provide suggestions. The planning process received extensive coverage by local news media including television, radio, and newspaper. Presentations were also made to the Greater Fort Wayne Chamber of Commerce as part of an ongoing working relationship with staff. Transportation planning staff met with minority community leaders to understand their concerns and issues. A presentation was made to the local chapter of the United American-Hispanics and board members of the local Chapter of the NAACP as part of the public involvement process.

The comments received from the citizen participation meetings, including the meetings with the minority leaders, NAACP, the United American-Hispanics and Chamber of Commerce, are documented. These are combined with comments received by telephone, mail, or through the web site. The comments are reviewed by the Urban Transportation Advisory Board and related subcommittees. The staff, working with the Board, prepared responses to the citizen comments. The responses are mailed to all participating citizens and groups. The comments received as part

of the development of the 2030 Transportation Plan are provided in Appendix G.

Environmental Justice

The concept of environmental justice refers to the goal of identifying and avoiding disproportionate adverse impacts on minority and low-income individuals and communities. The provisions of Title VI of the Civil Rights Act of 1964, Executive Order 12898 on Environmental Justice, and other statutes, orders, policies, and guidelines affect planning and project decisions undertaken by Metropolitan Planning Organizations (MPO), public transportation agencies, State Departments of Transportation (DOT), and other transportation providers. Executive Order 12898 on Environmental Justice amplifies the provisions of Title VI of the 1964 Civil Rights Act that states "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

There are three fundamental principals at the core of environmental justice:

To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects including social and economic effects, on minority populations and low-income populations.

To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The implementation of Environmental Justice Order in the transportation planning process should assure public involvement of low-income and minority groups in planning activities and decision-making, prevent disproportionately high and adverse impacts of decisions on minority and low-income populations, and assure low-income and minority populations receive a proportionate share of transportation benefits.

The Northeastern Indiana Regional Coordinating Council, the Metropolitan Planning Organization

of the Fort Wayne-New Haven-Allen County Urban Area, has developed a process for addressing environmental justice issues in transportation planning activities and plan development. The process includes defining and identifying minority and low-income populations, public involvement strategies to engage minority and low-income groups and individuals in the transportation planning process, and measures for evaluating the benefits and burdens of transportation plans and projects.

Defining and Identifying Minority and Low-Income Populations

In order to identify the location of low-income and minority populations, a demographic profile of the Metropolitan Planning Area was developed based upon 2000 Census information. Three separate profiles were developed that identify minority, Hispanic, and low-income populations by census tract. Separate maps have been prepared for each profile.

The minority population is obtained by combining the Census categories of Black, American Indiana, Asian, Hawaiian, other, and two or more races. The Hispanic population is obtained directly from a Census category identifying Hispanic population. The information was determined by Census Tract. Identifying these two environmental justice populations was fairly straightforward.

Identifying the low-income population group is a little more difficult and subjective based on various acceptable methods. Information was obtained from 2000 Census data and is based upon household income. Several methods for identifying low-income populations using household income data were evaluated. One method used 2000 Census poverty income criteria for various household sizes, which is very similar to the U.S. Department of Health and Human Services 2000 poverty guidelines. This provided data on the number of persons considered low-income by Census poverty definitions. A second similar approach identified households, rather than population, that met the Census poverty guidelines. A third and simpler approach established a \$15,000 threshold for household income based upon Health and Human Services 2000 poverty guidelines and Census poverty definitions. Any household under the \$15,000 annual income level was identified as low-income. The three methods of identifying low-income populations yielded similar demographic profiles. The third approach was utilized for its simplicity and reasonable results.

The process used to identify concentrations of environmental justice populations was based upon establishing threshold levels for minority, low-income, and Hispanic populations. The thresholds are based on the Metropolitan Planning Area regional average established through 2000 Census data. The regional averages for the environmental justice populations are 18.28 percent for minority populations, 4.47 percent for Hispanic populations, and 13.11 percent for low-income populations. A map was developed for each population group identifying census tracts where data indicates the population characteristic exceeds the threshold level. Figures 12, 13, and 14 display this information. Figure 15 combines the minority population, Hispanic population, and low-income population census tracts that exceed the respective threshold levels.

Public Involvement Strategies for Engaging Minority and Low-Income Populations

The transportation planning process for the Fort Wayne-New Haven-Allen County has a long established public participation program that has evolved since the development of the first transportation plan in the late 1970's. The current public participation program involves a variety of strategies to inform citizens of transportation planning issues and encourage their participation. These strategies include public meetings, open board meetings, transportation planning briefs, press releases to local media, and information exchanged through telephone calls, mail, e-mail and visits to our offices.

Meetings of the Urban Transportation Advisory Board are open to the public. This is the policy body for the transportation planning process. Meeting notices and agendas are provided to groups representing minority and low-income populations such as the Fort Wayne Urban League, local Chapter of the NAACP, and Benito Juarez Cultural Center.

Public meetings are conducted at various times throughout the year to solicit citizen input to the transportation planning process and on specific improvement projects. One public meeting always coincides with the development of the Transportation Improvement Program. This meeting is used to present the proposed improvement program and gain citizen feedback. All comments are welcome at this meeting.

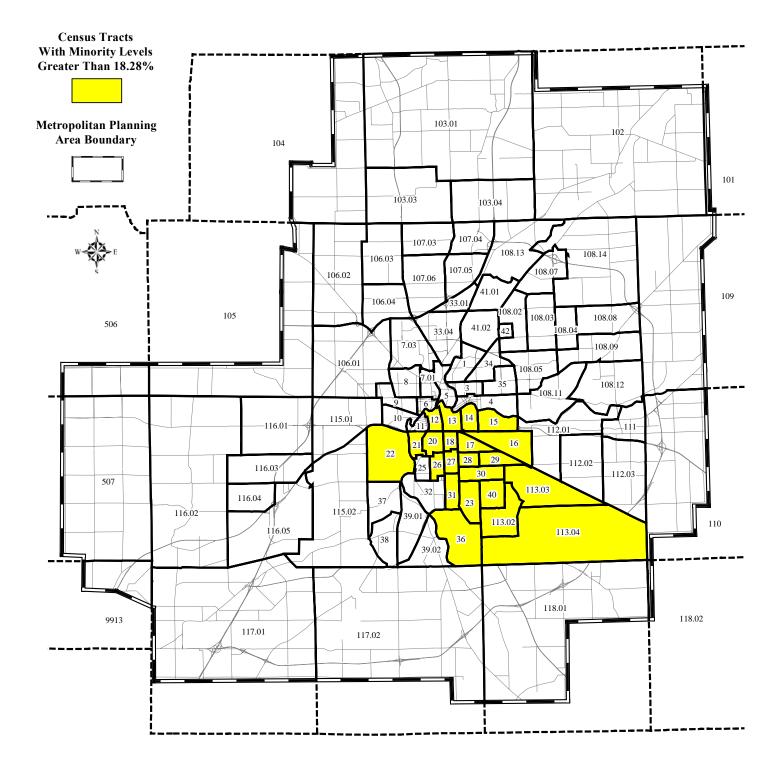


Figure 12

Minority Population Profile

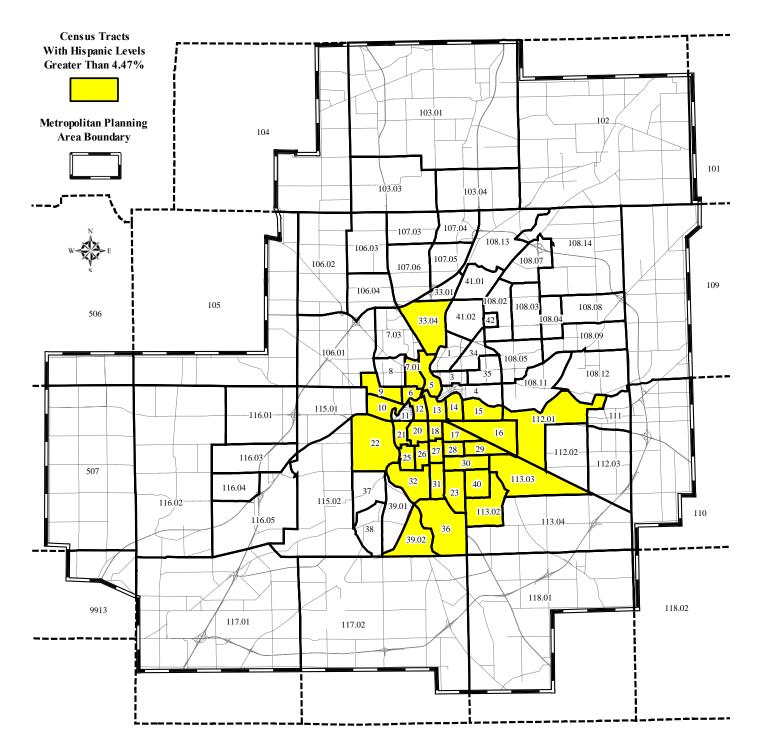


Figure 13

Hispanic Population Profile

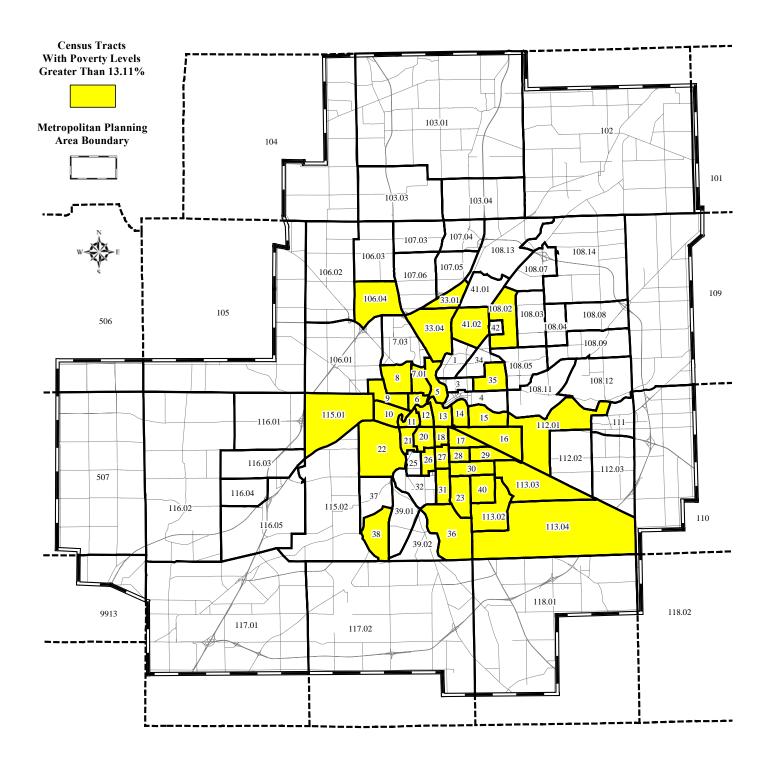


Figure 14

Low-Income Population Profile

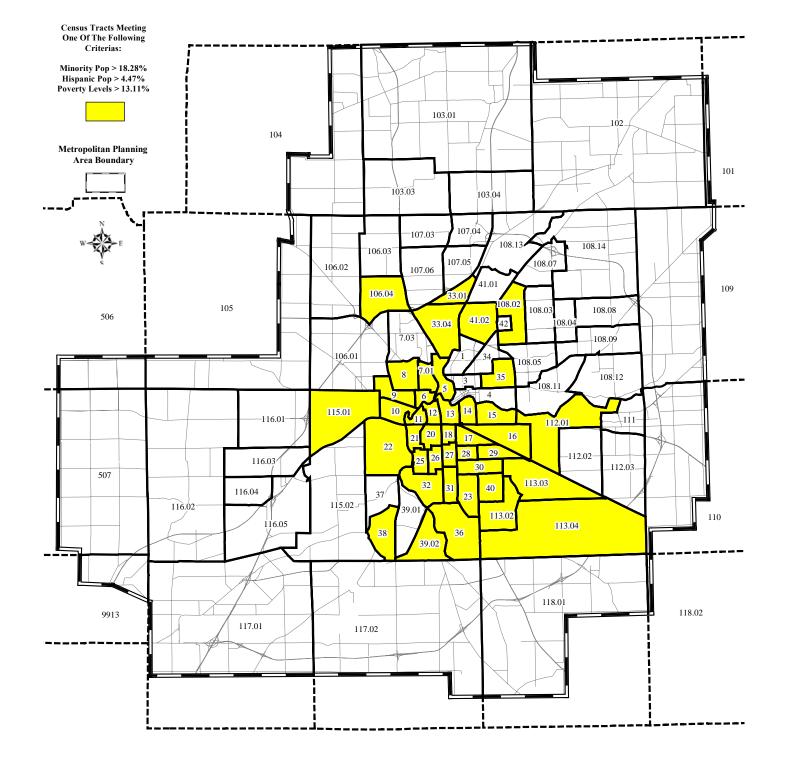


Figure 15

Combined Environmental Justice Population Profile

Notices for the public meetings are mailed to all known neighborhood association presidents or representatives. The neighborhood association representatives are well dispersed throughout the metropolitan area including areas where high concentrations of low-income, minority, and Hispanic populations have been identified. Figure 16 displays the location of neighborhood associations. In addition, a separate mailing is made for any other interested citizens or group that has expressed an interest in participating. This includes organizations representing low-income and minority groups, environmental groups, business groups, and other interested citizens. The news media is also notified to help publicize the meetings. The meetings are held at accessible sites and at times convenient for the public.

The meeting notices include a comment form that is designed to be easily returned to the NIRCC office. Comments are encouraged through use of the form, telephone calls, e-mails, office visits, or through attending the public meetings. The citizen comments presented at the public meetings and through the other various channels are documented by planning staff. The comments are presented to the policy board. The staff works with the policy board and related subcommittees to prepare responses to the comments. Once prepared, the comments and responses are sent to those who attended the citizen meeting. In addition, staff attends meetings of special groups when requested.

Additional public meetings are held at three different times during the development of a transportation plan. The first series of meetings are held during the beginning stages of plan development to discuss previous plans, planning assumptions, and gather citizen comments. This provides citizen input at an early stage in the plan development. A second round of meetings is held after the initial analysis has been completed and deficient areas have been identified. Various solutions and strategies are discussed to reduce congestion and improve mobility. The third set of meetings is held at the conclusion of plan development to present the selected plan.

