US 51 EIS Purpose and Need

What is the US 51 Project?

US Route 51 is part of a transportation corridor that extends the length of Illinois from Rockford to Cairo. In south central Illinois, US 51 is the only two-lane highway link in the four-lane north-south network (I-39, US 51, I-64, I-57). Improvements to the two-lane portion of US 51 are the subject of this study.

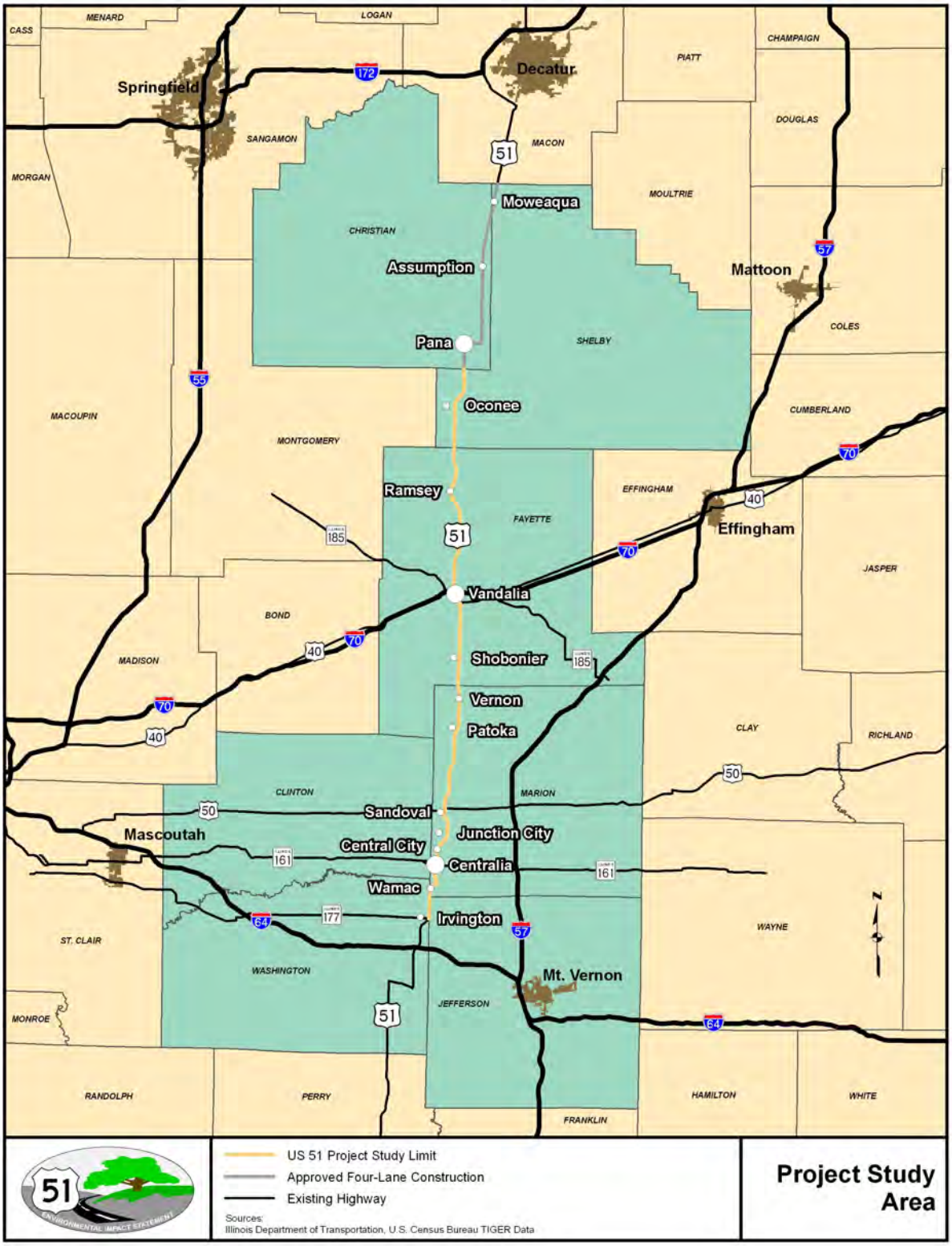
Where is the project located?

The study area for this project includes the counties of Shelby, Christian, Fayette, Washington, Jefferson, Marion, and Clinton. The following communities are located in the US 51 study area: Pana, Oconee, Ramsey, Vandalia, Shobonier, Vernon, Patoka, Sandoval, Junction City, Central City, Centralia, Wamac and Irvington. A map of the project study area is on page 2.

North-south corridor through Illinois

What is the background of this project?

