

#### DEARBORN COUNTY COMPREHENSIVE PLAN



**SECTIONS** 

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Goals & Strategies The Transportation Element provides a statement of policy for the development of modal infrastructure; specifically roadways, railways, pedestrian ways, and other transportation networks used to tie the community together and link it to the outside world.

# TRANSPORTATION FACILITY ASSESSMENT

Dearborn County, with the assistance of the Ohio Kentucky Indiana Regional Council of Governments (OKI), conducted the Dearborn County Transportation Assessment from April 2003 to March 2004.

While residential and commercial development is on the rise within Dearborn County, the infrastructure still remains mostly rural. Many of the county's rural roads were not designed to operate under increased volumes. Several roadways now serve thriving communities but are too narrow and do not meet current standards. The infrastructure of the area needs to be improved to accommodate the existing and future needs of Dearborn County. The Transportation Assessment provided Dearborn County with a framework for future projects along with a complete evaluation of the county roadway infrastructure.

#### TRANSPORTATION NETWORK

#### Dearborn County Roadways

Interstate Highways

There are two interstates within Dearborn County; Interstate I-74 and Interstate I-275.

Interstate I-74 begins in the Cincinnati urban core and traverses Dearborn County connecting West Harrison, St. Leon, and Lawrenceville. According to the 2000 traffic counts by the Indiana Department of Transportation (INDOT), the average daily traffic on the mainline is approximately 30,000 vehicles per day near the Indiana/Ohio state line and drops to approximately 20,000 near the Dearborn/Ripley County line.

Interstate I-275 is an expressway loop around Cincinnati serving Ohio, Kentucky and Indiana. I-275 passes through the southeastern portion of the County with one exit serving the Greendale / Lawrenceburg / Aurora communities, as well as the surrounding rural areas. INDOT 2000 traffic counts report approximately 30,000 vehicles per day travel on this approximately 3-mile stretch of I-275 within Indiana while over 50,000 vehicles per day utilize the on/off ramp.

# US Routes

Two US routes are within Dearborn County; US 50 and US 52.

US 50 is situated in the southern portion of the county and connects the areas of Greendale, Lawrenceburg, Aurora and Dillsboro. This roadway is heavily traveled, with over 40,000 vehicles per day passing through Lawrenceburg, according to INDOT 2001 traffic counts. US 50 is a major thoroughfare within the county, carrying traffic through the incorporated areas to I-275. The roadway experiences heavy congestion through Lawrenceburg during the peak hours. The roadway is over capacity in this area and is also plagued with a number of traffic signals.

US 52 is located in the northern portion of Dearborn County and has a connection to I-74. US 52 enters Franklin County just north of the interstate. According to 2001 INDOT traffic counts, US 52 provides service to approximately 7,000 vehicles per day.

# State Routes

State Routes 1, 46, 48, 56, 62, 148, 262 and 350 pass through the county. Below is a description of each of the roadways.

# State Route 1

SR 1 travels north-south across the county starting in Lawrenceburg and traveling through St. Leon. SR 1 has daily traffic volumes from 3,700 vehicles per day near the Franklin County Line to 14,000 vehicles per day near US 50 and I-275. Unfortunately, SR 1 is a heavily traveled trucking route. While signs are posted discouraging truck traffic, the industry continues to utilize the roadway as a short-cut between I-275 and I-74. Ohio licensing requirements also provide incentive for trucks not destined for that state to avoid traveling through it. The capacity along with the roadway geometry is not designed to handle this type of traffic.

# State Route 46

SR 46 begins at the I-74 and US 52 interchange and traverses the county to Lawrenceville almost parallel to I-74. Traffic volumes on SR 46 are between 1,000 and 4,600 vehicles per day.

# State Route 48

SR 48 crosses the County connecting Lawrenceburg and Manchester. While roadway volumes are heavy near Lawrenceburg, volumes are approximately 12,000 vehicles per day, decreasing to 4,000 vehicles per day near the Ripley County Line.







