

CHAPTER 1: CURRENT CONDITIONS

INTRODUCTION

Project Background

Dearborn County is the tenth fastest growing county in the State of Indiana, yet economic development opportunities here and in surrounding counties in southeastern Indiana are limited by the inability of United State Route (US) 50 to handle current traffic volumes effectively and safely. Improving mobility in this corridor, eliminating congestion, improving safety and creating functional land development will benefit the County, southeastern Indiana, and the Greater Cincinnati region.

In March 2004, the Indiana Department of Transportation (INDOT) announced it would lead a corridor planning/assessment study to be conducted as a joint Environmental Assessment (EA)/Corridor Study under the INDOT Environmental Streamlining Process.

The Southeastern Indiana Gateway: US 50 Transportation and Land Use Plan (US 50 Gateway Study) supplements the INDOT study by expanding the work of the US 50 Corridor Collaborative Planning Initiative that began in 2003, coordinating the placement of proposed alternatives with adjacent land uses and addressing economic development opportunities to ensure that the corridor develops at the highest potential possible. In addition, the Gateway Study analyzes access to US 50 and ways to incorporate good access management practices. This plan also compliments the INDOT study by further engaging stakeholders and allowing the community more opportunities for input during the planning process.

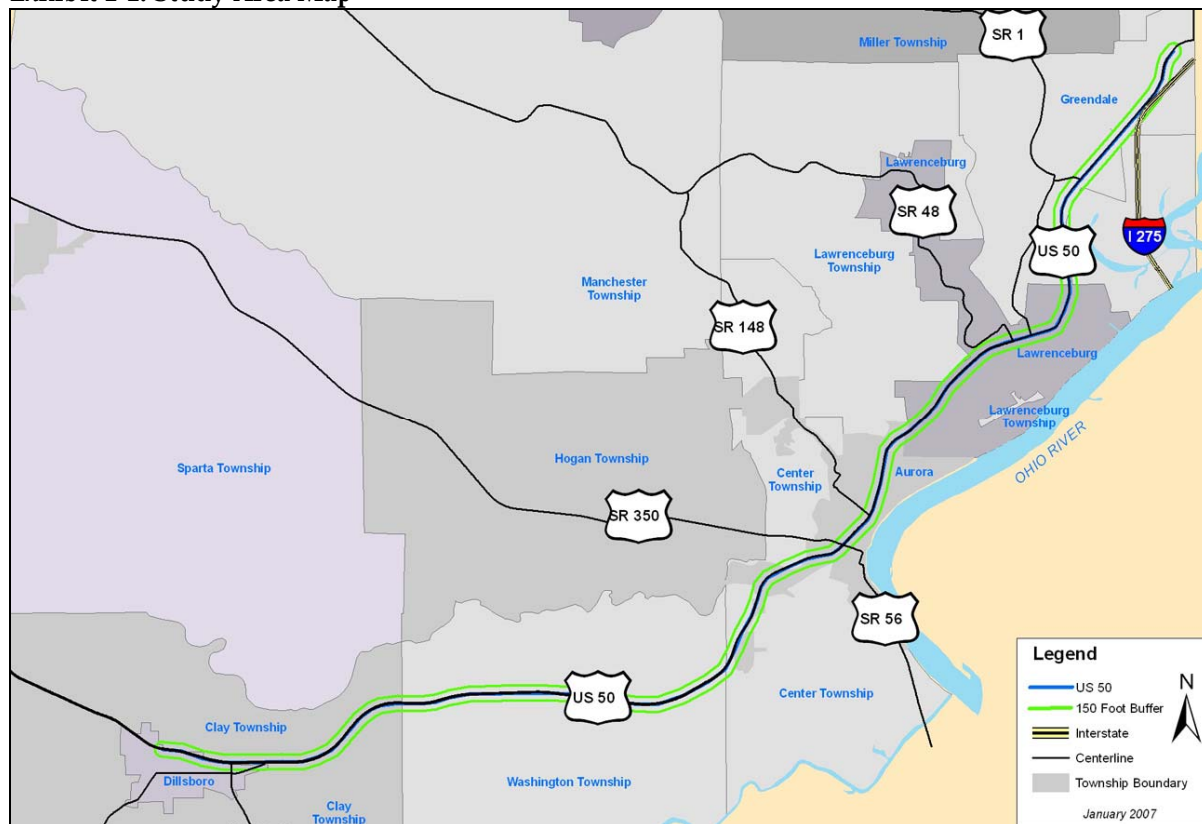
Study Area Description

The *US 50 Gateway Study* analyzes US 50 from State Line Road to State Route (SR) 62 in Dearborn County. The study area travels through the cities of Greendale, Lawrenceburg, Aurora and Dillsboro (see Exhibit 1-1). The study area is divided into the following four sections:

1. *State Line Road to Argosy Parkway* – This section is four lanes from State Line Road to Interstate (I)-275 and is seven lanes from I-275 to Argosy Parkway. East of I-275 in Greendale is becoming more developed, but is still a four lane undivided roadway. West of I-275 has three lanes in each direction with a center turn lane. Development is of a suburban type and there is sporadic access management.
2. *Argosy Parkway to SR 48* – This section travels through Lawrenceburg and has an urban cross-section with curb and gutter. Access consists of through intersections with left-turn lanes. This is the most constrained area of the

- corridor, with US 50 crossing Tanners Creek just east of SR 48.
3. *SR 48 to SR 350/56* – This section of the corridor is four lanes in each direction with a center turn lane. It travels west from Lawrenceburg to Aurora. Development is suburban and access management practices are sporadic. Land development is also inconsistent in this area.
 4. *SR 350/56 to SR 62* – This section of the corridor is mainly a four lane divided highway facility. It travels from Aurora to Dillsboro. Land development can be considered rural.

Exhibit 1-1: Study Area Map



Project Goals

The *US 50 Gateway Study* was to build upon and complement the transportation findings and recommendations being developed in the INDOT study. This project will supplement the INDOT study by looking at the land use opportunities in the corridor, by better defining access management and transportation operation improvements, and by assisting a public discussion that will lead to an appropriate vision for the corridor. The goals of the study were to:

- Improve Safety
- Improve Mobility
- Create Functional Development Patterns

RELATED STUDIES AND PROJECTS

Previous studies involving US 50 in Dearborn County were reviewed and include:

- Lawrenceburg/Greendale, Indiana Bypass Alternatives Study
- US 50 Corridor Collaborative Planning Initiative
- Dearborn County Comprehensive Plan
- Dearborn County Transportation Assessment
- INDOT US 50 Corridor/EA Study
- Future Projects

Lawrenceburg/Greendale, Indiana Bypass Alternatives Study

A Bypass Alternatives Study of Lawrenceburg and Greendale along US 50 was conducted in Dearborn County in April, 2003. The purpose of this study was to prepare traffic forecasts for four bypass alternatives. The intent was to find what traffic could be diverted from US 50 to travel around downtown Lawrenceburg to ease the existing congestion and delays.

A summary of the findings show that US 50 moves fairly well except in the southwest bound direction in the evening peak through downtown Lawrenceburg. Any bypass alternative built would relieve some of the pressure on US 50. It would also provide an alternative route around the Lawrenceburg area if US 50 were to become impassable. The Main Street intersection is the most critical and could use more in depth study to find solutions to mitigate the congestions and delay.

US 50 Corridor Collaborative Planning Initiative

In June, 2003 local officials met to discuss issues related to traffic congestion in the US 50 Corridor through Dearborn County, and to identify short and long term ways to solve these problems. A list of needs was compiled as part of the process and included:

- An alternative route for traffic crossing Tanners Creek along US 50
- Consideration of US 50's economic impacts on the community and the need to identify how to best utilize and protect these interests
- Consideration of land use patterns along the corridor and the need to identify the highest and best use of land while allowing the most efficient traffic flow
- An access management plan for the entire corridor that encourages creative solutions to traffic congestion.

Dearborn County Comprehensive Plan

The Dearborn County Comprehensive Plan (2004) is a guide to inform public policy and decision making. It is an assessment of the community's needs and a

documentation of community values, goals, and objectives. It serves as a living document that is continuously monitored and evaluated for its effectiveness so that it remains the true vision of the community. The Comprehensive Plan has jurisdiction within all unincorporated areas of Dearborn County.

Dearborn County Transportation Assessment

The Ohio Kentucky Indiana Regional Council of Governments (OKI) and Dearborn County undertook the Dearborn County Transportation Assessment in April of 2003. The transportation assessment provided Dearborn County with a framework for future projects and included a complete evaluation of the county roadway infrastructure. Goals of this study included:

- Identifying a responsible plan for roadway maintenance and spending within the county.
- Providing an accurate inventory of the county roadway system to assist in understanding the growth trends of the county and its future transportation needs.
- Developing standardized roadway typical sections and guidelines to assist in the maintenance of existing roadways and the design of new roadways.

This study suggested several future project recommendations which have been categorized into arterial, collector, and local roadways. Many of these streets and roads converge along US 50.

INDOT US 50 Corridor/EA Study

INDOT is conducting a concurrent study to the Gateway Study called the US 50 Corridor/EA Study. This study will evaluate the operational conditions on US 50 and make recommendations for improvement. The analysis will look at both on and off alignment alternatives. The study area is from I-275 in Lawrenceburg to SR 62 in Dillsboro. The *US 50 Gateway Study* and the INDOT study are working together to develop complimentary recommendations for the corridor.

Future Projects

An online search of the OKI Fiscal Year (FY) 2004-2007 Transportation Improvement Program for Highway, Transit, and Bikeway Projects found the following scheduled projects within the US 50 study area (see Figure 1-1).

Figure 1-1: OKI Transportation Projects in the US 50 Study Area

PID	C-R, Location	Description	Sponsor	Year
0101253	US-50, George St. in Aurora	Intersection improvement, including railroad	INDOT	UNSC
0201170	US-50, Bridge over CSX Railroad and Railroad Avenue, 1.05 miles west of SR 56	Bridge rehabilitation	INDOT	FY08

PID	C-R, Location	Description	Sponsor	Year
0400080	US-50, various	Pump Station replacements	INDOT	FY07
0400285	US-50, Bridge over Tanners Creek and service road, 0.08 miles east of SR 48	Bridge rehabilitation	INDOT	FY08

An online search of the INDOT Seymour District Long Range Plan (LRP) did not find any scheduled projects, though one project was found in the 2005-2007 Indiana State Transportation Improvement Program (STIP) (see Figure 1-2).

Figure 1-2: INDOT Projects in the US 50 Study Area

PID	Location	Description	Sponsor	Year
0101253	US 50 at George St. in Aurora	Intersection Improvement	INDOT	2005-2007

COMMUNITY AND ENVIRONMENTAL CHARACTERISTICS

Socioeconomic Profile

Information for the socioeconomic profile was obtained from the 2004 Dearborn County Comprehensive Plan. The study area for this project is located in four townships which include Lawrenceburg, Center, Washington, and Clay Townships.

Population

The population of Dearborn County has grown steadily over the past several decades. From 1990 to 2000, the county's population grew from 38,835 to 46,109 people, an increase of 18.7 percent (see Figure 1-3).

Figure 1-3: Dearborn County Historical Population Growth

Year	1920	1930	1940	1950	1960	1970	1980	1990	2000
Population	20,033	21,056	23,053	25,141	28,674	29,430	34,291	38,835	46,109

Figure 1-4: Dearborn County Population Growth by Township, 1980-2000

Township	Total Population			Percent Change (1980-2000)	Percent of County Population (2000)	Share of Overall County Population Growth (1980-2000)
	1980	1990	2000			
Center	5,157	5,182	5,431	5.3%	11.8%	2.3%
Clay	2,422	2,813	3,051	26.0%	6.6%	5.3%
Lawrenceburg	9,647	9,923	10,434	8.2%	22.6%	6.7%
Washington	1,210	1,387	1,488	23.0%	3.2%	2.4%

Forty-four percent of the Dearborn County population lives in the four townships in the study area. These townships account for nearly 17 percent of the overall county population growth (see Figure 1-4). The increased growth can be attributed to the pattern of outward migration from Hamilton County, Ohio. Many residents choose to live in Dearborn County and commute to work in Hamilton County. Two separate studies conclude that by the year 2020 the population of Dearborn County will be between 53,305 and 60,287.

Dearborn County has an overall population density of 151.1 persons per square mile. The highest population density is found in the southeast area of the county where the cities of Aurora, Greendale and Lawrenceburg are located.

Employment

The economy of Dearborn County has become more diverse over the past few decades. Similar to state and national trends, Dearborn County saw a shift from a manufacturing economy to a service and retail trade economy. According to employment data from the 2000 Census, 13.1 percent of the county's total employment is in retail trade, while service jobs comprise nearly 47 percent of all employment. This includes arts, entertainment and recreation (6.1 percent); finance,

insurance, real estate, rental and leasing (6.8 percent); professional, scientific, management, administrative and waste management services (3.5 percent) education, health and social services (8.8 percent); information services (1.5 percent) and other services (6.3 percent). Manufacturing jobs make up 10.1 percent of all county employment, yet employment in this sector has declined steadily over the past three decades from about 4,000 jobs in 1970 to less than 2,500 jobs in 2000.

The Dearborn County Chamber of Commerce estimates 1,400 businesses are established in the county, each with less than five employees. Argosy Casino, located in Lawrenceburg, is Dearborn County's largest employer, having a staff of over 2,100 people. Dearborn County Hospital, Wal-Mart Supercenter, American Electric Power, Pri-Pak, Inc., Pernod Ricard USA (Seagram Lawrenceburg Distillery) and the Aurora Casket Company each employ between 100 and 500 people.

Similar to the county's population density, employment density is highest in the southeast corner of the county. According to the 1997 Census of Agriculture, there were 679 farms in the county, with a total acreage of 81,383 acres. The average farm size was 120 acres with the majority of farms consisting of 50-179 acres.

Economics

The median household income for Dearborn County in 2000 was \$48,899, while the Census Bureau reports that the U.S. median household income for the same year was \$42,148 annually. Figure 1-5 lists the income of the four townships compared to the county. Lawrenceburg and Center Townships are below the national average value.

Figure 1-5: Dearborn County Income Data

Township/County	Median Household Income	Per Capita Income	Percentage of Residents Below the Poverty Line
Center	\$39,095	\$19,047	8.6%
Clay	\$42,262	\$17,115	6.3%
Lawrenceburg	\$37,863	\$19,758	9.3%
Washington	\$46,250	\$19,645	5.9%
Dearborn County	\$48,899	\$20,431	6.6%

Commute Patterns

Individual vehicular travel to work is the dominant mode of transportation in the county (see Figure 1-6), largely due to the lack of convenient transit alternatives. Catch-A-Ride is the county's fixed route, point deviation and demand responsive service with limited access to out of state destinations, including Cincinnati and Northern Kentucky.

Figure 1-6: Dearborn County Commuting Patterns

Township/County	Drove Alone	Carpooled	Public Transportation	Other Means	Worked At Home
Center	82.7%	12.6%	0.3%	2.8%	1.7%
Clay	78.8%	17.6%	0.3%	1.3%	2.1%
Lawrenceburg	82.6%	11.3%	0.0%	5.2%	0.8%
Washington	84.4%	8.3%	0.0%	5.3%	2.0%
Dearborn County	83.0%	11.7%	0.5%	2.3%	2.4%

Dearborn County can be considered a “bedroom community” for Hamilton County, Ohio – meaning that many residents live in Dearborn County, yet commute to work in Hamilton County. Commuting patterns show that the county does not provide enough jobs for a large portion of its population. Over four times more people commute from Dearborn County to work in other counties than those that commute to Dearborn County (see Figure 1-7).