In 1979/1980, a study conducted by the Illinois Department of Transportation (IDOT) along US 51 from Decatur to I-64 determined traffic levels did not warrant a four-lane section. Between 1980 and 1986, economic development initiatives spurred by the "Build Illinois" program and the completion of four-lane section improvements north of Decatur prompted a delegation of State legislators, elected city officials, and community leaders to request that IDOT revisit the concept of four-lane improvements from Decatur to I-64. A planning study for the corridor completed by IDOT in April 1987 concluded that based on economic development and regional connectivity, constructing four lanes along US 51 from Decatur to I-64 should be pursued. Funding for this Environmental Impact Statement has been earmarked as part of the 2005 transportation bill


CASS
MENARD
LOGAN
CHAMPAIGN
PIATT
Springfield
Decatur
172
SANGAMON
MACON
DOUGLAS
51
MORGAN
MOULTRIE
Moweaqua
CHRISTIAN
Assumption
Mattoon
57
COLES
Pana
SHELBY
55
MACOUPIN
Oconee
CUMBERLAND
MONTGOMERY
70
Ramsey
EFFINGHAM
40
FAYETTE
185
Effingham
51
JASPER
70
Vandalia
BOND
MADISON
40
70
Shobonier
185
Vernon
70
Patoka
40
CLAY
RICHLAND
50
CLINTON
MARION
50
Sandoval
Mascoutah
Junction City
Central City
161
Centralia
161
Wamac
64
177
Irvington
57
ST. CLAIR
WAYNE
WASHINGTON
Mt. Vernon
JEFFERSON
MONROE
51
64
RANDOLPH
PERRY
HAMILTON
WHITE
FRANKLIN
US 51 Project Study Limit
Approved Four-Lane Construction
Existing Highway
Sources:
Illinois Department of Transportation, U.S. Census Bureau TIGER Data
Project Study Area

legislation, Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

What other plans are underway for transportation improvements in the area?

Of the 100 miles between Decatur and I-64 studied in the late 1980s, the 35 miles immediately north of the Christian/Shelby County line have been upgraded to or are planned to be upgraded to a four-lane section (refer to the project study area map on page 2). Most recently, an Environmental Impact Statement was completed in 1992 for US 51 between Decatur and Pana. A four-lane US 51 south of Moweaqua opened to traffic in the fall of 2007. The next section to be constructed is a four-mile long bypass around Assumption. Another four-mile straight line section from south of Assumption to north of Pana and a bypass extending seven miles around Pana are being designed and will be constructed when funding becomes available. This study begins south of the Pana bypass near the Christian/Shelby County line.

Transportation improvements are planned for US 51 north of the study area.

What guidelines have been used in developing the current project?

Since the conclusion of the previous studies, new procedures have been adopted for involving the general public and other stakeholders in developing transportation projects. This study is being developed using IDOT's Context Sensitive Solutions (CSS) policy and the Federal Highway Administration's guidance under SAFETEA-LU legislation. These require early coordination with stakeholders to better understand the concerns and needs of the communities in the study corridor. The public's input has been sought in the development of the project's purpose and will continue to be sought throughout the project to provide the stakeholders in the US 51 corridor a project that addresses transportation issues and fits into the broader context of communities where they live and work.

Context Sensitive Solutions: stakeholders involved in the decision-making process

What is a Citizen's Advisory Group?

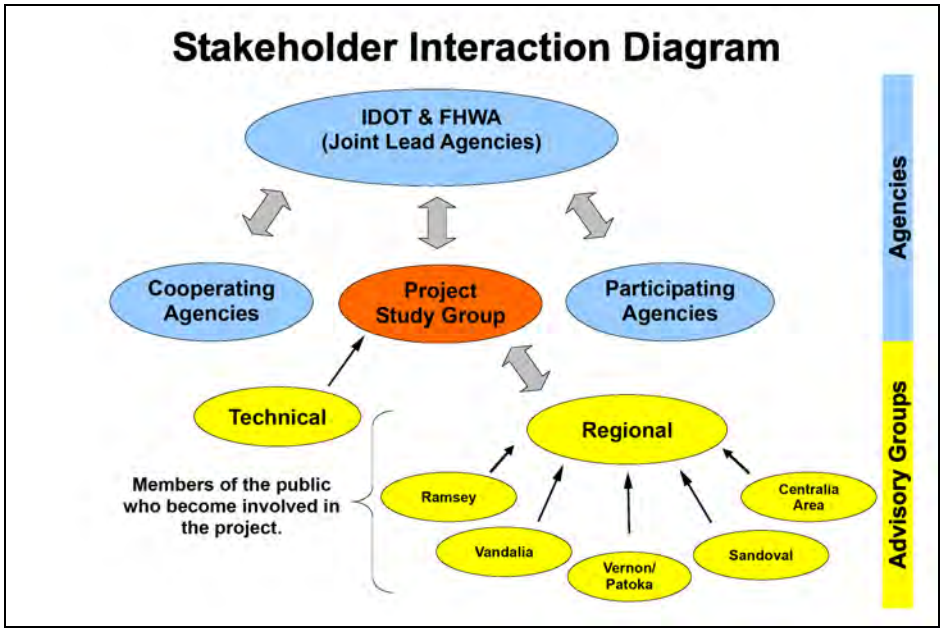
A diverse group of local and regional stakeholders that provide input on the concerns and values of their respective communities.