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State Route 56

SR 56 begins in Aurora and exits the county south at the Ohio County Line. Traffic volumes are fairly significant in Aurora, with just over 13,000 vehicles per day. SR 56 provides connection to Rising Sun and the Grand Victoria Casino.

State Route 62

SR 62 begins in Dillsboro and exits the county south at the Ripley County Line in Ceasar Creek Township. There are approximately 2,500 vehicles per day utilizing the roadway.

# State Route 148

SR 148 begins in Aurora and intersects SR 48 near Kirschs Corner in eastern Manchester Township. There are approximately 4,500 vehicles per day utilizing the roadway.

# State Route 262

SR 262 travels north/south from US 50 through Milton and exits the county at the Dearborn/Ohio County Line. There are approximately 3,000 vehicles per day utilizing the roadway.

# State Route 350

SR 350 also travels east/west across the county. It connects Aurora and Moores Hill. As expected, traffic volumes are higher near Aurora, with nearly 14,000 vehicles per day and the numbers decreasing to approximately 6,000 to 7,000 vehicles per day through the rural portion of the county.

# County Roadways

The roadway network in Dearborn County is mostly rural, with approximately 530 miles of county roadways, not including incorporated areas. Many of these roadways do not meet current design criteria as specified by INDOT and the American Association of State Highway and Transportation Officials (AASHTO). Most county roadways are also too narrow and the horizontal and vertical geometry is inadequate. While many of these facilities do not serve a significant number of vehicles, some are serving thriving suburban communities with capacity deficiencies. There is also an issue of maintenance. When roadways are not built to current standards, maintenance issues become problematic. Emergency paving, slippage and drainage repairs are common in the county.

# INTERMODAL TRANSPORTATION OPTIONS

Intermodal transportation refers to modes of transportation within Dearborn County in addition to roadways and highways. It includes modal considerations such as: public use airports, freight and passenger railroad services, bus transit services, marine terminals and other water ports, and bicycle and pedestrian facilities.

# <u>Airports</u>

There are no public use airports located in Dearborn County. However, the Greater Cincinnati/Northern Kentucky International Airport is located only 20 minutes (approximately 18 miles) from the southeastern portion of the county. The airport has eight passenger airlines and serves approximately 20 million passengers per year.

# Freight and Passenger Railroads

Currently Dearborn County has no passenger rail to serve the county. AMTRAK has one passenger rail service line that serves the Greater Cincinnati Area. The complete route connects Chicago, IL with Washington, D.C. The route operates three times per week. CSX and Central Railroad of Indiana serve Dearborn County with freight rail.

# <u>Transit</u>

The county is served by Catch-A-Ride, operated by Lifetime Resources, Inc., a fixed route point deviation and demand responsive service. The service area covers Dearborn, Jefferson, Ripley, Ohio, and Switzerland counties. In the past, service was provided to Cincinnati and Florence on a limited basis; however, due to financial constraints, it has been recently discontinued. Service to these areas could prove valuable in the future as Dearborn County continues to grow and should be investigated during long range planning efforts.

# Marine Terminals and other Water Ports

The Consolidated Grain and Barge located in Aurora serves the county. Rohe Paving and Gravel and Omare Paving and Gravel also maintain barge transferring facilities and are located on SR 56 near Aurora.







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#### Bicycle and Pedestrian Facilities

There is an existing pedestrian and bicycle trail in the cities of Lawrenceburg and Aurora along the Ohio River. According to the city of Lawrenceburg Pedestrian Connectivity Study (2001), several other bicycle and walking trails are recommended. They include the Lawrenceburg Levee Walk, the development of the Tanner's Creek Trail on an abandoned railroad right-of-way, and the creation of a loop around the city of Lawrenceburg. There is an existing shared use path along U.S. 50 and a similar shared use path along US 56 planned to connect Aurora and Rising Sun.