The series of meetings during the development of the Transportation Plan are held at four different locations throughout the Metropolitan Planning Area. Locations are selected to make participation by environmental justice populations comfortable and convenient. The meetings are held in libraries, community centers, churches and schools to encourage participation. Additional meetings

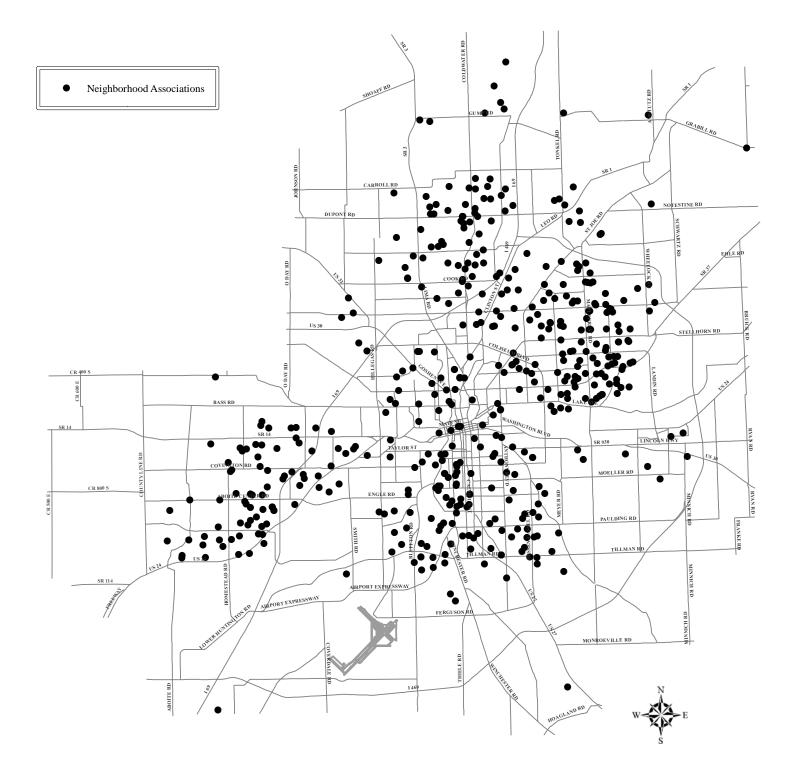


Figure 16

Neighborhood Associations

are scheduled with groups that represent minority and low-income populations such as the Urban League, Benito Juarez Cultural Center, NAACP, and leaders of the Black Community. These meetings focus on the needs of the environmental justice populations. Comments from all citizen involvement meetings are documented, and responses are prepared to ensure all comments are considered as input to the transportation planning process.

Four citizen meetings were held in October 2004 to discuss the development of the 2030 Transportation Plan and four follow-up meetings were held in February 2005. The meetings allowed for the exchange of information and generated many good ideas. To assure participation of minority and low-income persons, staff met with representatives of United American-Hispanics and board members of the local Chapter of the NAACP to discuss the 2030 Transportation Plan and investigate options for increasing minority participation in the transportation planning process. It was suggested that we continue to work with these representatives and they will help encourage low-income and minority participation. This process has enhanced minority involvement in the transportation planning process.

Through these meetings as part of the transportation planning process, issues have been raised regarding accessibility and mobility in the southeast central neighborhoods including recommendations for transit improvements. The concerns include mobility issues, intersection improvement, transit improvements, and bicycle/pedestrian safety. A specific mobility concern involves the Anthony Boulevard at grade railroad crossing between Wayne Trace and Lewis Street. Improvement projects for these problem areas were developed and are included in the Transportation Plan. These projects represent the responsive nature of the transportation planning process for all areas of the community, including low-income and minority areas.

Measures for Evaluating Benefits and Burdens of Transportation Plans and Projects

The evaluation of benefits and burdens is conducted at both a Transportation Plan level and a project level basis. The planning process, including development of the Transportation Plan, utilizes a total assessment of the transportation system for the entire Metropolitan Planning Area. Data collection and analysis is performed on the entire system utilizing uniform performance standards and

analytical tools. The transportation plan is developed through an analytical process of identifying existing and future deficiencies of the transportation system. The quantitative analysis that is a part of this process is applied consistently and unilaterally to the transportation system. This ensures that the entire Metropolitan Planning Area is treated equitably in the deficiency assessment process. The deficiency assessment process drives the development of transportation policies and projects.

The quantitative measures include volume to capacity ratios, level of service, travel time and delay, transit headways, and transit service routes. These criteria provide performance measures for evaluating the efficiency of the highway and transit systems. Factors affecting evaluation of highway performance utilizing volume to capacity ratios, level of service, and travel time and delay are based on area type and facility type regardless of the socioeconomic variables of the surrounding population. Performance measures of the transit system using headways and location of service routes also provide a unilateral evaluation tool unbiased to the environmental justice populations. A qualitative evaluation of the Transportation Plan and associated transportation planning process is also utilized to measure benefits. A qualitative assessment identifies the distribution of the proposed projects and corresponding benefits. As part of this evaluation, the location of deficient areas as defined by quantitative analysis procedures must be considered. Improvements planned for the highway system are identified and overlaid on maps that identify the locations of the environmental justice populations. The transit route system and other system improvements identified in the Transportation Plan are also overlaid on maps identifying locations of environmental populations. Headways, route saturation, and improvement projects can be measured for equitable distribution.

A historical look at the implementation of projects through the transportation planning process has shown a fair distribution of projects and benefits throughout the entire metropolitan planning area. The transit system is extremely sensitive to the needs of low-income and minority groups. The transit system has concentrated a number of routes in low-income neighborhoods based upon identified transit needs and transit propensity. Recent transit modifications by Citilink concentrated on improvements in the south central section of Fort Wayne. Service was improved and headways were reduced to thirty minutes on several of heaviest traveled routes through this area. The standard

headway for Citilink routes is sixty minutes. Decisions to improve transit service are based upon anticipated increases in ridership and where increased service will maximize public benefit. This is typically in the low-income neighborhoods.

The proposed improvements in the Transportation Plan are designed to improve safety, mitigate congestion, increase accessibility and mobility, and support economic growth through feasible strategies which minimize impacts on residential neighborhoods and are environmentally sensitive. Individual projects are designed to meet one or more of these objectives and their corresponding benefits measured. The regional benefits of the transportation plan are measured in vehicle miles of travel and vehicle hours of delay. These assessments are evaluated on the total package of projects proposed in the transportation plan.

Individual projects are also evaluated for burdens and benefits on environmental justice populations as part of the community and environmental analysis studies conducted as part of project development. The primary concern at the project level is identifying adverse impacts such as noise, traffic, and relocations. Mitigation strategies are included in the project development and design to minimize adverse impacts to all population groups, including low-income and minority populations. Context-sensitive design practices are beginning to be incorporated in the project development activities.

The transportation planning process includes assessment techniques through the development of the Transportation Plan and related improvement projects. The primary goal of a transportation plan is to achieve an efficient and safe transportation system for the movement of people and goods, while simultaneously improving the economic and environmental conditions of the community. The desire for an efficient transportation system includes accountability for environmental and social costs. The result is a plan that preserves neighborhood tranquility, minimizes environmental disruption, and is sensitive to its effect on minority and low-income populations.

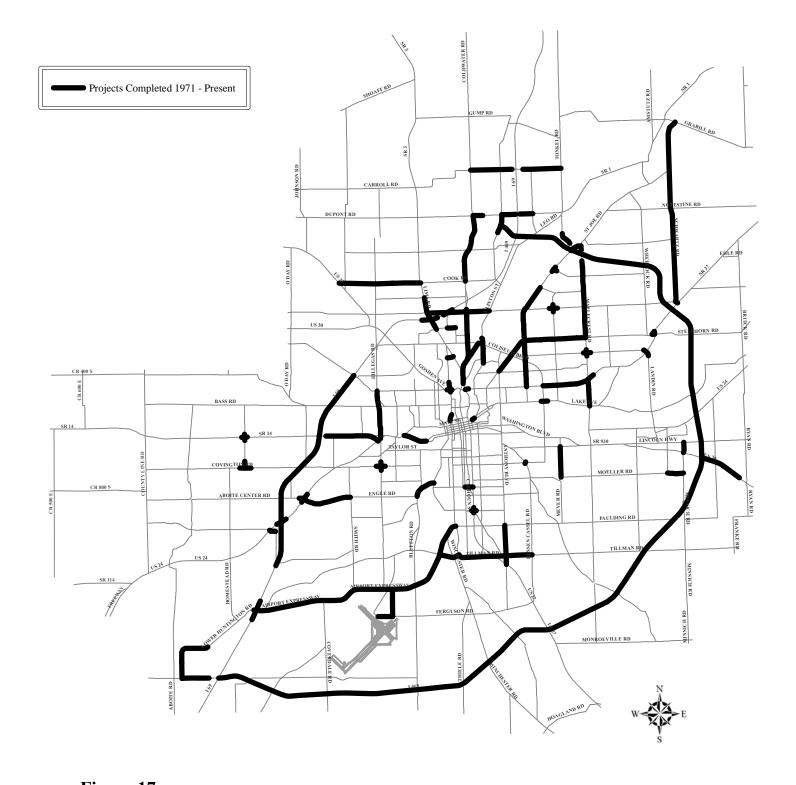


Figure 17

Implementation of Transportation Plans (1971-present)

Factors Influencing Plan Selection

The development of the Year 2000 Transportation Plan included the establishing of evaluation methodology for comparing alternative transportation plans. The ideals and concepts of this methodology have remained throughout the development of the 2005, 2010, 2015, 2025 and this plan. These concepts continuously guide transportation planning decisions within the metropolitan area. Three of the major factors influencing such decisions include reduced congestion, economic advantages, and land use concerns.

Reducing traffic congestion within the Metropolitan Planning Area will result in a number of distinct advantages. Less congestion equates to reductions in noise, air pollution, travel times, energy consumption and accident rates. Reducing accident rates and improving safety has always been the highest priority influencing transportation decisions. Reduced congestion also improves accessibility, provides safer streets, and improves the response time of essential emergency services such as medical, fire, and police.

Economic advantages of a well-designed transportation plan include enhanced regional accessibility, especially to areas zoned for future industrial and commercial developments. An efficient transportation system minimizes the travel times required to transport goods and services providing a direct economic benefit to area businesses. Improved accessibility significantly assists economic development activities for the Fort Wayne area, stimulating the economy and generating new employment opportunities.

Land use concerns were also considered throughout the development of the transportation plan. Protecting prime agricultural land and rural areas while providing sufficient access to commercial and industrial developments is a delicate procedure necessary to balance all interests involved. The outcome of this process is a transportation plan that promotes orderly growth and protects prime agricultural land.

The collaborative effort among local residents; public officials; federal, state, and local governmental agencies; and local boards, commissions, and committees, was the solidifying and driving force behind the 2025 transportation plan. The update incorporates positive impacts such

as safety and efficiency on the transportation system with less congestion and improved accessibility. The plan serves as a guide for directing and establishing transportation policy and policy decisions to ensure that the transportation system meets the travel demands of future generations.

TEA-21 Seven Broad Transportation Planning Areas

The Transportation Equity Act for the 21st Century (TEA-21) established seven broad areas to be considered in the metropolitan transportation planning process. These areas are incorporated into the transportation planning process for the Fort Wayne-New Haven-Allen County Metropolitan Planning Area. The inclusion of these areas helps to ensure the metropolitan planning process establishes a cooperative, continuous, and comprehensive framework for making transportation investment decisions. The seven broad areas are discussed below.

Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

The transportation planning process and resulting transportation plan is cognizant of the metropolitan area's need to be economically competitive, productive, and efficient in the global market. The planning process incorporates economic development and redevelopment strategies and projects into the land use and socioeconomic projections of future growth. Existing and proposed industrial parks and industrial sites are identified through a cooperative effort between economic development specialist and transportation planning staff. These areas receive special attention to ensure mobility and accessibility needs are met.

The Greater Fort Wayne Chamber of Commerce actively participates in the planning process. Transportation staff works with the Chamber and related committees to identify problems and issues affecting the business community. Together, solutions are developed and viable projects are implemented.

Intermodal sites including the Fort Wayne International Airport, Norfolk Southern Triple Crown Facility, and major industrial sites are scrutinized to ensure access to these areas are safe and

efficient. Examples of projects developed through the transportation planning process to address these issues include:

Airport Expressway - An expressway facility connecting the Fort Wayne International Airport, Fort Wayne Air Trade Center, and surrounding industrial developments to Interstate 69. This project was designed to improve access between the airport area and the Interstate System promoting economic growth, productivity, and efficiency. Completed in 2002, this project improves accessibility and mobility for the transport of goods and people to and from Fort Wayne International Airport.

US 24 Fort to Port Corridor Improvement Project - US 24 between New Haven, Indiana and Toledo, Ohio is a major commodity route supporting a high percentage of truck traffic. The current alignment creates safety concerns and hinders the efficient movement of people and goods. This project is under design to improve the safety and efficiency of the corridor. The project will improve the accessibility of regional businesses to markets in Ohio, Michigan, and Canada. The project will also provide direct and efficient access to the freshwater Port of Toledo promoting international trade.

Wayne Trace and Pontiac Street Intersection\ Railroad Grade Separation Reconstruction - This project, along with several companion project including the Pontiac Street and Coliseum Boulevard Intersection, Anthony Boulevard and Norfolk Southern Railroad Grade Separation, Anthony Boulevard and CSX Railroad Grade Separation, and Wayne Trace from Oxford Street to Pontiac Street, will improve the mobility of goods and people in a predominantly industrial area. The Norfolk Southern Triple Crown Facility, a major intermodal site, is surrounded by these projects and will directly benefit from the improved accessibility afforded by these projects. These projects will also enhance transit mobility through the area improving system efficiency.

Airport Expressway and Norfolk Southern Grade Separation - This project is near the Fort Wayne International Airport. Airport Expressway serves as a major route for passengers and freight to the airport area, and provides the most direct access from the Fort Wayne Central Business District to the airport. Currently, the railroad intersects Airport Expressway at grade creating lengthy delays. Air passengers attempting to reach flights at the airport are often delayed at this railroad crossing. A grade separation at this location will improve access to the airport for passenger and freight service.

