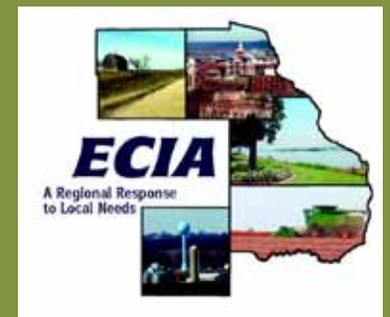


RPA 8

# 2031 Long Range Transportation Plan

Prepared By:





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## Introduction:

### State Consultation with Rural Officials:

In January 2003, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) issued a new rule to guide the consultation process between state transportation officials and non-metropolitan local officials. The new rule implements the congressional intent of the 1998 TEA-21 law to enhance the participation of rural local elected and appointed officials in the statewide transportation planning and decision-making processes. This rule was carried forward in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU authorizes the Federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009.

### Highlights of the rule include:

Each state must have developed and implemented a documented process for local official input into statewide transportation plans and investment programs by February 2004.

By February 2006, and at least every five years afterwards, states must seek feedback from local officials regarding the consultation process. States are also directed to seek comments and input from state associations of counties, municipal officials, regional development organizations and other non-metropolitan officials. The consultation process must be “separate and discrete” from state processes to obtain input from the general public, giving more weight to local government officials in recognition of their significant transportation responsibilities, including ownership of roads, bridges and transit systems.

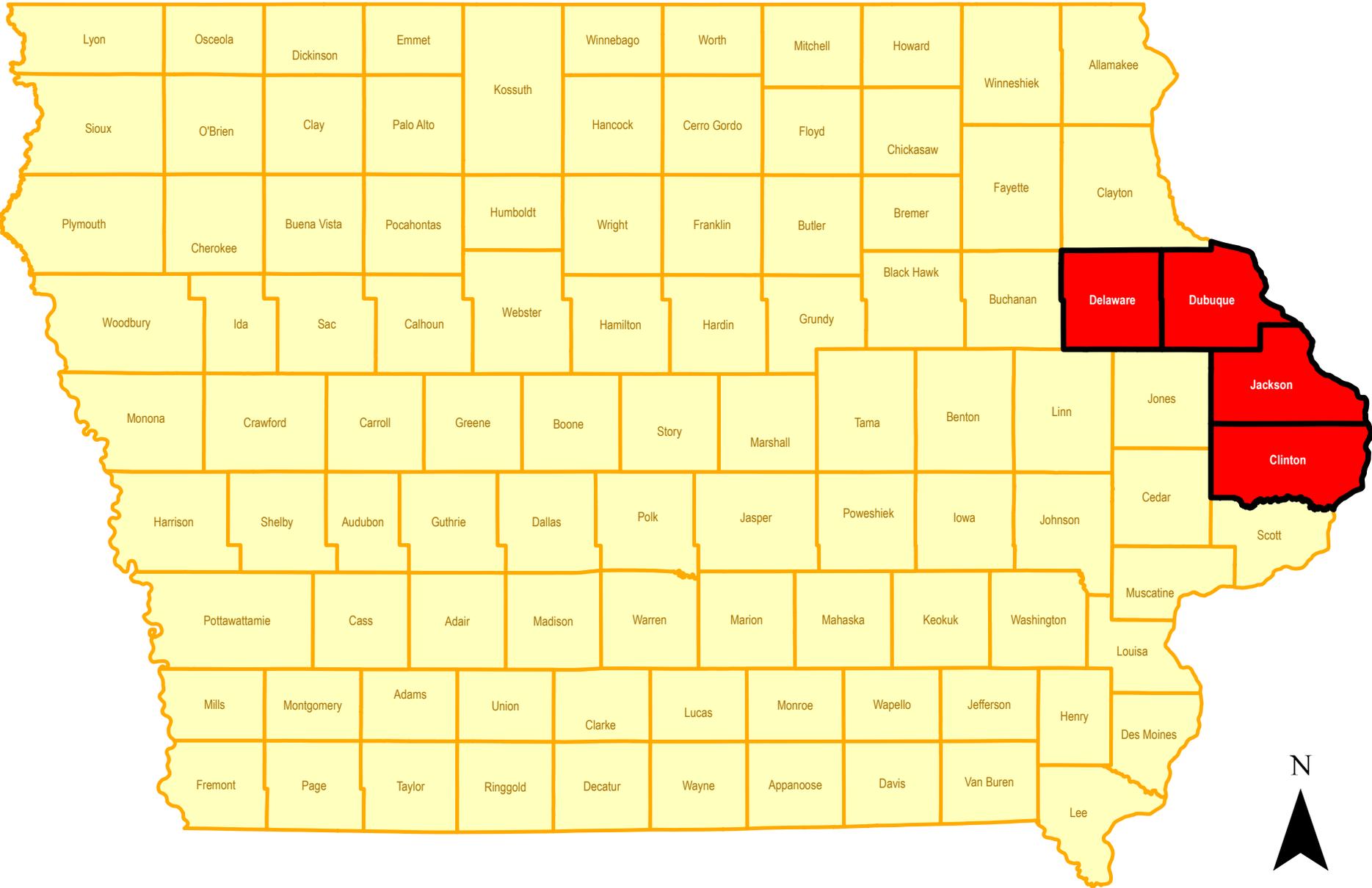
In order to meet these requirements, the Iowa Department of Transportation asked the Rural Planning Agencies to come up with a twenty year Long Range Transportation for their region which will be updated every five years.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 1.1 - Region 8 Location



## Organizational Structure

The ECIA RPA is governed by a board of twelve elected officials from the member jurisdictions. The RPA Policy Board is responsible for establishing overall policy, making decisions related to transportation planning and project funding priorities, and monitoring the direction of studies of transportation conditions in the region. There is a board member from each of the four counties, and a board member from each of the four large urban areas. The remaining four board members are from a non-urban city in each of the four counties which are elected by caucus every two years.

### RPA Policy Board:

#### COUNTIES

Grant Wilke  
*Clinton County*

Jeff Madlom  
*Delaware County*

Buck Koos  
*Jackson County*

Donna Smith, Chair  
*Dubuque County*

#### URBAN AREAS

Roger Holmes  
*City of Clinton*

Don Thiltgen, Vice-Chair  
*City of De Witt*

Milt Kramer  
*City of Manchester*

Tom Messerli  
*City of Maquoketa*

#### SMALL CITIES

Tom Roth  
*City of Camanche*  
*Clinton County*

Herb Sigwarth  
*City of Balltown*  
*Dubuque County*

Paul Konrardy  
*Jackson County*

### Ex officio (non-voting members)

Mokhtee Ahmad, Admin.  
*FTA Reg. VII*  
*(Proxy Mark Betchel)*

Stewart Anderson Plng. & Prog.  
*Iowa DOT*  
*(proxy Sam Shea)*

Phil Barnes, Admin  
*FHWA, Iowa Div.*  
*(Proxy Tracy Trounter)*

## RPA Organization and Management

The East Central Intergovernmental Association Regional Planning Affiliation was established on February 2, 1994 through the adoption of Articles of Agreement by the participating organizations in the region. It is one of the 18 RPA's in the state that were formed as part of the Iowa Department of Transportation's implementation of Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), particularly in regard to meeting the statewide planning and programming aspects of the legislation.

This cooperative, comprehensive, and continuing transportation planning process was established by an agreement between the state and local governments in compliance with the provisions of the ISTEA. The planning process is implemented through a committee structure. Committees forward their recommendations to the Policy Board for consideration and final action. At this time, the only standing committee is the Technical Advisory Committee (TAC). The TAC was formed by the Policy Board at its first meeting on February 2, 1994.

The East Central Intergovernmental Association Regional Planning Affiliation (RPA) membership is made up of 56 local cities and counties in a four county area in eastern Iowa. All member jurisdictions have signed a 28E agreement to conduct transportation planning and the programming of federal transportation funds as determined by the Iowa Department of Transportation. The City of Dubuque and the surrounding area is excluded from the RPA, as it is part of a separate transportation planning area - the Dubuque Metropolitan Area Transportation Study (DMATS) . The DMATS region includes the Cities of Dubuque, Asbury, Sageville, Peosta, Centralia and Durango, as well as portions of Dubuque County.

The RPA is staffed by the East Central Intergovernmental Association (ECIA), which has no formal membership on either the RPA Policy Board or the TAC. At their request, the Iowa Department of Transportation, Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) are only advisory members of the RPA Policy Board and TAC. Map 1.2 w shows the region and 56 local jurisdictions.



The 56 member local jurisdictions include four counties and four urban areas (population greater than 5,000). The four urban areas are the Cities of Clinton, DeWitt, Manchester, and Maquoketa. Members of the RPA include:

### CLINTON

Clinton County  
 Andover  
 Calamus  
 Camanche  
 Charlotte  
 Clinton  
 Delmar  
 DeWitt  
 Goose Lake  
 Grand Mound  
 Lost Nation  
 Low Moor  
 Toronto  
 Welton  
 Wheatland

### DELAWARE

Delaware County  
 Colesburg  
 Delaware  
 Delhi  
 Dundee  
 Earlville  
 Edgewood  
 Greeley  
 Hopkinton  
 Manchester  
 Masonville  
 Ryan

### DUBUQUE

Dubuque County  
 Balltown  
 Bankston  
 Bernard  
 Cascade  
 Dyersville  
 Epworth  
 Farley  
 Graf  
 Holy Cross  
 Luxemburg  
 New Vienna  
 Rickardsville  
 Sherrill  
 Worthington  
 Zwingle

### JACKSON

Jackson County  
 Andrew  
 Baldwin  
 Bellevue  
 LaMotte  
 Maquoketa  
 Miles  
 Monmouth  
 Preston  
 St. Donatus  
 Sabula  
 Spragueville  
 Springbrook



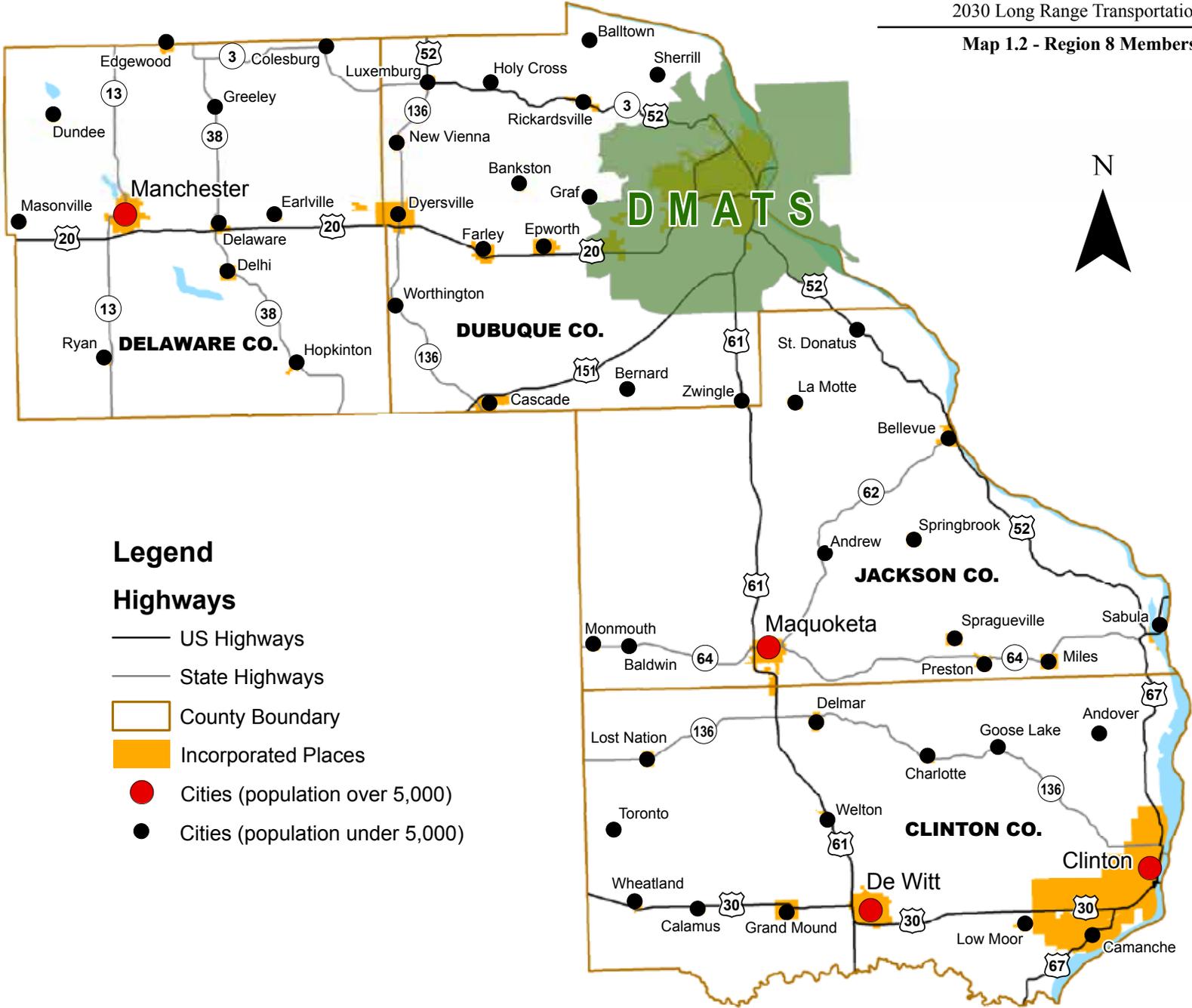
The purpose of the RPA is to enhance and improve the rural transportation planning consultation process between IADOT and those local governments responsible for transportation planning in the rural areas. The RPA gives the rural governments of the region a united voice in addressing safety issues, long range transportation needs and transit needs.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 1.2 - Region 8 Membership



Map prepared November 2008 by ECIA

## RPA 8 Technical Advisory Committee:

The Technical Advisory Committee consists of professional staff from the RPA member jurisdictions. The Technical Advisory Committee reviews, studies, and makes recommendations to the RPA Policy Board related to technical issues affecting spending and study priorities.

Todd Kinney, Chair  
*Clinton County Engineer*

Mike Reynolds  
*City of Clinton*

Anthony Bardgett  
*Delaware County Engineer*

Dennis Hart  
*Clinton MTA Director*

Bret Wilkinson  
*Dubuque County Engineer*

Timothy J. Vick  
*Manchester City Manager*

Clark Schloz  
*Jackson County Engineer*

Brian Wagner, Vice Chair  
*Maquoketa City Manager*

Mark Munson  
*RTA Executive Director*

Steve Lindner  
*DeWitt City Administrator*

Randy Zobrist  
*Great River Bend Executive Director*

## Ex officio (non-voting members)

Sam Shea, Iowa DOT  
*District Planner, District 6*

Tracy Troutner  
*FHWA Iowa Division*

Ryan Ward,  
*Transit System Administrator*  
*Office of Public Transit, Iowa DOT*

Mark Bechtel,  
*Community Planner*  
*FTA Reg. VII, Kansas City, MO*

The goals and objectives for the RPA 8 area transportation system are identified below. This insures that the goals, objectives, and projects are internally consistent, and that all transportation needs in the area are addressed based on the priorities set by the RPA 8 Policy Board.

## The RPA 8 Vision

To promote development of a coordinated, multi-modal transportation system that enhances mobility, economic vitality, and facilitates the safe, secure and efficient movement of people and goods within the Regional Planning Affiliation 8 (RPA 8) region and the surrounding regions.

## The RPA 8 Goals & Objectives

### Goal 1:

Develop a safe, secure multi-modal transportation system that provides for the efficient movement of people and goods.

**Objective 1:** Preserve and maintain the existing transportation system to maximize the performance of transportation infrastructure.

**Objective 2:** Identify future transportation improvements that are fiscally constrained and support the creation of a comprehensive, multi-modal transportation system.

**Objective 3:** Identify appropriate mitigation techniques to minimize the number and severity of accidents within RPA 8.

**Objective 4:** Select and program transportation projects that are consistent with community values and goals.



## Goal 2:

Develop a transportation system that promotes the use of alternative modes including public transit, and the development of a regional bicycle and pedestrian network.

**Objective 1:** Support transportation improvements that enhance existing linkages and create new linkages between transportation modes.

**Objective 2:** Support transit oriented development and explore opportunities to expand transit service to developing areas.

**Objective 3:** Ensure a high level of transit service to persons with special needs, older adults, and at-risk groups.

**Objective 4:** Establish a regional bicycle network that serves recreational and utilitarian trips by connecting major trip attractions such as schools, colleges, libraries, parks, and other important trip destinations.

**Objective 5:** Identify and preserve right-of-way, including abandoned rail lines, for future bicycle and multi-use trails.

**Objective 6:** Promote improvements to the sidewalk network throughout the communities.

## Goal 3:

Support transportation improvements and projects that promote existing and future economic development.

**Objective 1:** Evaluate the economic impacts and benefits of potential transportation projects and support those projects that maintain or enhance the economic vitality of the region.

**Objective 2:** Support transit improvements and programs that provide increased access to local and regional employment centers.

**Objective 3:** Support projects that encourage the planned growth of freight and passenger rail facilities and operations including projects that provide improved accessibility to freight and passenger systems.

**Objective 4:** Identify potential intermodal connections to support existing and future business operations within and outside the RPA 8.

The 2031 Long-Range Transportation Plan describes the current and future transportation needs of the RPA 8 area; and identifies the actions that must be undertaken to implement the above goals and objectives so that the area will promote a safe, continuous, comprehensive and coordinated transportation system.

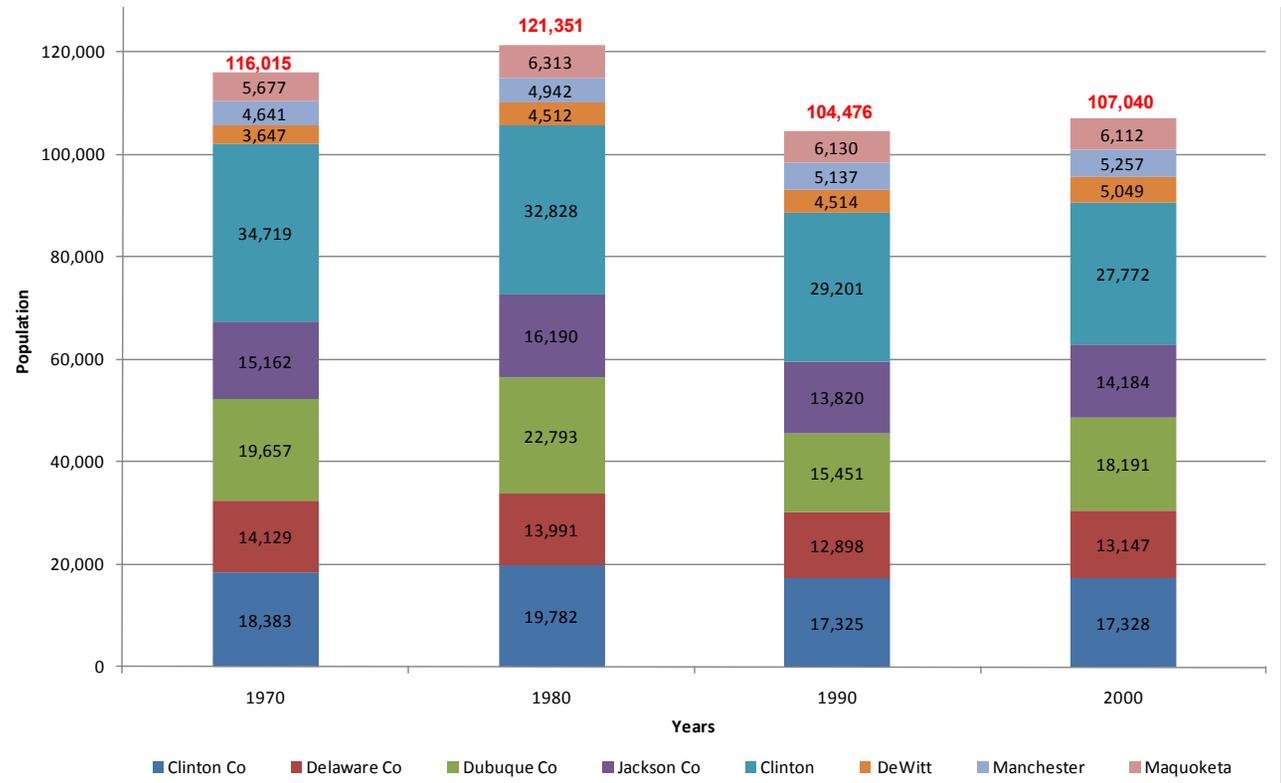


## Introduction

This chapter summarizes the socioeconomic data forecast developed for the Long Range Transportation Plan. This data is the primary input used to develop transportation requirements for the region. These forecasts and analyses are necessary for quality long-range transportation planning and to comply with federal transportation legislation. The process of acquiring and checking this data involves coordinated efforts by all the transportation and planning departments in the region.

As seen in Figure 2a, between 1970 and 1980, the population of the RPA 8 region increased by over 5,000. From 1980 to 1990, there was a significant decrease in population, that was partially regained in 2000. These fluctuations can likely be attributed to the economic conditions in the region during the 30 years included in the graph.

Fig 2a - RPA 8 Historical Trends



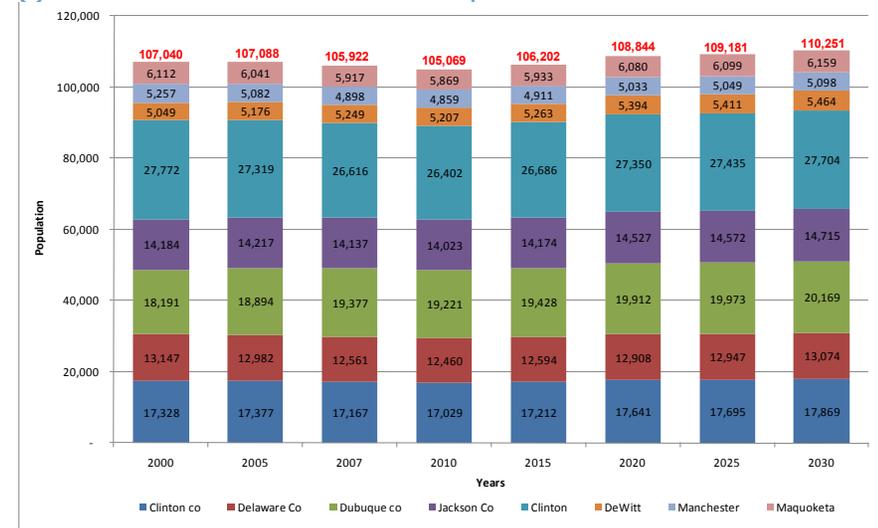
Source: Census Bureau

## Process

Population analysis is very important to the transportation planning process. Knowledge of past and present population characteristics is essential to meaningful projections of future population levels and characteristics. Future population levels determine both the amount of land to be developed and, the type of development (e.g., residential or commercial), which will soon occur. Understanding present population characteristics also helps the community determine the adequacy of existing transportation facilities, land use patterns, economic arrangements, and community facilities. Population forecasts for RPA 8 were created by Woods and Poole Economics, Inc. 2000 Census population levels were used as the base for the projection.

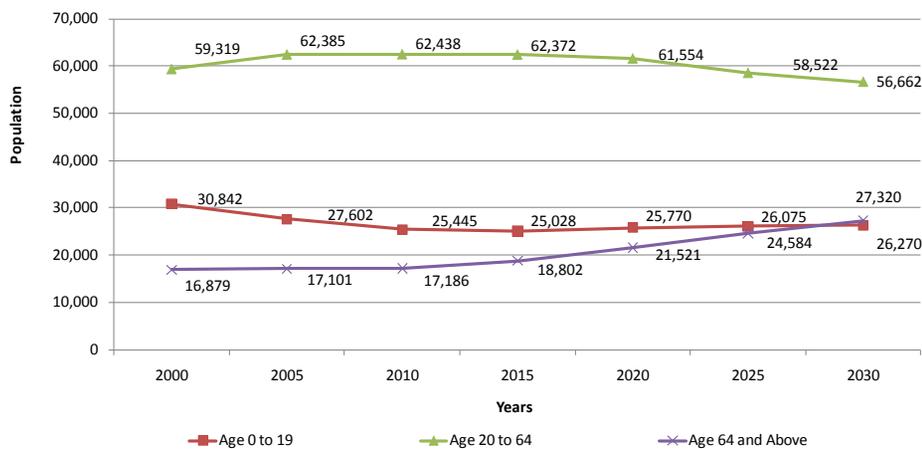
As seen in Figure 2b, population is expected to decrease slightly between 2000 and 2010. Following the initial decrease, the population is expected begin a slow growth pattern, adding 1,000 to 2000 people every 10 years. Over all, the population within the region is expected to increase by 2.99 percent in thirty years.

Fig 2b - RPA 8 Future Population Forecasts



Source: Census Bureau

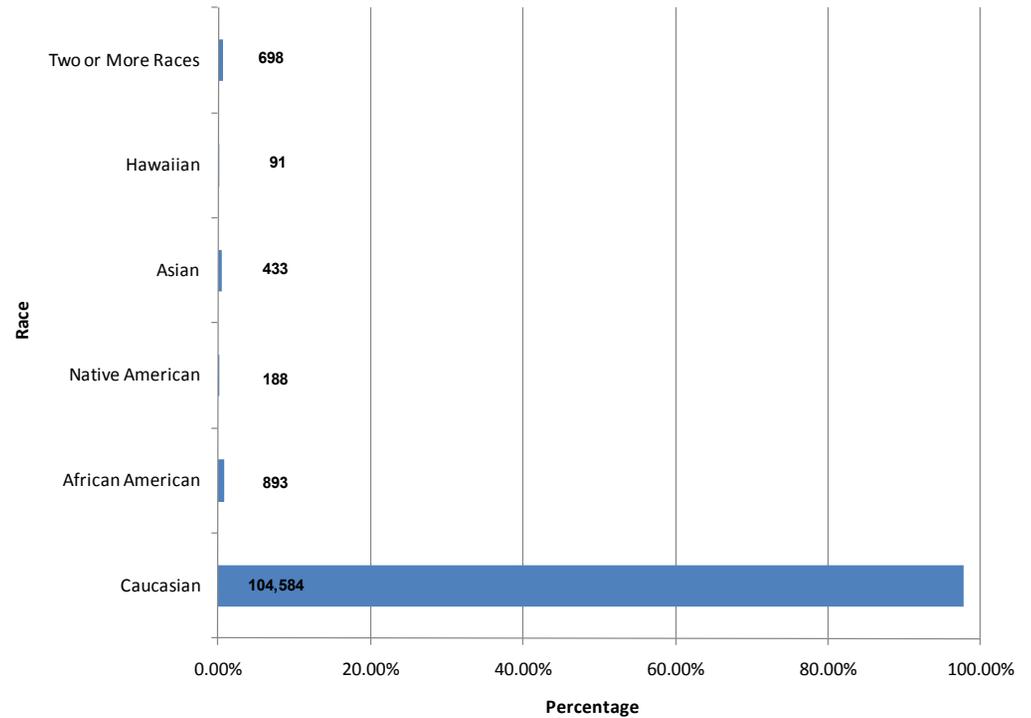
Fig 2c - RPA 8 Composition and Age Distribution



Source: Census Bureau

The age composition of the population of the RPA 8 is expected to change over the next thirty years. These changes are shown in Figure 2c. In the first age bracket (0-19), a reduction of 15 percent is expected over the twenty year period after a slight increase in the between 2000 and 2005. The second age bracket (20 – 64) is expected to decrease by only 5 percent. On the other hand, the percentage of persons 65 years of age and over will increase by 62 percent and should continue to increase as the “baby boomer” generation reaches this age bracket. Overall, the population RPA 8 is expected to become older in the next twenty years.

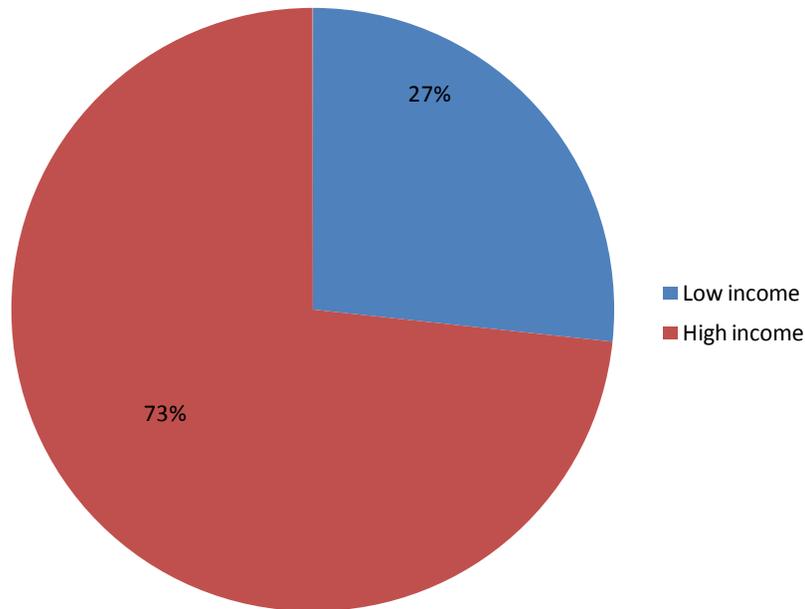
Fig 2d RPA 8 Racial Composition



Source: Census Bureau

The racial composition of RPA 8's population is shown in Figure 2d. The region is nearly 98 percent White, with a small African-American population and an even smaller Hispanic population. 2000 Census figures indicate that minority populations account for only 2.1 percent of the total population. The region's non-white population ranges from 0.07 percent in Delaware County, to a high of 3.22 percent in the City of Clinton. Map 2.1 on the following page shows the locations minority populations within the region.

Fig 2e Low Income Households



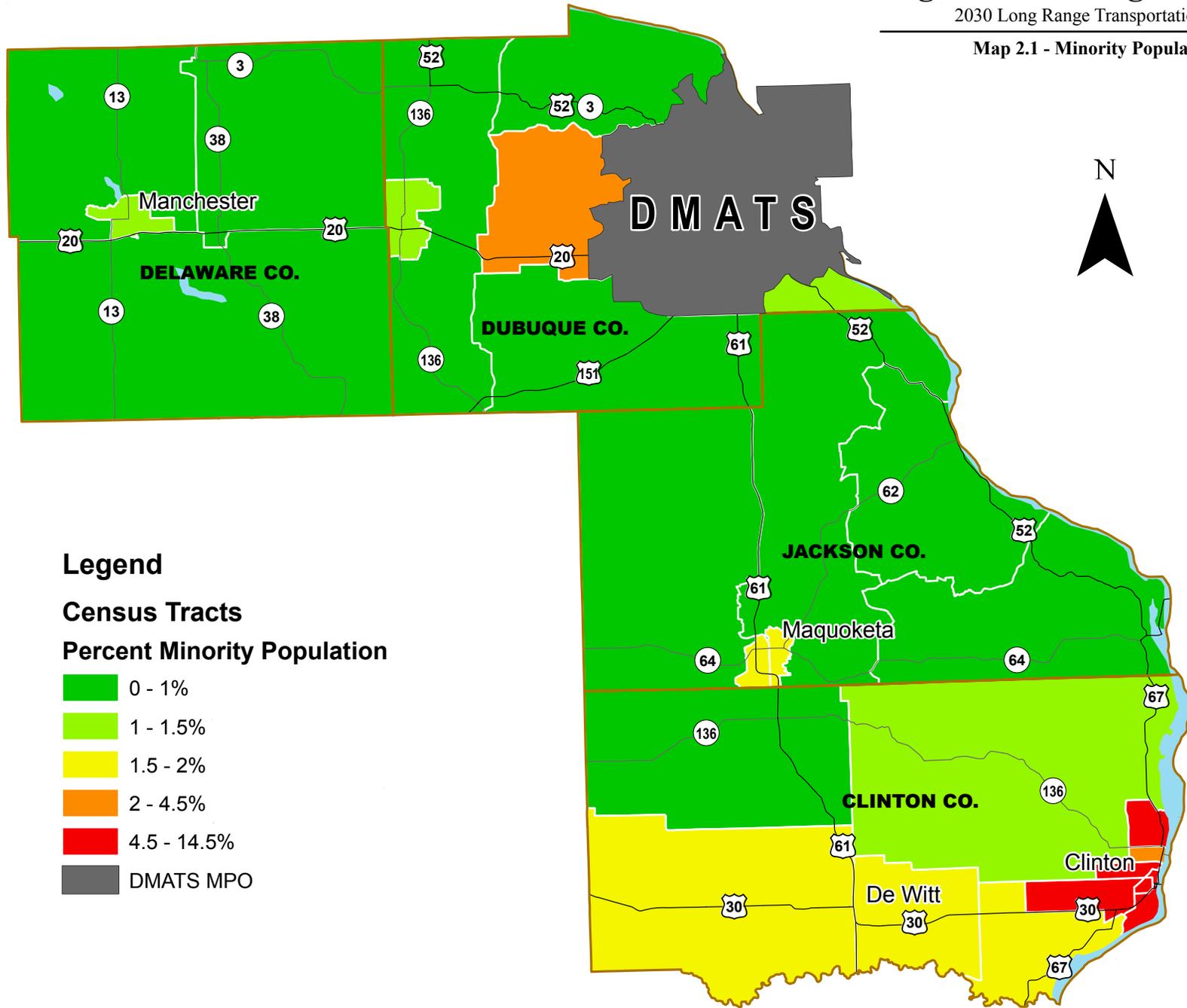
Source: Census Bureau

Income distribution plays a vital role in guiding transportation projects in the area. One person households making less than \$20,000 annually, two person households making less than \$23,000, three person households making less than \$25,000, and four person holds making less than \$30,000 are officially described as low income. Over all, 27 percent of households in RPA 8 fall below the low income threshold. FHWA policy requires local planning agencies to assess the benefits and burdens placed on low income and minority populations by all transportation projects. A project programmed for construction (or advanced environmental study) must consider low income populations affected by each project, regardless of municipal income averages. Figure 2e shows the percentage of low income households within the region. Map 2.2 shows the distribution of income by census tract.

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 2.1 - Minority Population



## Legend

### Census Tracts

### Percent Minority Population

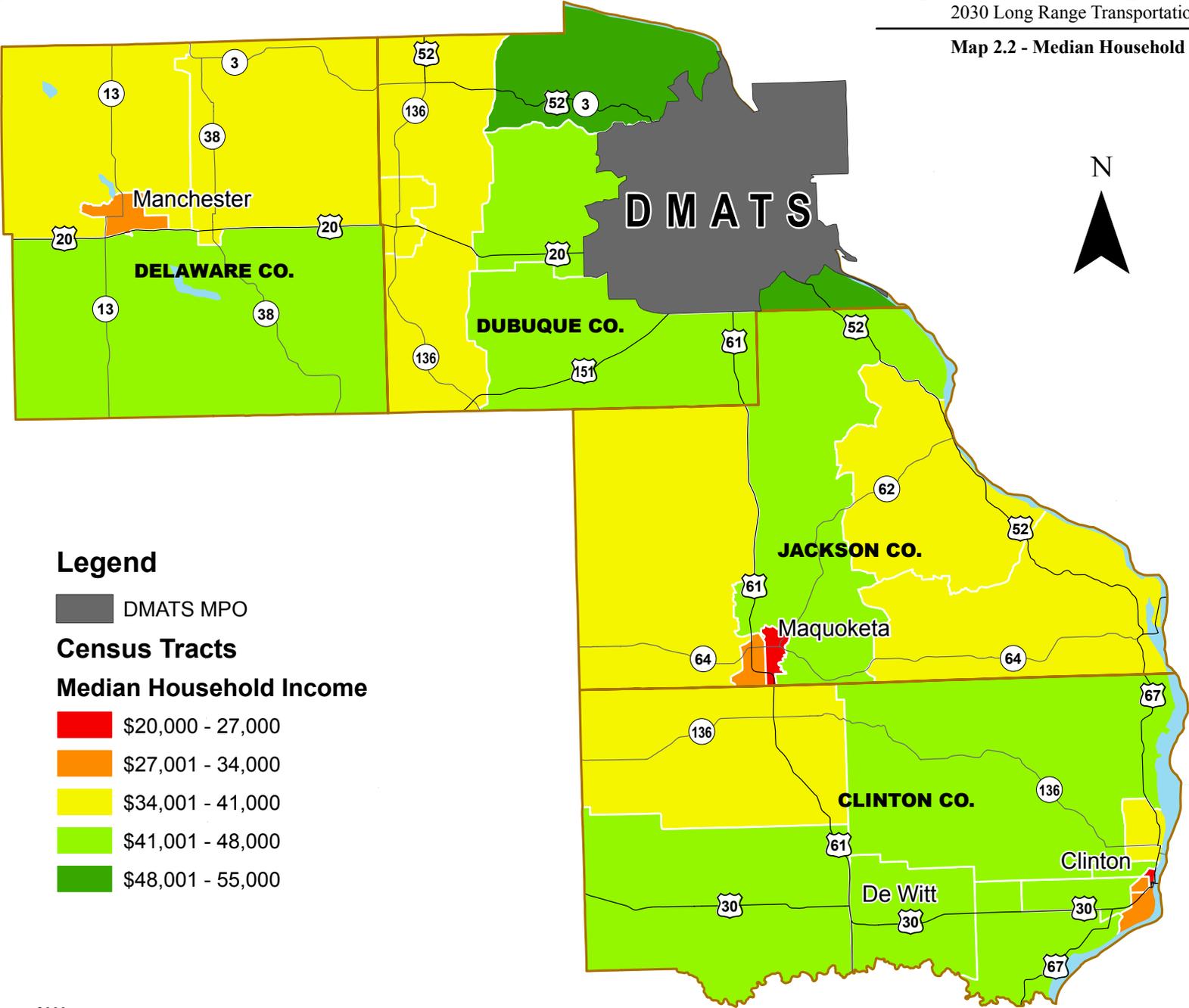
- 0 - 1%
- 1 - 1.5%
- 1.5 - 2%
- 2 - 4.5%
- 4.5 - 14.5%
- DMATS MPO

Map prepared November 2008 by ECIA

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 2.2 - Median Household Income



### Legend

DMATS MPO

### Census Tracts

### Median Household Income

- \$20,000 - 27,000
- \$27,001 - 34,000
- \$34,001 - 41,000
- \$41,001 - 48,000
- \$48,001 - 55,000

Data Source: U.S. Census 2000  
 Map prepared November 2008 by ECIA

## Economic Analysis

The following tables provide a quantitative look at the RPA 8 economy in three ways: as a whole, in comparison with the state, and broken into component parts. The tables display data regarding the labor force and employment trends.

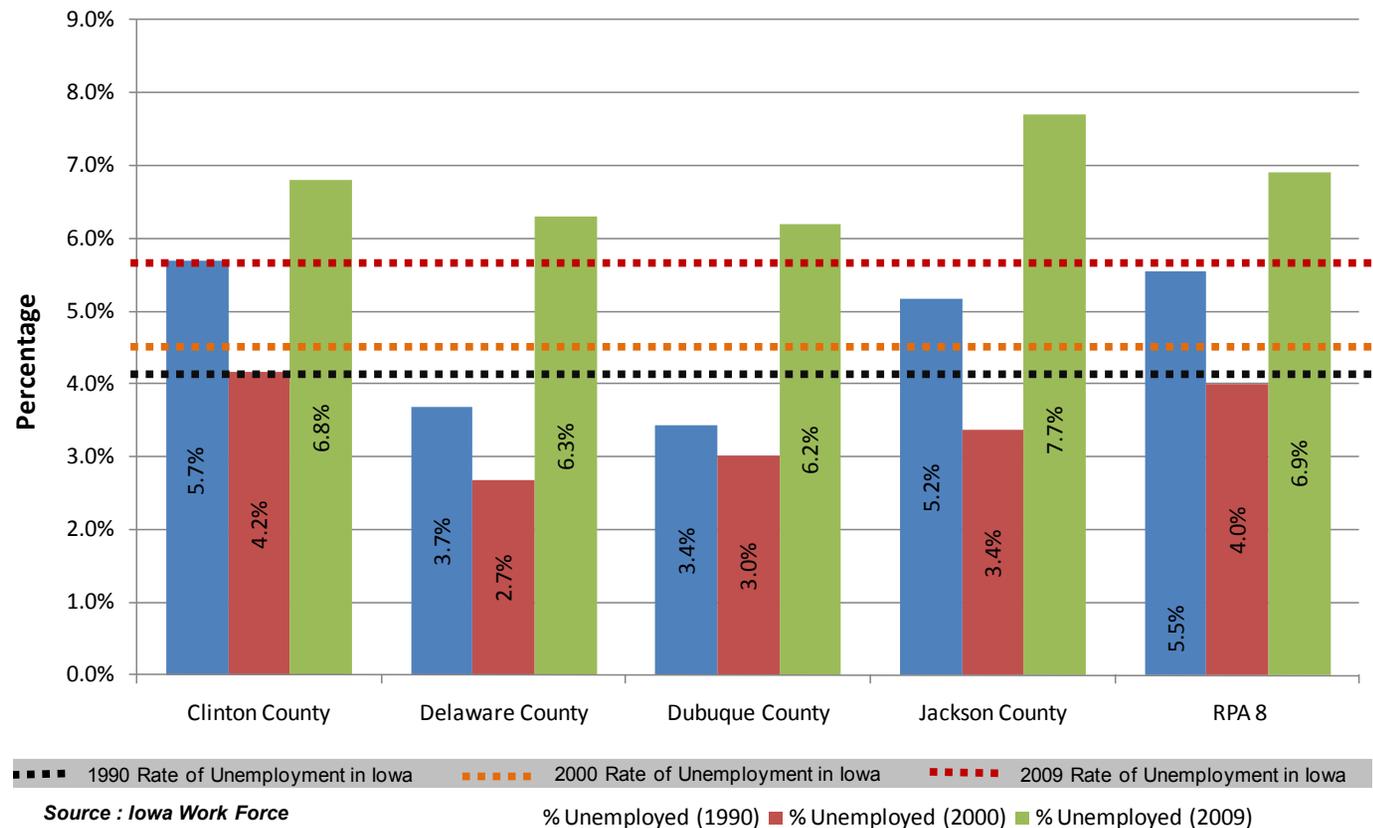
### RPA 8 Unemployment Status

According to the 1990 census data, the RPA member with the highest unemployment was City of Maquoketa with an unemployment rate of 8.3 percent. This was 4.8 percent higher than the state's average during the same time period. Over all the RPA 8 had an unemployment rate of 5.5 percent which was 1 percent higher than state average. In general RPA 8 members had unemployment rates at or above the state average.

In 2000 the RPA member with the highest unemployment was City of Clinton with an unemployment rate of 6.0 percent. This was only 1.8 percent higher than the state's average during the same time period. Over all, the RPA 8 had an unemployment rate of 4.0 percent which was 0.2 percent less than state average. Most of RPA 8 members had lower unemployment rate when compared to state average.

The unemployment rates for Census 1990 and Census 2000 of the members in the RPA 8 Region are compared to the state in Figure 2f. All of the members in the RPA 8 region had a decrease in unemployment from 1990 to 2000. City of Maquoketa showed the most significant decrease from 8.5 percent to 4.6 percent. Nearly a 46 percent reduction in only ten years.