Figure 1-7: Commuting Patterns in 2002

Location	Commute From Dearborn County		Commute To Dearborn County	
	Total	Percent	Total	Percent
Franklin County	102	2.5%	194	27.4%
Ripley County	1,016	7.3%	1,006	35.8%
Switzerland County	53	3.2%	445	1.9%
Ohio County	349	2.5%	769	27.4%
Kentucky	2,018	14.5%	129	4.6%
Ohio	8,601	61.7%	400	14.2%
Other Areas	1,401	10.1%	260	9.2%
Total	13,540		3,203	

Dearborn County has a low percentage of zero-car households. The townships of Lawrenceburg and Center have the highest concentration of zero-car households. This is not unexpected due to the lower income rates combined with a higher concentration of development patterns and mixed land uses (see Figure 1-8).

Figure 1-8: Countywide Vehicle Ownership

Township/County	No Vehicle	1 Vehicle	2 Vehicles	3 or more
Center	10.2%	29.6%	35.4%	24.8%
Clay	4.3%	29.6%	35.1%	31.0%
Lawrenceburg	11.6%	34.7%	35.9%	17.8%
Washington	5.1%	18.1%	39.9%	37.0%
Dearborn County	5.6%	23.1%	40.1%	31.3%

Conclusion

The population of Dearborn County increased 18 percent from 1990 to 2000, and this growth is expected to continue. The highest population density is located in the

southeast corner of the county, which is located near US 50. Shifting trends in employment coupled with commute patterns show that many residents live in Dearborn County but work in Hamilton County. The expected increase in population coupled with an east and west commute pattern, will continue to place heavily demands on US 50 in the future.

Environmental Resources

A review of pertinent literature was performed within the study area boundary to identify any environmental “red flags”. This review considered existing cultural and ecological resources, soils, hazardous materials and community resources.

Inventoried Structures

Information on the type and location of inventoried structures was obtained from the Historic Landmarks Foundation of Indiana publication “Dearborn County- Interim Report” 1983 (see Figure 1-9 and Exhibit 1-2). Below is a summary of this information organized by township (see Figures 1-10 to 1-13). Map reference numbers refer to location maps presented here and obtained from the Interim Report (see Appendix A). With respect to rating indicated in each column, the following definitions apply:

Figure 1-9: Inventoried Structures - Evaluation Definitions

Rating	Description
O	<i>Outstanding</i> : recommended as potential nominations to the National Register of Historic Places
N	<i>Notable</i> : recommended as potential nominations to the Indiana Register of Historic Places and Structures
C	<i>Contributing</i> : contribute to the density, continuity, and/or uniqueness of the whole county, or historic district, but don’t appear to meet the criteria for the National or State Registers
R	<i>Reference</i> : sites listed within historic districts which are considered later or badly altered pre-1940 structures
NC	<i>Non-contributing</i> : sites within historic districts that create a negative impact and are considered intrusions

Figure 1-10: Inventoried Structures - Lawrence Township

Map Reference No.	Rating	Description
1	C	Historical marker-Stateline Road-State Line-1838
2	C	Concrete arch bridge-US50-1905
3	N	Historical marker-Whitewater Canal -1836-47
001-411		Lawrence Historic District
001-204		Newtown Historic District
6	N	Lawrenceburg High School-US50-Art Deco-1936
19	N	J. Rees Farm-US50-Federal-c.1840
20	O	Harry Puellmand House-US50-International-1939
21	N	Amos Rees Farm- US50-Italianate-1880
22	O	James McLeaster Farm-US50-Greek Revival-1838/c.1840
23	C	House-US50-Greek Revival-c.1840
24	O	House-US50-Stick Style-c.1900

Figure 1-11: Inventoried Structures - Clay Township

Map Reference No.	Rating	Description
1	O	Round Barn-US50-Indeterminate-c.1920
2	O	Wesley Fleming Farm-US50-Italianate-c.1875
3	N	Abbott Farm-US50-Gothic Revival-c.1865
4	C	Farm-US50-Carpenter-Builder-c.1900
5	C	Farm-North Street-Federal/Carpenter-Builder-c.1840/c.1880
1-201		Dillsboro Historic District

Figure 1-12: Inventoried Structures - Center Township

Map Reference No.	Rating	Description
001-191		North Aurora Historic District
001-344		Aurora Historic District
001-124		Southwest Aurora Historic District
504	C	House-US50-Carpenter-builder-c.1910
505	N	House-US50-Greek Revival-c.1838
506	C	House-US50-Bungalow-c.1900

Figure 1-13: Inventoried Structures - Washington Township

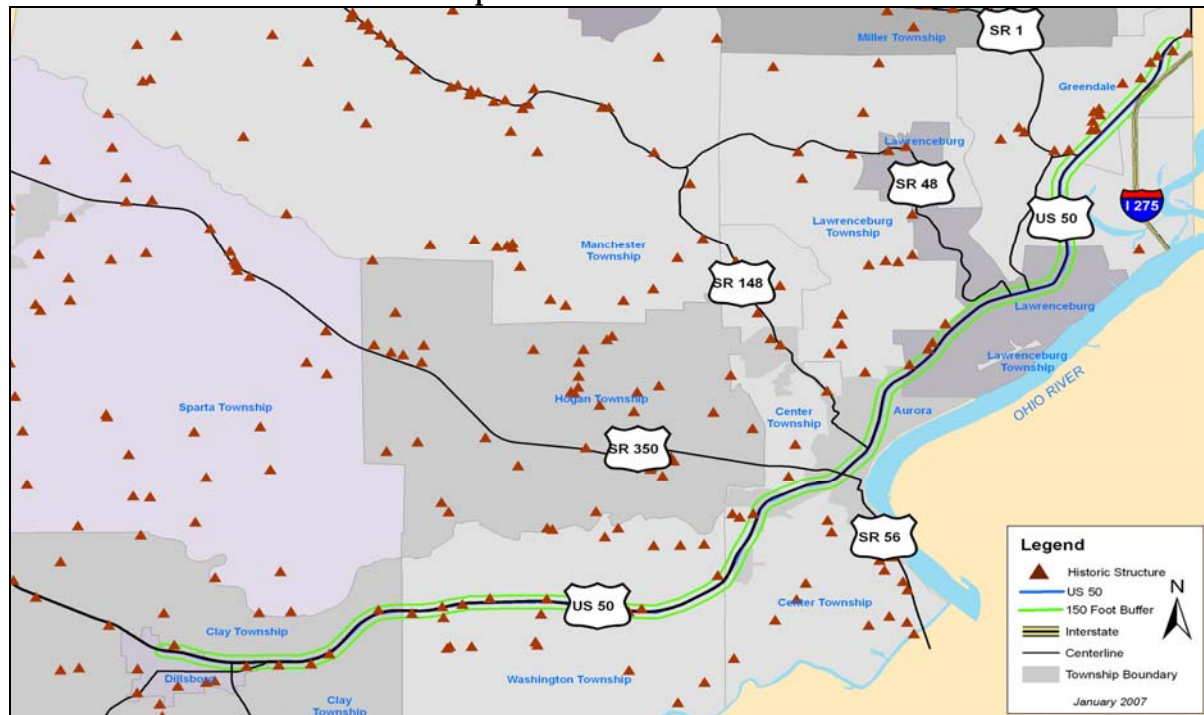
Map Reference No.	Rating	Description
8	C	R.A. Beckett House-US50-Carpenter-Builder-c.1885
10	N	Mt. Tabor Methodist Church and Cemetery-US50-Gothic Revival-1875
11	N	John F. Walker House-US50-Italianate-c.1875
12	C	Campbell Farm-US50-Gothic Revival-c.1870
14	O	Sowdon- Cotton House-US50-Federal-c.1830
15	N	George Randall House-US50-Greek Revival-c.1840
16	C	House-US50-Free Classic-c.1900
17	C	Maggie E. Tufts House-US50-Greek Revival-1848
18	N	Henry D. Tufts farm-US50-Gothic Revival-c.1855

There are also three canal structures and 11,992 linear feet of canal within the study area. Additional information regarding historic structures was obtained from Indiana Geographical Information Council - Geographic Information System (GIS) Atlas for Indiana.

This information was cross-referenced with the above and an additional three resources were identified: Oakdale Cemetery (Beatty Road- Clay Twp.) - Rated Contributing, Trestor Farm (Blair Road, Washington Twp.) - Rated Contributing and Railroad Buildings (Oberting Road- Greendale) - Rated Notable.

One additional structure was identified on the National Park Services web site listing National Register properties. This structure is the Daniel S. Major House (761 W. Eads Parkway, Lawrenceburg).

Exhibit 1-2: Inventoried Structures Map



Archaeological Resources

A request was made by OKI to the Indiana Department of Natural Resources (IDNR) - Division of Historic Preservation and Archaeology (DHPA) concerning the location of previously identified archaeological resources in the project study area. The IDNR-DHPA responded that to obtain this information, a literature review would need to be completed by a consultant who met their pre-qualification requirements. Based on the level of detail of the US 50 Gateway Study being completed, further information would be gathered at a later date when study alternatives are implemented.

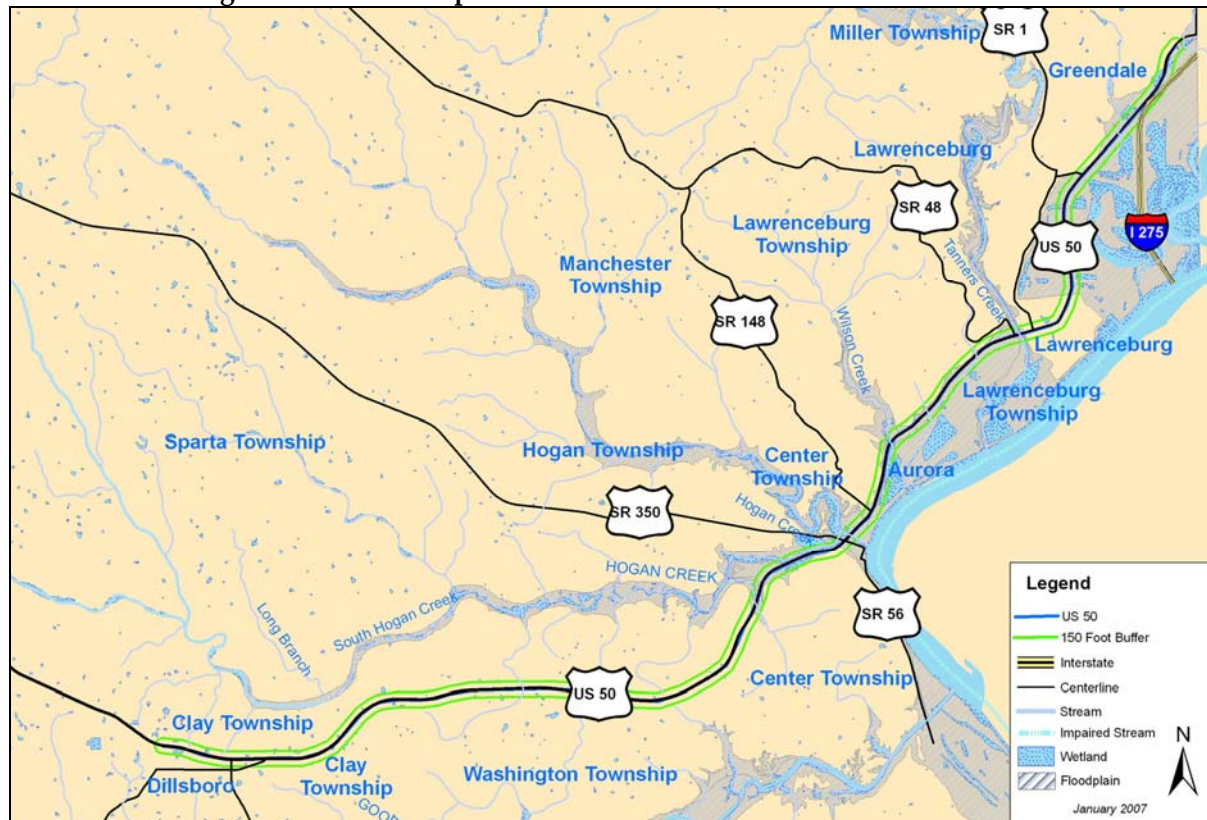
Streams

Within the US 50 study boundaries and adjacent area there are five major drainages, including North Hogan Creek, South Hogan Creek, Wilson Creek, Tanners Creek and the Ohio River (see Figure 1-14 and Exhibit 1-3). Of these streams, the Ohio River is listed as impaired by the Indiana Department of Environmental Management (IDEM).

Figure 1-14: Nearby Drainages

Drainage	Length within study area
North Hogan Creek	1,164 feet
South Hogan Creek	4,816 feet
Wilson Creek	3,297 feet
Tanners Creek	1,088 feet
Ohio River	0 feet

Exhibit 1-3: Ecological Resources Map



Wetlands

Based on information obtained from the Indiana Geographical Information Council-GIS Atlas for Indiana, there are approximately 10.1 acres of wetlands within a 150 foot buffer on either side of US 50 (see Exhibit 1-3).

Floodplain

Based on information obtained from the Indiana Geographical Information Council-GIS Atlas for Indiana, there are approximately 84.4 acres of floodplain that exist within the US 50 study area (see Exhibit 1-3).

Soils

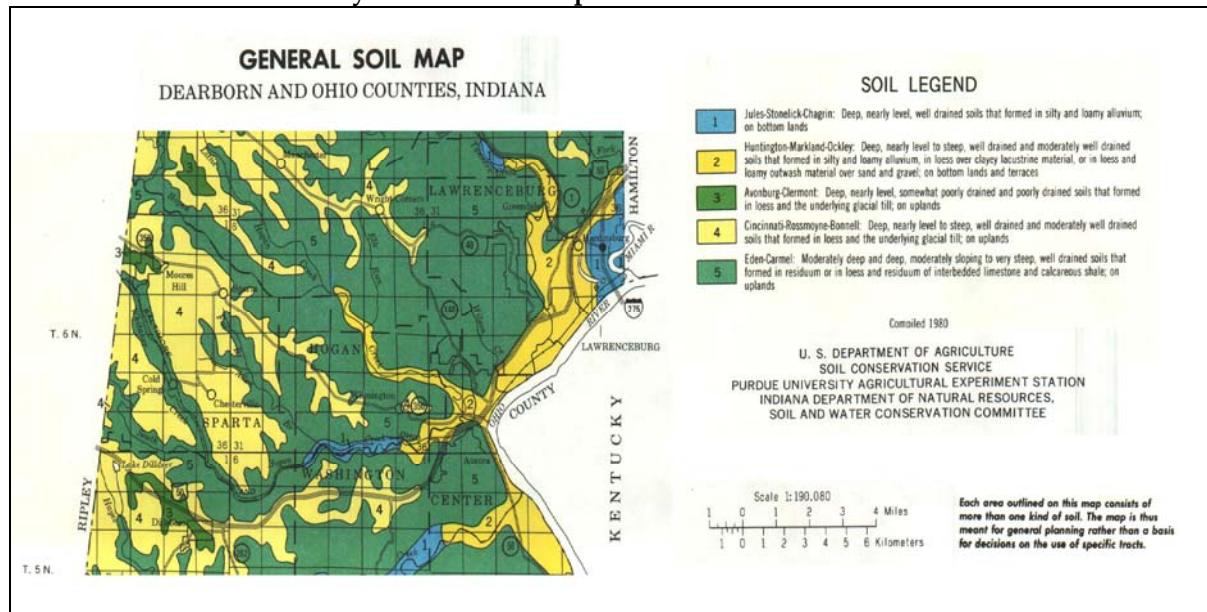
A review of the *Soil Survey for Dearborn and Ohio Counties Indiana (USDA-NSCS April 1981)* indicates that there are three major soil complexes along US 50 from the Ohio/Indiana border to Dillsboro (see Exhibit 1-4).