How have the public and other stakeholders been involved in developing this project?

Using CSS and SAFETEA-LU guidelines, Citizen's Advisory Groups (CAG) have been formed for the communities of Ramsey, Vandalia, Vernon/Patoka, Sandoval, and Junction City/Central City/Centralia/Wamac – communities that are adjacent to or separated by existing US 51. The project study team met with each group to discuss transportation problems, community issues and community context. Input from the CAGs was used to develop problem statements in the individual communities that address the transportation issues in the corridor from a user's perspective.

A Regional Advisory Group (RAG), made up of representatives from each CAG and other stakeholders, was formed to provide input on regional issues and context. The input from the RAG will be used to look at existing US 51 between the communities and address transportation issues from a regional perspective. The diagram below depicts the relationship between the CAGs, the RAG and the project study team.

A Citizen's Advisory Group identifying study area problems together.



What is the Purpose and Need of the US 51 Project?

What was the public's input?

Working with the CAGs, issues and the context of each community along the study corridor were identified. The project stakeholders came to a consensus on three elements for the CSS problem statement for this study:

- The existing US 51 highway does not provide an efficient and safe connection between local communities and commercial centers, and does not encourage long distance travel.
- The US 51 highway hinders travel and the movement of goods and services, limits tourism and commerce, and limits residential, commercial, and industrial growth.
- The existing US 51 highway is unsafe for cars, trucks, buses, pedestrians, bicycles, and farm equipment to share the road at the same time.

Safety concern: slow moving farm equipment sharing the road with faster moving cars and trucks. Photo taken: September 2008 on US 51 north of Vandalia.

The project team, working with the CAGs and the RAG, will address the identified problems while being sensitive to the unique aspects of each community. This will help to maintain or improve the quality of life within these communities.

Why do we need the US 51 Project?

The purpose of the US 51 project is to improve the connectivity within the south central Illinois region and to enhance the highway system continuity. The region needs a centralized roadway that effectively connects communities as well as local and commercial centers, while also providing a roadway that promotes efficient and safe travel in the region for a wide variety of transportation users. Connectivity and continuity are issues that can be addressed by a transportation improvement, while being sensitive to the economic development goals and safety concerns expressed in the problem statements of the local communities.

What is connectivity?

A roadway facility that provides *efficient* access for all types of transportation and *effectively* moves people, goods and services.

What is the role of US 51 at the local and regional level to allow people, goods and services to move freely?

Centralia and Vandalia are the largest communities in the project corridor. For residents in this corridor, these are destination points to access retail, cultural, education and community services not available in the smaller communities. US 51 is the most direct north-south route for access to these local destinations.

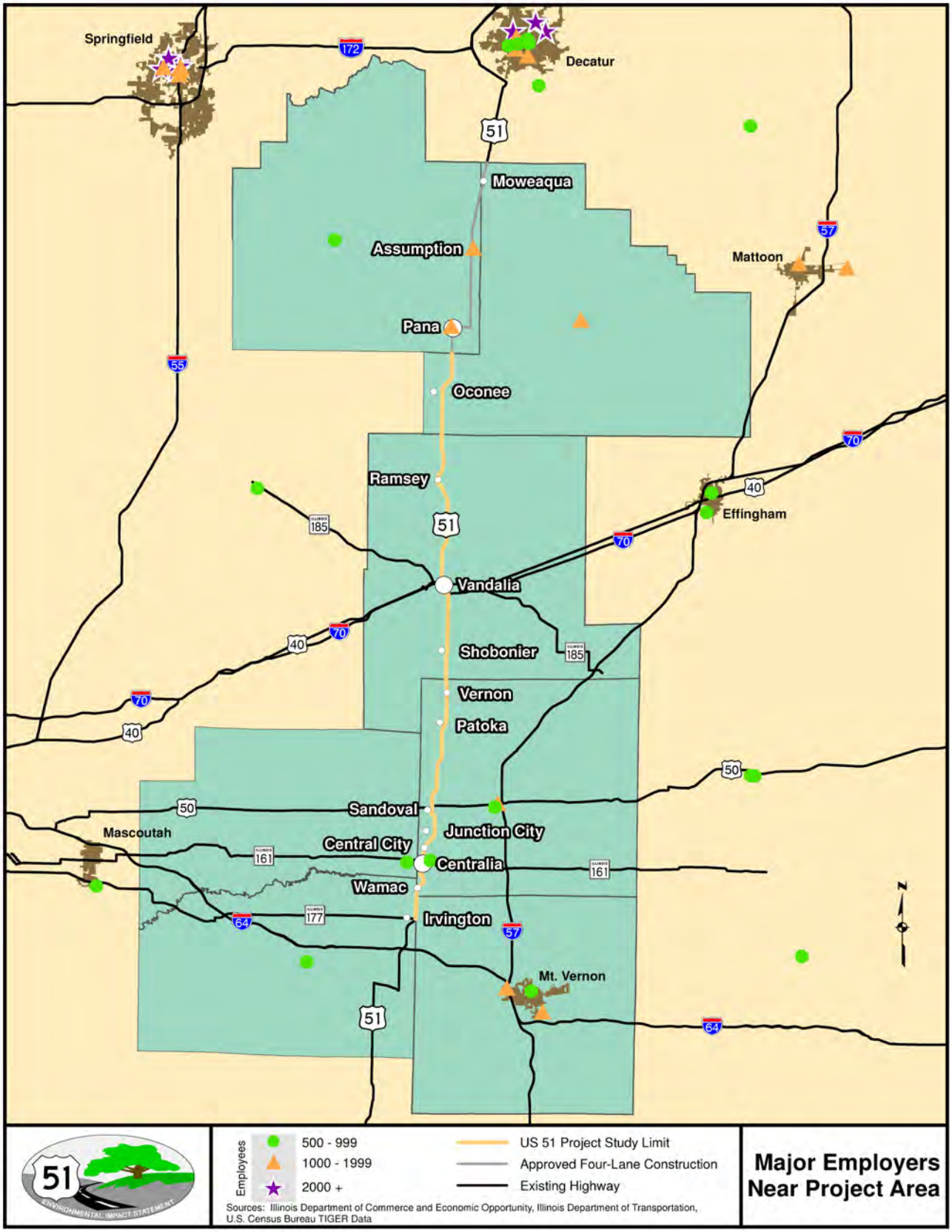
What is continuity?
A roadway facility that maintains uniform speed and pavement width to promote the free flow movement of people, goods and services.