Fig 2f Unemployment Rates



The employment forecasts for the RPA 8 area is based on county level economic forecasts developed for Dubuque County by Woods and Poole Economics (WPE) of Washington, D.C, Iowa Workforce development, and REEBIE data from Iowa DOT. These forecasts were developed by WPE using an econometric model. The employment projections within the area are shown in figure 2g, with data from the RPA 8 employment projections.

Fig 2h Travel Time to Work

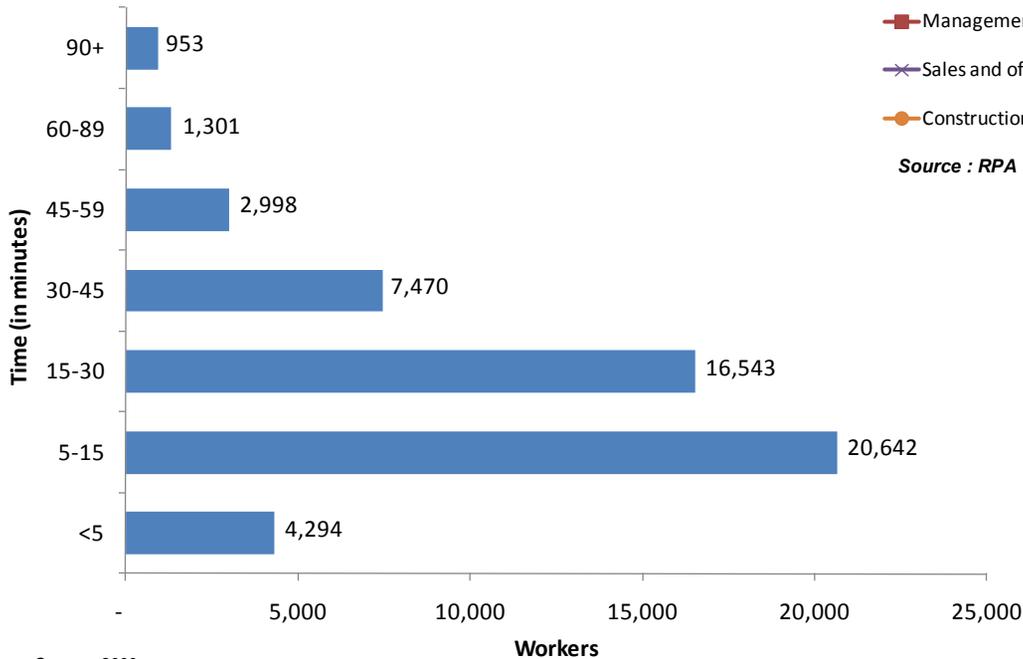
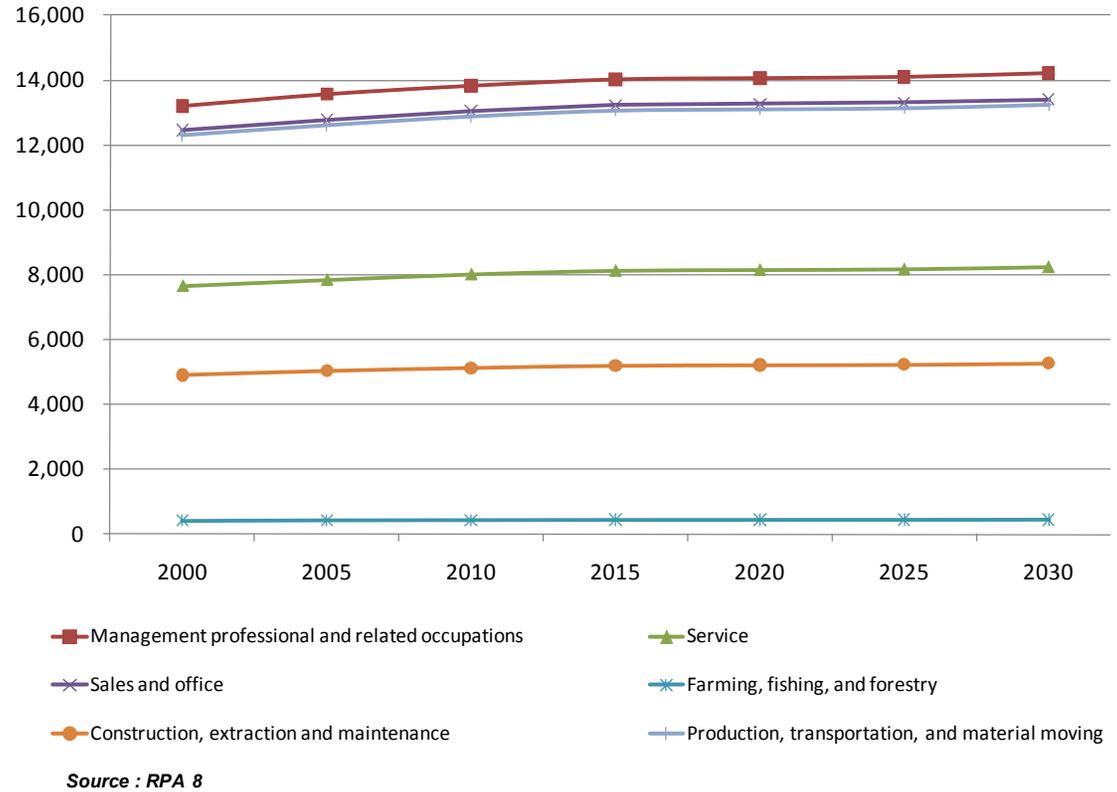


Fig 2g Employment Projections



Analyzing travel time to work can help identify problems in the transportation network. According to the 2000 census, workers in City of Clinton, City of Manchester and City of Maquoketa generally have the region's shortest commute times, with over 60 percent requiring less than 15 minutes to get to work. Only 23.5 percent have travel time more than 30 minutes to work. Figure 2h shows the number of workers by trip length.

Another key issue for the area's transportation system is transportation modes that are being used by workers to get to work. Trips to work make up the largest single group of trips and, in most urban areas, account for about 25% of all trips on an average day. Work trips place the single largest demand on the transportation system. The mode choice made by workers for their trip to work is one of the best indications available of the modes that will be chosen for other types of trips.

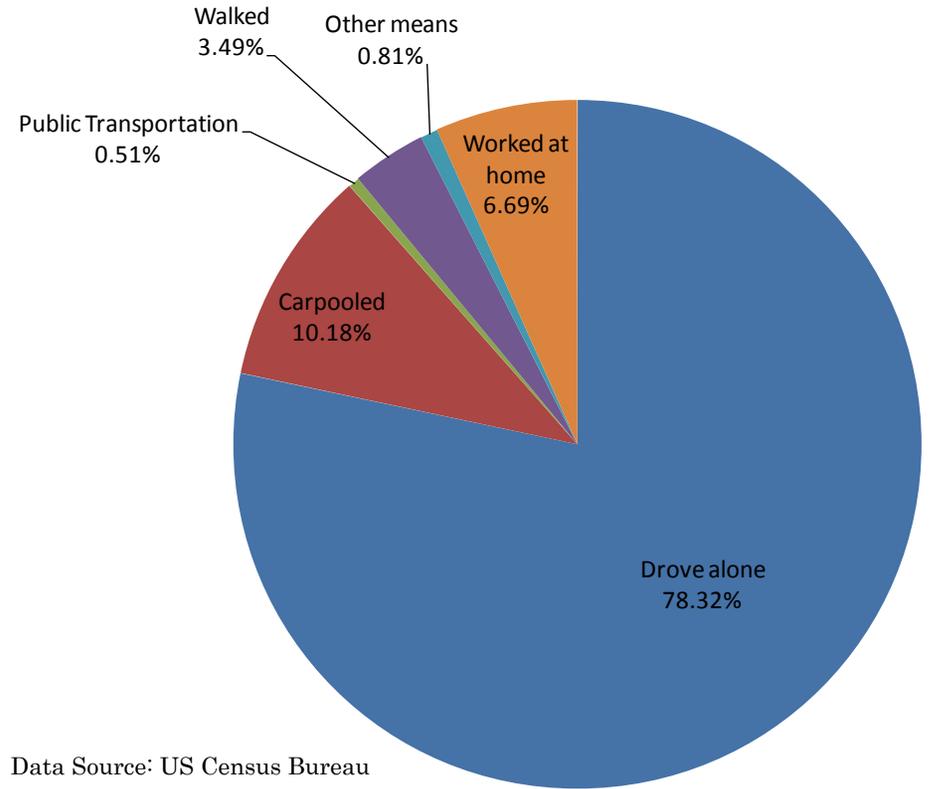
Most of the commutes in RPA 8 are single-occupant vehicle (SOV) trips and carpool trips. SOV trips account for 78.3 percent of RPA 8 commutes. Urban areas have the highest percentage of SOV trips with in the region on an average of 82.0 percent.

Carpooling accounted for 10.2 percent of all commuting trips in RPA 8, with Jackson County reporting the highest rate (13.1 percent).

Walking to work is uncommon in RPA 8, at only 3.5 percent of all trips. City of Clinton had the smallest percentage of walkers (2.7 percent). Jackson County had the longest mean travel time (21.9 minutes). Dubuque County had the shortest mean travel time, at 15.5 minutes.

Mean travel time strongly correlates to commutation patterns, with those counties that retain more commuters having shorter mean travel times than those counties that retain fewer commuters. Figure 2i shows the percentage of each mode of transportation for the region.

Fig 2i Mode of Transportation to Work



## Commuter Patterns

Commuting patterns vary among the four RPA 8 counties. This data provides a coarse indication of journey to work travel patterns.

At nearly 90 percent, Dubuque County has the region's highest percentage of workers employed within the county of residence. The county is also a net importer of workers from each surrounding RPA counties.

Jackson County exports nearly one third of its resident workforce—the highest such percentage in RPA 8. A majority of these trips are to neighboring Dubuque County, where approximately 1,804 workers commute from Jackson County. This number constitutes nearly 18 percent of Jackson County's resident workforce.

Overall most of the residents in RPA 8 work within the region.

Maps 2.4 and 2.5 on the following pages show intra-county commuting patterns across and throughout RPA 8.



## Conclusion

In recent years, RPA 8 has experienced little economic and population growth with increases in unemployment and travel time to work. Good transportation infrastructure is key to the continued development in all regions. This is especially true in regions that are attempting to jump-start economic growth. The information presented in this chapter demonstrates the need for continued infrastructure improvement, but also the need for continued improvements to the area's transit systems to accommodate the increasing low-income, minority, and elderly populations.

## Inward Commutes by County

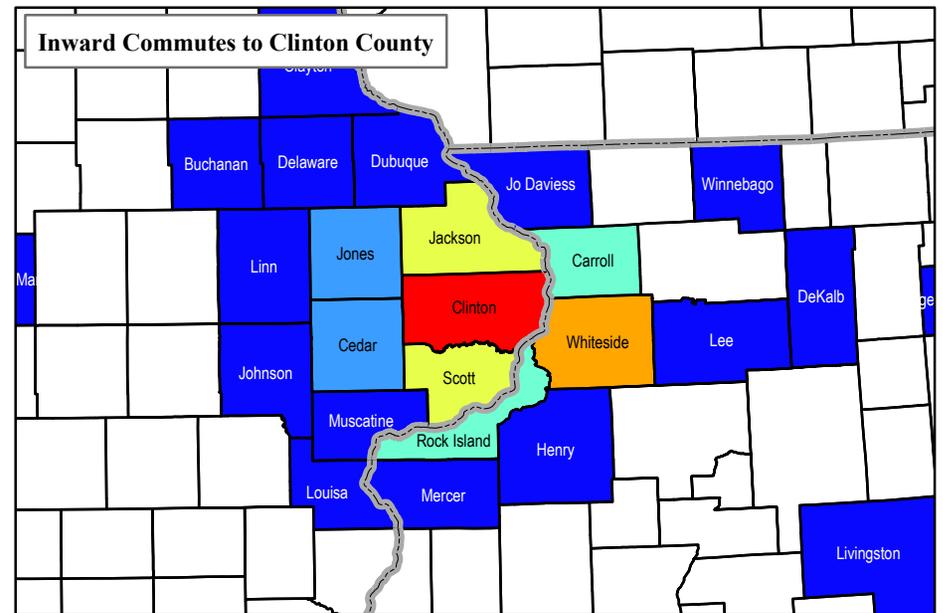
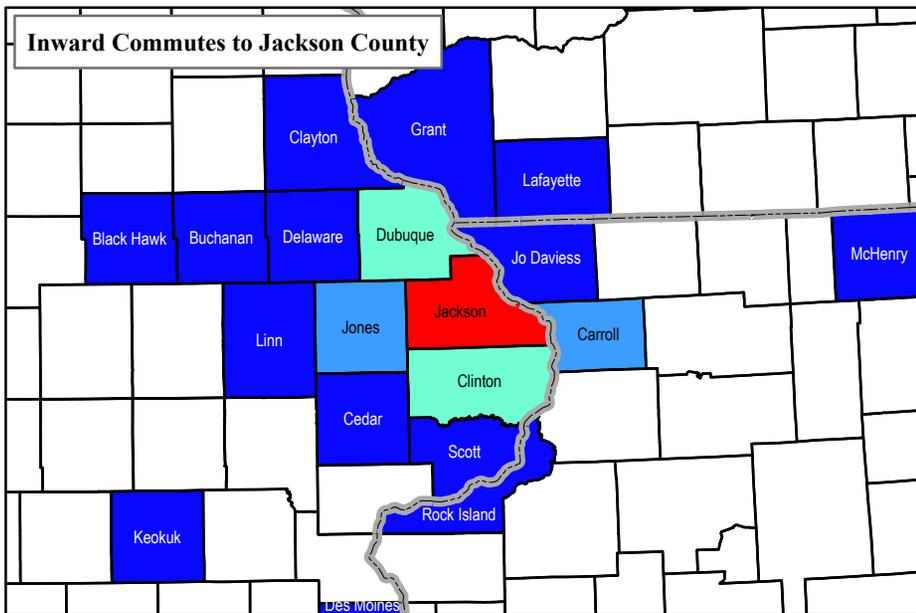
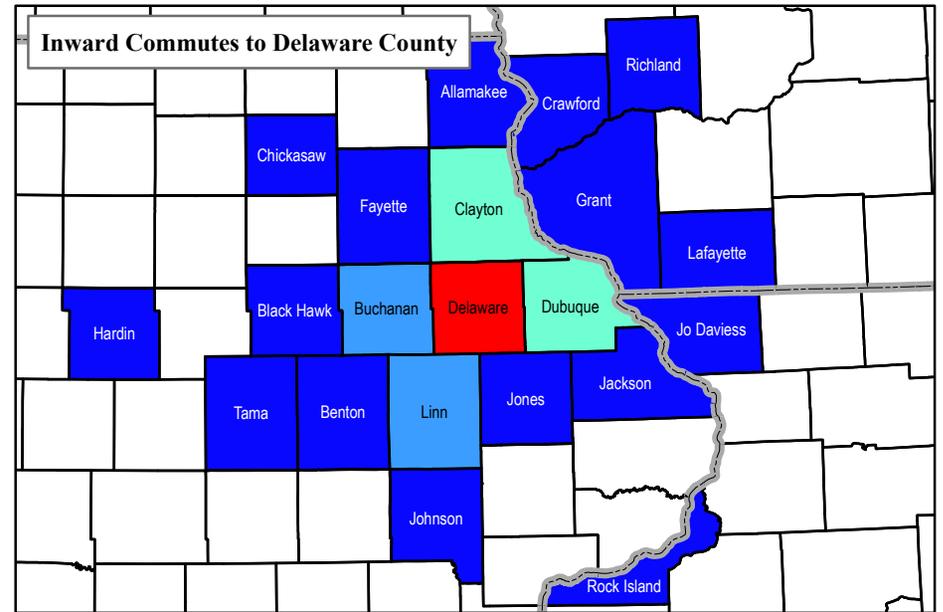
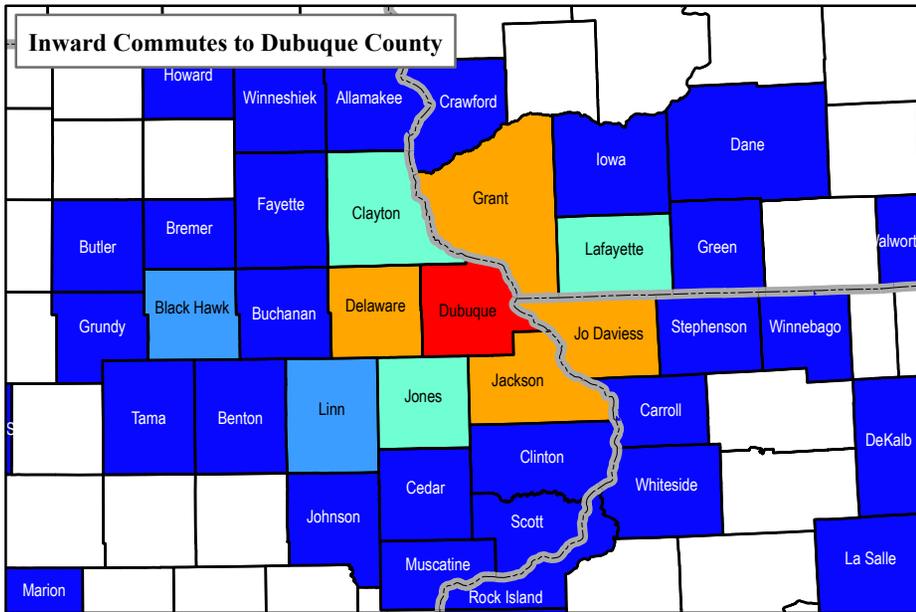


## Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 2.4 - County Workflow - Inward Commutes

Inward commutes refers to the workers in a given county and which county they reside in.



Map prepared December 2008 by ECIA, Data Source: U.S. Census 2000

## Outward Commutes by County

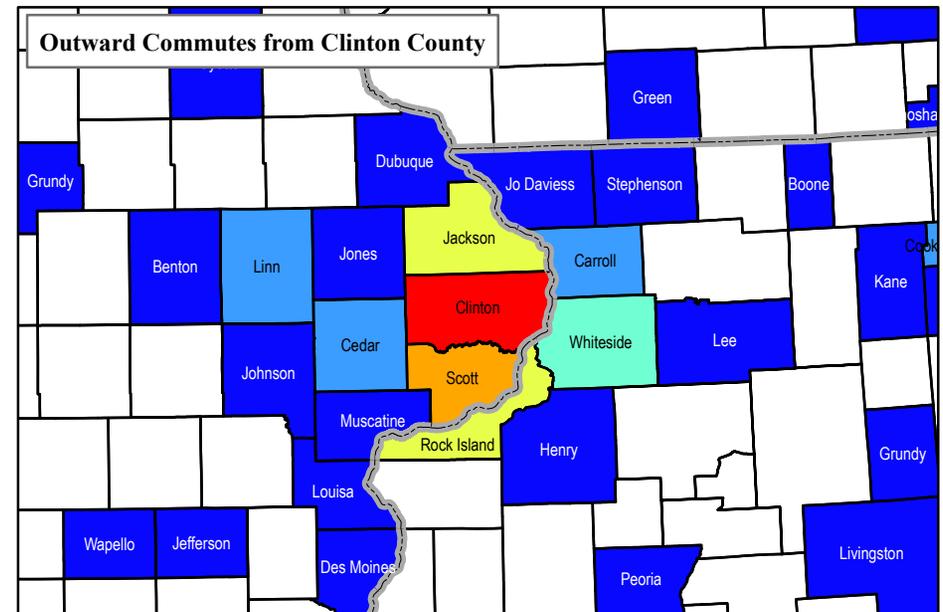
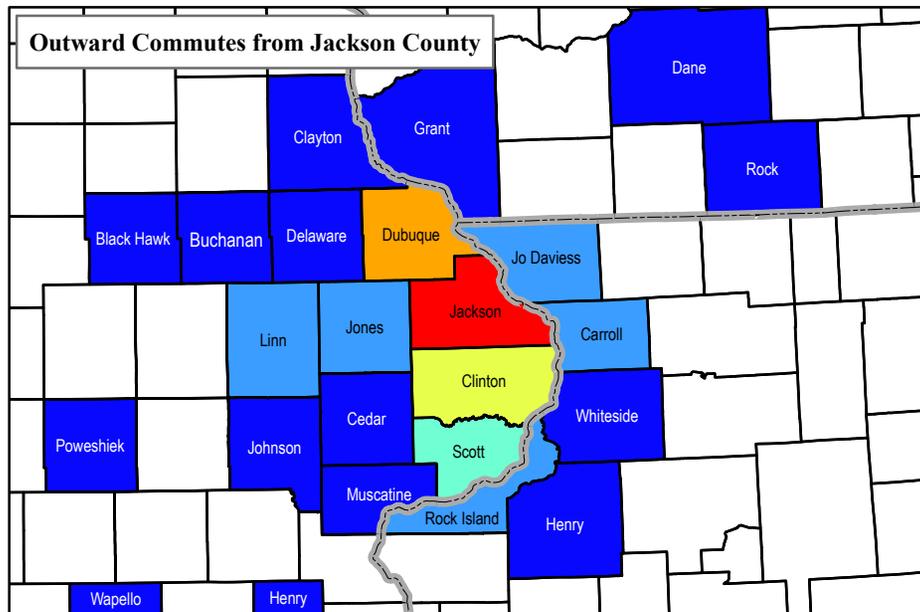
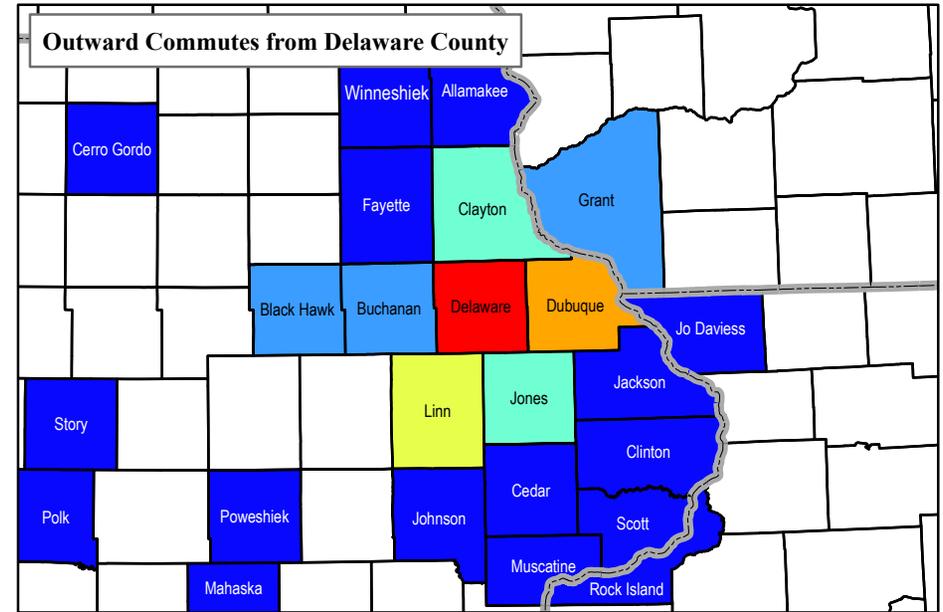
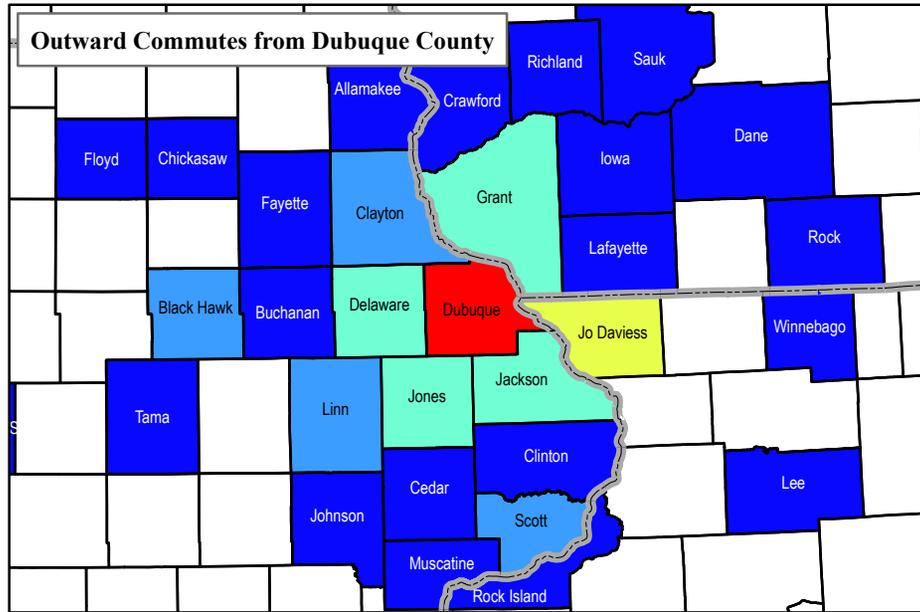


## Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 2.5 - County Workflow - Outward Commutes

Outward commutes refers to the residents in a given county and which county they work in.



Map prepared December 2008 by ECIA, Data Source: U.S. Census 2000

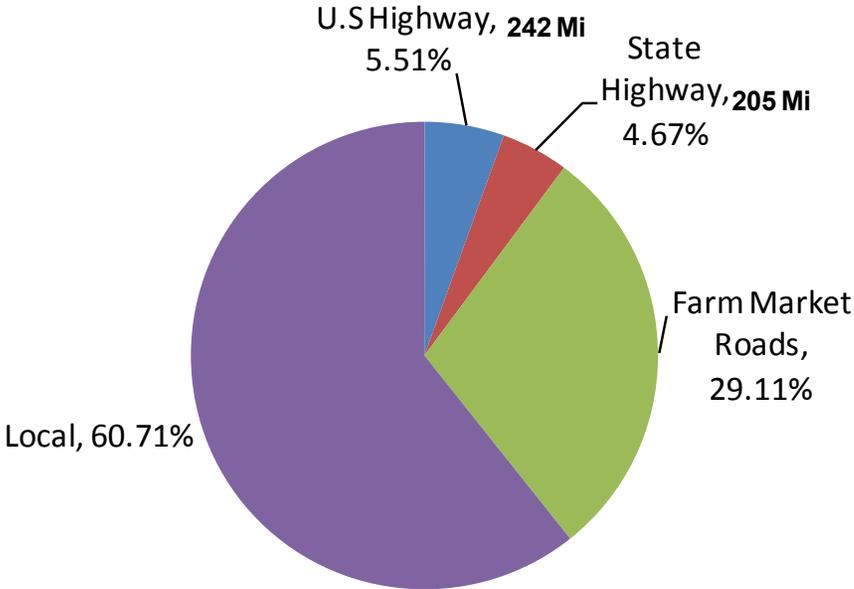


Introduction

The street and highway system comprises the foundation of RPA 8’s transportation infrastructure. While it primarily serves the movement of automobiles, the region’s public transportation and freight systems are also heavily dependent on the street and highway system. As such, the street and highway system plays a significant role in supporting the region’s transportation goals.

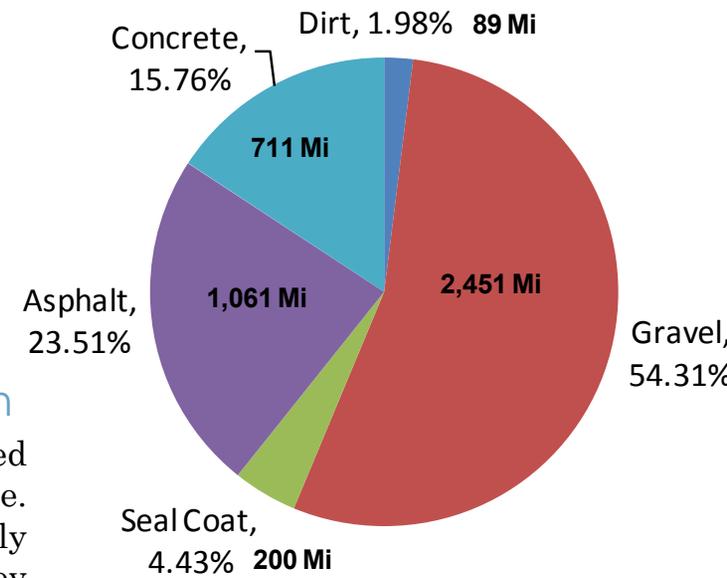
Type of Street Network:

There are nearly 4,900 linear miles of roadway crisscrossing RPA 8 region. Approximately, 10 percent of the Region’s roadways are maintained and operated by IADOT. The reaming 90 percent of the road system is owned by counties and cites in the region. (Graph 1)



## Surface Type

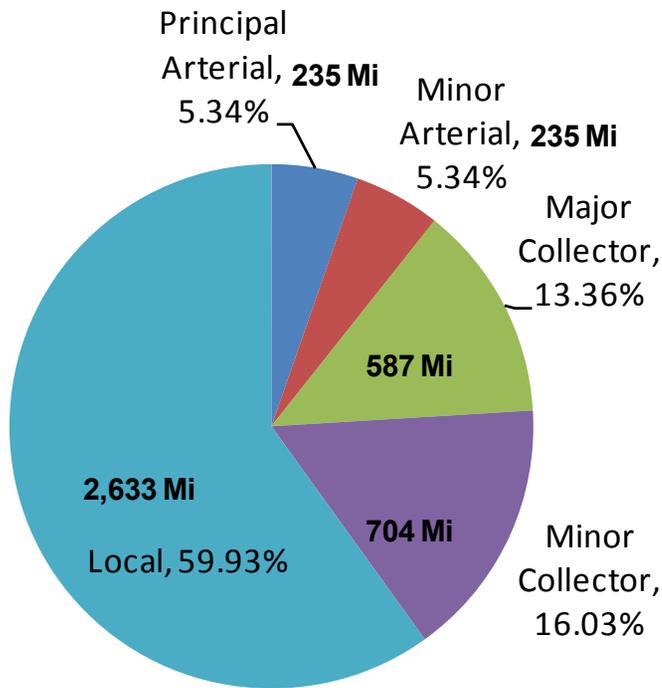
U.S. 20, U.S. 151, U.S. 61, U.S. 52, U.S. 67, and U.S. 30 account for 5.51 percent of asphalt and concrete roads in RPA 8. 43.7 percent of the roads in RPA 8 are asphalt, concrete, or seal coat. The remaining 56.29 percent have a dirt or gravel surface.



## Federal Function Classification

The FHWA classifies highways based on the type of service they provide. Streets and highways generally perform two types of service. They either provide traffic mobility or land access, and are grouped (or “ranked”) in terms of the proportion of each service they perform. State highways are classified as principal arterials. Principal arterials are the region’s highest functionally classified roadway, and make up 5.34 percent (235 miles) of roadway through out the region.

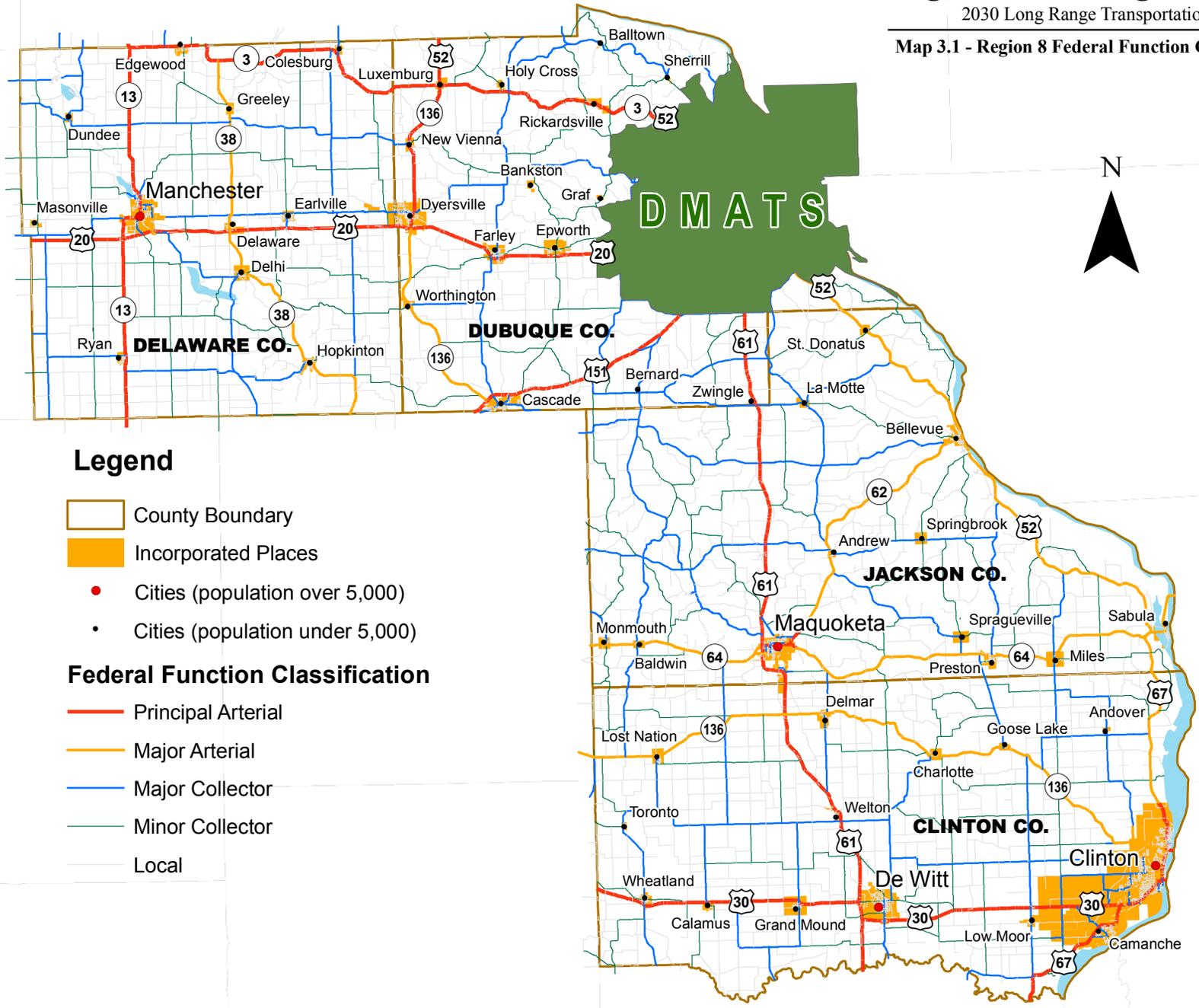
The Minor collectors and Local streets make up 76 percent (3337 miles) of the region’s roadways. All classifications except local streets and minor arterials are eligible for federal funding.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 3.1 - Region 8 Federal Function Classification



## Legend

-  County Boundary
-  Incorporated Places
-  Cities (population over 5,000)
-  Cities (population under 5,000)

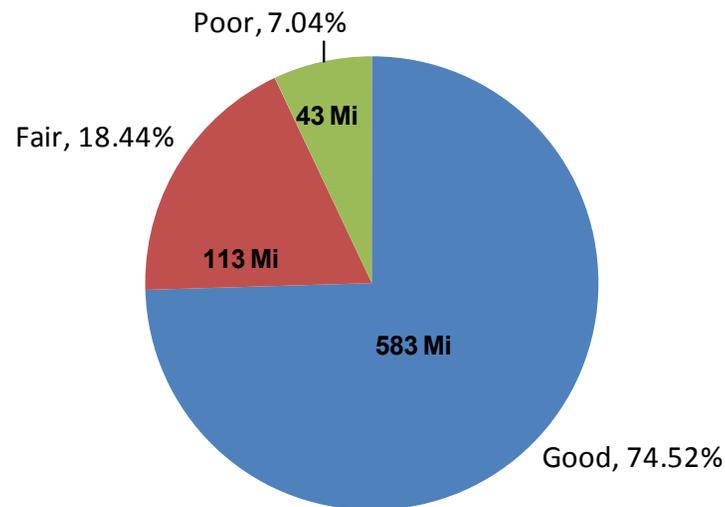
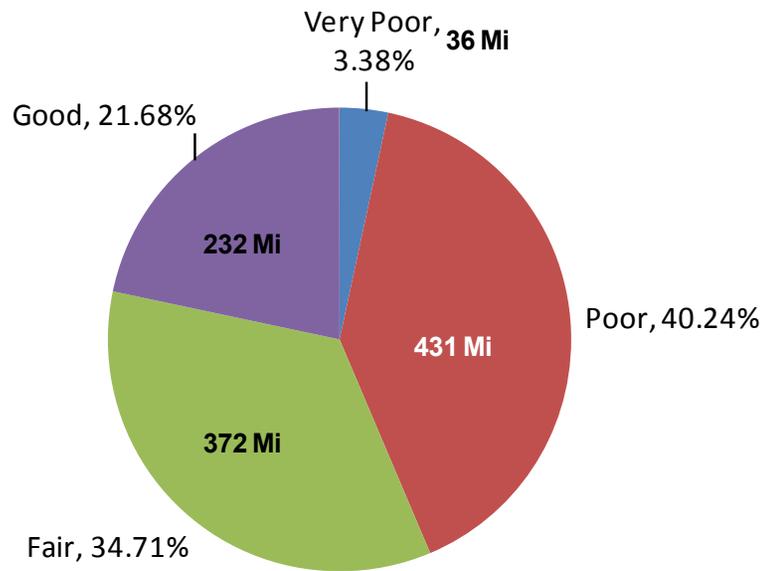
## Federal Function Classification

-  Principal Arterial
-  Major Arterial
-  Major Collector
-  Minor Collector
-  Local

Map prepared November 2008 by ECIA

## Roadway Conditions

Roadway conditions within RPA 8 are assessed based on the Pavement Condition Index (PCI) for secondary Road system, International Roughness Index (IRI), and Average Annual Daily Traffic (AADT) with Volume Capacity for road systems that has AADT.



### Pavement Condition Index

The Pavement Condition Index (PCI) is based on a visual survey of the pavement. A numerical value between 0 and 100 defines the condition with 100 representing an excellent pavement. The PCI is applied to all secondary roads in the region. 22.6 percent of the network is in good condition, and 34.7 percent is in fair condition. 40.2 percent of the network is in poor condition, and 3.3 percent is in very poor condition.

