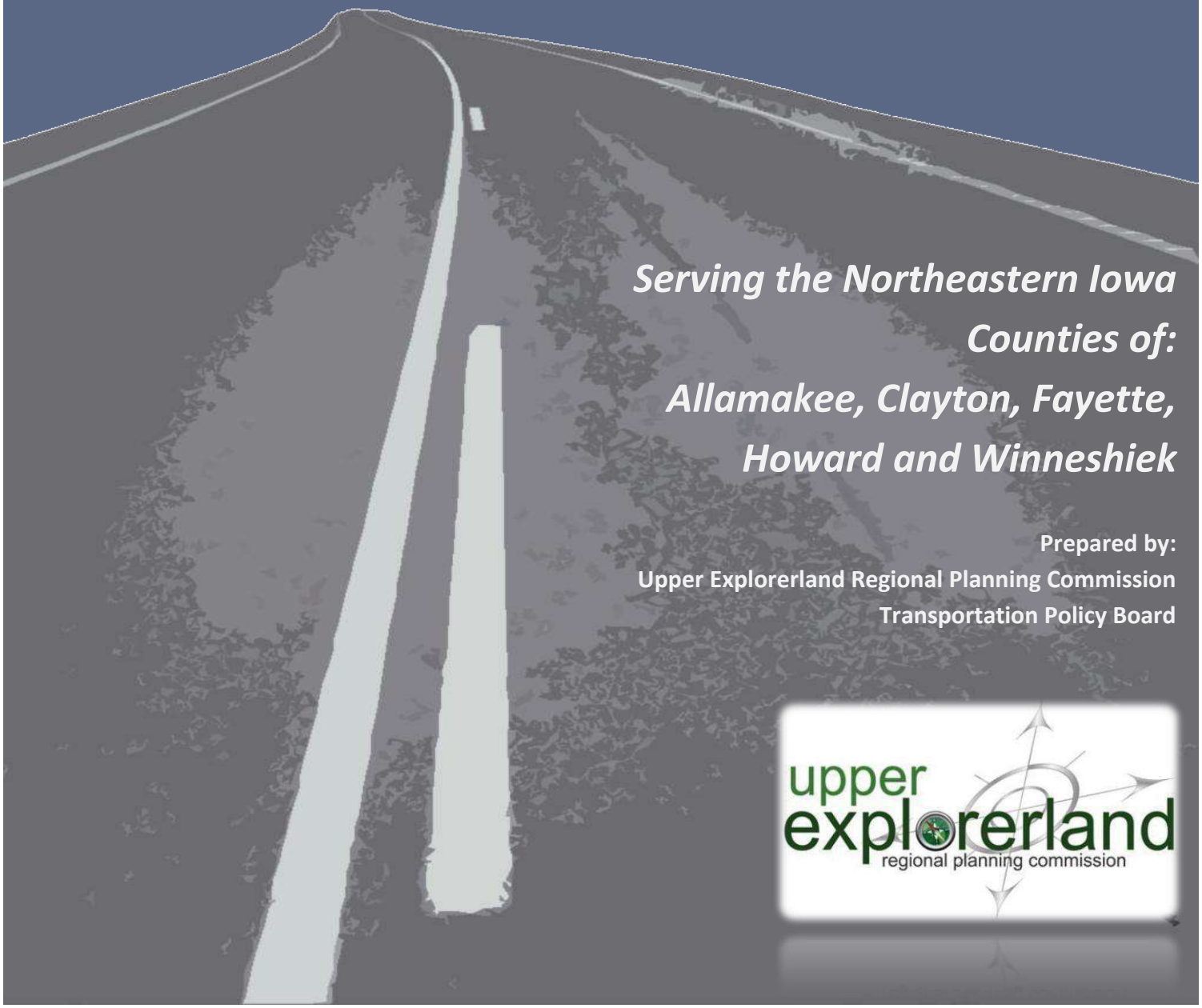
# RPA 1 Long Range Transportation Plan 2035



***Serving the Northeastern Iowa Counties of: Allamakee, Clayton, Fayette, Howard and Winneshiek***

**Prepared by:**
**Upper Explorerland Regional Planning Commission**
**Transportation Policy Board**

upper explorerland regional planning commission

# Upper Explorerland Regional Planning Commission
# Region 1 Regional Planning Affiliation
# Long Range Transportation Plan, 2035

* * * * * * * * * * *

Submitted to the Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010
March 21, 2014

By

Upper Explorerland Regional Planning Commission

Offices located at:

134 W. Greene Street, P.O. Box 219
Postville, Iowa 52162-0219

325 Washington Street, Suite A
Decorah, Iowa 52101

RPA-1 prepared this report with funding from the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration, and in part through local matching funds of the RPA member governments. These contents are the responsibility of RPA-1. The U.S. Government and its agencies assume no liability for the contents of this report or for the use of its contents. RPA-1 approved this document on March 20, 2014
Please call 563-382-6171 to obtain permission of use.

## RESOLUTION OF ADOPTION

UPPER EXPLORERLAND REGIONAL PLANNING COMMISSION
REGION 1 REGIONAL PLANNING AFFILIATION (RPA 1)
RESOLUTION 2014 - 01

RESOLUTION TO APPROVE
THE RPA 1 LONG RANGE TRANSPORTATION PLAN, 2035

WHEREAS, Upper Explorerland Regional Planning Commission (UERPC) has been designated as the regional planning agency (RPA 1) for the counties of Allamakee, Clayton, Fayette, Howard and Winneshiek for the purposes of transportation planning and programming, and

WHEREAS, the UERPC Transportation Policy Board has been established by resolution to serve as the governing body for RPA 1, and

WHEREAS, the Iowa Department of Transportation requires the RPA to develop a Long Range Transportation Plan that identifies the goals and objectives that will serve as guidance for prioritizing regional projects, and

WHEREAS, this plan will incorporate all relevant modes of transportation for the efficient movement of people and commerce, and

WHEREAS, the RPA 1 Policy Board has worked with regional agencies, governmental partners and transportation stakeholders to write an intermodal Long Range Transportation Plan that adheres to Iowa DOT Regional Long Range Transportation Plan Guidance, and

WHEREAS, the Transportation Policy Board, its committees and the public have had an opportunity to review and comment on the plan;

BE IT THEREFORE RESOLVED that the UERPC RPA 1 Transportation Policy Board hereby approves the RPA 1 Long Range Transportation Plan, 2035 for the five county region.

Passed and adopted this 20th day of March, 2014

Signed: Larry Schellhammer
Larry Schellhammer, Chair
Upper Explorerland RPA 1 Transportation Policy Board

Attest: Karla Organist
Karla Organist, Program Manager
Upper Explorerland Regional Planning Commission

## TABLE OF CONTENTS

Resolution of Adoption ..... 3
Table of Contents ..... 4
Table of Figures ..... 8
Table of Charts ..... 9
Table of Tables ..... 9
Acknowledgements ..... 10
RPA 1 Transportation Policy Board ..... 10
RPA 1 Transportation Technical Committee ..... 10
RPA 1 Transportation Enhancement Committee ..... 10
Others ..... 10
Introduction ..... 11
Long Range Planning ..... 11
The Regional Planning Affiliate ..... 11
Chapter One: Regional Planning Process and Stakeholders ..... 13
Chapter Two: Plan Goals and Objectives ..... 15
Roads and Bridges ..... 15
Active Transportation ..... 15
Public Transportation ..... 16
Aviation ..... 16
Rail Transportation ..... 16
Water Transportation ..... 17
Chapter Three: Regional Background and Trends ..... 18
Population ..... 18
Population Projections ..... 19
Population Density ..... 21
Diversity ..... 23
Income ..... 24
Employment ..... 27
Commuting ..... 29
Summary ..... 34
Chapter Four: Existing Regional Transportation System ..... 35

Roads and Bridges ..... 35
Roads ..... 35
Scenic Byways ..... 40
Roadway Safety ..... 41
Bridges ..... 43
Active Transportation ..... 45
Trails ..... 45
Safe Routes to School ..... 50
Public Transportation ..... 51
Designated Regional Transit Provider ..... 51
Other Providers ..... 53
Aviation ..... 53
Rail Transportation ..... 57
Water Transportation ..... 59
Barge Terminals ..... 60
Ferry ..... 61
Chapter Five: Planning and the Environment ..... 63
Inventory of Environmentally Sensitive Resources ..... 63
Wetlands ..... 63
Threatened and Endangered Species ..... 64
Protected Areas ..... 70
Public Areas ..... 73
Archaeological/Historical/Cultural Sites ..... 74
Impaired Waterways ..... 75
Outstanding Iowa Waterways (OIW) ..... 76
Coordination Activities ..... 77
Discussion of Mitigation Activities ..... 78
Summary ..... 80
Chapter Six: Future Regional Transportation Opportunities and Threats ..... 81
Chapter Seven: Key Regional Transportation Needs and Issues ..... 86
Roads and Bridges ..... 86
Roadway Embargoes ..... 86

Bridge Postings ..... 86
Transportation of Natural Resources ..... 86
Active Transportation ..... 86
Trail Development and Maintenance ..... 86
Community Walkability and Accessibility ..... 86
Public Transportation ..... 87
Accessibility and Affordability ..... 87
Aviation ..... 87
Facility Improvements ..... 87
Rail ..... 87
Safety and Access ..... 87
Water ..... 87
Access ..... 87
Chapter Eight: Alternatives to Meet Key Regional Needs and Issues ..... 88
Roads and Bridges ..... 88
Roadway Embargoes ..... 88
Bridge Postings ..... 88
Transportation of Natural Resources ..... 88
Active Transportation ..... 89
Trail Development and Maintenance ..... 89
Community Walkability and Accessibility ..... 89
Public Transportation ..... 89
Accessibility and Affordability ..... 89
Aviation ..... 90
Facility Improvements ..... 90
Rail ..... 90
Safety and Access ..... 90
Water ..... 90
Access ..... 90
Chapter Nine: Implementing the Action Plan (Years 1 – 5) ..... 91
Funding Sources ..... 91
Project Prioritization ..... 92

Surface Transportation Program (STP) ..... 92
Transportation Alternatives Program (TAP) ..... 93
Bridge Projects ..... 93
Proposed Projects ..... 94
Chapter Ten: Long Range Policy Plan (Years 6 – 20) ..... 104
Roads and Bridges ..... 104
Active Transportation ..... 104
Public Transportation ..... 105
Aviation ..... 105
Rail/Water Transportation ..... 105
Chapter Eleven: Funding the Plan ..... 106
Roads and Bridges ..... 106
Federal Funding ..... 106
State Funding ..... 107
Active Transportation ..... 108
Federal Funding ..... 108
State Funding ..... 109
Public Transportation ..... 109
Federal Funding ..... 109
State Funding ..... 109
Aviation ..... 110
Federal Funding ..... 110
State Funding ..... 110
Rail Transportation ..... 110
Federal Funding ..... 110
State Funding ..... 111
Water Transportation ..... 111
Chapter Twelve: Public Involvement Process and Results ..... 112
Chapter Thirteen: Future Regional Transportation Planning Activities ..... 115
References ..... 116
Appendix A: Public Meeting Presentation ..... 118

## TABLE OF FIGURES

Figure 1: Urban/Rural by Block Group, 2010 ..... 22
Figure 2: Percent of Non-white Population by Block Group, 2010 ..... 23
Figure 3: Median Income by Census Tract, 2011 ..... 25
Figure 4: Percent of Families in Poverty by Census Tract, 2011 ..... 27
Figure 5: Inflow/Outflow Job Counts, 2011 ..... 30
Figure 6: RPA 1 Job Locations, 2011 ..... 30
Figure 7: Allamakee County Worker Inflow ..... 32
Figure 8: Allamakee County Worker Outflow ..... 32
Figure 9: Clayton County Worker Inflow ..... 32
Figure 10: Clayton County Worker Outflow ..... 32
Figure 11: Fayette County Worker Inflow ..... 33
Figure 12: Fayette County Worker Outflow ..... 33
Figure 13: Howard County Worker Inflow ..... 33
Figure 14: Howard County Worker Outflow ..... 33
Figure 15: Winneshiek County Worker Inflow ..... 34
Figure 16: Winneshiek County Worker Outflow ..... 34
Figure 17: RPA 1 Federal Functional Classification Map ..... 38
Figure 18: RPA 1 Average Daily Traffic Counts ..... 39
Figure 19: PCI Ratings for State Highways in the Region ..... 40
Figure 20: Map of State and National Scenic Byways in RPA 1 ..... 41
Figure 21: RPA 1 Crash Locations, 2008-2012 ..... 43
Figure 22: Deficient Bridges in RPA 1 ..... 44
Figure 23: Regional "Backbone" Trail System Plan ..... 47
Figure 24: RPA 1 Existing and Proposed Trail Segments, Levels 1, 2 and 3 ..... 49
Figure 25: RPA 1 Public Airports and Heliports ..... 56
Figure 26: Map of RPA 1 Railroad Locations ..... 58
Figure 27: Map of Barge Terminal and Lock & Dam Locations ..... 61
Figure 28: Hydric Soils in RPA 1 (wetland or wetland potential) ..... 63
Figure 29: Map of Protected Areas by Manager/Owner ..... 72
Figure 30: Map of RPA 1 Public Areas ..... 73
Figure 31: Archaeological Sites and Historic Structures in RPA 1 ..... 74
Figure 32: Impaired Waterbodies, RPA 1 ..... 75
Figure 33: Iowa Distribution of MAP-21 STP Funds ..... 106
Figure 34: Iowa Distribution of MAP-21 TAP Funds ..... 108

## Table of Charts

Chart 1: Five-County Population Totals, 1900-2010 ..... 18
Chart 2: Population Loss/Gain, 2000-2010 ..... 18
Chart 3: Net Population Loss/Gain per Age Group, 2000-2010 ..... 19
Chart 4: Population Projections to 2040 ..... 21
Chart 5: Regional Population Change and Projections by Age Group, 1980-2040 ..... 21
Chart 6: Percent of Rural Population per County, 1980-2010 ..... 23
Chart 7: Median Household Income, 1990-2011 ..... 24
Chart 8: Per Capita Income, 1990-2011 ..... 24
Chart 9: RPA 1 Family Income Distribution, 2011 ..... 26
Chart 10: Annual Unemployment Rates, 2007-2013 ..... 28
Chart 11: County Annual Unemployment Rates, 2009-2013 ..... 28
Chart 12: Employing Industries in RPA 1, 2011 ..... 29
Chart 13: Occupations for RPA 1, 2011 ..... 29
Chart 14: Commuting Distance, RPA 1 Workers, 2011 ..... 31
Chart 15: Modes of Commuter Transportation ..... 31
Chart 16: All Crashes in RPA 1, 2003-2012 ..... 42
Chart 17: Cassville Ferry, Average Monthly Usage ..... 62
Chart 18: Regional Federal Funding Apportionments and Estimates, 2008 – 2017 ..... 82

## Table of Tables

Table 1: Population Projections, Simple Compound Growth, 2015-2040 ..... 20
Table 2: Woods & Poole Population Projections, 2015-2040 ..... 20
Table 3: Exponential Population Projections, 2015-2040 ..... 20
Table 4: Impact of Employment Transportation Costs on Families with Two Parents Working ..... 26
Table 5: RPA 1 Labor Force Characteristics ..... 27
Table 6: Federal Functional Classifications, RPA 1 ..... 36
Table 7: Crash Analysis, RPA 1, 2008-2012 ..... 42
Table 8: SRTS Rural Modeling ..... 50
Table 9: RPA 1 Airport Information ..... 54
Table 10: RPA 1 Airport Needs ..... 55
Table 11: RPA 1 Railway Information ..... 59
Table 12: Lock and Dam Data ..... 60
Table 13: RPA 1 Barge Terminal Information ..... 60
Table 14: Federal List of Threatened and Endangered Species in the RPA 1 Region ..... 64
Table 15: Iowa Endangered and Threatened Species within RPA 1 ..... 66
Table 16: Protected Areas, RPA 1 ..... 70
Table 17: Outstanding Iowa Waterways in RPA 1 ..... 76
Table 18: Future Transportation Opportunities and Threats to RPA 1 ..... 81

## ACKNOWLEDGEMENTS

### RPA 1 Transportation Policy Board

Don Arendt, City of Decorah
Larry Gibbs, Clayton County
Dennis Karlsbroten, Winneshiek County
Jan McGovern, Howard County
Larry Murphy, City of Oelwein
Vicki Rowland, Fayette County
Larry Schellhammer∗, Allamakee County

### RPA 1 Transportation Technical Committee

Lee Bjerke, Winneshiek County Engineer
Lindsay Erdman, City of Decorah Engineer
Al Miller, Fayette County Engineer
Rafe Koopman, Clayton County Engineer
Brian Ridenour*, Allamakee County Engineer
Nick Rissman, Howard County Engineer
Tom Stewart, City of Oelwein, Street Superintendent

### RPA 1 Transportation Enhancement Committee

Chad Bird, Winneshiek County
Robin Bostrom, Fayette County
Harold Chapman, Howard County
Tim Engelhardt, Clayton County
Elaine Govern, Howard County
Dean Hilgerson, Clayton County
Jim Janett, Allamakee County
Darla Kelchen, Clayton County
Darrel Knecht, Howard County
Rod Marlatt*, Fayette County
Laura Olson, Allamakee County
Bruce Palmborg, Allamakee County
Barb Schroeder, Winneshiek County
Durango Stegall, Fayette County
Randy Uhl, Winneshiek County
Lora Friest, Ex-officio, NE Iowa RC&D

### Others

Krista Rostad, IDOT District 2 Planner
Earl Henry, Northeast Iowa Community Action Transit
Karn Pankow, Northeast Iowa Community Action Transit
Transportation Advisory Group (TAG)
RPA 1 Airport Managers
RPA 1 City Administrators/Clerks


∗ Chairperson

# INTRODUCTION

## Long Range Planning

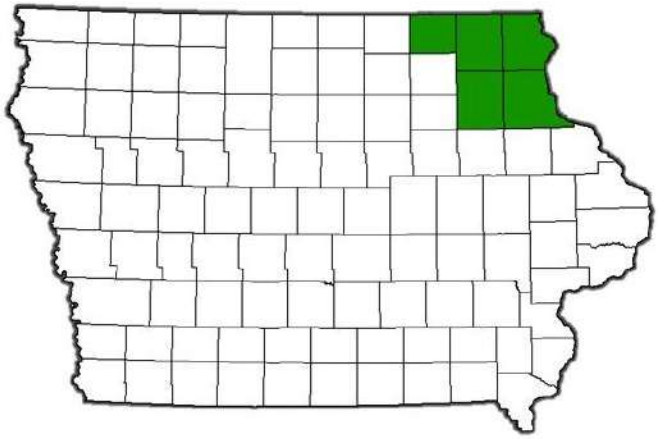
The purpose of the Long Range Transportation Plan is to encourage and promote the development of a regional transportation system that incorporates various modes of transportation to provide for the safe, efficient and economical movement of people and products. The Long Range Transportation Plan plays an important role in the region's vision for its future. The plan includes a description of the region's existing conditions; forecasts future population and potential growth corridors; identifies current and projected future transportation problems and needs; and identifies various transportation improvement strategies to address those needs. In addition, the plan lays out the short-term projects and long-range policy goals and discusses the funding necessary to implement the plan. The inventories and data included in this plan can be a useful source of information for regional leaders and elected officials, economic developers and transportation project developers.

In accordance with 2012 "Moving Ahead for Progress in the 21st Century Act" or "MAP-21," this plan follows the scope of planning process laid out for statewide and nonmetropolitan transportation planning. The Act indicates that state planning should consider and implement projects, strategies and services that will:

- support the economic vitality of the United States, the States, nonmetropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
- increase the safety of the transportation system for motorized and non-motorized users;
- increase the security of the transportation system for motorized and non-motorized users;
- increase the accessibility and mobility of people and freight;
- protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;
- promote efficient system management and operation; and
- emphasize the preservation of the existing transportation system

## The Regional Planning Affiliate

Upper Explorerland Regional Planning Commission (UERPC) serves as the Regional Planning Affiliate (RPA 1) for the counties of Allamakee, Clayton, Fayette, Howard and Winneshiek in Northeast Iowa. The Upper Explorerland Regional Planning Commission (UERPC) Transportation Policy Board serves as the governing body for RPA 1 and is committed to the implementation of the Long Range Transportation Plan.



The five counties in RPA 1 cover an area of 3,313 square miles. There are 53 incorporated communities within the region, with only four cities having populations over 2,500 and eight other communities with populations over 1000. The U.S. Census Bureau counts the total 2010 population for the five counties as 83,961 persons, a decrease of 3.05% since the 2000 census. On average, there are just over 25 persons per square mile, which is less than half the statewide average of 54.5. As a result, residents across the region spend a considerable amount of time traveling for employment, healthcare and shopping. Because of the small and scattered nature of the region's cities and population, a safe and efficient rural transportation system is essential to travel-dependent residents in Region 1.

The RPA 1 **Transportation Policy Board** is comprised of representation from each of the five counties and the two communities within the region with populations over 5000, Decorah and Oelwein. Supporting the Policy Board are committees whose memberships represent expertise and/or interest in the focus of each committee. The **Technical Committee**, which consists of the five county engineers and street department representatives from Decorah and Oelwein, serves as the Policy Board's technical advisory group. The Technical Committee initiates, reviews and recommends regional transportation programming to the Policy Board. The **Enhancement Committee** consists of the five county conservation directors and other regional stakeholders with interest in enhancement activities. The committee meets to review and recommend projects for transportation alternatives funding and also works to build a sustainable and feasible trail system to provide non-vehicular travel options. The **Public Transportation Advisory Group** is charged with building an improved passenger transportation system for regional residents who do not have access to personal transportation options. This group consists of local transit representatives, private transportation providers, human service providers and others concerned about transportation for non-drivers. A new committee created as an offshoot of the PTAG, the **Job Access Mobility Institute Team** has been formed to work on workforce transportation in the region. This group is focused on increasing Transit ridership and developing commuter routes with improved services and amenities.

## CHAPTER ONE: REGIONAL PLANNING PROCESS AND STAKEHOLDERS

The RPA 1 Long Range Transportation Plan 2035 is a full update to the region's "*20 Year Transportation Development Plan 2000-2020*" completed in 1999. The planning process was completed through the following steps:

1. Formation of sub-committees from the Technical and Enhancement Committees to act as steering team for the planning process
2. Data and information collection (demographic, economic, social, historical, environmental) to guide informed decision-making and identify key trends
3. Inventory and SWOT (Strengths, Weaknesses, Opportunities, Threats) Analysis of regional transportation system
4. Review of existing plans for consistency (city and county comprehensive plans, hazard mitigation plans, airport plans, transportation plans…)
5. Identification of the region's critical issues
6. Development of strategies to address issues
7. Proposals for short and long-term projects and policies
8. Public engagement and feedback
9. Final document approval

Stakeholders were engaged at each step:

1. Steering Team: Technical committee members brought engineering expertise and Enhancement Committee members brought conservation, recreation and economic development expertise to the process
2. Data and information collection: Required consultation with national, state, regional and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation within the 5-county area
3. Inventory and SWOT Analysis: Required consultation with stakeholders from all modes of transportation:
    - Engineers
    - Airport managers
    - Terminal operators
    - Ferry commission
    - City and county administrations
    - Transit and other public transportation providers
    - Scenic Byways groups and administrators
    - Safe Routes to School Community Coalitions and Liaison
    - Conservation directors and trail committees
    - Watershed groups
4. Existing plans: Plan developers and owners (cities, counties and special interest groups)

5. Critical Issues: Stakeholders from all transportation modes, economic development and human service agencies
6. Strategy Development: All RPA 1 transportation committees
7. Project Proposals: All RPA 1 transportation committees
8. Public engagement: All RPA 1 residents
9. Final approval: RPA 1 Policy Board

Following final approval, the Long Range Transportation Plan will guide the region's implementation of the goals and objectives outlined in the plan. The plan is a living document and updates and changes may be required as trends and existing conditions change. The plan will continue to be available to the public as a resource and for review online at www.uerpc.org/transportation.html.

## CHAPTER TWO: PLAN GOALS AND OBJECTIVES

This chapter will cover the region's long range transportation goals and objectives. Goals are broad statements of desired outcomes for transportation in the five-county area. Objectives are measurable achievements intended to guide the region toward reaching its goals. RPA 1 goals and objectives are broken into six system categories: roads and bridges, transportation alternatives, public transportation, aviation, rail and water. These systems often rely on their intermodal connectivity and easily accessible transfer points or linkages. Facilities such as barge terminals, park and ride areas, trailheads and rail load facilities are included in system sections as applicable.

### Roads and Bridges

**Goal:**
Roads and bridges are in good condition and can support the movement of people and goods safely throughout the region.

*Objectives:*
1. Prioritize projects on roads and bridges where condition ratings are poor or very poor
2. As funding allows, replace 5% of county roads every year to increase the load carrying capacity of the roadways
3. As funding allows, replace 2% of county bridges every year to increase the load carrying capacity of the bridges
4. Lobby for increased road funding

**Goal:**
Roads and bridges bring economic value to the region by providing transportation linkages for the transport of agricultural, commercial and industrial goods, as well as tourists and travelers.

*Objectives:*
1. Consider and implement methods to address the added expense of heavy load generating industries
2. Support zoning proposals that constrain the location of new rural development by weighing the cost of service needs against the increase in tax revenue generated
3. Maintain and improve access roads to barge terminals
4. Maintain and improve access roads to tourist and recreational destinations
5. Consider efforts to improve and maintain Scenic Byway roadways

### Active Transportation

**Goal:**
The built environment provides safe and well-connected access for bicycles, pedestrians and other non-motorized forms of transportation.

*Objectives:*
1. Prioritize projects that increase the connectivity of the bicycle and pedestrian transportation system
2. Support initiatives that improve safety for pedestrians and bicyclists
3. Lobby for increased funding

**Goal:**
The region's economy is enhanced through tourism and a growing population as the trail system increases the quality of life in the area.

*Objectives:*
1. Develop a strong maintenance plan for the existing system
2. Seek ways to promote the region and its assets (capitalize on Scenic Byways, natural resources/public spaces and connectivity beyond the region)

## Public Transportation

**Goal:**
Public transportation is available and affordable to all residents in the region, regardless of their location, income or ability.

*Objectives:*
1. Improve image of existing public transit system, change public perceptions about eligible users
2. As feasible, add commuter routes to existing door-to-door and in-town services
3. Provide access to information detailing all options for public transportation

## Aviation

**Goal:**
The region's airports support the aviation needs of business and industry, while providing safe facilities for recreational use.

*Objectives:*
1. Improve or construct adequate aprons, taxiways and runways
2. Update Airport Layout plans as needed
3. Improve or construct hangars, terminals and other buildings
4. Acquire or improve snow removal equipment

## Rail Transportation

**Goal:**
Railroads through the region support local economic activity while ensuring the safety of residents in the communities with railroads, and travelers at all crossings.

*Objectives:*
1. Maintain or improve railroad crossing signage or signals
2. Work with the railroad to improve safety
3. Support the development of rail spurs for economic development
4. Support the closure of redundant crossings

## Water Transportation

**Goal:**
The region's economy is enhanced by access to water transportation options.

*Objectives:*
1. Maintain or improve access roadways to water transportation ports
2. Support the development of new access points that provide economic development for the region

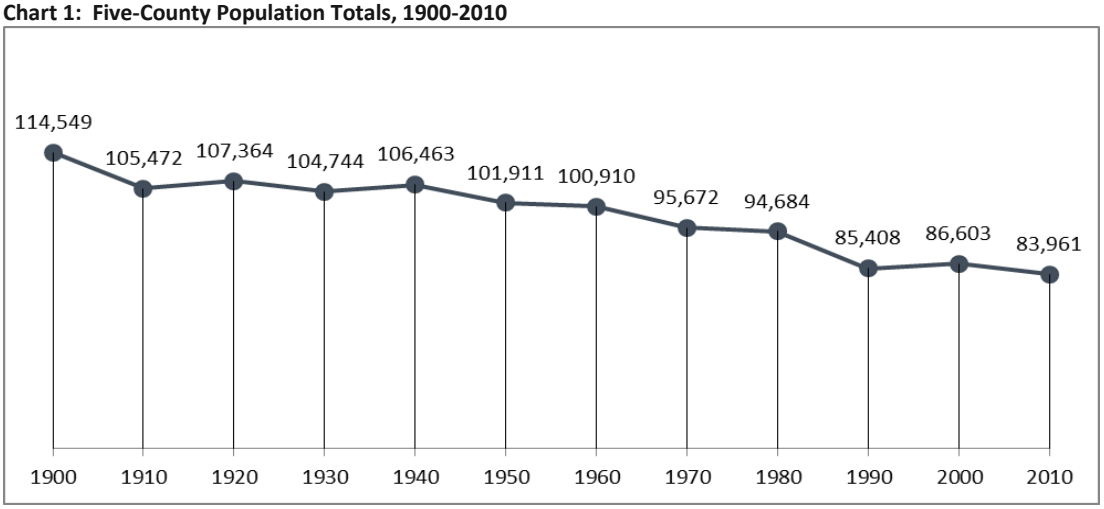
## CHAPTER THREE: REGIONAL BACKGROUND AND TRENDS

The information presented in this chapter illustrates the demographic characteristics and economic factors within the five-county area.

### Population

The total population of the five-county region is 83,961 as of the 2010 Census. This was a decline of over 3% from the 2000 Census and a long-term decline of over 26% since the turn of the last century. Chart 1 illustrates this decline over time.

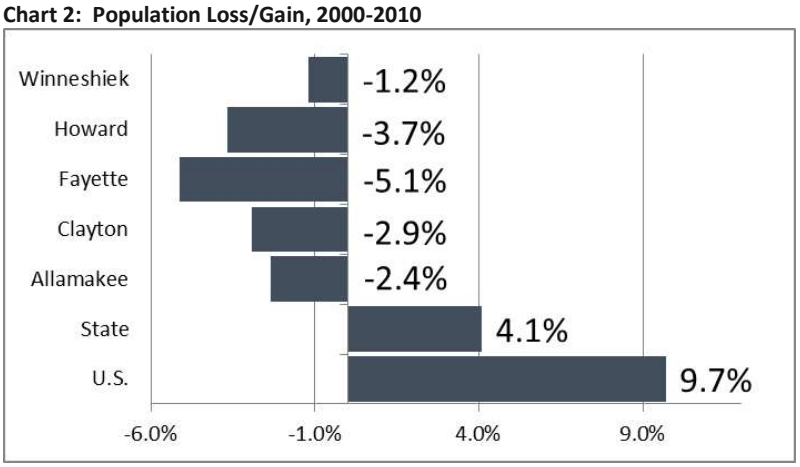
**Chart 1: Five-County Population Totals, 1900-2010**




Source: State Data Center of Iowa, n.d. (Decennial Census); U.S. Census Bureau, 2012 (2010 Census)

Population loss occurred in each of the five counties over the last decade, with some experiencing more loss than others. Chart 2 breaks out each county in comparison to the change in population at the state and national level. This is significant for the region as much of the transportation funding is allocated by population. Not only are the five counties losing population in their own right, but with the growing state population, the region's percentage of overall population is shrinking significantly.