In addition to connecting to local destinations, US 51 provides access to routes connecting to metropolitan areas throughout the Midwest. Seven highways cross US 51 throughout the project corridor:

- I-70 intersects US 51 in Vandalia
- US 40 runs east/west through Vandalia
- IL 185 in Vandalia runs northwest and southeast.
- US 50 intersects US 51 in Sandoval.
- IL 161 in Centralia and IL 177 in Irvington lead to St. Louis.

What is considered a metropolitan area?
The US Office of Management and Budget defines a metropolitan area as containing a core urban area with a population of 50,000 or more.

Regional employment centers are scattered throughout the project study area, with the greatest concentrations in the metropolitan locations (see map on page 7). Providing efficient access to the interstates and major communities within the corridor combine to enhance the regional connections. Presenting solutions to the continuity issues (i.e. 90 degree turns and traffic signals) would remove one of the impediments to traffic flows. Truck traffic comprises a significantly higher percentage of the ADT (up to 24%) in the northern portions of the project corridor, with significantly lower numbers (6%) at the southern limits. One corporation, Grain Systems Inc., is headquartered north of the project study area near Assumption. In addition to Assumption, production centers for the company are located in Paris, Newton, and Flora, distributed east of US 51 throughout the project limits. Continuity on this route that


Springfield
Decatur
Moweaqua
Assumption
Mattoon
Pana
Oconee
Ramsey
Effingham
Vandalia
Shobonier
Vernon
Patoka
Sandoval
Junction City
Mascoutah
Central City
Centralia
Wamac
Irvington
Mt. Vernon
172
51
57
55
70
40
185
161
64
177
50
Employees
500 - 999
1000 - 1999
2000 +
US 51 Project Study Limit
Approved Four-Lane Construction
Existing Highway
Sources: Illinois Department of Commerce and Economic Opportunity, Illinois Department of Transportation, U.S. Census Bureau TIGER Data
Major Employers Near Project Area

bisects the south central region would provide a viable alternate to the existing interstate system.

What is the role of other modes of transportation to allow people and goods to move freely?

There are other modes of transportation in the region, such as rail, bus and air, that connect to destinations nationwide but do not provide as direct a north-south connection as US 51.

Amtrak service through Centralia.

Freight rail facilities in Centralia are served by the Burlington Northern Santa Fe, the Canadian National Rail and the Norfolk Southern Railroad. Centralia has an Amtrak station with service to Chicago and Carbondale, IL, continuing on to New Orleans, LA. Amtrak's ridership records indicate this location realized a 40% growth in usage in 2007 over the previous year, and trends indicate continued increases. Other Amtrak stations in the region outside the study area are in Springfield, Carlinville, and Alton with service to Chicago and St. Louis, continuing on to national destinations.

What is a one-way couple?

A set of parallel one-way streets with traffic flowing in opposite directions that takes the place of a two-way street.

There is no regional bus service in the local area. South Central Transit (SCT) is a demand responsive service that operates within Centralia and a few nearby communities. SCT maintains a Kaskaskia College Shuttle available within the City of Centralia and feeder routes to the Metro Transit system which services the St. Louis area.