### International Roughness Index (IRI)

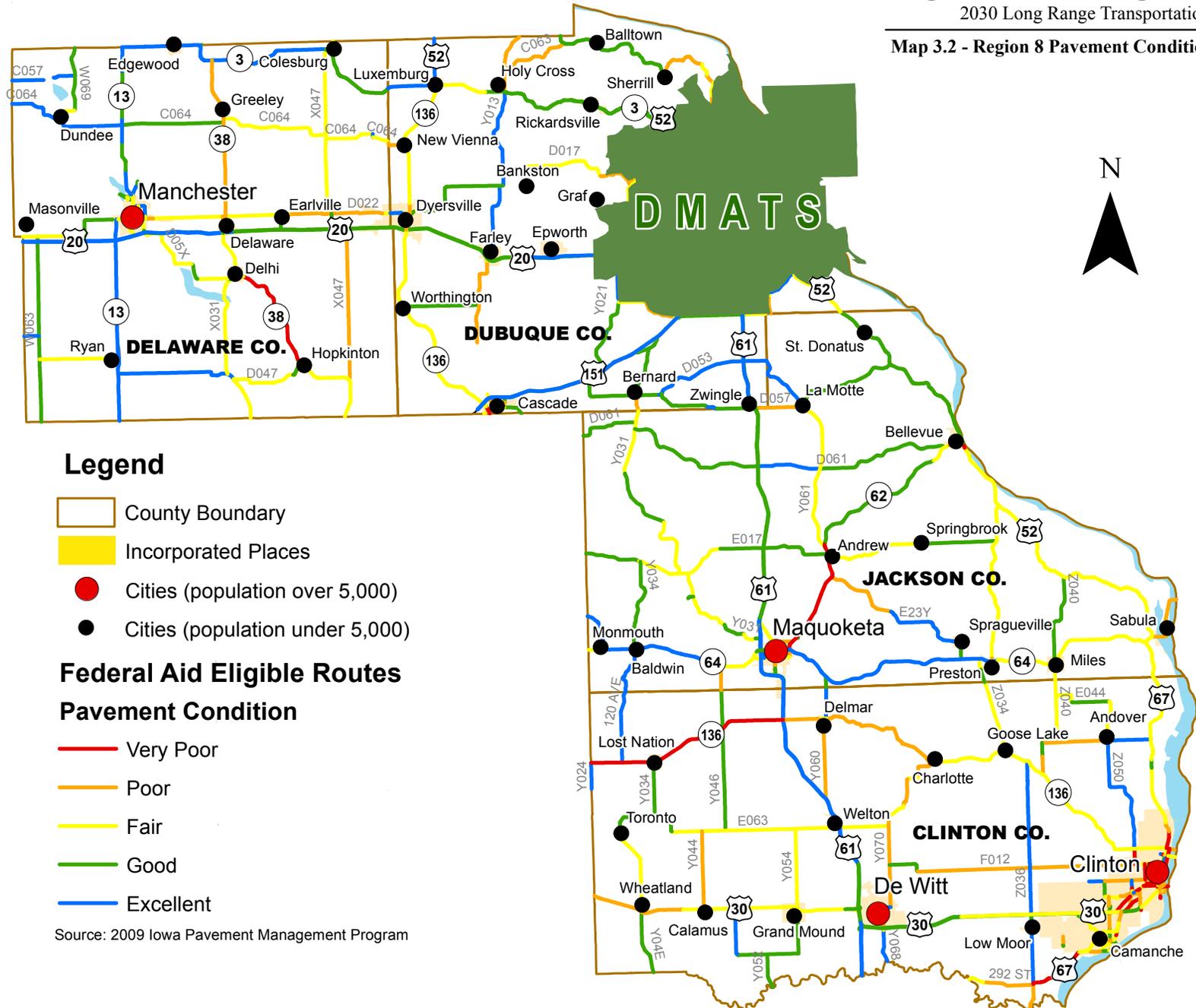
IRI measurements are recorded based on the level of deflections per segment of highway. The lower the IRI, the smoother the road. Using IRI ranges, all roads are rated good, fair, or poor. In the region 74.5 percent of the network is in good condition, 18.4 percent is in fair condition, and 7.0 percent is in poor condition.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 3.2 - Region 8 Pavement Condition Index

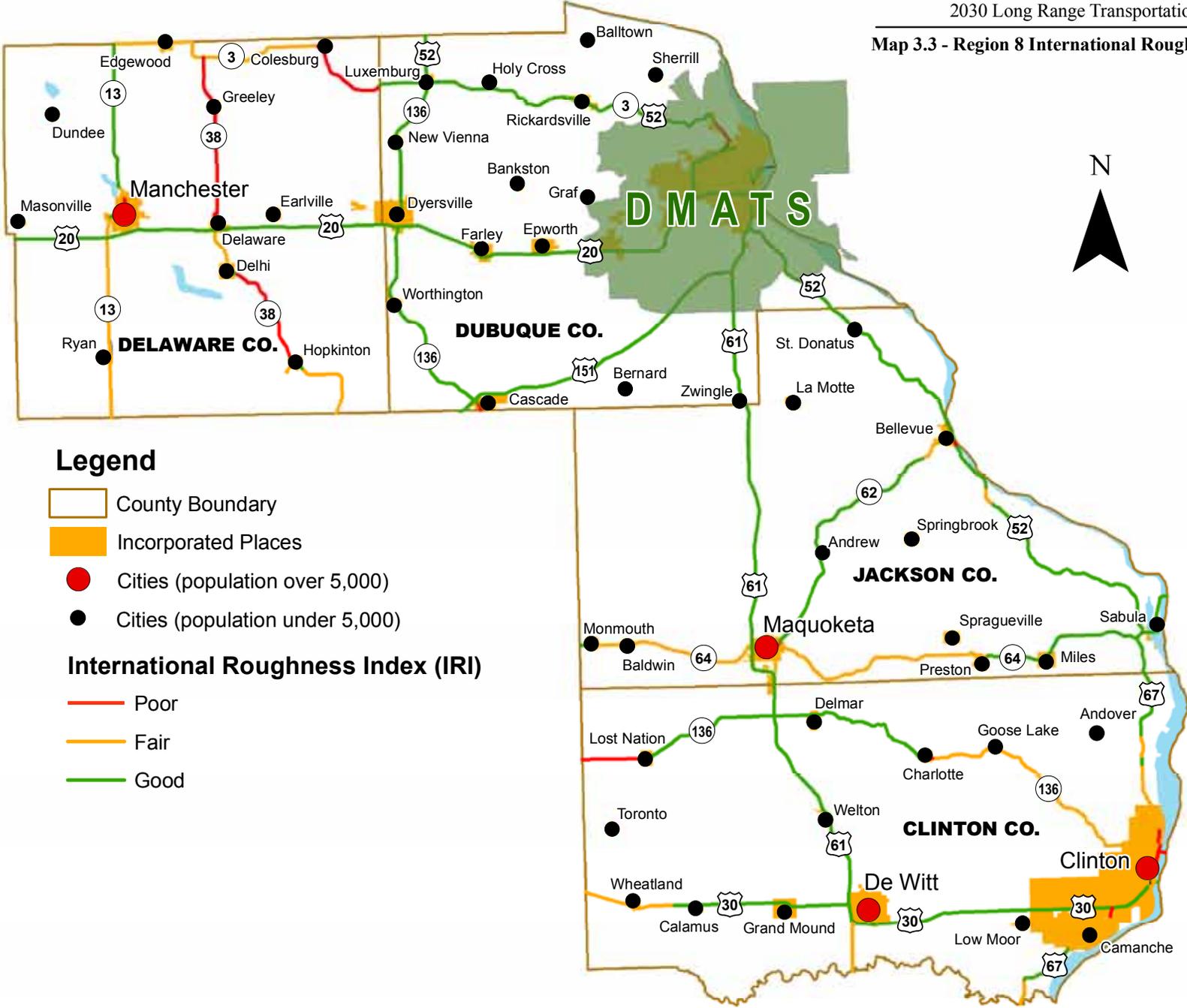


Map prepared April 2011 by ECIA

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

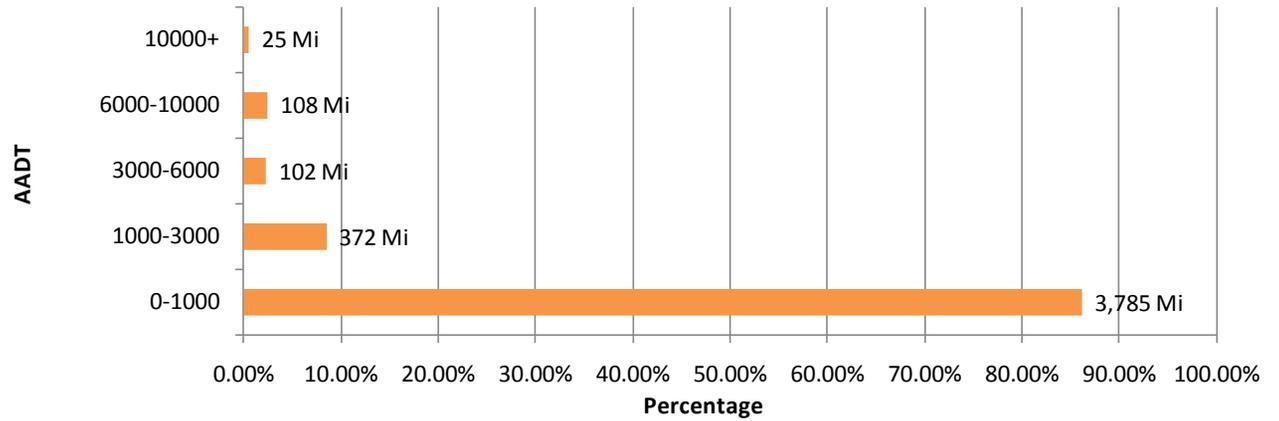
Map 3.3 - Region 8 International Roughness Index



Map prepared November 2008 by ECIA

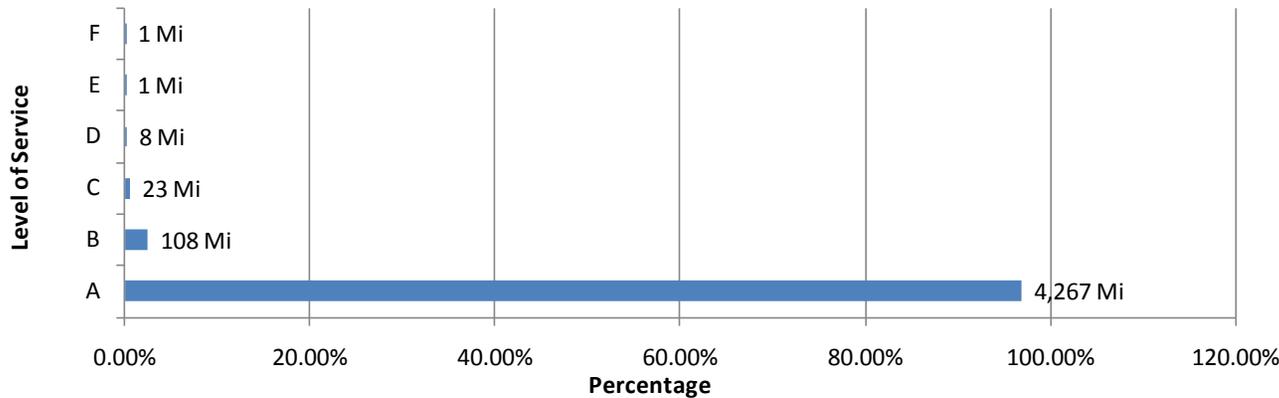
### Average Annual Daily Traffic (AADT)

AADT is a measure of system use. AADT data is collected through 24 hour traffic counts. AADT can be used to examine the road system and identify areas with high or low use. In the region, 86.6% of the network has less than 1,000 AADT, 8.48 percent has between 1,000 – 3,000 AADT, 2.32 percent has between 3,000 – 6,000 AADT, 2.47 percent has traffic between 6,000 – 10,000 AADT, and 0.58 percent has traffic more than 10,000 AADT.



### Volume Capacity (V/C):

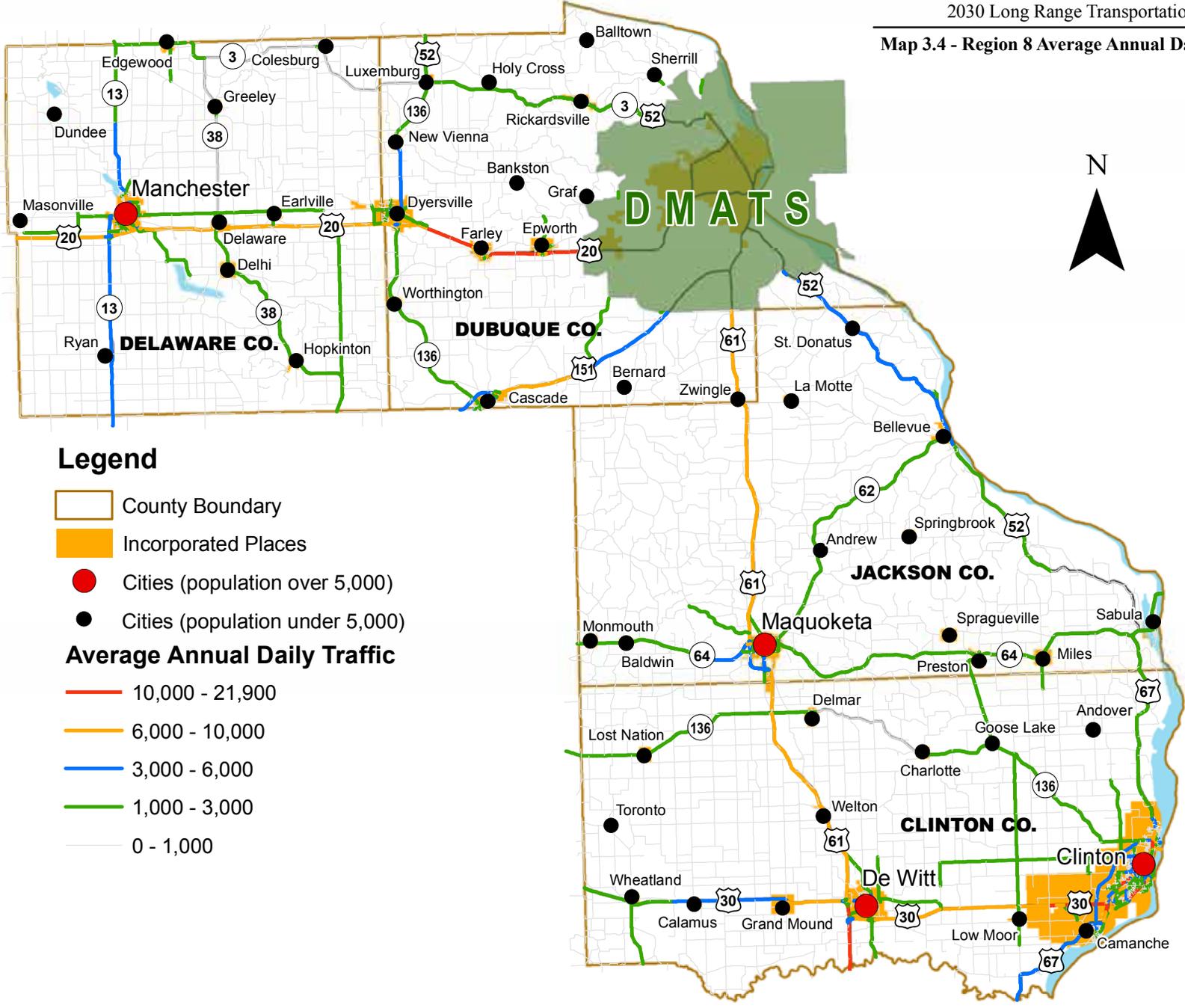
Volume Capacity method is to compare the estimated roadway capacity with the AADT that has been measured for the roadway. This approach provides a general indication of the road segments that are congested. The outcome ratio is broken down into levels of service. Level of service A to C are good D is acceptable, E is bad and F is worse. Around 96.8 percent of the network in RPA 8 is in level of service A.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 3.4 - Region 8 Average Annual Daily Traffic

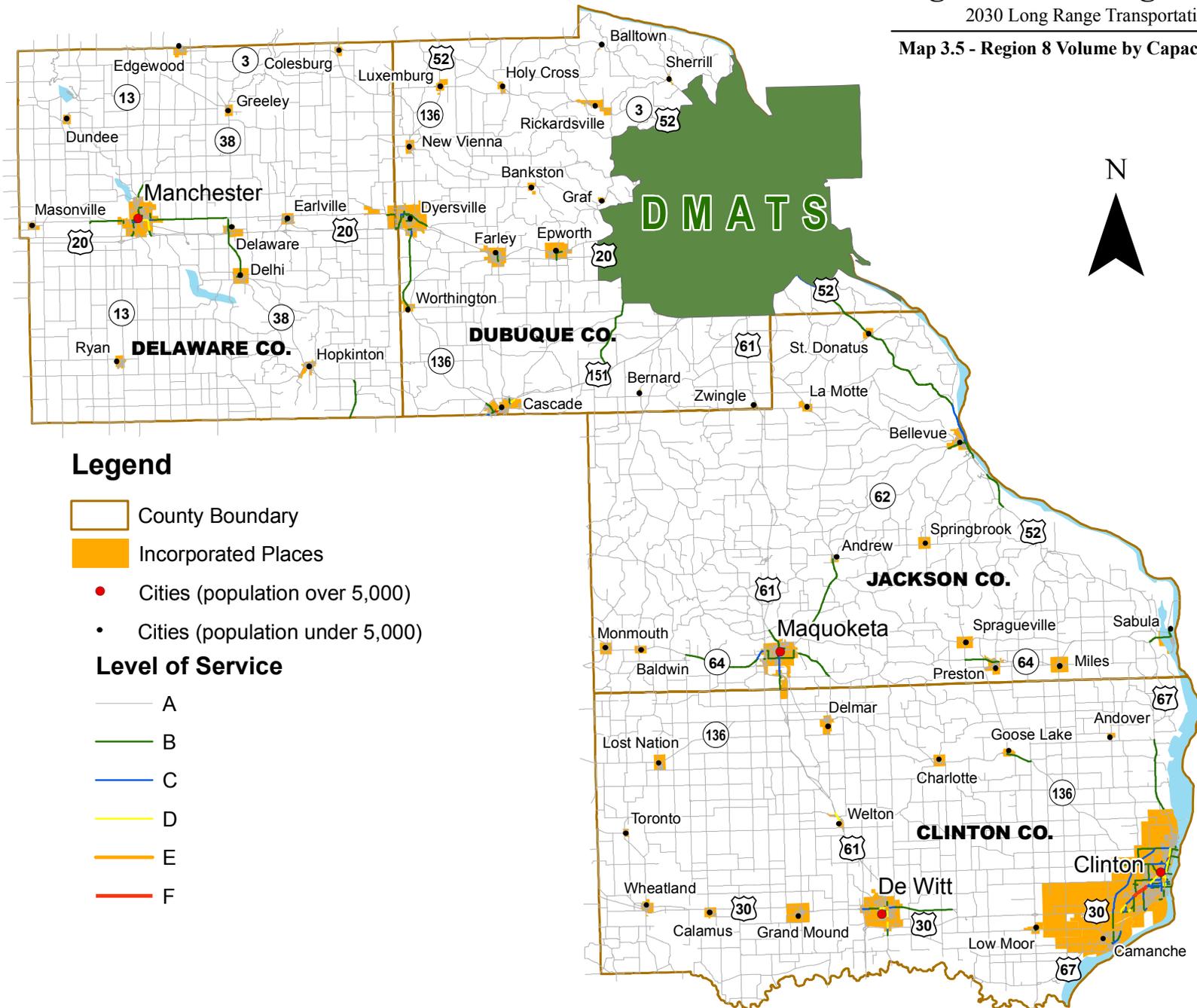


Map prepared November 2008 by ECIA

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 3.5 - Region 8 Volume by Capacity Ratio



Map prepared November 2008 by ECIA

## Funding Deficiencies

The region has 730 miles of federal function classification roads, 987 miles of farm to market roads, and 2,440 miles of local roads. Maintenance costs were estimated by assigning an average cost per mile of road and an average cost per bridge. The average cost to maintain one lane mile of county road over the road's 15 year life is \$225,000. The average costs to maintain a lane mile of city road is \$800,000 over the same period of time. The average cost of city and county bridge replacement is \$350,000. To estimate the total maintenance cost for the RPA over the next twenty years, average costs were multiplied by the number of lane miles or the number of bridges, and were inflated using 4% rate. Over all, RPA 8 members will need \$5,309,130,037 to maintain the existing system over the next twenty years. The region will have difficulty funding any new construction projects with the huge demand for road maintenance. That being said, there are three new construction projects that will be a priority in the next twenty years. These projects include:

City	Project
City of Camanche	Washington Blvd: From Hwy 67 to Hwy 67 in Camanche
City of Clinton	19th Ave N: From N 2nd St to Mill Creek Park Way
City of Dyersville	US 20 Interchange

In addition to the three projects listed above, nineteen road projects are scheduled for implementation within the next four years. These projects are listed in the charts on pages 37 and 38.

Sponsor	Location	Length	Project Funding in 1,000			
			FY 11	FY 12	FY 13	FY 14
Dewitt	11TH ST: From 6th Ave to Silver Creek Bridge	1.05 Miles	\$775	--	--	--
	Overlay and storm water improvements					
Iowa DOT	IA 136: WCL Clinton to Charlotte	16.3 Miles	\$4,700	--	--	--
	Pavement Rehab					
Dubuque County	D-17: Budd Rd to Bankston Park Road	8.5 Miles	\$2,700	--	--	--
	Pavement Rehab					
Dubuque County	Y-13: City of Farley to City of Cascade	10.6 Miles	\$2,800	--	--	--
	Pave , Granular Shoulders					
Dubuque County	D-15/Petersburg Rd: From Delaware Co. Line to New Vienna City Limits	0.9 Miles	\$587	--	--	--
	Pavement rehab, widen					
Dubuque County	D-41: Sundown Road to US 151	--	--	--	--	\$1,300
	Pavement Rehab/Widen					
Maquoketa	MAIN ST: MAIN ST TEAP Study	--	\$25	--	--	--
	Replace Traffic Signals					
Jackson County	D53/Centerville Road: From 230th Avenue to 239th Avenue	2.49 Miles	--	\$1,400	--	--
	Grading & Bridge Replacement					
Clinton	19th Ave Connector: From N 2nd St to Mill Creek Park Way	--	\$1,800	--	--	--
	Grade & Pave					
DeWitt	6th Avenue: From 400 block of 6th Avenue south to Union Pacific Railroad	0.42 Miles	\$606	--	--	--
	Pavement Rehab/Widen					
Clinton	28TH AVE N: From the 27th Avenue N/N 13th Street intersection east and north to the MRT Trail connection	1.34 Miles	\$550	--	--	--
	Ped/Bike Development					
Epworth	East Gate Walkway: West of Bierman Rd to North of Jacoby Dr East	0.53 Miles	\$207	--	--	--
	Ped/Bike Development					

Sponsor	Location	Length	Project Funding in 1,000			
			FY 11	FY 12	FY 13	FY 14
Maquoketa	S MAIN ST: Monroe St to Carlisle St	0.5 Miles	\$425	--	--	--
	Ped/Bike Structures					
Ryan	Main St: Washington St to Franklin St	6.2 Miles	\$72	--	--	--
	Ped/Bike Structures					
Dubuque County	Y-13: City of Farley to City of Cascade	3.91 Miles	--	\$300	--	--
	Ped/Bike Structures					
Iowa DOT	US 30: S 14TH ST TO S 4TH ST In Clinton Stage 2 (LIB-ERTY SQ)	--	\$2,300	\$9,977	--	--
	Grade and Pave, Right of Way					
Iowa DOT	US 67: In Clinton From US 30 to IA 136-State Share	2.8 Miles	\$696	--	--	--
	Pavement Rehab					
Camanche	WASHINGTON BLVD: From Hwy 67 to Hwy 67	2.61 Miles	--	\$4,960	--	--
	Work not Assigned					
Clinton	19TH AVE N: From N 2nd St to Mill Creek Park Way	1.27 Miles	--	\$2,900	--	--
	Grade and Pave					

## Recommendations

- Apply context-sensitive design to reduce community impacts
- Promote street connectivity
- Continue to partner with IADOT to construct projects identified in the LRTP to meet current and future travel demand
- Continue to partner with IADOT in the early development of environmental documents for projects identified in the LRTP

## Conclusion

Roadways provide the connections that allow efficient movements of people and goods within the region. The ongoing maintenance and expansion of the roadway network is vital to the RPA’s future economic and cultural future.

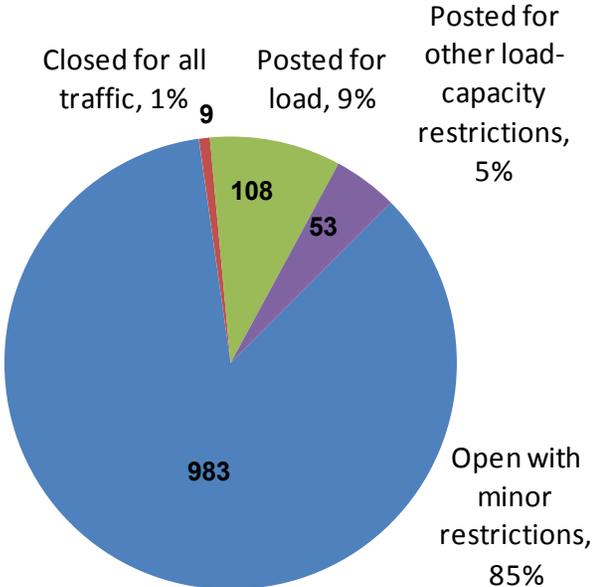
## Introduction

There are 1,153 bridges in the RPA 8 region. A good network of bridges is essential in improving residents' access to activities, goods and services. Ongoing preservation, improvement, and expansion of bridges will bolster the region's economic development potential and the mobility of its residents.



# Bridge conditions can be measured in three ways:

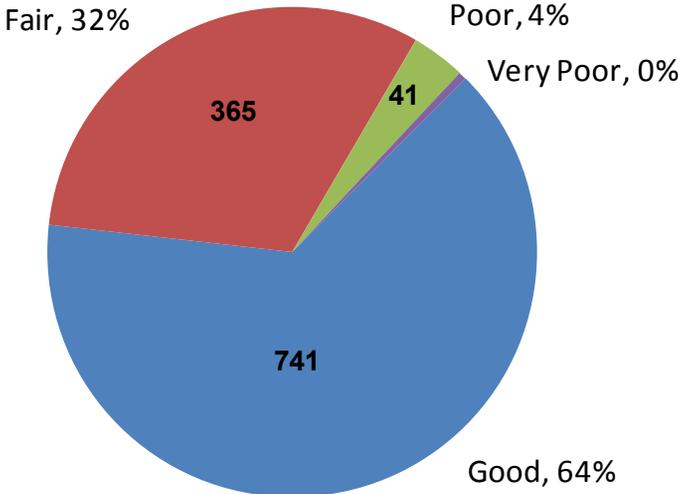
## #1 Load Capacity Challenged (Posted and Closed)



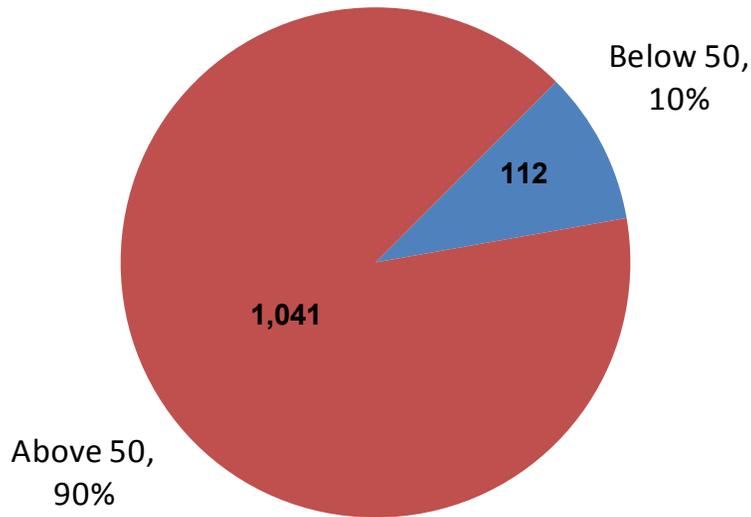
The most common measures of bridge performance are bridge closings and postings. Posting is part of the load rating process that determines the safe load carrying capacity of structures. If a structure is inspected and deemed deficient, County officials will post a maximum load for the structure. Posted and closed bridges negatively impact emergency response, goods movement, and commerce in general. In the RPA 8 region, most posted and closed bridges are on local roads. Map 4.1 shows the locations of bridges within RPA 8 that are posted and closed

## #2 Substandard Bridges (Structurally Deficient/Functionally Obsolete)

Structurally deficient bridges are structures unable to carry vehicle loads or tolerate the speeds that would normally be expected for that particular bridge in its designated system. They do not meet current criteria for live load capacity and traffic capacity. Functionally obsolete refers to a bridge with inadequate width or vertical clearance for its associated highway system...a “choke point.”



### #3 Sufficiency Ratings



Sufficiency rating is a method of evaluating factors which indicate a bridge's sufficiency to remain in service. The result of the formula is a percentage in which 100 percent represents an entirely sufficient bridge and zero percent represents an entirely insufficient or deficient bridge. The sufficiency rating is never less than 0 or more than 100.

States annually submit information for each bridge to the Federal Highway Administration (FHWA). The FHWA uses this information to determine the sufficiency rating.

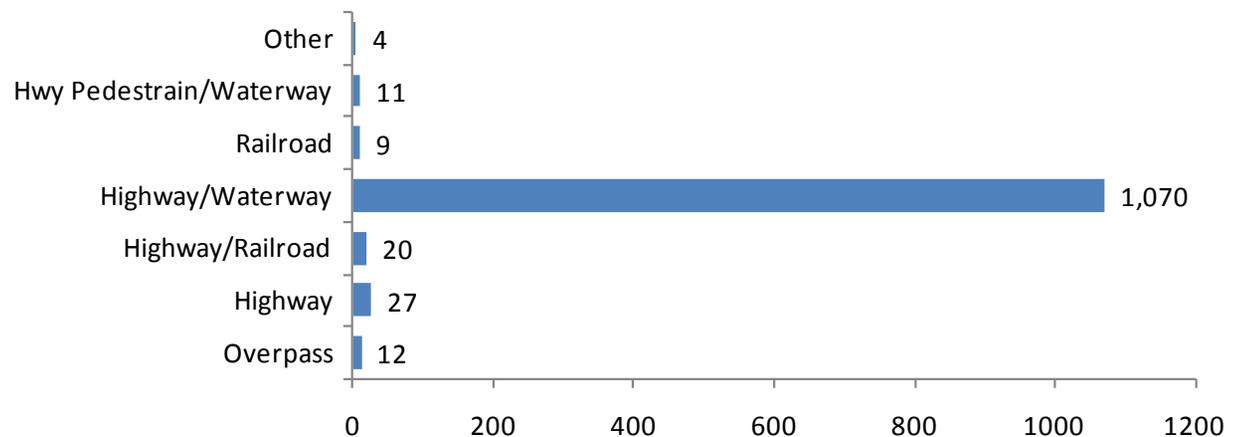
The sufficiency rating doesn't necessarily indicate a bridge's ability to carry traffic loads. It helps determine which bridges may need repair or replacement, not which bridges could collapse. A bridge's sufficiency rating affects its eligibility for federal funding for maintenance, rehabilitation, or replacement activities. For bridges to qualify for federal replacement funds, they must have a rating of 50 or below. To qualify for federal rehabilitation funding, a bridge must have a sufficiency rating of 80 or below.

Ratings of individual bridge elements (deck, substructure, superstructure, etc.) and levels of traffic are factors that are important in the determination of bridge sufficiency ratings. Map 4.1 shows the locations of bridges.

### Bridge Inventory

The RPA 8 has 1,153 bridges of which 1,070 bridges cross waterways, 27 are highway bridges, 20 are highway bridges on railroads, and the remaining are pedestrian bridges.

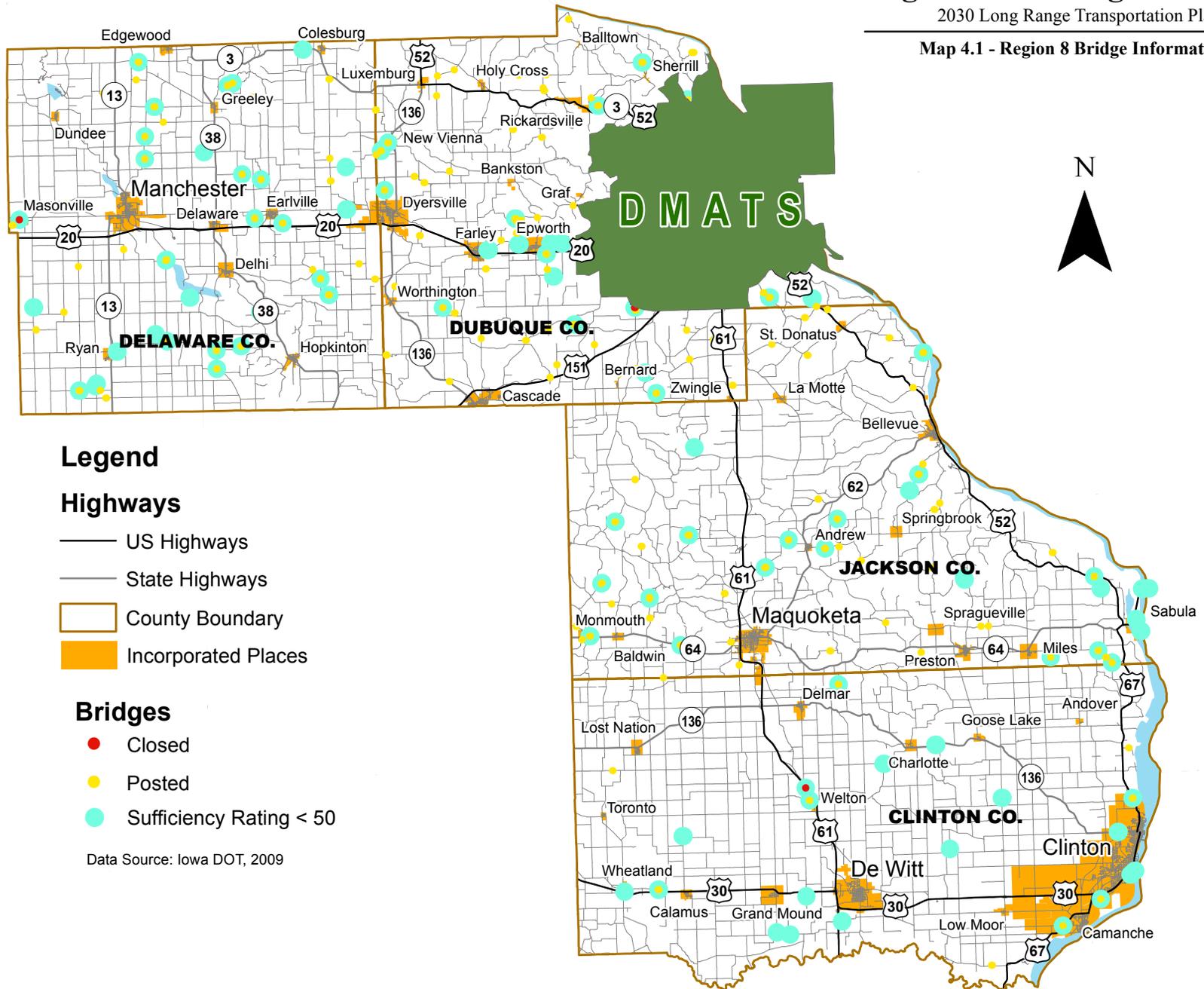
The RPA 8 has three major bridge crossings over the Mississippi River, one in Sabula and two in city of Clinton. There are five major highways in the region U.S. 20, U.S. 151, U.S. 61, U.S 52, and U.S 30 that connect the region with the surrounding regions.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 4.1 - Region 8 Bridge Information



Map prepared April 2011 by ECIA

## Bridge Projects

Over the next four years, one bridge deck overlay project and ten bridge replacement projects have been scheduled. All bridge projects are listed in the table below.

Sponsor	Location	Length	Project Funding	Project Funding in 1,000			
				FY 11	FY 12	FY 13	FY 14
Delaware County	X-21: 240th Street to Jefferson Rd	0.1 Miles	Total	\$1,000	--	--	--
	Bridge Replacement						
Jackson County	D53/Centerville Road: From 230th Avenue to 239th Avenue	2.49 Miles	Total	--	\$1,400	--	--
	Grading & Bridge Replacement						
Iowa DOT	US 151: Branch Praire Creek 8.4 Miles North of Cascade	--	Total	--	--	\$251	--
	Bridge Deck Overlay						
Clinton County	Y-44: Over CALAMUS CREEK	0.1 Miles	Total	\$300	--	--	--
	Bridge Replacement						
Clinton County	Y54: Over creek	0.1 Miles	Total	--	\$315	--	--
	Bridge Replacement						
Delaware County	W-69: 255th St to 240th St	0.2 Miles					
	Bridge Replacement						
Delaware County	265th Avenue: Ranch Road to 195th Street	0.25 Miles	Total	\$300	--	--	--
	Bridge Replacement						
Delaware County	197th Avenue: 275th Street to 295th Street	0.2 Miles	Total	--	\$300	--	--
	Bridge Replacement						
Delaware County	267TH ST: Over Turtle Creek	0.2 Miles	Total	--	--	--	\$500
	Bridge Replacement						
Dubuque County	MAIN ST: Over Coffee Creek	--	Total	\$490	--	--	--
	Bridge Replacement						
Jackson County	E1e: 1/4 mile east of bridge to 1/4 mile west of bridge	0.5 Miles	Total	\$600	--	--	--
	Bridge Replacement						

## Financial

Within RPA 8 there are 435 bridges in the unincorporated areas and 27 bridges in incorporated areas which are not in IADOT right of way that need to be replaced in the next twenty years. It is assumed that replacement, on average, costs \$350,000. The life span for each bridge is assumed to be 50 years. Using a 4 percent inflation rate, \$355,740,000 will be needed to maintain the existing bridge system over next twenty years.

## Recommendations

- Apply context-sensitive design to reduce community impacts
- Promote street connectivity
- Continue partnering with IADOT to construct projects identified in the LRTP to meet current and future travel demand
- Continue partnering with IADOT in the early development of environmental documents for projects identified in the LRTP

## Conclusion

All bridge replacement projects are treated as real projects within the region. Bridges are the links that connect road systems and help connect both urban and rural communities. Maintaining bridges and keeping them in shape will help increase safety within the region.



## Introduction

Bicycling and walking facilities are an increasingly popular alternative form of transportation. These facilities allow for a pollutant-free form of transportation to important destinations such as work, schools, retail and services, parks, and recreational areas. The development of biking and walking networks also provides connectivity between communities in the region.



RAGBRAI Manchester, Iowa

## Bicyclists Skill Levels

In order to create a bicycle/pedestrian system that will accommodate as many users as possible, the system must take into consideration the differing abilities of potential riders using the system. The Federal Highway Administration (FHA) uses the following general categories of bicycle users to assist planners in determining the impact of different facility types and roadway conditions on bicyclists. These categories are: Group A – Advanced Bicyclists, Group B – Intermediate Bicyclists, and Group C – Beginner Bicyclists.

The Bicycle Federation of America estimates that out of nearly 100 million people in the United States that own bicycles, roughly 5 percent qualify as Group A bicyclists, with the remaining 95 percent in Group B or C categories.



### Group A Bicyclists:

Experienced riders who can operate under most traffic conditions. They comprise the majority of users of collector and arterial streets and are best served by the following:

- Direct access to destinations usually via the existing street and highway systems.
- The opportunity to operate at maximum speed and minimum delays.
- Sufficient operating space on the roadway or shoulder to reduce the need for either the bicyclists or the motorists to change position when passing.



### Group B Bicyclists:

Casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. These bicyclists prefer:

- Comfortable access to destinations, preferably by a direct route using either low-speed, low traffic volume streets or designated bicycle facilities.
- Well-defined separation of bicycles and motor vehicles on arterial and collector streets such as bike lanes or shoulders, or grade separated bike paths.



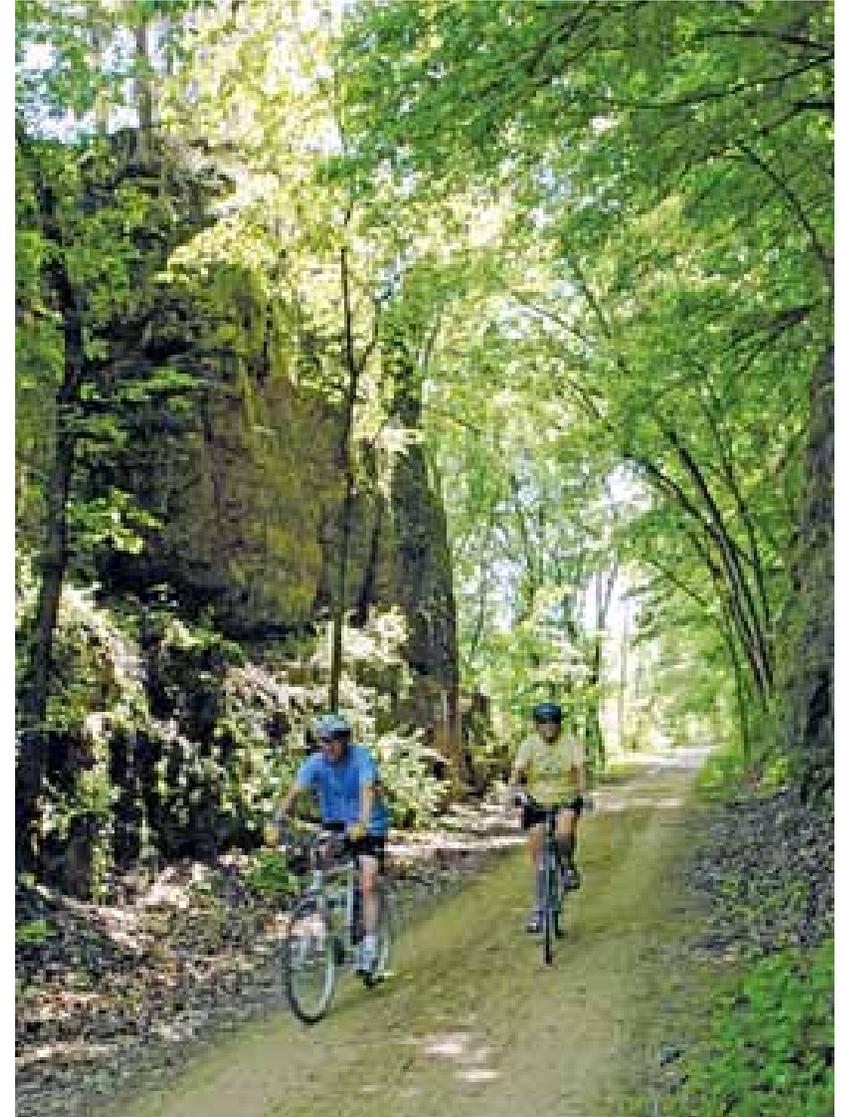
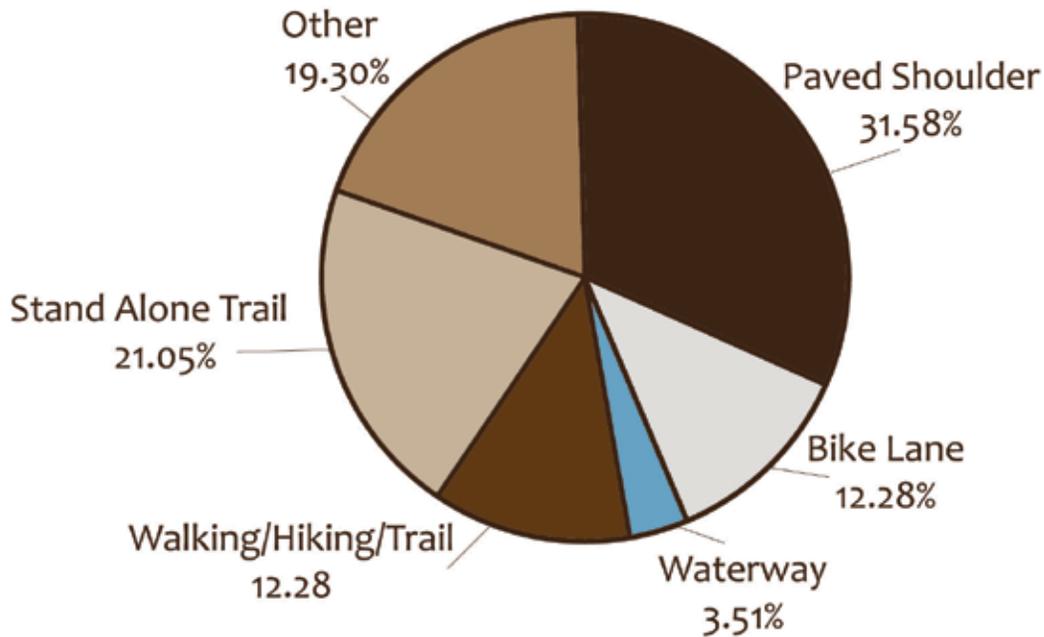
### Group C Bicyclists:

Pre-teen riders whose roadway use is initially monitored by parents. Eventually they are accorded independent access to the system. They and their parents prefer the following:

- Access to key destinations surrounding residential areas, including schools, recreation facilities, shopping, or other residential areas.
- Residential streets with low motor vehicle volumes and speeds.
- Well-defined separation of bicyclists and motor vehicles on arterial and collector streets or separate bike paths.

## Existing Facilities

The national Mississippi River Trail (MRT), currently under development, follows the Mississippi River bordering the East side of the region. The Heritage Trail runs 26 miles from Dyersville to connect with the MRT just North of Dubuque. Other large trails include the Bernard Road Trail in southeast Dubuque County and the trail from Spragueville to county Highway Z34 in southern Jackson County. Many cities have shorter trails that lead to important destinations. The majority of trails in the region are paved shoulder, followed by stand alone trails, and other types, including multipurpose trails.



**Mississippi River Trail (MRT):** A national trail running along the Mississippi River from Lake Itasca, Minnesota to the Gulf of Mexico that connects 10 states and is approximately 3,000 miles in totality. About 280 of those miles are along the Eastern Iowa border and connect various cities, towns and existing trail networks. The trail accommodates on-road and bike/pedestrian pathways.

**Maquoketa River Trail:** A water trail on the Maquoketa River that begins in eastern Jackson County at the Mississippi River and follows southwest to Maquoketa and then northwest through Jones, Dubuque, and Delaware Counties to end in Dyersville. It has canoe access and boat ramps along the trail.

**North Fork Maquoketa River Trail:** A water trail that splits from the Maquoketa River trail in Maquoketa and runs east and northeast through Jones Delaware and Clayton Counties and has canoe access and ports as well as boat ramps.

## Delaware County Trails

**Western Delaware County Routes:** The on-road paved shoulder bike route runs from Linn County on 110th Avenue going north all the way to 135th Street and connecting cities of Ryan, Masonville, Manchester, and Dundee. There are a number of offshoots from the trail as well. The first split follows 300th Street to the East to connect the city of Ryan to the route system. The second split goes west on 285th street into Buchanan County. The third follows 255th Street east to Highway 13. The fourth split from the route makes a loop in Northeast Delaware County. The trail splits at 220th Street near Masonville and the route follows north on 145th Avenue to 165th west to 130th Avenue north to Dundee. Two other routes split from the fourth route. One follows east to Manchester on 210th Street, and the other follows 190th Street to north Manchester at the canoe portage and boat ramp along the Maquoketa River.