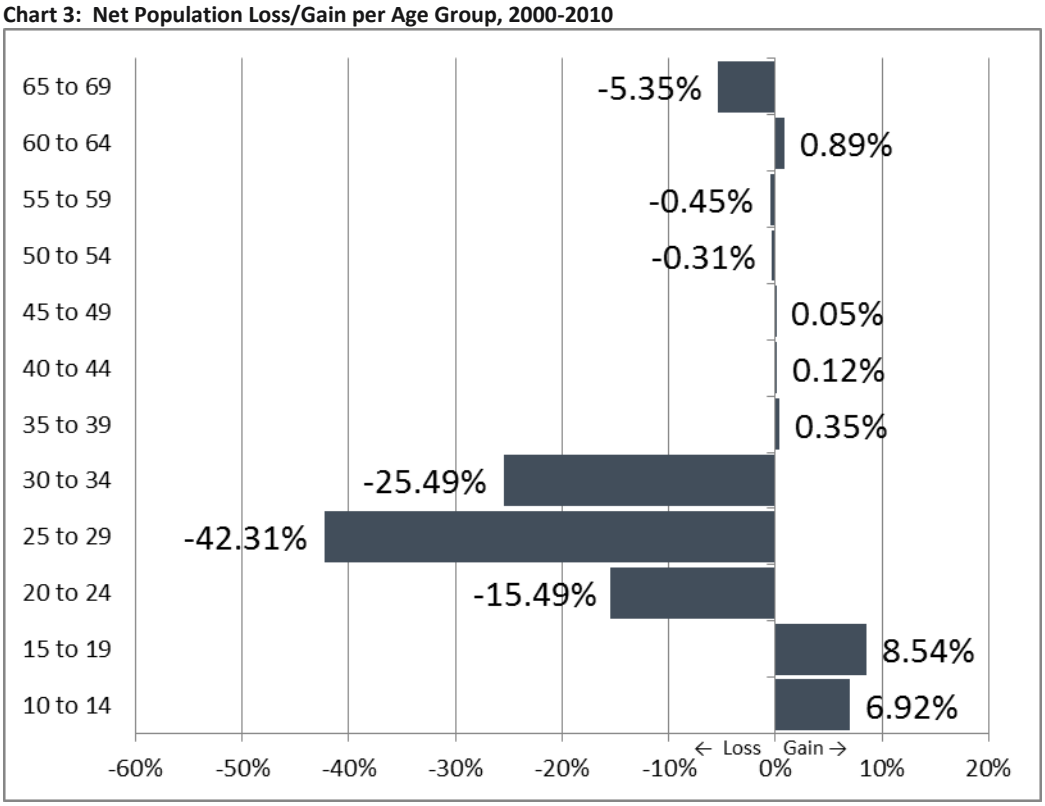
**Chart 2: Population Loss/Gain, 2000-2010**




Source: State Data Center of Iowa, n.d. (Decennial Census); U.S. Census Bureau, 2012 (2010 Census)

Chart 3 demonstrates how much each five year incremental age group is shrinking or growing due to a net migration. In other words, when compared to expected population numbers from the previous census, one can see the age groups in which the region is gaining or losing population due to a migration in or out of the region. The greatest loss of population is in the age groups from 20 to 34, losing a net of over 5,400 individuals within the decade. The region notes some gains in the 10 to 19 year age groups, but not enough to overcome the net losses in later years. There are many reasons for population migration including jobs, retirement, family and medical needs.

**Chart 3: Net Population Loss/Gain per Age Group, 2000-2010**




Source: U.S. Census Bureau, 2012 (2000 and 2010 Census)

## Population Projections

Future population can be predicted through a number of methods. This plan will look at three possible population projections. The first is calculated using a simple compound growth rate calculation and does not consider birth, death or net migration rates. As a region, the population has noted an annualized growth rate of -.08% over the last 20 years. The 20-year calculation is used to project population for the region as it is the period of growth rate with the smallest deviation from zero growth. Table 1 projects the region's population out to 2040 using the following calculation, where $\mathrm{i}$ is the growth rate and $n$ is the number of periods:

$$Future\ Population = Present\ Population \times (1 + \mathrm{i})^n$$

**Table 1: Population Projections, Simple Compound Growth, 2015-2040**

| Year | Population | | Year | Population |
|---|---|---|---|---|
| 2015 | 83,606 | | 2030 | 82,550 |
| 2020 | 83,252 | | 2035 | 82,201 |
| 2025 | 82,900 | | 2040 | 81,853 |

Calculations/Source: UERPC, 2013

The second method is taken from Woods & Poole calculations benchmarked to the 2000 Census. Woods & Poole calculations do take into account migration and several other variables, but were calculated prior to the 2010 Census. Table 2 shows the Woods & Poole population projections from 2009.

**Table 2: Woods & Poole Population Projections, 2015-2040**

| Year | Population | | Year | Population |
|---|---|---|---|---|
| 2015 | 83,121 | | 2030 | 84,581 |
| 2020 | 83,549 | | 2035 | 85,123 |
| 2025 | 84,055 | | 2040 | 85,688 |

Source: State Data Center of Iowa, n.d. (Woods & Poole, 2009)

The third method predicts population by calculating exponential growth based on the population data since 1900. Table 3 illustrates the results of this method. The results are calculated by fitting an exponential trend line to the known population data for each decennial period. The following equation was identified to project population exponentially where $e$ is a constant 2.71828182845904, the base of the natural logarithm, and $x$ is the number of the year (where 1900 is year 1):

$$Future\ Population = 117178 \times e^{-0.027x}$$

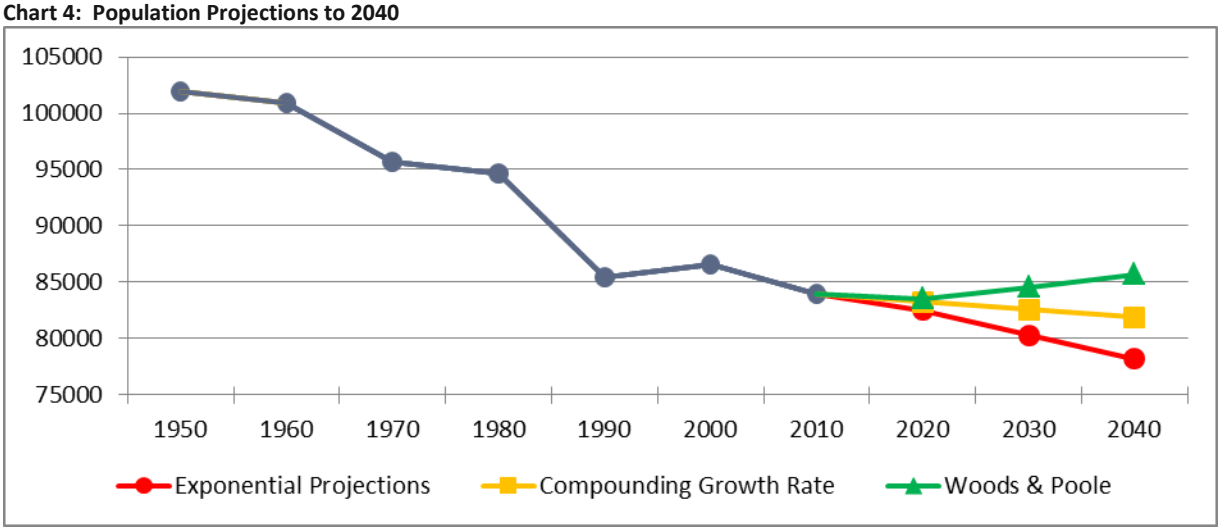
**Table 3: Exponential Population Projections, 2015-2040**

| Year | Population | | Year | Population |
|---|---|---|---|---|
| 2015 | 83,613 | | 2030 | 80,294 |
| 2020 | 82,491 | | 2035 | 79,217 |
| 2025 | 81,385 | | 2040 | 78,155 |

Calculations/Source: UERPC, 2013

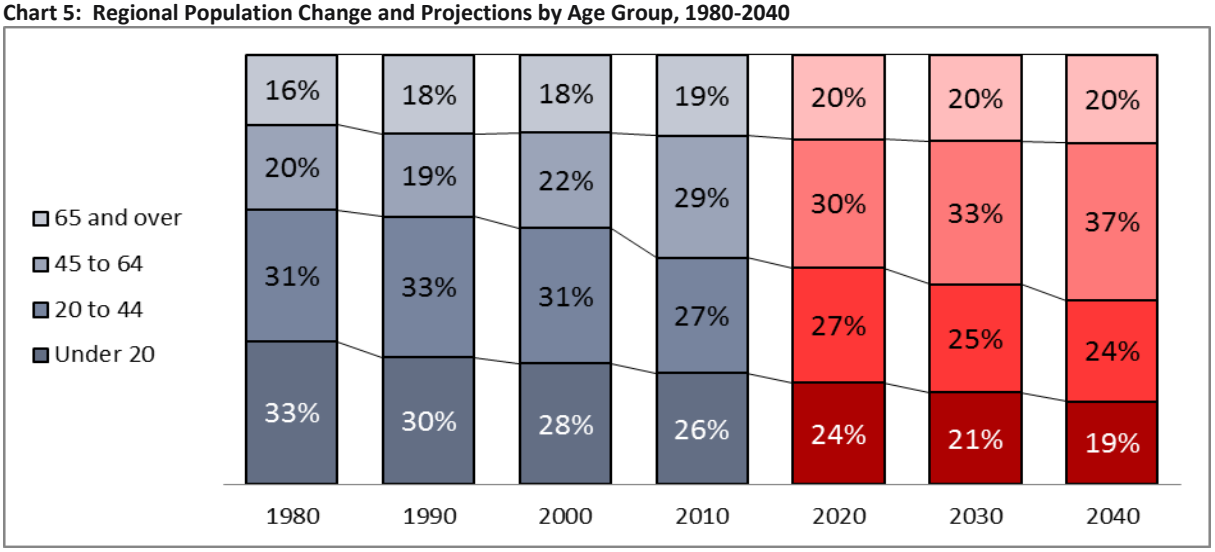
Chart 4 illustrates each of these projections from the actual population counts since 1950. It is important to note that these projections are dependent on many different variables and can in no way be considered exact counts. Only the Woods & Poole projection indicates population growth, but these projections were created prior to the 2010 Census, at which time the five-county region registered a loss in population. The compounding growth rate method comes closest to the average of all three, while the exponential calculations present the most conservative estimate for future population numbers if being used to calculate future funding distribution by population.

**Chart 4: Population Projections to 2040**




The overall decline expected in population over the next 30 years will impact various age groups differently. Chart 5 illustrates the projected change in percent of population by age group calculated exponentially from 1980. These projections indicate that the population, while shrinking overall, is also expected to grow older, with approximately 57% of the population projected to be over the age of 44 by 2040. The transportation needs of older populations may require adjustments to the current infrastructure. This may include larger, brighter signage, more visible pavement markings and additional public transportation options. The availability of sufficient and affordable transportation allows older people to live more independently in their communities and can also help to prevent loneliness and social isolation within this vulnerable population.

**Chart 5: Regional Population Change and Projections by Age Group, 1980-2040**

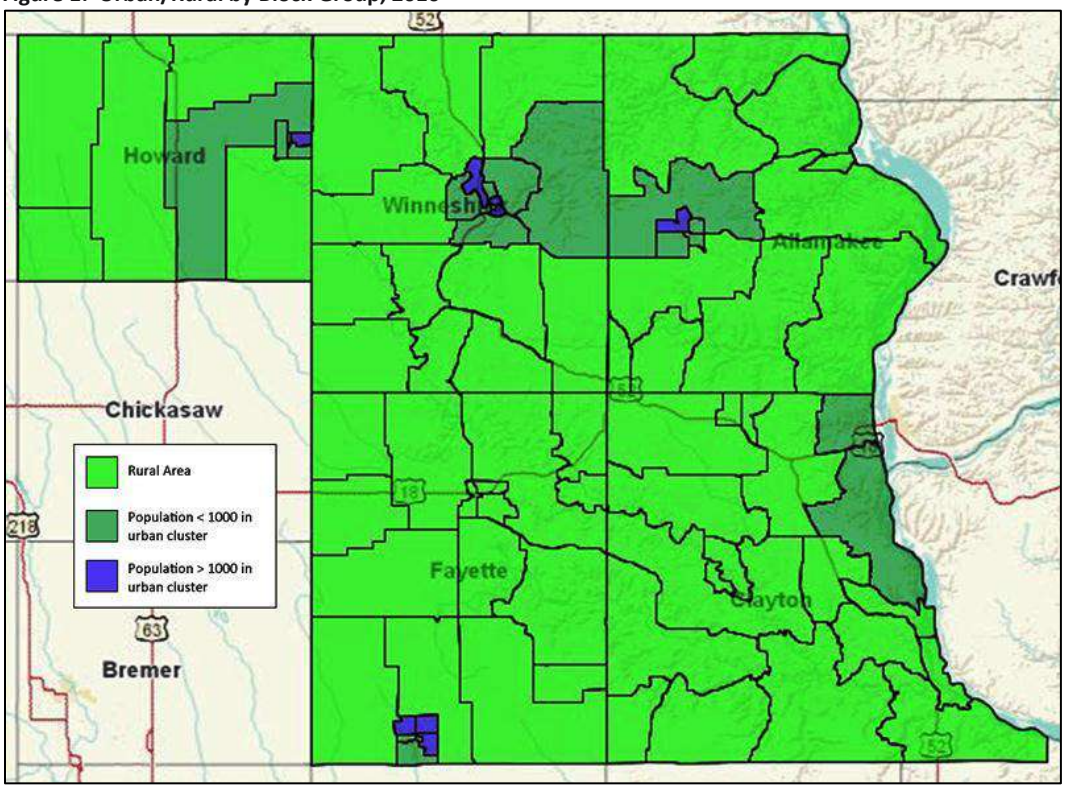



## Population Density

As of the 2010 Census, there were just over 25 persons per square mile, which is less than half the statewide average of 54.5. The Census defines a densely settled territory that has at least 2,500 people but fewer than 50,000 as an urban cluster. At the 2010 Census, 27% of the region's population resided in an urban cluster. Figure 1 illustrates the region's urban clusters by block group. Block groups with a

population over 1000 in an urban cluster are shaded in purple, populations less than 1000 in an urban cluster are shaded in dark green and rural only block groups are shaded light green. With such a spread-out population, transportation costs, whether for personal vehicles or public transportation, are an increasing burden for the region.

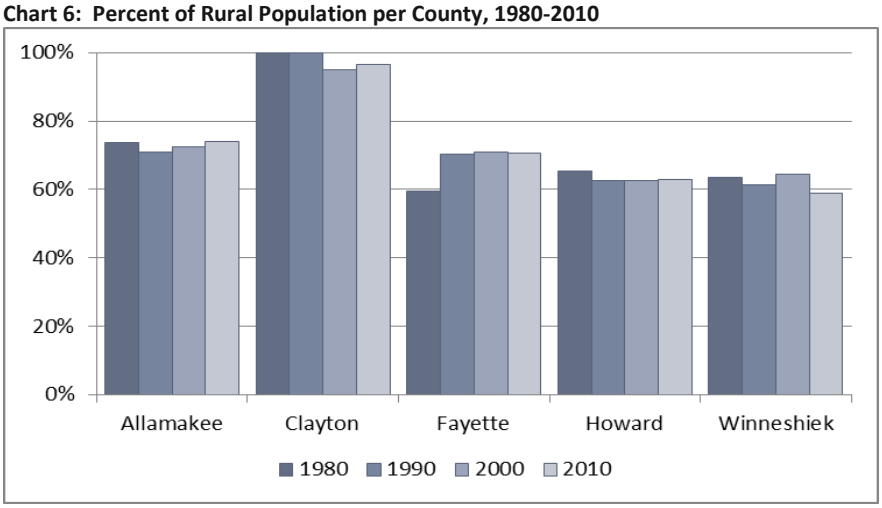
**Figure 1: Urban/Rural by Block Group, 2010**




Source: U.S. Census Bureau, 2012 (2010 Census)

The urban/rural distribution in each county has remained fairly steady since 1980. Chart 6 illustrates the percentage of population in each county residing in a rural area from 1980 to 2010. In all counties, the majority of population is in a rural area. Clayton County has the highest percent of its population in rural areas while Winneshiek County has the lowest at 59% as of 2010. Fayette County is the only county where the percent of its population in rural areas has grown over time, with most of the change occurring between 1980 and 1990.

**Chart 6: Percent of Rural Population per County, 1980-2010**

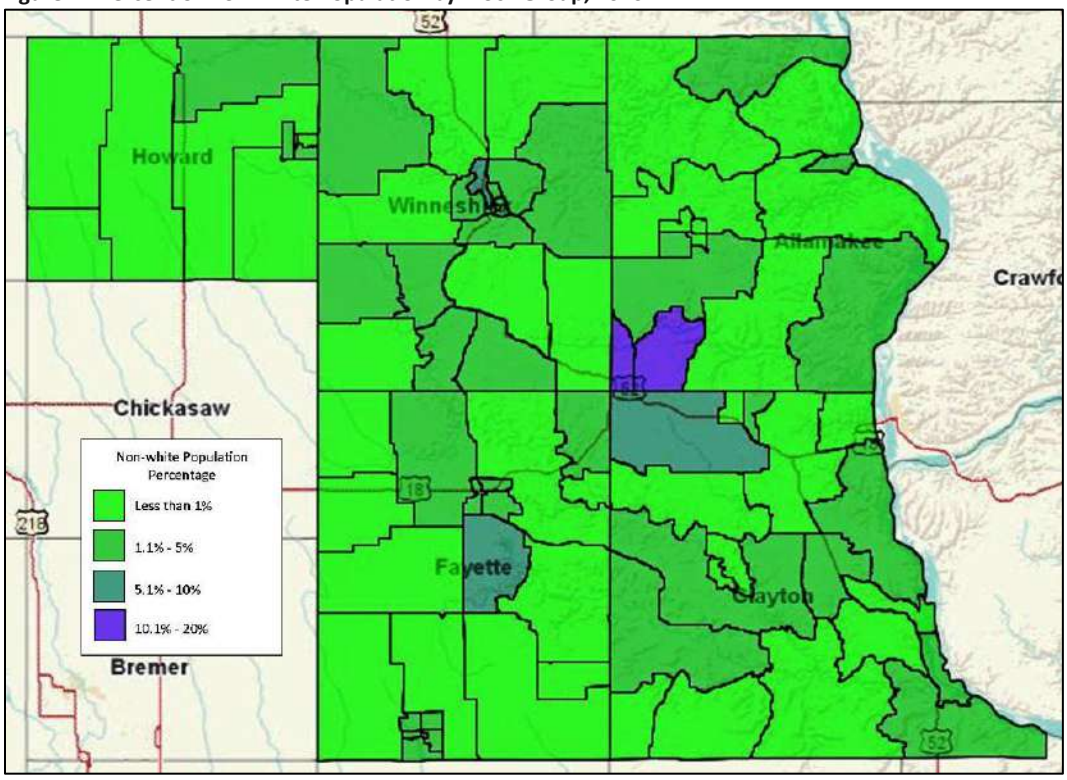



Source: State Data Center of Iowa, n.d.; U.S. Census Bureau, 2012 (2010 Census)

## Diversity

The population in the region is not very racially diverse. As of 2010, the non-white population in the region was only 2.2% of the total population. This was, however, an increase from the 2000 Census, at which time only 1.72% of the population was non-white. Figure 2 illustrates the percent of non-white population in the region by block group. Areas with higher percentages of minority populations occur nearest the region's two private colleges, Luther College in Decorah and Upper Iowa University in Fayette and in and around the community of Postville.

**Figure 2: Percent of Non-white Population by Block Group, 2010**

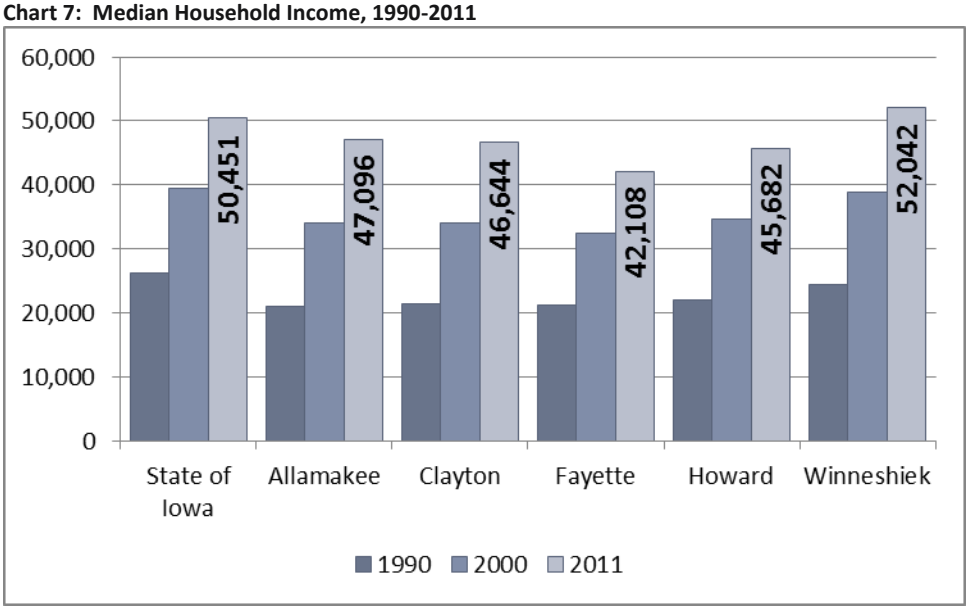



Source: U.S. Census Bureau, 2012 (2010 Census)

## Income

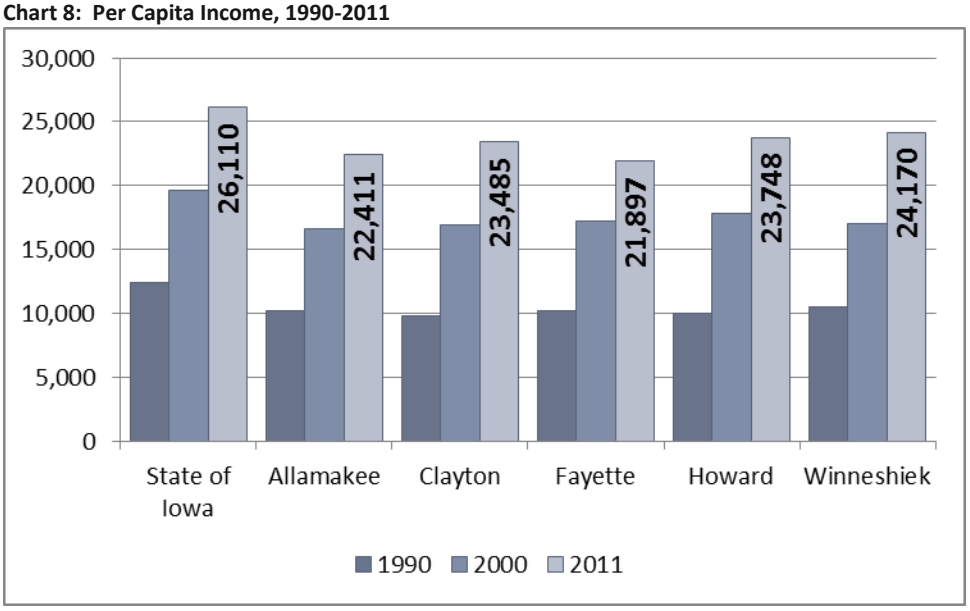
The median household income for the region has risen at an average annual growth rate of 5.4% since the 1990 Census. Per capita income has noted an average annual growth rate of 6.1%. Chart 7 and Chart 8 compare the median income and per capita income of each county to the state for the past two decades. With the exception of Winneshiek County, the counties in RPA 1 have median income levels below that of the state as a whole. All counties have a per capita income level lower than the state.

**Chart 7: Median Household Income, 1990-2011**




Source: State Data Center of Iowa, n.d.; U.S. Census Bureau, 2012 (2007-2011 ACS)

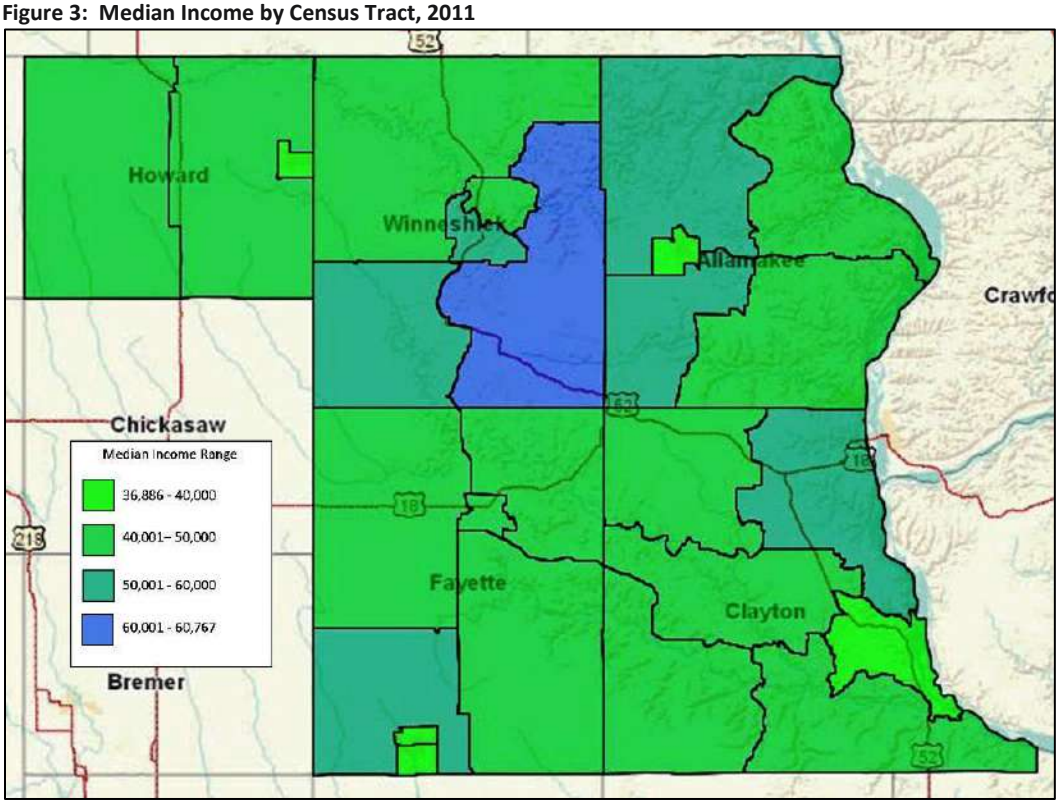
**Chart 8: Per Capita Income, 1990-2011**




Source: State Data Center of Iowa, n.d.; U.S. Census Bureau, 2012 (2007-2011 ACS)

Figure 3 illustrates the median household income by Census Tract. Tracts surrounding Cresco, Waukon, Guttenberg and Oelwein have the lowest median incomes, while the tract consisting of the southeast section of Winneshiek County registers the highest median income in the region.

**Figure 3: Median Income by Census Tract, 2011**




Source: U.S. Census Bureau, 2012 (2007-2011 ACS)

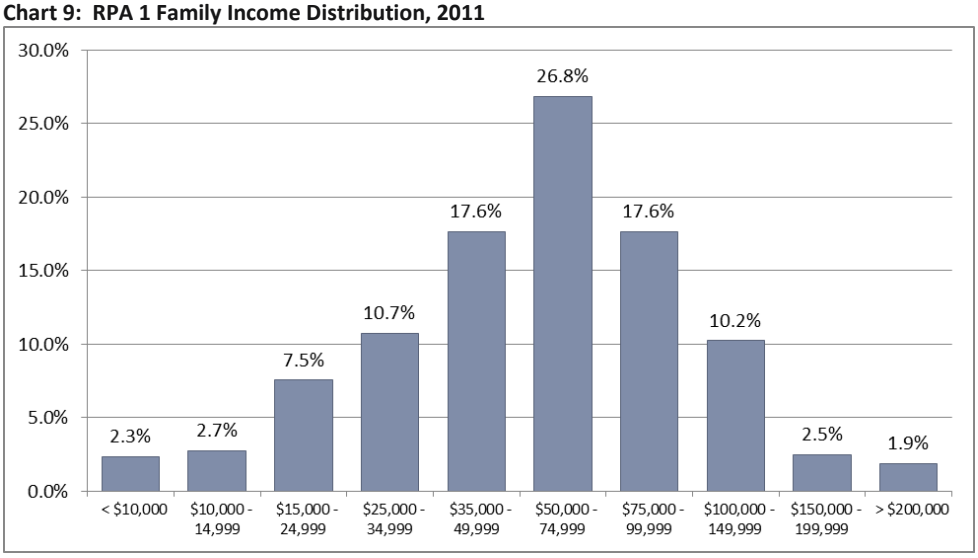
Chart 9 demonstrates the family income distribution of all counties combined by percent of population in each income range. A full 41% of the regions' families earn less than $50,000 and nearly 13% make less than $25,000. According to HUD, families in Allamakee, Clayton, Fayette and Howard counties making less than $47,850 are considered "low-income." In Winneshiek County, the low-income threshold is $52,300.

In the five county region both parents are working in 80% of all families. According to a recent AAA report, it was found that the cost per mile to operate an average sedan is 59.6 cents (AAA, 2012). Table 4 illustrates the possible costs of transportation to work for the region's lower income families. A very low income family with both parents working could pay over 30% of their income on transportation. Affordable transportation will continue to challenge the region as costs continue to rise.

**Table 4: Impact of Employment Transportation Costs on Families with Two Parents Working**

| | |
|---|---|
| Average travel time to work (U.S. Census Bureau, 2012) | 18.98 minutes |
| *Assumption*: average miles to work (19 minutes @ 40 mph) | 13 miles |
| Average distance per year (50 weeks) | 6,500 miles |
| Average cost per year @ 59.6 per mile (AAA, 2012) | $3,874.00 |
| Average cost per family given two people working | $7,748.00 |
| % family income spent on work transportation @ $50,000 | 15.4% |
| % family income spent on work transportation @ $25,000 | 31% |

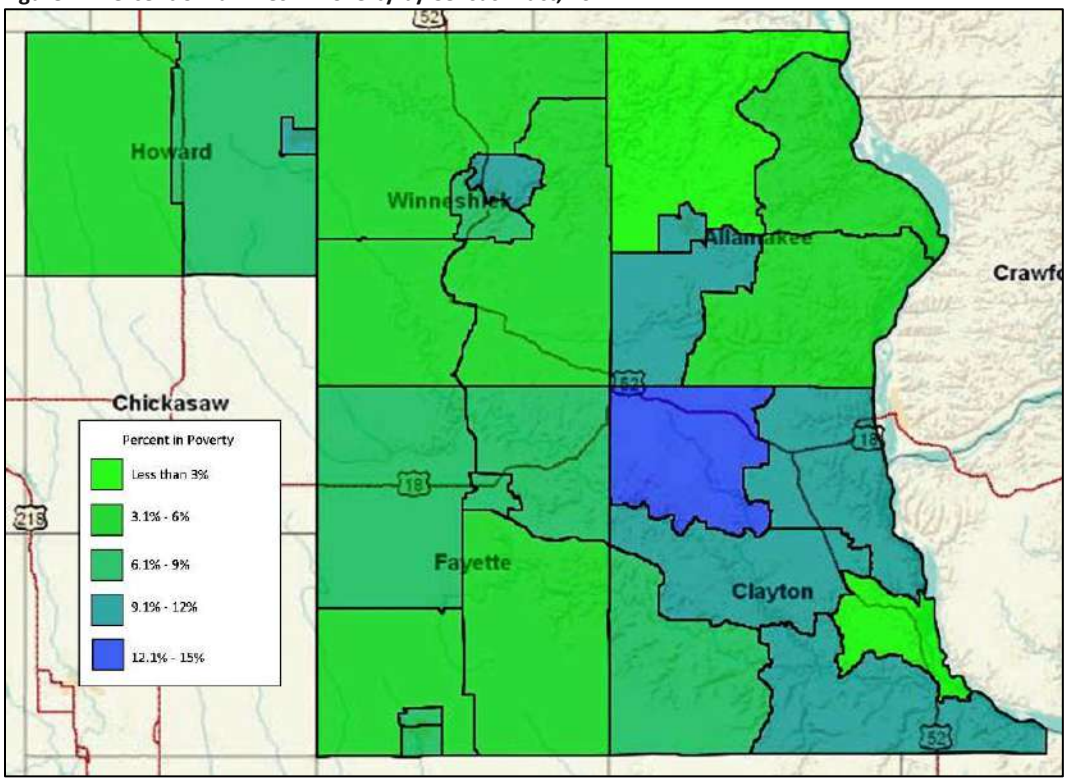
**Chart 9: RPA 1 Family Income Distribution, 2011**




Source: U.S. Census Bureau, 2012 (2007-2011 ACS)

Figure 4 illustrates the percentage of families whose income was below the poverty level by Census tract. Clayton County notes the largest area with percentage of poverty level families over 9% within the region. The Census tract in and south of Postville has the largest percentage of families in poverty at 13.8%.

**Figure 4: Percent of Families in Poverty by Census Tract, 2011**




Source: U.S. Census Bureau, 2012 (2007-2011 ACS)

## Employment

An aging workforce and a shortage of critical talent are among the biggest challenges facing today's rural businesses. The availability of, and access to, skilled workers is critical to the success of the region's businesses, especially when competing in an increasingly global economy. Table 5 breaks down the labor force characteristics for the region as it compares to the state.