These soil complexes include:

1. Huntington-Markland-Ockley (2): Deep, nearly level to steep, well-drained and moderately well-drained soils that formed in silty and loamy alluvium, in loess over clayey lacustrine material, or in loess and loamy outwash material over sand and gravel, found on bottom land and terraces.

2. Cincinnati-Rossmoyne-Bonnell (4): Deep, nearly level to steep, well-drained and moderately well-drained soils that formed in loess and the underlying glacial till, found on uplands.
3. Eden-Carmel (5): Moderately deep and deep, moderately sloping to very steep, well-drained soils that formed in residuum or in loess and residuum interbedded limestone and calcareous shale, found on uplands.

Exhibit 1-4: Dearborn County General Soil Map



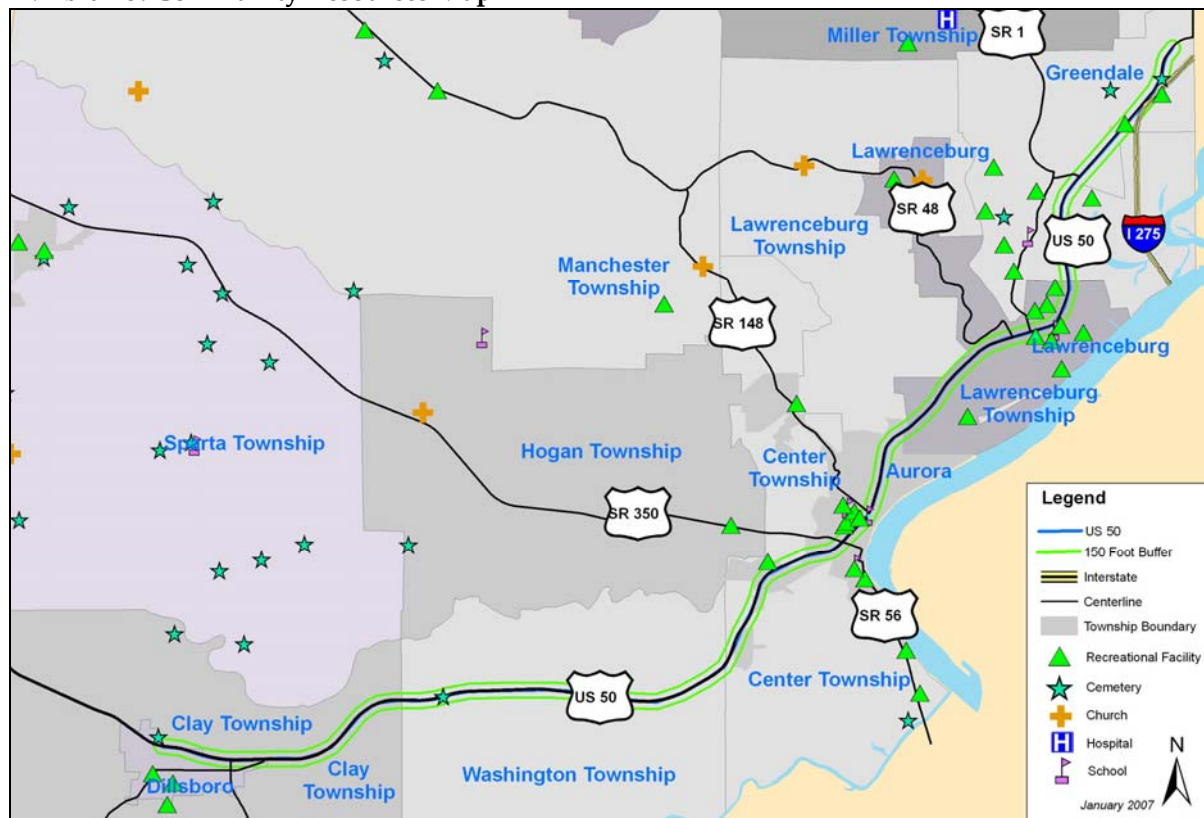
Community Resources

Based on information obtained from the Indiana Geographical Information Council-GIS Atlas for Indiana within the US 50 study area, the following Community Resources were identified: two parks, six schools/recreational facilities and two cemeteries:

- Parks
 - New Town Park
 - Largent Park
- Cemeteries
 - Miller Cemetery
 - Mount Tabor Church Cemetery
- Schools/Recreational Facilities
 - Central Elementary School
 - Aurora Middle School
 - Sisters of St. Francis
 - St. Lawrence School
 - Lawrenceburg High School
 - South Dearborn Comm. School Corp. - Aurora Elementary School
 - South Dearborn Comm. School Corp.- Central Office

While there are churches in Dearborn County, there are no hospitals or churches within 150 feet on either side of US 50, the study area boundary (see Exhibit 1-5).

Exhibit 1-5: Community Resources Map



Wellhead Protection Areas

The IDEM - Drinking Water Branch was contacted concerning the location of any Wellhead Protection Areas in the project study area. They responded that there are three wellhead protection areas in the general vicinity of the study area.

These include the cities of Greendale, Lawrenceburg and Aurora. The wellhead protection area in Lawrenceburg is currently located adjacent to US 50 in downtown Lawrenceburg, but there are plans to decommission the existing well and utilize other sources in the future.

Threatened, Endangered and Rare Species – Dearborn County

A request was made to the IDNR – Indiana Natural Heritage Data Center to determine what threatened, endangered or rare species may occur within Dearborn County. The species list on the following page was provided by the IDNR. Those species highlighted in yellow have been identified within or near the US 50 study area (see Figure 1-15).

Figure 1-15: Threatened, Endangered and Rare Species

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Villosa lienosa	Little Spectaclecase		SSC	G5	S2
Insect: Coleoptera (Beetles)					
Cicindela marginipennis	Cobblestone Tiger Beetle		SE	G2	S2
Fish					
Ammocrypta pellucida	Eastern Sand Darter			G3	S2
Etheostoma variatum	Variegated Darter		SE	G5	S1
Amphibian					
Ambystoma barbouri	Streamside Salamander			G4	S3
Plethodon electromorphus	Northern Ravine Salamander			G5	S2
Reptile					
Crotalus horridus	Timber Rattlesnake		SE	G4	S2
Bird					
Lanius ludovicianus	Loggerhead Shrike	No Status	SE	G4	S3B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Sterna antillarum athalassos	Interior Least Tern	LE	SE	G4T2Q	S1B
Tyto alba	Barn Owl		SE	G5	S2
Mammal					
Lynx rufus	Bobcat	No Status		G5	S1
Taxidea taxus	American Badger			G5	S2
Vascular Plant					
Armoracia aquatica	Lake Cress		SE	G4?	S1
Diodia virginiana	Buttonweed		WL	G5	S2
Euphorbia serpens	Matted Broomspurge		SE	G5	S1
Juglans cinerea	Butternut		WL	G3G4	S3
Lilium canadense	Canada Lily		SR	G5	S2
Ludwigia decurrens	Primrose Willow		WL	G5	S2
Penstemon canescens	Gray Beardtongue		SE	G4	S2
Saxifraga virginensis	Virginia Saxifrage		WL	G5	S3
Trifolium stoloniferum	Running Buffalo Clover	LE	SE	G3	S1
Viburnum molle	Softleaf Arrow-wood		SR	G5	S2
High Quality Natural Community					
Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	G3	S2
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

A review of the United States Fish and Wildlife Service - Region 3 Midwest website lists the federally endangered Indiana bat (*Myotis sodalist*) and Running buffalo clover (*Trifolium stoloniferum*) and the federally threatened Bald eagle (*Haliaeetus leucocephalus*) for Dearborn County.

Hazardous Materials

Based on information obtained from the Indiana Geographical Information Council-GIS Atlas for Indiana, it appears that the following sites of concern are located within or near the US 50 study area (see Exhibit 1-6 and Figure 1-16 and):

Exhibit 1-6: Hazardous Materials Sites Map

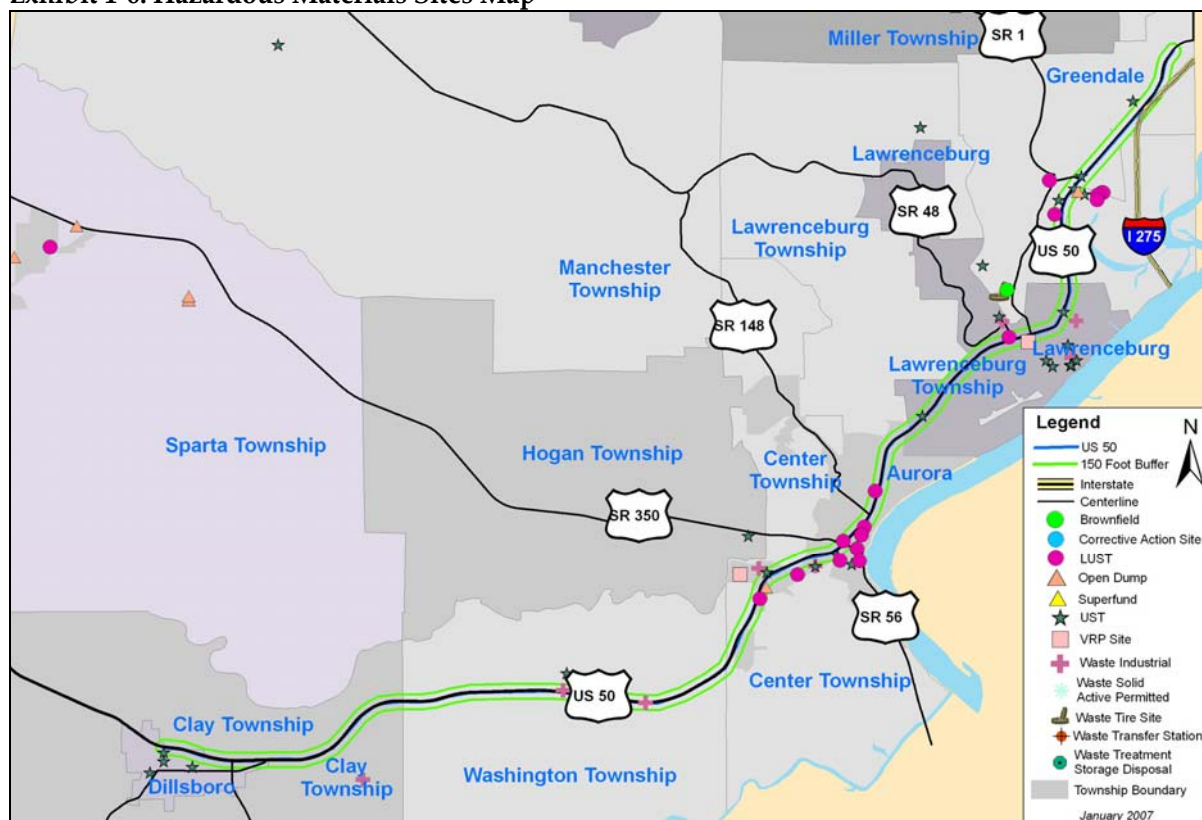


Figure 1-16: Hazardous Materials Sites

Site Type	Number	Site Type	Number
Brownfields	1	Waste Tire	1
LUST (Leaking Underground Storage Tanks)	15	Solid Waste Active/Permitted	0
Open dump	2	Waste Transfer Station	0
UST (Underground Storage Tank)	22	Waste treatment/Storage/Disposal	0
VRP (Voluntary Remediation Program)	2	Superfund	0
Industrial Waste	6	CORAC	0

Petroleum Resources

Within the US 50 study area, there are seven petroleum wells and one petroleum field. The petroleum field is located in the vicinity of Lawrenceburg (see Exhibit 1-7).

Quarries

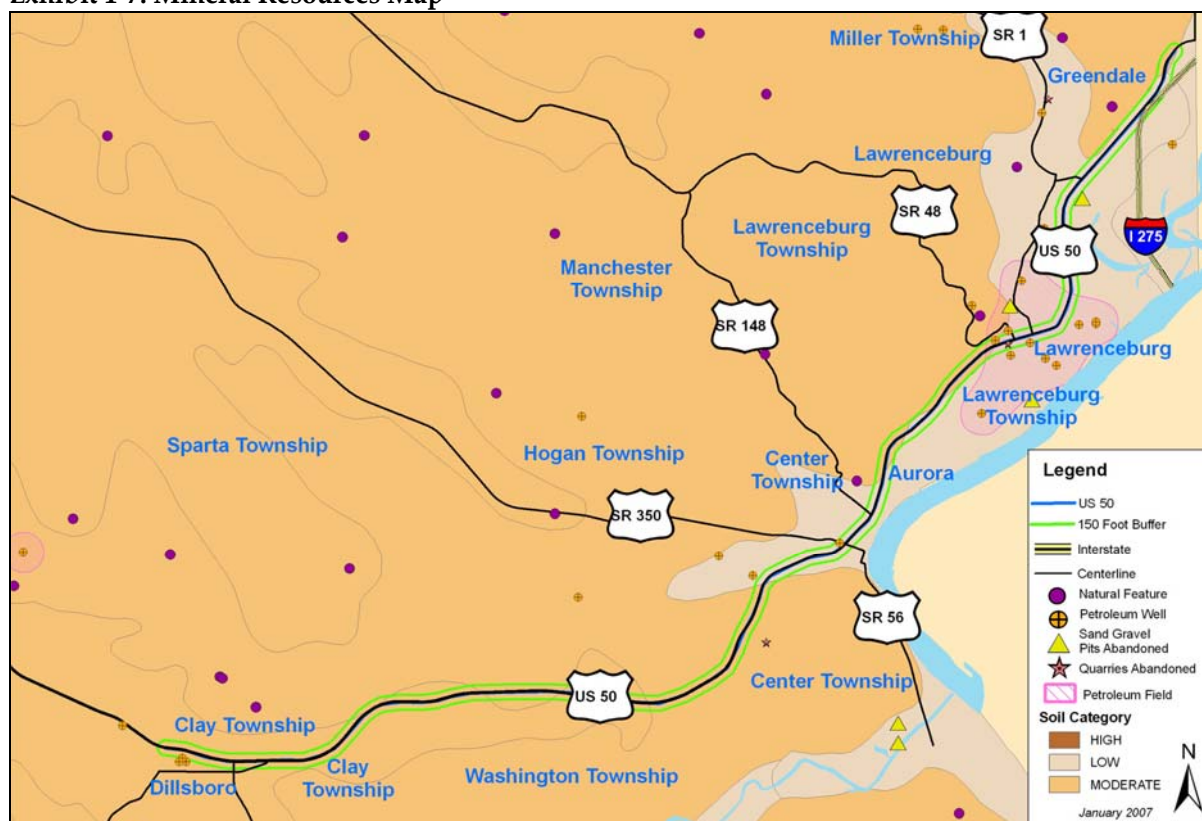
Within the US 50 study area, there is one abandoned quarry (see Exhibit 1-7).

Shrink-Swell Potential

Shrink-swell potential is the potential for volume change in a soil with a loss or gain in moisture. This change occurs mostly because of the interaction of clay minerals with water. This potential also varies with the amount and type of clay minerals in the soil.

For example, if the shrink-swell potential is rated moderate to very high, shrinking and swelling can cause damage to buildings, roads and other structures. Based on information obtained from the Indiana Geographical Information Council - GIS Atlas for Indiana the US 50 study area is shown with a majority of moderate to some low potential (see Exhibit 1-7).