The projects listed above provide examples of how the transportation planning process addresses the economic development issues within and surrounding the metropolitan area in support of its economic vitality. These projects will improve accessibility and mobility to regionally significant economic sites including industrial, commercial, and corporate business locations. The projects will reduce congestion and promote an efficient transportation system.

Increase the safety and security of the transportation system for motorized and non-motorized users.

The transportation planning process has consistently championed safety as a major concern. The Safety Management System routinely reviews hazardous locations on the transportation system through cooperative efforts with local governments. Highway crash data is also obtained from the Indiana Department of Transportation to review and identify hazardous locations. Accident data is compiled from throughout the metropolitan area to determine high hazard locations. Accident studies are conducted for the high hazard locations, solutions developed, and recommendations are made to improve safety. Hazard elimination and safety funds (HES) are sought for the appropriate projects.

The SMS program activities also monitor rail-highway grade crossings and maintains an inventory of pertinent data for each location. This information supports the Indiana Department of Transportation rail-highway improvement program. Selected rail-highway crossing improvements in the metropolitan area are annually included in the Transportation Improvement Program. New rail-highway grade separation projects are also included in the transportation plan. These projects will improve safety for transit passenger, children riding school buses, passenger vehicles, pedestrians, and bicyclists.

The access management component of the Congestion Management System Plan is a tool used as part of the transportation planning process to promote safety. This program implements access design standards with safety as the primary concern. Through this program, access points are kept to a minimum reducing the number of conflict points along a corridor. The design standards ensure safe design and spacing of access points including signalization when warranted. Access management improves safety by reducing the frequency of fatal, injury, and property damage accidents.

The transportation planning process acknowledges the importance for improving pedestrian and bicycle safety. Projects developed in the Pedestrian and Bicycle Plan are designed to improve the safety for these modes of transportation. The recently completed projects at the Parnell Street

Bridge and the Historic Wells Street Bridge provide pedestrians and bicyclists new pathways eliminating the need to cross and travel along high volume roadways. Proposed pedestrian/bicycle projects will promote safety in similar fashion. A project proposed to extend the River Greenway from Johnny Appleseed Park to Shoaff Park will provide a safe pathway linking activity centers including parks, residential housing, Memorial Coliseum, Memorial Stadium, Indiana University Purdue University Fort Wayne, and athletic\soccer fields to each other and existing pedestrian\bicycle paths.

Safety improvements to the highway system have corresponding safety benefits to the transit system. In addition, Citilink addresses safety issues concerning the transit system and is aware of the importance safety plays in overall passenger comfort. Several projects currently under construction are designed to improve security and customer safety at the transfer facility. The perception of a safe transit system is a great marketing tool. Citilink strives to maintain a safe transit system.

Highway improvements designed to mitigate congestion also provide added safety benefits to the highway system. Motorists frustrated by heavy congestion are more likely to make hazardous maneuvers in traffic. The transportation plan includes projects to add a third or fifth lane on selected corridors as continuous left-turn lanes. These projects improve traffic flow, reduce congestion and lower driver frustration often without major infrastructure modifications.

The Safety Management System, access management program, pedestrian\bicycle paths, railroad grade crossing safety improvements, rail-highway grade separations, highway improvements and transit security projects are all components of the transportation planning process. These safety improvements support all modes of transportation including transit, walking, bicycling, freight movement, and passenger vehicles. Safety is a primary goal.

Increase the accessibility and mobility options available to people and for freight.

It is sometimes difficult to distinguish the difference between accessibility and mobility. The transportation planning process for the Fort Wayne-New Haven-Allen County Metropolitan Planning Area considers accessibility as a measure of the ease that people and goods can engage a

social or economic activity. Mobility is considered a measure of the ability people and goods can move freely from one place to another including the option for various modes of travel. The transportation plan attempts to increase both accessibility and mobility.

The transportation planning process addresses accessibility and mobility options for transit, pedestrian, bicycle, freight and automobile travel. The transit system, highway system, pedestrian and bicycle system, intermodal and freight issues are incorporated in the transportation plan. The specific improvement projects identified through the transportation planning process are designed to increase the accessibility and mobility of these systems.

Transit options include reducing headways, expanding service, improving customer amenities, and developing a downtown intermodal transfer/transportation center. The improved frequency of service and expanded service area will promote additional options of travel and increase the origins and destinations accessible by transit. Customer amenities such as shelters, benches, better signage, and Internet access to transit routes and vehicle locations improve accessibility. The implementation of a downtown intermodal transfer/transportation center will meet both objectives of increasing accessibility and mobility. Citilink fixed route buses all have bicycle racks attached to encourage both bicycle and transit ridership.

The Pedestrian and Bicycle Plan includes extending paths promoting bicycling and walking as alternate modes of travel. Improving the safety and expanding pedestrian/bicycle system will make the system more attractive and directly available to more residents. These improvements increase the accessibility and mobility of the transportation system by providing additional linkages between neighborhoods and community activity centers.

The access management program, incorporated into the transportation planning process, promotes the increase of accessibility and mobility of the transportation system. This program implements access design standards that balance the need for adequate site access with safe and efficient traffic flow on adjacent corridors. This process exemplifies the delicate balance between promoting both accessibility and mobility on a transportation system. Access management protects the existing

transportation system from haphazard access from new developments.

Highway oriented projects identified in the transportation plan advance accessibility and mobility of the transportation system. Prime examples include the rail-highway grade separation improvements and the Maplecrest Road extension to align with Adams Center Road. The rail-highway grade separation and reconstruction projects combined with adjacent intersection and corridor improvements create a package of projects addressing a combination of accessibility and mobility problems for transit vehicles, school busses, freight movement, intermodal travel, and passenger automobiles to and from the east central section of Fort Wayne. This area includes heavy industrial sites with adjacent commercial developments and residential neighborhoods. In addition, these projects support economic development, redevelopment, and land use improvement efforts.

The Maplecrest Road extension project provides an additional river crossing and grade separated rail crossings to an area plagued with multiple at-grade rail-highway crossings and limited river crossings. The railroads in this area of Fort Wayne and New Haven are extremely active. A major Norfolk Southern rail yard is immediately east of this project. This project will significantly increase both accessibility and mobility to adjacent industrial and residential developments and promote improved access between the northeast and southeast quadrants of the Metropolitan Planning Area. A serious problem exist with the multitude of at-grade rail-highway crossing, high frequency of train movements, and the accessibility of emergency vehicles in and through the area. This project will improve the overall accessibility of the surrounding area, with a vital improvement for emergency vehicles.

The above projects are examples of transit, pedestrian\bicycle, and highway improvements intended to increase both accessibility and mobility. In essence, every transportation project proposed in the 2030 Transportation Plan is tangible in some manner to promoting accessibility and mobility on the transportation network. Each improvement will increase the ease that people and goods can engage a social or economic activity and the ability they can move freely from one place to another utilizing various modes of travel.

Protect and enhance the environment, promote energy conservation, and improve quality of life.

The transportation planning process includes specific objectives to protect the environment, promote energy conservation, and improve the community's overall quality of life. These objectives are mutually supportive and are integrated into the design of transportation improvement projects. Projects promoting transit, walking, bicycling are components of the transportation plan. Highway projects developed to mitigate congestion, increase safety, and reduce vehicle miles of travel also support these objectives.

Transportation improvements are intentionally developed to minimize their impacts, and the impacts of traffic, on residential neighborhoods. Mitigating congestion on the arterial highway system to maintain acceptable levels of service reduces the attractiveness of shortcuts through residential neighborhoods to circumvent congested corridors. Specific projects such as the recently completed Hillegas Road\Ardmore Road interconnection and the planned Maplecrest Road\Adams Center Road interconnection minimize vehicle miles of travel, increase accessibility, and improve mobility. Reducing vehicle miles of travel corresponds with reducing energy consumption and vehicle emissions.

Traffic operation and intelligent transportation system improvements such as interconnecting traffic signals, optimizing signal performance, and motorist alert changeable message signs help to maximize existing capacity. These types of projects can mitigate congestion, reduce energy consumption without widening roadways. These environmentally non-invasive projects are components of the 2030 Transportation Plan.

The transportation planning process engages projects that encourage transit, walking, and bicycling as alternatives to automobile usage. Reducing automobile usage through promotion of these alternative modes of travel yields environmental and energy consumption benefits. Expansion of the transit system and pedestrian\bicycle pathways will encourage greater usage of these systems.

The access management program supports protection of the environment, energy conservation, and

improving the quality of life. This program promotes corridor preservation, improves air quality, and reduces accidents. Access management integrates transportation and land-use planning and encourages cooperation between agencies that make land use and transportation decisions. Access management can also support transit, pedestrian, and bicycle access to new site developments.

The transportation planning process is inclusive of multiple modes of travel, strives to mitigate congestion, minimize vehicle miles of travel, increase accessibility and mobility, be sensitive to environmental issues, embody economic development strategies and improve transportation system safety. This process ensures the development of a transportation plan that is environmentally responsible, energy conscious, and improves the overall quality of life.

Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

The transportation planning process has identified improvement projects devised to enhance the integration and connectivity of the transportation system for all modes supporting the travel needs of people and freight. The development of a downtown intermodal transfer/transportation center will fully support the integration and connectivity of the transportation system. This project is currently in the land acquisition phase and will be located in the heart of the Fort Wayne Central Business District. The transportation center will provide for the integration of fixed route transit and paratransit services with the potential to include specialized human service transportation, taxi, and intra-city bus service. The feasibility of including and\or locating near childcare facilities, job training centers, and retail services will be explored. The ease of pedestrian and bicycle access to the site will also be considered. Citilink currently integrates bicycle travel with transit service by providing bicycle racks on the transit coaches.

The transportation planning process continues to pursue projects conceived to improve intermodal access and connectivity. The transportation plans have included projects such as Airport Expressway and Ardmore Avenue to improve accessibility and mobility to the Fort Wayne International Airport and adjacent Air Trade Center. The rail-highway grade separation and reconstruction projects near the Norfolk Southern Triple Crown intermodal site will resolve a combination of accessibility and mobility problems for freight movement, transit vehicles, and

school busses in the east central area. This area includes heavy industrial sites with adjacent commercial developments and residential neighborhoods.

The Hillegas Road\Ardmore Avenue and Maplecrest Road\Adams Center Road projects will connect north-south arterial corridors providing continuity to the transportation system. These interconnects will significantly improve the connectivity of the transportation system. These projects will benefit travel for people and goods, including transit accessibility, school bus travel, and freight distribution.

The pedestrian and bicycle component of the transportation plan sustains multimodal options and connectivity of the transportation system. The New Haven Bicycle Pedestrian Trail project is a good example of providing connectivity on the transportation system. This project, currently under construction, will connect the New Haven pedestrian\bicycle pathway system with the Fort Wayne Rivergreenway system. When completed, the integration and connectivity of the two systems will provide an enhanced pedestrian\bicycle system. The pedestrian\bicycle plan also promotes the interconnection of sidewalks from surrounding residential neighborhoods to commercial\retail developments. These interconnects provide area residents with mode of travel options.

Promote efficient system management and operation.

The transportation planning process and development of the transportation plan includes provisions to promote efficient system management and operation. The process includes intelligent transportation strategies for both highway and transit systems, pavement management, transit operations and alternate transit service options, congestion management and access management programs.

The intelligent transportation system strategies include motorist information sites, traffic operation improvements, and transit vehicle locator system with Internet connectivity. The motorist alert dynamic message signs have been strategically placed on Interstate 69 to provide motorist advanced warning of pending traffic congestion so that they may alter their route to avoid lengthy delays. Additional sites for dynamic message signs on US 30 and other major corridors are in the planning stages. The City of Fort Wayne recently completed a major upgrade of their traffic signal operating

system. This system provides more efficient signal operation, additional capacity for signal interconnection, and support for video detection and surveillance of traffic flow. Citilink has implemented the first phase of a transit vehicle locator system to improve the efficiency of the transit dispatching process. Through Internet connections, transit riders will eventually be able to locate the transit vehicle on their selected route to anticipate its arrival time. These types of projects promote transportation system efficiency and operation.

The management systems including pavement, bridge, safety and congestion all lend to improved system efficiencies. The Transit Development Plan, which serves as a transit management system, is a tool used to maximize system efficiency and improve transit operations. These programs are either administered directly through activities of the Metropolitan Planning Organization or conducted by the member local governments. The management systems attempt to maximize the efficiency of available resources by monitoring the condition of the transportation system, developing strategies to mitigate problems, and implementing solutions. The congestion management system and Transit Development Plan are two examples of how these systems improve efficiency.

The Congestion Management System (CMS) and companion access management program develop and implement strategies to mitigate congestion and maximize the efficiency of the existing system. The CMS process includes conducting corridor studies and developing corridor protection plans. The congestion management strategies identified in these plans may include traffic operation and intersection modifications, transit usage, access management, and other transportation improvements. The access management program maintains transportation system travel efficiency and corridor preservation.

The transit improvements identified through the Transit Development Plan accommodate the investigation of various types of transit service. Reviewing options for providing and expanding transit service allows for the evaluation of the most efficient method. Citilink has recently initiated service frequency improvement on selected routes and investigates methods to provide service to outlying suburban medical facilities and shopping centers. Citilink will continue to explore transit

service provision options to improve transit service levels and maximize transit efficiency.

These programs implement transportation improvements and investigate new approaches to solving transportation problems by engaging technological advances. Through the implementation of the management systems, transit improvements, and intelligent transportation technology, the transportation planning process can promote efficient system management and operation.

Emphasize the preservation of the existing transportation system.

An assortment of transportation strategies is employed by the transportation planning process to preserve the existing transportation system. The management systems, access management, transit options, intersection improvements, and intelligent transportation system strategies can individually, and collectively preserve the transportation system. Encouraging alternative modes of travel such as walking, bicycling, and using transit will minimize demands on the highway system and preserve the existing infrastructure.

The management systems emphasize the maintenance of the transportation system. Local governments implement maintenance programs on the highway system. In the Metropolitan Planning Area, these governments have historically spent considerable portions of their transportation budgets on administering and maintaining the existing transportation infrastructure. Citilink, the transit provider, likewise has an excellent maintenance program for its transit coaches and support vehicles. The Indiana Department of Transportation implements its own maintenance program on its highway system.