There is regional air service at the Lambert-St. Louis International Airport or MidAmerica St. Louis Airport. There are municipal airports in Centralia and Vandalia. The other modes of transportation available in the south central Illinois region do not connect people and goods to community services or employment centers nor do they provide a more efficient north-south route through central Illinois than US 51.

How does US 51 discourage long distance travel and hinder efficient and safe travel?

US 51 in the study area is generally a two-lane highway through small communities and rural areas of the study area. Two exceptions are in the City of Centralia where US 51 becomes a one-way couple through the city, and through a portion of the City of Vandalia where US 51 is a four-lane roadway for approximately one-half mile.

One-way couple in Centralia.

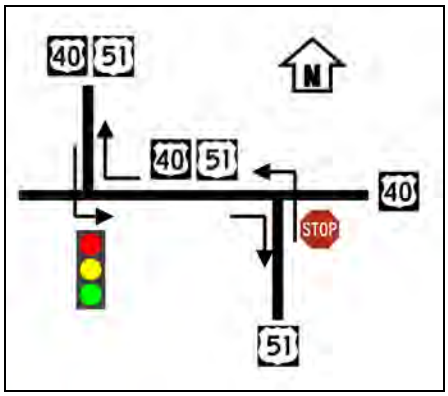
Drivers using US 51 will encounter traffic signals in Centralia and Vandalia, at grade railroad crossings in Sandoval and Centralia, business districts with on-street parking and cross streets, and multiple changes in speed limits, abrupt right angle turns in Vandalia, and slow moving oversized farm equipment throughout the corridor. These interruptions to free flow travel combined with limited opportunities to safely pass slower moving and oversize vehicles, frustrate efforts to move freely though the US 51 corridor, and encourage risky driving behavior. The National Cooperative Highway Research Program (NCHRP) has linked behaviors such as speeding and unsafe passing to drivers who believe that their travel is being hindered unnecessarily.

Abrupt right turns in Vandalia. (View is looking south.)

Driving directly through the cities of Centralia and Vandalia and smaller communities along US 51 discourages long distance travel by presenting the driver with a wide range of speed limits that increase and decrease repeatedly along the route. The speed limit on US 51 is generally 55 miles per hour (mph) in rural areas, and is reduced to 30 mph in some municipalities. South of Wamac where US 51 is already a four lane divided highway, the speed limit increases to 65 mph. A continuous free flow condition does not exist for the motorist traveling the US 51 corridor due to the speed limit changes.

Speed Limits in Communities Along US 51

30 mph	Centralia
30 mph	Ramsey
30 mph	Vandalia
35 mph	Sandoval
40 mph	Vernon
55 mph	Unincorporated
65 mph	S. of Wamac



US 51 "jog" at the south end of Vandalia.

US 51 is a north-south route that undergoes an east-west "jog" at the south end of Vandalia as depicted in the diagram to the left. These are the only two 90 degree turns of US 51 along the corridor. With stop signs at the west intersection and traffic signals at the east intersection, free flow is hindered and travel times are increased.

During the spring planting and fall harvesting seasons, farm equipment volumes increase in the US 51 corridor. Many farm vehicles are oversized, encroaching into the opposing traffic lane as depicted in the photo to the left. Additionally, the limited time to complete their planting and harvesting often requires work and travel after sunset. Area farmers depend on US 51 for their operations, and they must share the two lane roadway with other users. This creates an impediment to efficient travel and causes safety concerns for both farmers and the traveling public.

Slow moving and oversize agricultural vehicles increase travel times.

The CAG identified features of existing US 51 that hinder safe, long distance travel from a driver's perspective. For example, there are areas of US 51 where existing hills and curves may impede a driver's view making it difficult to pass a slow moving vehicle or farm implement. Also, travelers entering or exiting driveways and field entrances often slow the through traffic along US 51, and the difference in speeds between through and turning traffic increases crash potential.


The Leader-Union

Two killed in Saturday accident

Route 51 was closed for about 2 ½ hours

September 27, 2008: fatal accident closed US 51 for 2½ hours south of Vandalia

IDOT tracks crash data throughout the state and identifies locations with high potential for crashes also known as 5% Segments. Locations with high potential are where more crashes occur than should be expected for the type of roadway and amount of traffic. The most recent report in 2008 identifies five locations or "segments" in the US 51 corridor where fatalities or severe injuries have occurred at rate higher than what should be expected. These roadway segments on US 51 are located north of Sandoval, the east side of

Patoka, north of Shobonier, between Vandalia and Ramsey, and two miles south of the Christian Shelby County line and can be seen in the figure on page 13.

How many cars and trucks use US 51 now ?