Exhibit 1-7: Mineral Resources Map



Noise

The National Environmental Policy Act (NEPA) of 1969 requires the evaluation of potential environmental impacts of all projects subject to federal funding or approval. Noise analyses are conducted in accordance with the Federal Highway Administration (FHWA) Federal Aid Policy Guide, Subchapter H, Part 772, *Procedures For Abatement Of Highway Traffic Noise And Construction Noise* and INDOT's guidelines. Based on information obtained during this review, it appears that noise sensitive land uses are found within the project study boundaries, such as schools, homes and recreation facilities.

Air Quality

Portions of Dearborn County (Lawrenceburg Township) are in non-attainment for ozone (8 hour) and particulate (size <2.5 micrometers). The entire county is in attainment for carbon monoxide, nitrogen dioxide, ozone (1 hour), sulfur dioxide, particulate (size <10 micrometers) and lead.

Section 4(f) Properties

"Section 4(f)" refers to that portion of the original Federal Department of Transportation Act (1966) which requires consideration of publicly-owned park and recreational lands, wildlife and waterfowl refuges and historic sites in the preliminary development process. During preliminary environmental studies, "red flag" areas within the study area were identified so those areas can either be avoided or considered for measures to minimize harm. The literature reviews conducted for this project identified several historic and potentially historic properties as well as public parks and recreation areas within the study area. If any of these resources are impacted, the Section 4(f) process must be implemented and an evaluation prepared to ensure that no feasible and prudent alternative to the use of land from the property exists and that the action includes all possible planning to minimize harm to the property.

TRANSPORTATION NETWORK

Traffic Information

The following is a summary of the traffic routes in the study area, focusing on US 50, but also including other transportation corridors that feed into US 50. This traffic summary also includes the Annual Average Daily Traffic (AADT) and 2030 Levels of Service (LOS), or predicted ease of traffic flow, along US 50. Existing traffic information was collected from OKI, INDOT and the Dearborn County Transportation Assessment Study.

US 50

US 50 is located in the southern portion of the county and connects the areas of Greendale, Lawrenceburg, Aurora and Dillsboro. This roadway is heavily traveled, seeing over 40,000 vehicles per day within 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 the heart of Lawrenceburg during the peak hours. The roadway is congested in this area and also has a number of traffic signals. In addition to the incorporated areas along US 50, Argosy Casino is also located along the roadway, which is a major attraction and economic engine that adds additional traffic.

I-275

I-275 is a loop around Cincinnati serving Ohio, Kentucky and Indiana. I-275 is located in the southeast of the county with an exit at Lawrenceburg. INDOT 2001 traffic counts report approximately 30,000 vehicles per day travel on I-275 within Indiana.

State Route 1

SR 1 travels north-south across the county from Lawrenceburg to 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. This is also a heavily traveled trucking route. While signs discouraging truck traffic are posted, the industry continues to utilize the roadway as a short-cut between I-275 and I-74. However, 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 past Lawrenceburg 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 and then decrease to 4,000 vehicles per day near the Ripley County line.

State Route 56

SR 56 begins in Aurora and exits south of the county at the Ohio County line. Traffic volumes are fairly significant in Aurora, with just over 13,000 vehicles per day.

State Route 148

SR 148 connects Kirschs Corner at the junction of SR 48 to US 50 in Aurora. Traffic volumes on SR 148 are between 2,400 and 4,800 vehicles per day.

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.

Annual Average Daily Traffic

Existing traffic data was collected from OKI for the years 1997 and 2001 (see Figure 1-17). The percentage change between those years was calculated and eight of the nine segments in the study area showed an increase in daily traffic. The three highest increases in AADT occur from Hill Top Drive to Exporting Street and from Exporting Street to both SR 56 and 350 in Aurora, and from SR 1 and I-275 to the state line in Greendale. The segment with the heaviest amount of traffic is located in Lawrenceburg, beginning at SR 48 and ending at SR 1 and I-275. The only segment to have a decline in traffic occurred from Station Hollow Drive, just east of Dillsboro, to Cole Lane, which is about 1.6 miles west of Aurora.

Figure 1-17: Annual Average Daily Traffic

US 50 Highway Segment	Segment Length (miles)	1997 AADT	2001 AADT	AADT Percent Change
Station Hollow Road to Cole Lane	5.3	11,300	10,300	-9.7%
Cole Lane to Hill Top Drive	1.6	14,100	15,400	8.4%
Hill Top Drive to Exporting Street	1.9	13,600	17,400	21.8%
Exporting Street to SR 56 & SR 350	0.06	14,700	21,100	30.3%
SR 56 & SR 350 to George Street	0.36	24,600	28,000	12.1%
George Street to SR 148	0.13	32,500	37,400	13.1%
SR 148 to SR 48	2.98	31,200	35,600	12.4%
SR 48 to SR 1 & I-275	2.52	35,800	41,900	14.6%
SR 1 & I-275 to state line	2.7	11,700	35,000	66.6%

2030 Levels of Service

LOS is a qualitative measure of the effect of traffic flow factors, such as travel time, interruptions, freedom to maneuver, driver comfort, convenience, and (indirectly) safety and operating cost. It is defined in the *Highway Capacity Manual* as ranging from A to F. LOS A is the best rating, indicating free flow conditions. LOS B represents essentially free flow conditions. LOS C indicates nearly free flow speeds, but freedom to maneuver is beginning to be restricted. At LOS D, travel speeds are

reduced and the ability to maneuver is limited. At LOS E, the roadway is near capacity and traffic flow is unstable. At LOS F, the traffic volumes exceed the roadway's capacity, which may result in queues and stop-and-go conditions. 2030 LOS data was collected from INDOT along the mainline of US 50. The table to the right (see Figure 1-18) lists the LOS for the US 50 project area.

In 2030, US 50 is projected to have deficiencies from the intersection of SR 56 and SR 350 in Aurora to the junction of SR 1 and I-275 in Greendale. INDOT reports that there are over 150 vehicle hours of delay per mile between Aurora and Lawrenceburg. The forecast also shows a LOS E and F between Aurora and Lawrenceburg. This will result in increased delays and commute times of travelers along US 50.

Figure 1-18: 2030 Level of Service

US 50 Highway Segment	2030 LOS
Station Hollow Road to Cole Lane	A-B
Cole Lane to Hill Top Drive	C
Hill Top Drive to Exporting Street	C
Exporting Street to SR 56 & SR 350	C
SR 56 & SR 350 to George Street	F
George Street to SR 148	E
SR 148 to SR 48	F
SR 48 to SR 1 & I-275	D*
SR 1 & I-275 to State Line	NA

*This Segment ranges from an LOS of C to F

Traffic Crash Study

Detailed crash data was provided by Dearborn County for the entire county for the three-year period between 2003 and 2005. From this data, all crashes occurring along US 50 were isolated for further study. US 50 was divided into 58 links and 58 intersections so that specific problem areas could be identified. Using GIS and manual selection, each crash was coded by specific location, crash type, road contour, lighting conditions, pavement condition and crash severity; the results were then compiled into intersections, links and total crashes (see Exhibits 1-8 through 1-10). The analysis indicated 901 total crashes within the study area over the three year period. This analysis concentrated on the characteristics of the crashes and an overview of the safety issues in the corridor. It compared US 50 to itself as opposed to other highways in Indiana. The information needed to complete an analysis utilizing statewide crash rates was not available for this study. A traditional crash rate analysis, which takes into account roadway length and average daily traffic, was not performed.

Crashes at intersections, accounting for 510 (57 percent) of all crashes, occurred more frequently than did link crashes, which accounted for 391 (43 percent) of all crashes. Rear end crashes were by far the most common crash type, accounting for 39 percent of the total; the next most common types were right angles at 15 percent, animal/object in roadway at 12 percent, same direction side-swipes at 9 percent, and ran off road at 6 percent. Across the entire study area, most crashes occurred on straight sections (94 percent), during daylight (70 percent), and on dry pavement (77 percent), indicating that curvature, lighting conditions and pavement conditions were not major contributing factors. While this generalization is true of the study area as a whole, some variation on this trend became apparent upon analysis of

crash type by location. Crash severity across the study area was fairly low, with 82 percent of crashes involving property damage only, 18 percent involving injuries, and less than one percent involving fatalities.

Crash Analysis by Location

As US 50 moves across Dearborn County from west to east it transitions from predominantly rural to predominantly urban/suburban; a fairly well defined line in land use patterns exists in the border between Washington and Center Townships. This transition is clear in the accident data as well. Using Blair Road as a dividing line, located approximately at the border of the two townships, it is clear that the frequency and types of accidents differ in the two parts of the county. From the western border of Dearborn County to Blair Road, a total of 132 crashes occurred during the three year period, accounting for only 15 percent of all study area crashes. The majority (65 percent) of crashes in this section occurred along a link.

The most common crash type was an animal/object in roadway (54 percent), along a tangent (95 percent), in dark (not lighted) conditions (56 percent) on dry pavement (78 percent). This crash type is typical of rural areas in which deer or other animals are more likely to be in the road. Beginning with the Blair Road intersection and moving east to the state line, 769 crashes occurred (85 percent of total) from 2003 to 2005. This area of Dearborn County includes the cities of Aurora, Lawrenceburg, and Greendale. Approximately 60 percent of the crashes here occurred at intersections. The most common crash type was rear end (45 percent) followed by right angle (15 percent), and same direction side-swipe (10 percent). The fact that most crashes in this area occurred on a straight road (94 percent), during daylight (77 percent), in dry conditions (77 percent) suggests that contour, lighting and pavement conditions were not major contributing factors.

High Accident Links/Intersections

A number of links and intersections in the study area have disproportionately high occurrences of crashes in comparison to the rest of US 50. A rating system was utilized to compare crashes at different locations (see Exhibits 1-8 through 1-10).

- 30 or more crashes, an average of at least 10 per year, were deemed severe accident areas
- 20 to 30 crashes were high occurrence
- 10 to 20 were medium occurrence
- Less than 10 crashes were considered a low occurrence

No link or intersection west of Blair Road had more than 20 crashes over the three year period, indicating that accident frequency is generally low throughout this portion of the county. From the western edge of Center Township

to the eastern state line there were three links and six intersections that rated severe, with more than 30 total accidents (see Figure 1-19).

Figure 1-19: High Accident Link Crashes on US 50

Link	# of Crashes
SR 148 to Billingsly Drive	39
Bellevue Drive to Oberting Road	34
Oberting Road to State Line Road	32

Of the 105 accidents in these three locations, 18 resulted in injuries and the rest were property damage only. The most common crash type for SR 148 to Billingsly Drive and Oberting Road to State Line Road was a rear end, along a straight roadway section, during daylight, on dry pavement. The most common crash type between Bellevue Drive and Oberting Road was an animal/object in the road, along a tangent, in dark (not lighted) conditions, on dry pavement.

Figure 1-20: High Accident Intersection Crashes on US 50

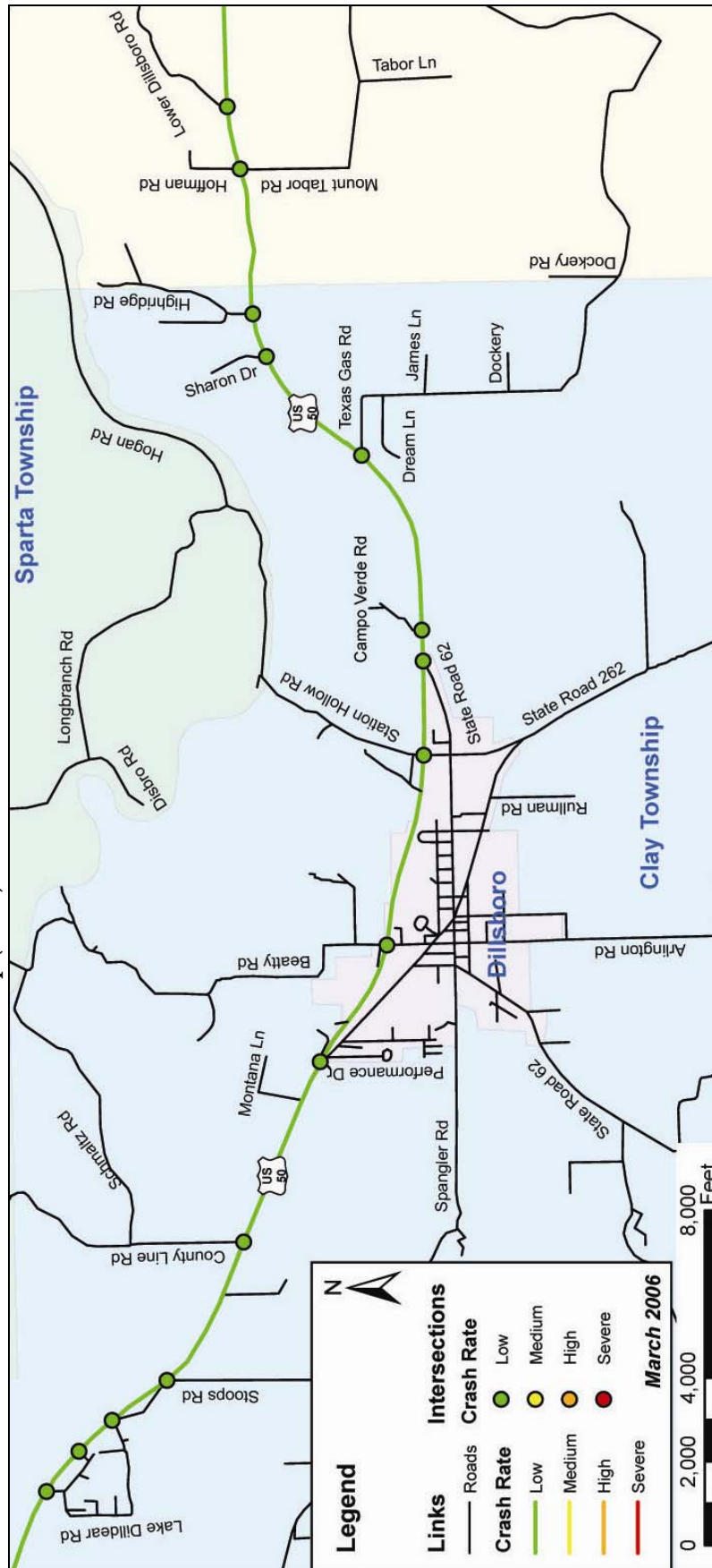
Intersection	# of Crashes
US 50 & SR 48	55
US 50 & SR 350	50
US 50 & Argosy Parkway	45
US 50 & Main St	40
US 50 & Tiger Boulevard/ Arch Street	34
US 50 & George Street	32