Intelligent transportation system strategies, traffic operation improvements, and congestion and access management programs work to maximize the existing capacity and preserve highway corridors. The transportation plan incorporates intelligent transportation system solutions to improve the highway and transit systems. These projects will help maximize existing capacity and provide direct information to transportation system users. Intelligent transportation system products will also be implemented for traffic control and operations monitoring to improve traffic flow. Intersection improvements are also part of the transportation planning process that can facilitate

traffic flow without roadway widening.

The congestion and access management program are two of the best tools implemented as part of the transportation planning process to achieve corridor preservation. Access management is the careful control of driveways and public street connections to the roadway system. The access management process utilizes access standard design and access control to realize significant improvements in traffic safety and operation. The congestion management system attempts to reduce existing and prevent future congestion. Problem areas are identified, and strategies developed to mitigate congestion. The development of congestion mitigation techniques begins with the least invasive solutions to address the problem. Traffic operation improvements, transit service options, intersection improvements are examples of congestion mitigation techniques which will be implemented. If these techniques will not mitigate the congestion, providing additional capacity through roadway widening will be considered.

Proper maintenance of the existing transportation system, controlling access, implementing intelligent transportation strategies, and mitigating congestion through traffic operation and intersection improvements will advance the preservation of the transportation system. The transportation planning process will continue to emphasize these strategies.

Livable Communities

The Livable Communities is a federal initiative designed to provide communities with tools, information, and resources they can use to enhance their quality of life, ensure their economic competitiveness, and build a stronger sense of community. The transportation planning process and resulting transportation plan incorporates many transportation-related activities associated with the Livable Communities initiative. The transportation plan has as its goal to achieve an efficient and safe transportation system for the movement of people and goods while simultaneously improving the economic and environmental conditions of the community. The implementation of such a system will minimize energy consumption and reduce air pollution. Reductions in vehicle hours of delay, vehicle miles of travel, accident rates, and accident severity are measures by which the system can be measured. Achieving this goal will enhance quality of life in the Metropolitan Planning Area and ensure that it remains as a "Livable Community."

In pursuit of this goal, the transportation plan and planning process have identified improvement strategies and projects designed to improve the quality of life for area residents and people visiting the community. Including a variety of travel modes as components of the transportation system improves accessibility and mobility while reducing the dependency on the private automobile. Promoting and expanding transit service in the metropolitan area is an important policy objective of the plan. Improving and extending the pedestrian and bicycle pathway system to reach more neighborhoods and activity centers will be achieved through the implementation of the transportation plan. These types of projects encourage the use of alternative travel modes.

The transportation plan includes many transit related projects and policy guidance to improve transit service within the community. Reducing headways, expanding service hours, and providing service on Sundays are transit service level improvements designed to increase the attractiveness of the transit system. To ensure transit issues are considered as new development occurs in the community, the transportation plan recommends that land use policies address transit needs for accessibility to private developments through street and subdivision design. It further states that the land use planning approval process should include pedestrian and public transit issues. Incorporating these policies into the land use planning process will be an objective of the transportation planning process.

The bicycle/pedestrian plan is another component of the transportation planning process that will encourage walking and bicycling and support the livable community agenda. This plan includes interconnecting the New Haven bicycle and pedestrian trail system with the Fort Wayne River Greenway system. The combining of these two systems will improve accessibility and mobility on both systems. Additional projects to expand the system and develop new trails will further improve pedestrian/bicycle opportunities in the Metropolitan Planning Area. The bicycle/pedestrian plan also supports the requirements for sidewalks in all new developments and ensuring they interconnect with adjacent developments. This process will ensure a growing network of sidewalks throughout the community.

The transportation planning process includes a traffic-calming program initiated by the City of Fort

Wayne. Through this process, neighborhood associations can request that a study be conducted to develop traffic calming strategies. Through a collaborative process, the Metropolitan Planning Organization collects data and provides information to the Fort Wayne Traffic Engineering Department to assist in the study. The Fort Wayne Traffic Engineering Department makes the final decision and implements the selected strategy. The MPO staff provides similar assistance to other local governments upon request.

The access management program, a component of the congestion management program, is an extremely successful program enhancing the community's quality of life. The access management program controls driveway and public street connections to the roadway system. The access management process utilizes access standard design and access control to minimize traffic impacts to the transportation system from new developments. The access management program supports corridor preservation, leads to air quality improvements, prolongs the functional life of existing highways, maintains travel efficiency for economic prosperity, saves lives by reducing the frequency of accidents, applies uniform standards and promotes fair and equal application to the development community, and requires cooperation among all agencies that make land use and transportation decisions thereby achieving improved planning and transportation integration. These benefits, of a well developed and administered access management program, directly support the many facets of the "Livable Communities" initiative.

Financial Analysis

An important factor affecting the selection of the 2030 Transportation Plan is the financial revenues available to support the implementation of the improvement projects. The plan is required to include a financial analysis that demonstrates the consistency of proposed transportation investments with available and projected sources of revenue. The plan selection was developed within this framework. The selection of proposed transportation investments for inclusion in the plan occurred after financial analysis was complete and projected revenue was earmarked for project implementation. Only those projects, for which funding is reasonably expected to be available, were included in the plan.

Chapter 6

THE SELECTED PLAN

The culmination of the long range planning process is the selected transportation plan titled "2030 Transportation Plan." The plan is a combination of transportation improvement projects and policies for the highway, transit, and pedestrian/bicycle systems. The proposed highway improvements are displayed in Figure 18. A complete highway improvement project listing is provided as a part of this chapter. The transit system, including potential areas for future transit service, is displayed in Figure 19. The Pedestrian and Bicycle Plan is displayed in Figure 20. Potential areas for future transit service are also identified and discussed in this chapter. Collectively, these distinctive yet mutually dependent systems form the transportation plan.

Specific projects and capital improvements form one component of the plan, and equally important, is the set of policies directed at preserving the integrity of the transportation system through the encouragement of wise decision-making. These policies aspire to promote highway, transit, and pedestrian/bicycle efficiency including specific strategies incorporating each system. The policies address non-traditional strategies for mitigating congestion including interchange reviews, access management, project implementation and transit recommendations.

Goal of the Transportation Plan

The goal of the transportation plan is to achieve an efficient and safe transportation system for the movement of people and goods while simultaneously improving the economic and environmental conditions of the community.



Figure 18

Recommended Year 2030 Highway System

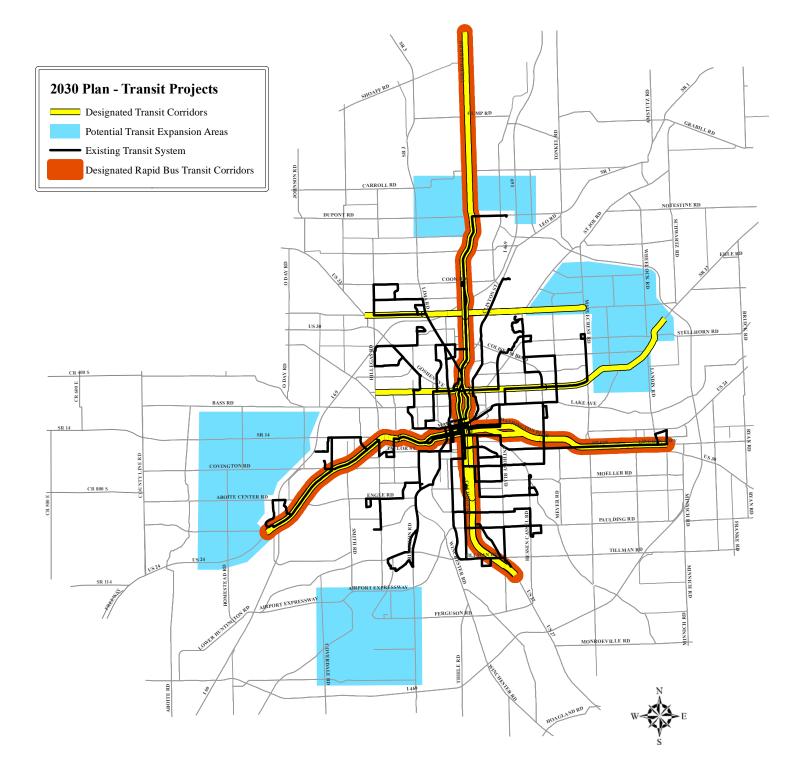


Figure 19

Recommended Year 2030 Transit System



Figure 20

Pedestrian and Bicycle Plan

The Recommended Plan

The recommended plan is a comprehensive list of transportation projects and policies carefully developed to meet future travel demands. The policies and projects were selected on their potential for mitigating congestion and improving mobility throughout the metropolitan area. A safe and efficient transportation system is the primary goal of the recommended plan.

Highway Improvements

New Construction

These projects enhance the mobility of drivers in areas that become increasingly important as the community grows. A more efficient system allows the traveler to take a quicker route reducing vehicle miles of travel, air pollution, energy consumption and travel delay.

New four-lane construction

Maplecrest Road from Lake Avenue to State Road 930

New two-lane construction

Ardmore Avenue from Airport Expressway to Lower Huntington Road Coombs Street from Maumee Avenue to Wayne Street North Glendale Drive from Jefferson Boulevard to North Bend Drive Spring Street from Wells Street to Spy Run Avenue

Widening Projects

Widening projects improve the accessibility of the area, add to street continuity and provide relief in congested areas. Relieving congestion also equates to a reduction in travel time, lower accident potential and improved air quality. Widening projects expand the capacity of the selected roadway by providing additional travel lanes. Added travel lanes are considered when less evasive congestion management strategies can no longer satisfy the travel demands.

Widen to six lanes

Clinton Street from Parnell Avenue to Auburn Road Interstate 69 from s/o Leesburg Road to s/o Coldwater Road Interstate 69 from s/o Coldwater Road to Dupont Road/State Road 1 Interstate 69 from Interstate 469 to US 24 Interstate 69 from Dupont Road/State Road 1 to Hursh Road Jefferson Boulevard from Illinois Road South to Main Street State Road 3/Lima Road from Ludwig Road to Dupont Road State Road 3 from Dupont Road to Gump Road

State Road 14/Illinois Road from Interstate 69 to Hadley Road

US 30 from Interstate 69 to US 33

US 30 from US 33 to Flaugh Road

US 30 from Flaugh Road to O'Day Road

Widen to four lanes

Adams Center Road from State Road 930 to Moeller Road

Aboite Center Road from Coventry Lane to Jefferson Boulevard

Ardmore Avenue from Taylor Street to Engle Road

Ardmore Avenue from Engle Road to Lower Huntington Road

Bass Road from Hillegas Road to Scott Road

Clinton Street from Auburn Road to Dupont Road/State Road 1

Dupont Road from Coldwater Road to Lima Road/State Road 3

Goshen Avenue from State Boulevard to Coliseum Boulevard/State Road 930

Hillegas Road from s/o Bass Road to Washington Center Road

Huguenard Road from Washington Center Road to Cook Road

Lake Avenue from Coliseum Boulevard/SR 930 to Reed Road

Lake Avenue from Reed Road to Maysville Road

Maysville Road/Stellhorn Road from Maplecrest Road to Koester Ditch

Saint Joe Center Road from Saint Joe Road to Reed Road

State Boulevard from Maysville Road to Georgetown North Boulevard

State Boulevard from Spy Run Avenue to Clinton Street

State Boulevard from Clinton Street to Goshen Avenue

State Road 1/Dupont Road from Interstate 69 to Tonkel Road

State Road 1/Leo Road from Tonkel Road to Union Chapel Road

State Road 1/Bluffton Road from Interstate 469 to State Road 116/124

State Road 14/Illinois Road from Hadley Road to Scott Road

State Road 14/Illinois Road from Scott Road to West Hamilton Road

State Road 14/Illinois Road from W. Hamilton Road to Allen/Whitley County Line

State Road 37 from Doty Road to Interstate 469

State Road 930 from Minnich Road to Brookwood Drive

Tonkel Road from Dupont Road/State Road 1 to Union Chapel Road

US 33 from Cook Road to Washington Center Road

US 33 from Cook Road to O'Day Road

US 33 from O'Day Road to State Road 205

Washington Center Road from Lima Road/State Road 3 to US 33

Wells Street from State Boulevard to Fernhill Avenue

Widening Projects - three lanes

Ardmore Avenue from Jefferson Boulevard to Taylor Street

Congestion Management Strategy Implementation

Congestion Management Strategies include improvements aimed at maximizing existing highway capacity. The construction of a center turn lane to allow left-turning vehicles to exit the busy through lanes resulting in less traffic conflicts and reduced accident potential. This category of projects may also include a turn lane extension for intersection or ramp movements where congestion is occurring. The extended turn lanes allow turning traffic to exit the through lanes improving flow and maximizing capacity. Intersection reconstruction projects improve intersection capacity and flow, negating the need to widen long sections of roadway. These projects may include adding turn lanes or realigning intersections to improve traffic flow. The reconstruction and realignment of roadway segments will improve safety and traffic flow. Certain roadway sections have varying lane configurations due to egress lanes, left turn lanes, and passing blisters. These projects will establish a consistent roadway design reducing motorist confusion and improving traffic flow. This category of projects also includes intelligent transportation system improvements such as signal modernization/interconnection and motorist information systems.