**Greeley/ Edgewood Route:** A paved shoulder bike route that starts from Edgewood going south along Laser Drive to Jet Drive where the trail forks. One trail continues to follow Jet Road to Greeley; the other goes west then south on 230th Avenue to 150th Street.

**Northeast Delaware County Route:** A paved shoulder route that runs from east Manchester to Earlville along 210th



Street to Dyersville. A route splits for the north and follows 300th Avenue to Colesburg. One trail splits along the way to follow 270th Avenue north from Earlsville to 155th Street.

**Manchester North Route:** The paved shoulder bike route begins on Honey Creek Road in Northern Manchester and splits at 180th Avenue. One route follows 180th Street to 150th Street and the other follows Honey Creek Road to 170th Street and then turning east to meet with Highway 38.

**Manchester, Delhi, Hopkinton System:** The paved shoulder bike route begins in Southern Manchester. The first trail leads south along 180th Avenue to 275th Street Route that runs from Highway 13 to 230th Avenue. The route leads south from 275th Street on 190th Avenue to 310th Street Route that runs along 310th Street/D47 from Highway 13 to 245th Avenue at Buck Creek and south into Jones County. The second route starts at Highway 20 and Jefferson Road to follow Jefferson Road southeast to 240th Street, then to 210th Avenue going south to 250th Street east to Delhi. One trail splits off 197th Avenue to the 275th Street Trail, and follows 220th Avenue to the 275th Street Trail where the paths run together a short distance and then back south on 230th Avenue until the intersection with D47 and then meet with 315th Street to follow east to Hopkinton.

**Southeast Delaware County Route:** The paved shoulder route runs on 310th Avenue/ X47 from Highway 38 north to Highway 20. One path breaks off to the east on 275th Street to connect to Worthington.

**Hopkinton Walkway:** A separated walking path along county road D47 near the name change of SW Marion Street to 315th Street. The path leads to bridges over the North Fork Maquoketa River.

**Bailey' Ford Park Trails:** Off-road hiking trails in the 105-acre park located three miles southeast of Manchester at 2379 Jefferson Road.

**Fountain Springs Park Trail:** Separated hiking paths in the Fountain Mill Spring Park off of Oak Road, 3 miles Northeast of Greely.

**Backbone State Park Trails:** Approximately 25 miles of multiuse trails in Backbone State Park located in the Northwest corner of Delaware County, just north of Dundee, IA. One trail leads out of the park and follows 120th Street west into Buchanan County.

**Manchester Riverfront Trail:** A separated path for biking a walking, it runs along the Maquoketa River from S Franklin and Main Street down to Marion Street heading east to S Wayne Street in Manchester, IA.

**Southeast Manchester Trail:** A bike trail going from the intersection of Main Street and Bailey Drive south to Brewer Street and Jefferson Road, then heading northwest along Brewer Street to Vine Street in Manchester, IA.

**Main Street Manchester Trail:** A bike lane along Main Street between 12th Avenue and 9th Avenue.

**East Manchester Parks Trail:** A biking trail starting at the corner of Butler Street and Anderson Street and going northeast through the Joseph J. Baum Memorial Park to Stiles Street. The trail follows Stiles Street north to East Acres Street; follow Acres Street west until connecting with west sides of parks and recreational facilities in Manchester and the Fairgrounds.

**Manchester Sidewalks:** The first sidewalk connects the East terminus of the Main Street Trail to the Riverfront Trail. The second bridges over the Maquoketa River and crosses the Riverfront Trail at East Marion Street and continues to follow Marion Street until heading south on Brewer Street to connect with the Southeast Manchester Trail at Vine Street. The third trail winds through the center of Manchester. It starts from West Union Street at the river and follows East to Franklin Street (HWY 13) and travels north one block to East Liberty Street where it travels east one block to North New Street. Following New Street north

two blocks to East Prospect Street going east one block to North Sherman Street and heading north to East Clara Street heading East one block to North Doctor Street going north until reaching East Acres Street at the Fairgrounds.

## Dubuque County Trails

**Northern Dubuque County Routes:** The paved shoulder routes are actually four separate trails located in Northern Dubuque County, all of which are relatively short in distance. The first route runs on Clear Creek Road, east of Luxemburg, to Hiederscheit Road and follows northeast to the county line with Clayton County. The second route starts at the intersection of Toll Gate Road and Ridge Road following Ridge Road northeast to North Buena Vista Road at the southern dip in the Great River Road along the MRT. The third route runs from Rickerdsville north along James Road to Horseshoe Road. The fourth route begins just west of Balltown at the MRT and runs south, then east to Sherrill to meet back with the MRT.

**Central Dubuque County Route:** The paved shoulder route begins at New Vienna and follows New Vienna Road east to Bankston Road and then to Asbury Road all the way to meet with the Heritige Trail north of Graf. The bisecting route leads from Park Hollow Road and Bankston Park Road south through the intersection with the East/West route and continues south to Placid Rd passing Bankston and Epworth and following south to Pleasant Grove and south again on Roller Coaster Road to Cascade Road going southwest to end at Kearney Road and Simon Road.



**Heritage Trail:** A 26 mile long biking and hiking path in Dubuque County from Dyersville winding Eastward past Farley, Epworth, Graf, Durango, and Sageville to Heritage Pond and Trail Interpretive Area just 3 miles north of Dubuque on US 52 and Rupp Hollow Road. The scenic path is available for use year-round and leads through scenic overlooks and old mining and mill towns.

**Bernard Road Trail:** Southeast Dubuque County trail accommodated with an on-road bike lane. Beginning at the intersection of Highway 151 and Curoe Road heading south to Higginsport Road then Eastward past the city of Bernard, IA and past the connection with Highway 61 where Higginsport changes to Haxybylane Road and terminates at 230th Avenue/ Olde Davenport Road.

An asphalt shoulder route splits off to go north on Bernard Road to meet with Highway 151.

**Monastery/ Skyline Road Route:** The paved shoulder runs along Monastery Road at Sundown Road south of Peosta going east to change to Skyline Road and meeting with Highway 61

**Military Road Route:** The asphalt paved shoulder runs from Highway 151 NNE along Military Road to Key West Dive south of Dubuque.

**North Cascade Road Route:** The asphalt paved shoulder runs northeast from the Highway 20 bend just west of Peosta along North Cascade Road into the city of Dubuque.

**Jacoby Walkway:** An on-road bike path along Jacoby Road running along the southern city limits in Epworth, IA. The trail begins at 5th Avenue SW and continues past a connection with Center/1st Avenue Trail almost to Bierman Road.

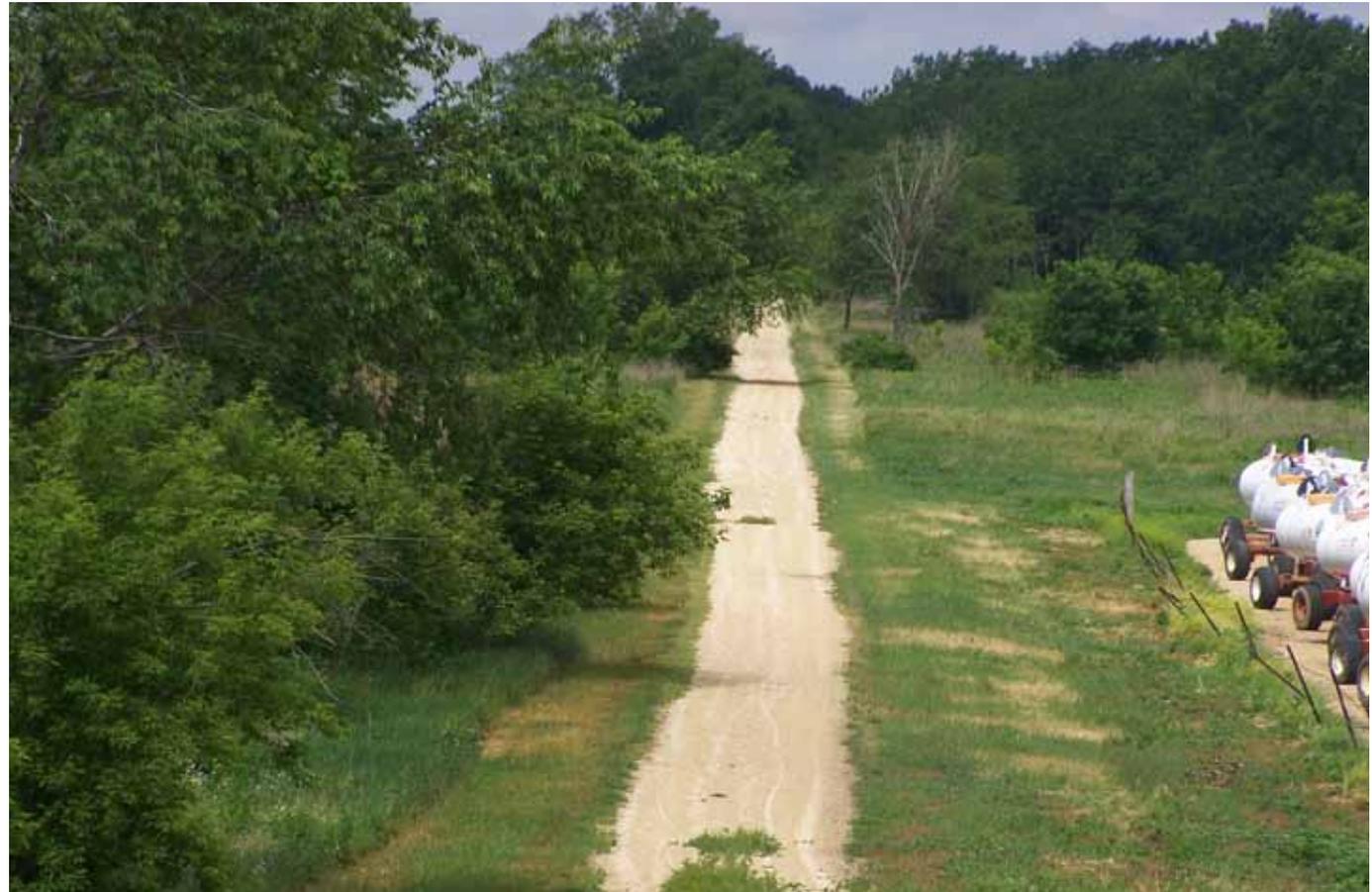
**Central/1st Avenue Trail:** On on-road bike path along 1st Avenue North and Park down to Main Street where it runs together with Main Street Trail westward until Center Avenue heading south to Jacoby Road and Jacoby Walkway in Epworth, IA.

**Epworth Main Street Trail:** A bike lane running east to West along Main Street in Epworth. The trail follows Main Street from the west city limits, just west of 7th Avenue SW, to Mozena Lane. Runs together with Center/1st Avenue trail for a short distance and then branches south down to city institutional land on the east side of Center Avenue.

**Worthington City Trails:** Multiuse trails in the city of Worthington, IA.

**Cascade Prairie Trail:** A separated biking/walking/hiking path that cuts diagonally from the SW to the NW of the Cascade, IA 4-Acre Prairie Field.

**Cascade Riverfront Trail:** A separated path for biking and walking that starts at the intersection of 2nd Avenue NW and Lincoln Street NW heading east to the North Fork Maquoketa River running through Cascade, IA and follow the river NNE toward HWY 151.



**Balltown Walkway:** A separate walking path along the MRT in Balltown, IA from an open-air pavilion with bike parking along Balltown Road going north to Ridge Road heading west to a scenic overlook.

**New Wine Park Trails:** Separated multiuse paths located on 184 acres just 3 miles north of Dyersville and west of HWY 136.

**White Pine State Hollow Trails:** Separated hiking paths in White Pine State Hollow Park in Dyersville.

**Peosta North/South Trail:** An on-road biking path leading from Peosta Street/ Sundown Road at Highway 20 going south to connect with Monastery Road.

## Jackson County Trails

**Bellevue-Cascade Road Route:** The concrete paved shoulder runs along Bellevue-Cascade Road/ D61 from Bernard Road going East to Bellevue in Northern Jackson County.

**Springbrook-Goose Lake Route:** The concrete paved shoulder follows 150th Street/ E17 from Springbrook to 435th Avenue/Z34 where the trail forks. One path leads north to Highway 52 and the MRT; the other continues south on 435th Ave to Preston. Another path leads off just before Preston going southwest to Spragueville on a separate path and then back north along paved shoulder on 378th Avenue to 70th Street. From Preston the route follows 418th Avenue south to 362nd Avenue to the City of Goose Lake in Clinton County. All together this trail connects the cities of Springbrook, Preston, Spragueville, and Goose Lake.

**Es Gate Road Trail:** A concrete signed route starts from North Maquoketa and follows Es Gate Road NNW to meet with the North Fork Maquoketa River and waterway trail at 150th Street. The trail then turns to head southeast on a asphalt signed route following 150th Street to Caves Road.

**Ansel Briggs Highway Trail:** The trail is a concrete signed route leading from the northeast city limits of Maquoketa following Ansel Briggs Highway/ Highway 62 NNE to connect with Iron Bridge Road.

**Springbrook, Andrew, La Motte Loop:** The trail begins at 362nd Avenue going SSW from Bellevue at the MRT to Springbrook, then west to Andrew on 150th Street, then north to La Motte on 250th Street and northeast back to the MRT to complete the loop.

**Highway 62 / Andrew Loop:** The trail follows Highway 62 north of Andrew to intersect with 298th Avenue. It then follows 298th Avenue to 261st Avenue to 154th Street to complete the loop.

**Bellevue State Park Trails:** Five different trails within Bellevue State Park, located just south of the Bellevue city limits, total about four miles of multiuse paths. The trails lead to destinations within the park. They are the Bellevue Scenic Overlook Trail, the Woodland Culture Indian Trail, the South Bluff Nature Center Trail, Quarry Trail, and Woodland Interpretative Trail.

**Jackson County Recreational Trail:** A separate bike path begins from East Main Street in Spragueville and follows the Maquoketa River NNE to connect with county road Z34 (435th Avenue) at a canoe access point.

**Copper Creek Trail:** A separate bike path leading to Copper Creek starts from North Mitchell Street and heads northwest along the city limits of Preston, IA.

**Bellevue Riverfront Trail:** A separate walking path that runs along Riverview Street/ Highway 52 from High Street heading south all the way to Vine Street along the east border of Bellevue, IA.

**Mill Creek Trail:** A separate biking and walking trail extending from the southern terminus of South 8th Street and continues south

and then makes a loop abutting Mill Creek in Bellevue, IA.

## Clinton County Trails

**Andover-Clinton Route:** The route runs on a paved shoulder switching between asphalt and concrete. Starting at the MRT, it runs east on 110th Street and south on 410th Avenue to 115th Street back east through Teeds Grove and south on 432nd Avenue to Andover. It continues south, crossing the MRT, to 170th Avenue going east and then back south on 442nd Street to Clinton.

**Clinton, Charlotte, DeWitt Route:** The asphalt and concrete paved shoulder route starts on 220th Street going west out of Clinton to 330th Avenue where it splits in three directions. One path goes south on 330th Avenue to 245th Street and heads west toward DeWitt. The second follows north on 330th Avenue to Charlotte and then on 152nd Street west to 310th Avenue going south to 160th Street west and then 302nd Avenue to 182nd Street and to 390th Avenue/ CR-70 south into DeWitt. The third path from the 220th Street/ 330th Avenue split follows 220th Street west to 308th Avenue north to 215th Street West to meet up with the second path north of DeWitt.



**West DeWitt Route:** The asphalt shoulder begins on 252nd Street at Highway 30/61 and goes west to 260th Avenue then north to 212th Street and back east to meet with Highway 61 northwest of DeWitt.

**E-63 North Clinton County Routes:** The asphalt and concrete paved shoulder path follows E63 from CR-Y70 going west past Welton and terminates in Toronto on the west county line leading into Cedar County. Several paths split off to the north and end at or pass the Jackson County line. The first splits off to follow Highway 61 to 250th Avenue to Delmar and north on 252nd Avenue to the county line. The second splits off and follows 185th Avenue passing Highway 136 and continues to the county line where it changes to 142nd Avenue and continues until meeting with Highway 64. The third route leads north along 140th Avenue to Lost Nation, then west to 120th Avenue and north again to the county line.

**Southwest Clinton County Routes:** The asphalt paved shoulder routes split from E63 going south. The first trail starts on 230th

Avenue going south through Grand Mound, then east along 270th Street to 190th Avenue then north to Highway 30. This path branches off from 270th Street going south on 210th Avenue into Scott County. The second trail follows 170th Avenue to Calamus. The third trail starts at E63 in Toronto, one direction leading west into Cedar County, the other leading southwest on 202nd Street to 130th Avenue heading south through Wheatland and south to the Scott County line.

**Clinton County Y32 Route:** The concrete paved shoulder route runs along 120th Avenue/ Y32 north from Highway 136 to the county line.

**Syracuse Wildlife Area Trails:** The stand alone trail system is located within the 695-acre park facility along Old Highway 30 in western Clinton County 2 miles in the East/West directions from Wheatland and Calamus.

**Eden Valley Refuge Trails:** A stand-alone multiuse trail system running through the 201-acre Refuge center located on 50th Avenue/ CR-Y32 2 miles south of Baldwin.

**Mockridge Wildlife Preserve Trail:** The trail system accommodates biking and hiking through its 75 acres of pine forest located along 160th Avenue and 215th Street in Western Clinton County.

**Sherman Park Trail:** The 231-acre Park includes a standalone multiuse trail system and is located on the Wapsipinicon River East of 160th Avenue and South of 274th Street in Southwestern Clinton County.

**Rock Creek Park Backwater Trail:** The Backwater Trail runs along the Mississippi River through the 100-acre park and accommodates multiple uses off-road.

**Camp Miss-Elk-Ton Trail:** Paths separate from other traffic lead north and south in the camp making about 1 mile of trails. The camp is located just northeast of Teeds Grove.

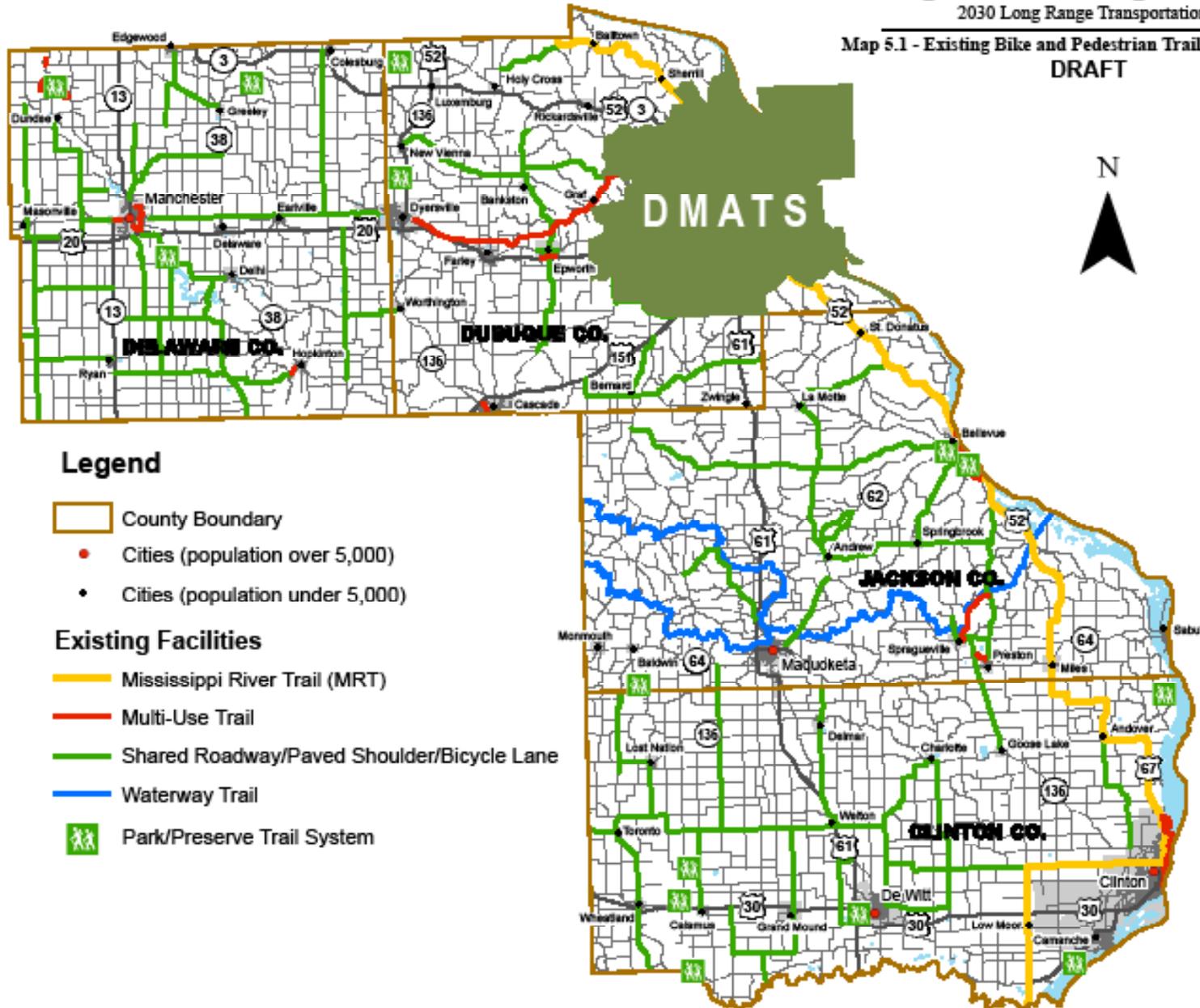
**Brookfield Recreation Trail:** A separate walking trail in the 21-acre Brookfield Wildlife Preserve located south of HWY 136 between Lost Nation and Delmar.

**Skeffington Trail:** The trail is a separate path for biking and walking within the Westbrook Park in DeWitt, IA. It loops twice and goes past disk golf, picnic, and playground areas.

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 5.1 - Existing Bike and Pedestrian Trails and Routes  
DRAFT



Map prepared January 2010 by ECLA

## Planned City Trails

City trails leading to destinations and for recreation areas are listed below and shown as insets of Map 2.

### Delaware County

**Hopkinton Walkway:** The separated path connects Broadway to the second bridge on Mill Street along D47 in Hopkinton.

**Southwest Manchester Trail:** The separated path will begin at the west terminal end of the Main Street Manchester Trail and turn south on Highway 13 to 220th Street going east and then north on Enterprise Avenue, back west to South 10th Street going north to Grant Street. It then follows Grant Street west to South 5th Street going north to Marion Street, then back east to connect with the sidewalk connector for the existing Riverfront Trail in Manchester.

**South Manchester Trail:** The separated path splits from the Southwest Manchester Trail at 220th Street and Burlington Road and follows Burlington Road east to south 3rd Street and north to connect to Schram Drive. It makes a loop around the lake and a path follows northeast to connect to the existing Bailey's Ford Park Trail on South Brewer Street in Manchester.

**East Manchester Trail:** The separated path will connect the northeast terminus of the Southwest Manchester Trail at Bailey Drive and Main Street to the south end of the East Manchester Parks Trail at East Butler and Anderson Street.

**North Manchester City and River Trail:** The separated path would begin going north from the north terminus end of the Manchester East Parks Trail to 195th Street, following west until 4th Street, then south to the intersection of North 5th Street and Quaker Mill Drive where the trail forks. The first route continues following west until reaching the Maquoketa River and follows along the river south until reaching Main Street to connect with the existing River Walk Trail. The second route goes south through the park to North 6th Street and then to Line Street where one path goes west to connect back with trail #1 along the river and the other follows south to West Acres Street and then cuts southwest to connect back to trail #1.

### Dubuque County

**Jacoby Walkway Extensions:** The sidewalk will be continue along the new streets built north from Jacoby Drive, Crown Line Drive East, and to meet with the existing Center Avenue/1st Avenue Trail in Epworth.

**Fishpond Road Trail:** The separated path begins at the Heritage Trail and Fishpond Road and follows Fishpond Road south to Old Highway Road where the trail forks. One path leads south on Old Highway Road to the Epworth Main Street Trail and the other continues south along New Road and east to meet with Jacoby Road in Epworth.

**Mozena Lane North/South Trail:** The separated path would begin at the end of Mozena Lane and follow south along the city limits of Epworth to Main Street connecting with the terminal end of the existing Epworth Main Street Trail. The trail would follow southwest on Beirman Road to the commercial and residential zone border to connect to the east terminal end of the Jacoby Walkway.

**West Side North Fork River Trail:** The separated multiuse path would start out on River View Road going north through a field to Plum Street and following east to meet the south terminal end of Peirce Street SW. The trail will continue east to the North Fork Maquoketa River and meet with the northwest terminus of the existing Cascade Prairie Trail where the other leg of the trail comes up from the east side of the prairie along the river to meet with the main trail. The trail then follows the river north-northwest around a point of interest and along the river past the Historic Riverview Park and intersecting with the 1st Avenue North/South trail to meet up with the southeast corner of the Cascade Riverfront Trail where it runs together to the north end of the Riverfront Trail and then continues west-southwest to meet with Highway 136 and northwest from the terminus of the Riverfront Trail to meet with Highway 151 on the west side of the River Bridge in Cascade.

**East Side North Fork River Trail:** The separated biking and walking path begins from 1st Avenue West and Fillmore Street SW along the North Fork Maquoketa River and follows the riverbank northeast to connect to Highway 151 on the east side of the River Bridge in Cascade.

**Delong to Park Via Industrial Court Trail:** the separate path begins at Delong Avenue SE and Fox Street SE and follows Delong Avenue east through the industrial court and then northeast to a city park on the south end of Mulberry Drive in Cascade.

**Cascade 1st Avenue and North/South Trails:** The bike lane begins on 1st Avenue West at Cleveland Street SW and follows 1st Avenue going east to Fox Street SE which it follows north to the Highway 151 Bridge where it goes back south to meet with the proposed 2nd Avenue SE Bike Trail in Cascade.



**Cascade 2nd Avenue Trail:** the separate biking trail will follow 2nd Avenue southeast from the Monroe Street Bridge going east to the industrial court connect with the proposed 1st Avenue and North/South Trail to end at Jack Road Drive South in Cascade.

**Balltown City Trail:** The separate walking path would go along Horseshoe Road from the business district north-northeast to the MRT on Balltown Road in Balltown.

**Dyersville Heritage Trail Connector:** The separate trail would extend the west terminal end of the Heritige Trail to connect Candy Cane Park and West Side Park in Dyersville.

## Jackson County

**Jackson County Recreation Trail Extension:** The separate multiuse trail would extend the existing trail along the river going northeast to Green Island on Highway 52.

**Copper Creek Trail Extension:** A separate multiuse path will connect the north terminal end of the existing Copper Creek Trail to the south terminus of the existing Jackson County Recreation Trail.

**Mississippi Riverbank Loop:** The separate multiuse path will start out from Highway 67 north of Sabula and cuts northeast to the Mississippi River, then follows the riverbank northwest, and then south along the Maquoketa River Trail to meet with the proposed Grant Wood Trail.

**Highway 52 Mississippi Riverbank Loop:** The separate multiuse path starts at Highway 52 between the Maquoketa River Trail and 435th Avenue along the MRT. It will then follow east to a high point in the Maquoketa River Trail and then northwest along the riverbank and back south to the starting point on Highway 52.

**Riverfront Trail Extension:** The separate path would extend the existing Riverfront Trail to the Mill Creek Trail/ Highway 52 in Bellevue.

**Mill Creek Trail:** This separate path began construction in the summer of 2008.

## Clinton County

**Skeffington Trail Extension:** This separate path trail will go north from the existing Skeffington Trail in Westbrook Park to outside the city limits. Construction began in the summer of 2008.

## Planned County Trails

The information for longer trails, trails connecting cities and trails that generally travel through more than one county are listed below; refer to Map 2 for visual.

**Grant Wood Trail:** The off-road biking and hiking path begins in Jones County and continues east into Clinton County passing through Lost Nation, Delmar and then north to Spragueville in Jackson County where it connects with the existing Jackson County Recreation Trail in Spragueville and picks up again as the Grant Wood Trail at the North terminal end of Jackson Recreation Trail at CR-Z34 existing trail and heading northeast to cross the MRT and meet with the northwest terminus of the proposed Mississippi Riverbank Loop.

**Jackson County Trail #2:** The trail runs along Iron Bridge road heading northwest from Spragueville in Jackson County. At the terminus of Iron Bridge Road, the trail follows south to meet with the existing Ansel Briggs HWY trail and then southwest toward Maquoketa crossing the existing Es Gate Road Trail. It turns northwest from Maquoketa along Caves Road and ends at the meeting point with the Canton Baldwin Trail in west central Jackson County.

**Jackson County 50th Avenue Trail:** A bike lane beginning at 50th Avenue in Southwest Jackson County following north through Baldwin, crossing over the Maquoketa River to meet with the proposed Canton/Baldwin Trail on Bernard Road.

**Canton/ Baldwin Trail:** The separated pathway branches off of the proposed Jackson County Trail #2 where the proposed extension of the Bernard Road Trail and existing Es Gate Road Trail meet and follows west into Jones County where it changes name to the Jones County Road E17 Trail.

**Bernard Road Trail South:** A proposed bike lane extension of the existing Bernard Road Trail. The trail begins in Grant Wood Trail: The off-road biking and hiking path begins in Jones County and continues east into Clinton County passing through Lost Nation, Delmar and then north to Spragueville in Jackson County where it connects with the existing Jackson County Recreation Trail in Spragueville and picks up again as the Grant Wood Trail at the North terminal end of Jackson Recreation Trail at CR-Z34 existing trail and heading northeast to cross the MRT and meet with the NW terminus of the proposed Mississippi Riverbank Loop.

**Jackson County Trail #2:** The trail runs along Iron Bridge road heading northwest from Spragueville in Jackson County. At the terminus of Iron Bridge Road, the trail follows south to meet with the existing Ansel Briggs HWY trail and then southwest toward Maquoketa crossing the existing Es Gate Road Trail. It turns northwest from Maquoketa along Caves Road and ends at the meeting point with the Canton Baldwin Trail in central western Jackson County.

**Jackson County 50th Avenue Trail:** A bike lane beginning at 50th Avenue in Southwest Jackson County following north through Baldwin, crossing over the Maquoketa River to meet with the proposed Canton/Baldwin Trail on Bernard Road.

**Canton/ Baldwin Trail:** The separated pathway branches off of the proposed Jackson County Trail #2 where the proposed extension of the Bernard Road Trail and existing Es Gate Road Trail meet and follows west into Jones County where it changes name to the Jones County Road E17 Trail.

**Bernard Road Trail South:** A proposed bike lane extension of the existing Bernard Road Trail. The trail begins in Bernard and follows south on Bernard Road across the North Fork Maquoketa River to meet with the existing Es Gate Road Trail and two other proposed trails.

**Curoe Road Trail:** The bike lane would lead from the southwest point of the existing Bernard Road Trail following south along Curoe Road to meet with proposed Bellevue Cascade Road Trail West extension.

**Bellevue-Cascade Road Trail West:** The bike lane extension would begin at the intersection of the existing Bellevue- Cascade Road Trail and Bernard Road and continue the trail along Bellevue-Cascade Road west into Jones County and north to Cascade.

**US Highway 151 Trail:** The on-road bike lane would begin from the northwestern city limits of Cascade and continue along US Highway 151 east-northeast connecting with the existing Bernard Road Trail and ending at Sundown Road where the proposed Dubuque County North/South Trail will begin.

**Farley/ Cascade Trail:** The separated path starts on the north city limits of Cascade and follows Farley Road to the south side of Farley, connecting the two cities.

**La Motte 230 Avenue Trail:** A bike lane along 230th Avenue beginning at the terminal end of the existing Bernard Road Trail and proposed Centerville Road Trail and going southeast to La Motte to meet with the proposed Mill Creek Road and 300th Street Trails as well as the existing Springbrook, Andrew, La Motte Loop.

**300th Street Road Trail:** The proposed bike lane would follow 300th Street from the existing Bernard Road Trail going east through Zwingle to La Motte to meet with existing Springbrook, Andrew, La Motte Loop and proposed 230th Avenue Trail and Mill Creek Road Trail.

**Mill Creek Road Trail:** The bike lane along Mill Creek Road from La Motte to Bellevue would connect the two cities with the MRT; the Springbrook, Andrew, La Motte Loop; and also to a large public park.



**Centerville Road Trail:** The bike lane would begin at the east terminal end of the existing Bernard Road Trail and proposed 230th Avenue Trail on the Dubuque/Jackson county line. The trail would follow Centerville Road east to Saint Donatus on the MRT.

**US Highway 61 Route:** The bike lane would start from the existing Bernard Road trail in southeast Dubuque County and connect with the MRT to the East and North.

**Key West-Dubuque Trail:** The bike lane would begin from South Key West Drive going north to the Military Road Trail then heading northwest to meet with Highway 20 in south Dubuque.

**Dubuque County North/South Trail:** The bike lane would begin from the east Terminal end of the proposed Highway 151 Trail and follow Sundown Road north to meet with the existing Peosta North/South Trail. The trail then continues east along the Monastery/Skyline Road Trail to New Mellerray Road. It follows New Mellerray Road north to a high point to connect with Highway 20 and back south and then northeast again to connect with the proposed Key West-Dubuque trail in south Dubuque.

**Dubuque County North/South Trail #2:** The bike lane would begin on the north side of Farley going north across the Heritage Trail and following Holy Cross Road to Holy Cross to Tollgate Road. Then follow north into Clayton County to meet with the MRT at North Buena Vista.

**Mud Lake Trail:** The trail would be a bike lane starting at the intersection on Highway 52 and the MRT by Sageville and follow north-northeast along Mud Lake Road to a boat ramp on the Mississippi River. The trail forks where Mud Lake Road intersects with Circle Ridge Road and also continues along Circle Ridge Road northwest to Hammerand Road and southwest on Hammerand Road back to meet up with the Great River Road/ Sherrill Road.

**Dyersville/ Clayton County Line Trail:** The bike lane would follow north, east, and north again crossing through Delaware, Dubuque and Clayton Counties. The trail starts on 1st Avenue NW in Dyersville then goes to 332nd Avenue north to Floyd Road, west to 330th Street and north again to US Highway 3. From there the route goes east to Luxemburg and Highway 52 and follows Highway 52 north into Clayton County to meet with the MRT in Millville.

**Delaware County Northern Trail:** The bike lane would begin on Petersburg Road going west from New Vienna to 163rd Street following 163rd Street to 330th Avenue and going north to 160th Street and west to 300th Avenue at Petersburg. From Petersburg it follows north a short distance to 155th Street and East to 147th Street near Greeley to meet Highway 38 and then go on 150th Street east to Dundee where 150th Street become South Street. Following South Street to Center Street, the trail goes north out of town to change into 140th Street and east to 140th Avenue and north past Backbone State Park in Forestville. The road changes to Forestville Road and intersects with Highway 3/13 which it follows northwest to Strawberry point in Clayton County. The trail also intersects and runs a short distance with the proposed Dyersville/Clayton County Line Trail.

**Strawberry Point/ Edgewood Highway Trail:** The on-road bike lane would begin from Highway 3/13 in Strawberry point and follow south along Highway 3 to Edgewood connecting the two cities.

**Edgewood- Bixby State Park Trail:** The bike lane would connect Edgewood to Bixby State Park in Clayton County by following North Franklin Street/Fortune Avenue north to the south side of Bixby State Park.

**Colesburg/ Elkport/ Edgewood Trail:** The on-road bike lane would connect the three cities. It would start on US Highway 3 heading east out of Edgewood to Mill Street and then north-northeast to Elkport in Clayton county, back southeast on Colesburg road to Colesburg in north Delaware County.

**Preston/Sabula Highway 64/67 Route:** The paved shoulder bike trail would connect the cities of Preston, Miles and Sabula as well as to the MRT. It would begin going east on Highway 64 out of Preston and through Miles to Sabula then northwest on Highway 67 to the proposed MRT Route Change.

Bernard and follows south on Bernard Road across the North Fork Maquoketa River to meet with the existing Es Gate Road Trail and two other proposed trails.

**Curoe Road Trail:** The bike lane would lead from the southwest point of the existing Bernard Road Trail following south along Curoe Road to meet with proposed Bellevue Cascade Road Trail West extension.

**Bellevue-Cascade Road Trail West:** The bike lane extension would begin at the intersection of the existing Bellevue- Cascade Road Trail and Bernard Road and continue the trail along Bellevue-Cascade Road west into Jones County and north to Cascade.

**US Highway 151 Trail:** The on-road bike lane would begin from the northwestern city limits of Cascade and continue along US Highway 151 east-northeast connecting with the existing Bernard Road Trail and ending at Sundown Road where the proposed Dubuque County North/South Trail will begin.

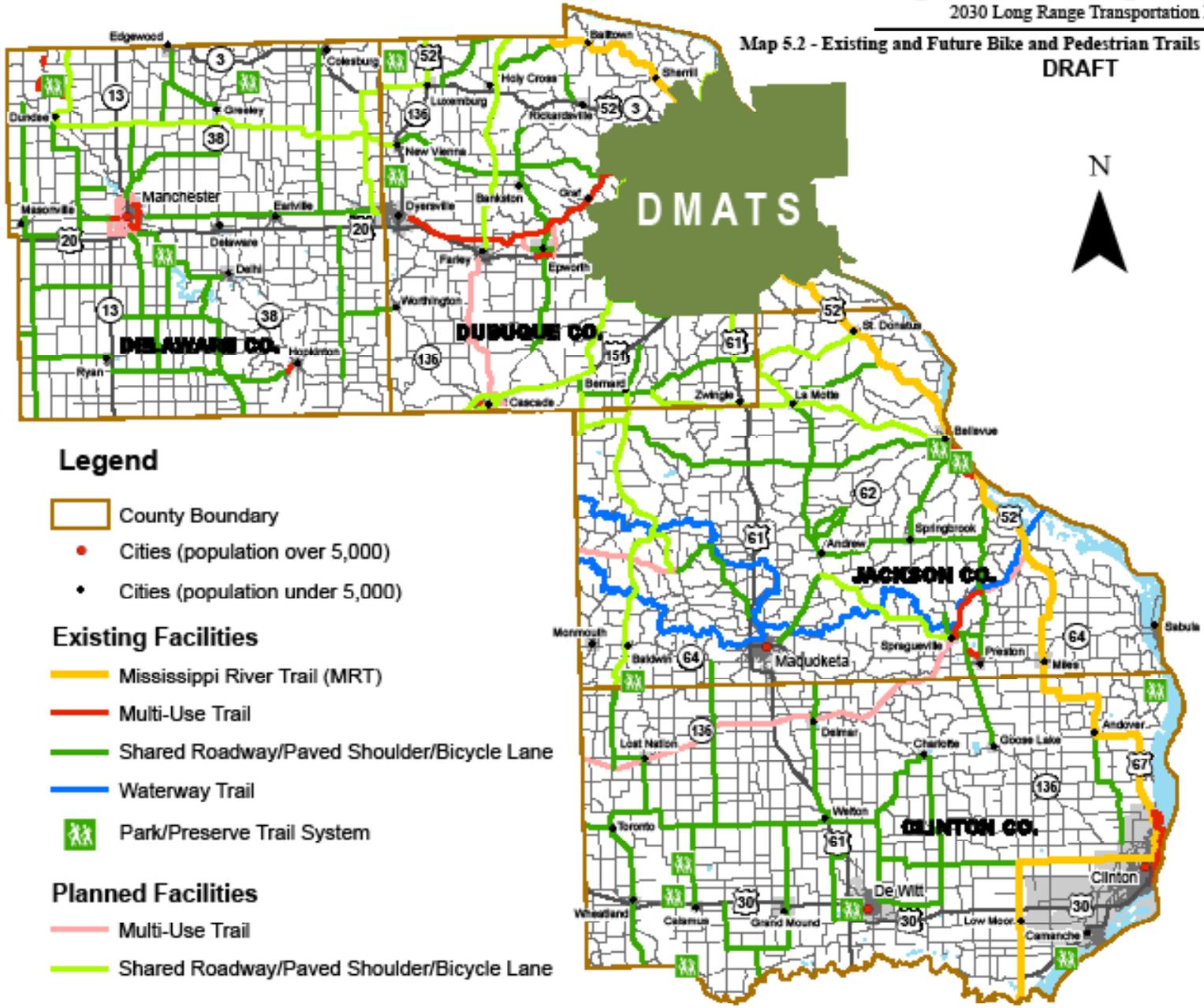
**Farley/ Cascade Trail:** The separated path starts on the north city limits of Cascade and follows Farley Road to the south side of Farley, connecting the two cities.

**La Motte 230 Avenue Trail:** A bike lane along 230th Avenue beginning at the terminal end of the existing Bernard Road Trail and proposed Centerville Road Trail and going southeast to La Motte to meet with the proposed Mill Creek Road and 300th Street Trails as well as the existing Springbrook, Andrew, La Motte Loop.

**300th Street Road Trail:** The proposed bike lane would follow 300th Street from the existing Bernard Road Trail going east through Zwingle to La Motte to meet with existing Springbrook, Andrew, La Motte Loop and proposed 230th Avenue Trail and Mill Creek Road Trail.

**Mill Creek Road Trail:** The bike lane along Mill Creek Road from La Motte to Bellevue would connect the two cities with the MRT; the Springbrook, Andrew, La Motte Loop; and also to a large public park.

Map 5.2 - Existing and Future Bike and Pedestrian Trails and Routes  
DRAFT



**Legend**

- County Boundary
- Cities (population over 5,000)
- Cities (population under 5,000)

**Existing Facilities**

- Mississippi River Trail (MRT)
- Multi-Use Trail
- Shared Roadway/Paved Shoulder/Bicycle Lane
- Waterway Trail
- XX Park/Preserve Trail System

**Planned Facilities**

- Multi-Use Trail
- Shared Roadway/Paved Shoulder/Bicycle Lane

Map prepared January 2010 by ECLA

## Recommendations

- Add wide paved shoulders existing roads to accommodate bicycles/pedestrians
- Expand bicycle route system to connect with surrounding counties
- Cooperate with local partners (Counties, Cities and surrounding towns) to expand the use of shared use paths throughout the system

## Conclusion

RPA 8 region has 182.86 miles of system that contains bicycle lanes, multi-use trails, off road non-paved trails, walkway trails, and 431.26 miles of paved shoulder. However, in recent years the region has invested little in expanding the existing system. Maintenance of the existing system and construction of new trails will improve quality of life in the region.



## Introduction

Public transit is an important component in the transportation network. The public transit providers within RPA 8 give riders access to opportunities that they might not otherwise have. The economic and social links provided by transit allows access to work, school, medical care, meal sites, and leisure activities. Transit helps its riders achieve continued self-improvement, independence, and quality of life.