# **REVIEW OF TRANSPORTATION STUDIES RELEVANT TO DEARBORN COUNTY**

Numerous documents, including transportation planning studies, county plans and other related reports have been developed to plan for, design, and implement various transportation-related improvements in the County. Studies or documents analyzed during public involvement workshop discussions include those summarized below:

#### US 50 Corridor Study

The Indiana Department of Transportation is conducting a county-wide corridor study to address the congestion and access management problems along US 50. Discussion initiated by the Dearborn County Board of Commissioners, members of the Plan Commission, Mayors and Council representatives of Aurora, Greendale, and Lawrenceburg as well as representatives of Dillsboro, regarding how to improve the traffic congestion plaguing the corridor led to a commitment of both State and Federal resources to comprehensively identify and evaluate appropriate improvement alternatives. The study will provide a purpose and needs statement that will identify the problems on US 50 and provide a framework for the evaluation of solutions. It will evaluate a set of alternative solutions, including traffic operations and intersection improvements, public transportation alternatives, the potential of a oneway pair system, road widening, and intelligent transportation system options. Planning is scheduled to begin mid-2004 and will evolve through an eighteen-month process.

# <u>Regional Rail Plan</u>

The Southwest Ohio Regional Transit Authority (SORTA), the Transit Authority of Northern Kentucky (TANK), Hamilton County, and the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) collaborated on a plan for the development of a regional passenger rail transit system in Hamilton County and the Greater Cincinnati/ Northern Kentucky area. The Regional Rail Plan is an outgrowth of a number of separate, yet coordinated, analyses including long range planning efforts from various agencies.

# Western Corridor Transit Options

While several alignments were identified as part of the Regional Rail Plan, of particular interest to the Dearborn County Transportation Study are the Western Corridor Transit Options. Two rail transit opportunities were identified for further study as a result of the Regional Rail Plan; a light rail alignment following Central Parkway and Interstate 74, and a commuter rail alignment using RailAmerica's existing CIND Line along River Road to Lawrenceburg. Additional studies would be required to advance either of the proposed Western Corridor rail projects. The OKI Board of Trustees is committed to a formal study of the Western Corridor and is actively pursuing funding for such an effort.

# <u>SR 101 Study</u>

The SR 101 Corridor Improvement Feasibility/NEPA Study was undertaken by the Indiana Department of Transportation to assess the implications of limited north-south access in the SR 101 study area and to identify feasible alternatives. The study area ran approximately 17 miles from I-74 in the north to US 50 in the south. It included the counties of Dearborn, Ohio, Switzerland, Ripley and Jefferson.

While several alternatives were evaluated, currently improvements to existing SR 129 are being planned to help alleviate north-south connectivity limitations in the region.

# INDOT Long Range Plan

The Seymour District INDOT Long Range Plan shows the plan for the construction of a portion of State Route 48. This will be new construction that will join the hospital to US 50 more directly. The new roadway will be a two lane road spanning about 1.8 miles in the Lawrenceburg area. The estimated cost of the new roadway is \$14 million.







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# FUNCTIONAL CLASSIFICATIONS

The functional classifications of roadways are necessary to differentiate between separate operating systems. The information in this section has been compiled from the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets, 2001 and the Indiana Department of Transportation (INDOT) Design Manual.

The classification of highways by operating system in a rural setting is determined by several factors.

- Geometric Characteristics The physical design of the roadway including, lane width, pavement width, grade etc.
- Traffic Volumes the volume of Average Daily Traffic the roadway serves.
- Connectivity the level of connectivity and access the roadway provides. Higher design roadway classifications generally connect inter-county or inter-state roadways. Lower level classifications generally provide local access.
- Access Control the level of access that is permitted on the roadway.

Each roadway in Dearborn County provides a particular function. In general these functions are differentiated by a hierarchy of traffic movements—which includes, from highest to lowest function, distribution facilities and primary roadway movements, collection systems, and local access roads. Each roadway in the county is classified by one of these operational functions.

# RURAL ROADWAY CLASSIFICATIONS

The Dearborn County Transportation Assessment provides for several classifications based not only on connectivity but also the amount of traffic that a roadway serves. The procedure to classify a roadway follows a two-phase process.

1) Classification by Access - A determination is made as to the interconnectivity of the roadway and the importance of the route not only within the county but externally as well. This analysis establishes the roadway category; arterial, collector or local roadway.