Center Turn Lane Improvement

Auburn Road from Cook Road to Interstate 469 Exit Ramp (3-lane)

Auburn Road from Dupont Road to Hursh Road (3-lane)

Bass Road from Hillegas Road to Scott Road (3-lane)

Coldwater Road from n/o Dupont Road to Union Chapel Road (3-lane)

Cook Road from Auburn Road to Coldwater Road (3-lane)

Covington Road from Scott Road to Homestead Road (3-lane)

Covington Road from Interstate 69 to Scott Road (3-lane)

Engle Road from Bluffton Road to Smith Road (3-lane)

Gump Road from State Road 3 to Auburn Road (3-lane)

Hadley Road from Illinois Road/State Road 14 to Covington Road (3-lane)

Jefferson Boulevard from Apple Glen Boulevard to South Bend Drive (5-lane)

Liberty Mills Road from Falls Drive to Homestead Road (3-lane)

Maysville Road from State Boulevard to Stellhorn Road (3-lane)

Saint Joe Center Road from Clinton Street to River Run Trail (5-lane)

Saint Joe Road from Evard Road to Mayhew Road (3-lane)

Saint Joe Road from Maplecrest Road to Eby Road (3-lane)

Union Chapel Road from Auburn Road to Tonkel Road (3-lane)

Wayne Trace from Oxford Street to Pontiac Street (3-lane)

Turn Lane Extension

Jefferson Boulevard from Lutheran Hospital Entrance to Interstate 69 Ramps

Intersection Reconstruction

Auburn Road and Cook Road/Auburn Road and Clinton Street

Clinton Street and Coliseum Boulevard

Clinton Street and Washington Center/St. Joe Center Road

Coliseum Boulevard and Pontiac Street Intersection

Cook Road and Huguenard Road Intersection

Coverdale Road, Winters Road and Indianapolis Road

Covington Road and Dicke Road/Covington Road and Hadley Road

Covington Road and Jefferson Boulevard/Covington Road and Getz Road/Getz Road and Jefferson Boulevard

Dartmouth Drive and Washington Center Road

Goshen Road and Lillian Avenue and Sherman Boulevard

Hadley Road, Bass Road and Yellow River Road

Homestead Road and US 24

Jefferson Boulevard, Rekeweg Road and N. Bend Drive

Leo Road and Mayhew Road

Ryan Road and Dawkins Road

Union Chapel Road at Leo Road/State Road 1

Intersection Realignment

Fritz Road/Hand Road at Dupont Road

Hand Road at Baird Road

Reconstruction and Realignment

Allen County/Whitley County Line Road from US 24 to SR 14

Carroll Road from State Road 3 and Coldwater Road

Coverdale Road from Indianapolis Road to Airport Expressway

Dupont Road from Pine Mills Road to Auburn Road

Flutter Road from Schwartz Road to St. Joe Road

Lake Avenue from Anthony Boulevard to Coliseum Boulevard

Landin Road from North River Road to Maysville Road

Maplecrest Road from Lake Avenue to s/o Stellhorn Road

Moeller Road from Green Street to Hartzell Road

Moeller Road from Hartzell Road to Adams Center

Ryan Road from Harper Road and Bremer Road

Saint Joe Center Road from Reed Road to Maplecrest Road

State Road 37 from Doty Road to Cuba Road

Till Road from Lima Road to Dawson Creek Boulevard

Wallen Road from Hanauer Road to Auburn Road

Other Highway Improvements

This category of highway improvements includes the construction and reconstruction of railroad grade separations, interchange construction and modifications, and the Congressional high priority corridor improvement for US 24 between Fort Wayne and Toledo (Fort to Port). These improvement projects will increase mobility and accessibility for transit, freight movement, and passenger vehicles.

New Railroad Grade Separation

Anthony Boulevard and Norfolk Southern Railroad Airport Expressway and Norfolk Southern Railroad

Reconstruct Railroad Grade Separation

Anthony Boulevard and CSX Railroad US 27/Lafayette Street and Norfolk Southern/CSX Railroads

Congressional High Priority Corridor Improvement

US 24 from Interstate 469 to Bruick/Ryan Road including interchange

US 24 from State Road 101 to Indiana/Ohio State line including interchange (outside MPA)

US 24 from Bruick/Ryan Road to Webster Road including interchange (outside MPA)

US 24 from Webster Road to w/o State Road 101 (outside MPA)

Interchange-New Construction

Interstate 69 at Hursh Road

Interchange-Modification

Interstate 469 and US 24 Interchange US 30 and US 33 Interchange Interstate 469 and US 30 Interchange

Additional Projects for Illustrative Purposes

Widening Projects - six lanes

Interstate 469 from Maplecrest Road to Interstate 69 State Road 930/Coliseum Boulevard from Parnell Avenue to Crescent Avenue US 24 from Interstate 69 to Homestead Road

Turn Lane Extension

State Road 3 from Interstate 69 to Washington Center Road (south bound)

Intelligent Transportation System-Motorist Information\Dynamic Message Signs

US 30 west of Interstate 69

US 30 east of Interstate 469

Intersection Reconstruction

State Road 1/Leo Road and Amstutz Road State Road 14/Illinois Road and Allen/Whitley County Line Road

Reconstruction and Realignment

US 27/Clinton Street from State Boulevard to Fourth Street

Interchange – Modification

Interstate 69 and Coldwater Road Interchange - Ludwig Road Interstate 69 and US 30/33/SR 930 Interchange Interstate 469 and State Road 1/Bluffton Road Interchange Interstate 469 and US 27 Interchange

Bridge Reconstruction/Modification

Bass Road over Interstate 69
Covington Road over Interstate 69
Ellison Road over Interstate 69
Hillegas Road over Interstate 69
US 27/Clinton Steet Bridge over St. Mary's River w/Pedestrian Treatment
US 27/Spy Run Avenue Bridge over St. Mary's River w/Pedestrian Treatment

Highway Policies

Interchange Review

As areas adjacent to interchanges on Interstates 69 and 469 develop, access at these locations must be carefully planned in order to preserve the ability of the interchanges to function safely and efficiently. It is recommended that the Northeastern Indiana Regional Coordinating Council, local government, and Indiana Department of Transportation carefully review these developments and their corresponding impacts on the interchange. In addition, as traffic volumes increase at interchange locations, the interchange performance should be periodically reviewed to determine if modifications are necessary to maintain acceptable levels of service.

Access Management Policies

The lack of access management of the roadway system is a major contributor to accidents and has been a leading cause behind the functional deterioration of our region's roads. As new accesses are built and traffic signals installed, speed and capacity on roadways decrease, and congestion and hazards increase. NIRCC will continue its access management program following guidelines as established in the Access Standards Manual and Site Impact Analysis Guide. The access management guidelines will be implemented to help preserve the integrity of the region's road system. Corridors will continue to be identified where access management guidelines should be used and specific techniques and strategies will be developed for each corridor.

Right of Way Acquisition Policies

The acquisition of right of way is an important part of meeting future travel needs. As travel patterns change, corridors and intersections must be upgraded to handle new demands. Local efforts will continue to identify locations where sufficient right of way should be acquired to accommodate future increases in travel demand.

Planning Process Policies

In order to insure that the long-range goals of the community are realized, it is necessary that there exist an interaction between transportation planners and the implementing agency during project

design. Efforts will continue to formalize the coordination between transportation planning and project implementation.

Transit Improvements

The transit improvements are listed in one category titled system modifications. This category of transit improvements includes route modifications, capital projects, and service modifications designed to increase transit efficiency and improve transit service. Reducing headways, providing Sunday service, potential transit expansion areas, and developing a downtown intermodal transportation center are examples of these projects. Equally important are the transit policies guiding future transit growth, methods of service delivery, and transit efficiency.

Transit Improvement Projects

Expanded transit service in the growing urbanized area. Potential locations include the Fort Wayne International Airport and surrounding area, Aboite, Perry, and Cedar Creek Townships. Types of service will be determined based upon projected demands and proposed service levels.

Design and construct a downtown intermodal transfer/transportation center.

Replacement of transit coaches and service vehicles necessary to maintain a dependable transit fleet.

Install and upgrade bus shelters, benches, and other customer amenities.

Reduce headways on selected routes where ridership warrants.

Expand service hours and provide Sunday service through fixed route and / or other types of transit services.

Provide customer access to automatic vehicle locator (AVL) information for the transit system through Internet connections.

Design and construct a satellite transfer center to serve the northern portion of the service area.

New Haven route and Georgetown route and interconnect.

Encourage the construction of pedestrian facilities to and from bus stop locations and within developments.

Designate corridors to include amenities that allow busses to safely pull off the corridor to load and unload as well as provide safe pedestrian facilities. These corridors should include Lafayette

Street/Spy Run Avenue, Clinton Street, Washington Boulevard, Jefferson Boulevard/Maumee Avenue, State Boulevard, and Washington Center Road.

Designate "Rapid Bus Transit" corridors that may use dedicated transit lanes and signal preemption.

Specific Improvements from the Transit Development Plan

Extend evening hours for Routes 2 (Times Corners – Georgetown), 3 (Canterbury via IPFW – Village Woods), 4 (Wells Ludwig – Parkview), 7 (Anthony / Oxford), &8 (Calhoun/Tillman Rd and Glenbrook/Northrop)

Increase service frequency for Route 4 (Wells Ludwig – Parkview) initially to 30-minutes for peak periods and eventually to 30-minutes for entire day

Implement Sunday Service on Routes 2 (Times Corners – Georgetown), 3 (Canterbury via IPFW – Village Woods), 4 (Wells Ludwig – Parkview), 7 (Anthony / Oxford), & 8 (Calhoun/Tillman Rd and Glenbrook/Northrop) on 60-minute headways

Increase service frequency for Route 2 (Times Corners – Georgetown) to 30-minutes for entire day

Increase service frequency for Route 1 (Waynedale via Broadway – Northcrest) & Route 10 (New Haven) to 30-minutes for peak periods

Implement new route between Glenbrook and the I-469 / Maysville area

Increase service frequency for Route 6 (Centlivre/Franke Park – McKinnie) & Route 9 (Brooklyn/Taylor – St Francis/Gateway) to 30-minutes for entire day

Update Transit Development Plan

Transit Policies

In the urbanized portion of the Metropolitan Planning Area where fixed route transit service is the most efficient means of providing public transit, Citilink fixed route transit service will remain as the service of choice. Where fixed route transit service cannot meet established performance standards, other types of transit service will be investigated.

As the urbanized area grows, transit service should be expanded to meet the transit demands of the community. Decrease headways where demands warrant.

Public transportation has an important role in clean air strategies, energy conservation, congestion management and meeting the needs of transit dependent populations.

Land use policies should address the transit need for accessibility to private development through street and subdivision design. The land use planning approval process should include pedestrian and public transportation issues and recommendations from appropriate providers and committees.

Citilink should have a role in urban core redevelopment. Transfer facilities and redevelopment efforts can be mutually supportive. Specific projects such as a downtown intermodal transfer/transportation center and the recently completed Hanna/Creighton community center can compliment and encourage redevelopment activities.

Citilink should continue to implement appropriate non-traditional transit services and evaluate vehicle type, design, and propulsion when purchasing new capital equipment. This may include the investigation and promotion of additional transportation services such as telecommuting, ridesharing, and van pools. Providers should also be encouraged to explore hybrid-propulsion and bio-diesel technology.

Citilink, Community Transportation Network, Allen County Council on Aging, Turnstone and other providers should be partners in the provision of specialized transportation services and access all potential financial resources to meet these specialized transportation needs.

Investigate the possibility of the provision of non-fixed route transportation services in the Metropolitan Planning Area provided through the recently incorporated Community Transportation Network (CTN).

Transportation policies should continue to be developed with opportunities for involvement by taxi and other private providers.

Bicycle, Pedestrian and Enhancement Improvements

Current Proposed Enhancement Projects

Broadway Corridor/Pedestrian Walkway-New Haven Sidewalk and Streetscape improvements on Broadway and State Street

Aboite New Trails-Allen County

Trail along Covington Road from W. Hamilton Road to w/o I-69 Trail along Homestead Road from US 24 to s/o NWACS

Fort Wayne Parks and Recreation

Trail along Anthony Boulevard from Concordia High School to IPFW Bridge Trail along Coliseum Boulevard from Anthony Boulevard to Appleseed Park

Financial Plan

The financial plan demonstrates the ability of local and state governments to maintain the existing transportation system and implement improvements to meet future travel demands. This financial component of the transportation plan compares the estimated revenue from existing and proposed funding sources, which are reasonably expected to be available for transportation expenditures, to the estimated costs of constructing, maintaining, and operating the total transportation system. The financial plan covers the twenty-five year period of the transportation plan.

The most important aspect of implementing the 2030 Transportation Plan is securing the necessary funding for project completion. The plan was developed to be fiscally reasonable based on the projected amount of available local and federal funding for the next 25 years. The plan's implementation depends on both the Indiana Department of Transportation and the local jurisdiction's funding resources.

Highway

Ensuring that the plan was fiscally constrained took several steps. The first step was to prepare an estimate of the amount of funds available for the next 25 years. This was done for Allen County and the cities of Fort Wayne and New Haven. The estimate was based on each jurisdiction's historical funding practices. Concurrently with the financial resources forecast, all of the projects in the plan were identified and the type of improvement necessary was determined. This includes all the projects that are the responsibility of local governments to implement.

The projects in the plan that are the responsibility of the Indiana Department of Transportation are consistent with State of Indiana 2030 Long-Range Transportation Plan. It is assumed that the State if Indiana and the Indiana Department of Transportation will have sufficient funds to implement projects on State Roads, US Routes, and Interstates as identified in this plan. The state system is an integral part of the transportation system in the Metropolitan Planning Area. In order for the state

to assist local government in the implementation of the transportation plan, it is incumbent on the state to develop a long-range strategy addressing the construction and maintenance of the transportation system. This strategy should be independent, yet complementary of federal funding policies. Such a strategy will contribute to economic health and development of communities within the state. Areas should receive a fair share of state and federal funds proportional to their population, vehicle ownership, and tax contributions.

Projects under local governmental jurisdictions were identified and the cost of each project was determined. Costs were divided into preliminary engineering, right-of-way acquisition, and construction. Finally, the costs of the projects and the amount of available funding were compared to determine the feasibility of the projects being completed in the next 25 years. The projects are separated into Local Urban Projects on Table 7 and State Urban Projects on Table 8.

Local Funding

Local governments predominantly rely on Motor Vehicle Highway (MVH), Local Roads and Streets (LRS), and local wheeltax funds for highway maintenance, administration, and construction expenditures. Additional funds such as Economic Development Income Tax (EDIT) and County Option Income Tax (COIT) are also used for highway maintenance and construction projects. The construction expenditures fund local construction and reconstruction projects, and provide local-matching funds for federally funded projects. The remaining funds are for operation, administration, and maintenance costs.

A forecast of federal funding available to the Fort Wayne urbanized area for the next 25 years was also completed at this time. This estimate was based on historical federal funding practices. Currently, the Fort Wayne urbanized area receives approximately 5.8 to 6.5 million dollars in federal funds each year. This equates to approximately 145.0 to 162.5 million dollars in federal funds for the urban area throughout the span of the transportation plan.