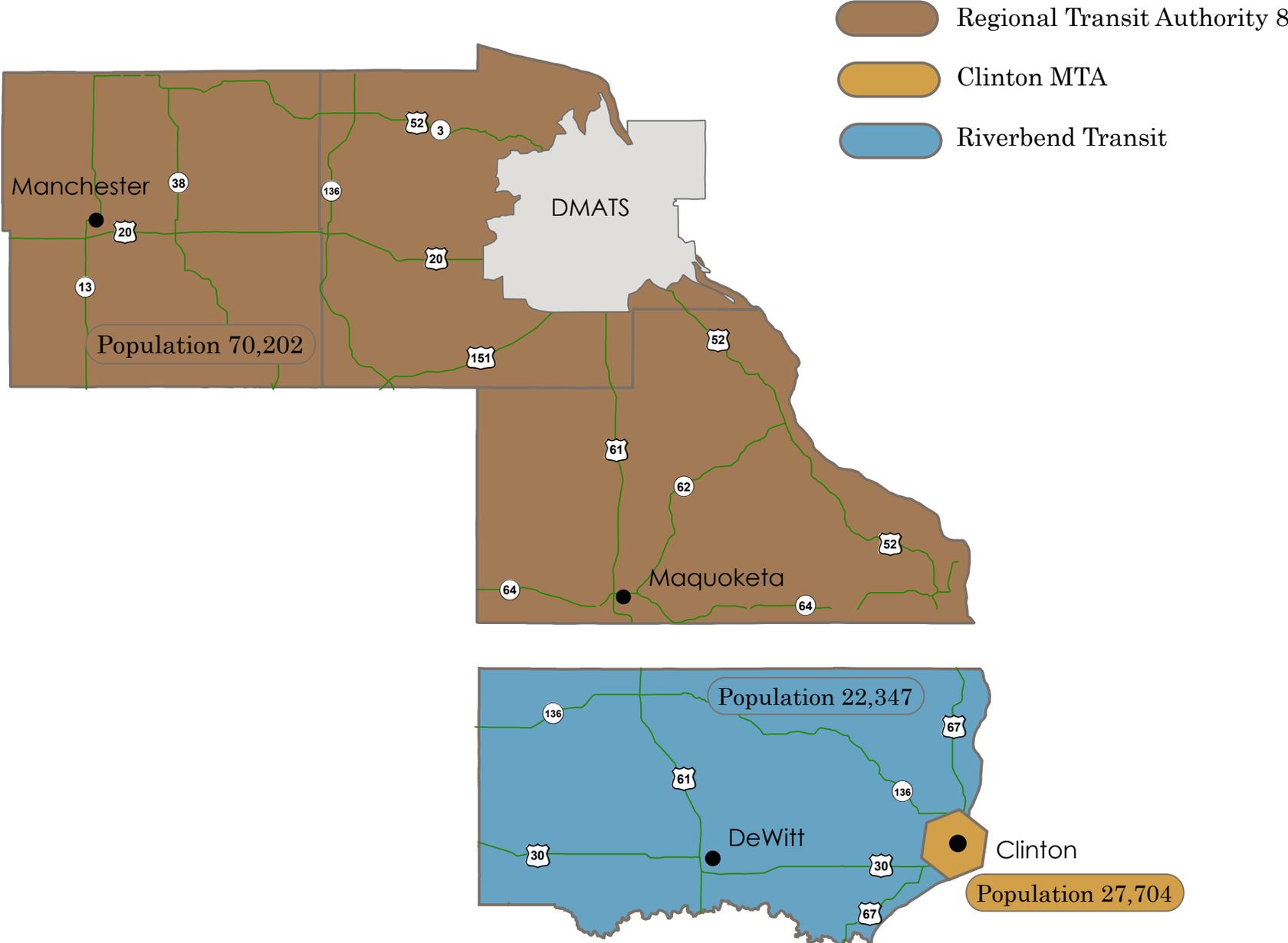
## Access

Transit not only provides an alternative to the automobile, but also provides the only available means of transportation to some youth, elderly, disabled, and economically disadvantaged citizens (transportation reliant). Map 1 shows households without vehicles in RPA 8.



# RPA 8 Transit Providers

RPA 8 is served by three transit systems: Regional Transit Authority 8, Clinton Metropolitan Transit Authority, and Riverbend Transit.



## Transit Provider Information

### Clinton MTA

Clinton MTA is responsible for providing safe, accessible, economic, and efficient public transportation service within the Clinton city limits.

Clinton MTA Fare Information	
\$1.00	Adult Cash
\$0.75	Senior Citizen, Disabled, Shuttle, Student Cash.
\$3.00	Day Pass
\$20.00	Adult Punch Card 21 Rides
\$15.00	Senior Citizen/Disabled Punch Card (21 rides)

\$15.00	Para Transit Punch Card (11 Rides)
\$25.00	Senior Citizen/Disabled Monthly Pass
\$20.00	Unemployed, College, Student k-12 Monthly Pass
\$30.00	Adult/Family Monthly Pass
\$65.00	Student K-12 Semester Pass*

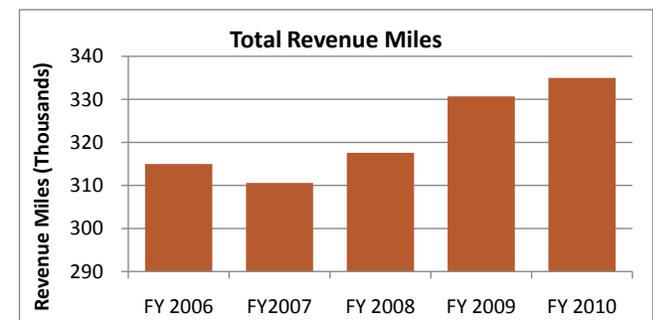
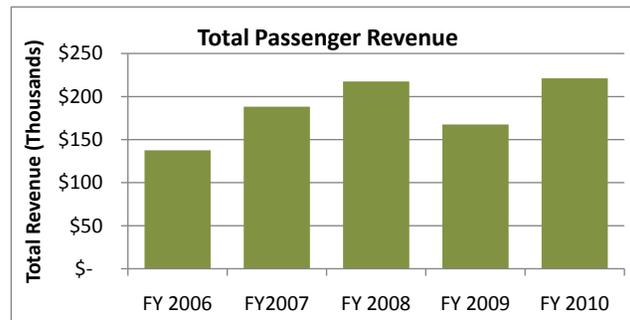
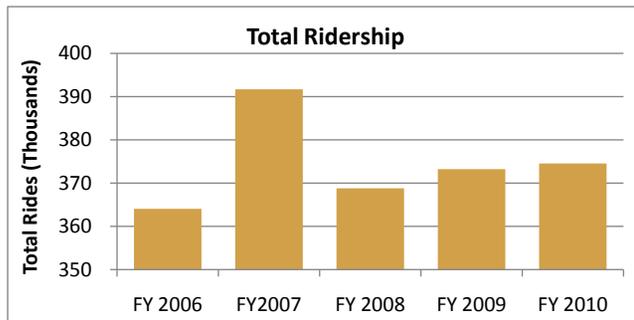
\*Students (K-12) ride Free with a valid Student ID

### Clinton MTA Service

- Fixed-route - The MTA operates six fixed routes. All routes except the Lincolnway Shuttle Route meet at the central transfer point, located on 6th Avenue. The Main Avenue West Route, Camanche Avenue/South Clinton Route, Main Avenue North Route, Camanche Avenue Route, and the Lincolnway Shuttle meet at the shuttle transfer point located at the Home Depot parking lot near South 19th Street.
- Para-transit door-to-door service for elderly and disabled - Requires an advanced reservation; reservations can be up to 14 days in advance.
- Special event transportation

The MTA operates from 6:00 A.M. to 6:00 P.M. Monday through Friday and 8:00 A.M. to 4:00 P.M. on Saturday, excluding the following holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day.

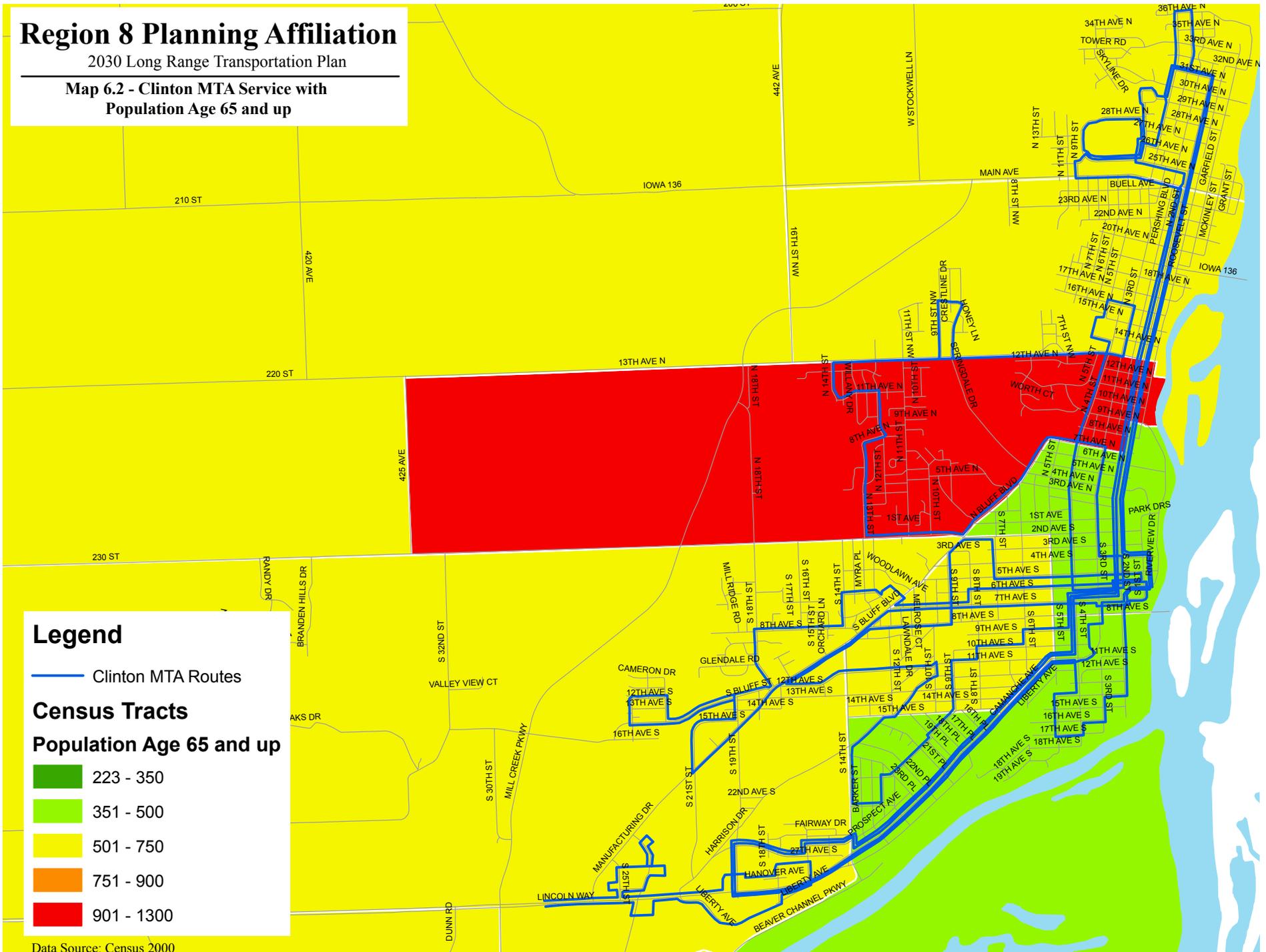
### Clinton MTA Annual Ridership and Revenue



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 6.2 - Clinton MTA Service with  
Population Age 65 and up



## Legend

— Clinton MTA Routes

## Census Tracts

## Population Age 65 and up

- 223 - 350
- 351 - 500
- 501 - 750
- 751 - 900
- 901 - 1300

Data Source: Census 2000

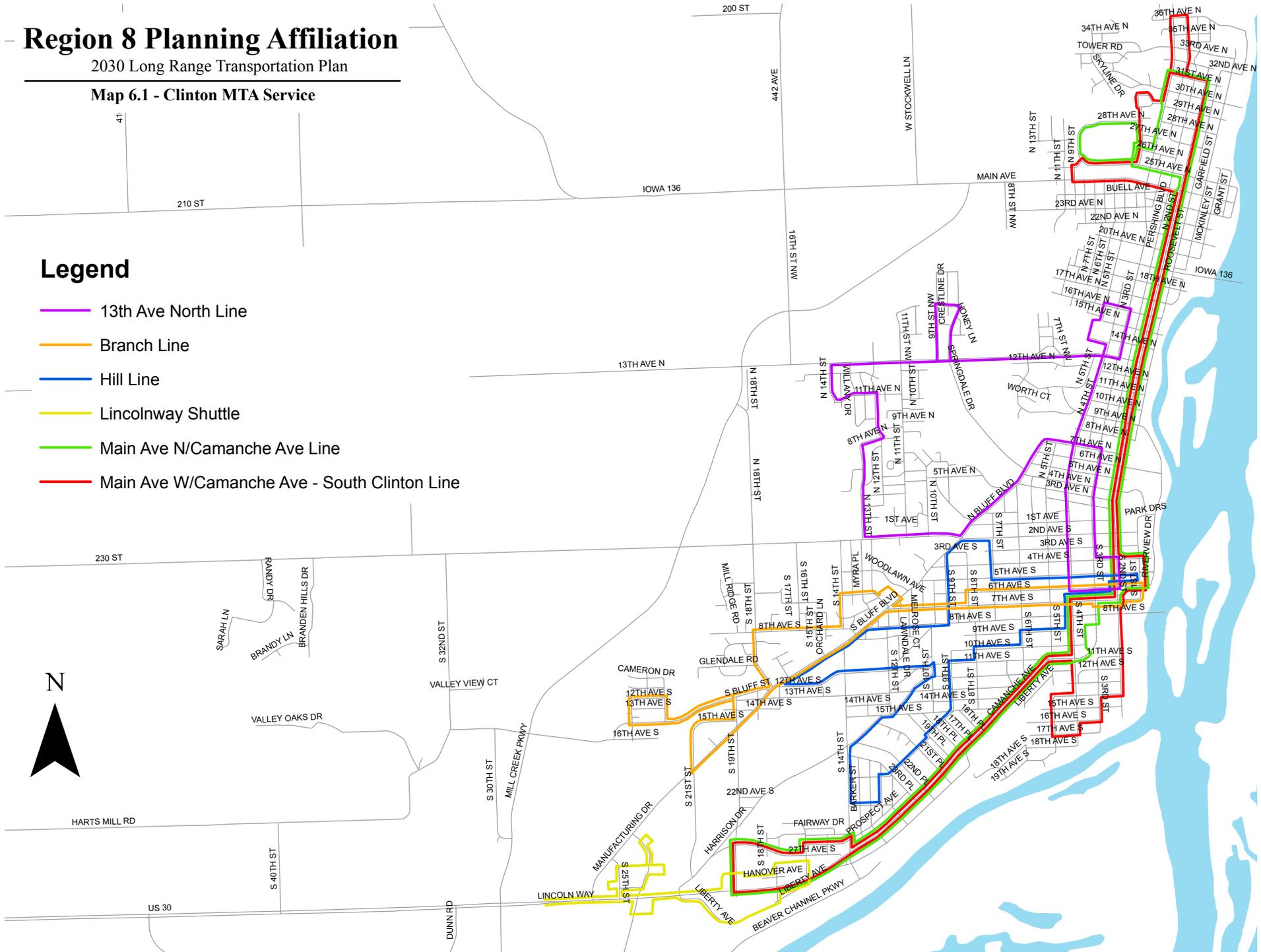
# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 6.1 - Clinton MTA Service

## Legend

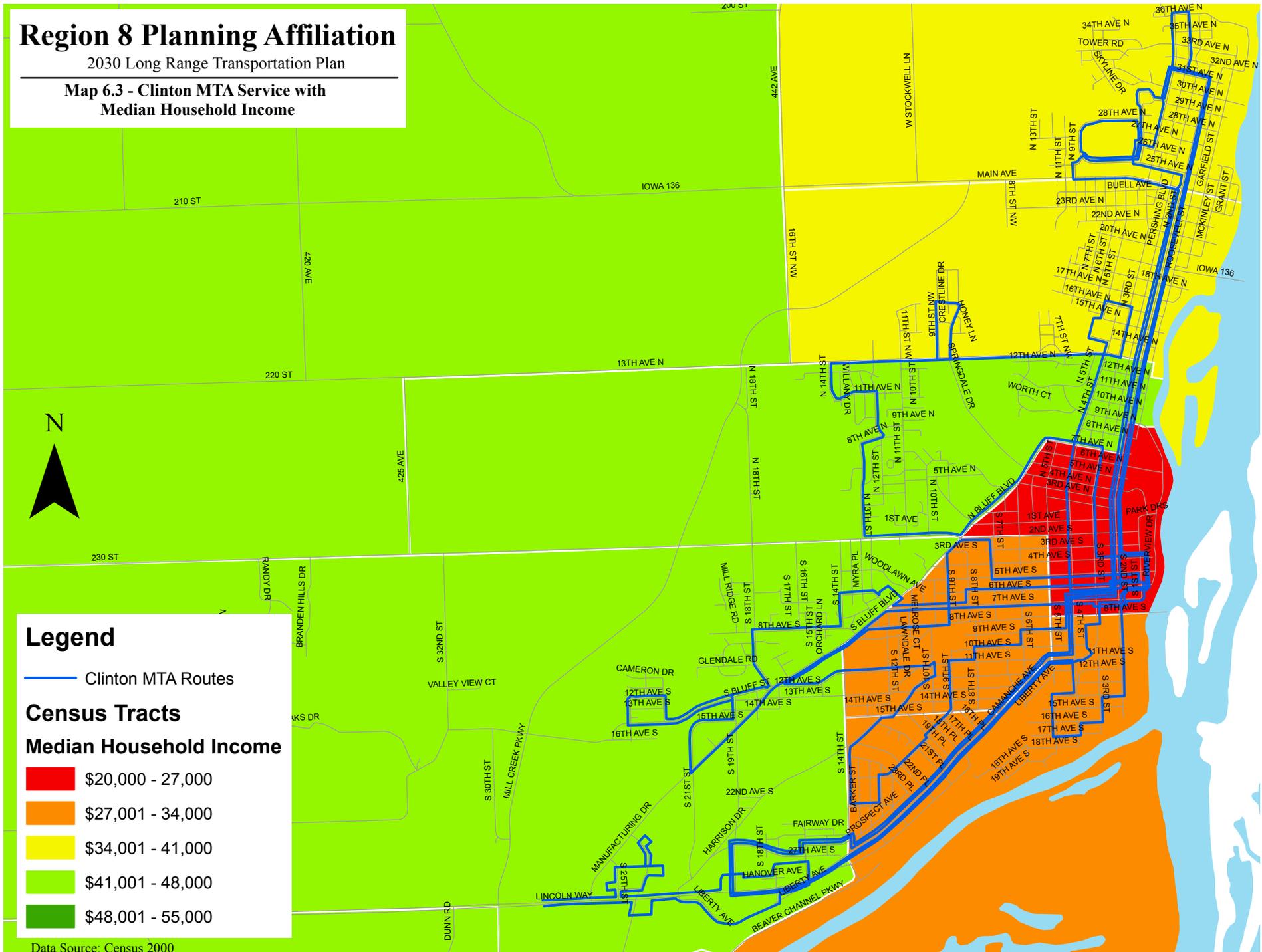
- 13th Ave North Line
- Branch Line
- Hill Line
- Lincolnway Shuttle
- Main Ave N/Camanche Ave Line
- Main Ave W/Camanche Ave - South Clinton Line



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 6.3 - Clinton MTA Service with Median Household Income



## Legend

Clinton MTA Routes

## Census Tracts

### Median Household Income

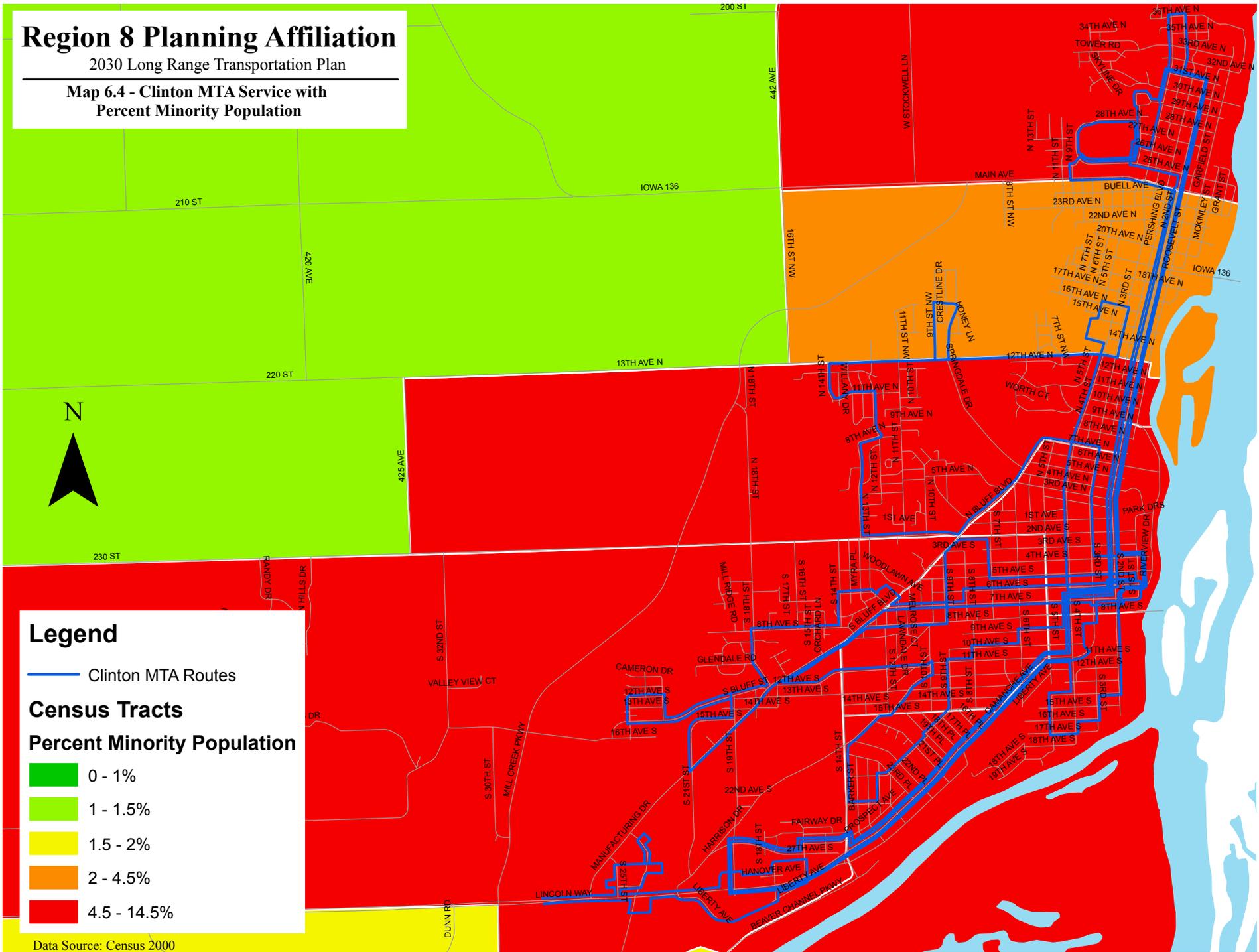
- \$20,000 - 27,000
- \$27,001 - 34,000
- \$34,001 - 41,000
- \$41,001 - 48,000
- \$48,001 - 55,000

Data Source: Census 2000

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 6.4 - Clinton MTA Service with Percent Minority Population



## Legend

— Clinton MTA Routes

### Census Tracts

### Percent Minority Population

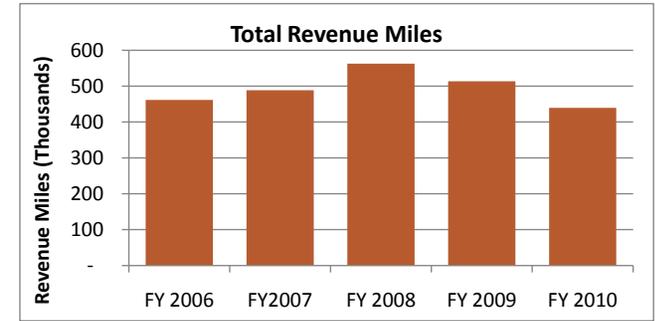
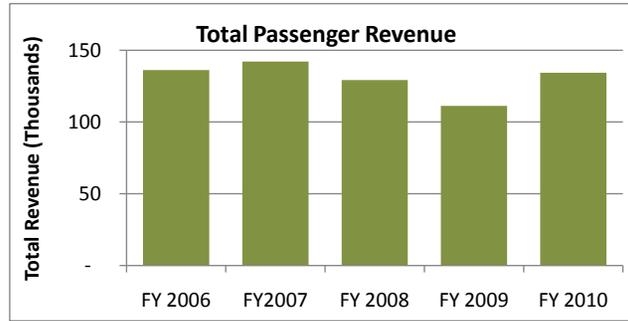
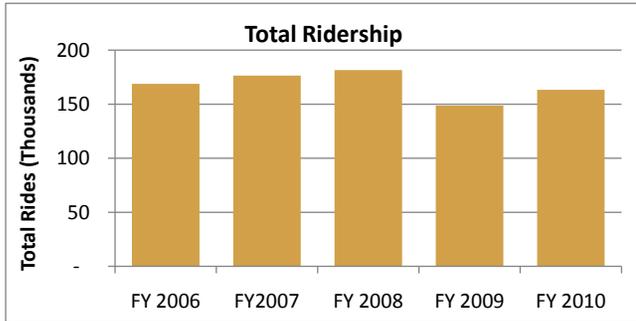
- 0 - 1%
- 1 - 1.5%
- 1.5 - 2%
- 2 - 4.5%
- 4.5 - 14.5%

Data Source: Census 2000

# Region 8 Regional Transit Authority (RTA 8)

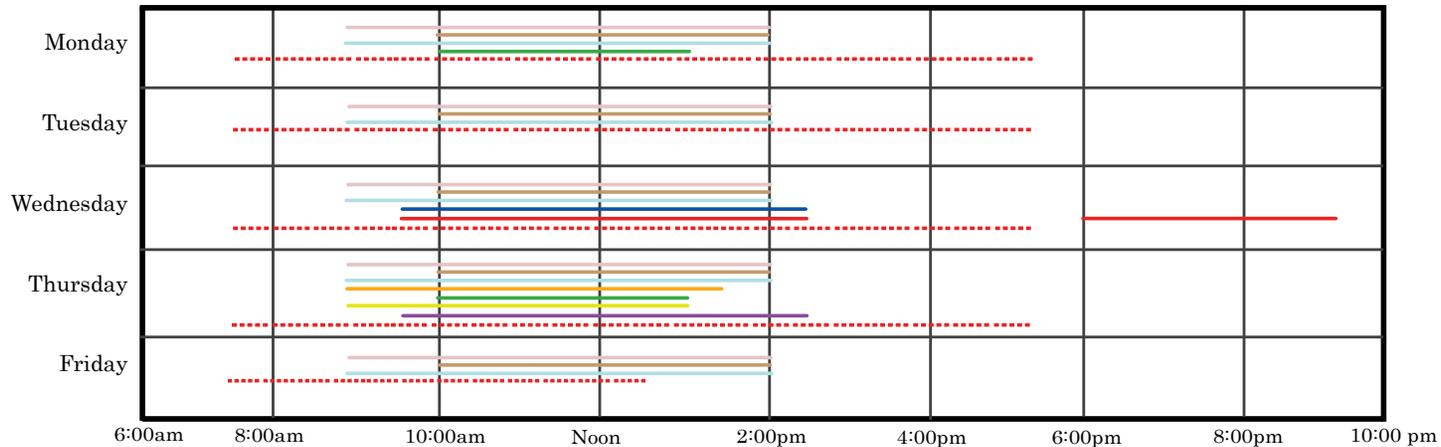
The Region 8 Regional Transit Authority (RTA) was formed to improve, consolidate, and coordinate transportation services, and provide accessible transportation to the underserved cities and rural areas of the State of Iowa Planning Area 8 including Delaware, Dubuque, and Jackson Counties. RTA provides many cities with daily service within their city as well as commuting to other cities, while other communities have service several times per week.

## RTA 8 Annual Ridership and Revenue



## RTA 8 Routes

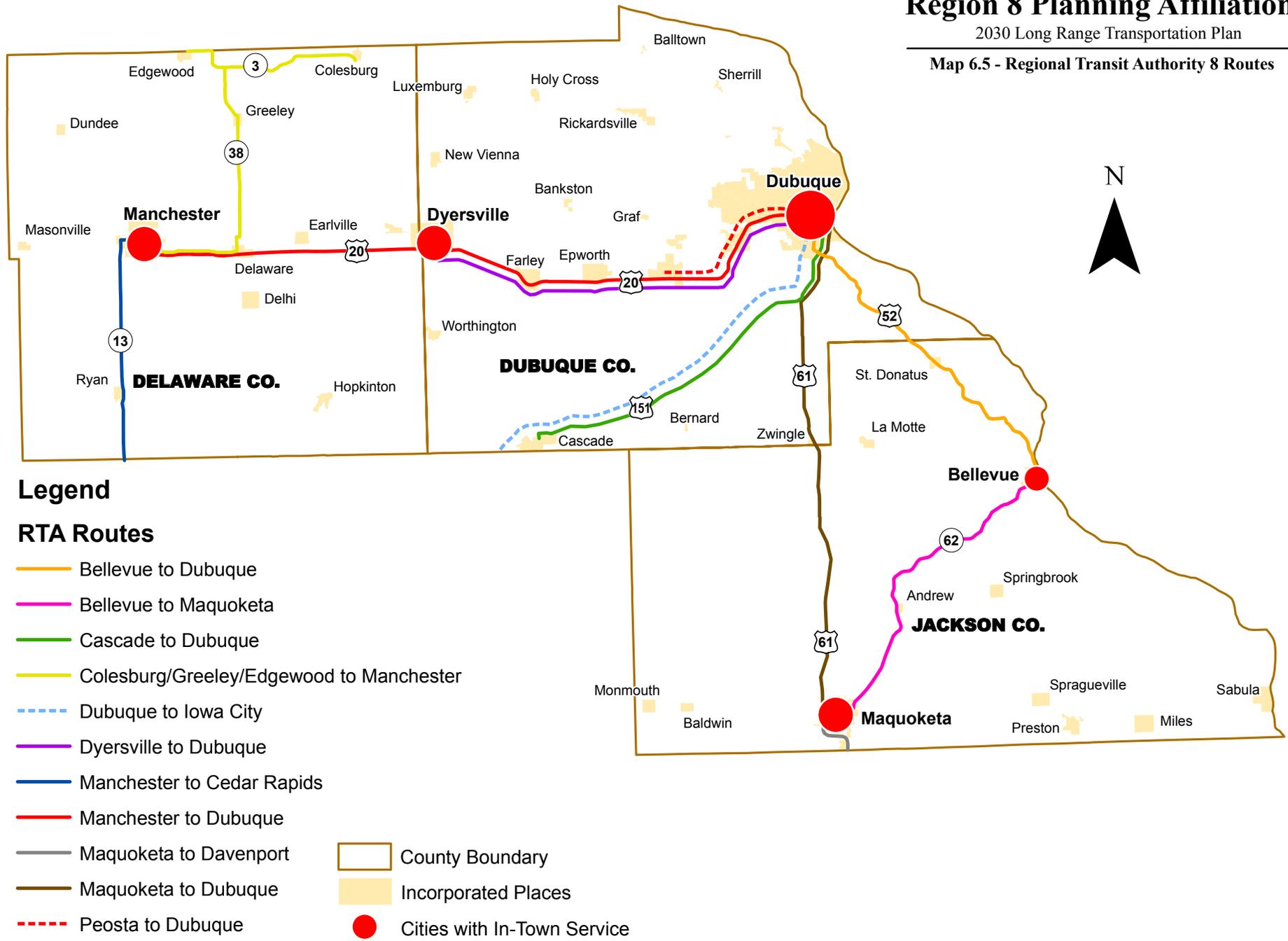
- In-Town Manchester
- In-Town Dubuque
- In-Town Maquoketa
- Bellevue to Dubuque (2nd & 4th Thursday)
- Bellevue to Maquoketa (days vary)
- Cascade to Dubuque (1st Mon., 3rd, Thurs.)
- Colesburg/Greeley/Edgewood to Manchester (1st & 3rd Thursday)
- Dubuque to Iowa City - Times vary (1st Thurs., 2nd Wed., last Tues.)
- Dyersville to Dubuque (4th Thursday)
- Manchester to Cedar Rapids (Last Wednesday)
- Manchester to Dubuque (1st, 2nd & 3rd Wednesday)
- Maquoketa to Davenport (By Request)
- Maquoketa to Dubuque (2nd & 4th Thurs.)
- Peosta to Dubuque



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 6.5 - Regional Transit Authority 8 Routes



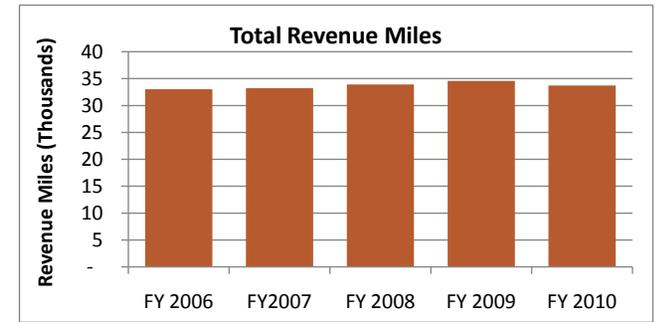
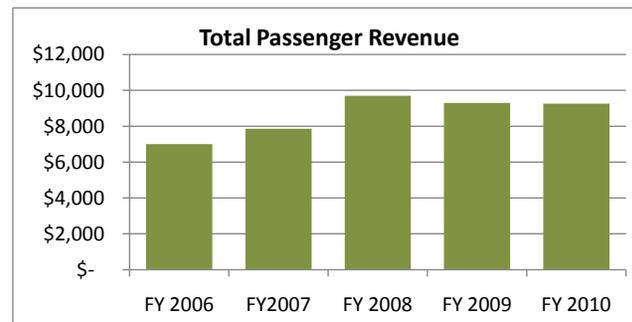
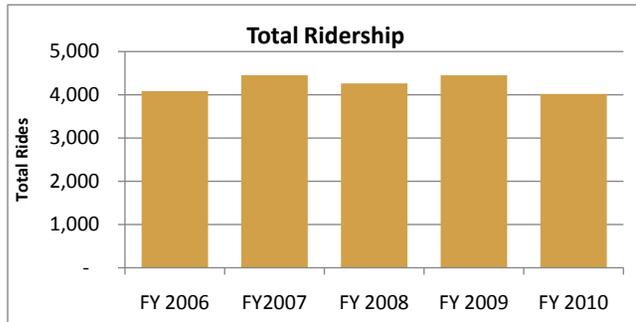
Map prepared January 2008 by ECIA

## River Bend Transit

River Bend Transit provides door to door transportation within Clinton County. River Bend Transit is on a priority call system, first serving disabled and elderly, then the general public on a first come, first served basis, when space as available. Service operates in different portions of the county each day of the week. For that reason, riders must plan their trips for that one day of the week when the vehicle comes to their area. The service day is the same day each week, however pick-up times may vary. River Bend Transit also provides rides to University of Iowa Hospitals and Clinics as well as other Iowa City destinations.

## River Bend Transit Annual Ridership and Revenue

Chart data represents services provided by River Bend Transit in Clinton County.



Current Service Needs (This is a general assessment and not limited to projects currently being proposed by one of the providers.)

### Determining Need: Public Input

Public input meetings were held in 2009 for all four counties (Dubuque, Delaware, Jackson, and Clinton). These meetings were presented as an opportunity for the public to discuss the current transit system in their area and provide feedback on how to make the system smooth for consumers. The public was very vocal with their concerns and needs, past and present. The meetings for this year were held as followed:

1. Tuesday October 13th, 2009 at Scenic Valley Agency on Aging in Jackson County
2. Tuesday October 13th 2009 at the Erickson Center in Clinton County
3. Tuesday October 20th, 2009 at the Manchester Public Library in Delaware County
4. Tuesday October 20th, 2009 at the Carnegie Stout Public Library in Dubuque County

Meetings were held in each county to reach as many consumers, human service providers, and any other interested members of the community as possible. Refreshments were offered to increase participation, and a PowerPoint slide show was presented to introduce participants to the PTP process. In an effort to create publicity, staff posted fliers in each community, aired radio commercials, did a newscast with KCRG Channel 9, and raffled off an iPod shuffle.

### Transit Action Group (TAG)

The TAG Group dissolved in 2007 due to lack of interest. However, the public input meetings were aggressively marketed to gain as much public feedback as possible. Based on input from the meetings, the need for the TAG was evident. This group reformed in December, and initiated a new focus and new members. With a new focus, and clear direction, it is hoped that TAG will become a valuable resource for transit consumers, human service providers, transit providers, and the annual Passenger Transportation Plan document.

### PTP Surveys

Passenger Transportation Plan surveys were sent by mail and electronically to over 500 agencies and consumers in the four counties. Ninety two (92) surveys were completed and returned for the PTP process. Those that completed the surveys included; human service providers, consumers, grocery stores, two colleges, one medical clinic, and two Central Point Coordinators

## Meeting the Need: Dubuque, Delaware and Jackson Counties (RTA):

- Expanded hours & days of service including; later afternoon service, evening service, weekend service, and holiday service. Many times, transit dependant riders have to turn down job offers because they cannot work the hours requested, due to limited bus hours. If the Regional Transit Authority provided service on evenings, weekends, and on holiday's residents would be able to search for employment through any employer at any shift. This service will also help employers by allowing them to search for qualified applicants throughout all shifts.

### Jackson County:

- Offer same day service or demand response – Developing Alternative Choices, and Crestridge requested this service. Both agencies expressed the need for immediate service as there are times when a consumer needs immediate medical attention. A service such as this could help consumers reach their basic medical needs.
- Add additional routes to Iowa City – Jackson County consumers requested additional routes to and from Iowa City so that there is flexibility in scheduling doctors' appointments. With increased routes, riders can schedule their necessary medical appointments around their doctor's schedule and their own schedule.
- Expand services within Jackson County- residents of Jackson County, particularly residents 65 and older requested this service. Jackson County does not have a taxi provider or an additional transit provider available. With expanded services, residents could get increase access to services and amenities.

### Delaware County:

- Fixed route to Dundee – Unlimited Services in Manchester suggested this as they see individuals who live in Dundee, but cannot access employment in Manchester because of the lack of transportation. With a regular fixed route to and from Dundee and Manchester, residents could apply for more jobs and have access to additional services.
- Iowa City route on Fridays- Scenic Valley of Manchester requested an additional route to Iowa City so residents could have some flexibility when scheduling their medical appointments. With increased routes, riders can schedule their necessary medical appointments around their doctor's schedule and their own schedule.
- Add additional routes from Dyersville to Dubuque – residents of Dubuque and Delaware County requested additional routes from Dyersville to Dubuque to increase their access to medical services and employment opportunities.

- Expand services within Delaware county- residents of Delaware County, particularly residents 65 and older requested this service. Delaware County does not have a taxi provider or an additional transit provider available. With expanded services, residents could get increase access to services and amenities.

#### Dubuque County:

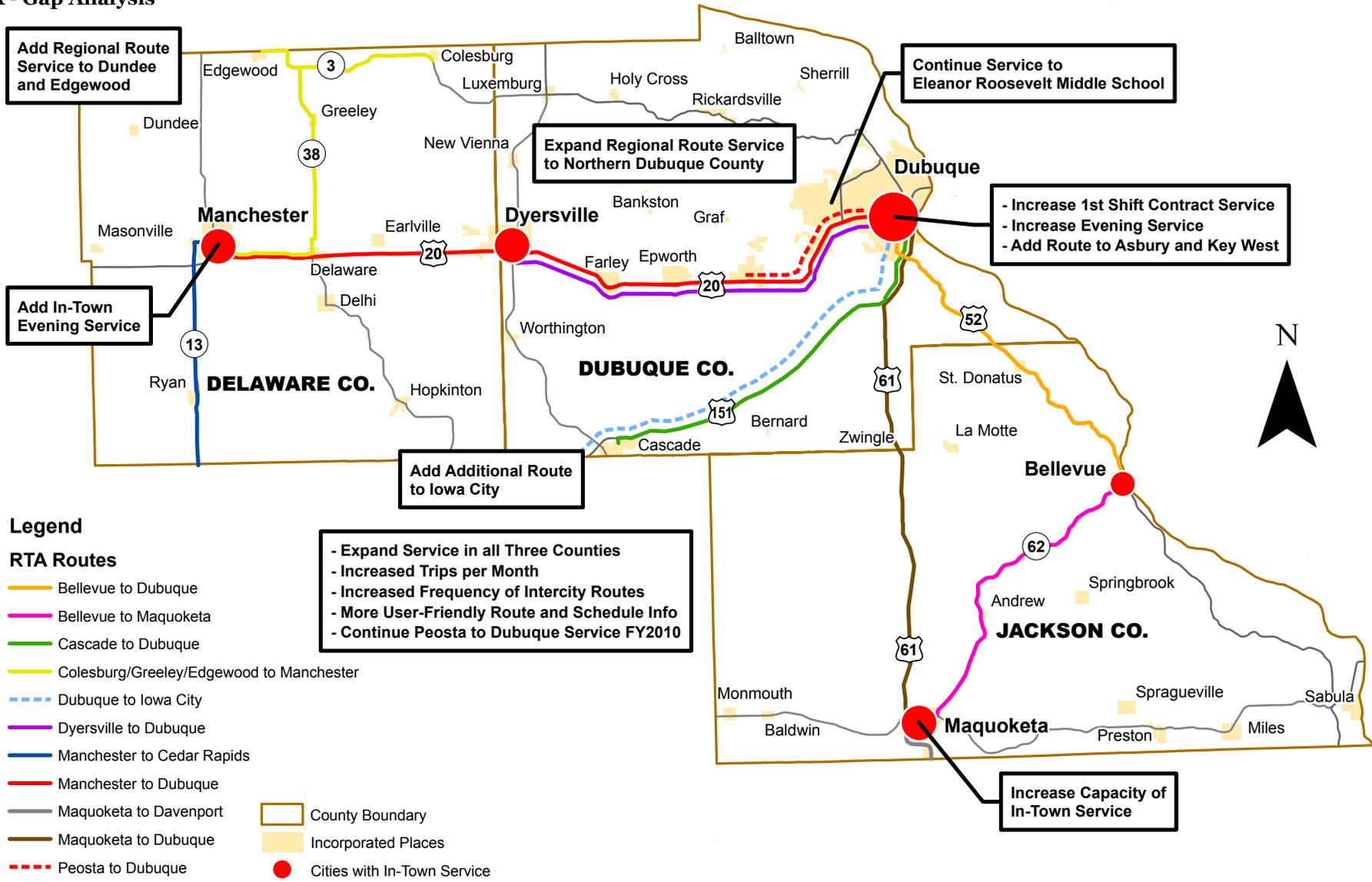
- Fixed route to West end neighborhoods – consumers of Keyline and the RTA asked for increase routes from the West End neighborhoods. The West End is a rapidly expanding commercial and residential area. Increased routes would provide access to residents living in the West End area, and also provide access to residents living in the city of Dubuque to the West End area.
- Expand Services within Dubuque – residents of Dubuque and many human service providers requested this service as it would add to and compliment Keyline transit. The service could Provide an option to residents who are not able to ride Keyline.