**Table 5: RPA 1 Labor Force Characteristics**

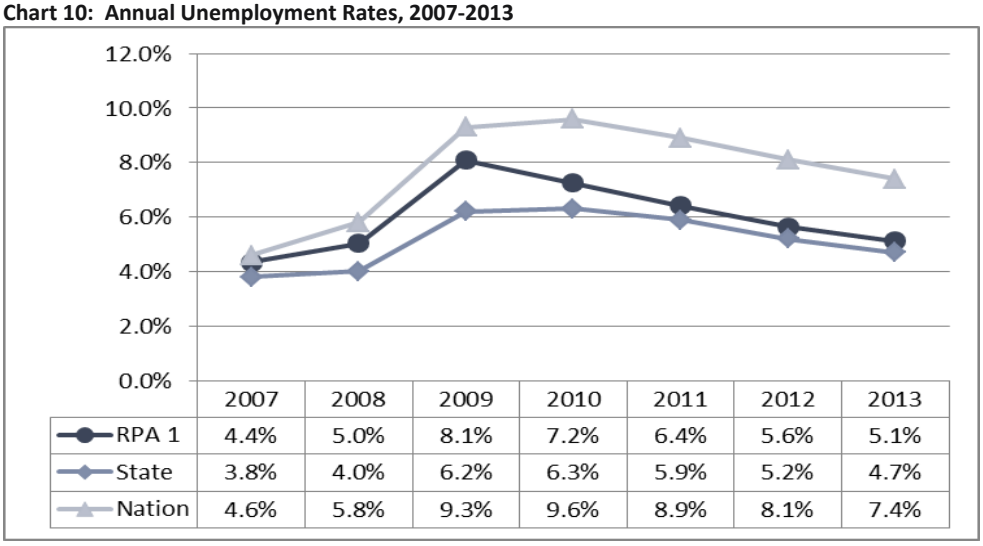
| | RPA 1 | State of Iowa |
|---|---|---|
| Total population 16 years and over | 67,495 | 2,392,818 |
| Total in labor force | 45,468 | 1,647,363 |
| Percent in labor force | 67.4% | 68.8% |
| Employed labor force | 43,153 | 1,554,416 |
| Percent employed in labor force | 63.9% | 64.9% |
| Females 16 years and over | 34,066 | 1,220,892 |
| Females in labor force | 21,538 | 784,084 |
| Percent of females in labor force | 62.9% | 64.2% |

Source: U.S. Census Bureau, 2012 (2007-2011 ACS)

Unemployment rates for the region, as compared to the state and nation, are shown in Chart 10. Since 2007, overall RPA 1 unemployment rates have been higher than the state and lower than the national average. Chart 11 illustrates the change in unemployment rates for each of the RPA 1 counties over the past five years. Generally, Winneshiek County noted the lowest rates, while Allamakee had the highest.

Unemployment rates have recently begun to drop in the state and county with the average rate as of 2013 at a five-year low for the region. Businesses are beginning to experience a shortage of workers within their immediate vicinity and understand that the high costs of transportation are affecting their ability to attract a workforce, especially for lower paying positions. This has led to some business expansion plans being put on hold or worse, expansions occurring in other locations. The region has already begun addressing these issues and is working to develop more affordable transportation options for its available workforce.

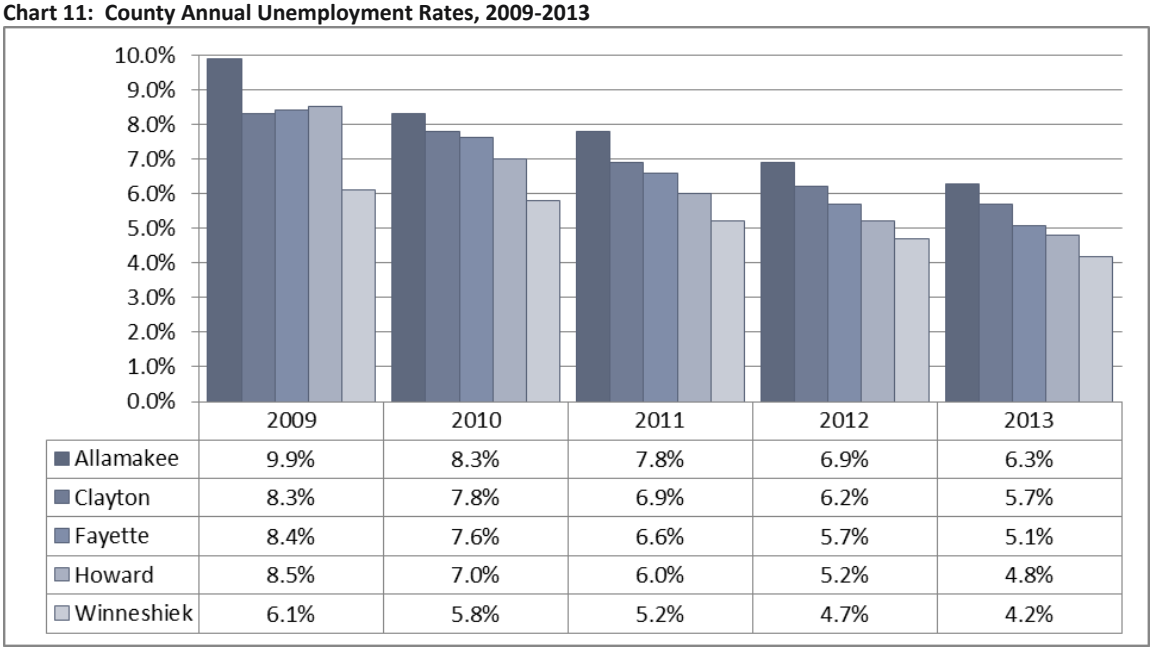
**Chart 10: Annual Unemployment Rates, 2007-2013**




| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|
| RPA 1 | 4.4% | 5.0% | 8.1% | 7.2% | 6.4% | 5.6% | 5.1% |
| State | 3.8% | 4.0% | 6.2% | 6.3% | 5.9% | 5.2% | 4.7% |
| Nation | 4.6% | 5.8% | 9.3% | 9.6% | 8.9% | 8.1% | 7.4% |

Source: Iowa Workforce Development, 2014; Bureau of Labor Statistics, 2014

**Chart 11: County Annual Unemployment Rates, 2009-2013**



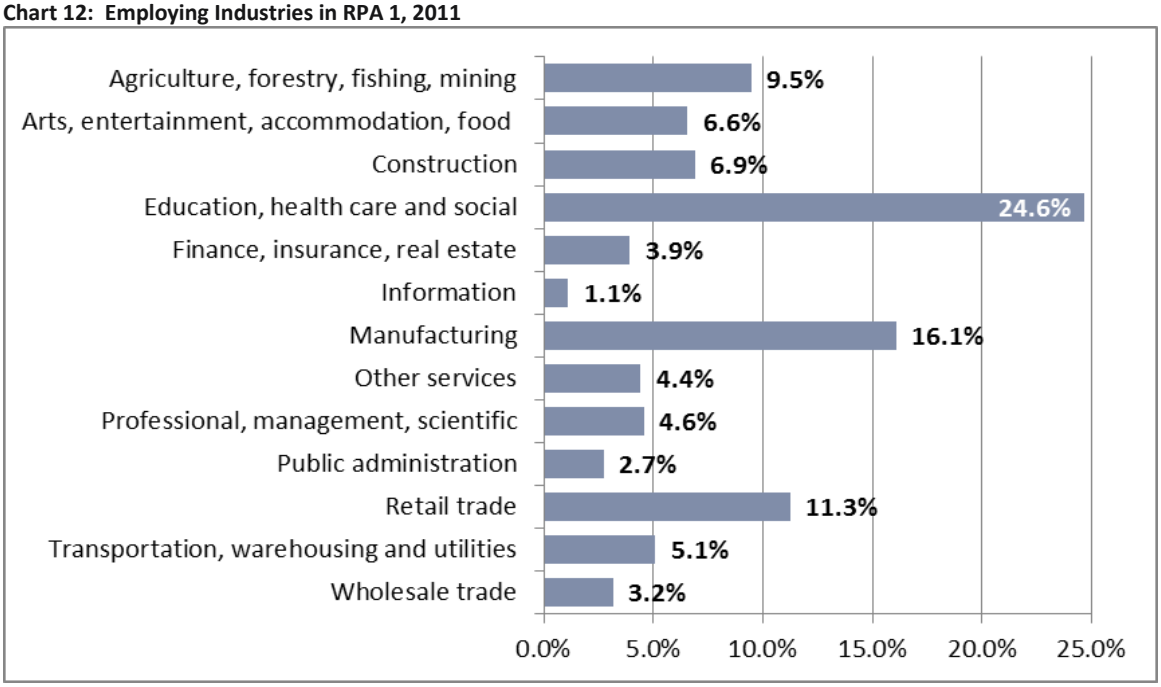

| | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|
| Allamakee | 9.9% | 8.3% | 7.8% | 6.9% | 6.3% |
| Clayton | 8.3% | 7.8% | 6.9% | 6.2% | 5.7% |
| Fayette | 8.4% | 7.6% | 6.6% | 5.7% | 5.1% |
| Howard | 8.5% | 7.0% | 6.0% | 5.2% | 4.8% |
| Winneshiek | 6.1% | 5.8% | 5.2% | 4.7% | 4.2% |

Source: Iowa Workforce Development, 2014

The region's economic base is distributed across many industries. The education, health care and social assistance service industry employs nearly 25% of the employed population within the region, with

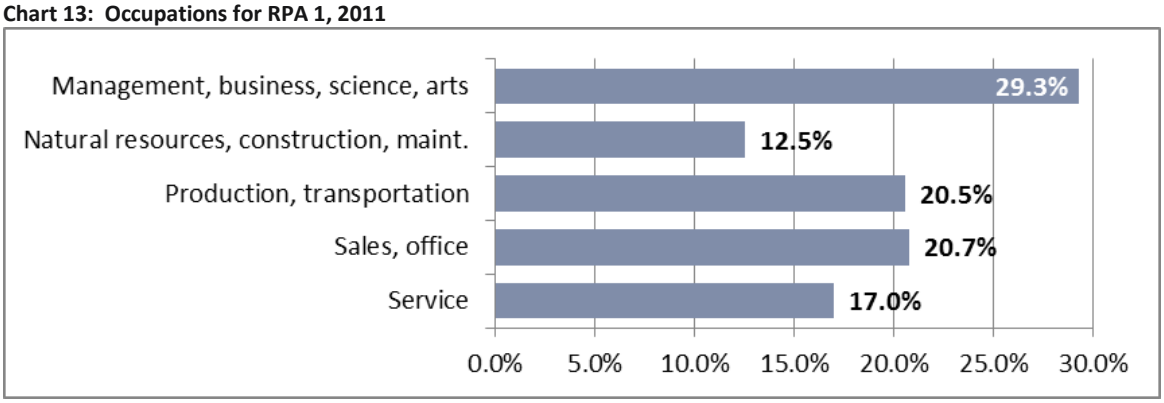
manufacturing and retail trade being the next largest employing industries at 16% and 11% respectively. Chart 12 illustrates the percent of the employed RPA 1 population working in each industry. Chart 13 shows the occupations of these same workers, regardless of industry. While most are employed in management, business, science and arts occupations (29%), over 20% of the working population fill occupations in each of production and transportation jobs and sales and office jobs.

**Chart 12: Employing Industries in RPA 1, 2011**




Source: U.S. Census Bureau, 2012 (2007-2011 ACS)

**Chart 13: Occupations for RPA 1, 2011**



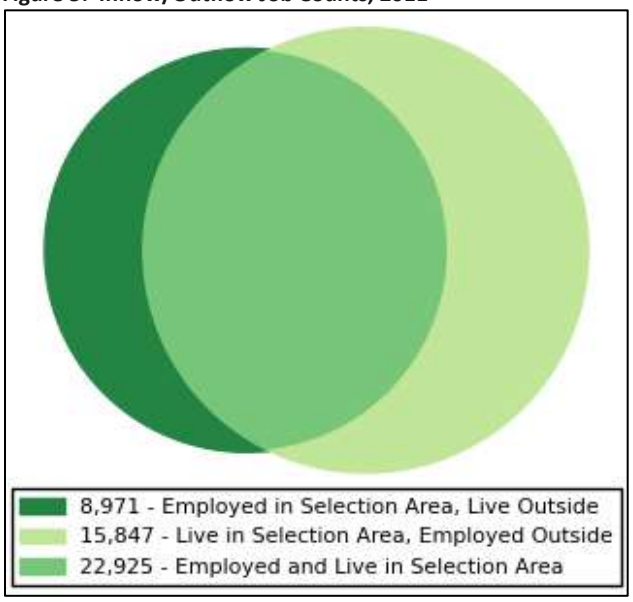

Source: U.S. Census Bureau, 2012 (2007-2011 ACS)

## Commuting

As previously noted, many of the employment opportunities for RPA 1 residents require a significant travel distance. Across the area, nearly 38% of the current workforce commutes greater than 25 miles for employment and over 55% work in a different county than where they live. As a region, over 40% of the working residents commute out of the RPA 1 five-county area for jobs (U.S. Census Bureau, Center for Economic Studies, 2011). Figure 5 shows the migration of the workforce both in and out of the RPA

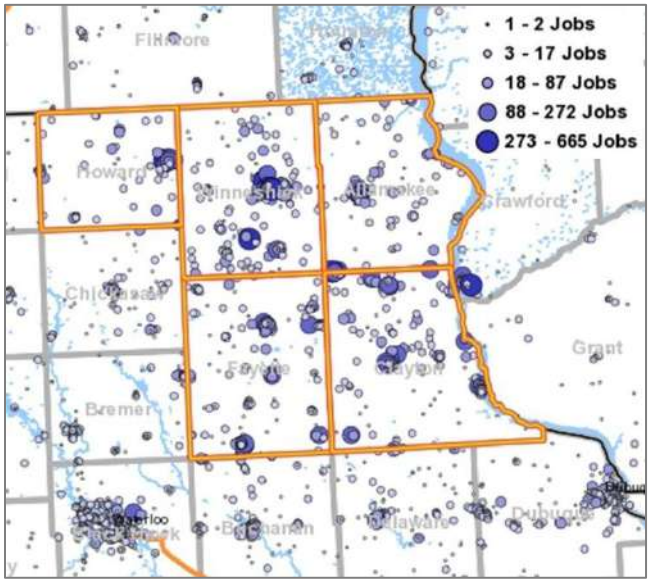
1 region. According to this data, there are fewer jobs than workers in the region. Figure 6 illustrates where the jobs are located within the region.

**Figure 5: Inflow/Outflow Job Counts, 2011**




Source: U.S. Census Bureau, Center for Economic Studies, 2011

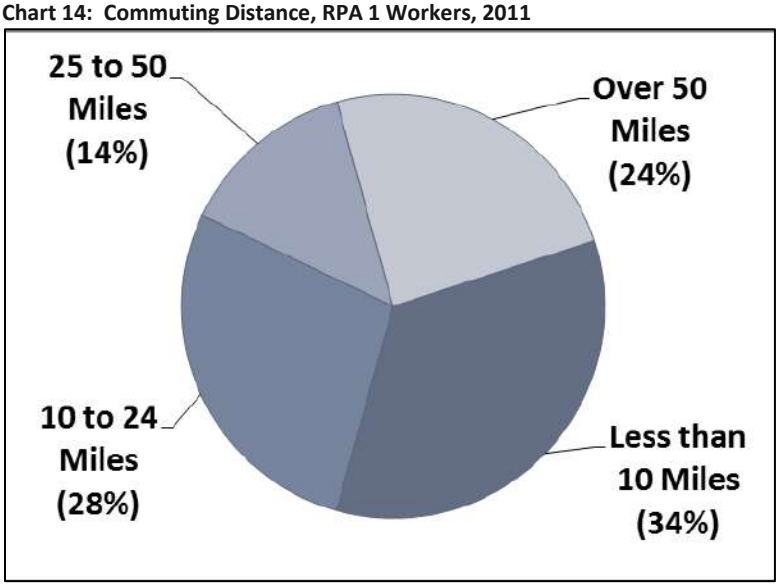
**Figure 6: RPA 1 Job Locations, 2011**




Source: U.S. Census Bureau, Center for Economic Studies, 2011

RPA 1 workers commute, on average, 19 minutes to their place of employment (U.S. Census Bureau, 2012). As noted in Chart 14, 34% of workers travel less than 10 miles to work and another 28% travel between 10 and 24 miles to work. The top five places of work for those who live in the five-county area are: Decorah (11.4% of the region's workers), Cresco (5.8%), Waukon (4.5%), Oelwein (3.9%) and Postville (3.6%). The remaining 70% of the region's workers are distributed widely across the region and in neighboring counties and states (U.S. Census Bureau, Center for Economic Studies, 2011).

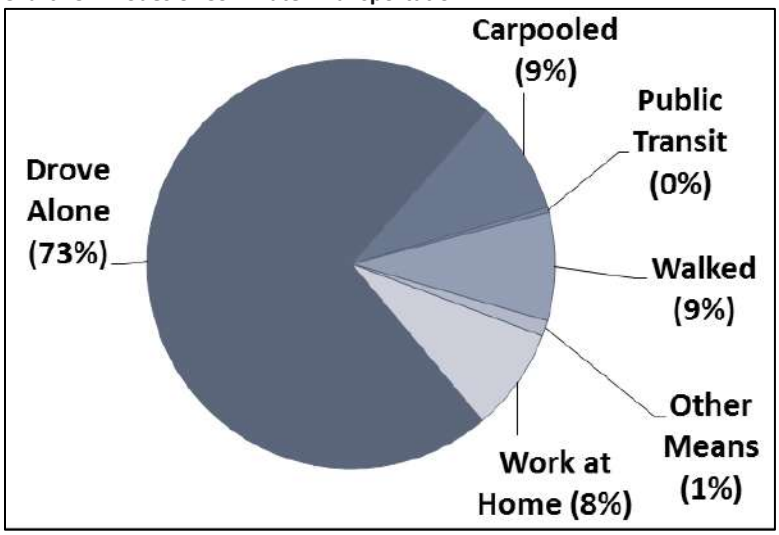
**Chart 14: Commuting Distance, RPA 1 Workers, 2011**




Source: U.S. Census Bureau, Center for Economic Studies, 2011

Chart 15 illustrates the methods of transportation most often used by workers to get to work. The majority of the commuting workforce travels alone. Workers in Winneshiek County were more likely to walk to work than in other counties, with over 15% walking to work. Carpooling was highest in Fayette County where nearly 10% shared rides to work. Over 10% of Howard County workers worked at home (U.S. Census Bureau, 2012).

**Chart 15: Modes of Commuter Transportation**




Source: U.S. Census Bureau, 2012 (2007-2011 ACS)

About 72% of the region's jobs are filled by workers living within the five-county region. County by county, this percentage drops significantly. The inflow of workers to the individual counties ranges from 41.6% of jobs filled by non-county residents in Howard County to 49.1% in Fayette County. The following figures demonstrate the top counties where workers are coming from for each individual county in the region and the top counties to which individual county residents are going to work.

**Figure 7: Allamakee County Worker Inflow**

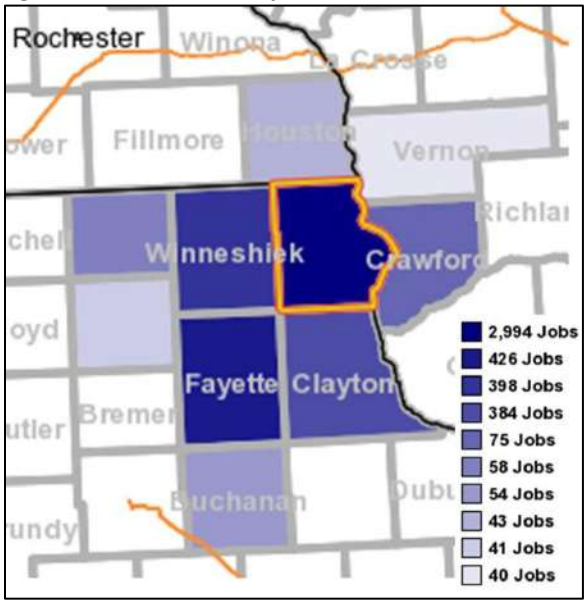



**Figure 8: Allamakee County Worker Outflow**

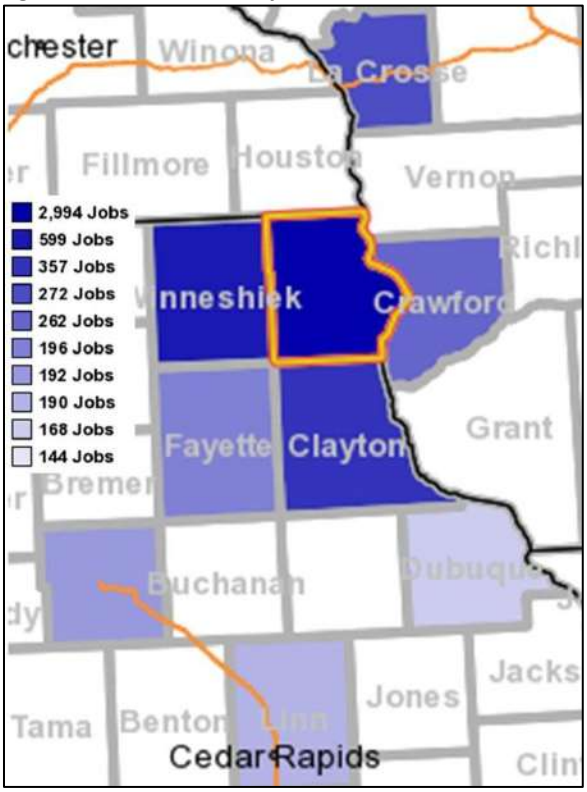



**Figure 9: Clayton County Worker Inflow**

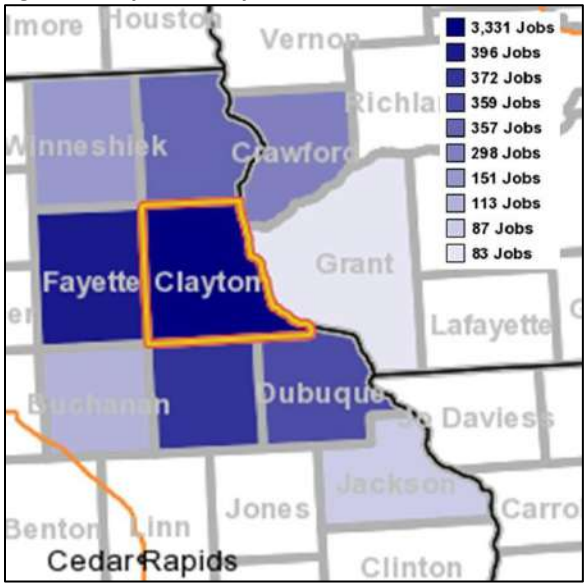



**Figure 10: Clayton County Worker Outflow**

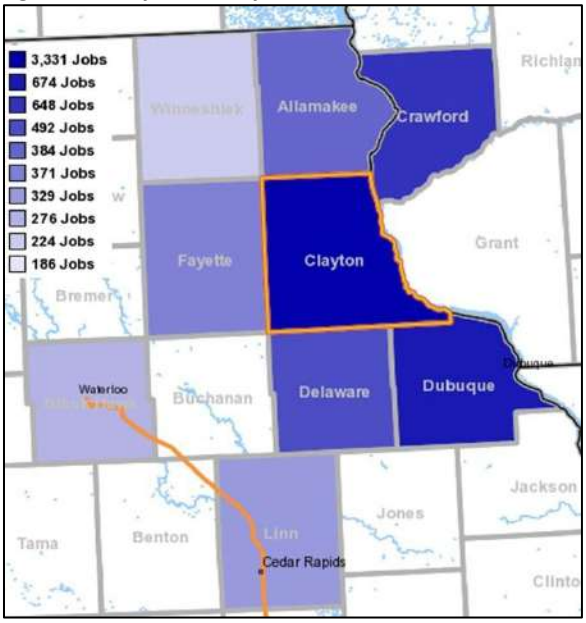


**Figure 11: Fayette County Worker Inflow**

**Figure 12: Fayette County Worker Outflow**

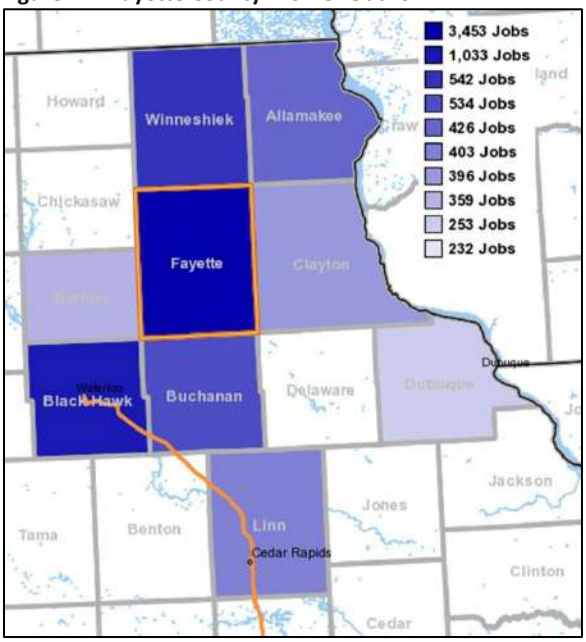



**Figure 13: Howard County Worker Inflow**

**Figure 14: Howard County Worker Outflow**

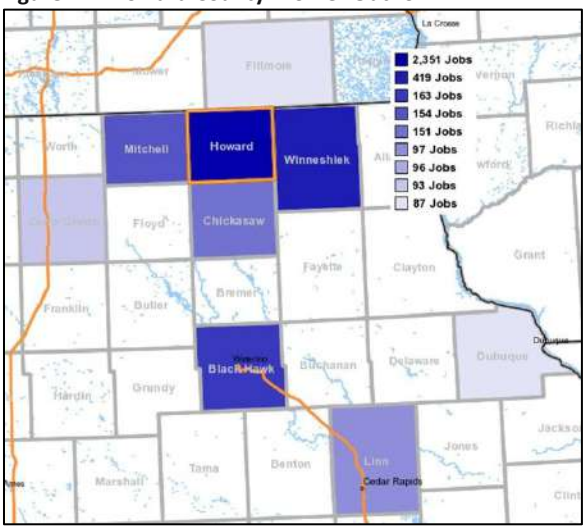


**Figure 15: Winneshiek County Worker Inflow**

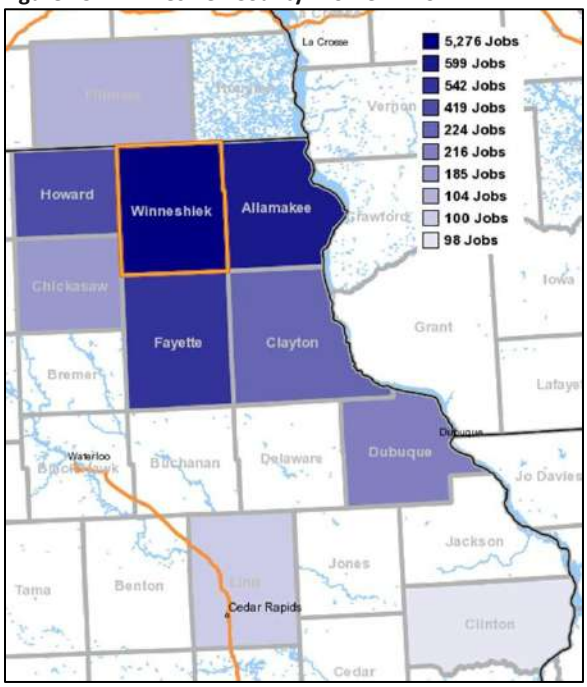
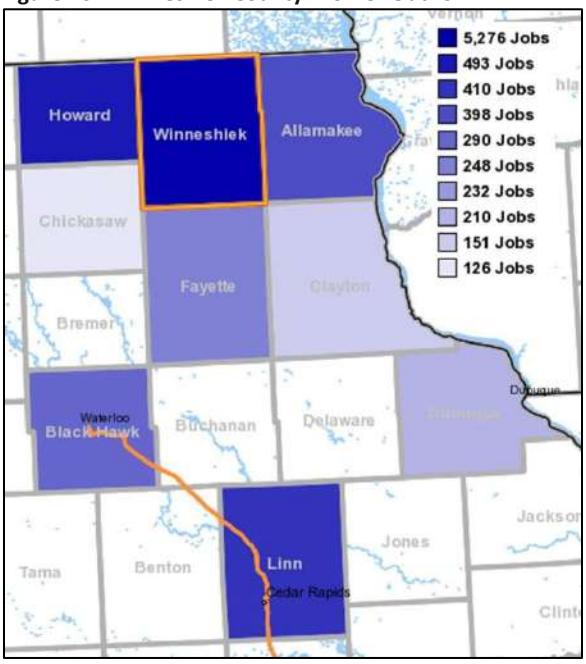



**Figure 16: Winneshiek County Worker Outflow**




Source: (U.S. Census Bureau, Center for Economic Studies, 2011)

## Summary

The region is facing a declining and aging population. This is expected to have an impact on the overall transportation system and the long term economic prospects for the area. The declining population is already having an impact on the region's employers as they seek to hire quality employees from an ever-shrinking pool. The employee recruitment area has expanded for these businesses and ensuring an affordable ride to work for employees will be integral to developing the workforce needed to accommodate openings. An aging population will require the region's leadership to consider the safety of these older drivers and realize that alternate modes of transportation will be necessary as older drivers become unable to transport themselves. The economic base of the region is very much reliant upon adequate and well-maintained infrastructure. Customers and commerce must all be able to utilize the region's roadways and other modes of transportation in order to maintain competitiveness in the worldwide economy.

# CHAPTER FOUR: EXISTING REGIONAL TRANSPORTATION SYSTEM

The transportation network is the backbone upon which the region bases its economy. It provides access to resources and vital connections within and outside of the area, forming a critical link for continued development and growth. Maintenance and repair, in addition to periodic additions and enhancements to this system, are essential for preserving connectivity for residents, visitors, business and industry. Keeping pace with changes in transportation trends and network use is also essential to anticipate needed improvements and potential additions to the transportation network.

## Roads and Bridges

**Roads**

The roadways within the five counties of RPA 1 cover approximately 5,665 total miles (Iowa Department of Transportation, 2012). The Region's County Road Departments are responsible for the maintenance of all regional roads with the exception of state highways and roads and streets within the boundaries of incorporated cities in the region, approximately 4,935 miles (Iowa DOT, Office of Transportation Data, 2012). Paved roads under the region's jurisdiction amount to about 935 miles, or about 20% of the total roadways under county jurisdiction. The counties work with their smaller communities to develop road maintenance agreements as needed by some communities to ensure that all city roads are maintained.

Funding issues have hampered the abilities of the counties to be more aggressive in their attention to the needs of the system. As previously indicated, the region's shrinking population, coupled with the growing state population resulting in a further reduction for the region as a percent of overall population, limits the amount of funding coming to the area when distributed based on population. State proposals to fund transportation infrastructure often ultimately favor more urban areas. The region has actively lobbied the Iowa Legislature to increase state funding to more appropriate levels and to ensure that any distribution of such funding supports work in rural areas. There is need to encourage the federal government to do the same.

Chapter 306 of the Code of Iowa sets the functional classification of all highways, roads and streets in the state into categories according to the character of service they provide. The classification of streets and roads in each county is periodically updated to be current with city boundary changes and the function of the streets. The classification system serves as a basis for determining future priorities, funds distribution and jurisdiction over the various highway, roads and streets in the state.
Rural roads are labeled, and jurisdiction is determined, by the following classifications: local roads, minor collectors, major collectors, minor arterials, other principal arterials and interstates. There are no interstates within the boundaries of RPA 1. Federal aid money is available to maintain major collectors, minor arterials and principal arterials.

Table 6 indicates the classifications and jurisdictions of the region's "federal aid" roadways and provides a description of each classification as defined by the Federal Highway Administration. A portion of the region's principal arterials are part of the National Highway System (NHS). There are nearly 150 miles of highways 18, 52 and 63 that are included in the NHS. The NHS includes roads that are important to the

nation's economy, defense and mobility and consists of the Interstate Highway System, most US Highways and many state and regional highways.