Local governments including Allen County, City of Fort Wayne, and City of New Haven have annual revenues of 20.6 million dollars dedicated to transportation operations, maintenance, and

construction. In addition, Economic Development Income Taxes generate millions of dollars each year of which a substantial portion is dedicated to highway construction projects. The amount of these funds spent on transportation projects varies from year to year. On average, local governments spend between 6 and 10 million dollars a year on construction and reconstruction projects. This equates to between 150 to 250 million dollars for the twenty-five year period of the plan.

The estimated combined federal and local dollars available for supporting the local projects in the plan ranges from 295 to 412.5 million dollars. A list of the local projects and their estimated costs for preliminary engineering, right-of-way and construction is provided in Appendix F. The total estimated cost for the preliminary engineering, right-of-way acquisition, and construction phases for the local projects is 261 million dollars including committed projects. This indicates that the highway projects included in the 2030 Transportation Plan can be funded through the combination of federal and local funds. The 2030 Transportation Plan is therefore financially feasible.

Transit

The key to understanding sources of revenue available to Citilink (formerly the Fort Wayne Public Transportation Corporation-FWPTC) in the future is to comprehend the current funding available and what the growth has been of these funds in the past. Citilink receives operating and capital subsidies from three primary sources: the Federal Transit Administration; the State of Indiana's Public Mass Transportation Fund (PMTF); and local funds including taxes and miscellaneous revenues.

Federal Funding

Since 1995, operating and capital funds allocated at the federal level have fluctuated. Federal operating funds allocated in 1995 were 955,204 dollars. In 1998, the last year Citilink received Federal operating assistance, they received 92,844 dollars. Since 1998, Citilink has not received any Federal operating assistance. The apportionment of Federal capital assistance funds has fluctuated from a high of 2.32 million dollars in 2004, to a low of 642,613 dollars in 1995. The combination of Federal operating and capital subsidies under the Section 5307 (formerly Section 9) have generally increased since 1995. Citilink received a total of 1.6 million dollars in 1995. Currently,

the capital assistance of 2.32 million is the sole source of Federal funds.

It is anticipated that Citilink will continue to receive Federal Capital assistance at the current rate of 2.32 million dollars annually. Citilink also currently has a carry-over balance of approximately 2.0 million dollars. Over the duration of the 25-year Transportation Plan, Citilink will have approximately 60.0 million dollars in federal assistance for capital projects. Assuming the 80:20 percent ratio of federal to local funds remains, 15.0 million dollars in local matching funds will be needed. These local matching funds will come primarily from the cumulative capital fund, local tax dollars and funds raised from the sales of obsolete equipment. The combination of federal and local dollars for capital projects totals 75.0 million dollars.

State Funding

The State of Indiana Public Mass Transportation Funds (PMTF) can be used for capital or operating assistance. The source of these funds is a fixed percentage of the Indiana State sales tax. The current fixed percentage is approximately 0.64 percent. These funds are allocated based on a performance-based formula with an emphasis on system efficiency.

Citilink has historically used state funding for operating purposes. State funding to Citilink has fluctuated between 1.25 and 1.51 million dollars since 1995. The 1995 allocation was 1.25 million dollars. In Fiscal Year 2004, Citilink expects to receive 1.49 million dollars. State funding is expected to remain relatively stable over the next few years. During the twenty-five year period of the plan, the state funds will provide approximately 37.3 million dollars for operating expenses.

Local Funding

The FWPTC receives local funds from the following sources: local taxes, municipal garage, farebox, miscellaneous income, demand response, and bus lease. Revenue from these sources utilized for general-operating costs was approximately 5.0 to 5.5 million dollars for the years 2002 through 2004. These funds, primarily obtained from property taxes, are expected to gradually increase throughout the duration of the Transportation Plan. Local property taxes are allowed to rise 5% per

year. A conservative estimate based on the local revenue for the year 2004 should provide approximately 137.5 million dollars over the twenty-five year period covered by the plan. These funds will be used primarily for operating funds.

A local cumulative capital fund deriving revenue from a dedicated portion of the local property tax is utilized for matching federal capital assistance. This fund currently provides 300,000 dollars annually. Citilink generally carries a balance of approximately 650,000 dollars. This local capital fund should provide an estimated 7.5 million dollars over the next twenty-five years.

Summary of Financial Plan

The majority of the transit improvements proposed in this Transportation Plan are relatively minor modifications to the existing system. The downtown intermodal transfer/transportation center is the only major capital improvement project proposed in the 2030 Transportation Plan. The total costs for this project are uncertain at this time. Additional financing for this project has been secured from discretionary funds. The remaining improvements can be financed through current operating and capital revenue sources. The anticipated primary capital investment over the duration of the Transportation Plan will be fleet replacement. The anticipated revenue stream coupled with cost containment will provide the necessary resources to finance these improvements. The Citilink will be able to maintain transit service for the duration of the Transportation Plan.

Other Transportation Modes

Pedestrian Walkway and Bicycle Transportation Facilities

The transportation planning process administered by NIRCC has over the years included pedestrian and bicycle transportation facilities. These components were typically included as part of the Transportation System Management Program or covered under specific projects and programs. The 2015 Transportation Plan was the first transportation plan to formally include pedestrian walkway and bicycle facilities. The transportation planning efforts have continued and improved for pedestrian and bicycle facilities as a component of the planning process. The 2030 Transportation Plan supports these efforts with a significant emphasis on pedestrian and bicycle facilities.

Bicycle and Pedestrian Plan

Major bicycle and pedestrian systems within the metropolitan planning area provide unique opportunities for alternative modes of travel. With the exception of pedestrian corridors within the Fort Wayne Central Business District, the existing pedestrian and bikeway systems have historically been primarily used for recreation purposes. The existing and proposed systems do have the potential to serve other trip purposes as well. These and other existing facilities have been identified and will continue to be evaluated to determine their potential for accommodating all types of pedestrian and bicycle trips.

Major pedestrian corridors in the Fort Wayne Central Business District have been identified by the Fort Wayne Redevelopment Commission as part of their overall Redevelopment Plan. Surface sidewalks primarily fronting on city streets and second story skywalks linking buildings and parking facilities serve these corridors.

The primary and secondary pedestrian corridors identified in the Fort Wayne Central Business District are listed below.

Primary Pedestrian Routes

Berry Street from Harrison Street to Barr Street Calhoun Street from Jefferson Boulevard to Colombia Avenue Wayne Street from Harrison Street to Barr Street

Secondary Pedestrian Routes

Barr Street from Jefferson Boulevard to Headwaters Park
Berry Street from Fairfield Avenue to Harrison Street
Calhoun Street from Columbia Avenue to Headwaters Park
Calhoun Street from Jefferson Boulevard south to the Penn Central Railroad
Harrison Street from Jefferson Boulevard north to Headwaters Park
Main Street from Lafayette Street to Harrison Street
Wayne Street from Fairfield Avenue to Harrison Street
Webster Street from Washington Boulevard to Berry Street

The City of New Haven has also developed a sidewalk pedestrian plan and is actively improving their pedestrian corridors. Sidewalks throughout the Metropolitan Planning Area have recently been a subject of significant debate. The bicycle/pedestrian component of the Transportation Plan addresses sidewalks as a general policy, identifying streets by classification that are recommended

for pedestrian accommodations. In addition, the bicycle/pedestrian component address recommended bicycle treatments throughout Allen County including trails, bike lanes, wide curb lanes and paved shoulders.

The bicycle/pedestrian component of the Transportation Plan is referred to as the "Comprehensive Bicycle and Pedestrian Plan." The Comprehensive Bicycle and Pedestrian Plan was developed by the Northeastern Indiana Regional Coordinating Council (NIRCC) in conjunction with the Northeastern Indiana Regional Bicycle and Pedestrian Forum. The plan is displayed in figure 20. The Forum is a task force comprised of governmental parks, planning and highway agencies, advocacy groups, and special project organizations. The Forum has been meeting since its conception in May of 2002.

The Comprehensive Bicycle and Pedestrian Transportation Plan represents a combination of plans completed by local groups (Aboite New Trails, Greenway Consortium, Northwest Allen Trails, Little River Wetlands, Fort Wayne, and New Haven) and selected routes identified by the forum. The identified routes that the forum has added to the plan are routes that are in need of bicycle treatment. These selected routes are based on an analysis of significant destinations and points of interest within the region, local bicycling activity, existing roadway and trail conditions, and proposed roadway and trail conditions. These routes have been prioritized and recommended for enhancement and protection.

The Forum created a design classification system from the Proposed Allen County Road Specifications and Standards 2004 manual for designing the identified routes on the bicycle-pedestrian transportation plan. This design classification system will give planners and highway officials design standards to follow as they coordinate them with present and future road projects. By mapping out these design classifications the bicycle-pedestrian transportation plan will be assured of having the appropriate continuity throughout the prioritized route system.

The design classification system used for the on street component of the plan consists of three different classes. There are bike lanes, wide outside curb lanes, and shoulder lanes. The off street design classification system consists of shared use paths and sidewalks. The forum has added the

local plans mentioned above for the off street proposed system. Besides the local group efforts that are, for the most part, geared toward off street systems, the forum has developed a sidewalk policy to add to the comprehensive bicycle and pedestrian plan.

The four county region represented by NIRCC has many individuals and organizations advocating improvements to the existing bicycle-pedestrian transportation system. To coordinate these efforts, NIRCC sponsors the Northeastern Indiana Regional Bicycle and Pedestrian Forum which represents a task force designed to develop and maintain a bicycle and pedestrian plan. Since the inception of the Forum, a great deal of staff effort has been devoted to assembling the database for the group's planning efforts and to using the information to develop a set of GIS maps. Upon request, staff makes these maps available to the public to assist in bicycle-pedestrian projects and planning.

One of the goals of the Forum is to develop a bicycle-pedestrian transportation plan for the region. The Forum began this effort early in calendar year 2003 by focusing on the region's rural areas. By the end of fiscal year 2004 the Forum nearly completed the planning process for the rural areas of Allen County along with planning the connectivity with surrounding counties such as Adams, Dekalb, and Wells. The Forum also completed most of the planning for areas within the more urbanized study area. The concept is to develop a planning tool for planners and highway officials by identifying a prioritized set of routes based on an analysis of significant destinations within the region. These routes will then be recommended for enhancement and protection.

Once the prioritization process was complete the Forum began assigning a classification system to the proposed set of routes on the bicycle-pedestrian transportation plan. This classification system provides planners and highway officials design standards to follow as they coordinate them with present and future road projects. By mapping out these design classifications the bicycle-pedestrian transportation plan assures the appropriate continuity throughout the prioritized route system. The design classifications of the plan are as follows:

Design Classification for Routes

Bike Path (Class I): A separate paved multipurpose trail for the principal use of bicycles

and other non-motorized modes. Bike paths are 10 feet wide except in high usage areas where they should be 12 feet wide.

Bike Lane (Class II): A portion of the road that is designated by pavement striping for exclusive bicycle use. Bicycle lanes may be signed as part of a directional route system. Bicycle lanes are five feet wide on a curbed road and minimum four feet wide as a shoulder bike lane.

Wide Curb Lane (Class III): A road that provides a widened paved outer curb lane to accommodate bicycles in the same lane as motor vehicles. Lane width shall be increased at least three feet.

Shoulder: A lane contiguous to the traveled way but separated by a stripe. Most common in rural areas or on rural designed roadways. Typically shared with pedestrians and occasional emergency vehicle access.

Shared Roadway: All roads not categorized above where bicycles share the roadway with motor vehicles.

Numerous maps and data sources were utilized in developing the bicycle and pedestrian plan. This information formed the basis from which decisions on route selections were derived. A substantial level of effort and resources were dedicated to developing and reviewing the information. The list below provides the type of information included in this process.

Characteristics Maps

- Water features
- Existing railroad
- Abandoned railroad
- Highways
- Local roads
- Gravel roads
- Average daily traffic volumes

- Truck % by traffic volume
- City / town boundaries
- AEP transmission Lines

Local, National, & Club Bike Routes

- ACD Parade Safari Bike Route
- WBNI Bike Route
- N.E.A.T. (Northeast Allen Tour)
- Three Rivers Velosport Routes
- Bikecentenial (Adventure Cycling Association) national bike route
- Flat 50 Bike Routes
- Suggested Route By Charlie Meyer
- Adams, Allen, Dekalb, & Wells counties
- Railroads
- Highways
- Local roads
- City / town boundaries

Points of Interest for Allen County

- Attractions, Bike Shops/Sales, Fitness Centers, Hotels, Ice Cream Shops, Libraries, Schools, Universities/Colleges, Shopping Centers
- Parks
- Three Rivers
- Highways
- Local roads
- City / town boundaries

Traffic Volumes and Speed Limits for Allen County

- Average Daily Traffic Volumes
- Truck % by Daily Traffic Volume
- Speed Limits
- Highways
- Local roads
- Gravel roads

Proposed or Existing Trails for Allen County

- Greenway Consortium Plan
- Aboite New Trails Plan
- New Haven Comprehensive Trails and Pedestrian Walkways Master Plan
- Northwest Allen Trails
- Little River Wetland Project

- Parks
- Three Rivers
- Highways
- Local roads
- City / town boundaries

Roadway Related Structures From Street Centerline Data for Allen County

- Stop Signs, Yield Signs, Traffic Signals, Railroad Crossings, Bridges / Culverts
- Three Rivers
- Highways
- Local roads
- City / town boundaries

Bicycle and Pedestrian Accidents for Allen County along with TIP Projects

- INDOT projects FY 03-05
- Local TIP projects FY 03-05
- Bicycle Pedestrian Accidents 2001-2002
- Highways
- Local roads
- Gravel roads

Inter/Intra - Regional Rural Bicycle Plan - Destinations and Connections

- Fort Wayne/New Haven to County Seats, Population Centers, Parks & Recreation Areas
- County Seats to County Seats, Population Centers, Parks & Recreation Areas
- Population Centers to Population Centers and Parks & Recreation Areas
- Water features
- Existing railroad
- Abandoned railroad
- Highways
- Local roads
- Gravel roads
- Cities / towns
- Adams, Allen, Blackford, Dekalb, Grant, Huntington, Jay, Lagrange, Noble, Stuben, Wells, Whitley counties

In addition to the proposed bicycle and pedestrian system, excellent trail systems have been established in the Cities of Fort Wayne and New Haven. The larger of the two systems, located in Fort Wayne is referred to as the Rivergreenway. This system connects many parks and other points of interest. The New Haven is also a superb system that connects parks and community facilities. New Haven has a project under construction that will connect their system with the Rivergreenway.