The 2007 Average Daily Traffic (ADT) volumes on US 51 vary throughout the study corridor (see page 14 for map). The ADT is between 2350 - 4250 cars, buses, and trucks in most rural areas and the communities of Ramsey, Vernon, Patoka and Sandoval. This increases to over 6,000 vehicles per day in the City of Vandalia, and over 7,000 vehicles per day in each direction of US 51 on the one way couple in the City of Centralia. The ADT on US 51 south of Centralia is between 4,200 and 5,500 vehicles per day.

What is ADT?

A number that indicates how many vehicles pass a given point on average during a 24 hour period. This includes all vehicle types and is the total of both directions of travel.

What will the traffic volumes be in 2030?

In order to estimate the predicted traffic, the project team studied the traffic volumes over the past 20 years, as well as the population and employment trends and land use changes. In the US 51 study area, the traffic volumes have fluctuated over the last 20 years (1985 to 2005 data). The project study area experienced average annual changes in ADT ranging from a decrease of 1.1% to increases of up to 1.8%. These historic traffic volume trends, along with population and employment trends, current traffic projections on adjacent roadways, recent changes in land use, as well as future land use plans were all considered in developing an estimate of future traffic volumes on US 51. The predicted traffic volumes are shown on the map on page 15.

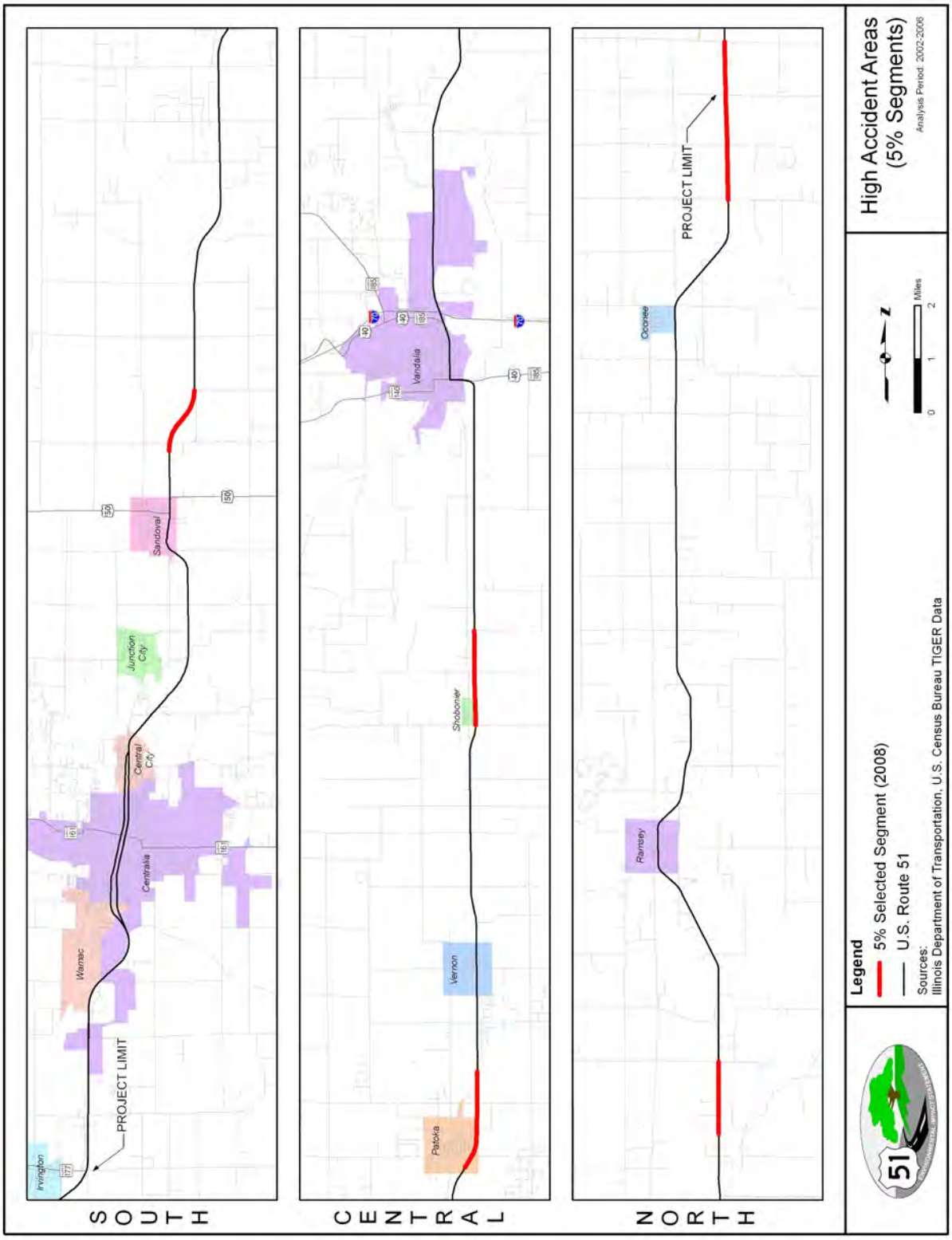
What will happen if no improvements are made to US 51?