2) *Classification by Traffic Volumes* - After the roadway category is determined, an analysis of the Average Daily Traffic (ADT) sub-classifies the facility and determines the design parameters appropriate to that level of roadway.

# **ROADWAY SYSTEMS & GUIDELINES**

#### Arterial System

There are two types of arterials: the principal arterial and the rural arterial. A principal arterial is generally identified as a facility that serves corridor movements adequate for statewide or interstate travel. The roadways in this category can be identified as the interstate system within the county.

Rural arterials are categorized by their linkages to cities or larger towns and they generally provide interstate or inter-county service. They are capable of attracting travel over long distances and have a spacing that is consistent with the population density in the county. All developed areas are generally within a reasonable distance to a rural arterial.

To further classify the roadways in this category, four (4) sub-categories have been developed based on the ADT volumes on the facilities. A list of these sub-categories is listed in Table 5-1. As each sub-category serves a separate level of traffic, design criteria has been developed separately to accommodate these differences. For example, a high-volume arterial's design standards will be greater than that of a low-volume arterial. Approximately 20% of the roadway miles in the county are classified as Arterials.

# Table 5-1: Rural Arterial Sub-Categories:

Sub-Category	Average Daily Traffic (ADT)
Category I	ADT < 400
Category II	400 < ADT < 3,000
Category III	3,000 < ADT < 5,000
Category IV	ADT > 5,000

#### Collector System

The rural collector system generally serves intra-county travel as opposed to statewide movements. The trips associated with a collector are predominantly shorter than those associated with arterial routes. Consequently, lesser design speeds are used and the design standards are generally less than that of arterial routes.







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Collector routes provide service to smaller communities and provide connections to the arterial system. They are categorized as serving the more important intra-county routes. Collector roadways account for 20% of the roadway miles in the County.

In order to further define the collector system the following subcategories have been developed based on the ADT volumes on the roadway.

# Table 5-2: Rural Collector Sub-Categories:

Sub-Category	Average Daily Traffic (ADT)
Category I	ADT <400
Category II	400 < ADT < 1,000
Category III	1,000 < ADT < 3,000
Category IV	3,000 < ADT < 5,000
Category V	ADT > 5,000

#### Local Roadways

The local roadway system in contrast to the arterial and collector system primarily provides access to adjacent land and to the wider network. It serves principally shorter trips and constitutes all roadways not classified as arterials or collector roads. To further characterize this category, design parameters a set of sub-categories have been developed based on the roadway traffic volumes. Over half of the roadways in Dearborn County are classified as local roadways. These sub-categories are presented in Table 5-3.

# Table 5-3: Local Roadway Sub-Categories:

Sub-Category	Average Daily Traffic (ADT)
Category I	ADT <400
Category II	400 < ADT < 1,000
Category III	1,000 < ADT < 3,000
Category IV	3,000 < ADT < 5,000
Category V	ADT > 5,000
Curb & Gutter Local	NA
Road (Urban Local	
Road)	

Categories I-V illustrate local roadways where ample right of ways are available for drainage concerns and minimal access is required. In some cases, as in that of a subdivision, right of way is limited and numerous driveway curb cuts are needed. In these instances, a curb and gutter section may serve the area more appropriately.

It is important to note that the Roadway Functional Classifications will need to be continually reviewed and updated by the county. Functional Classifications can change over time due to new development and changing travel patterns.

# KEY ISSUES:

- Transportation management needs to be sensitive to the environment
- Park and Ride opportunities need to be enhanced
- Local input is not always considered in state projects
- Sidewalks are lacking in most areas of the County
- Access is restricted to the southwest part of the County
- Mass transit opportunities do not exist
- Enforcement of traffic laws are not at highest level possible
- Concern over misperceptions of planned change
  - Fear of change! Lack of good public involvement in decision making process
- No established policy to insure coordination between city/county/regional and state transportation issues cooperation needed between local governments to formulate transportation goals
- Funding? How? Where? Priority?
- Other transportation modes need to be investigated that will enhance economic development, not just efficiency i.e. river transportation, airport issues, public transportation
- US 50 congestion
  - o Lack of alternative routes to US 50
- Safety of Stateline Road
- Safety of North Dearborn Road (east of SR 1)
- Cost effective maintenance
- Erosion/slippage on roads with steep slopes
- Lack of effective access management
- Lack of alternative routes for pedestrians
- Need to identify how roads affect and are affected by development
- Lack of County highway engineer
- Lack of a 10 year plan for roadway improvements
- No impact fees for new developments