The narrative below describes the existing systems.

Existing Bikeway/ Pedestrian system:

City of Fort Wayne

Separated bicycle/pedestrian paths

Five foot (8=) wide asphalt path

Johnny Appleseed Park to Traders Point- 3.60 miles.

Eight foot (8=) wide asphalt path

Traders Point to Tillman Park- 7.42 mile

On-street bicycle lanes (Represents part of the total Rivergreenway system and is on surface streets due to space of right-of-way problems)

Thieme Drive-.33 miles

Julliette Avenue/Brown Street-.44 miles

Vesey Avenue-.37 miles

The total distance of the Rivergreenway system within Fort Wayne's city limits is 12.16 miles. A new section of trail connecting Swinney Park to Rockhill Park was recently completed along Jefferson Boulevard. This section adds approximately 0.90 mile to the Rivergreenway system.

City of New Haven

Separated bicycle/pedestrian paths

.87mile hiking trail within Heatherwood Park

1200 feet of path through Moser Park.

On-street bicycle lanes

N/A

Designated bicycle routes

N/A

Allen County

Separated bicycle/pedestrian paths

Maumee River widening pathway (Pemberton Drive to Maumee Park, part of

Rivergreenway)- 3 miles

On-street bicycle lanes

N/A

Designated bicycle routes

N/A

Proposed Addition to the Bikeway/Pedestrian System:

City of Fort Wayne

Johnny Appleseed Park to Shoaff Park- 2.84 miles

This section would complete the Rivergreenway system within the city limits of Fort Wayne, traveling from the northernmost park (Shoaff) to the southernmost park (Tillman).

City of New Haven

Anticipated bikeway/pedestrian system: New Haven Greenway (4.3 miles) blacktop/sidewalk connecting many parks in the City of New Haven. The Greenway uses city sidewalks, Railroad right-of-way, wooded and flood plain areas. An additional link (1.75 miles) currently under construction will connect the New Haven/Adams Township Park Department's trail to the Fort Wayne Rivergreenway at Kreager (Maumee) Park.

Allen County

The Leo-Cedarville to Grabill pedestrian/bicycle path, currently under construction, will connect the Town of Leo-Cedarville with the Town of Grabill. This will create a pedestrian/bicycle corridor for the citizens to utilize. The trail will also provide access to a park located on the Cedarville Reservoir.

Existing: Programs, ordinances and other requirements designed to encourage pedestrian/bike travel

Subdivision Control Ordinances in all three jurisdictions require sidewalks on at least one side of the street in all new subdivisions (with very limited exceptions in rural areas). The city of Fort Wayne requires sidewalks on both sides of each street and within activity centers. The Allen County Plan Commission currently follows a policy of requiring pedestrian/bike connections between residential areas and activity centers in all new development where applicable

The Comprehensive Bicycle and Pedestrian Plan will serve as a tool those guides future trail and bicycle projects. The Rivergreenway bikeway/pedestrian trail serves as a multi-jurisdictional system as it is extends through Fort Wayne, Allen County and New Haven along the St. Joseph, St. Mary's and Maumee Rivers. Portions of the trail are yet to be constructed, but once completed the system will provide approximately 25 miles of transportation access to activity centers and downtown areas within the three jurisdictions. As depicted in the plan, numerous trails are being considered beyond the traditional Rivergreenway system. As the plan is implemented, many additional miles of trails and bikeways will be developed.

Recently Completed Projects

City of Fort Wayne

The Historic Wells Street Bridge reconstruction provides pedestrian/bike access from downtown Fort Wayne (Superior Street) north to the Bloomingdale Neighborhood/Wells Street Merchants area as well as to the Rivergreenway. Also, a 500 foot trail link connects downtown and Wells Street/Bloomingdale neighborhoods to Headwaters Park.

Headwaters Park on the east and west side of Clinton Street contains approximately 3 miles of pedestrian/bike path. It interconnects with both the downtown business district with the Rivergeenway and the Wells Street-Bloomingdale neighborhoods via the historic Wells Street Bridge.

A trail connecting Swinney Park with to Rockhill Park was recently completed. The trail is approximately 0.9 miles long and runs along the north side of Jefferson Boulevard. This trail provides the opportunity to extend the system further west connecting neighborhoods and major commercial areas.

City of New Haven

A pathway was completed through Moser Park consisting. This pathway connects the park with the surrounding sidewalk system and allows pedestrians/bicycles an alternative passage through the park separate from vehicular transportation.

A pathway connecting Moser Park in New Haven to Kreager Park in Fort Wayne is currently under construction. This project will be completed in 2005 and provides a critical link between the Rivergreenway system and New Haven trail system.

Allen County

Allen County, in conjunction with the Towns of Grabill and Leo-Cedarville, is construction a trail between the two Towns along Grabill Road. The trail will provide a safe facility for pedestrian and bicycle traffic. The trail will be approximately 2 miles in length.

Transportation Enhancement Activities

Transportation enhancement activities represent non-traditional highway and transit projects for which special funding was originally authorized under the Intermodal Surface Transportation and Efficiency Act (ISTEA). The transportation enhancement activities have been continued with support from the Transportation Equity Act for the 21st Century (TEA-21). Such projects can include bicycle paths, roadside landscaping, water run-off mitigation, and historic preservation of transportation facilities. The Northeastern Indiana Regional Coordinating Council continues to work with area citizens and various departments of New Haven, Fort Wayne, and Allen County to identify

and develop viable transportation enhancement activities.

Since the passage of ISTEA, a number of enhancement projects have been identified and implemented. A number of other projects are under construction or have pending grant applications. The current status of enhancement projects is provided in Table 9. Staff will continue to work with community groups and local governments to identify potential projects, incorporate selected projects into the transportation plan, and pursue implementation of selected projects. Many of these projects are components of the Pedestrian and Bicycle Plan.

Intelligent Transportation System (ITS) - architecture

The Intelligent Transportation System (ITS) represents the modernization of the transportation system through the application of new technology. The new technology includes the latest in computers, electronics, communication and safety systems. ITS can be applied to the transportation infrastructure including highways, streets, and bridges. Technology is also being developed for vehicles including cars, buses, trucks, and trains. The information and computer technologies can be used to better manage the transportation system. The Fort Wayne-New Haven-Allen County Metropolitan Planning Area has completed the regional ITS architecture. A document titled "Allen County Regional ITS Architecture" was completed in 2005. This document serves as the planning tool for ITS programs and projects in the Metropolitan Planning Area.

The Northeastern Indiana Regional Coordinating Council sponsored several special sessions of the Transportation Technical Committee to discuss ITS options. This meeting was to familiarize the members with ITS strategies and begin discussing coordination issues between the trafficengineering specialist from local government and the District office of the Indiana Department of Transportation. As new technology becomes available, and strategies have been identified to improve the transportation system. ITS will play an increasing role for traffic management in the metropolitan area. The Transportation Technical Committee will continue to review strategies and work to refine a coordinated intelligent transportation system for the metropolitan planning area.

Table 9
Current
Enhancement Projects

| Project | Status |
|--|---|
| Baker Street Train Station Restoration | Completed |
| Pedestrian Bicycle Facility IPFW | Planning Stage Grant Application Submitted |
| Allen County/Aboite New Trails | Planning Stage Grant Application Submitted |
| New Haven Pedestrian/Bicycle Trail | Grant Awarded Project Under Construction |
| Nickel Plate Railroad Steam | Grant Awarded |
| Locomotive #765 Restoration | Under Construction |
| Fort Wayne | Completed |
| Jefferson Boulevard Trail | |
| Fort Wayne | |
| Northwest Allen Trails | Grant Awarded |
| Abandoned Railroad Acquisition | |
| Fort Wayne | Grant Awarded |
| Urban Trails Project | Under Design |
| New Haven | Planning Stage |
| Broadway Pedestrian Corridor | Grant Application Submitted |
| Fort Wayne | Planning Stage |
| Rivergreenway Extension | Grant Application Submitted |

ITS Completed and Planned Improvement Projects

Three primary areas have been identified for ITS strategy implementation for the transportation system in the metropolitan area. One typed of project includes the installation of dynamic message signs (DMS) on major corridors in the metropolitan area. Two DMSs have been installed on Interstate 69, one north of Dupont Road/SR 1 interchange and one south of the Interstate 469/Lafayette Center Road interchange. Two additional DMSs have been proposed for the US 30 corridor east and west of the metropolitan area. These signs alert motorist coming into the

metropolitan area to possible delays on the highway system. Motorist will then have the option of selecting an alternate route to circumvent the congestion. The Indiana Department of Transportation is responsible for installing and operating this project.

The City of Fort Wayne recently completed a total upgrade the computerized traffic control system to monitor and communicate with several hundred traffic control signals. The system is currently hard-wired but is capable of upgrading to fiber optics. The system has sufficient capacity for expansion to include additional signals. The system is also capable of adding video surveillance to assist in congestion management and incident management. This project will improve the ability of local traffic engineers to manage traffic control devices to maximize traffic flow.

Citilink has adapted ITS technology for the transit fleet. The transit operator has equipped all transit coaches with automatic vehicle locators (AVL). This project has provided the transit dispatchers with the ability to track each vehicle throughout the system. This information will assist in dispatching vehicles, monitoring performance, and improving system efficiency. A planned expansion of this program will allow the vehicle location information to be sent to the Internet through Citilink's website to provide transit customers with real time information on the status of the transit bused. Transit customers will be able to more efficiently determine when to meet their bus and minimize wait time.

The transportation planning process will continue to explore and coordinate ITS strategies. As new technology becomes available, feasible strategies will be implemented to improve the efficiency of the transportation system. Highway and transit systems will both benefit from ITS applications. The ITS architecture will be reviewed and revised on a periodic basis.

Summary of Selected Plan

The plan represents a dynamic process whereby evaluation and analysis is a continuous effort of fine tuning and harmonizing the various components. The implementation of the plan requires a constant level of initiative among government agencies, local businesses, and area residents. The plan requires cultivation and considerable attention to ensure the improvements and policies are achieved. Chapter 7 will address particular activities necessary to strengthen the plan and achieve the stated objectives for the community.

Chapter 7

FUTURE EFFORTS AND IMPLEMENTATION

The dynamic characteristic of a transportation plan necessitates the continuous implementation, reevaluation, and assessment of its policies and improvement projects. This process is probably the most important aspect of the plan, otherwise it quickly becomes obsolete. Continual attention to the plan by the community, the Urban Transportation Advisory Board, the Cities of Fort Wayne and New Haven, Allen County, and the State of Indiana, is essential to meet the desired objectives. In this manner, the plan will guide transportation investment and service decisions in support of a transportation system that will meet existing and future travel desires.

The implementation of transportation policies and improvement projects documented in the transportation plan require a consorted interest and level of commitment necessary to make them reality. In support of this approach, there are several specific endeavors that will be pursued to ensure the policies and improvement projects are gradually implemented. These areas include but are not limited to some of the following plans and studies aimed at supporting the objectives of the transportation plan.

Status of Previous Transportation Plans

The transportation planning process was initiated in the late 1960's for the Fort Wayne-New Haven-Allen County Metropolitan Planning Area. Since the inception of the transportation planning process, numerous highway and transit improvements have been implemented based upon the recommendations of transportation plans. Completed highway improvements are shown in Figure 21. Many transit improvements have also been made which increase the mobility of area citizens.

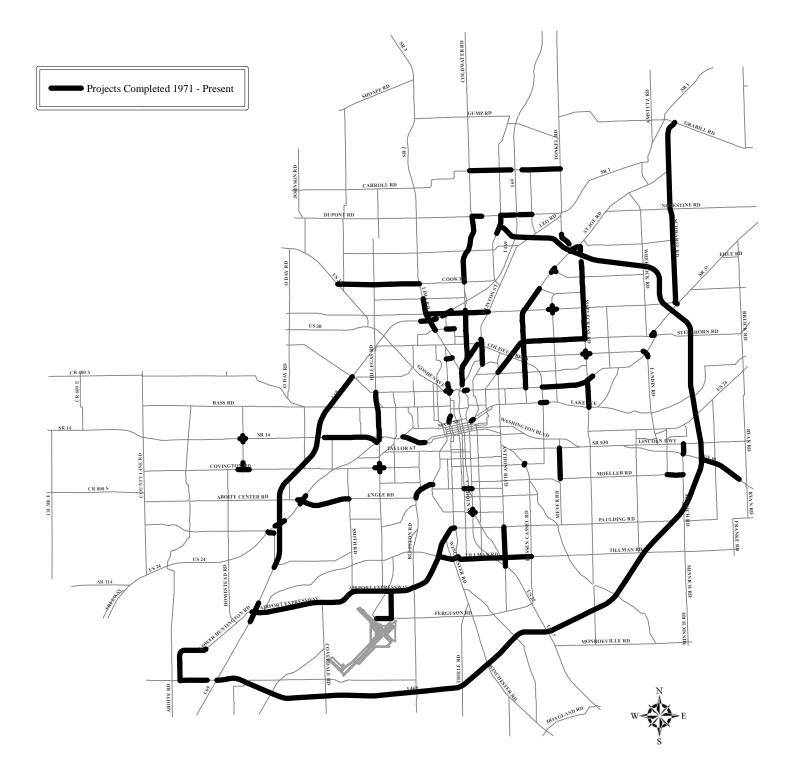


Figure 21

Implementation of Transportation Plans

The 2025 Transportation Plan was adopted in May 2000. In the five years since adoption, numerous highway and transit projects have been implemented or are ready for implementation. The following list provides a status report on the recommended transportation improvements from the 2025 Transportation Plan. Following each project is an indication of the project status. Projects that have not been started and remain as projects in the 2030 Transportation Plan are followed by a (2030 Plan).