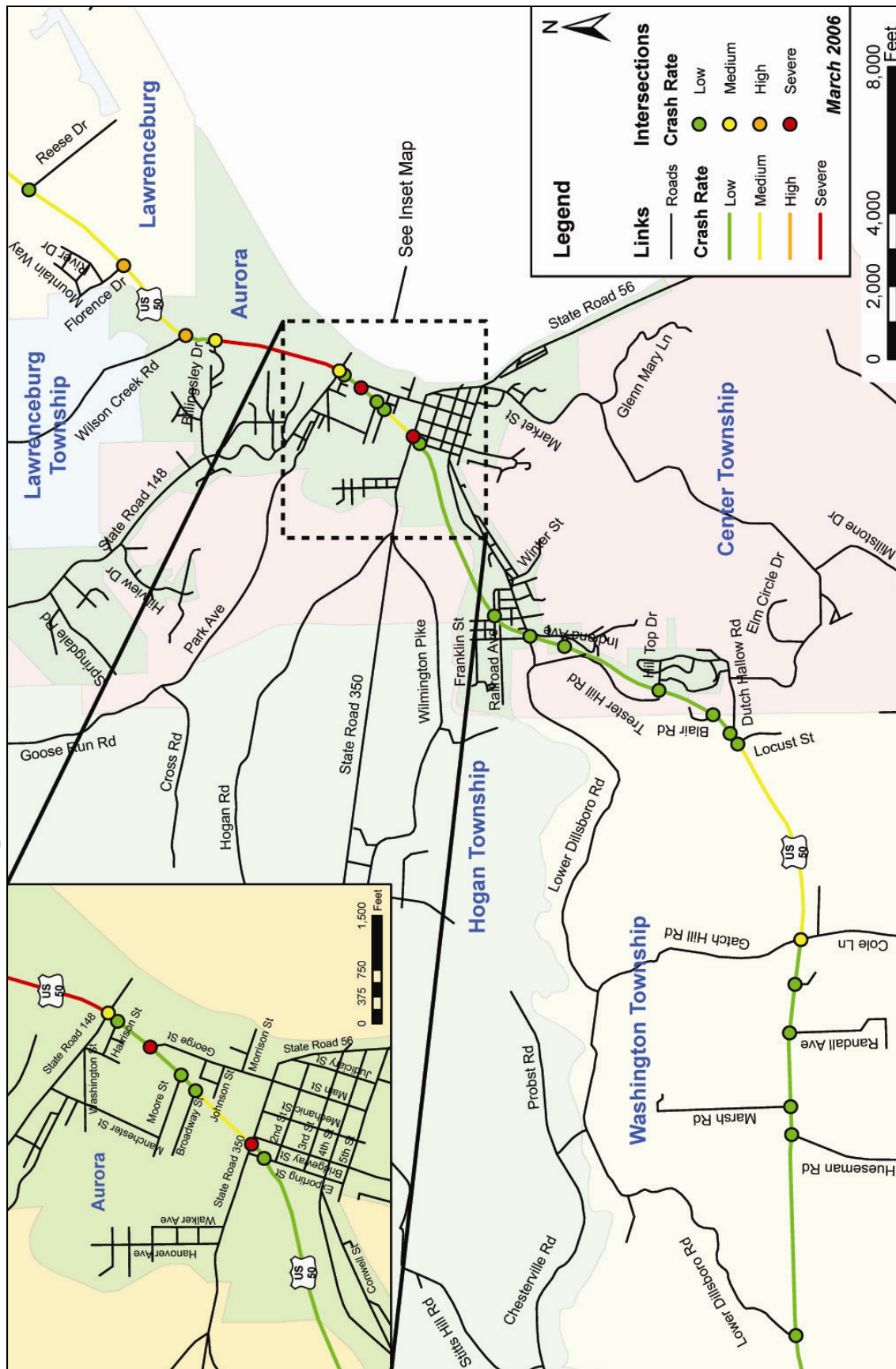
The severe occurrence intersections in the study area can be viewed in Figure 1-20. The 256 crashes at these six intersections account for 28 percent of all accidents in the study area. They resulted in 49 injuries and the remainder were property damage only. The most common crash type for all six intersections was a rear end collision, along a tangent, during daylight, on dry pavement.

Conclusions

The majority of crashes analyzed occurred within the cities of Aurora, Lawrenceburg and Greendale. In these areas, crashes were generally associated with intersections and factors such as road contour, lighting and pavement condition did not seem to be major contributing factors. The high percentage of rear end crashes further suggests that intersections are the key contributor to accidents. As development expands and traffic increases along the US 50 Corridor, these accident trends can be expected to increase as well.

Exhibit 1-8: 2003-2005 Intersection and Link Crash Map (1 of 3)





Map of Lawrenceburg, Indiana
 This map displays the crash rates at intersections and along road links for March 2006. The map covers Lawrenceburg and its surrounding areas, including Greendale, Miller Township, Lawrenceburg Township, Center Township, Manchester Township, and Hogan Township.

Legend:

- Links:** Roads (solid line)
- Crash Rate:**
 - Low: Green
 - Medium: Yellow
 - High: Orange
 - Severe: Red
- Intersections:**
 - Low: Green circle
 - Medium: Yellow circle
 - High: Orange circle
 - Severe: Red circle

Scale: 0 to 8,000 Feet

Inset Map: See Inset Map (Downtown Lawrenceburg)

Key Roads and Locations:

- US 50
- State Route 48
- State Route 1
- Argosy Pkwy
- George St
- St Clair St
- Arch St
- Tiger Blvd
- Water St
- Front St
- 1st St
- 2nd St
- Park St
- Shipping St
- State Route 48
- US 50
- Deer Run Dr
- Tower Rd
- Scenic Dr
- Elizabeth Dr
- Reese Dr
- Mountain Way
- W. Dr
- Flower Dr
- Heiner Hts
- Carroll Ave
- Tanner Ave
- Cook Ave
- Linney Ln
- Urban Way
- McClure Way
- Rudolph Way
- State Road 1
- Walnut St
- Main St
- Bellevue Dr
- Possum Creek Ln
- Obert Rd
- Par Dr
- Fairway Dr
- Longbottom Rd
- State Line Rd

Multi-Modal Options

Information for the multi-modal options summary was obtained from the 2004 Dearborn County Comprehensive Plan and the 2004 Dearborn County Transportation Assessment. This summary encompasses modes of transportation in Dearborn County in addition to roadways and highways. These modes include: public use airports, freight and passenger railroad services, bus transit services, marine terminals and other water ports, and bicycle and pedestrian facilities.

Airports

There are no public use airports located in Dearborn County. However, the Greater Cincinnati/Northern Kentucky International Airport is located only 20 minutes (approx. 18 miles) from the southeastern portion of the county. The airport has nine 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 route that serves the Greater Cincinnati area. The complete route connects Chicago, IL with Washington, D.C., and operates three times per week. CSX and Central Railroad of Indiana serve Dearborn County with freight rail.

Transit

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 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. The Transit Authority of Northern Kentucky (TANK) was contacted in regards to providing possible future service in Dearborn County. Due to the current funding strategy of TANK, it would not be possible to provide service without both formal financial support from Dearborn County and action by the TANK Board and Boone, Kenton and Campbell Counties. While no service in Dearborn County is currently included in the TANK Long Range Plan, TANK provided planning level information about a service proposal for Dearborn County. The hypothetical plan would provide park and ride service near I-275 and US 50 during peak hours only to downtown Cincinnati. In this scenario, the service would be an extension of the KY 237/I-275 Park and Ride route. The service would provide three weekday morning and three weekday afternoon express commute trips to/from downtown Cincinnati with one to two interim stops (KY 237, CVG Airport, etc.). The service would add six daily hours and 150 daily miles to TANK's existing operation. The daily figures translate to 1,572 hours and 39,300 miles per year (daily figures multiplied by 262 weekdays). TANK's fully allocated cost for service is approximately \$60/hour. The cost for the service mentioned above would be approximately \$94,320/year. This type of transit scenario is something for

Dearborn County to consider in the future.

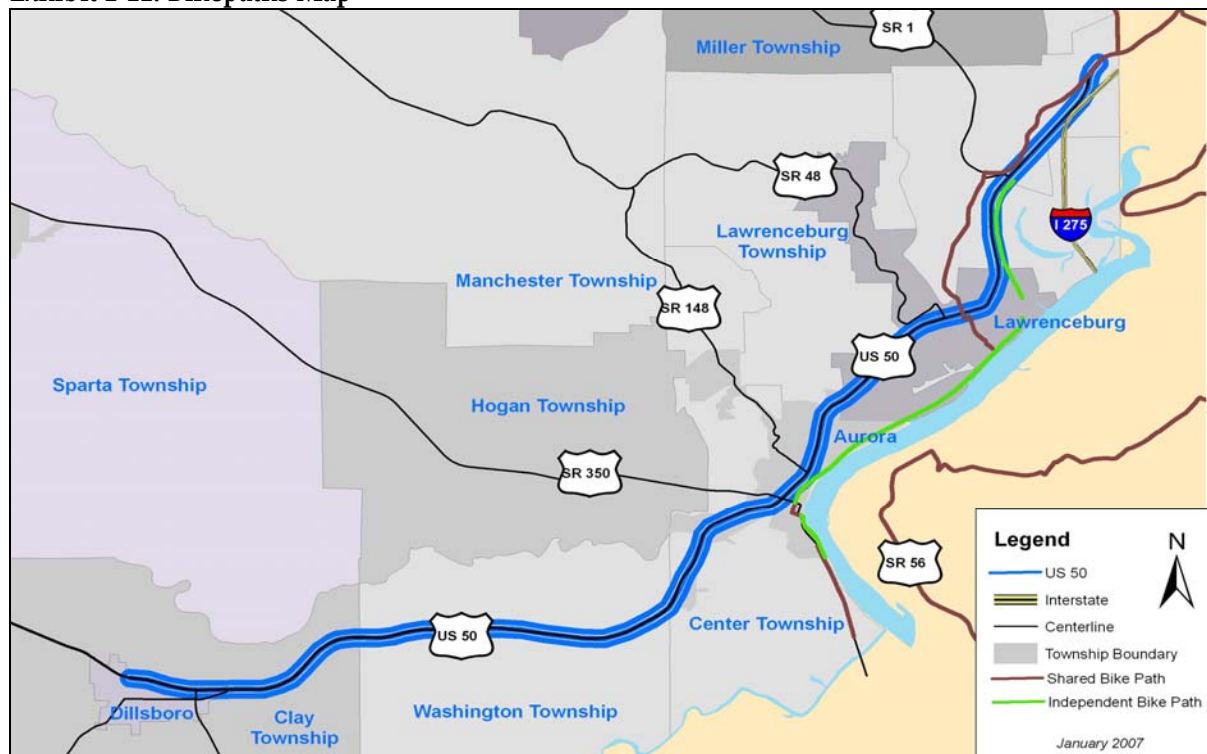
Marine Terminals and Other Water Ports

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.

Bicycle and Pedestrian Facilities

There is an existing pedestrian and bicycle trail serving the cities of Lawrenceburg and Aurora along the Ohio River. According to the Lawrenceburg Pedestrian Connectivity Study (2001), several other bicycle and walking trails are recommended (see Exhibit 1-11). They include the Lawrenceburg Levee Walk, the development of the Tanner's Creek Trail on an abandoned railroad right-of-way (ROW), and the creation of a loop around the city of Lawrenceburg. There is an existing shared use path along US 50 and a similar shared use path along US 56 planned to connect Aurora and Rising Sun. The city of Greendale recently completed a one mile trail atop the levee parallel to US 50. This segment along with the portion in Lawrenceburg end at the Argosy Casino. A connection between the two trails is being negotiated. Another project, the Ohio River Trail, proposes a greenway with trail along both sides of the Ohio River between Maysville, Kentucky and Madison, Indiana. It would include the Ohio River Trail, the Aurora-Lawrenceburg Trail and Kentucky River Path projects.

Exhibit 1-11: Bikepaths Map



LAND USE CONDITIONS AND DEVELOPMENT OPPORTUNITIES

Land Use Inventory

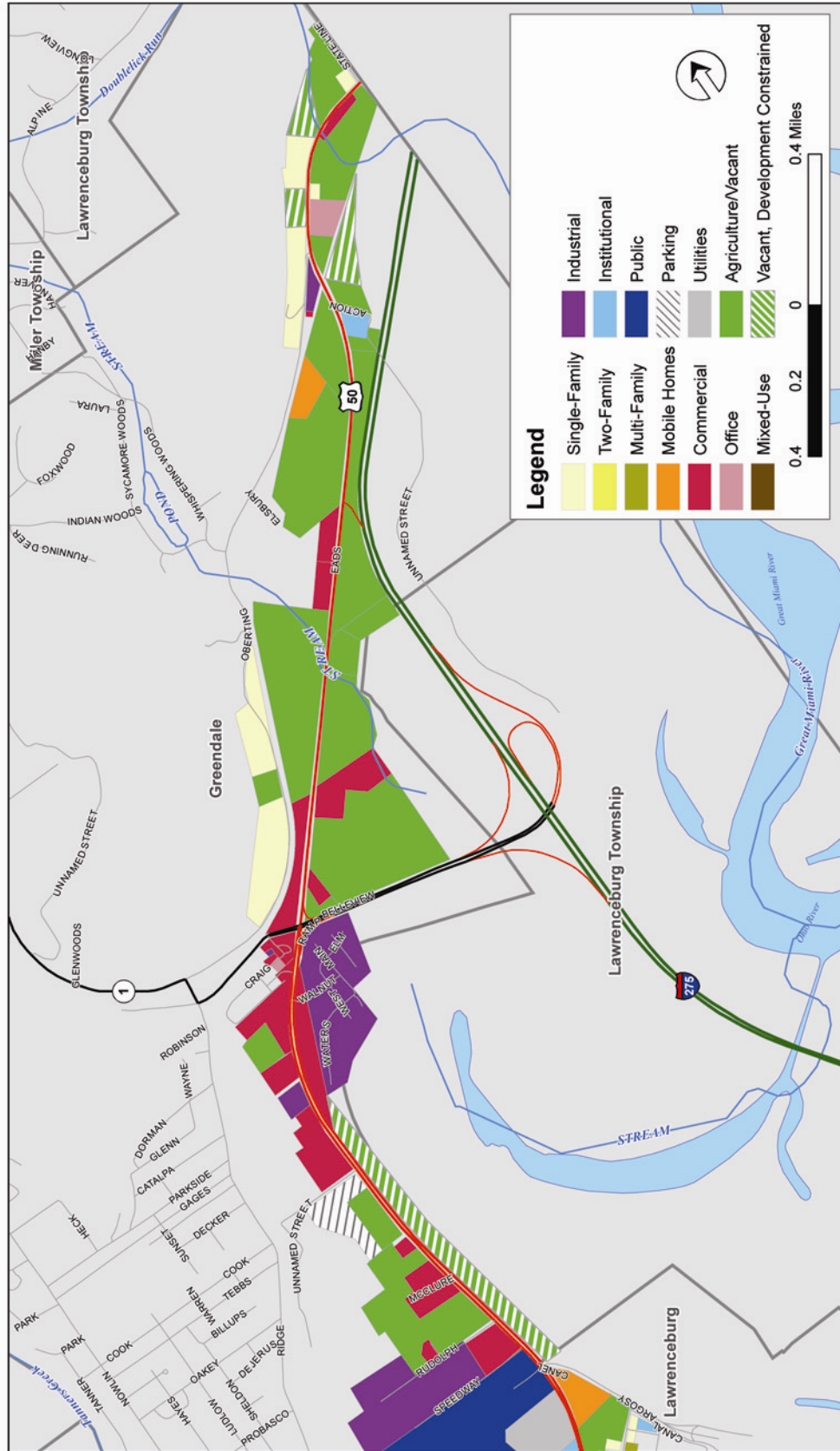
The scope of this land use inventory was generally limited to properties with frontage on US 50. Exceptions include more densely developed areas such as Lawrenceburg and Aurora, where up to one block was surveyed on either side of the roadway. Overall the corridor contains a diverse mix of uses, with an emphasis on suburban-scale retail in the areas between State Line Road and Aurora, and low-density residential and agriculture in areas west of Aurora. Retail uses appear to serve local residents, truckers and tourists visiting the Argosy Casino and Perfect North Slopes ski area. The character of the corridor is mostly suburban to rural, with the exception of the historic urban cores of Aurora and Lawrenceburg.