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# TRANSPORTATION GOALS

T-1 A safe, convenient, efficient, cost effective transportation system to serve the greatest percentage of the County population while utilizing existing resources and minimizing the negative impact on environmental surroundings.

Strategies:

- T-1.a Develop a capital improvements plan for both roadway maintenance and new roadway construction by implementing a 5-year short-term plan with 10, 15, 20 year plans for capital improvements and maintenance with ongoing evaluations.
- T-1.b Implement short-term measures while planning for long-term solutions.
- T-1.c Proactively plan roadways, utilities, and drainage improvements in areas where appropriate development is expected to occur by developing and maintaining through regular evaluation a Countywide Thoroughfare plan.
- T-1.d Utilize available infrastructure for new uses by using railroad beds for light rail alignments as this transportation mode becomes feasible.
- T-1.e Document a Countywide environmental assessment of sensitive natural features to inform and compliment any future Phase I Environmental Inventory Studies conducted.

# T-2 Intergovernmental coordination, cooperation and communication between the County, jurisdictions within the County and State governments on transportation improvement initiatives.

Strategies:

- T-2.a Cooperate with TANK and SORTA by assisting them to establish park & ride locations and shuttle bus stops within Dearborn County.
- T-2.b Participate in long-range transportation planning initiatives with OKI such as the Western Corridor Initiative by providing local data as it is available and offering advisory level input as it is solicited.
- T-2.c Support the local municipal league and encourage collaboration with and among all local jurisdictional

governments by participating in and providing forums for communication and discussion.

- T-2.d Support collaborative, multi-jurisdictional efforts that address access management and land use planning along arterial corridors by participating in and providing forums for communication and discussion.
- T-3 Objectives and rationale of transportation improvements are communicated to and understood by the public from their conception and all stakeholders are involved during the planning process.

# Strategy:

T-3.a Ensure occurrence of public forums and encourage all information to be displayed in layman's terms during all transportation planning initiatives.

# T-4 Maintain a level of service (LOS) C or better on all thoroughfares within the County.

# Strategies:

- T-4.a Implement an access management plan to more efficiently control access to arterial and collector streets throughout the County.
- T-4.b Encourage mixed-use neighborhoods to be developed in already established communities and settlements within the County to alleviate future access and traffic volume demands on arterial and collector roadways.
- T-4.c Evaluate the County Zoning Ordinance and Subdivision Control Ordinance routinely to ensure appropriate methods of access management are employed as transportation engineering theories and technology advance including appropriate distances between access points, turning movement controls, and other appropriate traffic flow mechanisms.





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Goals & Strategies T-5 Multi-modal transportation alternatives for County residents and visitors.

Strategies:

- T-5.a Explore local and regional mass transit opportunities and alternatives by exploring partnership opportunities with surrounding transit providers including SORTA, TANK, and Catch-a-Ride.
- T-5.b Encourage pedestrian access/connectivity within and between neighborhoods by creating incentives for these connections to occur.
- T-5.c Encourage continuation of and pedestrian connections to the riverfront bike/pedestrian trail system.
- T-5.d Encourage alternative links between and to public facilities, neighborhoods, and shopping areas from residential areas.
- T-5.e Research and identify other community bikeway plans to identify appropriate models and funding mechanisms for Dearborn County to implement.
- T-5.f Consider alternative modes of transportation such as bikeways, water taxis and light rail when planning for new roadway alignment infrastructure.

#### T-6 Alternative funding mechanisms for needed transportation improvements. <u>Strategy:</u>

T-6.a Evaluate impact fees on new development, surcharge taxes on fuel, and wheel taxes and implement appropriate mechanisms identified.