RTA's strategies are concepts, not specifically designed projects. The concepts need to be developed through ongoing discussions with the human service organizations.

# Passenger Transportation Development Plan

Dubuque Metropolitan Area Transportation Study | Region 8 Planning Affiliation

## RTA - Gap Analysis



Map prepared March 2009 by ECIA

### Meeting the Need: The City of Clinton (Clinton MTA):

- Expanded hours & days of service including; later afternoon service, evening service, weekend service, and holiday service  
Many times, transit dependant riders have to turn down job offers because they cannot work the hours requested, due to limited bus hours. If Clinton MTA provided service on evenings, weekends, and on holiday's residents would be able to search for employment through any employer at any shift. This service will also help employers by allowing them to search for qualified applicants throughout all shifts.
- Re-route branch line to avoid unimproved roads – One resident expressed concern that he bus was driving on these roads and creating more damage. She suggested making some changes to the route that would avoid these roads and also create more ridership, by traveling on roads that have higher traffic.
- Extend South Clinton Line for New Choices residents – Lutheran Social Services of Clinton suggested extending the South Clinton Line because the bus stop does not reach the New Choices facility. New Choices is a facility that provides services to children and adults with developmental and physical disabilities. Clinton MTA does not stop in front of their facility; therefore consumers walk from the bus stop to the front door which is approximately 4,000 feet. This can be dangerous for consumers and caregivers when walking in icy or stormy conditions.
- Add a route to and from Ashford University Campus – Clinton residents have been recently made aware that Ashford University plans to add another location to their campus in 2010. Residents may want access to all buildings on the Ashford Campus; therefore Iowa at Work and Lutheran Social Services of Iowa suggested preparing for this addition by adding an extra route. Advertising this as the building is under construction would help students who are enrolling or scheduling their classes.

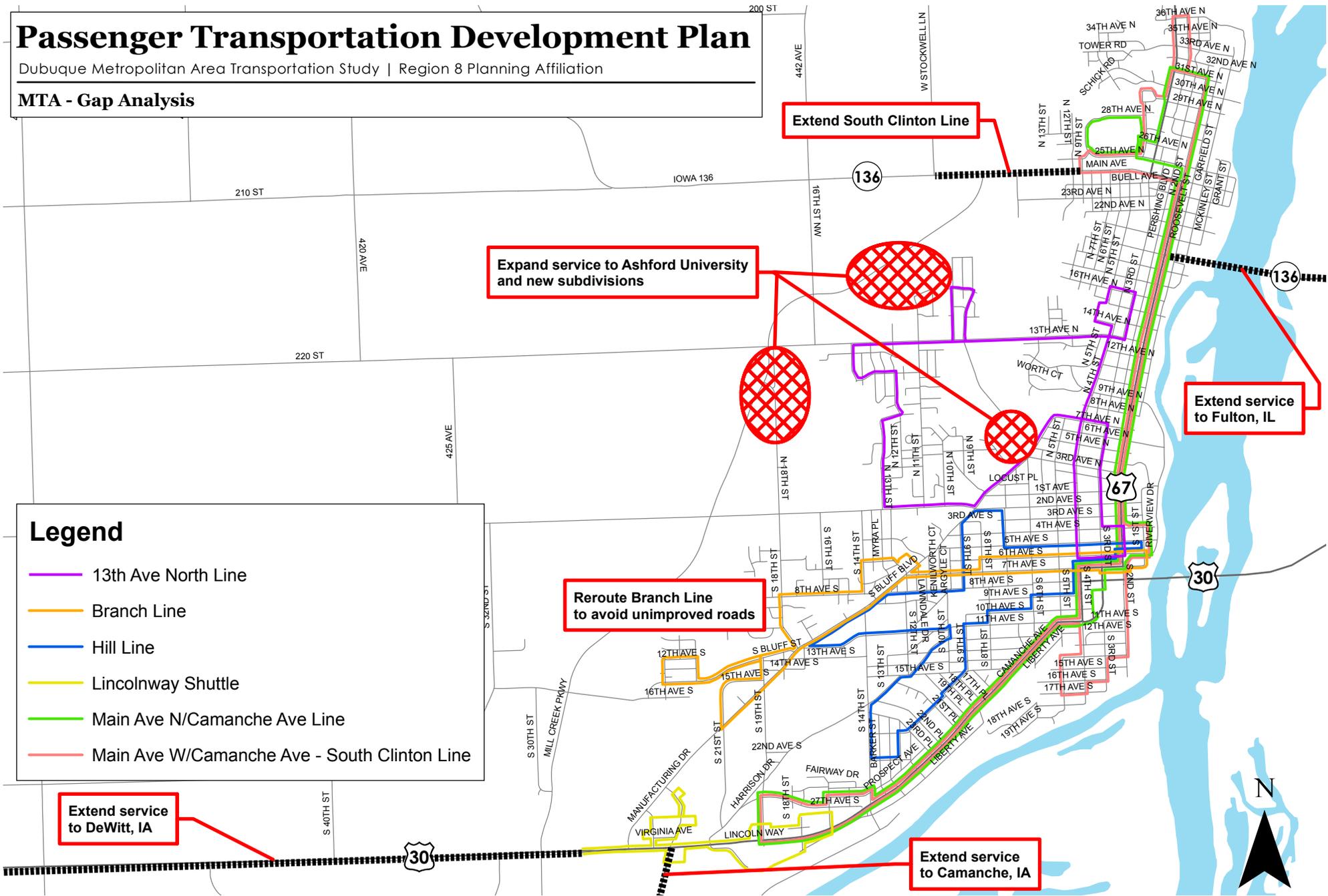
### Clinton County (River Bend):

- Add a route from Clinton to Camanche – Lutheran Social Services suggested this route as she has consumers who frequently travel from Camanche to Clinton and vice versa. Camanche residents rely on Clinton for many needs including health care, grocery stores, banking, etc. This route would help residents access these valuable resources on a daily basis.
- Add a route from Clinton to DeWitt – Iowa at Work recommended this route as some of their clients would like to search for employment outside of the city of Clinton. With regular bus routes to and from Clinton to DeWitt, residents can increase their employment options.

# Passenger Transportation Development Plan

Dubuque Metropolitan Area Transportation Study | Region 8 Planning Affiliation

## MTA - Gap Analysis



### Legend

- 13th Ave North Line
- Branch Line
- Hill Line
- Lincolnway Shuttle
- Main Ave N/Camanche Ave Line
- Main Ave W/Camanche Ave - South Clinton Line

## Transportation Priorities

The public was asked to place these projects in a ranking of priority through an online survey. The projects were ranked as “high”, “medium,” and “low”. Projects ranked as a high priority were listed first and the lowest priorities last.

Project/Service	High Priority	Medium Priority	Low Priority
<b>Regional Transit Authority</b>			
Expand hours and days of service	88%	9%	3%
Maintain a consistent schedule	74%	26%	0%
Expand services within Dubuque	59%	30%	11%
Expand services to West end	57%	35%	8%
Add an extra Iowa City route	56%	22%	22%
Offer same day service or demand response in Jackson County	55%	30%	15%
Offer more affordable services	49%	39%	12%
Educate community about route information and widely market services	48%	43%	9%
Offer additional routes from Dyersville to Dubuque	48%	40%	12%
Coordinate services with Manchester health clinic’s schedule	48%	43%	9%
Offer same day service or demand response in Dubuque County	45%	55%	0%
Expand Services in Delaware County	39%	43%	18%
Market employer incentives for mass transit	39%	39%	22%
Post announcements on RTA website	36%	42%	22%
Expand routes within Jackson County	35%	30%	35%
Add an extra bus for ARC services in Dubuque	33%	37%	30%
Add more wheelchair accessible buses	27%	40%	33%
Provide additional training to drivers on wheelchair tie downs	21%	52%	27%
Add a fixed route from the city of Manchester to Dundee	4%	38%	59%

Project/Service	High Priority	Medium Priority	Low Priority
<b>Clinton Municipal Transit Administration</b>			
Expand service hours and days	50%	20%	30%
Provide defensive driver training	50%	10%	40%
Offer hand sanitizer to keep buses clean and sanitized	50%	20%	30%
Re-route Branch Line, Hill Line, and Camanche Avenue	40%	20%	40%
Offer a Clinton to Camanche Route	40%	30%	30%
Add an Ashford University Campus route	40%	10%	50%
Offer a Clinton to Fulton Route	20%	30%	50%
Extend South Clinton Line	10%	50%	40%
<b>River Bend</b>			
Add a Clinton to DeWitt route	30%	40%	30%
Offer hand sanitizer to keep buses clean and sanitized	20%	30%	50%

## Recommended Projects for Existing and Unmet Service Needs

#	Provider	Project Description	Type	Estimated Cost	Potential Source	Amount (\$)	Priority	FY 2010	FY2011	FY2012	FY 2013	FY 2014
1	RTA	Expand hours and days of service	O	\$85,000	5311, STA, JARC, New Freedoms, Medicaid	\$43/hr	H	\$43	\$45	\$47	\$49	\$51
2	RTA	Maintain a consistent schedule	O	\$0		\$0	H	\$0	\$0	\$0	\$0	\$0
3	RTA	Expand services within Dubuque	O	\$134,000	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	M	\$43	\$45	\$47	\$49	\$51
4	RTA	Expand services to West end	O	\$43/hr	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	M	\$43	\$45	\$47	\$49	\$51
5	RTA	Add an extra Iowa City route	O, P	\$4,100	5311, STA, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	M	\$43	\$45	\$47	\$49	\$51
6	RTA	Offer same day service or demand response in Jackson County	O	\$10,000	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	M					
7	RTA	Offer more affordable services (No fare)	O	\$140,000	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$140,000	M	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000
8	RTA	Educate community about route information and widely market services	P	\$40/hr	Mobility Coordinator Position, Special Projects	\$40/hr	M	\$40/hr	\$40/hr	\$40/hr	\$40/hr	\$40/hr
9	RTA	Offer additional routes from Dyersville to Dubuque	O	\$4,100	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	M	\$43	\$45	\$47	\$49	\$51
10	RTA	Coordinate services with Manchester health clinic's schedule	O	\$40/hr	Mobility Coordinator Position	\$40/hr	M	\$40/hr	\$41/hr	\$42/hr	\$43/hr	\$44/hr

## Recommended Projects for Existing and Unmet Service Needs

11	RTA	Offer same day service or demand response in Dubuque County	O	\$43/hr	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue		M	\$43	\$45	\$47	\$49	\$51
12	RTA	Expand services in Delaware County	O	\$10,000	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	M	\$43	\$45	\$47	\$49	\$51
13	RTA	Market employer incentives for mass transit	O, P	\$40/hr	Mobility Coordinator Position	\$40/hr	M	\$40/hr	\$40/hr	\$40/hr	\$40/hr	\$40/hr
14	RTA	Post announcements on RTA website	P	\$40/hr	Mobility Coordinator Position	\$40/hr	M	\$40/hr	\$41/hr	\$42/hr	\$43/hr	\$44/hr
15	RTA	Expand routes within Jackson County	O	\$4,200	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	M	\$43	\$45	\$47	\$49	\$51
16	RTA	Provide additional training to drivers on cheelchair tie downs	P	\$30/hr	5311, RTAP, STA, Property Tax	\$30/hr	L	\$30	\$32	\$34	\$36	\$38
17	RTA	Add a fixed route from the city of Manchester to Dundee	O	\$44,720	5311, STA, JARC, New Freedoms, Medicaid, Property Tax, Agency/Contract Revenue	\$43/hr	L	\$43	\$45	\$47	\$49	\$51
18	RTA	Continuation Funding of JARC		\$100,000				\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
19	RTA	Continuation Funding of New Freedoms		\$25,000				\$25,000	\$25,000	\$25,000		
20	MTA	Expand service hours and days	O	\$118,600	local		H			118,600		
21	MTA	Provide defensive driver training	P	\$30/hr	local		H	1,000				
22	MTA	Offer hand sanitizer to keep buses clean and sanitized	O	\$300	local		H	300				
23	MTA	Re-route Branch Line, Hill Line, and Camanche Avenue	O	\$25,000	local		H	25000				
24	MTA	Offer a Clinton to Camanche Route	O	\$140,000	local-28E		M				140000	
25	MTA	Add an Ashford University Campus route	O	\$110,000	local-28E		L				110000	
26	MTA	Offer a Clinton to Fulton Route	O	\$115,000	local-28E		M				115000	
27	MTA	Extend South Clinton Line	O	\$0	local		L					
28	River Bend	Add a Clinton to DeWitt route	O				M					
29	River Bend	Offer hand sanitizer to keep buses clean and sanitized	O	\$300			L					
Product Code: O= Operations, C= Capital, P= Planning Equipment Code: L= Wheelchair Lift, R= Wheelchair Ramp, MR= Mobile Radio, F= Farebox, MDT= Mobile Data Terminal/Computer, SC= Security Camera Type of Improvement: REP= Replace, REHAB= Rehabilitate												

## Recommendations

- Expand hours and days of service
- Maintain a consistent schedule
- Expand services within Dubuque
- Expand services to West end
- Add an extra Iowa City route
- Offer same day service or demand response in Jackson County
- Offer more affordable services (No fare)
- Educate community about route information and widely market services
- Offer additional routes from Dyersville to Dubuque
- Coordinate services with Manchester health clinic's schedule
- Offer same day service or demand response in Dubuque County
- Expand services in Delaware County
- Market employer incentives for mass transit
- Post announcements on RTA website
- Expand routes within Jackson County
- Provide additional training to drivers on wheel chair tie downs
- Add a fixed route from the city of Manchester to Dundee
- Continuation Funding of JARC
- Continuation Funding of New Freedoms
- Expand service hours and days
- Provide defensive driver training
- Offer hand sanitizer to keep buses clean and sanitized
- Re-route Branch Line, Hill Line, and Camanche Avenue
- Offer a Clinton to Camanche Route
- Add an Ashford University Campus route
- Offer a Clinton to Fulton Route
- Extend South Clinton Line
- Add a Clinton to DeWitt route

## Conclusion

Transit provides RPA residents with access to employment, education, medical care, and recreation. Transit helps its riders achieve continued self-improvement, independence, and quality of life. Over the next twenty years, RPA 8 will continue to improve and expand the transit system, with the goal of providing the best service possible to its riders.



## Introduction:

The efficient movement of goods is one of the keys to effective competition in a world market system. As a result, policy makers, industry specialists, and transportation planners have recognized that providing efficient systems for moving goods will help to create a competitive advantage in the global market. This chapter focuses on four different freight modes, three of which are active in the RPA 8 area: truck, rail, water-borne, and air freight. Although each of the freight shipping options are described separately, the different modes are often used in combination, which is referred to as intermodal freight transport.

RPA 8 is located on the Mississippi river, the second longest river in the United States, with a length of 2,340 miles from its source in Lake Itasca in Minnesota to its mouth in the Gulf of Mexico. The river serves as a valuable asset to the RPA 8 region, providing direct connectivity to 10 states and numerous cities on its journey to the gulf. The river is currently being used for incoming and outgoing freight. The region is also located on US Hwy 20, US Hwy 51/161, and US Hwy 52. These highways provide a ground connection to the rest of the state of Iowa and the nation. The rail system that passes through the region is another valuable resource as Iowa and RPA 8 move into greater ethanol and biodiesel production which will require rail transport. Air transport is currently not used by the RPA 8 region for goods movement. Cedar Rapids, IA and Rockford, IL are located within reasonable driving distance. Both airports serve as major air freight hubs for the surrounding area.

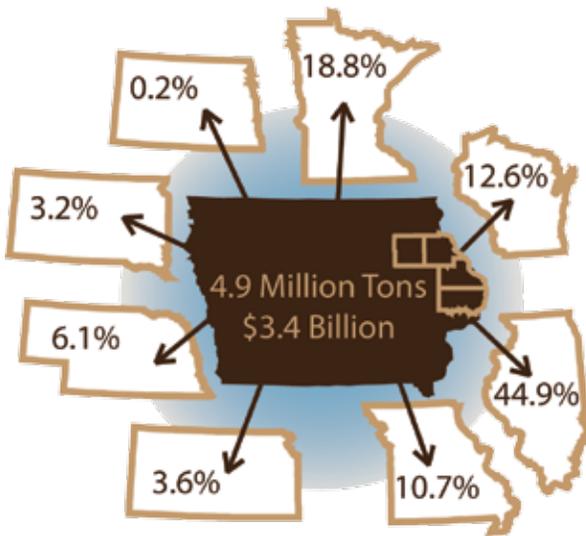
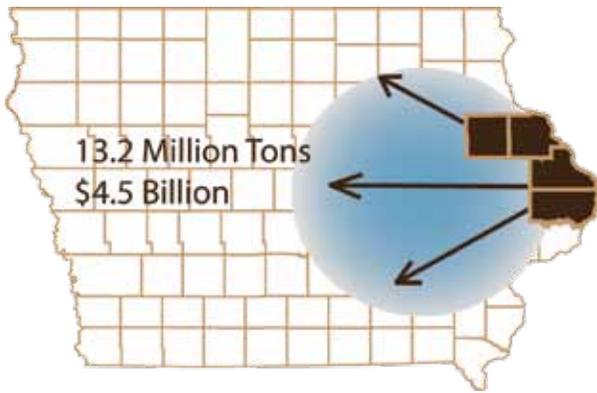
This element of the RPA 8 plan will focus on the current and predicted freight movement patterns as well as existing air, barge, and rail facilities in the region.



# Freight Movement - State, Region, Nation

## Total Freight Movement

Originating Tons: 22.1 Million  
Originating Value: \$11.7 Billion

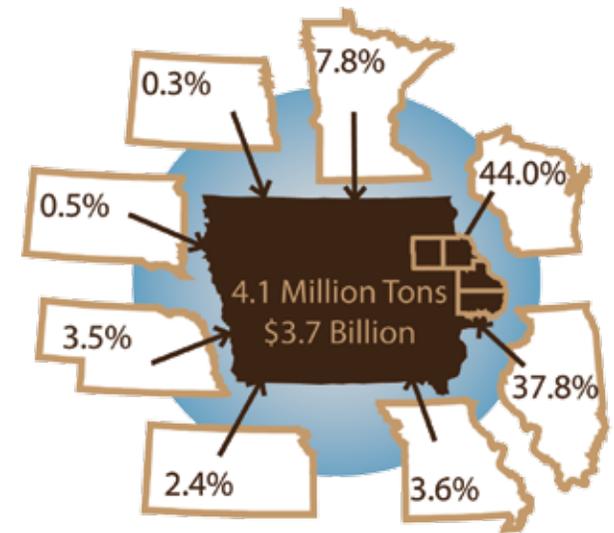
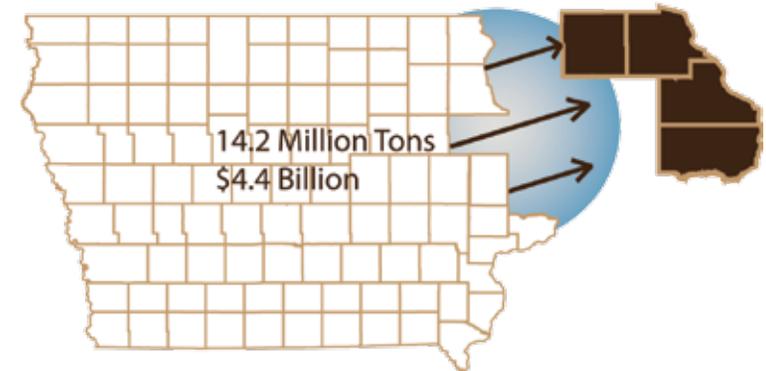


Freight moving out of the RPA 8 region and the state of Iowa consists mainly of products in the following categories: chemicals or allied products, food or kindred products, and transportation equipment. Freight originating in RPA is expected to increase to all surrounding states and national regions with exception of the North Prairie region. Freight moving into the RPA 8 region, not including that from in state, consists mainly of products in the following categories: chemicals or allied products, fabricated metal products, and primary metal products. Freight terminating in RPA is also expected to increase from all states and national regions with the exception of North Dakota.

Freight moving out of the RPA 8 region to the state of Iowa consists mainly of products in the following categories: ordinance or accessories, food or kindred products, and chemicals or allied products. Freight originating in RPA is expected to increase by 15% in 2011. Freight moving into the RPA 8 region from in state, consists mainly of products in the following categories: Food or kindred products, primary metal products, machinery, and lumber or wood products. Freight terminating in RPA is also expected to increase by 18% in 2011.

Regionally, the two largest recipients of freight from the RPA region, via truck and rail, are Illinois and Minnesota. Similarly, by water, Wisconsin is the largest recipient.

Terminating Tons: 21.5 Million  
Terminating Value: \$10.4 Billion



Regionally, the two largest deliverers of freight to the RPA region, via truck, are Wisconsin and Illinois. By rail, the largest deliverers are Illinois and Wisconsin. Similarly, by water, Illinois, Minnesota, and Missouri are the largest deliverers.

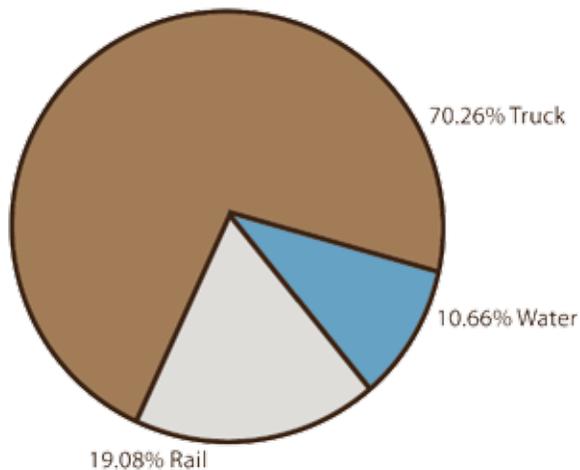


Nationally, the largest recipient of freight from the RPA region, via truck, water and rail, is the Southwest.

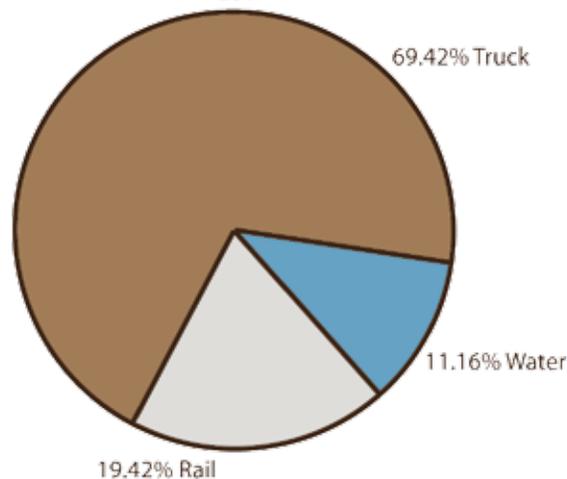
Nationally, the two largest deliverers of freight to the RPA region, via truck, are the Midwest and the South. By both rail and water, the largest deliverer is the Southwest.



% Total Tonnage Originating in RPA 8 by Mode  
2001



% Total Tonnage Originating in RPA 8 by Mode  
2011

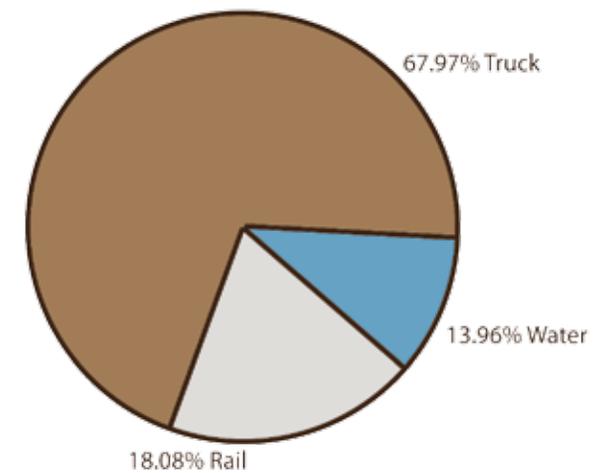


In 2001, truck was the most common mode for freight movement in the region, representing 67.97% of incoming tonnage and 70.26% of outgoing tonnage. By 2011, incoming tonnage moved by truck is predicted to increase to 68.17% while outgoing tonnage moved by truck is predicted to decrease to 69.42%.

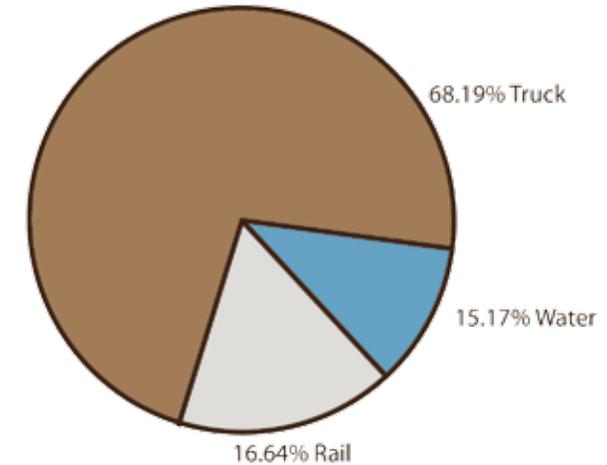
Rail was the second most common mode for freight movement in 2001, representing 18.08% of incoming tonnage and 19.08% of outgoing tonnage. By 2011, incoming tonnage moved by rail is predicted to decrease to 16.64%, while outgoing tonnage moved by rail is predicted to increase by a fraction of a percentage to 19.42%.

Though the region is located on the river, the share of freight moved by water is small when compared with freight moved by truck. Incoming freight moved by barge accounted for 13.96% of total tonnage in 2001 but is predicted to show a small increase to 15.17% in 2011. Outgoing freight moved by barge in 2001 made up 10.66% of total value of goods moved and a slight increase is predicted which estimates barge freight at 11.16%.

% Total Tonnage Terminating in RPA 8 by Mode  
2001



% Total Tonnage Terminating in RPA 8 by Mode  
2011



## Airports:

### Clinton Municipal Airport: Enhanced Service

There were 33 aircraft, not including ultralights, based at the airport in 2003. The number of based aircraft, excluding gliders, ultralights and others is forecast to increase to no fewer than 39 in 2022.

There were an estimated 16,071 total annual operations conducted in 2003. The total number of operations is expected to increase to 21,135 in 2022.

#### Projects:

Development Item	2004-2009
Land Acquisition - RPZ (Runway 21)	\$184,000
Rehabilitate Hangar "A" Apron	\$40,000
Taxiway/taxilane rehabilitation	\$150,000
Aircraft storage - 6,400 SF	\$264,000
Rehabilitate (Runway 14/32)	\$1,261,815
Total	\$1,899,815



## Dubuque Regional Airport: Commercial

Based aircraft at the airport totaled 79 aircraft in 2003. The number of based aircraft is forecast to increase to no fewer than 91 in 2022.

There were an estimated 55,009 total annual operations conducted in 2003. Of that total, general aviation had 48,447 operations, commercial carriers had 6,489 operations, and the military had 73 operations. The total number of operations is expected increase to 73,038 in 2022.

Projects:

Development Item	2004-2009
Snow removal trucks	\$500,000
Ground level boarding bridge	\$500,000
T-Hangar replacement	\$205,000
Apron for T-Hangar	\$12,000
Runway sensor update	\$36,500
Rehabilitate mtc/generator building	\$5,000
Entrance road lights	\$50,000
Quonset/corporate ramp areas	\$14,000
Passenger terminal land acquisition	\$1,000,000
Rehabilitate vault/windsock Taxiway A	\$800,000
T-hangar replacement, phase II	\$60,000
Rehabilitation terminal building frontage road	\$45,000
Terminal building sidewalk replacement	\$10,000
Rehabilitate parking lot	\$80,000
Entrance road beautification	\$48,000
Paint Quonset/corporate hangars	\$6,000
Slurry seal terminal apron	\$8,400
Radar display system	\$450,000
Chlorine system update	\$22,000

Field drain replacement	\$80,000
Roof replacement	\$35,000
Structural repair Quonset/corporate	\$70,000
Apron repair corporate	\$7,200
New passenger terminal design	\$1,000,000
Construct water tower	\$300,000
Runway 18-36 painting	\$20,000
Extend GA apron	\$50,000
Rehabilitate mtc/generator building	\$45,000
Rehabilitate corporate hangar	\$30,000
Rehabilitate administrative office area	\$30,000
New passenger terminal, phase I	\$7,615,000
Rehabilitate steel T-hangar	\$72,000
Utility improvements	\$450,000
<b>Total</b>	<b>\$13,656,100</b>

### Maquoketa: General Service

There were nine aircraft based at the airport in 2003. The number of based aircraft is forecast to increase to no fewer than ten in 2022.

There were an estimated 4,381 total annual operations conducted in 2003. The total number of operations is expected to increase to 5,232 in 2022.

Projects:

Development Item	2004-2009
Runway 15/33 rehabilitation	\$864,516
Total	\$864,516



### Manchester: Basic Service

There were four aircraft based at the airport in 2003. All were single engine. The number of based aircraft is forecast to increase to five in 2022.

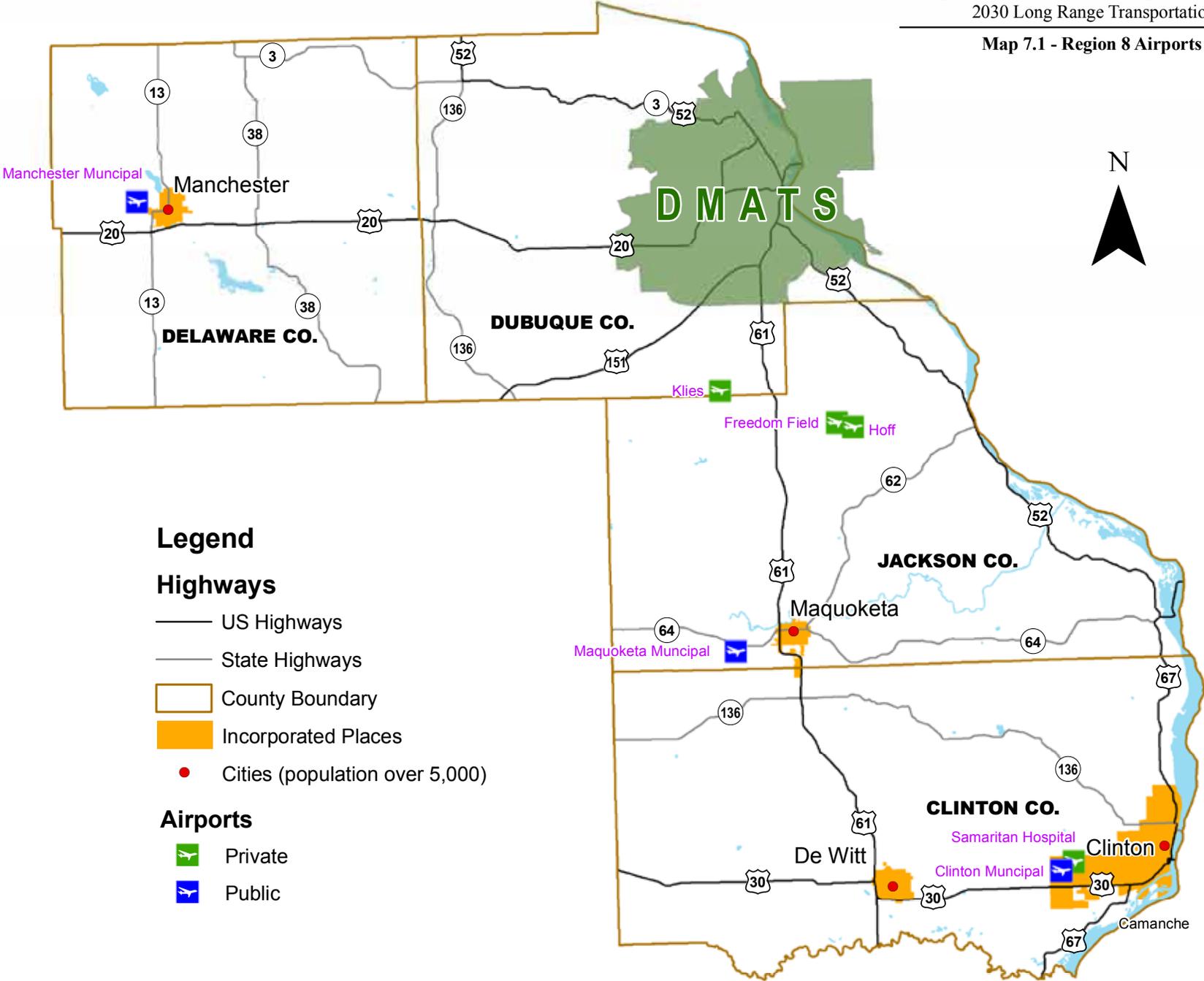
There were an estimated 1,947 total annual operations conducted in 2003. The total number of operations is expected to increase to 2,449 in 2022.

Projects: No Projects

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 7.1 - Region 8 Airports



### Legend

#### Highways

- US Highways
- State Highways
- ▭ County Boundary
- ▭ Incorporated Places
- Cities (population over 5,000)

#### Airports

- ✈ Private
- ✈ Public

Map prepared November 2008 by ECIA

## Barge Facilities:

The ports, terminals and fleeting areas in Iowa provide jobs and income for their communities and support Iowa industries dependent on the river for transportation. River transportation, including our harbors and terminals, are an engine for continued economic growth.

The following is a list of barge terminals in the RPA 8 Region:

### 1. Mississippi Belle II, Clinton Showboat Landing:

- Mooring casino boat; boarding passengers

### 2. City of Clinton, Clinton Municipal Unloading Dock:

- Receipt of grain; receipt of miscellaneous dry bulk materials including fertilizer
- Two surface tracks with total capacity for 90 cars
- Serves loading spout and terminal in rear
- Connects with Union Pacific Railroad and I,C&E Railroad

### 3. Artco Fleeting Services, Service, Dock:

- Mooring barges for fleeting

### 4. ADM/Growmark, Clinton River Terminal Dock:

- Mooring barges for cleaning, maintenance, and repair
- Mooring barges for fleeting

### 5. ADM Corn Processing, Clinton Plant, Liquid-Handling Dock:

- Shipment of grain
- Plant trackage in rear connects with Burlington Northern Santa Fe Railway, Union Pacific Railroad and I,C&E Railroad

### 6. ADM Corn Processing, Clinton Plant, Corn- Pellet-Loading Dock:

- Receipt of caustic soda, receipt and shipment of industrial and beverage alcohol, ethanol, and crude and refined vegetable oil
- Plant trackage in rear connects with Burlington Northern Santa Fe Railway, Union Pacific Railroad, and I,C&E Railroad

### 7. Alliant Energy, IP&L Co., M. L. Kapp Plant Wharf:

- Shipment of corn pellets

### 8. Vertex Chemical Corp., Camanche Plant, Dock:

- Receipt of coal for plant consumption
- Plant trackage in rear connects with Burlington Northern Santa Fe Railway, Union Pacific Railroad and Iowa, Chicago & Eastern Railroad

### 9. Artco Fleeting Services, Camanche Fleet Moorings:

- Receipt of caustic soda

### 10. Determann Industries Dock:

- Mooring barges for fleeting, maintenance and repair; mooring floating drydock

### 11. City of Clinton, Clinton Municipal Loading Dock:

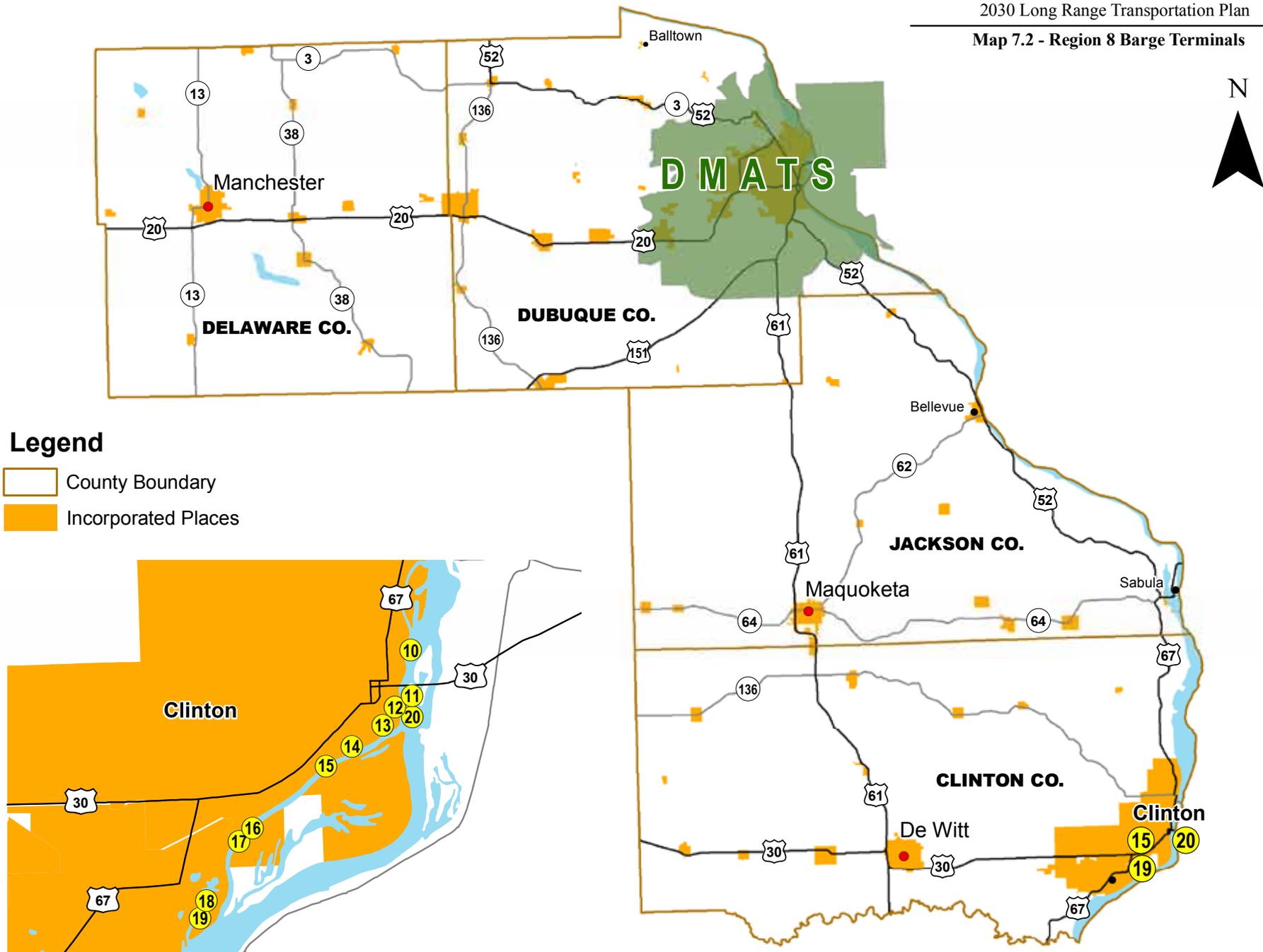
- Receipt of coal; receipt and shipment of steel products and miscellaneous bulk materials
- Shipment of grain
- One surface track serving undertrack pit on apron and two serving warehouses in rear, connect with Burlington Northern Santa Fe Railway, Union Pacific Railroad, and I,C&E Railroad.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 7.2 - Region 8 Barge Terminals



## Legend

- County Boundary
- Incorporated Places

Map prepared November 2008 by ECIA

## Rail Facilities:

The RPA 8 area is served by 4 rail carriers. The following describes the 4 carriers in general terms.

**Burlington Northern Santa Fe:** The Burlington Northern and Santa Fe Railway (BNSF) is among the largest railroad in the United States with track mileage totaling 33,353 miles covering 28 states and two Canadian provinces. In the DMATS area, the BNSF's track is located exclusively on the east side of the Mississippi in the governmental jurisdictions of Grant County, Wisconsin, Jo Daviess County and the City of East Dubuque in Illinois.

**Iowa, Chicago, Eastern (IC&E):** The Iowa, Chicago, and Eastern Rail Link (I C & E) is a regional railroad which is owned and operated by the Dakota, Minnesota, and Eastern Railroad. The IC & E recently purchased the I & M Rail Link, which was formed in 1997 and operated through the DMATS area. Between the two branches (DM&E and IC&E) the railroad operates in Iowa, Illinois, Minnesota, Missouri, Nebraska, Wyoming, Wisconsin, and South Dakota. The IC& E primarily provides service between Minneapolis, Chicago, and Kansas City. The main route in Iowa parallels the Mississippi River on the west side from the Minnesota state line south through the Dubuque and south to Muscatine. The I C & E also operates an east-west line that begins in Marquette and extends west through Northern Iowa to Sheldon.

**Canadian National (CN):** Canadian National (CN) is a leader in the North American rail industry. Following its acquisition of Illinois Central in 1999, WC in 2001, and GLT in 2004, as well as its partnership agreement with BC Rail in 2004, CN provides shippers with more options and greater reach in the rapidly expanding market for north-south trade. CN is the only railroad which crosses the continent east-west and north-south, serving ports on the Atlantic, Pacific and Gulf coasts while linking customers to all three NAFTA nations.