State Line Road to Argosy Parkway

This segment of the study area is generally suburban in character, with the majority of development found south of the entrance ramp to I-275. As indicated on Exhibit 1-12, the area north of I-275 is relatively sparsely developed with a mix of mostly residential and commercial uses amid a substantial amount of vacant or agricultural land. Some of the undeveloped sections of this segment are constrained by the floodplain of Ohio River tributaries, the close proximity of I-275 and steep slopes. Most of the residential development is relatively large-lot, single-family development along Oberting Road, which runs parallel to this section of US 50. The residential uses are buffered from the traffic noise of US 50 and I-275 due to their distance from these roadways and their substantial setback from Oberting Road. The commercial development closer to State Line Road consists mostly of neighborhood and roadside services, while the commercial development closer to the I-275 ramp consists of entertainment and hospitality, including a recent cinema, hotel and restaurant. An exception to this pattern is a fireworks retail establishment located at this interchange, which appears considerably older than the other surrounding retail uses.

The area south of the I-275 interchange is considerably more developed, with a mix of commercial, industrial and public uses. The developed areas are mostly west of US 50, as much of the eastern frontage is constrained by the Lawrenceburg Floodwall. The commercial uses include a mix of automobile-oriented retail such as car dealerships, as well as hospitality uses such as hotels and restaurants. The main public use is the Dearborn County Fairgrounds, located at the intersection of Argosy Parkway and US 50. The fairgrounds include horse and auto racing tracks, off-street parking and covered areas for general festival activities. Industrial uses include a relatively modern industrial park adjacent to the fairgrounds and older industrial uses immediately south of the I-275 ramp. An additional use is an overflow parking for the Argosy Casino, located at Lorey Lane. A substantial amount of undeveloped land exists directly north of the industrial park and south of the casino parking lot.

Exhibit 1-12: Existing Land Use Map – State Line Road to Argosy Parkway



Argosy Parkway to SR 48

This segment of US 50 is considerably more urban in character than the remainder of the corridor, because it passes through the historic core of Lawrenceburg. As indicated on Exhibit 1-13, most of the southern frontage of this segment of US 50 contains a fine-grained mix of single to multi-family residential, commercial, office, institutional and public uses.

Older buildings are generally pedestrian-oriented and located at the sidewalk line, although this context is occasionally interrupted by newer, suburban-scale infill development with parking located in front of the building. The northern frontage of US 50 west of Stadium Lane contains a similar development pattern, although the area east of Stadium Lane contains a suburban-scale collection of public schools with larger setbacks, athletic fields and parking lots.

SR 48 to SR 350/56

This segment of US 50 is generally suburban in character, containing mostly retail commercial uses and a small amount of residential, industrial, institutional and utility-related uses (see Exhibit 1-14). Development has occurred within a relatively narrow swath of land along US 50 between steep hillsides to the northwest and the Ohio River floodplain to the southeast.

Though most of this section is commercial, a highly visible feature is the large powerplant and associated power lines located immediately west of the historic core of Lawrenceburg. Located east of the powerplant is another utility use, the Lawrenceburg sewage treatment plant. The retail establishments in this section of the corridor are diverse in use and age and include neighborhood services such as groceries, large-format retail such as a Wal-mart Supercenter, specialty retail such as gift shops, equipment rental and marine supplies. The retail seems to cater to a variety of customers, including local residents, tourists and businesses. Amid the retail establishments along the southeastern frontage of US 50 is an access point for a marina that is located in an inlet of the Ohio River.

Industrial uses are few and generally include light manufacturing and warehousing. The principle institutional use is a post office located at Reece Drive. Residential uses include single and multi-family development, generally located behind commercial uses on the northwestern frontage of US 50. As US 50 approaches the historic core of Aurora, development becomes more mixed and pedestrian-oriented, as in Lawrenceburg. Unlike Lawrenceburg, however, US 50 only skirts the edge of the urban portion of Aurora.

Exhibit 1-13: Existing Land Use Map -Argosy Parkway to SR 48

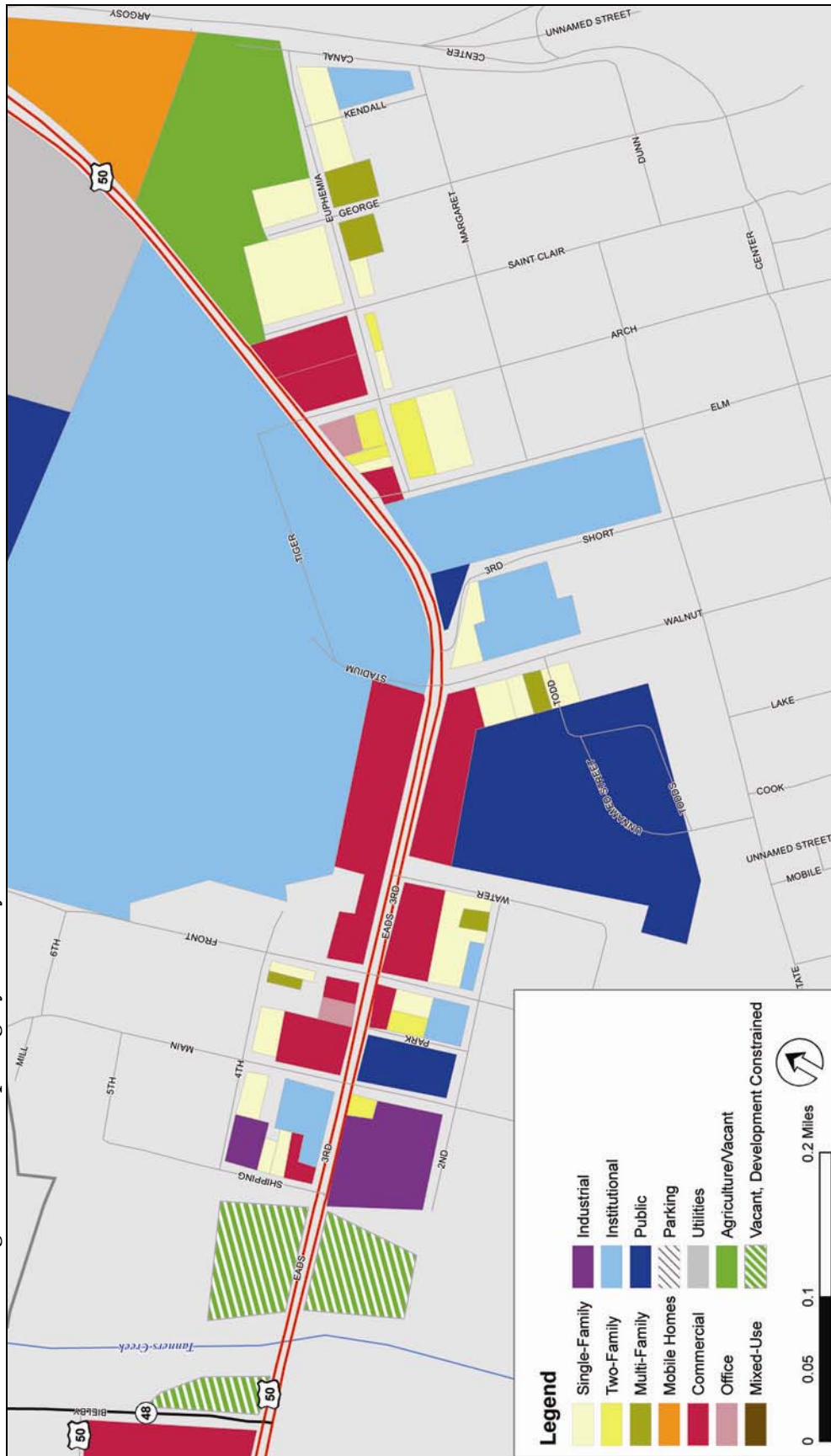


Exhibit 1-14: Existing Land Use Map -SR 48 to SR 350/56

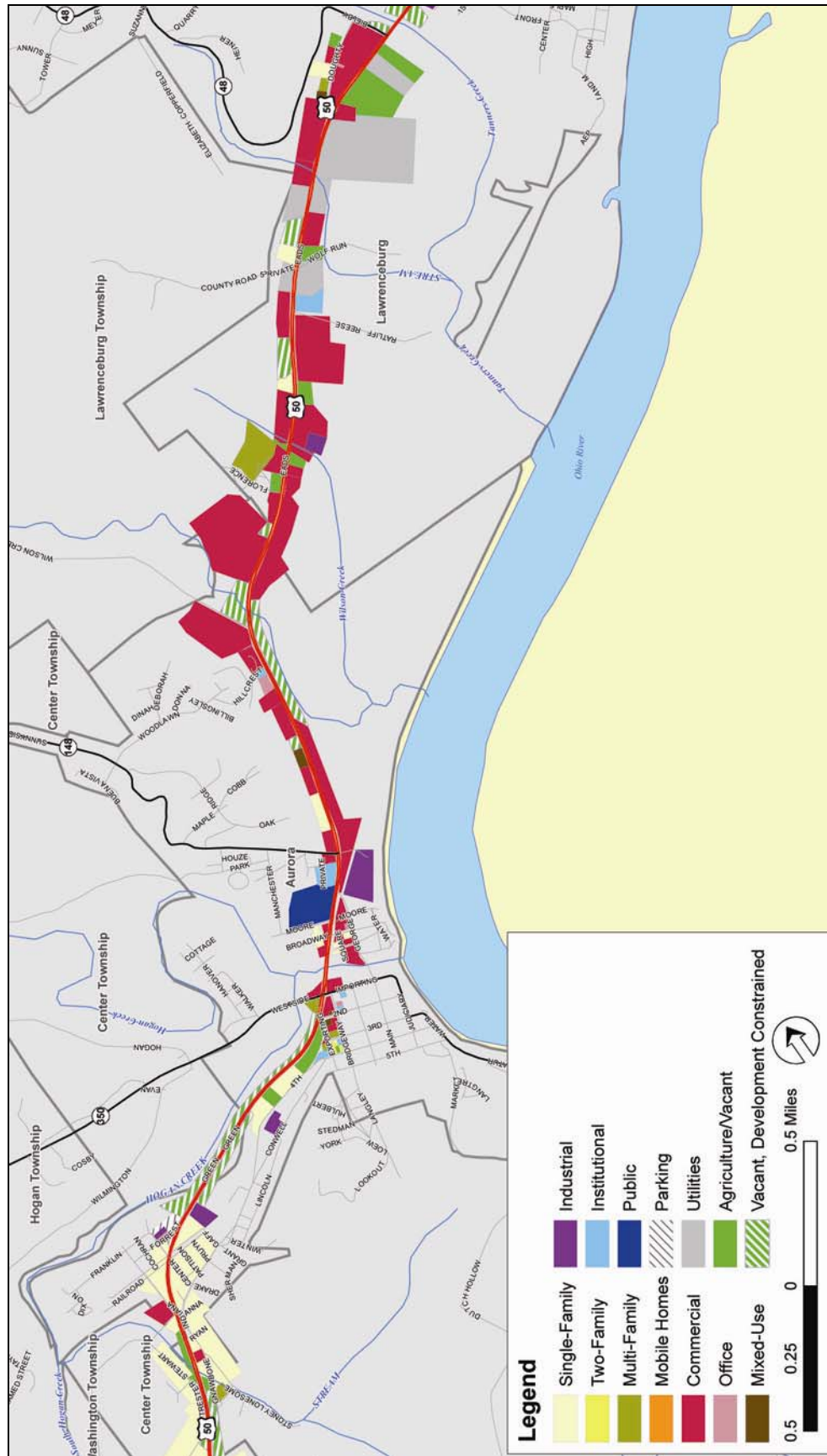
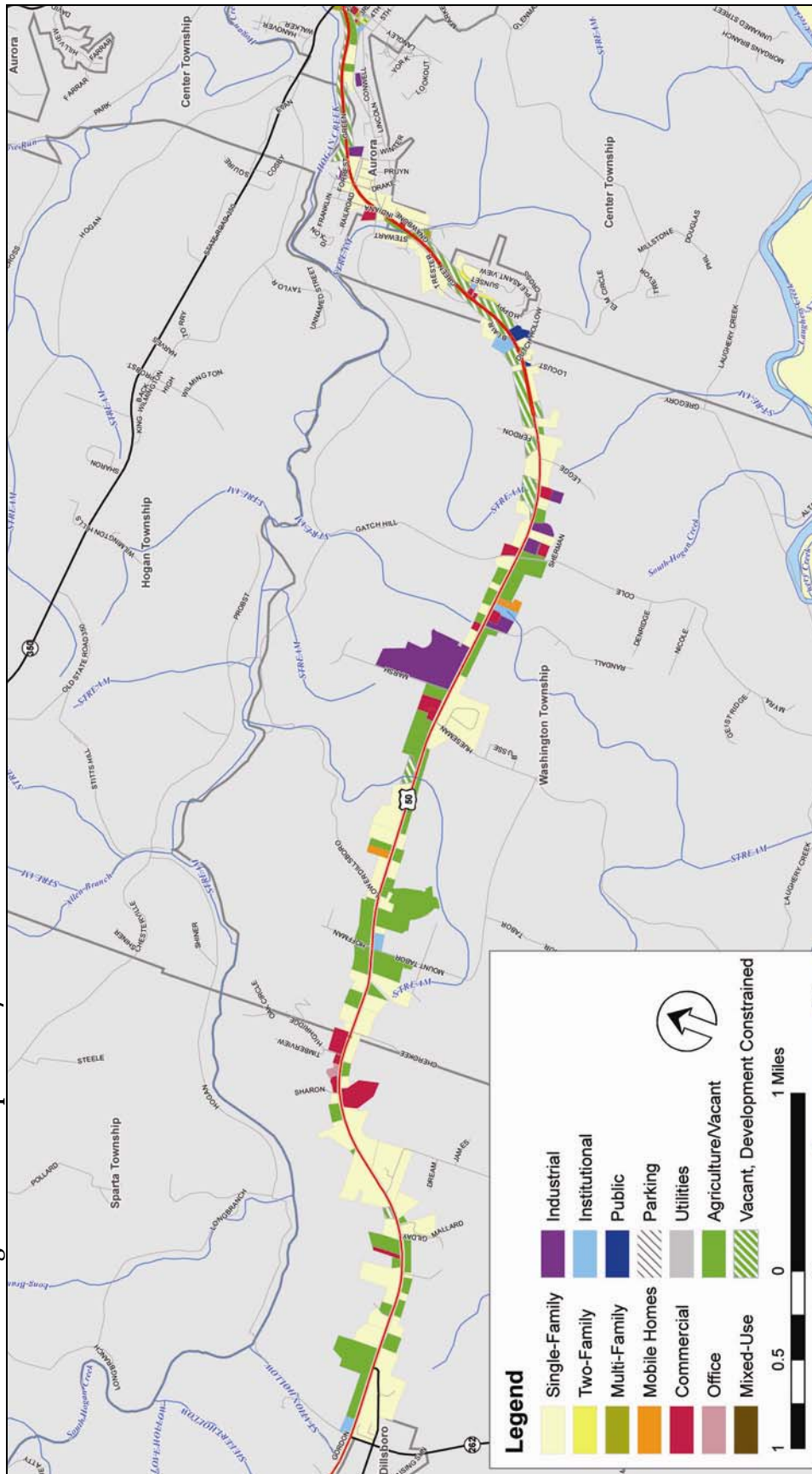


Exhibit 1-15: Existing Land Use Map -SR 350/56 to SR 62



SR 350/56 to SR 62

As US 50 travels west of Aurora the land use pattern quickly changes. West of Aurora, US 50 turns away from the Ohio River valley, and the terrain in much of this area is characterized by rolling hills. US 50 is a divided, limited-access roadway in this segment, unlike the remainder of the corridor. As indicated on Exhibit 1-15, land use is dominated by mostly large-lot single-family residential and agricultural uses. Occasional industrial, commercial, office, public and institutional uses dot the landscape. Industrial uses include the Aurora Casket Company, a significant employer in the area. Commercial uses mainly include small-scale, local services and storage facilities. Office uses are few and mainly consist of local professional services such as medical or insurance offices. The principle public use is a fire station located immediately west of Aurora. Institutional uses mainly consist of churches and cemeteries.