**Table 6: Federal Functional Classifications, RPA 1**

| Roadway | Classification | Jurisdiction | Miles | Classification Description |
|---|---|---|---|---|
| US Hwy 18 | Principal Arterial | State | 243 | Consists of a connected network of continuous routes that have substantial trip length and travel density for statewide or interstate travel. |
| US Hwy 52 | | | | |
| US Hwy 63 | | | | |
| State Hwy 3 | | | | |
| State Hwy 9 (Hwy 63 to Hwy 52) | | | | |
| State Hwy 150 | | | | |
| State Hwy 9 (E. of Decorah) | Minor Arterial | State | 211 | With the principal arterials, form rural networks that link cities and larger towns and provide interstate and inter-county service. These roads are spaced so that all developed areas of the State are within a reasonable distance of an arterial highway. |
| State Hwy 9 (W. of Hwy 63) | | | | |
| State Hwy 13 | | | | |
| State Hwy 24 | | | | |
| State Hwy 26 | | | | |
| State Hwy 51 | | | | |
| State Hwy 56 | | | | |
| State Hwy 76 | | | | |
| State Hwy 93 | | | | |
| State Hwy 128 | | | | |
| State Hwy 187 | | | | |
| A11, A16, A18 (from Hwy 139 to Hwy 52), A21, A23 (W. of V58), A26, A34, A44 (Hwy 76 to Hwy 9), A46 (W. of V58), A52 (Hwy 9 to X42), B16, B17, B25, B44, B45, B60 (W. of X16 and X28 to Hwy 13), B64, B65 (X16 to Hwy 13), C14, C17 (E. of Garnavillo), C24, C2W, C43 (X47 to C7X), C50, C7X, C9Y, State Hwy 139, T68 (A23 to B17), V10, V18, V26, V36, V58, V62, V64, V68, W51, W14 (from A34 S.), W20 (from A18 to Decorah), W25, W33, W38, W40, W42, W45, W46, W48, W4B, W60 (A26 - A16 and S. of West Ridge Road), W64, W68, W69, X16, X20, X21, X26 (N. of Hwy. 18), X28, X32, X3C, X42, X47, X52, X56, Y13 | Major Collector | Counties | 816 | These routes, also known as federal aid farm to market roads, provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators, such as schools, shipping points, county parks, important mining and agricultural areas and link these places with nearby larger towns or cities, or with routes of higher classification. Federal aid can be used by the county in conjunction with farm to market funds to maintain these roads. |

**Table does not include roadway classifications that fall only within the region's urban area boundaries (Decorah, Oelwein and McGregor). Source: (Iowa Department of Transportation, 2012); (Federal Highway Administration, 2012)

There are several minor collectors throughout the region that account for about 899 miles of roadway. Funding to maintain or repair these roads comes from farm to market and local funds. Minor collectors are also considered farm to market only roads and are spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road. They also provide service to the remaining smaller communities and link the locally important traffic generators within the rural areas. Over 3,495 miles of local roads constitute the rest of the roadways in the region. The rural local road system provides access to adjacent land and provides for travel over relatively short distances as compared to collectors or other higher systems. Figure 17 maps the classifications of the region's roadways.

Figure 18 illustrates the traffic counts within the RPA 1 region. The highest regional traffic counts are measured on Highway 9 in Decorah at 13,600 vehicles per day (VPD). Traffic counts, pavement history and condition, safety concerns, and limited budgets dictate which roadways receive attention first. Only three other roadway sections in the RPA 1 region have VPD counts of over 10,000 and they are within the jurisdictions of Decorah and Oelwein. This can put the region at a disadvantage when the state determines its project priorities.

Another indicator of travel levels on the roadway system is the number of vehicle miles of travel (VMT). As Iowa's population continues to grow, VMT has grown as well, noting an increase of over 3% since 2001. In contrast to the state, the VMT in RPA 1 has declined over that same time period by nearly 5% with just a slight (.5%) increase noted in the past year (Iowa Department of Transportation, 2012). Overall regional population decline contributes to some of the decline, as well as other factors such as the economy, gasoline prices and an aging population. It is interesting to note that nationwide, VMT has not increased since 2004. A recent report concluded that this trend is being led by young people, ages 16 to 34, who drove 23% fewer miles in 2009 than in 2001. To the Millennial Generation (born between 1983 and 2000), walkability and public transportation are increasingly important factors when seeking places to work or live (U.S. PIRG Education Fund; Frontier Group, 2013). As noted in Chapter Three, *Chart 3: Net Population Loss/Gain per Age Group, 2000-2010*, the region has experienced a net loss of population in the age ranges from 20 to 34 from 2000 to 2010. This fact, along with an overall regional decline in VMT could speak to a need to provide a more diverse, less car-reliant transportation system in the region.

**Figure 17: RPA 1 Federal Functional Classification Map**

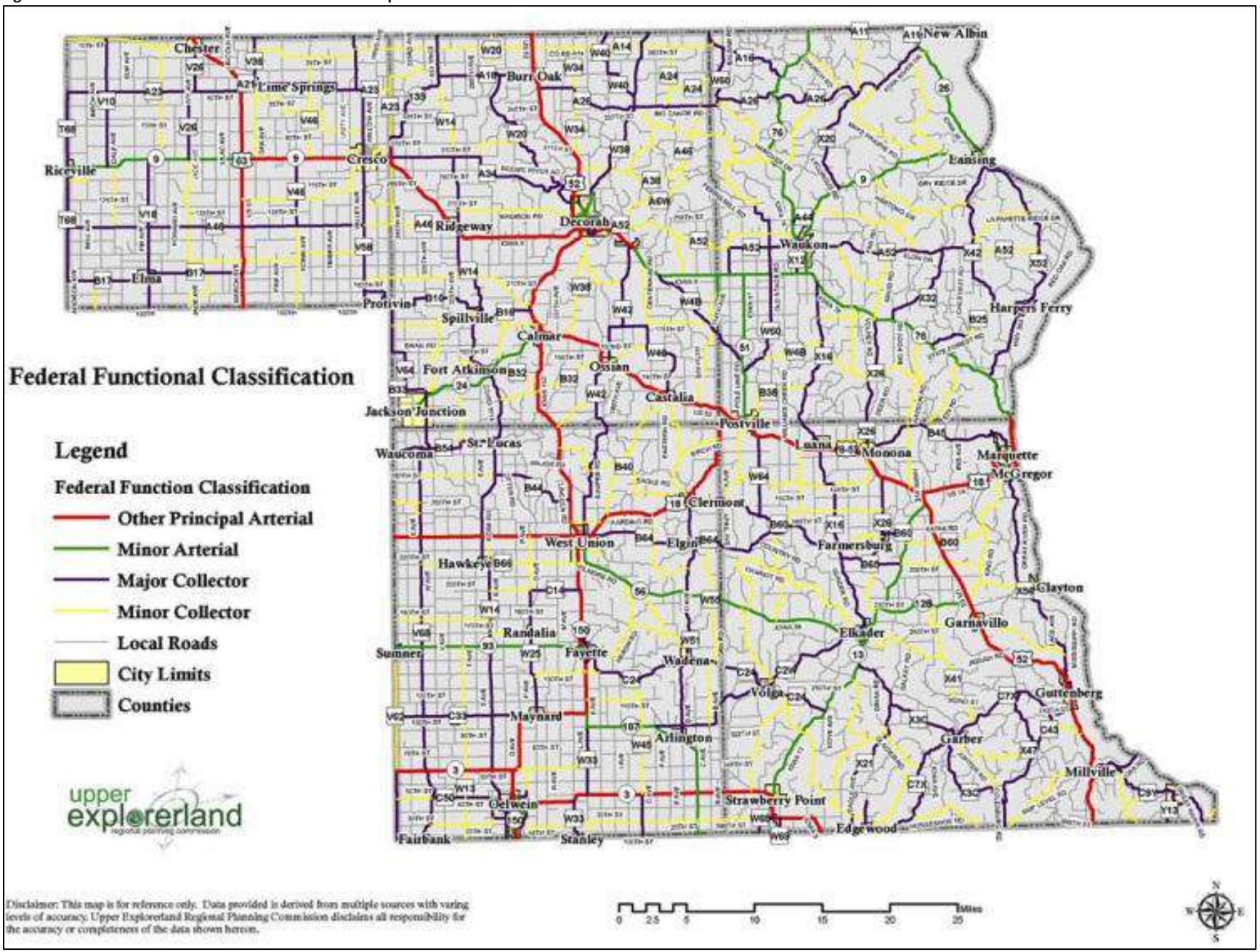
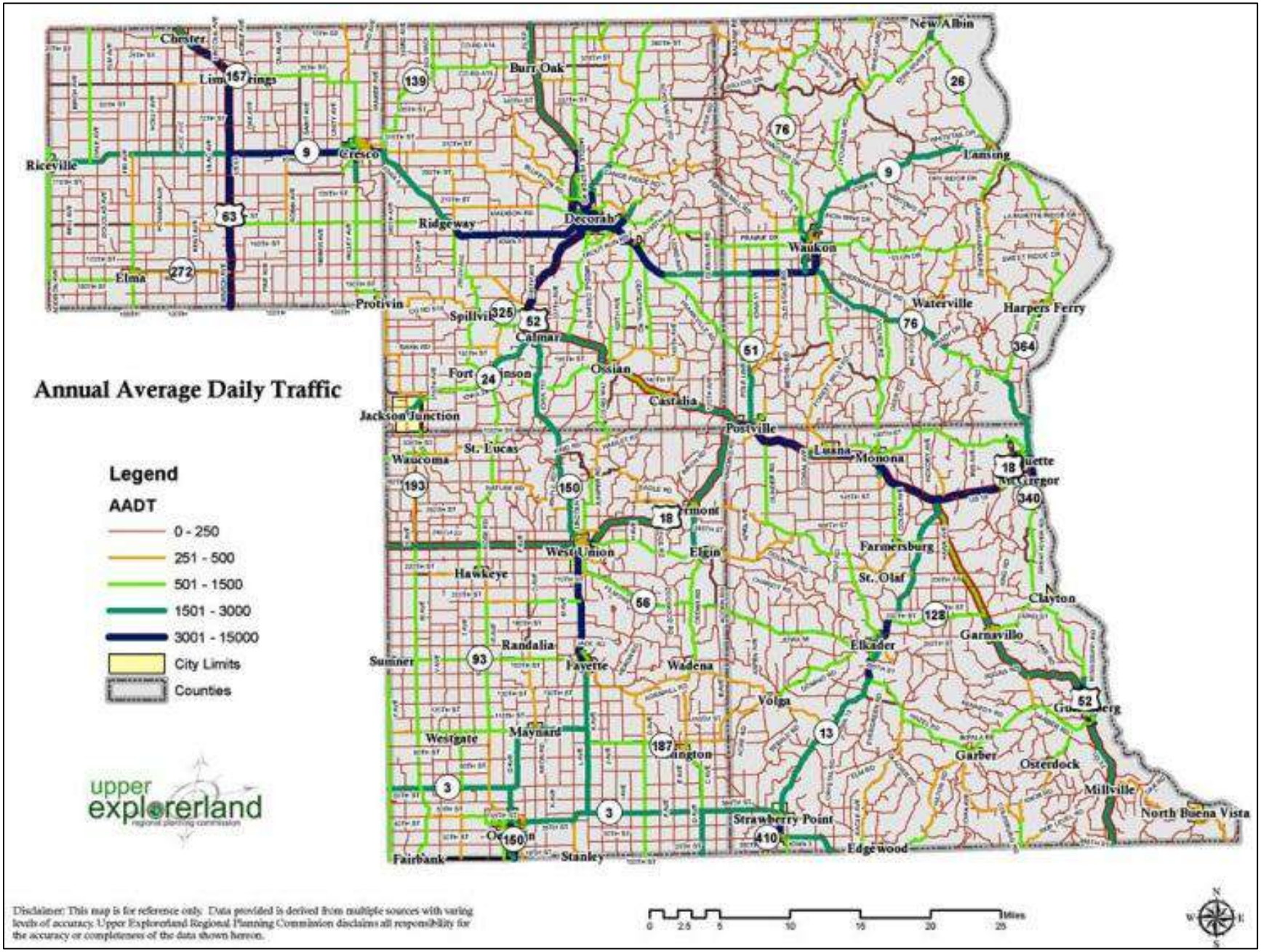
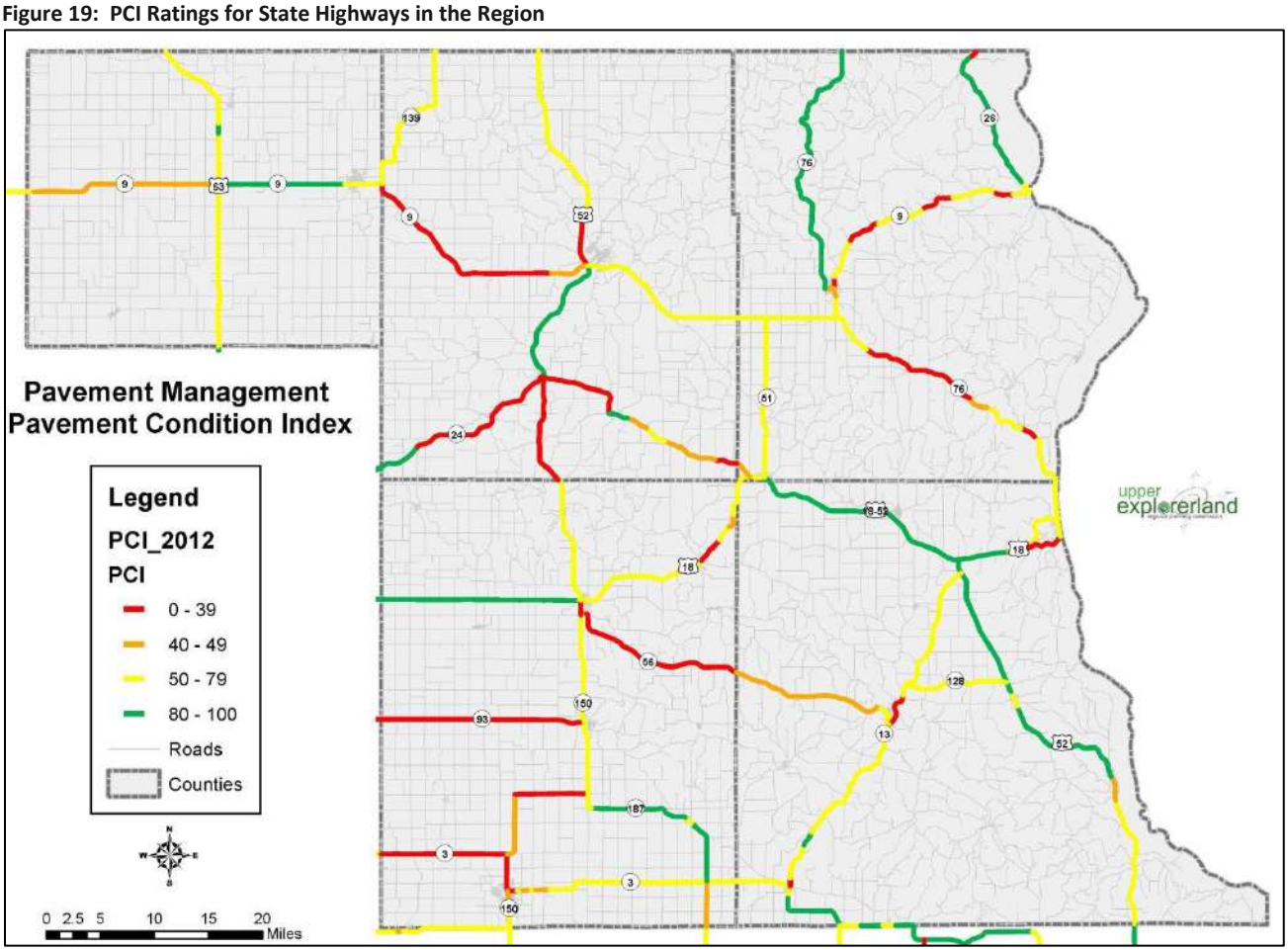


**Figure 18: RPA 1 Average Daily Traffic Counts**



The State of Iowa conducts annual pavement inspections to monitor the condition of principal and minor arterials in the state. One measurement of pavement condition is the Pavement Condition Index (PCI). The PCI is a 0-100 rating that represents the condition of state highway pavements, where 0 is worst and 100 is best. PCI is a measure of pavement condition only and does not consider geometrics, safety or congestion; the index is used as a network-level performance measure and is one of many tools that the state uses identify pavement improvement needs. Figure 19 illustrates the PCI ratings for roadways within the region. The roadways in red are in the worst condition, and the roadways in green are in the best condition.

**Figure 19: PCI Ratings for State Highways in the Region**



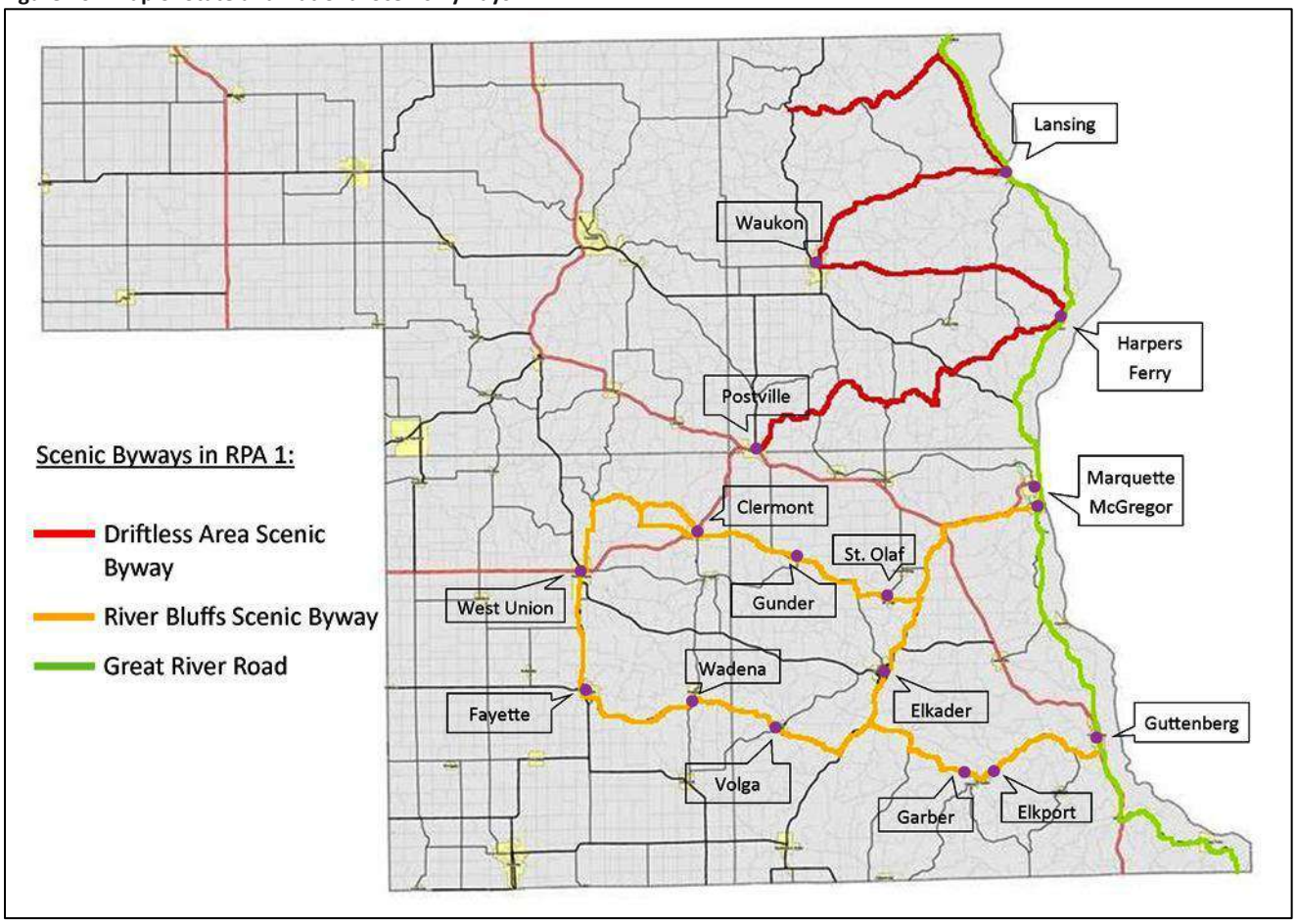

Source: (Iowa DOT, Geospatial Technologies, 2012)

**Scenic Byways**

The beautiful bluffs and valleys of Northeast Iowa have inspired the designation of two state byways within the region, the Driftless Area Scenic Byway and the River Bluffs Scenic Byway. In addition, the Great River Road, a national scenic byway, runs along the Mississippi River through Allamakee and Clayton Counties. Figure 20 illustrates the locations of the scenic byways in the region. The Driftless Area Scenic Byway winds 100 miles through Allamakee County on both hard-surfaced and gravel roads through the high relief, pre-glacial landscape. The byway begins at Postville and travels through the

communities of Harpers Ferry, Waukon and Lansing. The byway also takes visitors past the prehistoric American Indian burial mounds at Effigy Mounds National Monument. The River Bluffs Scenic Byway runs 109 miles in both Fayette and Clayton Counties through 13 communities. Parks, nature centers, fishing, campgrounds and trails are a large part of the appeal of the River Bluffs Scenic Byway. The Volga River Recreation Area, the Big Springs Fish Hatchery and the Aquarium & Fish Management Area in Guttenberg are prime examples of visitor attractions. History is also featured prominently along the byway including the Motor Mill Historic Park and Montauk, the home of Iowa's 12th governor, William Larrabee (Northeast Iowa RC&D, n.d.). The byways play a significant role for tourism in the region. Tourism expenditures in the five-county area were just over $116 million in 2011, up nearly 11% over 2010 expenditures. In the three counties with the byways, tourism expenditures totaled nearly $85 million, which is about 73% of the total for the region. In addition, 540 jobs are attributable to tourism in the three counties with byways, 880 jobs in the full region. (Iowa Economic Development Authority - Iowa Tourism Office, 2012)

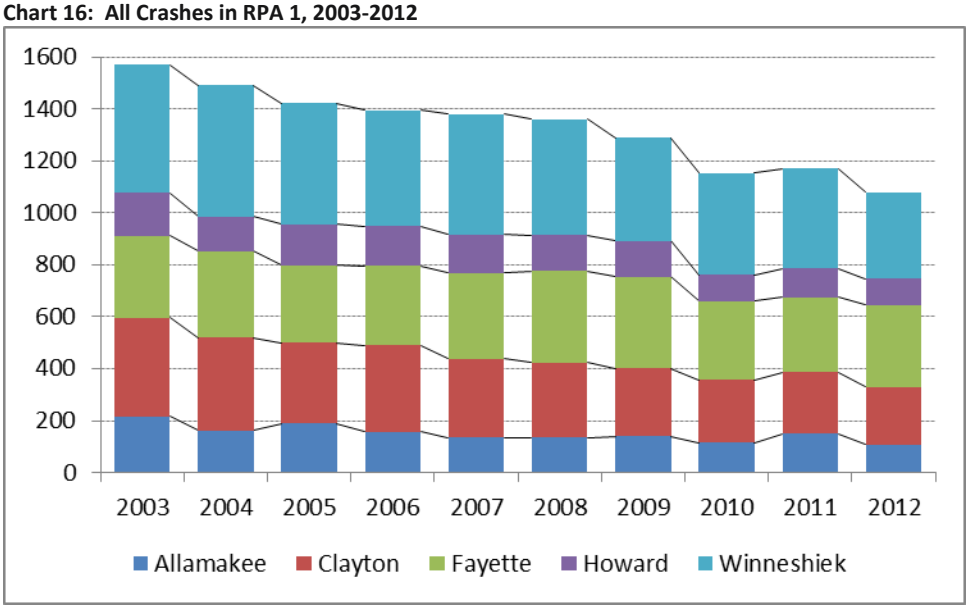
**Figure 20: Map of State and National Scenic Byways in RPA 1**




## Roadway Safety

The safety of the roadways in RPA 1 is of prime concern in all aspects of planning. Chart 16 shows that the number of crashes in the region has been steadily declining over the past decade, and even with a slight uptick in 2011, the overall decrease is just over 31%.

**Chart 16: All Crashes in RPA 1, 2003-2012**



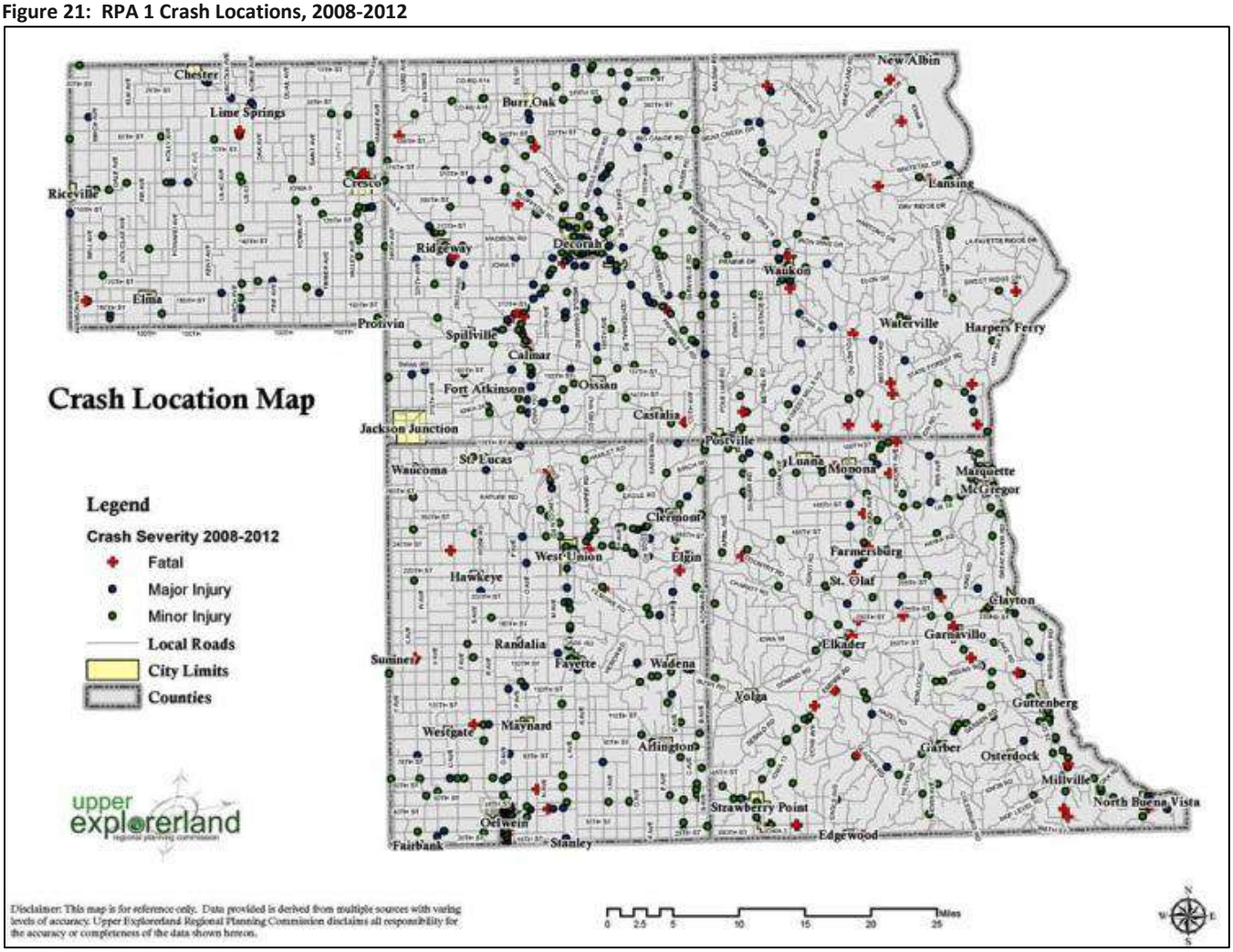

From 2008 to 2012 there were 6,055 reported crashes within the five-county region, resulting in over 2,145 injuries and 77 traffic fatalities. Figure 21 illustrates the location of crashes in the five years from 2008 to 2012. During that time, the cause of nearly 30% of all crashes was animal related, 10% were caused by swerving or evasive actions and another 8% each were caused by running off the road (to the right) and driving too fast for the conditions. Dry surface conditions were evident in nearly 60% of crashes, but snow and/or slush played a role in 14% of all crashes. In the fatal crashes, nearly one quarter were caused by crossing the center line and another 15% were caused by roadway departures to the right (Iowa DOT, CMAT, 2012). This makes a strong case for the installation of centerline and shoulder rumble strips or stripes in future road renovations. Table 7 presents further analysis of the five year crash data.

**Table 7: Crash Analysis, RPA 1, 2008-2012**

| Crash Analysis Element: | Percent of All Crashes | |
|---|---|---|
| Driver Gender | 56% Male | 39% Female |
| Driver Age | 27% Under 25 | 12% 65 and over |
| Drugs/Alcohol | 94% None indicated | 4% Alcohol involvement |
| Day/Time | 31% Friday or Saturday | 26% between 4:00 & 6:00 p.m. |

Source: (Iowa DOT, CMAT, 2012)

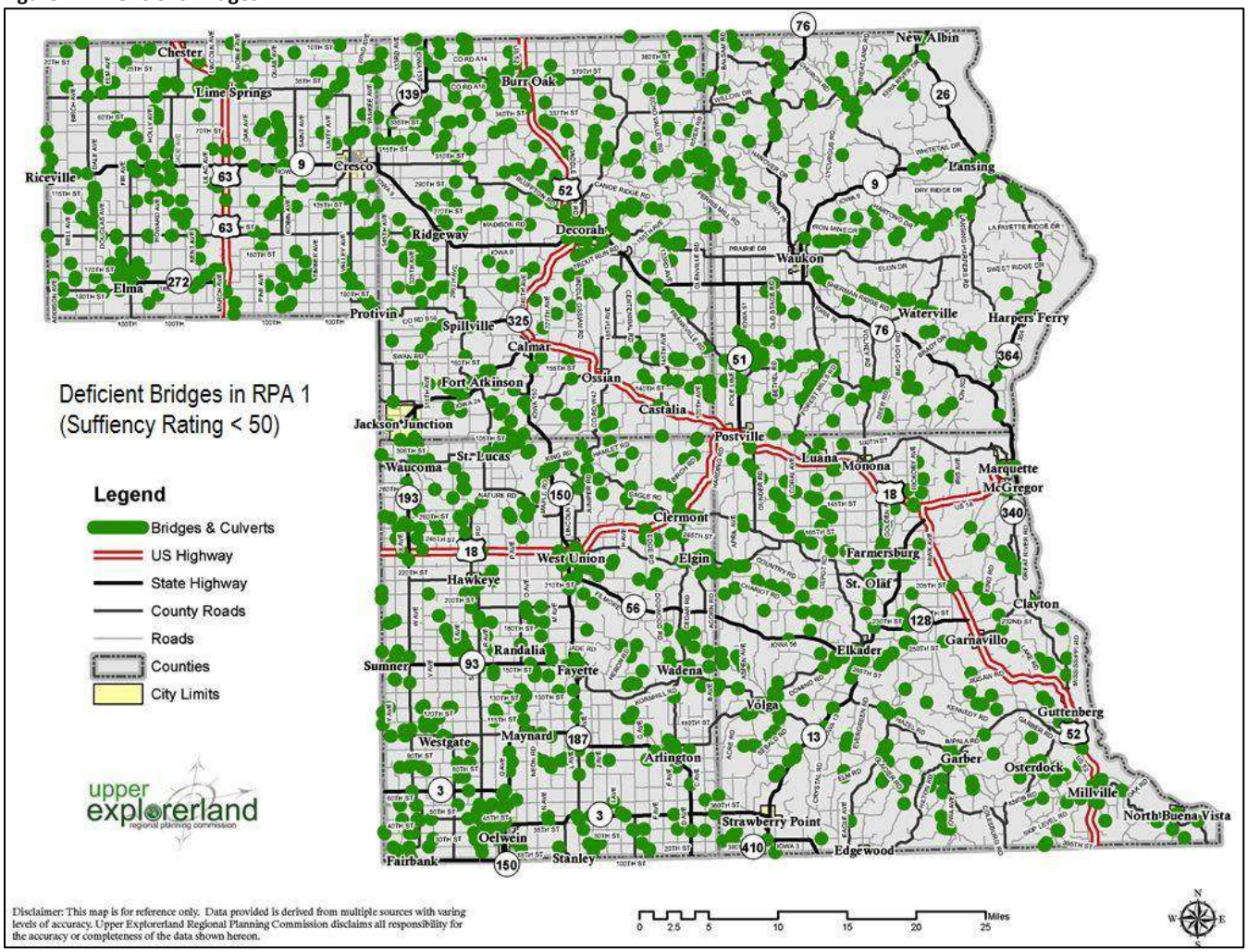
**Figure 21: RPA 1 Crash Locations, 2008-2012**




## Bridges

There are 1,410 bridges over 10 years of age within the five-county area included on the National Bridge Inventory. As of 2009, 401 of the bridge structures in the five county region were considered structurally deficient (277 bridges) or functionally obsolete (124 bridges) (Federal Highway Administration, 2009). Together, over 28% of the bridges within RPA 1 counties are considered to be deficient. Winneshiek County has the sixth highest number of deficient bridges in the state. Winneshiek and Clayton Counties have the largest percentage of deficient bridges at 36.7% and 35.4% respectively. Allamakee County has the lowest number of total bridges and the lowest percentage of deficient bridges at 15.7%. Figure 22 illustrates the locations of these structurally deficient or functionally obsolete bridges within the region. Bridge issues exist throughout the entire area and are broadly distributed. As bridges fall below an adequate level of sufficiency, weight restrictions are placed on the bridge, and as further deterioration occurs, bridges can be closed. Restrictions and closures can cause hardships for residents and interfere with agricultural activities.