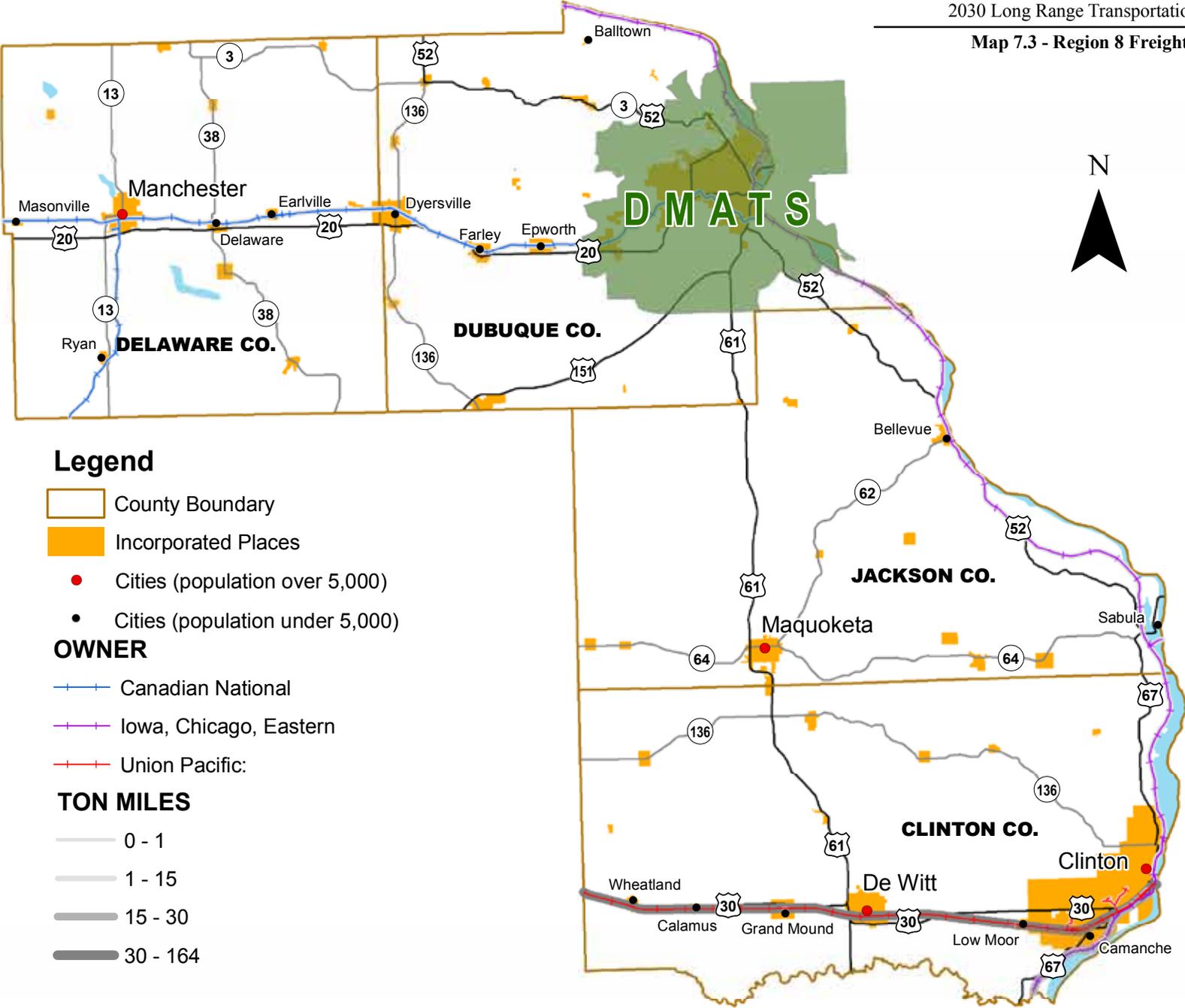
**Union Pacific:** Union Pacific Railroad is an operating subsidiary of Union Pacific Corporation. It is the largest railroad in North America, operating in the western two-thirds of the United States. The railroad serves 23 states, linking every major West Coast and Gulf Coast port, and provides service to the east through its four major gateways in Chicago, St. Louis, Memphis and New Orleans. Additionally, Union Pacific operates key north/south corridors and is the only railroad to serve all six major gateways to Mexico. UP also interchanges traffic with the Canadian rail systems.



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 7.3 - Region 8 Freight Rail



### Legend

- County Boundary
- Incorporated Places
- Cities (population over 5,000)
- Cities (population under 5,000)

### OWNER

- + Canadian National
- + Iowa, Chicago, Eastern
- + Union Pacific:

### TON MILES

- 0 - 1
- 1 - 15
- 15 - 30
- 30 - 164

Map prepared November 2008 by ECIA

## Lincolnway Railport Project

The Lincolnway Railport is a multi-modal freight project to be constructed west of Clinton. The project includes the construction of a 500 acre industrial park, and a rail spur with direct access to Union Pacific main line. The railport will be located on US 30 south of the Clinton Municipal Airport.

The Lincolnway Railport project is the result of a partnership consisting of the Clinton Regional Development Corporation (CRDC), Union Pacific Railroad (UP), and the Iowa Department of Transportation (IDOT).

According to CRDC forecasts, within five years of its completion, the railport is expected to generate 1,000 jobs, increase wages by \$25 million, increase local spending by \$23.5 million, and encourage 180 million in new capital investment.

CRDC received approval from UP on December 13, 2007 to begin construction on the first phases of the project. In phases I and II, which broke ground in 2010, crews will construct 14,000 feet of track adjacent to existing UP right of way. The Railport is on UP's most congested mainline. To limit further impediments to traffic on the main line, UP required the construction of enough track to accommodate trains of over a mile in length

Total cost for both phases is estimated at \$14 million (Phase 1 = \$10.8 & Phase II = \$3.2). Last year CRDC was awarded a \$2 million American Recovery and Reinvestment Act (ARRA) Grant from IDOT which will be applied to Phase I construction. The CRDC expects the completion of Phases I and II within the next five years.

Following the completion of the rail infrastructure, the next phases of construction will focus on the infrastructure in and around the industrial park. In total, the CRDC will need to raise over \$50 million to complete the project. See chart for total estimated costs.

## Pipelines

There are several pipelines that pass through the RPA-8 region shipping multiple commodities. Anhydrous ammonia, crude oil, and natural gas are all transported to cities in the RPA-8 from outside of the region.

All pipelines in service in the RPA-8 region are privately owned. As such, any deficiencies associated with the pipeline system will be identified and rectified by the individual owner.

The RPA-8 will work to coordinate construction projects to maintain the integrity of the service offered by the pipelines. The RPA-8 will also work with the pipeline vendors to provide multi-modal transfer of their respective services.

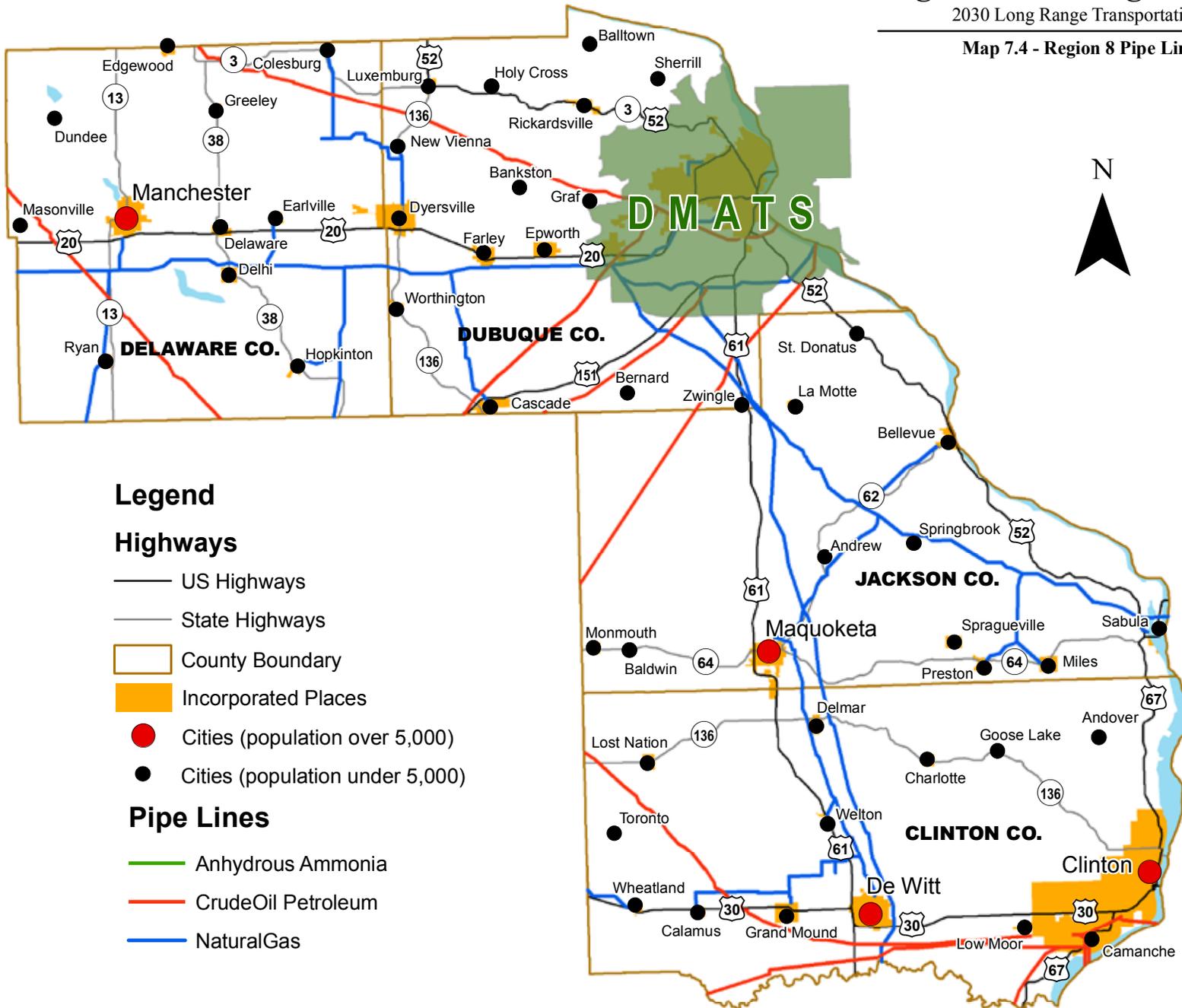
## Estimated Total Development Costs

ON-SITE PARK IMPROVEMENTS	\$ 48,075,000
Land Acquisition	\$22,072,500
Roadway Improvements & Grading	\$17,470,500
Water	\$ 1,976,000
Sanitary Sewer	\$ 2,767,000
Storm Sewer	\$ 3,789,000
OFF-SITE PARK IMPROVEMENTS	\$ 8,425,000
Turn Lane Improvements	\$ 425,000
Water extension to site	\$ 3,000,000
Roadway improvements	\$ 5,000,000
<b>Total Development Cost:</b>	<b>\$ 56,500,000</b>

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

Map 7.4 - Region 8 Pipe Lines



Map prepared November 2008 by ECIA

## Recommendations

- Implement an Intermodal Management System
- Continue to expand the highway system to provide improved access and circulation around major transportation corridors
- Coordinate needed improvements to meet the advancements of the RPA 8 Freight hubs
- Closely coordinate area roadway planning with freight objectives, including access and mobility in the context of other community planning objectives

## Conclusion

Freight movement is key to economic growth and prosperity in the region. It is important that policy makers, industry specialists and transportation planners continue to acknowledge the importance of providing efficient systems for moving goods, helping to create a competitive advantage in this global market.





## Introduction

Transportation often generates negative externalities affecting safety, human health, and the natural environment. For this reason, the environment is one of the eight planning factors included within SAFETEA-LU. Negative externalities are caused by the construction and maintenance of infrastructure, and by the operation of motor vehicles. Infrastructure externalities include effects on water systems (dewatering, runoff, sediment loadings, and erosion), soil processes (material related pollution), and ecosystems (habitat destruction, degradation, and fragmentation).

Transportation infrastructure improvements typically make land more attractive for commercial and residential development. The pressure for land development is not as high in RPA 8 as it is in other jurisdictions. Yet, future development still represents a significant concern with regard to natural as well as other resources. In this context, transportation infrastructure projects in RPA 8 region warrant the consideration of potential ecological and environmental effects. Various environmental regulations and mitigation measures that aim to minimize the impact of road projects are proposed in this chapter.



## Environmental Safeguards

Conservation, water, and air quality regulations are the most applicable environmental safeguards for transportation projects. Projects advanced by the Iowa DOT must comply with a number of environmental requirements. The National Environmental Policy Act (NEPA) requires an environmental review process when Federal funds are applied to transportation projects. Table 8.0 presents the two generic documents prepared for environmental reviews under NEPA.

<b>Table 8.0 National Environmental Policy Act Environmental Review</b>	
<b>Document</b>	<b>Description</b>
Environmental Assessment (EA)	Provides evidence/analysis for determining whether a transportation project will cause significant impacts. <sup>a</sup>
Environmental Impact Statement (EIS)	Describes the purpose and need for the proposed action, the proposed alternatives, the affected environment, and the environmental consequences of the alternatives. <sup>b</sup>
<p><sup>a</sup> National Environmental Policy Act explains in detail the concept of “significance” based on two criteria: context and intensity.</p> <p><sup>b</sup> Air quality is covered in the environmental review process</p>	

As RPA 8 region has experienced relatively little growth over the last several decades, the pressure for land development has not been as substantial as in many jurisdictions. The region’s topography and historical economy have fixed agriculture as the region’s primary land use. Therefore, agricultural land protection through a zoning code is the most prominent form of environmental regulation in the region.

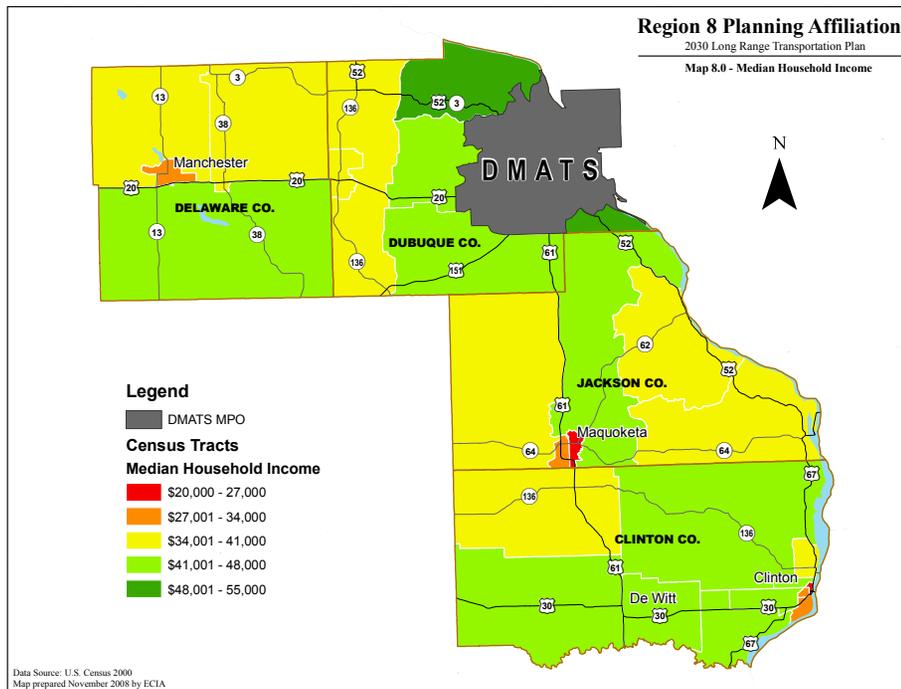
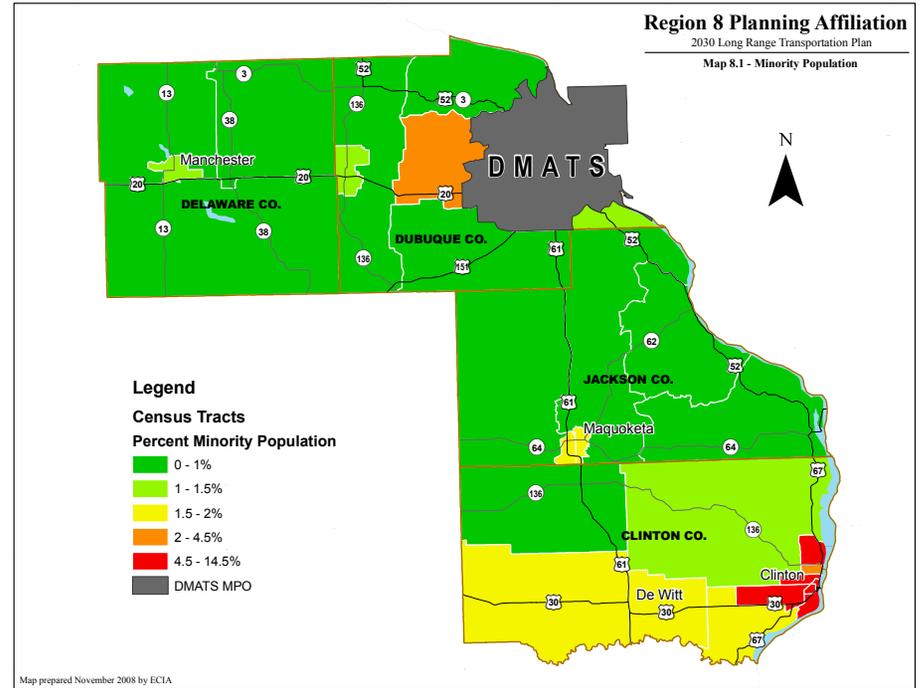
## Environmental Impact Analysis

The information that follows is designed to provide general information to the public and to decision-makers as they consider transportation priorities in this long range transportation plan. The information has been provided on a project basis to allow easy review of the information by the public and decision-makers. Nine environmental issues were considered for all projects:

**Right-of-way** – Right-of-way impacts were addressed qualitatively. Two considerations were addressed in the right-of-way analysis. The first was whether the project would require additional right of way. In some cases transportation improvements can be completed without additional right-of-way. In other cases, the project will require new right-of-way or additional right-of-way. The second consideration was the proportion of the land, designated for acquisition, that is already developed. Acquiring developed land will increase impacts on property owners, and project costs. The analysis of right-of-way impacts is based on general project concepts and a brief review of the project location. Final environmental analysis will be required for every project to fully identify right-of-way impacts. There is no right-of-way map designed for RPA 8 region as most of the projects are maintenance.

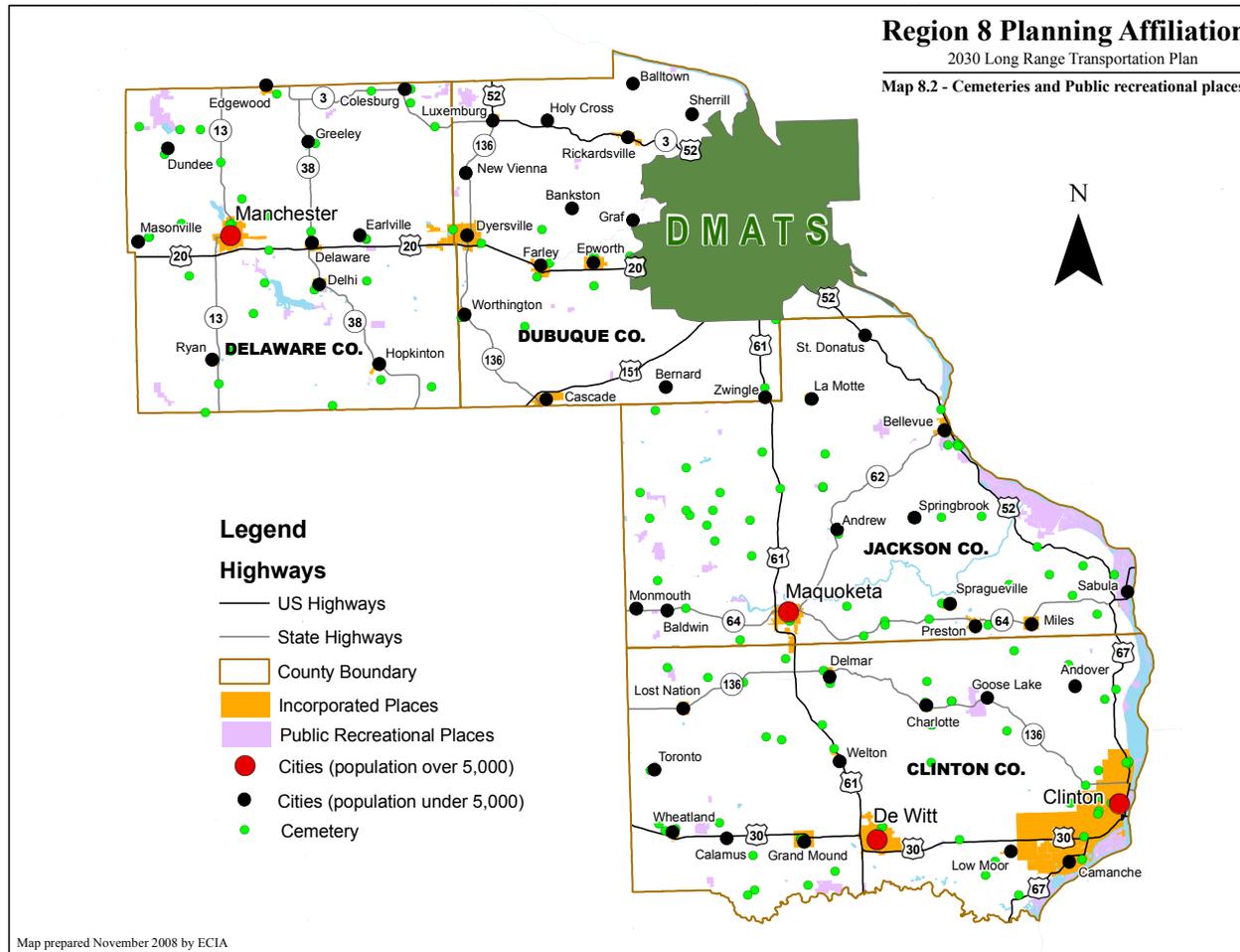


**Environmental Justice** – 2000 Census Data is used for identifying low income or minority communities. Census tract data has been used to identify instances when proposed projects could impact low income or minority communities.

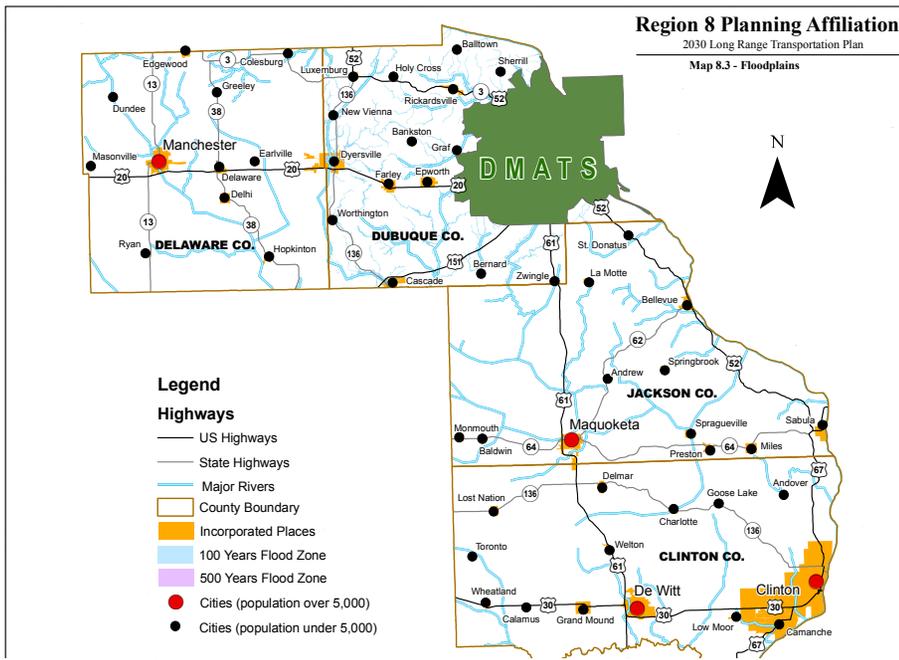


Census tracts are generally too large to allow for a detailed analysis. Staff will execute a more detailed analysis during project development. The data contained herein is simply an indication that there is the potential for an impact. Maps 8.0 and 8.1 show the locations of minority and low income populations in the region.

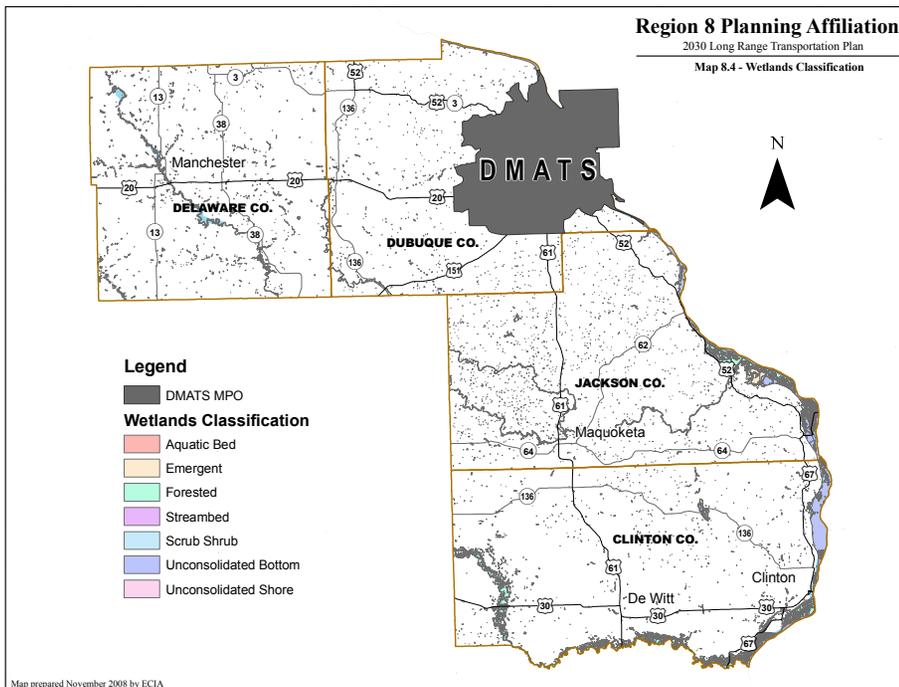
**Cemetery** – Cemetery impacts are identified if the proposed project will pass next to or encroach on an existing public or private cemetery. At this point, projects are in a conceptual stage and it is not possible to know if there will be an impact on the identified cemetery. All that can be known from this analysis is that there is a potential for such an impact. Map 8.2 shows locations of cemeteries in the region.



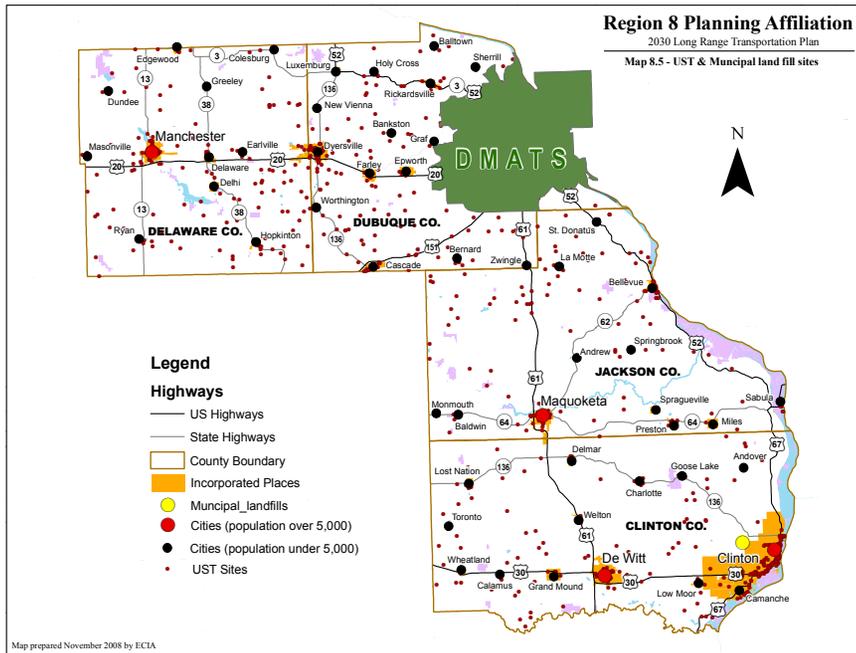
**Public recreational places** – Park or recreational use impacts are identified if the proposed project is adjacent to a known, existing public or private park or other recreational use. At this point, projects are in a conceptual stage and it is not possible to know if there will be an impact on the identified park or recreational use. All that can be known from this analysis is that there is a potential for such an impact. Map 8.2 shows locations of public recreational places in the region.



**Floodplain** – The floodplain assessment was conducted using FEMA data, which is available for Dubuque county and major river locations for rest of the region. Projects are identified as no impact if they are completely outside identified flood plains. Projects within an identified flood plain were identified for further analysis. Map 8.3 shows flood plains in the region.



**Wetland** – Wetland impacts were identified using the National Wetland Inventory. This environmental analysis does not include specific drainage or water quality assessments. The purpose of this analysis was to identify known wetlands that could be impacted by the proposed transportation improvements. Map 8.4 shows wetlands in the region.



**LUST Sites and Municipal Landfills** - Leaking underground storage tank (LUST) sites and Municipal Landfills are locations that contain contamination from petroleum products or other substances classified as hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). A more detailed analysis is required if a project encroaches on one of these sites. Map 8.5 shows UST and Municipal landfills in the region.

**Historical/Archeological** – Known historical or archeological sites that are within 500 feet of a proposed project are identified by this analysis. This analysis was based on the National Historic Register for Historic Places and on the location of archeological sites identified in other studies. The analysis only states that there is the potential for impact on known sites. More specific surveys will be necessary for each project to determine if there will actually be impacts and also to identify any historical or archeological sites which have not previously been identified.

**Farmland** – A potential farmland impact has been identified in cases where a project will require additional right-of-way that will be taken from a farm.

## Conclusion

There are several types of analysis which are typically included in an environmental assessment which have not been addressed here. These include noise, stormwater, water quality, air quality, and geotechnical/seismic. In each case, these types of analysis were sufficiently specialized that neither RPA 8 staff nor RPA 8 Technical Advisory Committee members were qualified to conduct a cursory analysis of the potential impacts.



## Introduction

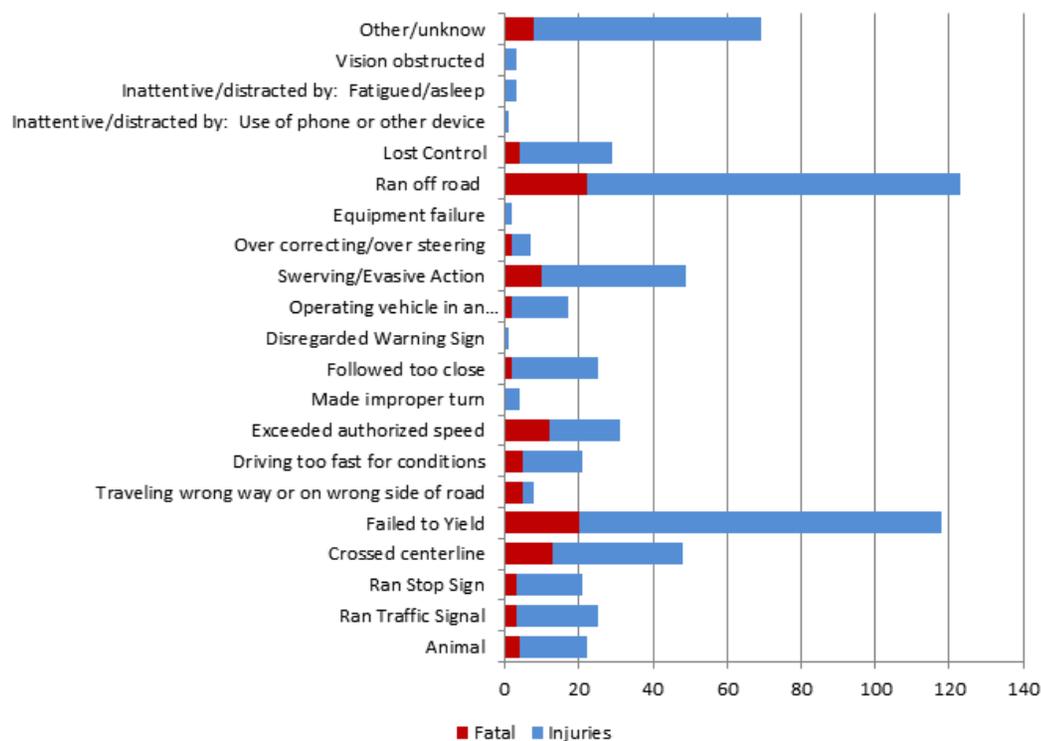
The safety and security of the traveling public are top priorities for RPA 8, the Iowa Department of Transportation (IADOT), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the cities and counties in the planning area. This chapter addresses these issues and recommends actions for improving traveler safety and security.

The Safety portion of the LRTP will focus on traffic accidents and methods to establish a process to reduce the occurrence and severity of these accidents. In addition, since September 11, 2001, the need for public security has gained importance. Technologies are available to improve the security of the region's transportation system. This aspect will be addressed in the Security section of this chapter.

## Safety

There are two common methods of addressing accidents that occur on the region's roadways. The first identifies locations where the number of accidents at a spot location (such as an intersection) is higher than would normally be expected. The other method is a system-wide approach that focuses on the predominant types of accidents along a longer section of roadway or road network. Both methods are used to find the locations that are creating major safety issues in the region.

The crash data from Iowa Department of Transportation has been used to analyze the high accident locations and the severity of accidents that occurred in the region between 2001 and 2006. The high accident locations are identified through the use of a GIS database. The types of accidents are represented in graph to the right.



Between 2001 and 2006 there were 115 fatalities and 512 major injuries in the region. Most of these accidents occurred due to human behavior. Reducing the number of fatalities and major injuries is a point of emphasis for the long range planning process. One way this emphasis is reflected is in linkages to the Iowa Comprehensive Highway Safety Plan (ICHSP). As projects are developed, the following elements from the ICHSP will be incorporated.

#### Top Five Safety Policy Strategies (Legislative)

1. Young drivers - Strengthen minor school license (MSL) and graduated driver's license (GDL) laws with stronger provisions that are proven to reduce specific risks and save lives.
2. Occupant protection - Require occupant restraints in all automotive vehicle seating positions.
3. Motorcycle safety - Restore a motorcycle helmet law.
4. Traffic safety enforcement - Support traffic safety enforcement and adjudication with adequate resources.
5. Traffic Safety Improvement Program – Increase Iowa Traffic Safety Improvement Program funding from .5 percent to a full 1 percent of Iowa's Road Use Tax Fund.

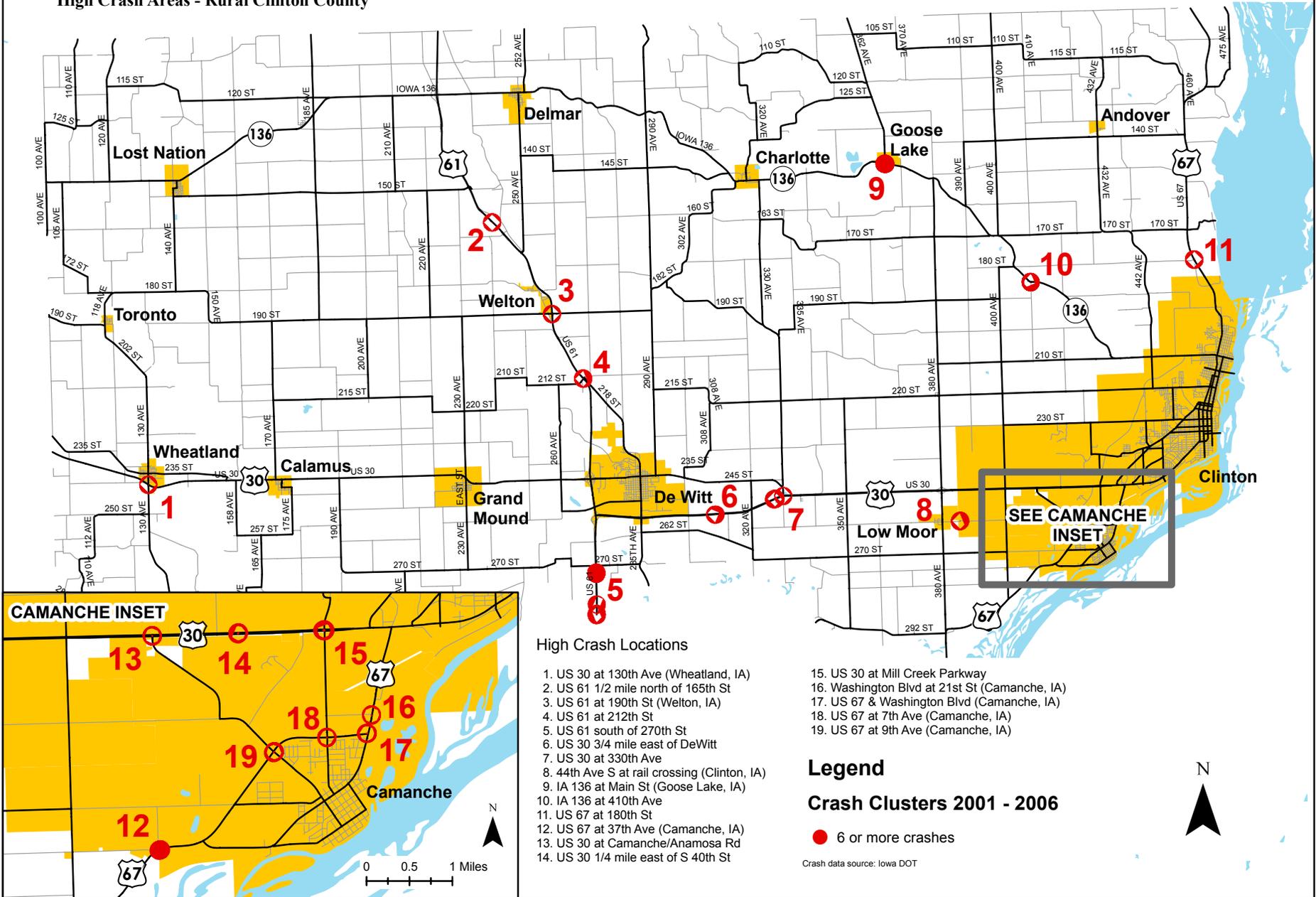
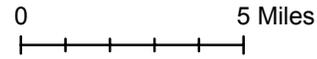
#### Top Eight Safety Program Strategies (Administrative)

1. Lane departure - Enhance lane departure related design standards and policies (e.g., paved shoulders, rumble strips and median barriers).
2. Safety corridors - Identify safety corridors and use multidisciplinary strategies to mitigate specific crash causes such as impairment, speeding, driver inattention, and other factors.
3. Intersections - Promote innovative intersection designs, such as roundabouts and other configurations.
4. Local roads - Create local multidisciplinary safety teams to identify and resolve local crash causes.
5. State traffic records - Enhance data availability and use by all stakeholders.
6. Senior mobility - Develop a single point of contact to help older persons and their caregivers navigate existing programs regarding changing mobility needs.
7. Safety training and education - Provide state and local multidisciplinary traffic safety education programs for professionals and the driving public.
8. Unpaved rural roads - Promote public awareness of the risks of driving on unpaved rural roads.