Development Opportunities

With the exception of a handful of sites, future development of land immediately adjacent to US 50 will be limited by a combination of physical constraints, existing development, and truck and automobile access affected by traffic congestion and distance from key transportation routes and major metropolitan areas. Ongoing loss of manufacturing jobs in the older urban cores such as Lawrenceburg and Aurora, particularly the recent announcement to close the Seagrams plant in Lawrenceburg, have the potential to create substantial redevelopment opportunities in those communities. The most viable development opportunities are clustered around the ramp to I-275. Areas to preserve include the viable historic urban cores of Lawrenceburg and Aurora.

Constraints

Physical Features. The US 50 Corridor traverses an environmentally sensitive area characterized by a major river, several tributaries and steep (greater than 10 percent slope) hillsides. Roughly half of the corridor, northeast of Aurora, is situated within a narrow swath of land between the Ohio River and the hillsides that form the river valley. Portions of this swath are within the floodplain of the Ohio River and/or its tributaries. Therefore, development within a significant portion of the corridor is either not possible or will involve significant expense and have environmental consequences. Areas west of Aurora are characterized mostly by rolling hills and do not face the same degree of physical constraints.

Existing Development. Much of the most desirable frontage of US 50, i.e. that which is most accessible from I-275 and not constrained by physical features, has already been developed. A recent spate of retail development is quickly using up the remaining developable land. Additionally, the corridor travels through the cores of two historic communities, Lawrenceburg and Aurora, that contain architecturally significant buildings as well as older industrial properties that may contain environmental contamination. Some established land uses within the corridor

conflict with surrounding land uses and may discourage development of some uses on adjacent parcels. Examples of these uses include industrial establishments and the power plant and sewage plant located directly southwest of Lawrenceburg. These uses will present a conflict for less intense uses such as residential and retail, locating on adjacent parcels.

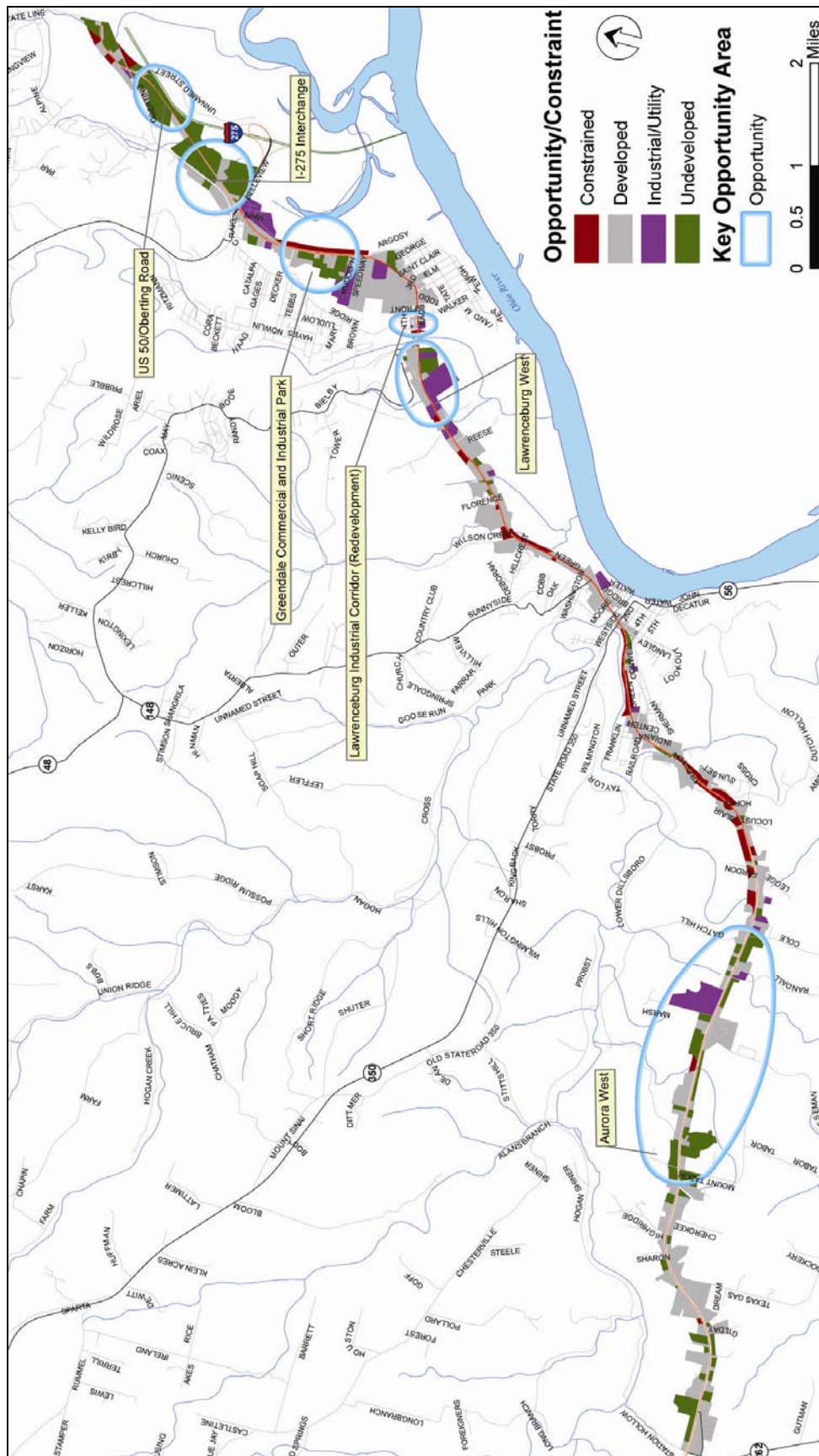
Accessibility. The corridor from State Line Road to Argosy Parkway enjoys excellent regional automobile and truck access, as it is within 2.5 miles of the I-275 interchange with US 50, and there are few traffic bottlenecks in either direction from the interchange. Traffic congestion worsens, however, as one travels through Aurora and Lawrenceburg. Therefore, poor regional accessibility becomes a constraint in the area southwest of Lawrenceburg and, to a greater extent, west of Aurora.

Opportunity Areas

Development opportunities are limited in the US 50 Corridor, due to the aforementioned constraints. As indicated on Exhibit 1-16, five general areas of opportunity for new development and one area for redevelopment were identified.

1. *US 50/Oberting Road.* This collection of undeveloped land occupies the western frontage of US 50, south of the intersection with Oberting Road. This site benefits from good visibility and access from I-275, although portions of the site may be constrained due to flood hazards.
2. *I-275 Interchange.* This opportunity area is located immediately northeast of the interchange. A cinema, restaurant and hotel were recently developed at this location, and a substantial amount of vacant land remains adjacent to these uses. Some portions of the site, however, may be constrained by flood hazards. This site benefits from excellent access and visibility from I-275.
3. *Greendale Commercial and Industrial Park.* This area is situated along the western frontage of US 50 between Rudolph Way and Lorey Lane. The area abuts light industrial facilities to the south, an overflow parking lot for the Argosy Casino to the north, and it wraps around automobile-dependent retail establishments that have frontage on US 50. This site benefits from excellent access and proximity to I-275, though visibility from I-275 is limited due to distance and the Lawrenceburg floodwall.
4. *Lawrenceburg Industrial Corridor (Redevelopment).* This area contains a collection of older industrial uses, including the Seagrams Distillery (now owned by Pernod Ricard), a significant employer in the region. Some of these industrial facilities may face a limited future due to the obsolescence of structures and the decline of manufacturing businesses locally and regionally. The recent announcement to close the Seagrams Distillery is the latest example of such trends. Plans for the area must include recommendations for reusing or redeveloping these properties as they become vacant, lest they become liabilities for the community.

Exhibit 1-16: Development Opportunities and Constraints Map



5. *Lawrenceburg West.* This area, though mostly built-out, contains some vacant parcels and vacant retail structures. Much of the vacant land is located adjacent to the power plant and sewage plant, which will limit its development potential. The area is accessible to local residents and businesses, though regional access from I-275 is somewhat hampered by traffic congestion in Lawrenceburg.
6. *Aurora West.* This mostly rural area contains a substantial amount of undeveloped land, though its regional accessibility is hampered by its distance from I-275 and traffic bottlenecks on US 50 in Aurora and Lawrenceburg. The Aurora Casket Company, a significant industrial employer in the area, is located within this section of the corridor.

Preservation Areas

Many of the constraints within the study area discussed earlier translate into preservation opportunities. There is a significant need to identify areas in which future development, redevelopment and infrastructure improvements should be limited or controlled. Preservation areas include floodplain, hillsides (greater than ten percent slope) and the historic cores of Lawrenceburg and Aurora. Slopes over ten percent increase development costs due to cut and fill operations and complex designs needed for building foundations, utility connections, and road construction. It should be noted that several areas of floodplain have been filled in the past to allow for increased development. This is particularly true in Greendale near the new movie theater and shopping center.

It is apparent that recent developments have not respected these community features. For example, some recent retail development between Lawrenceburg and Aurora has resulted in significant alteration of several hillsides. Additionally, some recent infill development in historic Lawrenceburg has adopted a suburban context that is inconsistent with the urban, pedestrian-oriented nature of this community.

Conclusions

The project area contains several sites that should be studied to determine the feasibility of development and/or redevelopment. In addition, the project's consultant team contacted previous land users that have visited the area and elected not to develop. The reasons for not developing on US 50 include traffic congestion on US 50, issues with the location of utilities and the population mix in the county. Access management improvements and land use enhancements may help alleviate some of their concerns.

The US 50 Corridor has had a fair amount of recent small development, almost all of which is associated with commercial/retail uses. There appears to be several large tracts of property currently for sale or lease within the study area. Most, if not all, of these tracts are listed on the Dearborn County economic development web site and

are suitable for commercial, office and/or industrial uses. The existing retail and its growth are most likely associated with the added traffic along the US 50 Corridor generated by the casino traffic together with a few big box retailers that have located within the immediate area.

The majority of available sites are well identified for informational purposes and there appears to be no single reason why these sites have not been developed other than lack of demand. Other larger issues regarding the demand that have been identified in previous county studies of transportation, housing, employment etc. are most likely involved. Marketing tools such as the Dearborn County Economic Development web page have done an excellent job of putting forward the available sites together with the statistical information of the area and the county. Most of the identified sites currently appear to have access to the required utilities for most, if not all, of the contemplated land uses. The availability of utilities will be verified to determine if this is an issue concerning future development.

The traffic within the corridor and within the incorporated areas has been a driving force for the retail development to date. The amount of traffic, the numerous access points and/or the lack of defined access points appear to be hampering the ease of use of the smaller parcels for retail development and redevelopment. Another contributing factor with some of the smaller parcels within the study areas appears to be the existing shallow depths of parcels as well as the surrounding topography. From a national or regional retailers perspective, this inability to readily access US 50 with ease definitely plays a part in whether or not to locate or redevelop within the area.

ACCESS MANAGEMENT

Access Management Benefits

A main task of the *US 50 Gateway Study* was to evaluate side road and adjacent property access to and from US 50 between State Line Road and SR 62. US 50 is plagued with access problems such as poorly located and/or closely spaced driveways and intersections. These problems degrade the capacity of the roadway and result in more traffic crashes on US 50. The study recommends implementing nationally recognized access management practices that have been proven to improve the roadway's traffic-carrying capability and reduce traffic crashes.

The practice of access management brings a balance of mobility, safety and access to adjacent properties. The benefits of access management have been well documented in recent years. This report applies information from the Transportation Research Board Access Management Manual, the Indiana Statewide Access Management Study, the INDOT Driveway Permit Manual and the Ohio Department of Transportation (ODOT) State Highway Access Manual.

In evaluating current research on the benefits of implementing an access management plan, four overall conclusions can be drawn:

1. *As access density increases, crash rates increase.* In a Minnesota Department of Transportation Study, crash rates increased as access density increased regardless of roadway condition and geometry. The study indicated that increasing access points by 50 percent resulted in an increase in crash rates of 41 percent.
2. *Roadways with medians are safer than undivided roadways or those with continuous two-way left turn lanes.* In 1999, NCHRP Report 420 found that the crash rates on roadways with medians were 30 percent lower than on those with continuous two-way left-turn lanes.
3. *U-turns are generally safer than direct left turns.* A 2000 Florida study found that u-turns combined with right-turn only access exhibited almost 20 percent fewer crashes than on roadways that allow left turns.
4. *Medians improve pedestrian safety.* Properly designed medians can provide a safe haven for pedestrians on crowded roadways. These refuges are not available with two-way continuous left turns lanes, like those that are present in most of the study area.

Another significant benefit of access management is an increase in operational efficiency. Again, there is extensive research on the subject. The studies found repeatedly that good access management practice helped to maintain the desired speeds and reduced congestion related delays. For example, the *Highway Capacity Manual* states that for every increase of 10 access points per mile, one can expect a

2.5 mile per hour reduction in the free flow speed of the roadway. ODOT found that roadway capacity can be increased as much as 35 percent by employing access management practices. That's an increase of 10,000 cars per day for a four-lane facility, without having to construct additional new lanes.

There are economic benefits to implementing an access management plan as well. When a roadway becomes congested, travel speeds decline and it becomes more difficult for customers to travel to and from businesses along the facility. Access management can help to reduce congestion by increasing travel speeds and improving safety. For example, if the current average roadway speed is 30 miles per hour (mph), a business is within a 15 minute drive for customers living within a seven mile radius. If the average speed of the roadway is increased by 10 mph to 40 mph with the implementation of access management techniques, the same 15 minute drive puts businesses within reach of customers within a 10-mile radius, expanding the potential customer base one and one half times.

Access Management Guidelines

Before an access management plan can be developed, a list of guidelines must be created. Because the US 50 corridor is developed, there are some constraints that affect the ability to meet all guidelines. For example, the major roadway intersections on US 50 cannot be moved; therefore, the access management plan must accommodate them. The following table lists access management standards that guided the *US 50 Gateway Study* recommendations. The priorities represent the way the guidelines were applied (see Figure 1-21). For example, "the functional area" of each intersection was looked at and protected first.

Figure 1-21: Access Management Priorities

Priority	Condition	Access Spacing (ft)
1	Intersection Upstream Functional Area, 45 mph, suburban	702**
2	Minimum spacing between driveways (edge of driveway to edge of driveway, 45 mph	350*
3	Offset distance between driveways on opposite sides of an undivided roadway, minor arterial	220**

*Indiana Permit Manual, 1996

** Transportation Research Board, Access Management Manual, 2003

The following table represents the characteristics of driveway geometry that were followed when analyzing US 50 (see Figure 1-22). These standards may be found in the INDOT Driveway Permitting Manual, 1996. It is assumed that INDOT's forthcoming updates to the Permitting Manual will also use these standards.

Figure 1-22: Access Management Driveway Geometry

Condition	Standard (ft)
Driveway width, 2-way access, low volume, single-unit trucks	24
Driveway width, 2-way access, high volume, multi-unit truck	36
Typical corner radii, moderate speed turns for passenger cars	40
Corner Radii, moderate speed turns for multi-unit trucks	50

There are several access management techniques that can be used to retro-fit a corridor like US 50. Several of these techniques are described below.