2025 Transportation Plan

New four-lane construction

Maplecrest Road from Lake Avenue to State Road 930 (2030 Plan)

New two-lane construction

Ardmore Avenue from Indianapolis Road to Lower Huntington Road (2030 Plan)

Widen to six lanes

Interstate 69 from US 24 to Dupont Road (portions complete) (2030 Plan)

Interstate 69 from Interstate 469\Lafayette Center Road to US 24 (2030 Plan)

Interstate 69 from Dupont Road to Hursh Road (2030 Plan)

Jefferson Boulevard from Illinois Road to Main Street (2030 Plan)

State Road 3 from Ludwig Road to Dupont Road (2030 Plan)

State Road 930\Coliseum Boulevard from Parnell Avenue to Crescent Avenue (listed as illustrative project)

US 30 from Interstate 69 to US 33 (2030 Plan)

US 30 from US 33 to Flaugh Road (2030 Plan)

US 30 from Flaugh Road to O'Day Road (2030 Plan)

Widen to four lanes

Adams Center Road from State Road 930 to Moeller Road (2030 Plan)

Aboite Center Road from Coventry Lane to Jefferson Boulevard (2030 Plan)

Clinton Street from Coliseum Boulevard to Coldwater Road (complete)

Coldwater Road from Dupont Road to Cook Road (complete)

Dupont Road from Coldwater Road to Lima Road (SR 3) (2030 Plan)

Goshen Avenue from State Boulevard to Coliseum Boulevard (2030 Plan)

Hillegas Road from State Boulevard to Washington Center Road (2030 Plan)

Huguenard Road from Washington Center Road to Cook Road (2030 Plan)

Lake Avenue from Coliseum Boulevard to Maysville Road (2030 Plan)

Leo Road from Auburn Road to Dupont Road (2030 Plan)

Maysville Road from Stellhorn Road to south of Interstate 469 (2030 Plan)

Saint Joe Center Road from Saint Joe Road to Reed Road (2030 Plan)

State Boulevard from Maysville Road to Georgetown North Boulevard (2030 Plan)

State Boulevard from Spy Run Avenue to Goshen Road (2030 Plan)

Stellhorn Road from Maplecrest Road to Maysville Road (2030 Plan)

State Road 1 from Interstate 69 to Tonkel Road (2030 Plan)

State Road 1 from Tonkel Road to Union Chapel Road (2030 Plan)

State Road 14 from Interstate 69 to West Hamilton Road (2030 Plan)

State Road 37 from Doty Road to Interstate 469 (2030 Plan)

State Road 930 from Minnich Road to Brookwood Drive (2030 Plan)

Tonkel Road from Dupont Road to Union Chapel Road (2030 Plan)

US 33 from Cook Road to O Day Road (2030 Plan)

US 33 from Cook Road to Washington Center Road (2030 Plan)

Washington Center Road from Lima Road (SR 3) to US 33 (2030 Plan)

Wells Street from State Street to Fernhill Avenue (2030 Plan)

Center Turn Lane Improvement

Auburn Road from Cook Road to Interstate 469 Exit Ramp (3-lane) (2030 Plan)

Jefferson Boulevard from Illinois Road to South Bend Drive (5-lane) (2030 Plan)

Jefferson Boulevard from Swinney Park to Main Street (5-lane) (complete)

Saint Joe Center Road from Clinton Street to River Run Trail (5-lane) (2030 Plan)

Saint Joe Road from Evard Road to Mayhew Road (3-lane) (2030 Plan)

Saint Joe Road from Maplecrest Road to Eby Road (3-lane) (2030 Plan)

Wayne Trace from Oxford Street to Pontiac Street (3-lane) (2030 Plan)

Turn Lane Extension

Jefferson Boulevard from Lutheran Hospital Entrance to Interstate 69 Ramps (2030 Plan)

Intersection Reconstruction

Auburn Road and Cook Road/Auburn Road and Clinton Street (2030 Plan)

Coliseum Boulevard and Pontiac Street Intersection (complete)

Covington Road and Dicke Road/Covington Road and Hadley Road (2030 Plan)

Covington Road and Jefferson Boulevard/Covington Road and Getz Road/Getz Road and Jefferson Boulevard (2030 Plan)

Maysville Road and Old SR 37/Maysville Road and Stellhorn Road/Old SR 37 and Stellhorn Road Intersections (phase 1 complete)

Reconstruction and Realignment

Dupont Road from Pine Mills Road to Auburn Road (2030 Plan)

Maplecrest Road from Lake Avenue to south of Stellhorn Road (2030 Plan)

Saint Joe Center Road from Reed Road to Maplecrest Road (2030 Plan)

Intelligent Transportation System-Motorist Information\Changeable Message Signs

Interstate 69 north of State Road 1\Dupont Road (complete)

Interstate 69 south of Interstate 469\Lafayette Center Road (complete)

US 30 west of Interstate 69 (listed as illustrative project)

US 30 east of Interstate 469 (listed as illustrative project)

Intelligent Transportation System-Traffic Signal System

Upgrade Computerized Traffic Signal System (complete)

New Railroad Grade Separation

Anthony Boulevard and Norfolk Southern Railroad (2030 Plan) Baer Field Thruway and Norfolk Southern Railroad (2030 Plan)

Reconstruct Railroad Grade Separation

Anthony Boulevard and CSX Railroad (2030 Plan)
US 27/Lafayette Street and Norfolk Southern/CSX Railroads (2030 Plan)
Wayne Trace/Pontiac Street and CSX Railroad (complete)

Congressional High Priority Corridor Improvement

US 24 from Interstate 469 to Bruick Road (In coordination with the state of Ohio) (2030 Plan)

Interchange-New Construction

Interstate 69 at Hursh Road (2030 Plan)

Interchange-Modification

Interstate 69 and US 30/33/SR930 Interchange (listed as illustrative project)
Interstate 469 and US 24 Interchange (2030 Plan)
Interstate 469 and US 30/SR 930 Interchange (2030 Plan)
US 30 and US 33 Interchange (2030 Plan)
Review of all Interchanges on Interstate 469 for needed modifications (complete)

Transit Improvements System Modifications

Expand transit service in the growing urbanized area. Potential locations include the Fort Wayne International Airport and surrounding area, Aboite Township, Perry Township, and Cedar Creek Township. Type of service will be determined based upon projected demands and proposed service levels. (Partially implemented-included in 2030 Plan)

Design and construct a downtown intermodal transfer/transportation center. (Design Stage-included in 2030 Plan)

Design and construct a major bus stop facility to include a transit customer waiting facility with the potential for park and ride and transfer opportunities. This project will compliment a redevelopment effort near Wallace Street and Creighton Avenue. (complete)

Replacement of transit coaches and service vehicles necessary to maintain a dependable transit fleet. (complete and on-going-included in 2030 Plan)

Install and upgrade bus shelters, benches, and other customer amenities. (Complete and on-going-included in 2030 Plan)

Reduce headways on selected routes where ridership warrants. (Partially complete and on-going-included in 2030 Plan)

Expand service hours and provide Sunday service through fixed route and/or other types of transit service. (Partially complete and on-going-included in 2030 Plan)

Implement automatic vehicle locator (AVL) technology for the transit system and provide customer access to AVL information through Internet connections. (Partially complete and on-going-included in 2030 Plan)

New Haven route and Georgetown route interconnect. (Included in 2030 Plan)

The status report indicates that the Fort Wayne-New Haven-Allen County Metropolitan Planning Area follows through with their plan implementation. Many projects have been completed or are in a phase of implementation.

Future Efforts

Congestion Management System

A Congestion Management System (CMS) has been developed and adopted for the Metropolitan Planning Area and is designed to support the efforts of the transportation plan. The congestion management system is a program or process that identifies strategies relevant to the transportation system (highway and transit) for mitigating existing congestion and preventing future congestion. The strategies consider both the supply and demand sides of urban travel, land use policies, transit operations, traffic operations, intelligent transportation systems, bicycle/pedestrian facilities and engineering improvements. The CMS represents a multi-jurisdictional approach with a regional perspective including both public and private sector involvement. The Congestion Management System Plan is provided in Appendix A.

As previously mentioned, the program focuses on mitigating existing congestion and averting future impediments to efficient corridor and transit performance. The products of the CMS process include strategies, policies, and improvement projects. These products are implemented as components of the transportation plan. One important policy of the CMS that is applicable to the entire system is the access management program.

Access Management

The access management program has been in force for a number of years in the metropolitan planning area. The program has emphasized driveway (street access) and site plan review since the mid 1960's. Through the administration of this program, a number of accessory plans and studies have been developed and implemented. In the 1980's a frontage road plan was developed. This plan identified corridors in the Metropolitan Planning Area where access roads should be implemented to preserve the corridor performance. The activities of this program have included the development of an Access Standards Manual as well as several revisions. The program has also developed interchange and corridor protection plans identifying Congestion Management Strategies for specific corridors. The program will continue to support these activities, strengthen their enforcement, and investigate new strategies for access management. This program has become a major tool for preserving the integrity and efficiency of the arterial highway system.

Safety Management System

The transportation planning process has consistently championed safety as a major concern. The Safety Management System routinely reviews hazardous locations on the transportation system through cooperative efforts with local governments. Highway crash data is obtained from law enforcement agencies and the Indiana Department of Transportation to review and identify hazardous locations. Accident data is compiled from throughout the metropolitan area to determine high hazard locations. Accident studies are conducted for the high hazard locations, solutions developed, and recommendations are made to improve safety. Hazard elimination and safety funds (HES) are sought for the appropriate projects.

The SMS program activities also monitor rail-highway grade crossings and maintains an inventory of pertinent data for each location. This information supports the Indiana Department of Transportation rail-highway improvement program. Selected rail-highway crossing improvements in the metropolitan area are annually included in the Transportation Improvement Program. The SMS program also acknowledges the importance for improving pedestrian and bicycle safety. Projects developed in the Pedestrian and Bicycle Plan are designed to improve the safety for these modes of transportation.

Safety improvements to the highway system have corresponding safety benefits to the transit system. In addition, Citilink addresses safety issues concerning the transit system and is aware of the importance safety plays in overall passenger comfort. Several projects currently under construction are designed to improve security and customer safety at the transfer facility. The perception of a safe transit system is a great marketing tool. Citilink strives to maintain a safe transit system.

Freight Mobility

Freight mobility within the region is monitored and analyzed through data collection efforts that include truck volumes, identifying intermodal and freight activity centers, and meeting with business groups engaged in trucking and distribution. The analysis of this information receives special attention to ensure mobility and accessibility needs are met for freight movement.

The Greater Fort Wayne Chamber of Commerce actively participates in the planning process. Transportation staff works with the Chamber and related committees to identify problems and issues affecting the business community with a special emphasis on trucking and freight distribution. Together, solutions are developed and viable projects are incorporated into the planning process. Intermodal sites including the Fort Wayne International Airport, Norfolk Southern Triple Crown Facility, and major industrial sites are scrutinized to ensure access to these areas are safe and efficient. The transportation planning process continues to pursue projects conceived to improve intermodal access and connectivity. These projects will benefit travel for the distribution and mobility of goods and services throughout the region.

Transit Mobility

The recently completed "Citilink Transportation Development Plan" serves as the short range transit planning guide for service improvements and capital investments. This report, published in 2004 through a cooperative effort between Citilink and the Northeastern Indiana Regional Coordinating Council, identifies transit improvements designed to provide a higher level of service and increase transit mobility in the metropolitan area. The implementation of the recommended service and capital improvements has been initiated. Efforts will continue to incorporate additional service improvements into the transit system. The transit development plan will be periodically updated to

continue identifying transit service improvements.

Highway improvements and site development must begin to take special considerations to enhance transit attractiveness, efficiency and mobility. Explicit efforts were undertaken to develop a document that details land use and highway designs amiable to transit usage and mobility. This document titled *Coordinating Development and Transportation Services, A Guide for Developer, Engineers, and Planners* was presented to the area plan commissions for their review. Through these efforts, consideration of transit mobility and accessibility are incorporated in to the land use decision-making process. Initiatives will continued be employed to gain acceptance for these designs and support their implementation. The *Coordinating Development and Transportation Services, A Guide for Developer, Engineers, and Planners* will be reviewed and updated as necessary to promote transit accessibility and mobility. The ability of transit to meet tomorrow's needs will depend on the existing level of commitment towards preparing our system for future transit service.

Alternative Travel Methods

The transportation plan cannot and does not address every transportation problem that will affect system efficiency. Traffic congestion, increased commute times, and air quality problems will continue to afflict transportation systems of the future. Communities facing these challenges must find creative means to reduce low occupancy automobile usage. Actions and ideas will be explored to reduce automobile usage. These strategies will be evaluated for their feasibility of use in the metropolitan area. Alternative transit services will be a focus of this endeavor.

Corridor, Site Impact, Intersection Analysis and Feasibility Studies

The transportation plan deals with the transportation system at a macroscopic level. Corridor, site impact, intersection analysis, and feasibility studies examine specific areas of the system at more refined levels. The emphasis of corridor studies is to estimate travel demands and develop alternative strategies for mitigating congestion from new developments. Site impact analyses are a component of the access management program and evaluate the traffic impacts from specific developments on the transportation system. Intersection analyses evaluate the performance or level of service of intersections. Based upon the analysis, problems are identified and solutions tested to

recommend improvement projects. Feasibility studies assist in the decision making process by evaluating alternatives and determining the most viable solution. The integration of these studies provides for continuous evaluation of the system with special attention to potential problem areas.

Implementation

The transition from a selected plan of recommended transportation policies and improvements to implemented services and facilities requires cooperation and commitment from the entire community. This includes federal, state, and local governments with "grass roots" support of the local residents. The planning process represents the first stage of implementation.

Following the planning process, implementation for specific improvements are introduced to the Transportation Improvement Program (TIP). The TIP is a three-year capital improvement plan for highway, transit, and enhancement projects. Improvement projects are selected from the transportation plan including the various Management Systems for inclusion in the TIP.

Planning support must accompany each project in the TIP for it to be eligible for state and federal assistance. The TIP tracks projects through various stages of implementation including preliminary engineering, right-of-way acquisition, and construction. The TIP is a valuable tool governing project implementation. Its status is gaining importance due to recent federal legislation.

Implementation will be assisted through a process of phasing large-scale transportation projects. This process simply segments large improvements into several manageable projects allowing the gradual disbursement of resources. While this practice has not been used extensively in the past, it will become necessary in this area for implementing capital intensive projects.

The transportation planning process included participation from citizens, local implementing agencies, and state and federal officials. This participation process is an on-going activity conducted by NIRCC as part of the transportation planning process. The implementation process requires the same collaborative commitment. This consolidated effort at every phase of the planning process has established a solid platform from which implementation of the selected plan can begin. The plan

will serve as a guide for transportation investments and service decisions shaping the future transportation system.