**Figure 22: Deficient Bridges in RPA 1**




*City Roadway and Bridge Strengths*

- As roads are reconstructed, widths are being designed to consider and recognize all types of transportation
- Large bridge infrastructure is good
- Few chronic accident hot spots
- Balanced traffic distribution
- Bicycle and pedestrian facilities being improved and recognized as critical infrastructure
- Have been willing and able to upgrade facilities when needed to accommodate traffic flow (turn lanes, etc.)

*County Roadway and Bridge Strengths*

- Local contractors and labor are able to build or maintain any road and bridge
- Three scenic byways
- Abundant roadside parks
- Strong regional cooperation for road and bridge projects

- Sufficient availability of local natural resources for construction projects

*City Roadway and Bridge Challenges*

- Considerable number of asphalt street miles reaching critical ages needing life-extending maintenance or reconstruction
- 90+ year old pavements on arterial routes in town that make up a considerable number of street miles and in many cases are substandard dimensionally (usually too narrow)
- ADA changes hinder ability to efficiently complete asphalt maintenance when doing asphalt street overlays
- Many alleys need reconstruction
- Many retaining walls along streets and floodways need replacement
- In Decorah, face unknown expenses when US 52 is addressed by the DOT

*County Roadway and Bridge Challenges*

- Insufficient funding to adequately maintain existing roads and bridges
- Funding streams for Scenic Byways projects limited locally
- Funding needed for road improvements that promote long-term economic development
- Lansing bridge is in need of modernization for safety and to accommodate all levels of traffic (non-restricted)
- Access to barge terminals should be improved
- More climbing, passing and turning lanes are needed on US 52, IA 150 and IA 76
- Highway 63 does not continue as a four-lane through Howard County

## Active Transportation

**Trails**

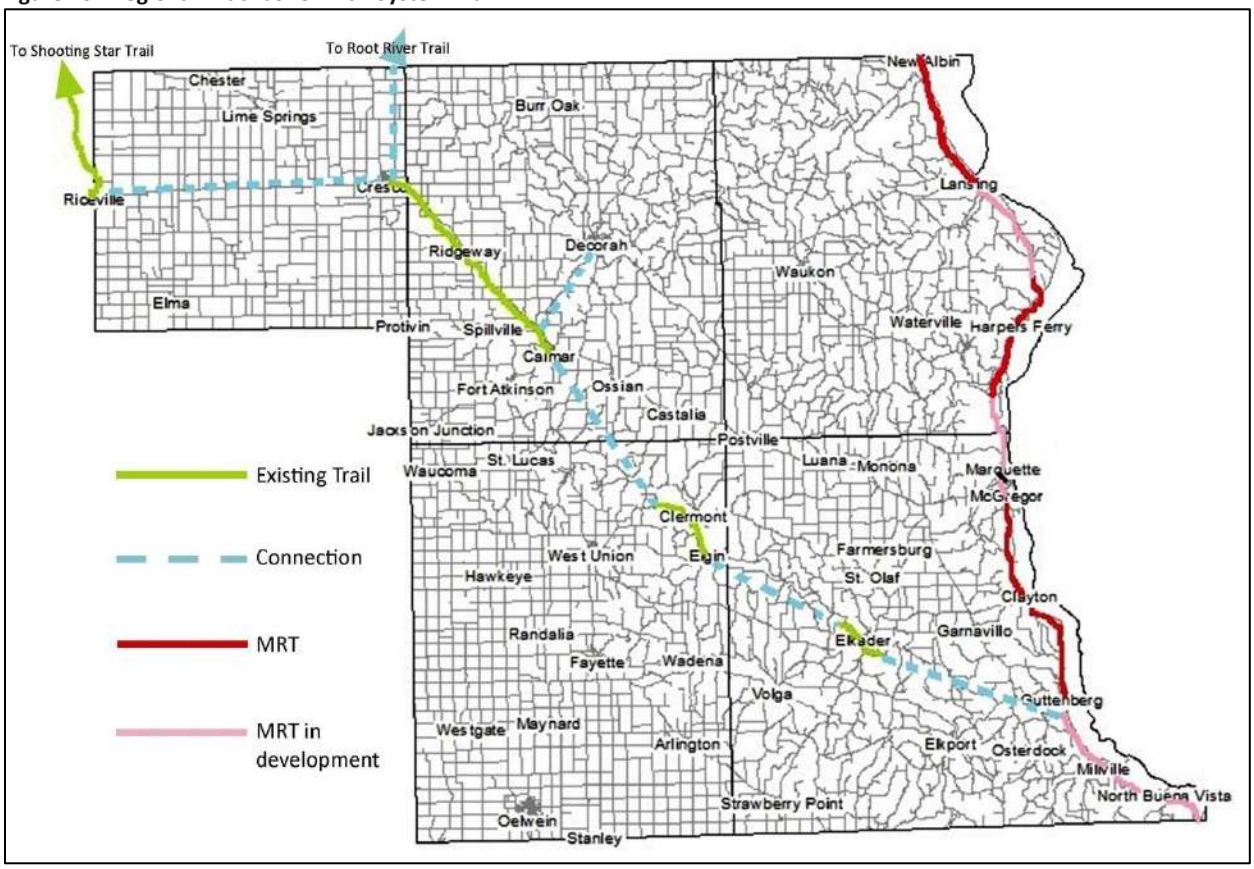
There are over 115 miles of completed trails within the five-county region. The Iowa DOT divides the state's trail system into state, regional and local level trail facilities. Level 1 trails are considered to be of statewide significance. These trails are part of Iowa's primary trail corridor network vision and are a priority of the Iowa DOT. Within the RPA 1 region, the DOT has designated the Mississippi River Trail as one of five Level 1 trails in the state. Level 2 trails are of regional significance and are identified as trails that either connect to a Level 1 trail and are at least 10 miles in length or are part of an existing or programmed trail network of at least 25 miles in length. These trails result in significant economic impacts to the state by providing for longer rides and attracting more out-of-state visitors. Level 3 trails have local significance and are shorter in length and are located in communities and counties. Level 3 trails typically do not draw visitors from a distance, but are very important in providing a better quality of life and improved mobility for communities.

The region has four major trail sections that when fully linked, will form the "backbone" to the area's trail system and are considered Level 2 trails within the region. Figure 23 illustrates where these existing sections are and the potential to connect them for a completed trail of approximately 120 miles across the region. The sections of this "backbone" include:

- **The Wapsi-Great Western Line (WGWL) Trail,** which runs 18.5 miles total in both Mitchell and Howard Counties. The majority of the trail is on abandoned railroad beds with less than a mile on shared roadway (Wapsi-Great Western Line Committee, 2012). There are 10.5 completed miles of the WGWL Trail in Howard County located around Riceville and Elma, with five of the miles running between Acme and Elma. In Mitchell County, the WGWL runs north to the Minnesota border, where the goal is to link to the Shooting Star Trail. In Howard County, the long-range goal of the "backbone" is to link the WGWL to the Prairie Farmer Trail in Cresco. The WGWL Committee is also pursuing a southward option, taking the trail from Elma all the way to the Waterloo/Cedar Falls area.
- **The Prairie Farmer Recreation Trail,** which begins in the community of Cresco in Howard County and runs on the abandoned Milwaukee Railroad line 20 miles to the community of Calmar in Winneshiek County. The Prairie Farmer Recreation Trail is a substantial section of the region's long range trail system plan which links the Prairie Farmer Recreation Trail to the Turkey River Recreation Corridor. Long-range plans also include a section north from Cresco to the Root River Trail near Harmony, MN.
- **The Dry Run Trail,** a link between the Prairie Farmer Recreation Trail and Decorah's Trout Run Trail. The Dry Run Trail will be 8.2 miles in length when completed, playing a vital role in connecting a major destination location in the region to the greater backbone trail system.
- **The Turkey River Recreation Corridor (TRRC),** an "Iowa Great Place," includes a completed 4.5 mile trail from north of Clermont to Elgin and the 4 mile Pony Hollow Trail near Elkader, along with the Motor Mill Bridge. When completed, TRRC will connect these trails resulting in a 26 mile completed trail. The long-range goal is to link the TRRC to the Mississippi River Trail (MRT) near Guttenberg.

The "backbone" will require significant resources in order to finish the approximate 110 miles of trail with over 35 bridge installations.

**Figure 23: Regional "Backbone" Trail System Plan**




Several communities within RPA 1 boundaries have long-range plans to connect existing city trail systems to the region's "backbone," to the MRT or other surrounding trail systems to create a trail network across the five counties. Cities with existing Level 2 or 3 trail transportation routes beyond the "backbone" segments include:

- Cresco: 2.5 mile Prairie Springs Trail with a goal of connecting to the Root River Trail in MN.
- Decorah: 11 mile Trout Run Trail loop that will eventually connect to the Prairie Farmer Trail and to Freeport
- Elkader: 1.25 mile River Walk Trail with expansion plans to connect to the Pony Hollow Trail
- Fayette: 5 mile city trail with a funded expansion of 2.5 miles to connect to the Volga River Recreation Area in 2014
- Monona: .6 mile Butterfly Trail with expansion to 1.2 miles in 2014
- Oelwein: 2.2 miles of city trail in two segments with future plans to connect the city trails and then expand to connect to the Rolling Prairie Trail to the west
- Postville: .25 mile Postville Pedestrian and Heritage Trail with expansion plans to the east
- Waukon: 2 mile city trail with expansion to 6.2 miles in 2017. Eventually, the trail could expand west to the Trout Run Trail and east to the MRT at Harpers Ferry through Waterville and the Yellow River State Forest
- Elma: .8 mile Old Roundhouse Trail, a city segment of the Wapsi-Great Western Trail

- Lansing: Improvements desired for three unimproved/rustic trail sections in the 104-acre Mount Hosmer Park on the bluff above the city overlooking the Mississippi. Long term plans include an expansion from the Clear Creek Park Greenbelt south of town along the Creek to the city park at the river (MRT) with a potential spur along 7th Street (plotted only – not in existence yet) around behind the bluff and up to Mount Hosmer.

In addition, there are several rural or county segments completed or in progress:

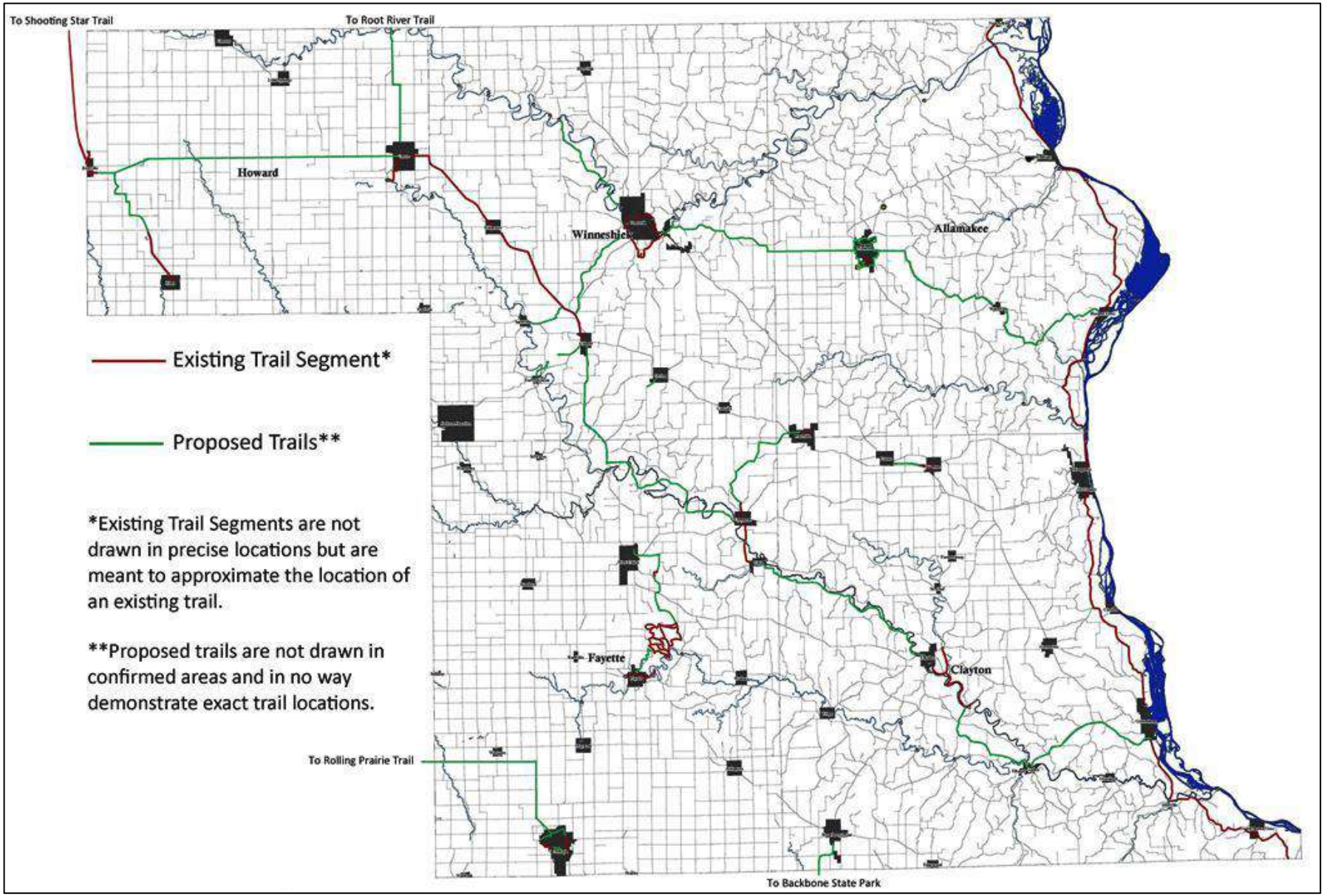
- The Mississippi River Trail (MRT): This Level 1 trail runs the entire length of the Mississippi River from Itasca, MN to the Gulf of Mexico, with a total of 3000 miles of on-road bike lanes and bike paths. The MRT runs about 75 miles along the river through both Allamakee and Clayton Counties. Figure 23 illustrates the location of the MRT in the region and its development status.
- The Great River Road Trail: A fully designated and signed 18-mile section of the MRT between Pikes Peak State Park south of McGregor and Guttenberg
- Volga River Recreation Area (VRRA): 25 miles of trail for walking, biking and equestrian use
- Echo Valley Environmental Nature Trail (E.V.E.N.T.): 2.5 miles of trail with long term goals of connecting to West Union and the VRRA
- Clermont to (eventually) Postville trail: 2.5 miles of trail is completed from Eagle Road to the Deerfield/Crystal Road intersection. An eventual connection to Postville is desired
- Clear Creek Park Greenbelt Trail: .75 mile looped trail through the park, located near the MRT, with potential expansion to and through Lansing.

Other communities and rural areas are in various planning stages for potential trails:

- Waukon to Waterville: 9 miles off road new construction
- Waterville to Harpers Ferry: 8 miles off road new construction and through Yellow River State Forest
- Marquette to McGregor: Trail of Two Cities, approximately 2 miles
- Luana to Monona: 3.2 miles on road in conjunction with road projects
- Strawberry Point to Backbone State Park: Approximately 3.5 miles
- Calmar to Lake Meyer: From the Prairie Farmer Trail approximately 3 miles
- Ossian to Silver Springs Park, approximately 1 mile
- Spillville to the Prairie Farmer Trail, approximately 3 miles
- Fort Atkinson to Lake Meyer, approximately 2 miles
- Bluffton to the Pole Line Road, approximately 7 miles

Figure 24 illustrates the existing trails of all levels as explained above and the approximate pathways of the region's proposed trails.

**Figure 24: RPA 1 Existing and Proposed Trail Segments, Levels 1, 2 and 3**



**Safe Routes to School**

RPA 1 has embraced the Safe Routes to School (SRTS) ethos and currently has a fulltime SRTS Liaison on staff. The Liaison coordinates a SRTS initiative that covers 10,000 students across the region and is adapted to the health and activity needs of schools and communities in rural places. The liaison has been successful in developing a rural model for SRTS that incorporates active transportation into the lives of children regardless of the school location. Where schools are within a walkable community, traditional SRTS methods such as the "walking school bus" or "bicycle train" are used. Where distances are longer, the initiative fosters activity in a variety of ways. For example, school buses can drop off students farther from the school entryway to allow for some walking, or bus drop-off points can be created around the school where students can finish their school trip by walking or biking. In very isolated schools where walking or biking is not practical or safe, the initiative focuses on integrating healthy activity into the school day. Some schools have introduced mileage clubs where students can win rewards for taking walking steps throughout the day. In other cases, teachers use curricula that incorporate activity, such as acting out stories, or feature exercise balls as classroom seating. The model creates four profiles for area schools and identifies SRTS programs that are likely to be successful for each profile. Table 8 illustrates the profiles and programs used in the rural model:

**Table 8: SRTS Rural Modeling**

| Profile Type | SRTS Programs |
|---|---|
| Single K-12 building, in-town | Walking School Buses; Bicycle Trains; Bike & Pedestrian Education; Bike Rodeo; Mileage Club/Punch Card; Specified Walking Days; Bike club (where trail is available) |
| Single K-12 building, isolated location | Bike & Pedestrian Education; Bike Rodeo; Mileage Club/Punch Card; Fitness Trail, onsite; Bike club (where trail is available) |
| Multiple buildings in single town | Walking School Buses; Bicycle Trains; Bike & Pedestrian Education; Bike Rodeo; Mileage Club/Punch Card; Walking Wednesdays; Bike club (where trail is available) |
| Multiple buildings, multiple towns | Walking School Buses; Bicycle Trains; Bike & Pedestrian Education; Bike Rodeo: Mileage Club/Punch Card; Walking Wednesdays; Bike club (where trail is available) |

In addition to developing and organizing student activities, the liaison also works to educate and provide resources and suggestions for community leaders and stakeholders so that their communities can become safer places for children to walk and bike. The liaison position maintains strong partnerships with the Northeast Iowa Food & Fitness Initiative, county public health officials, county conservation educators and area school districts that all work together to promote active communities and provide opportunities for active living.

*Active Transportation Strengths*

- Abundant natural resources provide scenic setting for trail system
- Existing trails attract many visitors to the region and provide residents with a higher quality of life

- Existing trails offer varying terrain for users at any level of ability
- Most existing trails offer real commuter opportunities
- Trails align with Scenic Byways and water trails
- Trails provide connectivity to the RPA's recreational resources such as parks and campgrounds
- Have developed strong partnerships to support and promote a healthier lifestyle
- Strong Safe Routes to School non-infrastructure programming

*Active Transportation Challenges*

- Routine and long term maintenance will become a challenge as assets begin to age
- Insufficient resources to develop trail connectivity across the region
- Some trails should have been built wider and as use increases may cause crowding
- Engaging in complete streets concept discussions
- Developing welcomed messaging regarding the benefits of active transportation, from economics to health and wellness
- Educating the public about funding sources for trails, many are "dedicated" and do not compete with the funding the region receives for other transportation infrastructure
- Continued funding to support Safe Routes to School non-infrastructure and infrastructure projects in local communities

## Public Transportation

**Designated Regional Transit Provider**

Public Transit is provided by Northeast Iowa Community Action Corporation (NEICAC). NEICAC Transit operates a fleet of 53 vehicles in the five-county area. 50 vehicles in the fleet are ADA accessible; fitted with either lifts or ramps. All vehicles are equipped with Mobile Data Computers that enable drivers to receive real-time trip updates from schedulers. Transit vehicles receive regular maintenance and receive three certified inspections each year: two from the Department of Education (DOE) and one from the USDOT. NEICAC Transit offers demand-response, curb-to-curb services from anywhere within the RPA 1 region to any destination. NEICAC Transit offers in-town regular services in eight communities:

| Town | Service Times | Frequency |
|---|---|---|
| Cresco | 7AM - 4PM | Monday - Friday |
| Decorah | 7AM - 5PM | Monday - Friday |
| Waukon | 9AM - 1PM | Monday - Friday |
| West Union | 9AM - 1PM | Monday - Friday |
| Oelwein | 9AM - 1PM | Monday - Friday |
| Elkader | 9AM - 1PM | Monday - Friday |
| Monona | 9AM - 1PM | Tuesdays & Thursdays |
| Guttenberg | 9AM - 1PM | Monday - Friday |

Regular in-town services offer the most affordable option for riders, with a current rate of $2.00 per one-way ride for trips that fit into the scheduled service times. Other ride options include:

| Ride Type: | Current Fare: | Description: |
|---|---|---|
| Special In-town Rides | $12 one-way | Pick-up and drop-off sites within same city, but no regular service exists |
| Dial-a-Ride Service | $1 per mile | Pick-up or drop-off address is outside city limits or the trip runs between 2 different towns. The trip does not fit within another service |
| Opportunity Shuttle: Monthly County Service | $13 per trip | Set up to provide rides to areas with expanded medical and shopping services on a regular basis, once or twice a month. There are seven shuttles currently with destinations in Decorah, Manchester, Oelwein and Prairie Du Chien. |
| Opportunity Shuttle: Housing Service | $3 one-way | A once a month trip available from Oelwein to Postville with stops in between. Service was built around the need for low-income families to physically go to a Postville office to apply for housing assistance. |
| Opportunity Shuttle: College Break Service | $25 one-way | Corresponding to UIU and Luther College breaks, this service offers rides to Waterloo-Cedar Falls, Boondocks truck stop, Ames, Ankeny and Des Moines. |
| Weekend In-town Service | $15 one-way | Weekend trip where pick-up and drop-off addresses are within the same city |
| Weekend Rural Service | $1.50 per mile | Weekend trips where pick-up or drop-off address is outside city limits or the trip runs between 2 different towns |
| Hourly Service | Varies | |

All of NEICAC Transit services are open to anyone wishing to ride. NEICAC seeks to increase ridership in order to make public transportation more affordable for everyone and is in the process of concept-testing a proposal for commuter routes throughout the region. In addition, the agency is planning to re-brand its Transit program to attract new users.

NEICAC Transit currently maintains a Mobility Manager position funded by JARC and New Freedom funds. The Mobility Manager focuses on strengthening partnerships, performing community outreach, identifying unmet needs and developing new services. In addition, the Mobility Manager developed and is managing the agency's Wheels for Work Program. The Wheels for Work Program is a zero-interest car loan program for working, low-income residents (incomes under 200% of poverty level). Applicants to the program also receive financial education and work with reputable vehicle dealers to make the most of the program. Loan recipients commit to carpooling and ride sharing as possible so that the program reaches more rural commuters.

With the repeal of JARC and New Freedom programs in MAP-21, NEICAC Transit expects to sustain the Wheels for Work program as a self-supporting revolving loan fund and will be continuing with the Mobility Manager position. Part of the mission of NEICAC is to "…create opportunities for basic self-sufficiency…" Given this goal, the organization sees value in continuing to financially support the Wheels for Work Program. In addition, the Mobility Manager's work to build is expected to increase revenue, some of which can help support the position. Funding will continue to be a challenge and the

long-term viability of these programs cannot be completely assured. The political and economic climate at the local, state and federal levels will continue to impact future programming decisions.

**Other Providers**

Several of the region's service providers have their own vehicles for transporting clients, especially those facilities that serve an elderly clientele. Many entertainment venues also provide transportation for their guests. Two counties, Allamakee and Clayton, operate VA vans that assist with veteran transportation to VA hospitals or clinics in other areas of the state. There are four charter bus or van providers: Hawkeye Stages in Decorah, Jewel Bus, south of Decorah, Deano Transportation in Decorah and Black Coyote Lines in Waterville. Two taxi services are available, both located in Decorah, Hometown Taxi and Sarge & Marge Taxi.

*Public Transportation Strengths*

- Strong vehicle maintenance program
- Dedicated, caring staff
- Focus on innovation and system improvements
- Focus on development of community partnerships
- Strong safety & staff training program

*Public Transportation Challenges*

- Aging fleet which increases maintenance expenses
- Shop and main office located in separate towns which causes logistical challenges at times
- Office space and layout not conducive to transit operations and limits staff growth potential
- Lack of funding limits growth of new services & ability to make system improvements
- Community perception problem "only for disabled, elderly & low-income"
- Taxi services are not available in other larger communities

## Aviation

There are six publicly-owned airports within the five-county area and four privately-owned facilities. There are also six FAA registered heliports within the region, the majority of which are for medical purposes. The nearest commercial service airports are located in Rochester, La Crosse, Dubuque, Waterloo and Mason City. Table 9 provides information on the public airports in the region.

**Table 9: RPA 1 Airport Information**

| Airport Name: | Location: | Operations (average/) | Aircraft Based on Field | % Local General Aviation | Runway Dimensions | Runway Surface | Eligible for Fed. Funding? |
|---|---|---|---|---|---|---|---|
| Ellen Church Field Airport | Cresco | 29/week | 7 | 75% | 2949 x 50 ft | Concrete | No |
| Decorah Municipal Airport | Decorah | 25/day | 26 | 55% | 4001 x 75 ft | Concrete | Yes |
| Monona Municipal Airport | Monona | 29/week | 6 | 59% | 2650 x 120 ft | Turf | No |
| Oelwein Municipal Airport | Oelwein | 77/week | 22 | 44% | 4000 x 75 ft<br>1723 x 85 ft | Concrete<br>Turf | Yes |
| Waukon Municipal Airport | Waukon | 83/month | 4 | 75% | 2413 x 60 ft | Asphalt | No |
| George L Scott Municipal Airport | West Union | 24/week | 6 | 39% | 4249 x 60 ft | Concrete | Yes |

Source: (AirNav, LLC, 2013)

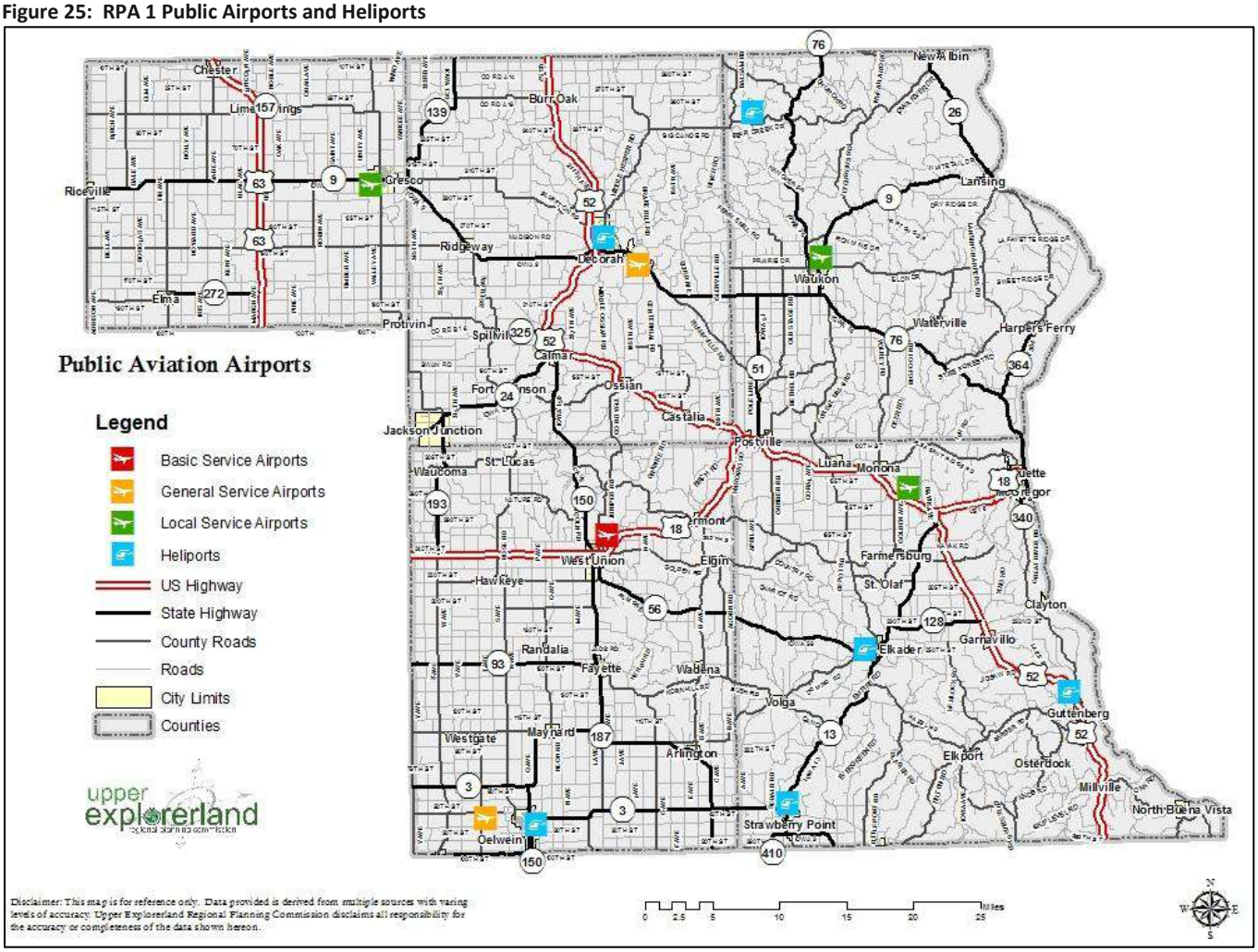
The Iowa Aviation System Plan identifies the Decorah and Oelwein airports as "General Service" airports. General Service airports have runways 4000 feet or greater in length with facilities and services customized to support most general aviation activity, including small to midsize business jets. The West Union airport is classified as a "Basic Service" airport. Basic Service airports have runways 3000 feet or greater, with facilities and services customized to meet local aviation needs. The airports in Cresco, Monona and Waukon are identified as "Local Service" airports. Local Service airports have runways less than 3000 feet or have turf as the primary runway surface. Local Service airports generally have limited airport services that support limited local aviation (Iowa DOT, Office of Aviation, 2013).

Figure 25 maps the locations of the region's public airports and the heliports. Table 10 lists the potential projects and development needs as identified in the Iowa Aviation System Plan and/or by the specific airport's commissioners for the Cresco, Decorah, Oelwein, Monona and West Union airports. Projects where funding amounts are included originate from the Iowa Aviation System Plan. Airports are important to the region's agricultural and business economies and the RPA 1 Policy Board will write letters of support for the region's airport commissions as grant applications are submitted to various state and federal agencies to implement the airport improvement plans.

**Table 10: RPA 1 Airport Needs**

| Airport: | Project Descriptions: | Funding Needed: |
|---|---|---|
| Ellen Church Field Airport, Cresco | Apron major rehabilitation | $300,609 |
| | Taxiway major rehabilitation | $577,631 |
| Decorah Municipal Airport | Construct a crosswind runway | $4,000,000 |
| | Construct Corporate hangar | |
| | Extend existing t-hangar | $165,000 |
| | Construct T-hangar and taxiway | $690,000 |
| | Airport Layout Plan update (2016, 2028) | $565,000 |
| | Apron major rehabilitation | $172,436 |
| | Replace Automated Weather Observing System (AWOS) equipment | $126,315 |
| | Install new cabinet and automated card reader to fuel system | $125,000 |
| | Construct partial parallel taxiway – grading | $311,721 |
| | Pave and light parallel taxiway and pave access taxiway | $450,000 |
| | Improvements to terminal building | $250,000 |
| | Terminal area improvements (and pilot's lounge) | $1,040,000 |
| Monona Municipal Airport | Taxiway repairs | |
| | Improved access road | |
| | Acquire land extension – not easily available | |
| | Acquire snow removal equipment | |
| Oelwein Municipal Airport | Construct connecting taxiway to Runway 13 | $642,350 |
| | Construct partial parallel taxiway – grading | $720,000 |
| | Construct parallel taxiway (2) | $1,100,000 |
| | Install Precision Approach Path Indicator (PAPI) on runway 13 and 31 | $60,000 |
| | Install Runway End Identifier Lights (REILS) on runway 31 approach | $35,000 |
| | Construct Hangar | $640,000 |
| | Airport Layout Plan (ALP) update | $335,000 |
| | Construct snow removal equipment building and terminal | $443,600 |
| | Replace Automated Weather Observing System (AWOS) equipment | $131,580 |
| | Update snow removal equipment (extend snow blower chute) | $7,000 |
| | Construct electrical distribution center (vault) | $130,000 |
| | Replace runway edge lighting | $180,000 |
| | Rehabilitate runway | $860,000 |
| Waukon Municipal Airport | Resurface taxiway – asphalt overlay | |
| | Resurface tie down area – asphalt overlay | |
| George L. Scott Municipal Airport, West Union | Replace the East roof tin and 3 hangar doors | |
| | Landscaping | |
| | Build a garage for maintenance equipment | |
| | Make updates to office interior | |
| | Painting: roof, remaining walls, beacon tower | |
| | Develop marketing plan and materials to advertise the airport | |
| | Taxiway major rehabilitation | $95,613 |
| | Relocate threshold, construct connecting taxiway | $336,359 |
| | Install fuel facility | $216,000 |
| | Install wildlife fence | $402,990 |
| | Acquire land extension | $503,960 |

**Figure 25: RPA 1 Public Airports and Heliports**




*Airport Strengths*

- Strategic locations in each county support community and economic development
- Good range of services and reputation for well-run facilities
- Reasonable fuel prices and ongoing fuel farm improvements at various airports
- Strong pavement inspection programs

*Airport Challenges*

- Some airports landlocked with no room for expansion
- Not all airports have a fixed-base operator (FBO)
- Lack of sufficient funding limits operating ability and improvements

## Rail Transportation

The region is served by two freight railroad companies, the Canadian Pacific Railroad and the D & W Railroad. There is no passenger rail service in the area.