- *Shared Driveways* - The combination of adjacent access points to create a common drive servicing two or more properties were investigated. Shared driveways help to preserve the traffic carrying capacity of an arterial. This technique results in fewer driveway intersections that often can be controlled by a traffic signal.
- *Frontage/Service Roads* - The access management study also considered alternative access to US 50 through the use of frontage and/or service roads. These roadways are generally one-way and would be accessed from US 50 either from a signalized intersection or acceleration/deceleration lanes. Frontage roads and service roads could be used to provide access to adjacent property from a different direction, thus allowing the US 50 access points to be closed.
- *Acceleration Lanes* - Reducing the amount of slower turning traffic from the arterial is an access management technique that is used to improve the traffic carry capacity and safety on the arterial. Proper turn radius, driveway width, driveway length and driveway slope are features that are important because they help slower, turning traffic move off the arterial more quickly and help the traffic leaving a driveway turn and enter the stream of traffic more efficiently. The study evaluated the design features of cross road intersections and major driveways and makes recommendations for improvements, where necessary. Right turn deceleration lanes help to get turning vehicles smoothly out of the through traffic lane
- *Raised Medians* - “Non-transversable” or raised medians are generally safer than two-way left turn lanes in areas where the average daily traffic exceeds 24,000 vehicles per day, on multi-lane facilities, where there is a high crash rate, or where there is a desire to limit left turns. Median breaks should generally be provided only at public road intersections or at driveways shared by several businesses. This study investigated the possibility of using right-in, right-out driveways as opposed to full-movement. This type of driveway decreases the number of conflict points on the roadway.

As discussed previously, there are dramatic differences in configuration and performance across the length of US 50. While the area from I-275 to SR 350 is

highly developed, the area east of I-275 and west of SR 350 has not yet seen the commercial boom. These western areas remain largely rural, but this characteristic is expected to quickly change in the future. Access management should be more conservative in these areas. For example, currently developed areas may not allow for the use of frontage roads on US 50; future development can be designed so that frontage roads are commonly used, thereby preserving the integrity of the arterial.

The final recommendations from the access management study are comprised of a package of access management techniques that is best tailored to the US 50 study area. The recommended techniques vary along the length of the study area, depending on traffic counts, adjacent land uses and number and type of existing driveways.

Access Management Inventory

In order to most efficiently and effectively implement access management guidelines discussed above, the project team first gained an understanding of the current access conditions along US 50. The following inventory itemizes every access point in the US 50 study area. This list provides insight into the assets and challenges that might exist to developing good access management practices. Some initial information is given regarding access conditions for the study area as a whole, but as the four sections of the highway differ in nature, so do the characteristics of the access each provides to US 50. For this reason, the inventory has been divided into four parts, each addressing the specific access issues present in each of the four quadrants of the project. Appendix B contains a table and maps for each section, detailing each access point in that area.

The *US 50 Gateway Study* spans nearly 17 miles and contains over 400 access points; an average of 25.8 per mile. Of greatest concern with regard to safety are the 15 signalized intersections in the study area, accounting for 3.5 percent of all access points. A secondary concern is the unsignalized intersections which account for an additional 40 (9.2 percent) access points. Finally, the remaining access points are driveways, which still pose concerns for safety, especially when their widths are excessive and spacing is minimal or non-existent.

Section 1: State Line Road to Argosy Parkway

The eastern-most sub-area of the US 50 project is 3.7 miles in length and contains 50 access points, an average of 13.5 per mile. Of these 50 access points, four (eight percent) are signalized intersections (see Figure 1-23).

Figure 1-23: Section 1 Signalized Intersections

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
0	State Line Road	-	27	-	170

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
21	State Route 1	105	67	514	433
44	Lorey Lane	-	66	391	1014
47	Rudolph Way	-	28	787	257

* Shaded boxes designate a deficiency

While each of the roads in Section 1 are of an adequate width, each is deficient in its spacing (within 702 feet) from the next closest access point in at least one direction, as shown by the cells above highlighted in yellow, in Figure 1-24. This section also contains seven (14 percent) unsignalized intersections (see Figure 1-24). Like the signalized intersections, each of the unsignalized intersections in this portion of the study area meets the minimum standard for road width. Three of the eight unsignalized intersections fail to meet spacing standards as they are within 360 feet of the next access point in at least one direction. Additionally, one access point, ID #20, fails to meet spacing standards as it is less than 700 feet from a signalized intersection to the west.

Figure 1-24: Section 1 Unsignalized Intersections

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
13	Oberting Road	-	27	28	794
14	Auction Lane	25	-	794	814
19	Unnamed	41	38	1987	657
20	Unnamed	26	39	657	514
28	Walnut Street	44	-	38	8
45	Unnamed	-	38	1014	764
46	McClure Way	-	32	764	787

* Shaded boxes designate a deficiency

Of the 39 driveways in Section 1, eight (21 percent) have widths less than the 24 foot minimum standard, and an additional 24 (62 percent) have widths in excess of 36 feet, the standard for two-way, high volume, multi-unit truck access. All but four driveways in this area are less than the recommended distance from the nearest access point, meaning that 90 percent are deficient in this area of the access management inventory.

Section 2: Argosy Parkway to State Route 48

This is the smallest of the four sections, stretching only 1.1 miles and containing 30 access points, an average of 27.3 points per mile. This section of US 50 is entirely urban as it cuts through the City of Lawrenceburg, therefore many of the access management standards which are designed for higher speed areas will not be met, specifically spacing between intersections. Proportionally, there are a greater number of signalized and unsignalized intersections in this section than in any

other, and because intersections are the greatest safety concerns in an access management study attention must still be paid to their widths and spacing. There are five signalized intersections in this section (see Figure 1-25).

Figure 1-25: Section 2 Signalized Intersections

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
50	Argosy Parkway	76	48	286	292
53	Arch Street/ Tiger Boulevard	53	31	884	710
57	Walnut Street/ Stadium Lane	62	30	51	23
73	Front Street	43	37	50	148
75	Main Street	56	54	139	144

* Shaded boxes designate a deficiency

All five signalized intersections meet minimum width requirements, but only the Arch Street/Tiger Boulevard intersection corresponds with the spacing requirements set forth in the guidelines. The other four signalized intersections fail to meet proper spacing in both directions. In addition to the five signalized intersections, there are six (20 percent) unsignalized intersections in Section 2 (see Figure 1-26). In this urban setting, none of the unsignalized intersections maintains the minimum 360 foot spacing from other access points. Four of the six intersections also lead to roads with widths insufficient to handle even low volume, two-way traffic.

Figure 1-26: Section 2 Unsignalized Intersections

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
56	Third Street	37	-	38	51
69	Water Street	22	48	12	7
71	Unnamed	12	13	114	78
74	Park Street	23	23	148	139
77	Shipping Street	40	42	161	68
79	Unnamed	20	31	112	546

* Shaded boxes designate a deficiency

The remaining 19 access points are driveways, of which six (32 percent) have widths of less than 24 feet, and eight (42 percent) have widths greater than 36 feet. A total of 17 (89 percent) of the driveways in Section 2 have spacing less than the recommended safe distance. This includes four with “zero spacing”, which means that the drives on opposite sides of US 50 overlap but are not aligned at an intersection.

Section 3: State Route 48 to State Route 350

Section 3 is 3.5 miles long and contains 121 access points with an average of 34.6 access points per mile, the densest groupings of access points of the four. Despite having more than double the access points of Sections 1 or 2, Section 3 has only six (5 percent) signalized intersections (see Figure 1-27). Each of the six intersections is of adequate width, but only Reese Drive meets the minimum 700 foot spacing standard in each direction.

Figure 1-27: Section 3 Signalized Intersections

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
80	State Route 48	29	58	546	31
107	Reese Drive	40	38	704	776
139	Unnamed	80	54	79	85
143	Wilson Creek Road	-	34	705	686
185	State Route 148	25	43	25	0.00
191	George Street	48	-	81	440

* Shaded boxes designate a deficiency

There are nine (seven percent) unsignalized intersections in this area (see Figure 1-28). All but one of the unsignalized intersections meet the minimum width standards set forth in the guidelines, but none meet the standards for intersection spacing. Both Billingsly Drive and Moore Street are directly west of signalized intersections and although they are separated by more than the 360 foot minimum for unsignalized intersections, they are within 700 feet. One intersection of great concern in Section 3 is Harrison Street as it fails to meet width standards and there is essentially has no separation between it and State Route 148, which is the next access point to the east. This presents a serious safety concern for vehicles turning onto and off of US 50.

Figure 1-28: Section 3 Unsignalized Intersections

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
84	Unnamed	-	49	153	494.13
89	Doughty Road	-	122	51	0.00
99	Unnamed	40	-	0.00	130.03
106	County Road 5	-	26	91	707
125	Florence Drive	35	-	0.00	0.00
144	Billingsly Drive	-	32	686	157
186	Harrison Street	-	23	0.00	52
192	Moore Street	-	43	440	7
195	Broadway Street	-	40	13	72

* Shaded boxes designate a deficiency

With signalized and unsignalized intersections accounting for only 12 percent of the access points in Section 3, the vast majority (106) of access points are driveways. In analyzing these driveways, it is clear that access management in this area is sporadic in some places and non-existent in others as driveway widths range from 8.5 feet to over 300 feet. A total of 22 (21 percent) driveways are less than 24 feet in width and another 43 (41 percent) are greater than 36 feet in width. Furthermore, only one driveway meets the access spacing guidelines in both directions. Particular attention was paid to access points 154 through 161, where eight driveways in a row exist with virtually no spacing in between.

Section 4: State Route 350 to State Route 62

Covering 8.5 miles of US 50, Section 4 is larger than the other three sections combined. There are a total of 232 access points in this portion of the study area, which translates to 27.3 points per mile. Because the majority of Section 4 is a four lane divided facility, it is also important to consider access to the eastbound and westbound lanes separately as not all access points are common to each direction. In the eastbound direction, there are 114 access points, or 13.4 per mile, while the westbound lanes have 118 access points, or 13.9 accesses per mile. As this portion of US 50 is predominantly rural, there are few intersections and far more driveways. The only signalized intersection in either direction is State Route 350 (Access ID #201) in Aurora. The road widths at this intersection meet the access management guidelines, but intersection spacing is deficient in both directions. Unsignalized intersections are far more prominent in Section 4 than are signalized intersections; there are 24 (21 percent) unsignalized intersections in the eastbound direction (see Figure 1-29), and 26 (22 percent) in the westbound direction (see Figure 1-30). Of the 24 unsignalized intersections in the eastbound direction, nine (38 percent) fail to meet minimum width requirements in at least one direction and 18 (75 percent) fail to meet intersection spacing standards. In the westbound direction, 10 (38 percent) of 26 intersections fail to meet minimum width requirements in at least one direction, and 21 (81 percent) fail to meet minimum spacing requirements. Among the unsignalized intersections, the three-way intersection of Indiana Avenue, West Conwell Street, and Lower Dillsboro Road is of the greatest concern for safety, as access to US 50 from each of these roads overlap with the others, and proper alignment does not occur.

Figure 1-29: Section 4 Unsignalized Intersections (Eastbound Lanes)

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
202	Exporting Street	45.86	-	202	52
203	Unnamed	40.83	-	52	4008
205	Indiana Avenue	-	24	1854	0.00
206	W Conwell Street	67.23	-	0.00	0.00
207	Lower Dillsboro Road	-	31	0.00	747
210	Stewart Street	-	52	250	100

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
211	Gnawbone Road	28.00	-	100	1327
212	Hilltop Drive	48.09	-	1327	1595
213	Blair Road	-	33	1595	193
215	Dutch Hollow Road	30.27	60	370	99
217	Locust Street	24.88	13	111	278
256	Unnamed	32.20	13	423	428
261	Cole Lane	25.27	22	528	397
273	Randall Avenue	29.55	47	394	277
280	Marsh Road	20.21	38	440	43
285	Unnamed	-	124	323	370
288	Hueseman Road	24.60	11	370	446
318	Lower Dillsboro Road	-	51	675	82
324	Mt Tabor Road	20.37	23	352	698
338	Cherokee Lane	15.26	-	179	190
354	Sharon Drive	29.29	33	242	361
380	Texas Gas Road	31.09	19	219	151
397	Campo Verde Drive	10.88	23	695	34
404	State Route 62	26.83	25	540	-

* Shaded boxes designate a deficiency

Figure 1-30: Section 4 Unsignalized Intersections (Westbound Lanes)

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
202	Exporting Street	46	-	202	52
203	Unnamed	41	-	52	4008
205	Indiana Avenue	-	24	1854	0.00
206	W Conwell Street	67	-	0.00	0.00
207	Lower Dillsboro Road	-	31	0.00	747
210	Stewart Street	-	52	250	100
211	Gnawbone Road	28	-	100	1327
212	Hilltop Drive	48	-	1327	1595
213	Blair Road	-	33	1595	193
215	Dutch Hollow Road	30	-	361	243
217	Locust Street	25	13	243	306
256	Unnamed	32	13	442	63
261	Gatch Hill Road	25	22	228	142
269	Unnamed	-	14	270	96
273	Randall Avenue	30	-	410	53
280	Marsh Road	20	38	428	133
284	Unnamed	124	32	236	0.00
288	Hueseman Road	25	11	35	1350
306	Unnamed	-	37	379	18
318	Lower Dillsboro Road	51	32	118	919
324	Hoffman Road	20	23	537	701
345	Highridge Road	-	45	63	61
354	Sharon Drive	29	33	434	217

Access ID #	Road	Access Width (Ft.)		Distance to Next Access Point (Ft.)	
		EB Side	WB Side	To the East	To the West
380	Texas Gas Road	31	19	308	958
397	Campo Verde Drive	11	23	606	600
404	State Route 62	27	25	871	-

* Shaded boxes designate a deficiency

There are 89 driveway access points in both the eastbound and westbound directions of Section 4 of the US 50 study area. Because most of these are residential driveways, especially toward the western edge of the study area, the vast majority fail to meet minimum width standards. Although widths standards for drives along this part of US 50 are consistently not met, access spacing is of greater concern for safety. In the eastbound lanes, 68 (76 percent) of driveways fail to meet spacing standards, while 74 (83 percent) driveways on the westbound side do not have adequate spacing. In addition to the signalized intersection, unsignalized intersections and driveways, there is one exit ramp in the westbound direction in Section 4 (Access ID #204). Although standards are not discussed for exit ramps, the ramp in this case is sufficiently spaced from other access points to avoid safety concerns. While Section 4 of the study area is of a rural character, growing development pressures in this area warrant good access management standards and practices in order to prevent traffic safety problems from occurring in the future.

NEEDS STATEMENT

As clearly illustrated in this Current Conditions Report, Dearborn County is growing and US 50 serves as its “Main Street”. Congestion levels on US 50 are expected to increase in the future and the current roadway does not function as it should. Two issues that are complicating matters are poor access management in the corridor and disparities in land use.

Access management changes on US 50 are needed. There are access management deficiencies in all sections of the corridor, with the worst area being between SR 48 and SR 350, with approximately 35 access points per mile on average, equating to one access point every 150 feet; well below the national standard of 350 feet. In addition, six intersections along the US 50 study area experience more than 10 crashes per year. These accidents pose a safety concern and contribute to congestion on US 50.

Land use changes are also needed on the US 50 Corridor. Overall the corridor contains a mix of land uses, from suburban-scale retail uses throughout to industrial uses with in and west of Lawrenceburg. These land uses sometimes conflict with each other and present difficulties for development opportunities in the future. Changing land use will make US 50 appear as a cohesive corridor with more promising development potential.