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

## High Crash Areas - Rural Clinton County



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

High Crash Areas - City of Clinton



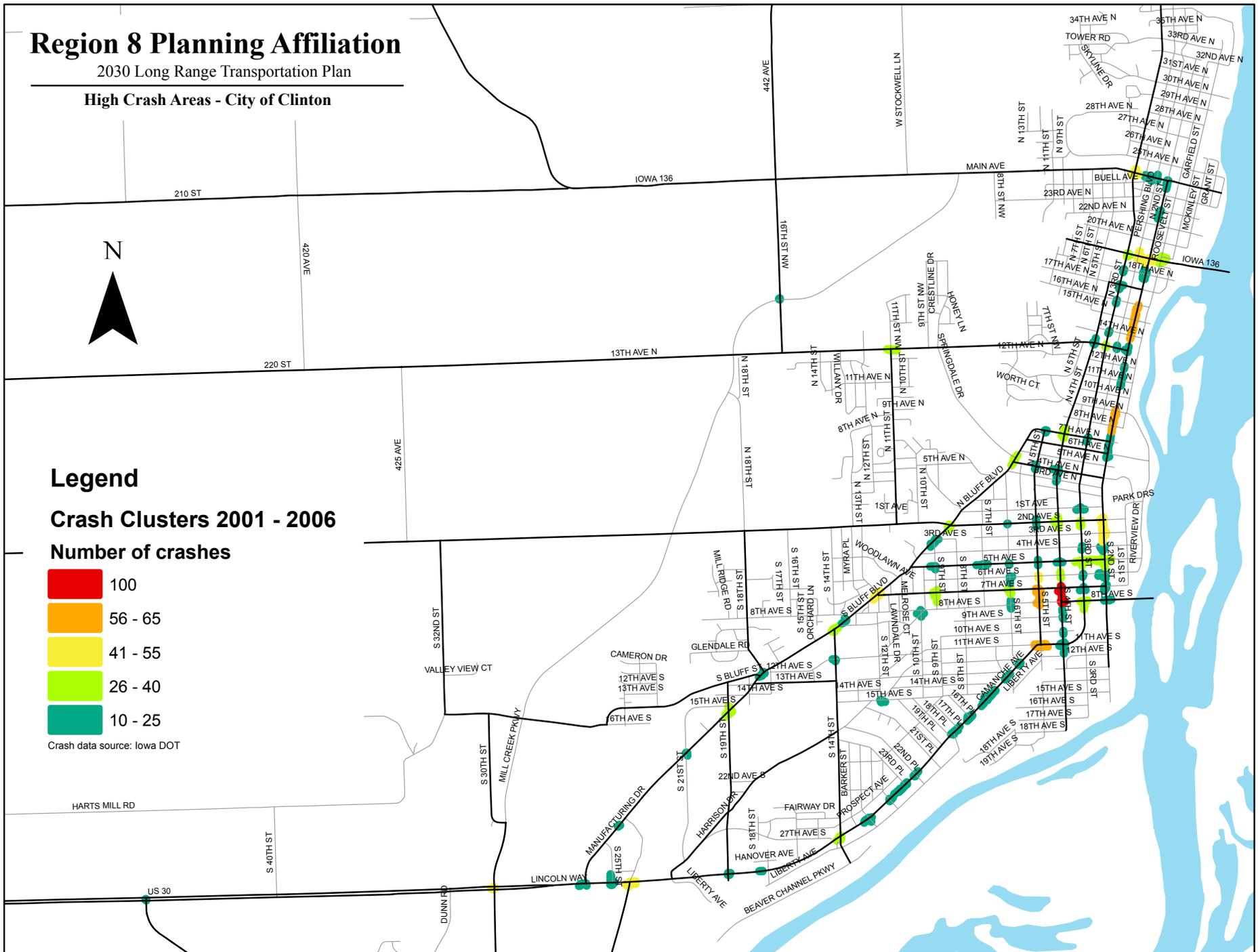
## Legend

### Crash Clusters 2001 - 2006

#### Number of crashes



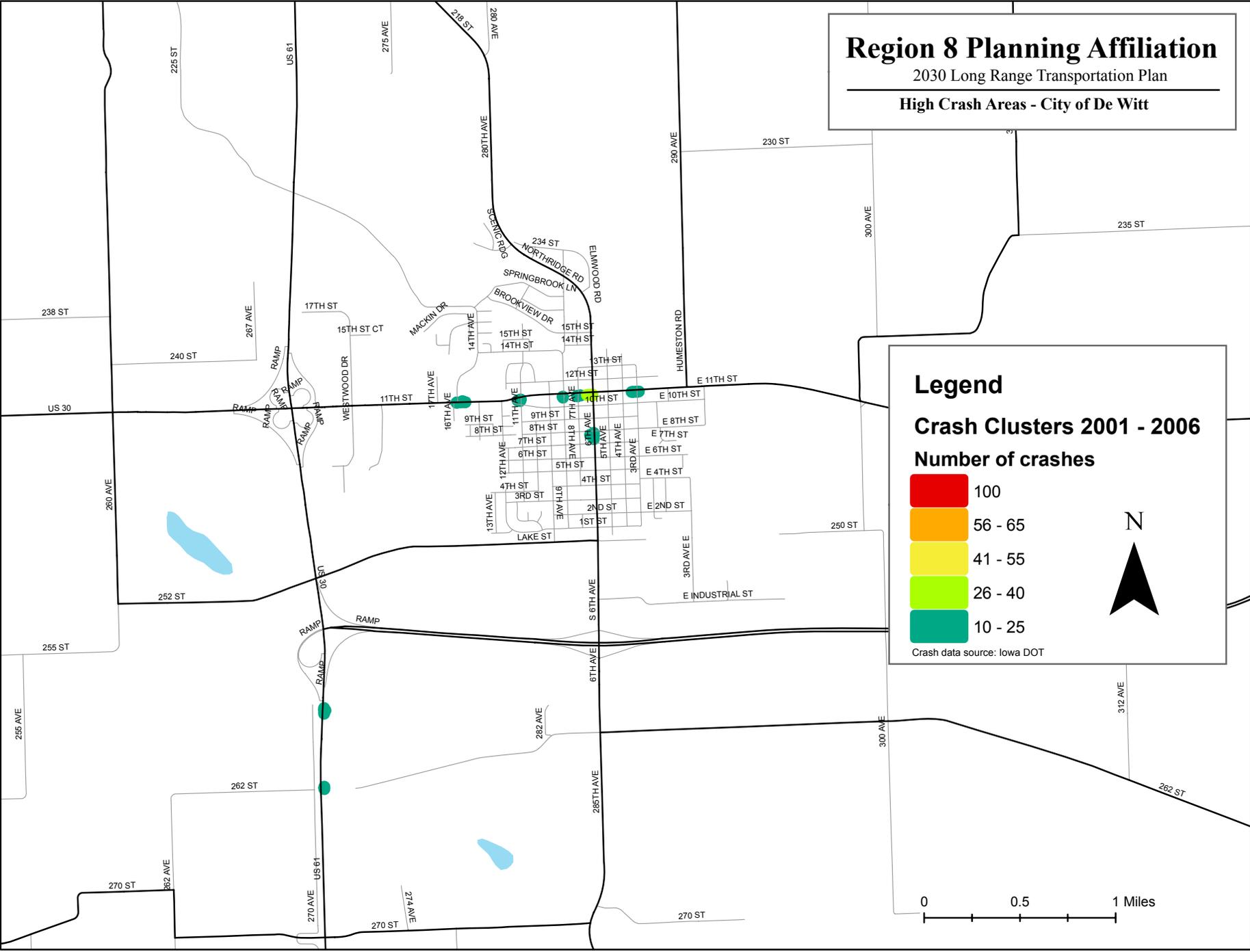
Crash data source: Iowa DOT



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

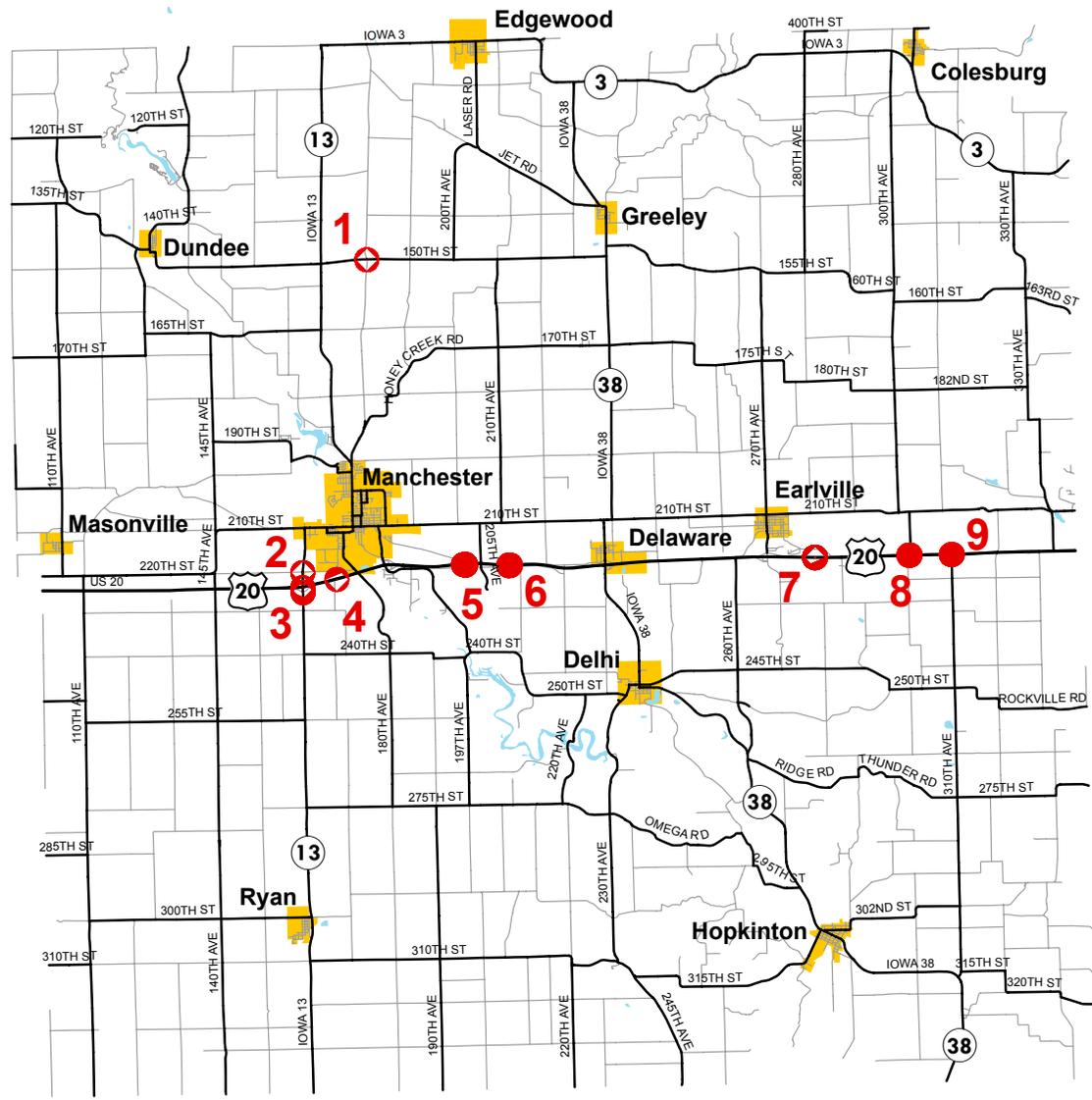
## High Crash Areas - City of De Witt



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

## High Crash Areas - Rural Delaware County

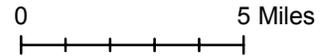


### Legend

#### Crash Clusters 2001 - 2006

● 6 or more crashes

Crash data source: Iowa DOT



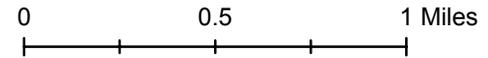
#### High Crash Locations

1. 150th St at 180th Ave
2. IA 13 at 220th St
3. IA 13 at US 20 interchange
4. US 20 1/2 mile east of IA 13
5. US 20 1/3 mile west of 205th St
6. US 20 1/2 mile east of 205th St
7. US 20 1 mile east of Earlville interchange
8. US 20 at 300th Ave
9. US 20 at 310th Ave

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

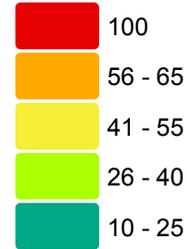
High Crash Areas - City of Manchester



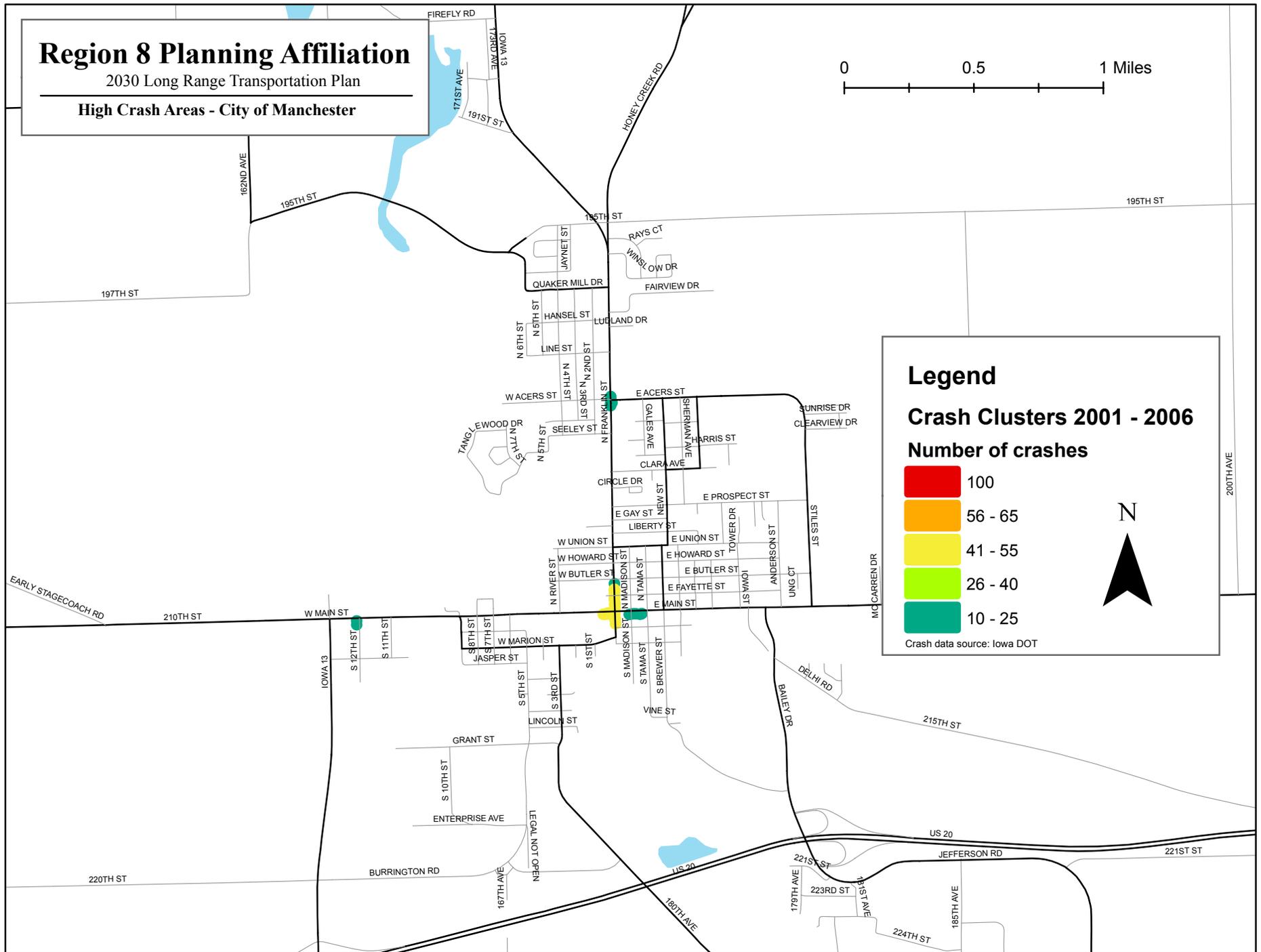
## Legend

### Crash Clusters 2001 - 2006

#### Number of crashes



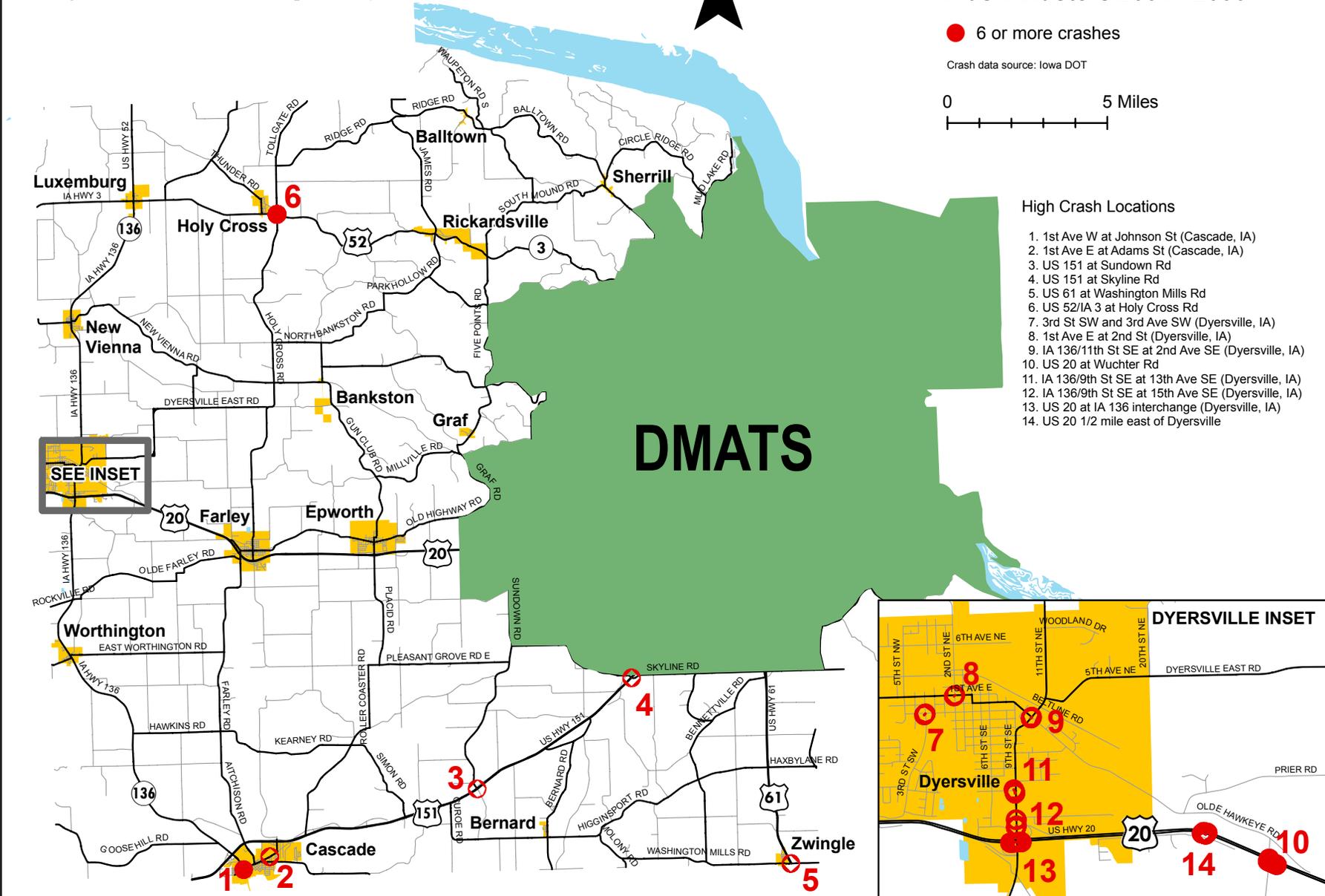
Crash data source: Iowa DOT



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

## High Crash Areas - Rural Dubuque County



# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

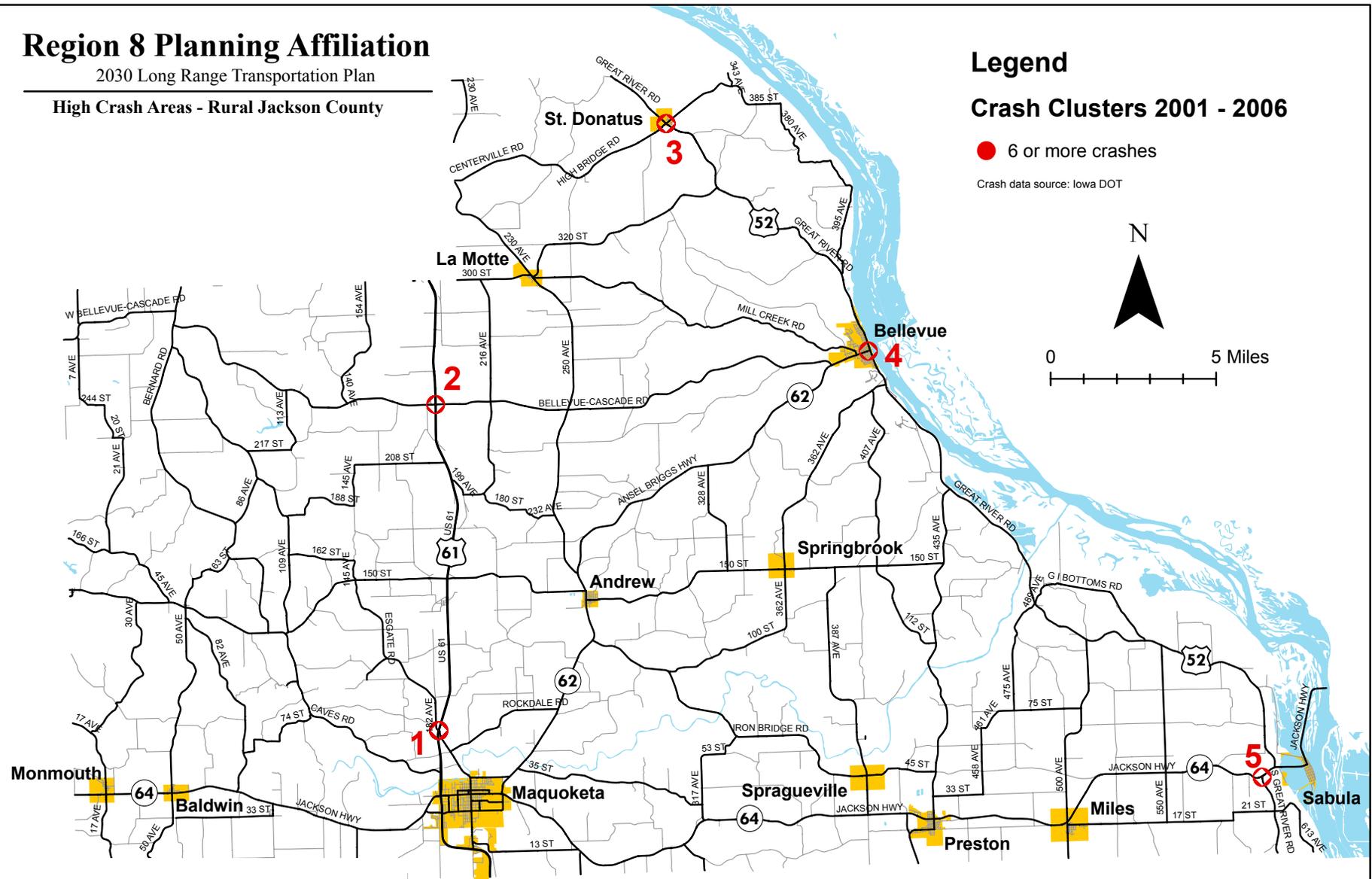
## High Crash Areas - Rural Jackson County

### Legend

#### Crash Clusters 2001 - 2006

● 6 or more crashes

Crash data source: Iowa DOT



### High Crash Locations

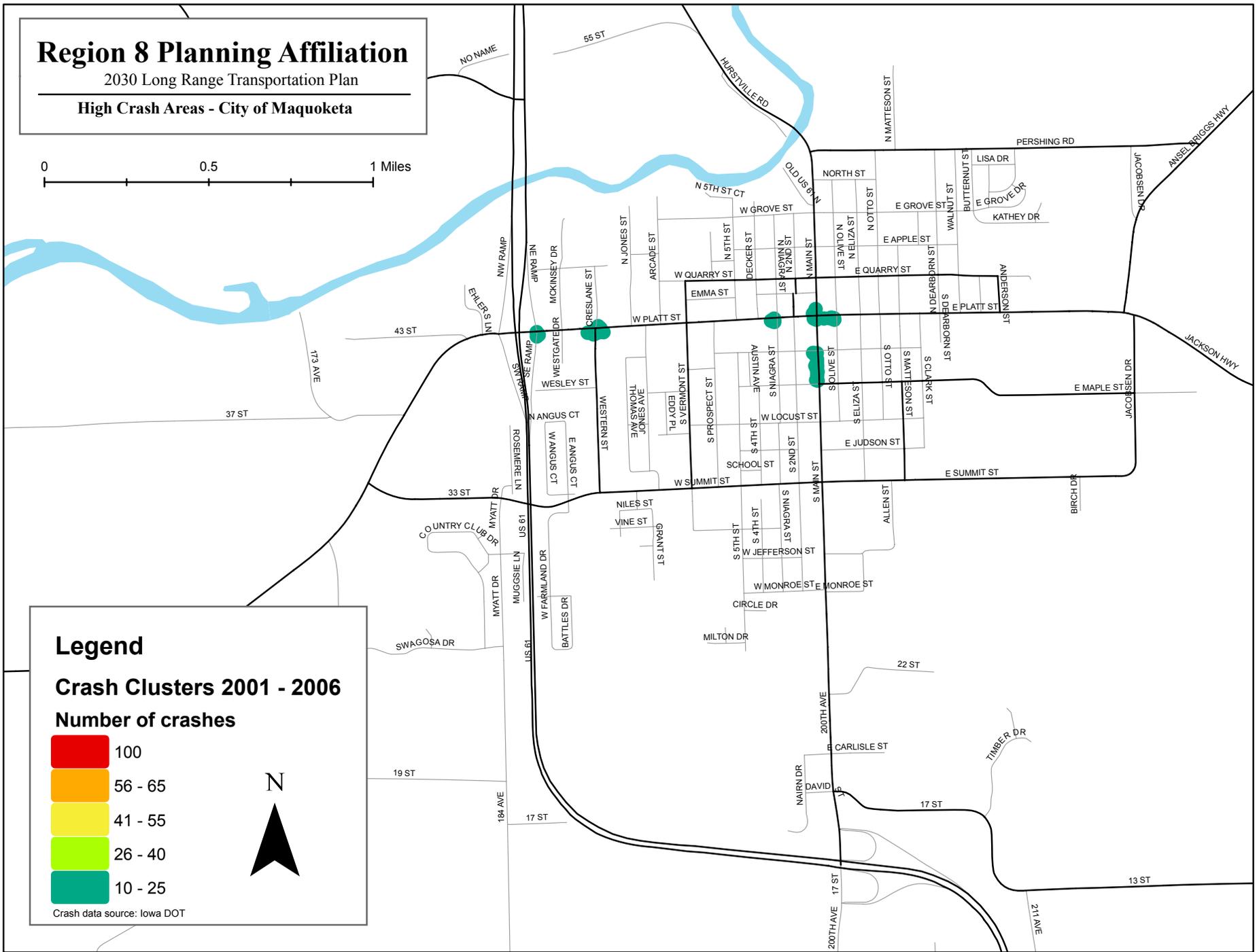
1. US 61 at Hurstville Rd
2. US 61 at Bellevue-Cascade Rd
3. US 52 at High Bridge Rd (St. Donatus, IA)
4. IA 62/State St at 2nd St (Bellevue, IA)
5. US 67 at IA 64

# Region 8 Planning Affiliation

2030 Long Range Transportation Plan

## High Crash Areas - City of Maquoketa

0 0.5 1 Miles



RPA 8 has following programs encouraging safety in the region.

### Safe Routes to School and Bike & Pedestrian Plans

RPA 8 has developed a plan to address the infrastructure and safety needs of bicyclists and pedestrians through the Tri-State Area Trail plan , City of Clinton Bike and Safety Plan, and the Western Dubuque school system, Jackson County, Delaware County, and Clinton County Safe Routes to School Plans. These plans will analyze the area's needs and include recommendations and action steps to enhance the safety of Children walking to school, bicyclists and pedestrians.

The outcomes of these plans are to come up with a list of infrastructure and Non infrastructure improvements. Examples of eligible projects are:

- Sidewalk improvements
- Traffic calming efforts
- Speed reduction initiatives
- Pedestrian and bicycle crossing improvements
- On street/off street bicycle and pedestrian facilities
- Secure bike parking
- Traffic diversion programs around schools
- Educational programs in and around school systems

### Multi Disciplinary Safety Teams

RPA 8 created Multi Disciplinary Safety Teams in Dubuque County and Clinton County. The purpose of these groups is to coordinate safety and security efforts in the respective counties in an efficient manner. These groups help in coordinating planning activities with daily needs in the area, and help to coordinate evacuation plans with future developments in the region.

### Security

Following September 11, 2001 and more recent events, security of our nation's transportation system has become an important issue. The focus of transportation officials has been to determine ways technology can assist in making transportation systems more secure. Although the immediate organizational response to security incidents and disasters will be the responsibility of security and public safety agencies, there is an important role that RPA 8 can play in promoting coordinated planning in anticipation of unexpected events or natural disasters. RPA 8 Can play an important role in improving the coordination and communication among the many different operating agencies in the region.

## Highway

The Strategic Highway Network system of public highways provides access, continuity, and reliability during emergency conditions. RPA 8 roadways are designated as major routes in the region for use in times of evacuations and other emergency situations. In RPA 8 there are seven major highways that connect to urban and rural areas within the region, and provide commerce routes into State of Illinois and Wisconsin. The system should be protected from any attacks as this is the life line for the region.

## Transit

The Regional Transit Authority (RTA), Clinton Municipal Transit Administration (MTA), and River bend Transit system provide transit services to RPA 8 residents. The following are guidelines for the safe and secure operation of transit services within RPA 8.

1. Review county evacuation plans, transit systems security plans, and transit contractor security plans to ensure compatibility and clarity regarding responsibilities and procedures in the event of an incident.
2. Review security measures against checklists developed by FTA and IPTA.
3. Create an action plan with county sheriffs and city police departments to request random patrols of transit systems headquarters, the depots, and “hot spots” on Friday and Saturday evenings.
4. Work with Safety teams and County EMS regarding security and emergency preparedness plans, and ensure that all are familiar with bus basics and are aware of the depot layouts.
5. Establish an ongoing means of communication with fire departments, police departments, and the county EMS to ensure sharing of crime and security information.
6. Defined transit systems role in non-transit emergencies.
7. Train all personnel in emergency response procedures and protocols, include annual refresher training.
8. Conduct at least one emergency exercise annually.

### Other security measures for the transit systems:

- Cameras on buses (accident activated)
- Newer buses to be equipped with full time cameras
- Buses equipped with mobile data terminals should be connected with GPS.
- Security cameras installed at transit offices and depots.
- Transit offices secured with 24 Hour guards and card swipe locks.

## Disaster Preparedness

Each county in RPA 8 has an emergency management office. The county office of emergency management develops and maintains disaster plans for the area. The office also works to prepare residents, businesses, industries, and governmental agencies for all types of hazards and emergencies.

Disaster plans for the area are developed in coordination with transportation, law enforcement, and operational agencies. These plans address issues such as evacuation, containment, and first-responder actions, and are grouped under the heading of the Emergency Management Plan.

Publicity steps are targeted to residents, businesses, and various agencies, and include information about evacuation and preparation. Individuals and families should be prepared for self-sufficiency for at least three days including providing for one's own shelter, first aid, food, water, and sanitation.

RPA will participate in emergency management planning by providing socio economic projections and long range improvement plans for the region. This will help emergency management officials to look to the future when making and implementing emergency management plans.



## Recommendations

1. Reduce the number of fatalities and decrease the economic impact from highway-related accidents
2. Encourage city and county implementation of bicycle and pedestrian improvements, services, and programs.
3. Encourage local government participation and continue RPA participation in bicycle and pedestrian safety education and outreach activities.
4. Continue use of incident management patrols, coordination with law enforcement agencies, and implementation of safety and mobility projects by the members to respond to safety trends and issues.
5. Address roadway operational issues on routes receiving significant freight movement, including roadway geometry, intersection configurations, and capacity.
6. Work closely with the IADOT Rail Division on planning studies and project development activities for rail safety projects, including rail grade separations at targeted locations.
7. Encourage transit systems to secure funding for full-time cameras on all buses.
8. Encourage transit systems to secure funding for automated vehicle locator system.
9. Encourage transit systems to contact the fire department and county emergency management regarding security and emergency preparedness plans, and ensure that all are familiar with bus basics and are aware of the depot layouts.
10. Suggest that transit systems develop and execute at least one emergency exercise annually.
11. Encourage cities and counties to continue to implement bicycle parking and encourage its installation by developers, business owners, schools, and other institutions.
12. Transportation and operational agencies should continue to coordinate with the county emergency and hazard mitigation plans
13. Transportation and operational agencies should continue to work closely with transit systems.

## Conclusion

Following September 11, 2001 and more recent events, security of our nation's transportation system has become an important issue. The focus of transportation officials has been to determine ways technology can assist in making transportation systems more secure. Although the immediate organizational response to security incidents and disasters will be the responsibility of security and public safety agencies, there is an important role that RPA 8 can play in promoting coordinated planning in anticipation of unexpected events or natural disasters. RPA 8 Can play an important role in improving the coordination and communication among the many different operating agencies in the region.

## Introduction:

The purpose of the financial element is to balance the transportation projects recommended for implementation with the resources of the community available to build and maintain transportation facilities and services. It is based on an analysis of past funding, expected funding, and projected needs.



## Revenue Sources for Roads, Bridges and Trails

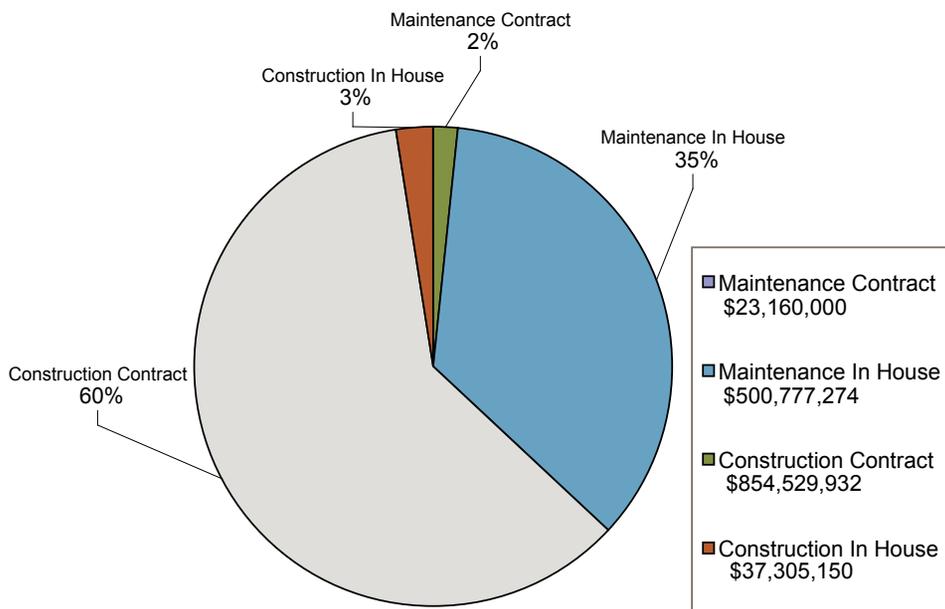
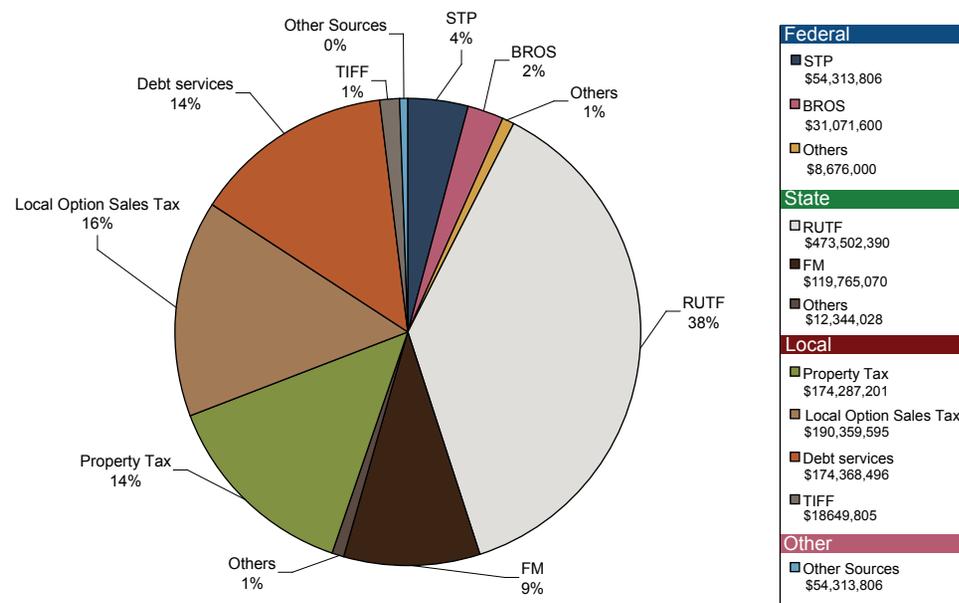
Several federal, state, and local funding sources provide revenues to fund the transportation system in the RPA 8 region. The funding sources that can be used for the projects within the region are addressed. The funding sources are broken down into funding sources that the RPA 8 members receive every year, and funding sources that are based on application process.

Funding sources for RPA 8 members					
Funding	Roads (Intersection Improvements, 3R etc)	Bridges	Trails (On Road & off Road)	Sources	Distribution
<b>Federal</b>					
Surface Transportation Program (STP)				RPA 8	Sub allocation
Bridge Replacement and Rehabilitation Program (BROS)				IADOT	Sub allocation
Transportation Enhancement Program (TE)				RPA 8	Application
Others					
Earmarks				D.C	Application
Federal Grants					
Federal Enhancement				IADOT	Application
Safe routes to School				IADOT	Application
National Scenic Byways					
American Scenic Byways					
Iowa Clean Air Attainment Program				IADOT	Application
<b>State</b>					
Road Use Tax Funds (RUTF)				IADOT	Sub allocation
Farm Market (FM)				IADOT	Sub allocation
Others					
IADOT Funds				IADOT	Application
State Grants					
State Scenic Byways				IADOT	Application
Traffic Safety				IADOT	Application
State Enhancement				IADOT	Application
Urban-State Traffic Engineering Program (U-STEP)					Application
County-State Traffic Engineering Program (C-STEP)					Application
<b>Local</b>					
Property Tax				City/County	
Local Option Sales Tax				City/County	
Debt services				City/County	
Tax Increment Finance Funding (TIFF)				City	

## Funding Projections

Revenues from FY 08 – FY 12 were used to project revenue for twenty years of planning period. Discretionary (or “spike”) funds, legislative earmarks, special appropriations, and similar revenue sources and funding streams are uncertain and unpredictable, and thus were not considered. Funding has been constant for period of twenty years and is used on both maintenance and construction projects

Overall RPA 8 will have \$ 1,263,578,000 in form of revenue from different sources of funding.



### Maintenance costs include:

- Existing road and trail projects that are in need of crack seal and patching
- Existing bridges that need maintenance
- Salaries & wages
- Snow removal budget

### Construction costs include:

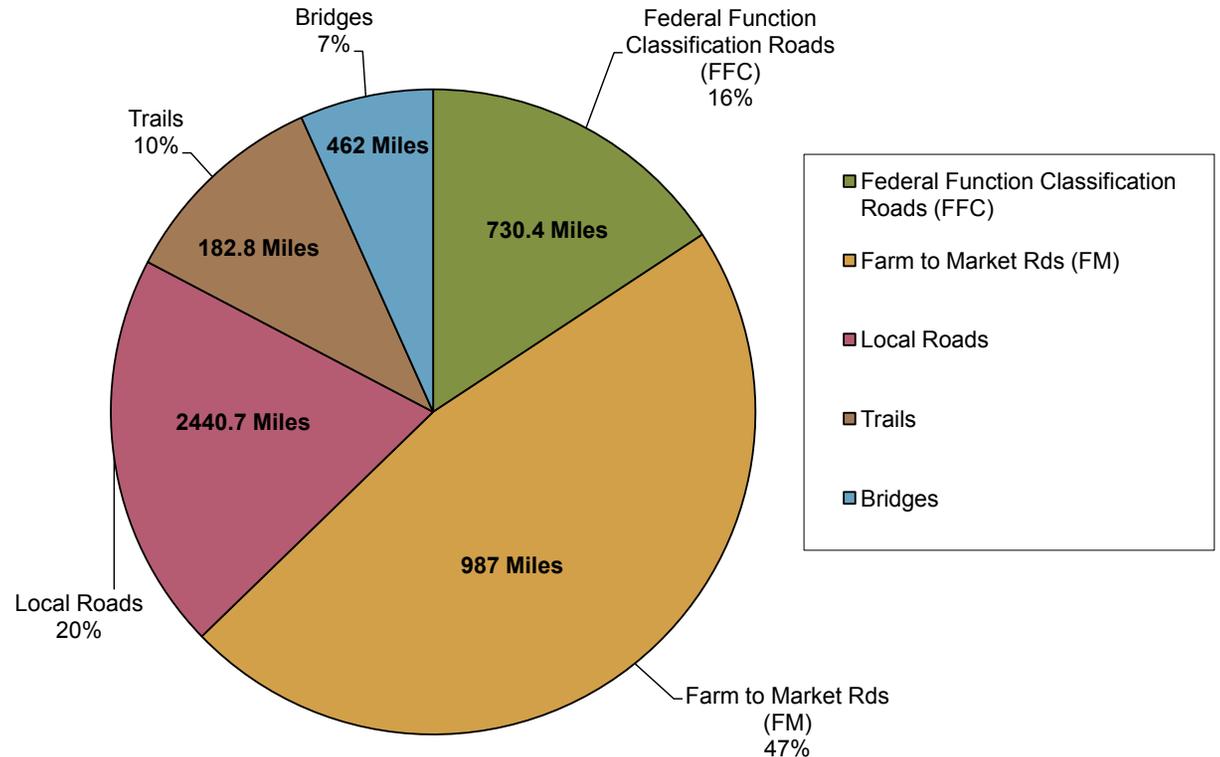
- Existing road and trail projects that are in need of resurfacing, reconstruction, or restoration
- Adding extra capacity to the existing road system
- Adding sidewalks to the existing road system
- New bridges
- New trails
- New roads

## Cost of maintaining the system

Maintenance costs are estimated based on the miles of road and number of bridges. Maintenance costs were estimated by assigning an average cost per mile of road and an average cost per bridge. The average cost to maintain one lane mile of county road over the road's 15 year life is \$225,000. The average costs to maintain a lane mile of city road is \$800,000 over the same period of time. The average cost of city and county bridge replacement is \$350,000. To estimate the total maintenance cost for the RPA over the next twenty years, average costs were multiplied by the number of lane miles or the number of bridges, and were inflated using 4% rate. Over all, RPA 8 members will need \$5,309,130,037 to maintain the existing system over the next twenty years. A breakdown of maintenance cost by road type is displayed in the chart below.

## Recommendations

1. Continue to monitor transportation funding needs
2. Identify shortfalls in funding sources and strategies to fill gaps
3. Seek alternatives and innovative ways to fund transportation improvements
4. Support efforts to increase federal and state revenue for transportation projects in the area
5. Continue to support local funding programs sufficient to obtain state and federal full-funding grant for planned projects
6. Continue to aggressively fund trail and bike-way investments



## Conclusion:

RPA 8 members will not be able to pay for maintenance of the existing system over the next twenty years. \$1.26 billion in projected revenue will fall approximately \$4.04 billion short of the projected \$5.30 billion in maintenance costs. Identifying resources to maintain the transportation system will be a primary challenge for RPA 8 over the next twenty years.

This chapter compiles the recommendations of each element of the 2031 RPA 8 LRTP. Implementation of these recommendations will be contingent upon a wide range of external factors, including but not limited to: actual future funding availability, socio-economic trends, emergent technologies, political decisions, and environmental impacts.

## Recommendations

### Roadway & Bridges

1. Apply context-sensitive design to reduce community impacts
2. Promote street connectivity.
3. Continue to partner with IA DOT to construct projects identified in the LRTP to meet current and future travel demand.
4. Continue to partner with IA DOT in the early development of environmental documents for projects identified in the LRTP.

### Bicycle and Pedestrian

1. Add wide paved shoulders existing roads to accommodate bicycles/pedestrians.
2. Expand bicycle route system to connect with surrounding counties,
3. Cooperate with local partners (counties, cities and surrounding towns) to expand the use of shared use paths throughout the system.

### Transit

1. Expand hours and days of service.
2. Maintain a consistent schedule.
3. Expand services within the City of Dubuque.
4. Expand services to the West End of Dubuque.
5. Add an extra Iowa City route.

6. Offer same day service or demand response in Jackson County.
7. Offer more affordable services (No fare).
8. Educate community on routes and market services.
9. Offer additional routes from Dyersville to Dubuque.
10. Coordinate services with Manchester health clinic's schedule.
11. Offer same day service or demand response in Dubuque County.
12. Expand services in Delaware County.
13. Market employer incentives for mass transit.
14. Post announcements on RTA website.
15. Expand routes within Jackson County.
16. Provide additional training to drivers on wheelchair tie downs.
17. Add a fixed route from the city of Manchester to Dundee.
18. Continuation funding of JARC.
19. Continuation funding of New Freedoms.
20. Expand service hours and days.
21. Provide defensive driver training.
22. Offer hand sanitizer to keep buses clean and sanitized.
23. Re-route Branch Line, Hill Line, and Camanche Avenue.
24. Offer a Clinton to Camanche Route.
25. Add an Ashford University Campus route.
26. Offer a Clinton to Fulton Route.
27. Extend South Clinton Line.
28. Add a Clinton to DeWitt route.

## Freight

1. Implement an Intermodal Management System.
2. Continue to expand the highway system to provide improved access and circulation around major transportation corridors.
3. Coordinate needed improvements to meet the advancements of the RPA 8 Freight hubs.
4. Closely coordinate area roadway planning with freight objectives, including access and mobility in the context of other community planning objectives.

## Environmental

1. Coordinate with resource agencies throughout the development of transportation plans and documents.
2. Minimize impacts to environmental resources and minority and low-income populations through systems-level.
3. Work with statewide partners to support and develop a statewide data system.

## Safety and Security

1. Reduce the number of fatalities and decrease the economic impact from highway-related accidents.
2. Encourage city and county implementation of bicycle and pedestrian improvements, services, and programs.
3. Encourage local government participation and continue RPA participation in bicycle and pedestrian safety education and outreach activities.
4. Continue use of incident management patrols, coordination with law enforcement agencies, and implementation of safety and mobility projects by the members to respond to safety trends and issues.
5. Address roadway operational issues on routes receiving significant freight movement, including roadway geometry, intersection configurations and capacity.
6. Work closely with the IADOT Rail Division on planning studies and project development activities for rail safety projects, including rail grade separations at targeted locations.

7. Encourage transit systems to secure funding for full-time cameras on all buses.
8. Encourage transit systems to secure funding for automated vehicle locator system.
9. Encourage transit systems to contact the Fire Department and County Emergency Management regarding security and emergency preparedness plans, and ensure that all are familiar with bus basics and are aware of the Depot's layout.
10. Suggest that transit systems develop and execute at least one emergency exercise annually.
11. Encourage cities and counties to continue to implement bicycle parking and encourage its installation by developers, business owners, schools, and other institutions.
12. Transportation and operational agencies should continue to coordinate with county emergency and hazard mitigation plans
13. Transportation and operational agencies should continue to work closely with transit systems.

### Financial

1. Continue to monitor transportation funding needs.
2. Identify shortfalls in funding sources and strategies to fill gaps.
3. Seek alternatives and innovative ways to fund transportation improvements.
4. Support efforts to increase federal and state revenue for transportation projects in the area.
5. Continue to support local funding programs sufficient to obtain state and federal full-funding grant for planned projects.
6. Continue to aggressively fund trail and bikeway investments.