The Canadian Pacific (CP) Railroad, owner of Dakota, Minnesota & Eastern Railroad Corp. (DME) operates two lines within the region. One line runs east-west through Winneshiek, Allamakee and Clayton Counties about 55 miles with a density of annual gross tons per mile at 6.22 million. The other line runs north-south along the Mississippi River through Allamakee and Clayton Counties about 75 miles. The density on the north-south line is 6.22 million annual gross tons per mile from the MN state line to the intersection with the east-west line between Marquette and McGregor, and 14.03 million annual gross tons per mile south to Dubuque. CP is a Class 1 railroad, defined as a railroad with 2011 operating revenues of at least $433.2 million (Association of American Railroads, 2013). The total CP operations in Iowa consist of about 660 miles of rail. The main products handled by the rail include coal, farm products, food products, chemicals, waste products, primary metal products, nonmetallic metals and stone (Iowa Department of Transportation, 2012).

A short stretch of rail owned by D&W Railroad (DWRV) is located in the southwest portion of Fayette County. Transco Railway Products and Hawkeye Renewables formed the D&W Railroad, LLC in 2005. Transco transferred the existing assets of the D&W Railroad Inc. (formed in 2002 by Transco to acquire the rail line from Dewar to Oelwein from the Union Pacific Railroad). The DWRV headquarters are located in Fairbank, Iowa and currently owns 19 miles of track, approximately 11 miles of which are within RPA 1. The railroad is considered a local railroad (engaged primarily in line-haul service) and has a density of annual gross tons per mile of .65 million. DWRV contracts with the Iowa Northern Railway Co. (IANR) to maintain the line and provide service to shippers. The main products carried on the line include grain, ethanol, feed and rail cars to be repaired or rebuilt (Iowa Department of Transportation, 2012).

Figure 26 illustrates the locations of railroads within the five-county region. Table 11 provides additional data regarding train traffic and crossings.

**Figure 26: Map of RPA 1 Railroad Locations**

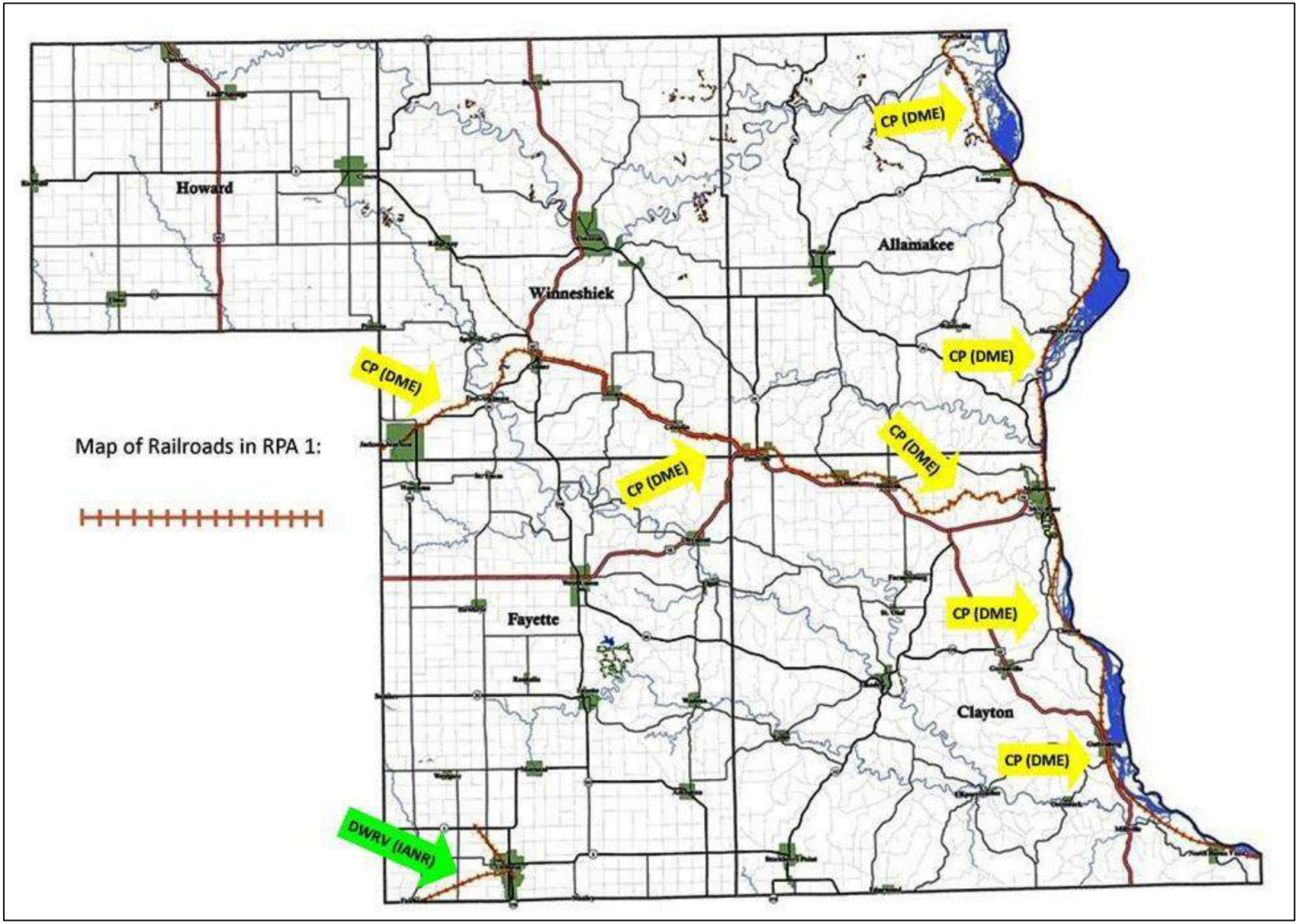


**Table 11: RPA 1 Railway Information**

| County | City | Number of Crossings (in/near) | Number of Trains Daily (in/near) | Number of Grain Loading Facilities (elevators or processors) |
|---|---|---|---|---|
| Allamakee | Harpers Ferry | 2/3 | 2/2 | 0 |
| | Lansing | 2/NA | 2/NA | 0 |
| | New Albin | 3/1 | 2/10 | 0 |
| | Postville | 7/3 | 2-3/3-4 | 3 |
| Clayton | Clayton | 1/NA | 4/NA | 1 |
| | Guttenberg | 13/3 | 4/4 | 0 |
| | Luana | 1/4 | 2/2 | 0 |
| | Marquette | 4/2 | 2-4/2 | 1 |
| | McGregor | 3/NA | 4/NA | 1 |
| | Monona | 7/5 | 2/2 | 2 |
| | North Buena Vista | 1/NA | 4/NA | 0 |
| Fayette | Fairbank | NA/3 | NA/0 | 1 |
| | Oelwein | 5/4 | 0-1/0-4 | 1 |
| Winneshiek | Calmar | 3/5 | 5/3-5 | 0 |
| | Castalia | 1/5 | 3/3 | 0 |
| | Fort Atkinson | 3/3 | 4/4 | 1 |
| | Jackson Junction | 3/3 | 4/4 | 0 |
| | Ossian | 5/3 | 3/3 | 1 |

Source: (Federal Railroad Administration, 2011)

*Rail Transportation Strengths*

- Rail lines offer transportation options for agriculture and industry
- Rail locations both east-west and north-south through the region
- Rail and barge offer multi-modal commerce transportation

*Rail Transportation Challenges*

- Rail lines run through several communities in close proximity to homes and businesses, possibly carrying hazardous materials
- Red flashing light signals are needed for safety on any crossings with 200 or more vehicles per day
- More spurs or loading facilities in communities along the rail lines to support industry growth and business attraction are desired

## Water Transportation

The Mississippi River in Allamakee and Clayton Counties is navigable several months out of the year and plays an important role for commerce in the area. The U.S. Army Corps of Engineers operates the locks and dams on the Mississippi River for navigation, not flood control. The locks and dams create slack-water pools for navigation during periods of low- and moderate-level water. For each pool, there is a primary control point, where a predetermined water elevation must be kept for navigation to continue. There are two dams along the river adjacent to RPA 1 counties. Lock and dam 9 is located just north of

Harpers Ferry on the Wisconsin side of the river, near Lynxville. Lock and dam 10 is located at Guttenberg in Clayton County. Table 12 provides additional data regarding these locks and dams.

**Table 12: Lock and Dam Data**

| | Lock and Dam 9, Lynxville, WI | Lock and Dam 10, Guttenberg, IA |
|---|---|---|
| Beginning Operation Date | July, 1937 | November, 1937 |
| Lock Chamber Size | 110' wide x 600' long | 110' wide x 600' long |
| Upper Pool/Tailwater Elevation | 620'/611' | 611'/603' |
| Vertical Lift | 9' | 8' |
| 2011 Annual Tonnage | 11,547,240 | 13,158,081 |
| Major Commodity | Farm Products | Farm Products |
| Total Boat Lockages | 4,712 | 4,810 |

Source: (U.S. Army Corps of Engineers - St. Paul District, 2012)

**Barge Terminals**

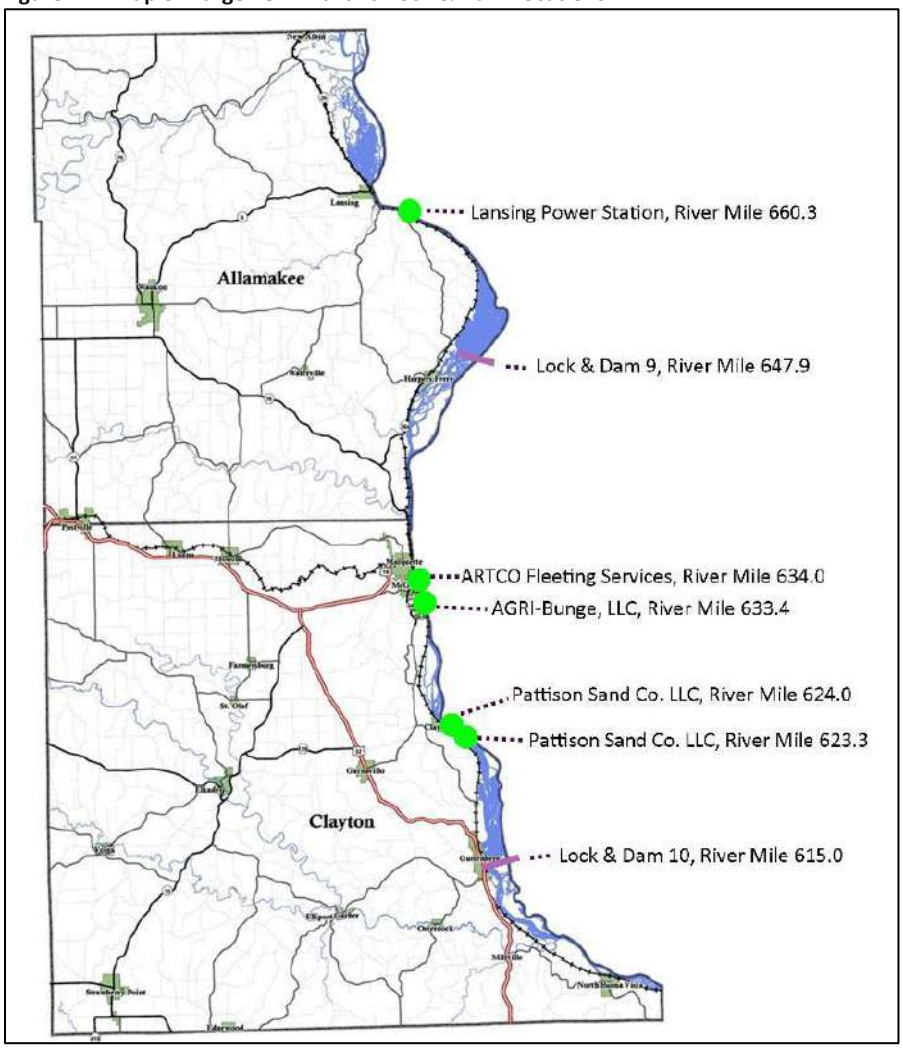
There are five terminals along the border of Allamakee and Clayton Counties, all serviced by DME Railroad. Table 13 provides data for each of them. Figure 27 maps the locations of the terminals and the locks and dams along the RPA 1 border.

**Table 13: RPA 1 Barge Terminal Information**

| Facility Name | Location | Rail Car Storage Capacity | Barges Worked Capacity | Barges Stored Capacity | Dry Storage Facilities | Major Commodities Handled |
|---|---|---|---|---|---|---|
| Pattison Sand Co. LLC | Clayton, River Mile 623.0 | 150 cars | 3 | 100 | NA | Silica sand, limestone, concrete stone |
| Pattison Sand Co. LLC | Clayton, River Mile 624.0 | 160 cars | 3 | 100 | NA | Silica sand, limestone, concrete stone |
| AGRI-Bunge, LLC | McGregor, River Mile 633.4 | 25 | 1 | 8 | 1 M Bushels | Corn and Soybeans |
| ARTCO Fleeting Services | McGregor, River Mile 634 | NA | NA | NA | NA | Fleet and Harbor Services |
| Lansing Power Station | Lansing, River Mile 660.3 | NA | NA | NA | 600,000 tons | Coal and Fly Ash |

Source: (Iowa Department of Transportation, 2011)

**Figure 27: Map of Barge Terminal and Lock & Dam Locations**

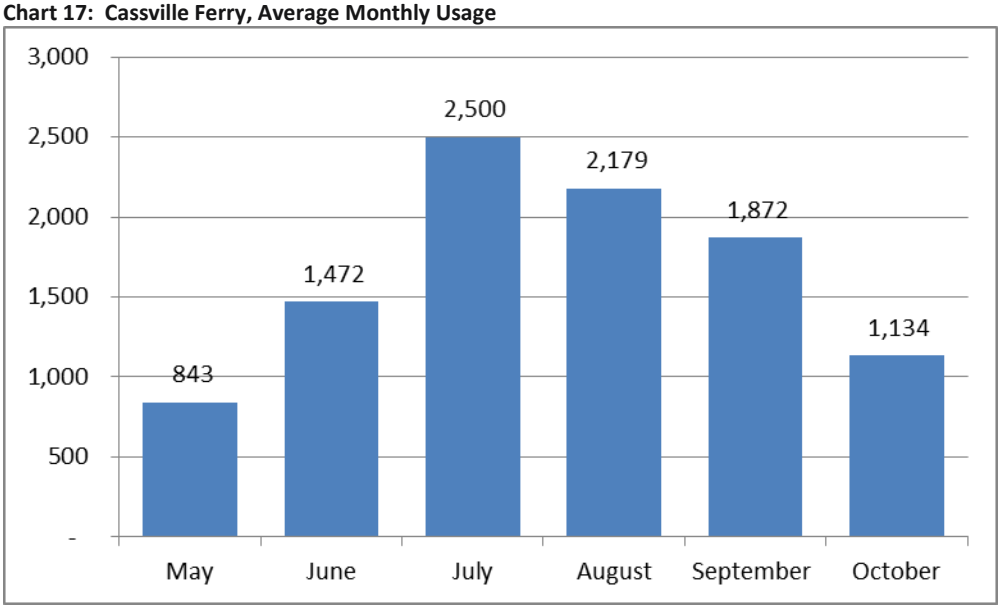



## Ferry

The Pride of Cassville Car Ferry operates on the Mississippi River between Cassville, WI and the Turkey River Boat Landing south of Guttenberg in the Upper Mississippi River National Wildlife and Fish Refuge. The ferry runs daily from Memorial Day through Labor Day and on weekends before and after these dates, from early May through October, river levels permitting. Chart 17 illustrates the average ridership per month based on the six years of operation from the 2007 to 2012 seasons. Days of operation varied over that period from just 74 days in 2008 to 160 in 2012. In addition to river levels, flooding can close or damage the roadway to the ferry, interrupting service.

Cassville Ferry at Iowa Landing

**Chart 17: Cassville Ferry, Average Monthly Usage**




Source: (Cassville Ferry Commission)

*Water Transportation Strengths*

- Barge terminals provide options for regional agricultural and industrial businesses
- Lock & dam system ensures navigability for a large part of the year
- Ferry offers transportation time savings for local agriculture and industry for river crossing
- Encourages tourism

*Water Transportation Challenges*

- Water levels can impair travel
- Flooding can damage access ways
- Need improved access to barge terminals

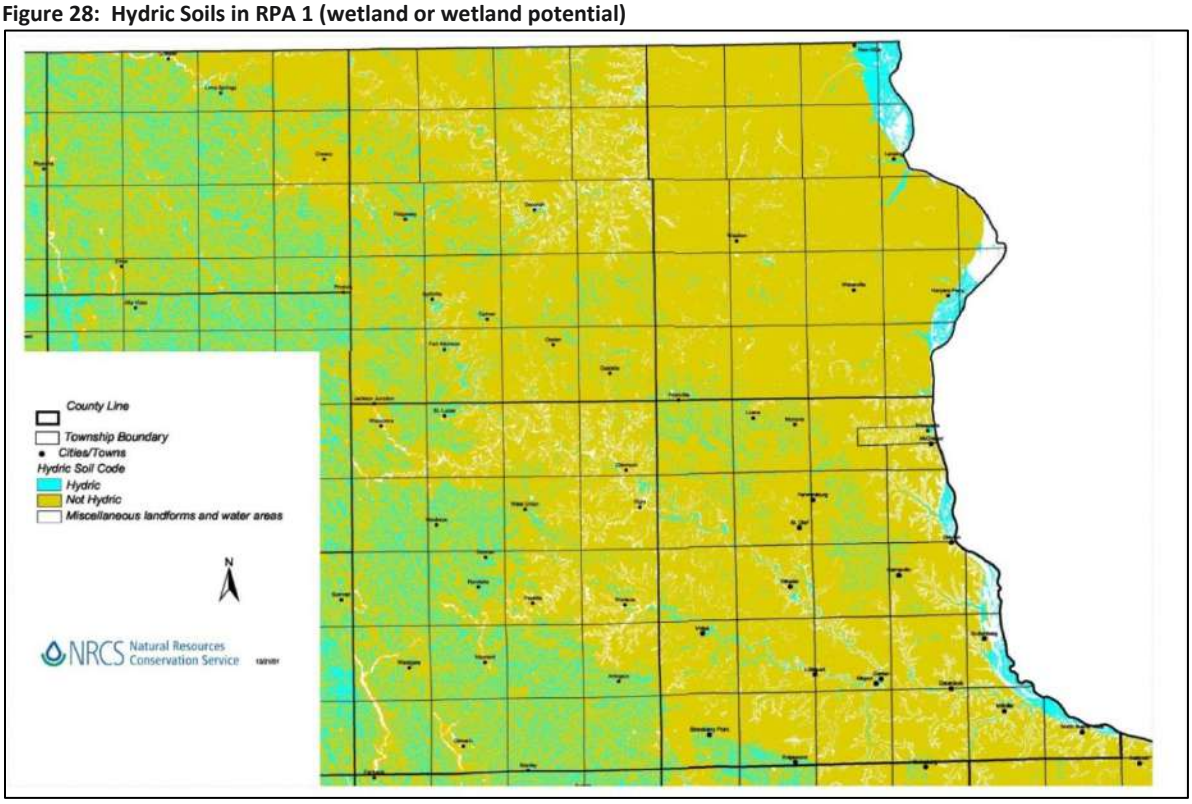
## Inventory of Environmentally Sensitive Resources

Planning for transportation projects must take in to account both the potential impacts and benefits of their implementation. Several pieces of Federal and State legislation have been put in place to ensure that potential impacts to the social and natural environment are examined and avoided as possible, and to reach project decisions that are in the best overall interest of the public. This section serves as the region's inventory of environmentally sensitive resources and areas, including wetlands, threatened and endangered species, protected and public areas, and other culturally significant sites. By creating an inventory, RPA 1 can understand and avoid potential conflicts between projects and its social and environmental assets.

### Wetlands

Wetlands, also known as marshes, swamps, sloughs, ponds, potholes, fens or bogs, play an important role in water retention, cleansing and cooling, which helps to reduce flooding and improve water quality. Wetlands also provide critical habitat for many species of native plants and wildlife. According to the Iowa Department of Natural Resources, nearly 95% of the state's original wetlands have been drained for agricultural purposes. Restoring and maintaining wetlands to fulfill their ecological role is of value on many levels. Figure 28 illustrates the location of wetlands, or the potential for wetlands (also called hydric soils) throughout the region.

**Figure 28: Hydric Soils in RPA 1 (wetland or wetland potential)**




Source: (USDA NRCS, 2013)

**Threatened and Endangered Species**

Table 14 indicates the federal list of threatened, endangered and proposed as endangered species found in the region. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Endangered species are animals and plants that are in danger of becoming extinct. Two species in the region are in this serious status and two others have been proposed as candidates for the endangered label.

**Table 14: Federal List of Threatened and Endangered Species in the RPA 1 Region**

| Counties: | Common Name: | Scientific Name: | Status: | Habitat: |
|---|---|---|---|---|
| All RPA 1 | Prairie Bush Clover | Lespedeza leptostachya | Threatened | Dry to mesic prairies with gravelly soil |
| All RPA 1 | Western Prairie Fringed Orchid | Platanthera praeclara | Threatened | Wet prairies and sedge meadows |
| Allamakee, Clayton | Northern Monkshood | Aconitum novaboracense | Threatened | Shaded to partially shaded cliffs, algific talus slopes or on cool, streamside sites |
| Allamakee, Clayton | Higgins' Eye Pearlymussel | Lampsilis higginsii | Endangered | Mississippi River |
| All RPA 1 | Northern Long-eared Bat | Myotis septentrionalis | Proposed | Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests during late spring and summer |
| Clayton, Fayette | Iowa Pleistocene Snail | Discus macclintocki | Endangered | North-facing algific talus slopes of the driftless area |
| Howard | Poweshiek Skipperling | Oarisma poweshiek | Proposed | Remnants of tallgrass prairie |

Source: (U.S. Fish & Wildlife Service, 2013)

*Prairie Bush Clover*

The Prairie Bush Clover is found in only four Midwestern states. The plant is a member of the pea family and exhibits a unique genetic and chemical makeup that could be useful in biological research to develop agricultural and medical improvements. The plant is threatened by the loss of tallgrass prairie habitat through the conversion of pasture to cropland, overgrazing, agricultural expansion, herbicide application, urban expansion, rock quarrying and transportation right-of-way maintenance and mowing.

Phil Delphey

*Western Prairie Fringed Orchid*

The Western Prairie Fringed Orchid is found only in about 75 sites in the states of Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and Oklahoma, and in Manitoba. The plant is threatened by habitat loss, mostly from conversion to cropland. Competition with introduced alien plants, filling of wetlands, intensive hay mowing, fire suppression, and overgrazing also threatens the plant. Over-collection, because of their rarity and beauty has also played a role, along with pesticides that threaten the insects vital for pollination, and other pollutants.

Marlin Bowles

*Northern Monkshood*

U.S.F.W.S.

Northern Monkshood is found in only four states, and in just five counties within Iowa. The plant is typically found in areas with cool soil conditions, cold air drainage, or cold groundwater flowage. The karst topography of northeast Iowa offers an ideal environment for the plant. The characteristic sinkholes release cool air and water from the ice contained underground. The Northern Monkshood is threatened by the filling of sinkholes, grazing and trampling by livestock, human foot traffic, maintenance of roadways and power lines, pesticides and quarrying.

*Higgins' Eye Pearlymussel*

U.S.F.W.S.

The Higgins' Eye Pearlymussel is found in parts of the Mississippi River north of Keokuk and in three tributaries of the river (none of which are within RPA 1 boundaries). The Higgins' Eye was reintroduced in the Wapsipinicon, but this has not been within RPA 1 boundaries. The mussel is reliant on deep, free-flowing, clean water and has been impacted by the impounding of the river and polluted runoff from city, industry and agriculture. Exotic species, in particular the Invasive Zebra Mussel, have become the most alarming threat to the Higgins' Eye. The Prairie du Chien, WI population, directly across the river from RPA 1, has been relegated from being one of the most populous Higgins' Eye mussel beds to one of the most threatened.

*Northern Long-Eared Bat*

Al Hicks

The Northern Long-Eared Bat has a large range throughout 39 states. The threat of White-nose Syndrome is so severe, that the bat has been selected as a candidate for endangered species status. Northern Long-Eared bats hibernate over the winter in caves and mines, typically large caves or mines with large entrances; constant temperatures; and high humidity with no air currents. During the summer, the bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. They may also roost in cooler places, like caves and mines and occasionally in structures like barns and sheds.

*Iowa Pleistocene Snail*

Joel Sartore

The Iowa Pleistocene Snail has only been found in about 30 sites in Iowa and Illinois, and in just five counties within the state of Iowa. The snail's habitat is in leaf litter, mostly birch and maple, in cool environments similar to the Northern Monkshood. Threats to the snail include logging, quarrying, road construction, sinkhole filling and trampling by humans and livestock. The largest threat comes from climate change, as the snail cannot survive in hotter air.

*Poweshiek Skipperling*

The Poweshiek Skipperling is a small, moth-like butterfly found in just six states and Manitoba. It has been found in only five counties within Iowa. The butterflies are generally found in areas where native prairie remains. Threats to the skipperling include loss of native prairie habitat, invasive species, gravel mining, herbicide applications, inbreeding, population isolation and poor fire/mowing management of habitat.

The State of Iowa has its own list of species classified as endangered, threatened or of special concern. The list is used by professional natural resource managers to identify opportunities for conservation, to improve natural resource management, and to conduct environmental reviews to avoid conflicts between development and listed species. Table 15 lists the species identified by the State as endangered or threatened.

**Table 15: Iowa Endangered and Threatened Species within RPA 1**

| County: | Common Name: | Class: | State Status: |
|---|---|---|---|
| Allamakee, Clayton, Howard, Winneshiek | Mudpuppy | Amphibians | Threatened |
| Winneshiek | Central Newt | Amphibians | Threatened |
| All RPA 1 | Henslow's Sparrow | Birds | Threatened |
| Allamakee | King Rail | Birds | Endangered |
| Allamakee, Winneshiek | Long-eared Owl | Birds | Threatened |
| Allamakee, Clayton | Red-shouldered Hawk | Birds | Endangered |
| Clayton | Barn Owl | Birds | Endangered |
| Fayette, Howard, Winneshiek | Northern Harrier | Birds | Endangered |
| Howard | Short-eared Owl | Birds | Endangered |
| Clayton | Least Darter | Fish | Endangered |
| Clayton | Western Sand Darter | Fish | Threatened |
| Allamakee, Clayton, Fayette, Howard | American Brook Lamprey | Fish | Threatened |
| All RPA 1 | Black Redhorse | Fish | Threatened |
| Allamakee, Clayton | Bluntnose Darter | Fish | Endangered |
| Allamakee, Clayton, Winneshiek | Burbot | Fish | Threatened |
| Allamakee, Winneshiek | Chestnut Lamprey | Fish | Threatened |
| Allamakee, Clayton | Grass Pickerel | Fish | Threatened |
| Allamakee, Clayton | Lake Sturgeon | Fish | Endangered |
| Allamakee, Clayton | Weed Shiner | Fish | Endangered |
| Allamakee, Winneshiek | Baltimore | Insects | Threatened |
| Allamakee, Howard | Silvery Blue | Insects | Threatened |
| Howard | Powesheik Skipperling | Insects | Threatened |
| Clayton, Howard | Spotted Skunk | Mammals | Endangered |
| Allamakee, Clayton | Butterfly | Mussels | Threatened |
| Allamakee, Clayton, Howard, Winneshiek | Creeper | Mussels | Threatened |
| Allamakee, Clayton | Higgin's-eye Pearly Mussel | Mussels | Endangered |

| County: | Common Name: | Class: | State Status: |
|---|---|---|---|
| Allamakee, Clayton | Round Pigtoe | Mussels | Endangered |
| Allamakee, Clayton | Yellow Sandshell | Mussels | Endangered |
| Clayton | Pistolgrip | Mussels | Endangered |
| Clayton | Purple Wartyback | Mussels | Threatened |
| Clayton | Sheepnose | Mussels | Endangered |
| Fayette, Howard, Winneshiek | Creek Heelsplitter | Mussels | Threatened |
| Fayette, Howard, Winneshiek | Ellipse | Mussels | Threatened |
| Howard, Winneshiek | Cylindrical Papershell | Mussels | Threatened |
| Allamakee | Bigroot Prickly-pear | Plants | Endangered |
| Allamakee | Black Huckleberry | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Bog Bedstraw | Plants | Endangered |
| Allamakee, Clayton, Howard | Bog Birch | Plants | Threatened |
| Allamakee, Clayton | Bog Willow | Plants | Threatened |
| Allamakee | Buckbean | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Bunchberry | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Canada Plum | Plants | Endangered |
| Allamakee | Clammy False Foxglove | Plants | Endangered |
| Allamakee | Clustered Broomrape | Plants | Endangered |
| Allamakee | Douglas Knotweed | Plants | Endangered |
| Allamakee, Winneshiek | Eastern Jointweed | Plants | Endangered |
| Allamakee, Winneshiek | Golden Corydalis | Plants | Threatened |
| All RPA 1 | Golden Saxifrage | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Green Violet | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Jeweled Shooting Star | Plants | Threatened |
| Allamakee, Clayton, Howard, Winneshiek | Kidney-leaf White Violet | Plants | Threatened |
| Allamakee, Winneshiek | Large-leaf White Violet | Plants | Endangered |
| Allamakee, Clayton | Low Sweet Blueberry | Plants | Threatened |
| Allamakee, Fayette, Winneshiek | Lupine | Plants | Threatened |
| Allamakee, Winneshiek | Narrowleaf Pinweed | Plants | Threatened |
| Allamakee, Clayton | Northern Black Currant | Plants | Threatened |
| All RPA 1 | Northern Lungwort | Plants | Endangered |
| Allamakee, Clayton | Northern Monkshood | Plants | Threatened |
| Allamakee, Winneshiek | One-sided Pyrola | Plants | Threatened |
| Allamakee | Pale Corydalis | Plants | Threatened |
| Allamakee | Pale False Foxglove | Plants | Endangered |
| Allamakee, Clayton, Winneshiek | Pinesap | Plants | Threatened |
| Allamakee | Pink Milkwort | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Pink Shinleaf | Plants | Endangered |
| Allamakee | Poppy Mallow | Plants | Endangered |
| Allamakee, Clayton, Fayette, Winneshiek | Prickly Rose | Plants | Endangered |