Projections of traffic volumes in the region indicate that US 51 will experience increases in vehicles each day (see page 15 for map) with its current configuration. If no improvements are made to US 51, the existing conditions on the roadway, such as inconsistent traffic

Is rural access important?

According to IDOT's *2007 Illinois State Transportation Plan*, accessibility to activities and services is the greatest transportation need in rural areas.

speeds, inefficient local and regional connections, and reduced safety for vehicles will not be improved. Inefficient connections hinder accessibility for rural communities. The movement of goods, services, and vehicles would continue to be impeded by the lack of connectivity and continuity associated with this section of US 51. This means local and regional traffic will be adversely affected by this two-lane section of US 51 that connects with the four-lane US 51 roadway to the north and south. The efficiency and safety of travel in the US 51 study area will continue to be a concern for the communities in the study area as there are few alternatives for travel in a north-south direction.


SOUTH
CENTRAL
NORTH
PROJECT LIMIT
PROJECT LIMIT
Irvington
Walnut
Centralia
Central City
Junction City
Sandoval
Shobonier
Vandalia
Vernon
Patoka
Oconee
Ramsey
High Accident Areas
(5% Segments)
Analysis Period: 2002-2006
Legend
5% Selected Segment (2008)
U.S. Route 51
Sources:
Illinois Department of Transportation, U.S. Census Bureau TIGER Data
Miles
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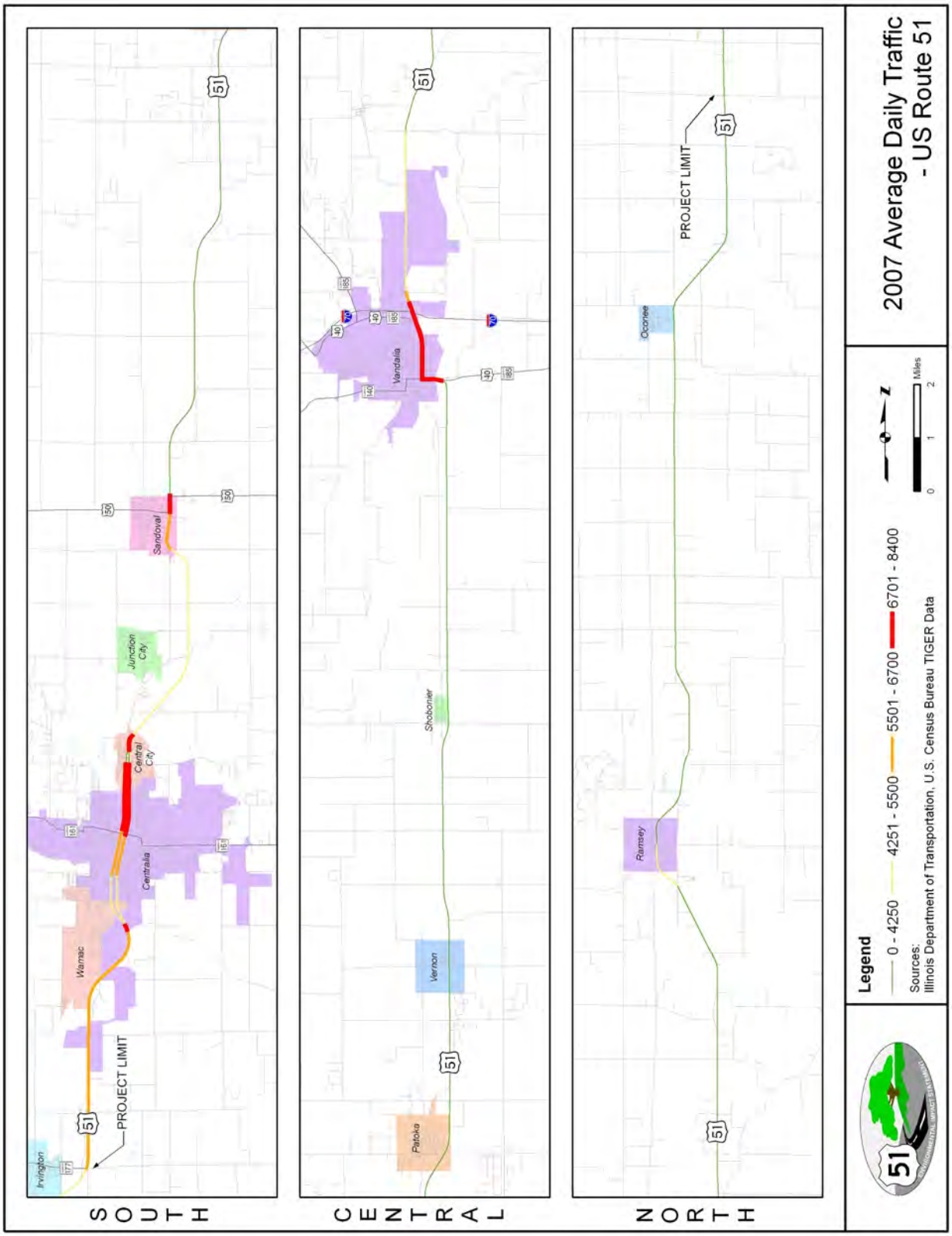
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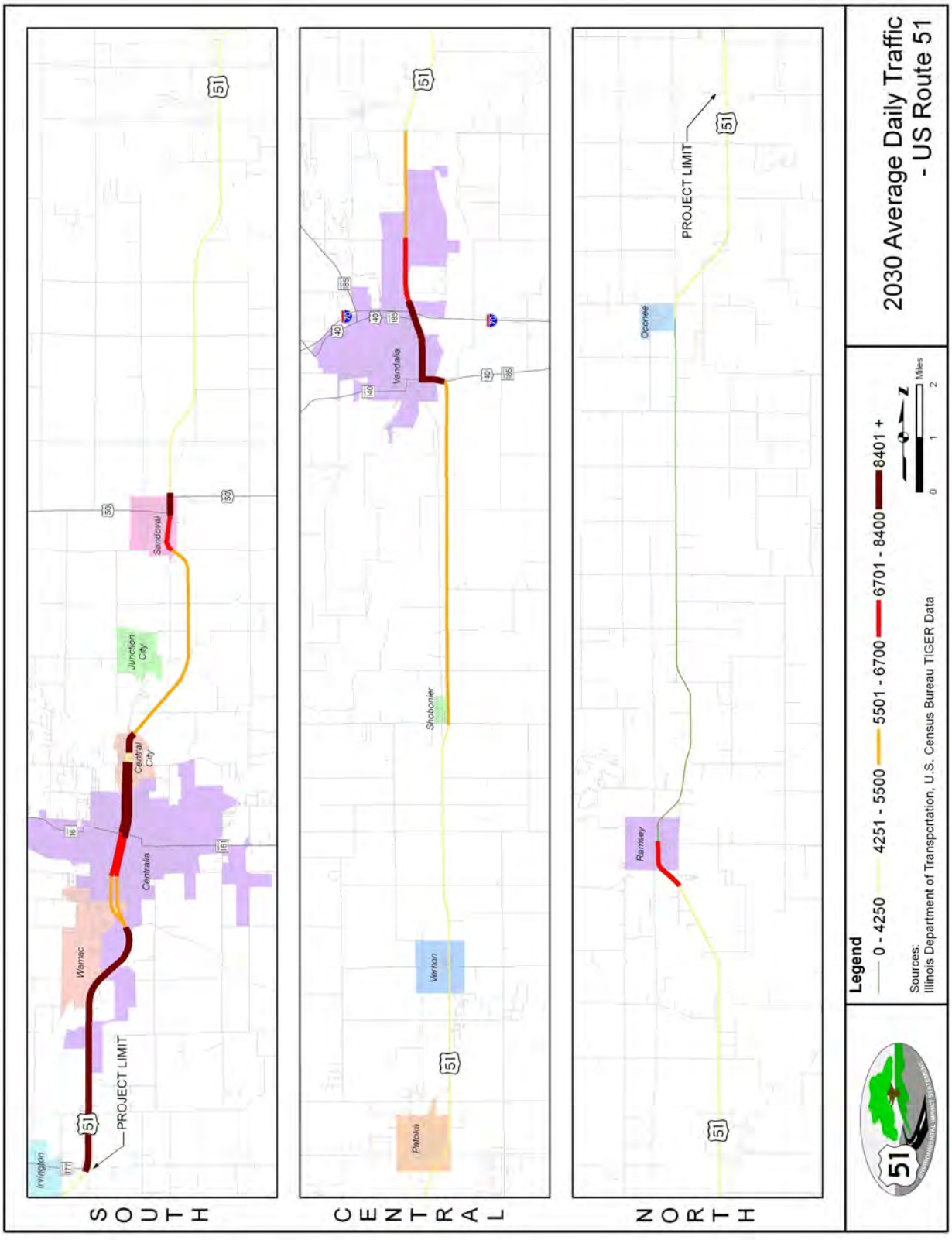
Shobonier
Vernon
Patoka
Ramsey
Ocoree
Legend
0 - 4250
4251 - 5500
5501 - 6700
6701 - 8400
Sources:
Illinois Department of Transportation, U.S. Census Bureau TIGER Data
Miles
2007 Average Daily Traffic
- US Route 51


2030 Average Daily Traffic
- US Route 51
SOUTH
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Vernon
Patoka
Ramsey
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6701 - 8400
8401 +
Miles
Sources:
Illinois Department of Transportation, U.S. Census Bureau TIGER Data