| County: | Common Name: | Class: | State Status: |
|---|---|---|---|
| Allamakee, Fayette, Winneshiek | Prince's Pine | Plants | Threatened |
| Allamakee | Racemed Milkwort | Plants | Endangered |
| Allamakee | Rough-seeded Fame Flower | Plants | Endangered |
| Allamakee, Fayette | Roundstem Foxglove | Plants | Threatened |
| Allamakee, Fayette, Winneshiek | Shining Willow | Plants | Threatened |
| Allamakee | Shrubby Cinquefoil | Plants | Threatened |
| Allamakee | Swamp Goldenrod | Plants | Endangered |
| Allamakee, Fayette, Howard, Winneshiek | Sweet Indian Plantain | Plants | Threatened |
| Allamakee, Winneshiek | Three-toothed Cinquefoil | Plants | Endangered |
| Allamakee, Clayton, Winneshiek | Twinflower | Plants | Threatened |
| Allamakee, Clayton, Fayette | Twinleaf | Plants | Threatened |
| Allamakee, Clayton | Velvet Leaf Blueberry | Plants | Threatened |
| Allamakee | Waterwillow | Plants | Endangered |
| Allamakee, Howard | Winterberry | Plants | Endangered |
| Allamakee, Fayette, Winneshiek | Wooly Milkweed | Plants | Threatened |
| Allamakee | Creeping Juniper | Plants | Threatened |
| Allamakee, Clayton, Fayette, Winneshiek | Hooker's Orchid | Plants | Threatened |
| Allamakee, Fayette, Howard, Winneshiek | Purple Fringed Orchid | Plants | Threatened |
| Allamakee, Clayton, Fayette, Winneshiek | Rosy Twisted Stalk | Plants | Threatened |
| Allamakee, Clayton, Fayette, Winneshiek | Showy Lady's Slipper | Plants | Threatened |
| Allamakee, Winneshiek | Slender Ladies'-tresses | Plants | Threatened |
| Allamakee, Clayton | Slender Mountain-ricegrass | Plants | Endangered |
| Allamakee, Winneshiek | Slim-leaved Panic Grass | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Spotted Coralroot | Plants | Threatened |
| Allamakee, Clayton, Fayette, Winneshiek | Yellow Trout-lily | Plants | Threatened |
| Allamakee | Yellow-lipped Ladies-tresses | Plants | Endangered |
| Allamakee | Daisy-leaved Moonwort | Plants | Endangered |
| Allamakee, Clayton | Glandular Wood Fern | Plants | Threatened |
| Allamakee | Ground Pine | Plants | Endangered |
| Allamakee, Clayton, Fayette, Winneshiek | Leathery Grape Fern | Plants | Threatened |
| Allamakee | Long Beechfern | Plants | Endangered |
| Allamakee | Marginal Shield Fern | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Oak Fern | Plants | Threatened |
| Allamakee, Winneshiek | Oregon Woodsia | Plants | Threatened |
| Allamakee, Clayton, Winneshiek | Purple Cliff-brake Fern | Plants | Endangered |
| Allamakee, Clayton | Rock Clubmoss | Plants | Threatened |
| Allamakee | Royal Fern | Plants | Threatened |
| Allamakee, Winneshiek | Rusty Woodsia | Plants | Endangered |
| Allamakee, Clayton | Tree Clubmoss | Plants | Threatened |
| Allamakee, Fayette, Howard, Winneshiek | Woodland Horsetail | Plants | Threatened |

| County: | Common Name: | Class: | State Status: |
|---|---|---|---|
| Clayton | Blue Giant Hyssop | Plants | Endangered |
| Clayton | False Mermaid-weed | Plants | Endangered |
| Clayton, Fayette, Howard, Winneshiek | Nodding Onion | Plants | Threatened |
| Clayton, Howard | Northern Panic-grass | Plants | Endangered |
| Clayton, Fayette, Howard, Winneshiek | Western Prairie Fringed Orchid | Plants | Threatened |
| Clayton | Cinnamon Fern | Plants | Endangered |
| Fayette, Winneshiek | Bearberry | Plants | Endangered |
| Fayette | Cliff Conobea | Plants | Endangered |
| Fayette | Kitten Tails | Plants | Threatened |
| Fayette | Queen-of-the-prairie | Plants | Threatened |
| Fayette, Howard, Winneshiek | Small Sundrops | Plants | Threatened |
| Fayette, Howard | Arrow Grass | Plants | Threatened |
| Fayette, Howard, Winneshiek | Beakrush | Plants | Threatened |
| Fayette | Low Nut Rush | Plants | Threatened |
| Fayette, Howard | Pale Green Orchid | Plants | Endangered |
| Fayette | Yellow-eyed Grass | Plants | Endangered |
| Howard, Winneshiek | Prairie Bush Clover | Plants | Threatened |
| Howard | Rush Aster | Plants | Threatened |
| Howard, Winneshiek | Leafy Northern Green Orchid | Plants | Threatened |
| Winneshiek | Big-leaved Aster | Plants | Endangered |
| Winneshiek | Black Chokeberry | Plants | Endangered |
| Winneshiek | Hairy Pinweed | Plants | Threatened |
| Winneshiek | Partridge Berry | Plants | Threatened |
| Winneshiek | Shrubby Cinquefoil | Plants | Threatened |
| Winneshiek | Yellow Monkey Flower | Plants | Threatened |
| All RPA 1 | Blanding's Turtle | Reptiles | Threatened |
| Clayton | Common Musk Turtle | Reptiles | Threatened |
| Clayton, Fayette | Ornate Box Turtle | Reptiles | Threatened |
| Allamakee, Clayton, Fayette | Bluff Vertigo | Snails | Endangered |
| Allamakee, Clayton | Briarton Pleistoscene Vertigo | Snails | Endangered |
| Allamakee, Clayton, Winneshiek | Frigid Ambersnail | Snails | Endangered |
| Allamakee, Clayton, Howard | Iowa Pleistocene Vertigo | Snails | Endangered |
| Allamakee, Clayton, Winneshiek | Midwest Pleistocene Vertigo | Snails | Threatened |
| Allamakee, Clayton, Howard, Winneshiek | Variable Pleistocene Vertigo | Snails | Threatened |
| Clayton | Hubricht's Vertigo | Snails | Threatened |
| Clayton, Fayette | Iowa Pleistocene Snail | Snails | Endangered |
| Winneshiek | Iowa Pleistocene Ambersnail | Snails | Endangered |
| Winneshiek | Minnesota Pleistocene Ambersnail | Snails | Endangered |

Source: (Iowa DNR, n.d.)

**Protected Areas**

Protected areas are locations that are recognized as having environmental or cultural value and are protected from certain types of usage. Ownership of protected areas can be public or private. Many of the unique habitats for the endangered species in the RPA 1 region are located in designated protected areas. Region-wide, about 2% of the land is protected, generally under governmental ownership. Table 16 lists some of the protected areas within the region and Figure 29 maps the locations of various areas. In the region, most of the protected areas are managed by the state, with federal agencies managing several protected areas along the Mississippi River.

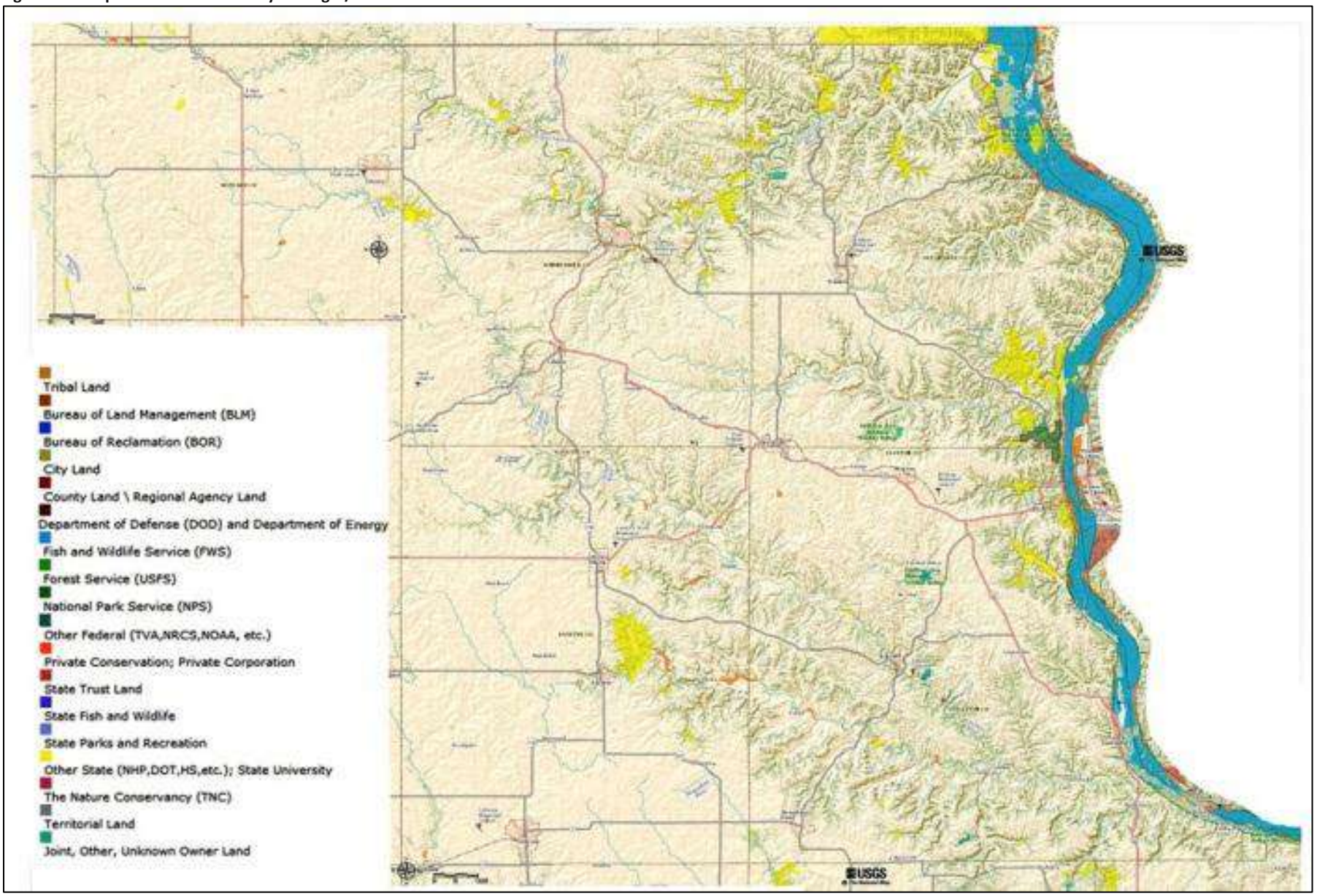
**Table 16: Protected Areas, RPA 1**

| County: | Protected Area Name: | Acres: |
|---|---|---|
| Allamakee | Patterson Creek | 357 |
| Allamakee | Waterloo Creek Wildlife Management Area | 1,769 |
| Allamakee | English Bench Wildlife Management Area | 29 |
| Allamakee | Clear Creek Wildlife Management Area | 922 |
| Allamakee | French Creek Wildlife Management Area | 1,454 |
| Allamakee | Pool Slough Wildlife Management Area | 631 |
| Allamakee | Blackhawk Point Wildlife Management Area | 320 |
| Allamakee | Fish Farm Mounds Wildlife Management Area | 578 |
| Allamakee | Lansing Wildlife Management Area | 1,906 |
| Allamakee | Village Creek Area Access | 52 |
| Allamakee | Yellow River State Forest | 8,504 |
| Allamakee | Franklin | 211 |
| Allamakee | Effigy Mounds National Monument | 2,526 |
| Allamakee/Clayton | Upper Mississippi River Wildlife and Fish Refuge | 938 |
| Allamakee/Clayton | Driftless Area National Wildlife Refuge | 648 |
| Clayton | Bloody Run Creek Wildlife Management Area | 740 |
| Clayton | Pikes Peak State Park | 990 |
| Clayton | Sny Mcgill - North Cedar Wildlife Management Area | 1,919 |
| Clayton | McGregor Area | 64 |
| Clayton | Big Springs Trout Hatchery | 122 |
| Clayton | Retz Woods Fee | 49 |
| Clayton | Ensign Hollow Wildlife Management Area | 38 |
| Clayton | Leonard Wildlife Management Area | 269 |
| Clayton | Turkey River Mounds State Preserve | 84 |
| Clayton | Mossy Glen State Preserve | 78 |
| Clayton | Merritt Forest State Preserve | 21 |
| Clayton | Pine Creek (Clayton) Wildlife Management Area | 49 |
| Clayton | Bixby State Preserve | 184 |
| Fayette | Montauk | 42 |
| Fayette | Brush Creek Canyon State Preserve | 214 |
| Fayette | Grannis Creek Wildlife Management Area | 184 |

| County: | Protected Area Name: | Acres: |
|---|---|---|
| Fayette | Volga River Lake State  Recreation Area | 5,601 |
| Fayette | Volga River Access | 52 |
| Fayette | Echo Valley State Park | 295 |
| Fayette | Kauten-Mihall Fen Fee | 16 |
| Fayette/Clayton | Joy Springs Wildlife Management Area | 72 |
| Howard | Hayden Prairie State Preserve | 240 |
| Howard | Elma Wildlife Management Area | 154 |
| Howard | Little Wapsi River Wildlife Management Area | 82 |
| Howard | Turkey River Area Wildlife Management Area | 320 |
| Howard | Turkey River Access | 91 |
| Howard | Crossman Prairie Fee | 11 |
| Howard/Winneshiek | Cardinal Marsh Wildlife Management Area | 1,173 |
| Winneshiek | Bluffton Fir Stand State Preserve | 125 |
| Winneshiek | Cold Water Spring State Preserve | 60 |
| Winneshiek | Malanaphy Springs State Preserve | 58 |
| Winneshiek | Canoe Creek Wildlife Management Area | 430 |
| Winneshiek | Cold Water Creek Wildlife Management Area | 172 |
| Winneshiek | Coon Creek Wildlife Management Area | 1,729 |
| Winneshiek | Falcon Springs Wildlife Management Area | 256 |
| Winneshiek | North Bear Creek Wildlife Management Area | 828 |
| Winneshiek | South Bear Creek Wildlife Management Area | 589 |
| Winneshiek | South Pine Creek Wildlife Management Area | 218 |
| Winneshiek | Trout River Wildlife Management Area | 171 |
| Winneshiek | Trout Run Wildlife Management Area | 60 |
| Winneshiek | Twin Springs Wildlife Management Area | 5 |
| Winneshiek | Upper Iowa River Wildlife Management Area | 2,359 |
| Winneshiek | Fort Atkinson State Preserve | 7 |
| Winneshiek | Siewers Springs Fish Hatchery | 20 |
| Winneshiek | Trout Run County Park | 13 |
| Winneshiek | Cold Air Slope | 174 |
| Winneshiek/Allamakee | Pine Creek Wildlife Management Area | 650 |
| Winneshiek/Allamakee | Slinde Mounds State Preserve | 29 |

Source:  (USGS, 2013)

**Figure 29: Map of Protected Areas by Manager/Owner**




Source: (USGS, 2013)

**Public Areas**

Public areas offer recreational opportunities and public access to natural resources throughout the region. Figure 30 maps the locations of the public areas in the RPA 1 region.

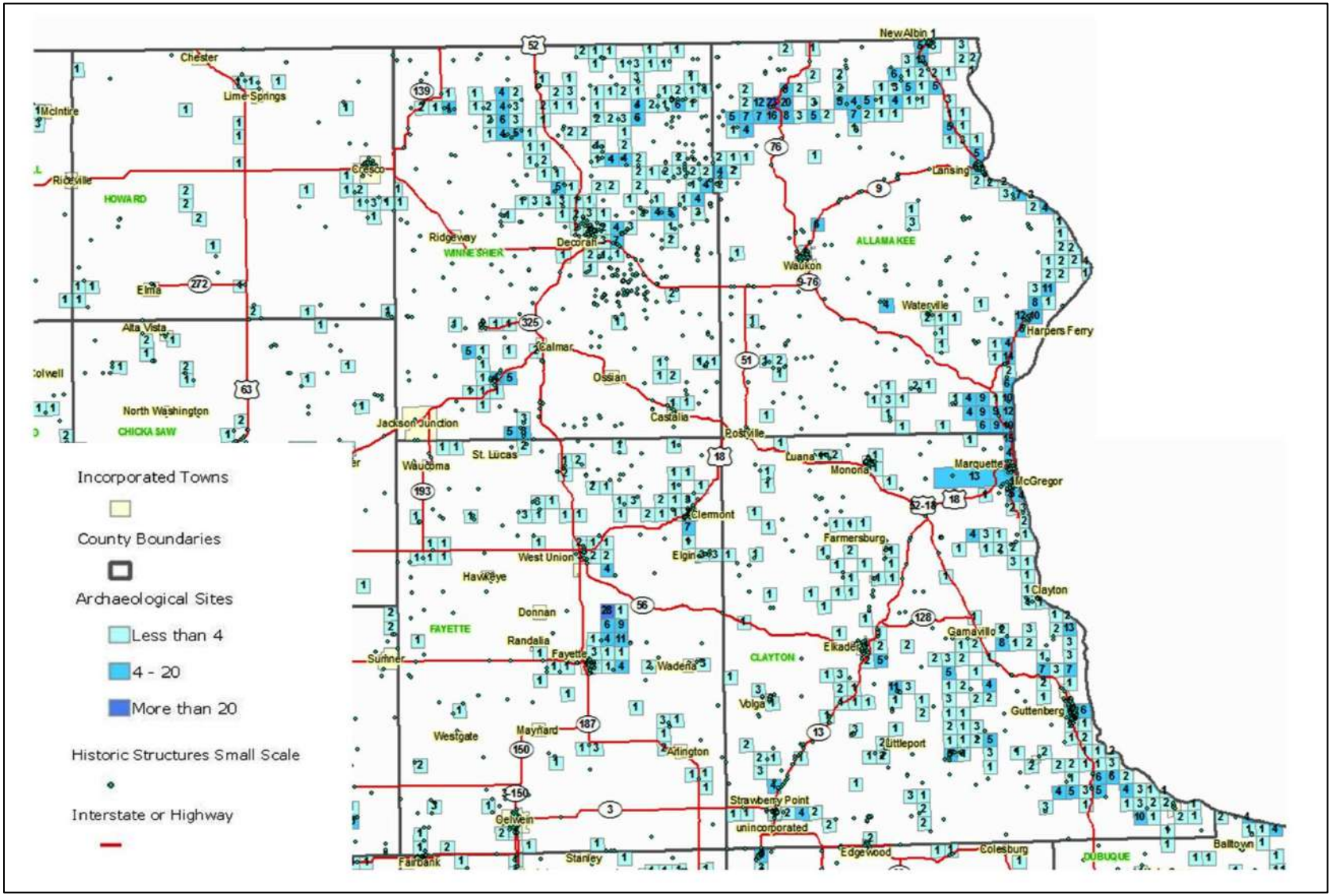
**Figure 30: Map of RPA 1 Public Areas**

Source: (Iowa DNR, 2013)

## Archaeological/Historical/Cultural Sites

The Region has nearly 140 properties on the National Register of Historic Places, and many other recognized archeological and cultural sites. Figure 31 maps the number and locations of known archaeological site and historic structures within the region.

**Figure 31: Archaeological Sites and Historic Structures in RPA 1**

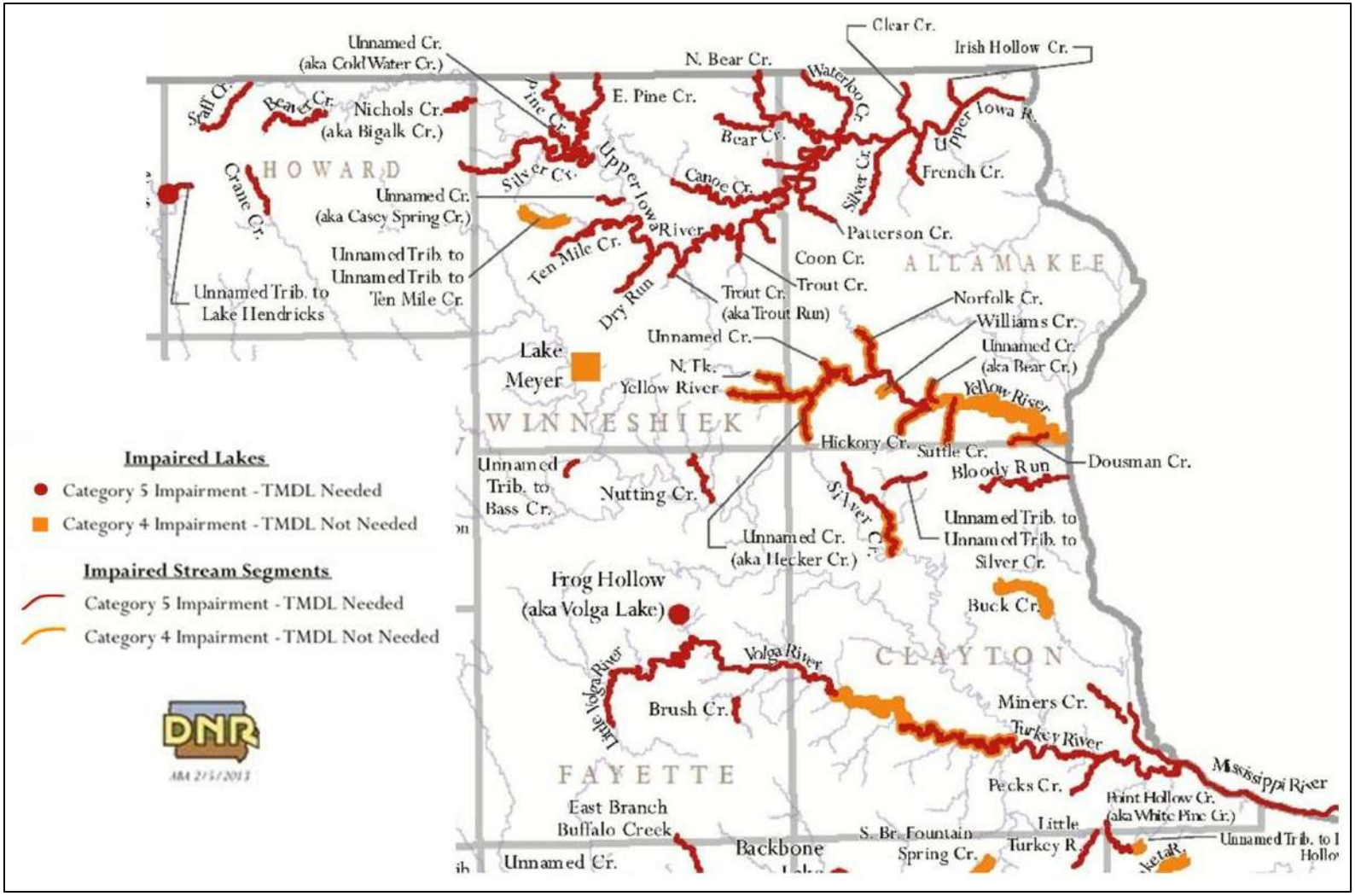



Source: (Office of the Iowa State Archaeologist, 2013)

**Impaired Waterways**

Figure 32 maps the impaired waterbodies within the five-county region. Many are in category 5 status, which require a total maximum daily load (TMDL). TMDLs are developed by the state and are approved by the EPA. They identify the links between the waterbody use impairment, the causes of impairment, and the pollutant load reductions needed to meet the applicable water quality standards. Of the 480 waterbodies on the State's 2012 Section 303(d) impaired waters list, 50 (10%) are within the RPA 1 region. The list includes 642 impairments, 85 of which (13%) are in the region's boundaries.

**Figure 32: Impaired Waterbodies, RPA 1**




Source: (Iowa DNR, 2012)

**Outstanding Iowa Waterways (OIW)**

The Iowa Department of Natural Resources is required by federal regulation to adopt an anti-degradation policy and an implementation procedure to ensure that Iowa's waters are protected from activities which have the potential to lower water quality. The federal regulations are designed to maintain and protect high quality waters and existing water quality in other waters from unnecessary pollution. Nearly 76% of the state's Outstanding Iowa Waterways (OIW) are within the RPA 1 region and require special protocol when work is to be done that may impact the waterway quality. In general, degradation of OIWs from new sources is prohibited. Temporary and limited degradation of OIWs or degradation caused by the expansion of existing sources may be allowed by the department on a case-by-case basis. Table 17 lists the OIW within the region.

**Table 17: Outstanding Iowa Waterways in RPA 1**

| Waterway Name: | County: | OIW Segment: | Length (miles) |
|---|---|---|---|
| Baron Springs | Clayton | Mouth to spring source | 1.99 |
| Bloody Run | Clayton | From W. line of Section 22 to the confluence with Unnamed Creek (NAD83) | 8.59 |
| Dousman Creek | Allamakee | Mouth to Allamakee-Clayton Co. line | 3.44 |
| Brownfield Creek | Clayton | Mouth to spring source | 0.94 |
| Clear Creek | Allamakee | Mouth to W. line of Section 25, T99N, R4W | 3.79 |
| Cold Water Creek | Winneshiek | Mouth to N. line of Section 31, T100N, R9W | 2.46 |
| Duck Creek | Allamakee | Mouth to the Iowa-Minnesota state line | 1.98 |
| Ensign Creek | Clayton | Mouth to spring source | 1.05 |
| Erickson Spring Branch | Allamakee | Mouth to W. line of Section S23, T98N, R4W | 0.91 |
| French Creek | Allamakee | Mouth to E. line of Section 23, T99N, R5W | 5.58 |
| Grannis Creek | Fayette | Mouth to W. line of Section S36, T93N, R8W | 3.56 |
| Jones Creek | Allamakee | Mouth to bridge crossing at Clonkitty Rd. | 5.75 |
| Kleinlein Creek | Clayton | Mouth to spring source | 3.96 |
| Little Paint Creek | Allamakee | Mouth to N. line of Section 30, T97N, R3W | 1.92 |
| Ludlow Creek | Allamakee | Mouth to confluence with an unnamed tributary | 2 |
| Mossey Creek | Clayton | Mouth to S. line of Section S10,T91N, R5W | 1.96 |
| North Bear Creek | Winneshiek | Mouth to the Iowa-Minnesota state line | 6.39 |
| South Pine Creek | Winneshiek | Mouth to N. line of S21, T99N, R7W | 2.8 |
| Smith Creek | Winneshiek | Mouth to S. line of S33, T98N, R7W | 3.42 |
| South Canoe Creek | Winneshiek | Mouth to the bridge crossing at Winn Rd. | 1.9 |
| Trout Run | Allamakee | Mouth through one mile reach | 1 |
| Twin Springs Creek | Winneshiek | Mouth to springs in Twin Springs Park | 0.61 |
| Village Creek | Allamakee | Mouth to W. line of S19, T98N, R4W | 13.32 |
| Waterloo Creek | Allamakee | Mouth to the Iowa-Minnesota state line | 9.39 |
| West Branch French Creek | Allamakee | Mouth to the confluence with Unnamed Creek | 0.67 |

Source: (Iowa DNR, 2010)

## Coordination Activities

The RPA 1 Policy Board is fortunate to have several local, state and regional contacts and resources to answer questions and assist with mitigation efforts for projects that may or may not impact environmentally sensitive areas. The following list is in no way comprehensive, but should be useful to transportation project engineers and contractors working through an environmental review process.

| Area of Focus: | Name: | Contact: |
|---|---|---|
| Soils, Watersheds, Waterbodies | Allamakee Soil & Water Conservation District (SWCD) | 635 9th St NW, Waukon, 563-568-2246, www.allamakeeswcd.org |
| | Clayton SWCD | 500 Gunder Rd NE, Elkader, 563-245-1048 |
| | Fayette SWCD | 120 N Industrial Pkwy, West Union, 563-422-3868 |
| | Howard SWCD | 311 7TH St SW, Cresco, 563-547-3040, www.howardswcd.org |
| | Winneshiek SWCD | 2296 Oil Well Rd, Decorah, 563-382-4352 |
| Watersheds, Forestry | Northeast Iowa Resource Conservation & Development | 101 E. Greene Street, Postville, 563-864-7112, www.northeastiowarcd.org |
| Endangered Species, Public and Protected Areas | Upper Mississippi National Wildlife and Fish Refuge, McGregor District | 563-873-3423, http://www.fws.gov/refuge/Upper_Mississippi_River/McGregor_District.html |
| Endangered Species, Public and Protected Areas, Historical/Archaeological Sites | National Park Service, Effigy Mounds | http://www.nps.gov/efmo/index.htm |
| Wetlands, Threatened and Endangered Species, Protected and Public Areas, Historical/Archaeological Sites, Waterbodies, Hazardous Sites | Iowa DNR | 909 West Main, Manchester, IA, 563-927-2640, http://www.iowadnr.gov/InsideDNR/DNRStaffOffices/EnvironmentalFieldOffices/FieldOffice1Manchester.aspx |
| Wetlands, Threatened and Endangered Species, Protected and Public Areas, Historical/Archaeological Sites, Waterbodies | Allamakee County Conservation | 427 N 1st St, Harpers Ferry, 563-586-2996 |
| | Clayton County Conservation | 29862 Osborne Road, Elkader, 563-245-1516 , http://www.claytoncountyconservation.org/ |
| | Fayette County Conservation | 18673 Lane Road, Fayette, 563-422-5146, http://fayettecountyiowa.org/CONSERVATION.html |
| | Howard County Conservation | 11562 Valley Ave, Cresco, 563-547-3634, http://co.howard.ia.us/offices/conservation/index.htm |
| | Winneshiek County Conservation | 2546 Lake Meyer Road, Fort Atkinson, 563-534–7145, http://winneshiekwild.com/ |
| Historical Sites | Allamakee County Historic Preservation Commission | 110 Allamakee Street, Waukon, 563-568-3522 |
| | Clayton County Historic Preservation Commission | 200 E Bridge Street, Elkader, 563-245-2201 |
| | Fayette County Historic Preservation Commission | 64 Pine Street, Clermont, 319-521-1897 |
| | Winneshiek County Historic Preservation Commission | 201 West Main, Decorah, 563-382-4183 |
| Historical Sites, Protected Areas | State Historical Society of Iowa | 515-281-8743, http://www.iowahistory.org/contact-list.html |

| | | |
|---|---|---|
| Historical/Archaeological Sites, Protected Areas in Allamakee, Howard, Winneshiek | Ho-Chunk Nation of Wisconsin | 715-284-7181 |
| | Flandreau Santee Sioux Tribe of South Dakota | 605-997-3512 |
| | Lower Sioux Indian Community in the State of Minnesota | 507-697-6321 |
| | Prairie Island Indian Community in the State of Minnesota | 651-385-2554 |
| | Santee Sioux Nation | 402-857-3346 |
| | Sisseton-Wahpeton Oyate of the Lake Traverse Reservation | 605-698-3584 |
| | Spirit Lake Tribe | 701-766-4221 |
| | Upper Sioux Community | 320-564-2360 |
| Historical/Archaeological Sites, Protected Areas in Allamakee, Clayton, Fayette, Winneshiek | Sac and Fox Nation of Missouri in Kansas and Nebraska | 785-742-7471 |
| | Sac and Fox Nation | 918-968-3526 |
| | Sac and Fox Tribe of the Mississippi in Iowa | 515-484-4678 |
| Historical /Archaeological Sites, Protected Areas in Allamakee | Winnebago Tribe of Nebraska | 402-878-3313 |
| Historical /Archaeological Sites, Protected Areas in all RPA Counties | Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation | 406-768-2382 |

## Discussion of Mitigation Activities

Northeast Iowa is a region with unique and special natural resources. Many of the people and businesses that locate in the area are here because of its beauty and culture. It is important to the region to preserve and protect these resources which make RPA 1 special. As projects are identified in the region, it will be necessary to determine what potential impacts might exist and work to avoid or mitigate any issues; not just to comply with environmental regulations, but to improve the environment and the quality of life whenever practical. Transportation activities necessitate an environmental stewardship approach in many settings including: construction projects near wetlands, sensitive environmental areas and cultural resources, air quality controls, construction noise reduction, fuel or potentially toxic material storage during construction, vegetation management during construction, winter road maintenance and chemical control, roadside vegetation management, maintenance facilities management, and more.

Avoiding projects that have adverse impacts on the environment is the first and best option for the region. Understanding potential impacts in the initial planning and design stages can enable early adjustments to project locations for the least amount negative effects on the environment. When projects must occur that will have some minimized impact to the environment, compensation or mitigation will need to take place. Context sensitive mitigation solutions will be determined on a project by project basis, depending on the location and scope of work required, and will be developed in

consultation with the appropriate federal, state, and tribal land management, wildlife, and regulatory agencies. It will be important to involve the public and any regulatory agencies in discussions and solutions to potential impacts on the environment and possible mitigation efforts as early as possible to lessen any possible conflicts.

Potential mitigation activities to consider:

*Wetland/Watersheds/Waterbodies:*

- Stream channel restoration projects
- Stream bank stabilizations
- Riparian buffer plantings
- Fish/aquatic habitat improvements
- Specialized culverts
- Dam removals
- Improving flood prone areas
- Retain water where possible with on-road water retention ponds, basins or wetlands
- Replace impacted wetlands
- Partner with watershed groups
- Consistency with watershed management plans
- Integral bridge abutments (as an avoidance of in-stream construction work)
- Avoid parking/storing construction equipment in the vicinity of potential groundwater contamination.

*Threatened/Endangered Species:*

- Measures within the project area to protect species/habitat
- Measures within the project area to enhance habitat
- Preservation of existing habitat
- Enhancement or restoration of degraded or a former habitat
- Establishment of buffer areas around existing habitats
- Establish vegetation management schedules that consider species' most vulnerable periods (reproduction, spawning, roosting, etc.)
- Consider species' most sensitive periods to prevent disturbances from construction activities, such as blasting or heavy pounding
- Relocation of listed species out of construction areas as practical
- Coordinate with appropriate agencies to identify threatened or endangered plant species in a project area in order to avoid them during construction.

*Protected/Public Areas/ Archaeological/Historical/Cultural Sites:*

- Design modifications & minimization
- Creating beneficial use to the resource
- Landscaping to reduce visual impacts
- Interpretative displays or educational materials to present information to the public

- Conducting archeological data recovery based on project location
- Archaeological monitoring as a supplement or as one aspect of a mitigation plan
- Develop educational activities to educate public about archaeology
- Reduce construction vibrations near sensitive structures
- Relocation of historical building
- Relocating a historic bridge to a new site
- Photo Documentation
- Historic archival recordation
- Relocation of park facilities
- Upgrade to park facilities
- Purchase of replacement park land
- Expansions to nearby park property/facilities
- Design elements to minimize harm (slight shifts or retaining walls etc.)

*Other:*

- Providing improved access to fields for farm machinery
- Specialized agricultural crossing locations or underpasses
- Improved drainage
- Coordinating with farm operators on the timing of construction
- Construct noise and/or visual barriers
- Mitigation Banks

## Summary

Protecting the environment within the RPA 1 region equates directly to protecting the region's quality of life and ensuring the same for future generations. For projects within the region, understanding the potential for harm, examining alternatives, and involving the appropriate resources and the public early in the planning process will be the key to successful, environmentally friendly projects. RPA 1 is committed to a sequence for environmental mitigation that first avoids damage to the environment altogether, then minimizes impacts on the environment, and as a last step, compensates for those impacts to the environment.

## CHAPTER SIX: FUTURE REGIONAL TRANSPORTATION OPPORTUNITIES AND THREATS

This section will identify and discuss externally-shaped opportunities and threats - trends and events that are generally beyond the control of regional leaders. Identifying likely threats (negative possibilities) allows the region to evaluate possible solutions. Reviewing opportunities (positive possibilities) allows the region to evaluate and ensure that it is prepared to capitalize on all reasonable opportunities. Some trends and events could offer both positive and negative outcomes, so it is important to understand how preparing for a threat can also be an opportunity. Table 18 illustrates the future trends and events that the region expects to impact the transportation system in the future. The narrative following the table details the threats, potential solutions and opportunities for each trend or future event.

**Table 18: Future Transportation Opportunities and Threats to RPA 1**

| Trend or Event: | Opportunity | Threat |
|---|---|---|
| Aging Population | | X |
| Declining Population | | X |
| Deficient Bridges | | X |
| Federal Funding | | X |
| Flooding | | X |
| Frac Sand Mining | X | X |
| Increasing Use of Freight Rail | X | X |
| Increasing Agricultural Production | X | X |
| Low Unemployment Rate | X | X |
| Millennial Generational Trend of Less Driving | X | X |
| Millennials Rank "Quality of Life" as High on List of Locational Determinants | X | |
| Oversized Loads | | X |
| Road Repairs on Low-Population Density Roads | | X |
| State Funding Proposals | X | X |
| Tourism on the Rise | X | |
| Weather | | X |

### *Aging Population*

The region's aging population will require consideration of the needs of older drivers. Solutions may include clearer, brighter and simpler signage with larger print; brighter street markings; widening or adding left-turn lanes and extending the length of merge or right turn lanes; adding rumble strips; offering education and training for older drivers; and ensuring that public transportation services and vehicles are affordable and easily accessible.

### *Declining Population*

The region's continued decline in population threatens the amount of transportation funding the region receives when funding is distributed by population. The increasing state population further reduces the region's percent of overall state population. In FFY 2014, the region's lower population coupled with the implementation of MAP-21, resulted in a reduction of STP funding by 11% over the previous year. The

region was able to lower that loss to a 7% decrease, but only by using 80% of the TAP Flex funds the region received.

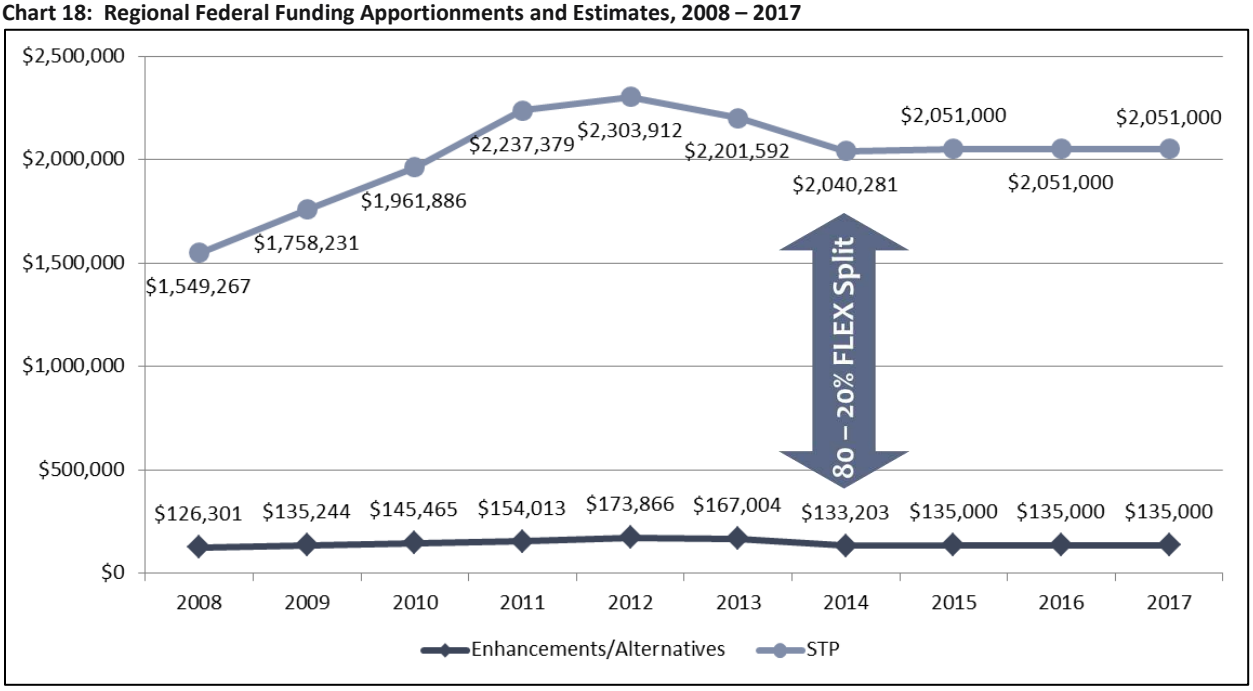
*Deficient Bridges*

Deficient bridges are a threat to the region as they limit access to homes and agricultural sites. Detours resulting from bridge issues cause increased VMT on other roadways. The region has had to post bridges with weight, height and width restrictions and even close bridges completely. This has a direct impact on the agricultural economy as many of these bridges are located on roads used to access fields and livestock facilities.

*Federal Funding*

Current decreases in funding and changes to the way the federal funding is distributed are impacting the amount of funds funneled to the region. Transportation alternatives have been especially hard hit as two of the sources of funding (federal scenic byways and statewide TAP) are no longer accessible for strictly local projects. In addition, with no alternative source of funding for local scenic byways and SRTS projects, limited TAP funds do not go far. Chart 18 illustrates how MAP-21 and the RPA's reduced population have affected federal funding in the region. Currently, the Policy Board intends to split the $90,000 of TAP Flex funds 80% to roads, 20% to transportation alternatives. Taken alone, the reduction in funding does not appear especially dramatic, however, the loss of dedicated pools of money for local transportation alternative projects that the area has been so successful in applying for to supplement the regional distribution, are no longer available. Since 2008, this has amounted to nearly $6.4 million from Statewide Enhancement, Scenic Byways, Safe Routes to School and Federal Scenic Byways funding sources.

**Chart 18: Regional Federal Funding Apportionments and Estimates, 2008 – 2017**



The uncertainty of future federal funding due to gridlock at the federal level is also a threat to the region. Funding uncertainty, given the length of the current two-year transportation bill, creates issues in the planning process and can force unexpected changes to programmed projects.

*Flooding*

Both river flooding and flash flooding have caused damage in many parts of the region, washing out bridges and roadways, as well as affecting access to, and barge traffic on, the Mississippi. Solutions could include improvements in flood-prone areas, implementation of water management techniques such as buffers, wetland restoration, water retention ponds, bio-swales or permeable pavements where appropriate.

*Frac Sand Mining*

Both an opportunity and a threat, frac sand mining means jobs and a potential boost to the local economy, but it can also be a threat, causing costly increased road wear and tear and potential damage to the pristine local environment. Strongly considering the opinions of the public, balanced with the costs of potential damages and the benefits to the economy will be part of any solution to addressing this practice. Counties are currently studying the impact of frac sand mining and the region can utilize those studies to make informed decisions about whether or how to approve such industries within the region.

*Increasing Use of Freight Rail*

According to the Iowa DOT, the tons of rail freight originating, terminating or traveling through the state has more than doubled since 1985. Continued growth in rail freight could be a threat to safety in the 14 communities and the rural areas through which rail runs. Increased chances for rail-vehicle crashes at crossings could be mitigated by considering different devices for traffic control as appropriate. Increased rail use also increases the chance of derailment and potentially harmful chemical releases within communities where homes, schools and businesses are often located very close to the rail lines. In addition, the proximity of the rail in Allamakee and Clayton Counties to the Mississippi River makes potential derailments and chemical spills in those areas an even larger threat in terms of the scope and environmental impact of an incident. As an opportunity, communities could capitalize on increasing use of freight rail by considering how to develop useful spurs or loading facilities as a business attraction tool for economic development.

*Increasing Agricultural Production*

As the agricultural economy grows and farm technology advances, equipment is becoming larger while at the same time fewer people are needed to support the industry. In addition, more and more land is going into production, increasing the roadways used by agricultural equipment. Threats to the transportation system include increased wear and tear on roadways and bridges as a result of use by larger equipment, and fewer people living in the area to support the tax base. Opportunities may include the ability to capture some road maintenance income from agricultural users, as well as the possibility of abandoning some roads no longer used for residential access.

*Low Unemployment Rate*
The region's low unemployment rate is an opportunity for the attraction of new workers to the area. The potential to grow the population is good for funding distribution and increased local taxes. The lower unemployment rate is also an opportunity to develop the region's public transportation system to include commuter routes that allows for a more mobile workforce and more affordable public transportation for all riders.

*Millennial Generational Trend of Less Driving*
This trend can be both a threat as well as an opportunity. The threat of young people continuing to leave the area is a big concern to regional leaders. Economic development, social programming and housing all depend on a balance of age groups to function properly. The trend is also an opportunity for the region to explore ways to increase alternative transportation options as a method for preventing "brain drain" or encouraging younger generations to locate in the region.

*Millennials Rank "Quality of Life" as High on List of Locational Determinants*
Related to the trend above, Millennials seek a high quality of life when determining where they are going to live and work. The region's trail network, abundant natural resources and recreational opportunities play a large role in creating a high quality of life in Northeast Iowa. Further development of the region's trail network for larger connectivity is an opportunity to capitalize on this trend.

*Oversized Loads*
Oversized loads have become increasingly common on the roadways. These are vehicles that carry an indivisible load and exceed legal size and weight limits. Oversized loads can put increased wear and tear on the roadways and cause safety issues for other motorists. A solution to address damaged roadways could be increased permit fees.

*Road Repairs on Low-Population Density Roads*
As population declines, especially in the rural areas, and agricultural uses of the land grow, the region is finding that the cost vs. benefit of road repairs on low-population density roads is unbalanced. Costly repairs are being made on roadways used by only a few residents. However, most local roads are used by agricultural vehicles too, and provide necessary access to fields and livestock. A solution could include the development and implementation of some method to capture user fees for the costs imposed on the system. In addition, some road segments could be closed or left unmaintained at certain points of the year to save money. These segments could be determined by several factors such as the existences of another road that allows access and adequately serves the area, or having no full time residences served by the road, or terrain that makes normal plowing or grading impractical.

*State Funding Proposals*
Concepts proposed to increase funding for transportation at the state level could be seen as threats or opportunities depending on many factors, including jurisdictional control over funds, what the impacts of new taxes or fees may be on the local economy, and the rural/urban distribution. Of special interest to the region is the STP swap proposal. The region's transportation system is in need of additional revenue and the RPA will remain engaged throughout any decision making process to make sure that

any concepts implemented are fair and equitably distributed and provide the maximum benefit to the region.

### *Tourism on the Rise*

As tourism grows nationwide, the existence of three Scenic Byways within the region is an opportunity to attract tourists. About 15% of the Scenic Byways in Iowa are located within RPA 1 and run through 17 of the region's communities. Trails are also an advantage when developing a tourism-based economy, especially when trails connect travelers with natural resources and recreational attractions, as many of the region's trails do.

### *Weather*

Weather can be a destructive force and is a threat to the transportation system. Heavy downpours can cause washouts and flooding; winter blizzards cause safety hazards; spring freeze and thaw causes pavement potholes and cracking, and ruts and frost heaves on gravel roads. Unanticipated weather events put strain on local budgets through costly repairs, increased chemical expenses, wear and tear on equipment and employee overtime. Engineers work hard to address these problems as they occur and new technologies in repairs and reconstruction can lessen the impact of future occurrences.

**Summary**

Protecting the value of transportation assets from threats and capitalizing on opportunities is a major focus for the region. While most remain beyond the control of the region, developing strategies to prepare for anticipated threats and opportunities as they arise can lessen impacts and improve gains. Threats and opportunities can cross transportation modes and community development elements (e.g. economic development, housing, conservation, recreation, infrastructure, etc.). What are seen as threats to some modes and elements can be opportunities to others. Comprehensive decision-making is needed to maintain a good balance when responding to threats and opportunities. By considering all options carefully, the region can avoid win/lose situations and find solutions that work for all.

## Roads and Bridges

### Roadway Embargoes

Each county in the region has embargoed roadways during the spring to prevent the damage heavy truck loads cause to both the paved and gravel system. Heavy loads on roadways with a weak base can cause cracks, potholes, heaves, dips and bumps – all of which require correction annually. The changing needs of agricultural and other industries (e.g. wind facilities and ethanol plants) have changed the travel patterns of heavy loads, often increasing the loads on paved county roads. The need to increase the load carrying capacity of roadways on the paved system so that the region has year round legal load pavements is vital to the regional economy and the long term sustainability of the system.

### Bridge Postings

Bridge postings that restrict vehicle size and weight hamper the movement of people, goods and services within the region. The region has identified the elimination of bridge restrictions as a need. Reducing the system is not feasible given the terrain and roadway network around many bridge locations. The distance of any rerouting and the loss of connectivity in certain areas would cause hardship for both people and commerce.

### Transportation of Natural Resources

Agriculture and Mining create a significant amount of natural resource exports for the region. Accommodating the transport of commodities such as grains, coal, gravel and sand is a challenge as these loads can stress the road system. According to the Iowa DOT, trucks transport 81.4% of the tons of goods shipped, rail 13.9% of the tonnage, water 2.8%, and other modes .8%. The region has identified a need as being the determination of the best way to move natural resource commodities through and out of the region that incorporates multiple modes of transport to take some of the pressure off of the roadways, or identifies ways to strengthen the roadways used by these industries.

## Active Transportation

### Trail Development and Maintenance

Continuing to work on the connectivity of the existing trail system is a need identified by the region not only to encourage tourism, but to support safe and active transportation modes for non-motorized commuting. As the system grows and ages, another important need will be the ongoing and long-term maintenance of trails. Financial and human resources are limited, and even managing the maintenance of existing trails could become an issue.

### Community Walkability and Accessibility

Many communities in the region have issues with walkability and ease of access. Sidewalk gaps, sidewalks in poor condition, inadequate or unsafe crosswalks and non-ADA compliant curbs and ramps are problems in every community. The region sees addressing these community issues as a critical need as the population ages and walkability in and of itself contributes to the community's quality of life.

## Public Transportation

### Accessibility and Affordability

Public transportation is becoming a bigger need within the region and keeping rates affordable is an issue for the agency given the rural nature of the region. As the region ages and driving preferences change for younger people, non-drivers are becoming more prevalent. In addition, employers are seeking a wider pool of workers, and transportation has been identified as a barrier to expanding the available workforce. The current public transit service is demand-response and can accommodate many riders, but ridership is hindered by cost when people need to travel more than a few miles. To complicate matters, many people don't know about the available transit agency or have misperceptions about the current public transit system. They do not realize that the service is open to the public and that it is accessible to everyone. To make the transit system more affordable for everyone, ridership must be increased. Increasing ridership will require new services, lower fare options, strategic marketing and education.

## Aviation

### Facility Improvements

Each public airport within the region has long range capital improvement needs to ensure ongoing support of local business and industry. Most of the local airports have on-call managers, and operate under local airport commissions. Only the Decorah Airport has a full-time fixed-base operator. Financing for needed improvements can be even more challenging for smaller airports ineligible for federal aid.

## Rail

### Safety and Access

Access to the rail (through spurs) for industry is a need for communities in the region. While there have only been 20 crashes over the past 10 years, with no fatalities and no derailments; half of the crashes occurred at public crossings. Ensuring that the region's over 100 crossings have appropriate signage and signals is a need for the region. In the 14 railroad communities, the proximity of homes, schools and businesses to the railroad makes working with operators to maintain an appropriate speed through these crowded areas a priority for community leaders.

## Water

### Access

Finding ways to maintain adequate access to river transportation is a need. Flooding and Mississippi water levels can affect access to water transportation. Roadways to barge terminals and the ferry are under strain from heavy load traffic or continual flooding. Improvements can be costly or short-lived if flooding damages repaired roadways.

## Roads and Bridges

### Roadway Embargoes

| Option: | Assessment: |
|---|---|
| Reconstruct roadways to add carrying capacity to the system (increase roadway base depth) | • High cost – would need to replace 5% of the system each year to keep up with the life of the pavement (current funding levels would only accomplish half of that) |
| Limit the size of agricultural loads (Maintain status quo - do not increase the legal load size) | • Politically challenging – no control<br>• Could impact the economy |
| Tighten zoning on site approvals to factor in stress on county roadways | • No local control on some industry placement<br>• Politically challenging |

### Bridge Postings

| Option: | Assessment: |
|---|---|
| Replace posted/restricted bridges | • High cost – limited resources |
| Maintain existing load limits | • Politically challenging<br>• Puts onus on haulers<br>• Run risk of further damage or collapse |

### Transportation of Natural Resources

| Option: | Assessment: |
|---|---|
| Sustain/replace roadways and bridges to provide for legal loads and access to rail and barge ports | • High cost |
| Consider more rail spurs to encourage/support the use of other modes for transport | • Railroads are private entities – can't just "build it and they will come"<br>• Could increase train traffic through towns<br>• Additional infrastructure (like viaducts) may need to be improved to accommodate - costly |
| Pursue additional taxation/fees/development agreements on truck generating facilities | • Counties restricted as to what they can do<br>• Politically challenging |
| Maintain Status Quo | • Increasing maintenance costs borne by counties |

## Active Transportation

### Trail Development and Maintenance

| Option: | Assessment: |
|---|---|
| Prioritize projects that are part of the regional connectivity plan (backbone) when selecting local projects for funding | • Need to develop better scoring system to reflect prioritization (and project readiness)<br>• No large cost involved |
| Conduct an economic impact assessment of the proposed backbone system | • Costly – but do have local entities that could complete<br>• Would help support requests for additional funding |
| Maintain Status Quo | • Connectivity not achieved<br>• Loss of potential tourism dollars |

### Community Walkability and Accessibility

| Option: | Assessment: |
|---|---|
| Enforce Existing Sidewalk Ordinances | • Politically Challenging |
| Fix sidewalk gaps, make repairs to poor sidewalks | • Costly – could cost-share with property owners – or assess |
| Upgrade curbs and ramps to be ADA compliant | • Costly all at once, can be managed with other projects<br>• Compliance sometimes doesn't make common sense for the location, but no local control |
| Maintain Status Quo | • Infrastructure continues to deteriorate<br>• Risk of injury/lawsuit increases<br>• Public complaints increase<br>• Potential for reduced development |

## Public Transportation

### Accessibility and Affordability

| Option: | Assessment: |
|---|---|
| Develop Commuter Routes | • Costly, but can start with pilot projects<br>• Long-term, will need to consider maintenance of park and ride facilities/areas |
| Upgrade public transit image | • Costly – could sell advertising or get other sponsorships or support |
| Develop Regional Transportation Website | • Costly in terms of human resources, somewhat reliant on the progress of statewide rideshare website |
| Maintain Status Quo | • Challenges to maintaining services continue as public funding decreases<br>• Many remain unserved due to high cost |

## Aviation

**Facility Improvements**

| Option: | Assessment: |
|---|---|
| Complete Improvements per Iowa Aviation Plan | • Costly, but necessary for development<br>• Airport funding is available from state and federal sources |
| Consider Consolidation – a Regional Airport | • Good option to support more services<br>• Politically Challenging |
| Maintain Status Quo | • Safety issues increase<br>• Usage may decline<br>• Some may close |

## Rail

**Safety and Access**

| Option: | Assessment: |
|---|---|
| Monitor crash data and local law enforcement reports to improve crossings as needed | • Good option, upgrading signals can be costly<br>• Need to work with railroads |
| Work with railroads to improve safety | • No local control<br>• No local enforcement |
| Consider supporting the construction of spurs in some communities for economic development projects | • Expensive, and need to work with railroads<br>• Some funding is available for railroads and/or economic development projects.<br>• Politically challenging |
| Maintain Status Quo | • No real impact to current situation |

## Water

**Access**

| Option: | Assessment: |
|---|---|
| Explore new roadway technologies or natural water management techniques that reduce the impact of flooding on access roads | • New technologies may be more expensive, or ineffective against river flooding<br>• Need to work with several agencies to successfully implement any findings |
| Consider agreements, fees or other supports with heavy load generating facilities to improve access to terminals | • Good option, may be politically challenging |
| Maintain Status Quo | • Maintenance needs/costs will continue<br>• Deteriorating infrastructure may reduce usage which could have an economic impact |

# CHAPTER NINE: IMPLEMENTING THE ACTION PLAN (YEARS 1 – 5)

This chapter will describe the federally funded projects and activities that are planned for the RPA 1 region in the next five years. These projects are included in the region's Transportation Improvement Plan (TIP), which is developed in compliance with the provisions of the *Moving Ahead for Progress in the 21st Century Act (MAP-21)*. MAP-21 was signed into law on July 6, 2012. However, it is only a two year authorization and is set to expire on September 30, 2014, resulting in continued federal funding uncertainty after that date. RPA 1 and the UERPC Transportation Policy Board will continue to monitor the situation with federal revenues and adjust future investments accordingly to maintain a fiscally responsible program.

## Funding Sources

The projects identified within this section may receive federal funding from a number of different sources. Federal funds are distributed through a variety of methods, some through formula, others are discretionary (earmarked) and some by a competitive granting process. Sources of federal funding used to fund local projects such as roads, bridges, trails and transit in the RPA 1 region include:

- Demonstration funding (DEMO): Funding from several different programs and sources that the FHWA administers for discretionary programs and special funding categories.
- Highway Safety Improvement Program (HSIP): Provides funding to improve the safety of public roads to significantly reduce fatalities and serious injuries. Portions of these funds are set aside for high risk rural roads and railway-highway crossings.
- National Highway Performance Program (NHPP): Funds available to the state for use on the National Highway System, including some state and U.S. highways ad interstates.
- Surface Transportation Program (STP): A main funding source for the region, these funds may be used on projects on federal-aid routes, bridge projects on any public road, transit capital improvements, TAP eligible activities and planning.
    - STP Bridge Program (STP-HBP): Although the Highway Bridge Program was eliminated by MAP-21, Iowa will continue to provide funding directly to counties for bridges on public roads, both on and off the federal-aid system.
- Transportation Alternatives Program (TAP): The TAP replaces the funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, Scenic Byways and several other discretionary programs, wrapping them into a single funding source. TAP projects improve the cultural, historic, aesthetic and environmental aspects of transportation infrastructure and can include bicycle and pedestrian facilities, restoration of historic transportation facilities, environmental mitigation activities, overlooks and viewing areas, among others.
- Federal Lands Highway Program (FLHP): Funding for public roads that service the transportation needs of federal and Indian lands.
- City Bridge: A portion of STP funding that is set aside and dedicated to local bridge projects within cities. The state awards funds to eligible projects based on specific rating criteria and bridges need to be classified as structurally deficient or functionally obsolete.

- Primary Road Funds (PRF): State DOT-controlled funds spent throughout the state.
- Federal Recreational Trails Program (RTP): This program provides federal funding for both motorized and non-motorized trail projects and is funded through a set-aside from Iowa's total TAP funding. The decision to participate in this program is made annually by the Governor.
- Capital Only Program (Bus and Bus Facilities Program) (Section 5339): Federal transit funding that is limited to capital projects to replace, rehabilitate and purchase buses and bus-related equipment, and to construct bus-related facilities.

In addition to federal funding, agencies may also receive state funds:

- State Transit Assistance (STA): Funding for public transit systems that can be used for operating, capital or planning expense
- State Recreational Trails Program: Allocated by the state legislature annually, the recreational trails program provides funds to establish trails in Iowa for the use, enjoyment and participation of the public.

## Project Prioritization

Regional projects are prioritized based on the needs of the system. Each year, the RPA receives many more projects than it can support with the available funds. The following subsections explain the methods for selecting the projects that do receive STP, TAP and STP-HBP funds.

**Surface Transportation Program (STP)**

All incorporated cities and counties located within RPA 1 boundaries are eligible to apply for STP funds. Applications may also be submitted by the DOT and the Regional Transit Authority. Invitations to apply are sent to each jurisdiction by the RPA. Projects must meet the following eligibility requirements:

1. Be located within or along the boundaries of RPA 1
2. Be located on a federally eligible route
3. Have documented support of the County Board of Supervisors
4. Have a minimum 20% matching non-federal cash funds.

Applications are due to the RPA offices in February. The Transportation Technical Committee reviews all projects to ensure feasibility and consistency with the long range transportation plans for the region. Applicants are invited to speak on behalf of their projects in an open meeting. After open discussion and consensus is reached, the Technical Committee makes its project recommendations to the Transportation Policy Board, who make the final selection decisions for projects. The Technical Committee and Policy Board make fiscally constrained project decisions that adhere to the funding targets provided by the Iowa DOT. Equity in distribution over the long term within the region is achieved by monitoring allocations to each county and the cities of Decorah and Oelwein (populations over 5000). As project needs are extensive throughout the region, there is never a shortage of viable and significant projects in any one county or city.

**Transportation Alternatives Program (TAP)**

Enhancement projects are funded as a separate federally designated portion of STP dollars with an opportunity to utilize the region's FLEX funds. All incorporated cities and counties located in RPA1/UERPC boundaries are eligible to apply for the funds. Applications may also be submitted by county conservation and other groups whose project proposals fit the enhancement funding priorities. Invitations to apply are sent to each known eligible entity within the region. Projects must meet the following eligibility requirements:

1. Be located within or along the boundaries of RPA 1/UERPC
2. Meet at least one of the eligible transportation alternatives program activities as prescribed by MAP-21 and the Federal Highway Administration (http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm) and relate to surface transportation
3. Obtain documented support from the appropriate city council and/or the county Board of Supervisors in whose jurisdiction the project will occur
4. Have a minimum 20% matching non-federal cash funds.

Applications are due to the RPA offices in February or March. The Transportation Enhancement Committee reviews all projects using a scoring and ranking process. Scoring criteria include:

1. Matching Funds
2. Financial feasibility and ability to meet programming timelines
3. Project significance (local, regional or statewide)
4. Consistency with the Long Range Transportation Plan
5. Economic benefit (local, regional or statewide)
6. Level of enhancement to the existing transportation system
7. Visitor points of interest
8. Benefit to select populations (children, elderly, low income, disabled)

The Enhancement Committee provides its project suggestions to the Technical Committee who, along with the Enhancement Committee, make recommendations to the Transportation Policy Board, where the final decisions for project selection are made. The Enhancement Committee is provided its annual funding targets by the Iowa DOT and makes fiscally constrained project decisions that are based on those numbers.

**Bridge Projects**

Bridge projects are selected on a county-wide basis and while slight variations exist from county to county, all bridge projects are ranked based on the following input:

1. Bridge inspection reports
2. Traffic data
3. Classification of type and level of service
4. Proximity to proposed construction projects

5. New or relocating business needs (economic development)
6. Public input

County engineers weigh this input to develop a five year plan that is presented to each county Board of Supervisors at a public meeting. Bridge projects are also publicly reviewed as part of the Transportation Improvement Program and approved by the Transportation Policy Board. Each county is provided with STP Highway Bridge Program (HBP) funding targets by the Iowa DOT to ensure fiscally constrained project planning.

## Proposed Projects

The following table lists the federal-aid projects planned within the region over the next five years. Projects listed in FFY2018 are proposals only and have not been approved by the RPA 1 Policy Board.

| Sponsor Name | Project Number / Location / Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **DEMO - Federal Demonstration (earmarked) Funds** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| Allamakee CRD | HDP-C003(046)--6B-03 | **Project Total** | **$2,085** | | | | |
| | X52: LANSING TO POWER PLANT & HRPRS FRY TO IA76 | Federal Aid | $1,668 | | | | |
| | PED/BIKE GRADE & PAVE | Regional FA | $140 | | | | |
| Howard CCB | EDP-C045(065)--7Y-45 | **Project Total** | **$303** | | | | |
| | WGWL TRAIL: FROM ACME TO RICEVILLE | Federal Aid | $303 | | | | |
| | PED/BIKE GRADE & PAVE | Regional FA | $0 | | | | |
| Winneshiek CRD | HDP-C096(124)--6B-96 | **Project Total** | **$2,201** | | | | |
| | A6W: FROM DECORAH CL TO BRIDGE FHWA# 347271 | Federal Aid | $1,651 | | | | |
| | PAVEMENT REHAB, PED/BIKE GRADE & PAVE | Regional FA | $0 | | | | |
| **FL - Federal Lands Highway Program** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| National Park Service | PLH-NATLPS()--18-3 | **Project Total** | **$376** | | | | |
| | EFFIGY MOUNDS: RETAINING WALL, FIX EROSION, GUARDRAIL | Federal Aid | $376 | | | | |
| | PAVEMENT REHAB | Regional FA | $0 | | | | |
| **HSIP - Highway Safety Improvement Program** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| Fayette CRD | HRRR-C033(100)--5R-33 | **Project Total** | **$410** | | | | |
| | B 60: ALONG APPLE RD ON NORTH SIDE | Federal Aid | $370 | | | | |
| | BRIDGE REPLACEMENT, SLOPE, SHOULDER GRADING | Regional FA | $0 | | | | |
| **NHPP - National Highway Performance Program** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| DOT-D02-RPA01 | NHSX-9-7(34)--3H-45 | **Project Total** | **$6,400** | | | | |
| | IA9, FROM ECL OF CRESCO TO 2 MI E OF RIDGEWAY | Federal Aid | $5,120 | | | | |
| | PAVEMENT REHAB | Regional FA | $0 | | | | |

| Sponsor Name | Project Number<br>Location<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **PRF - Primary Road Funds** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| DOT-D02-RPA01 | BRFN-()--39-3 | **Project Total** | **$20** | **$20** | **$20** | **$20** | |
| | IA9: MISSISSIPPI RIVER IN LANSING (STATE SHARE) | Federal Aid | $0 | $0 | $0 | $0 | |
| | BRIDGE WASHING | Regional FA | $0 | $0 | $0 | $0 | |
| DOT-D02-RPA01 | BRFN-018()--39-22 | **Project Total** | **$20** | **$20** | **$20** | **$20** | |
| | US18: MISSISSIPPI RIVER IN MARQUETTE(STATE SHARE) | Federal Aid | $0 | $0 | $0 | $0 | |
| | BRIDGE WASHING | Regional FA | $0 | $0 | $0 | $0 | |
| DOT-D02-RPA01 | STPN-009()--2J-45 | **Project Total** | **$5,391** | | | | |
| | IA9: RICEVILLE TO US 63 | Federal Aid | $0 | | | | |
| | PAVEMENT REHAB,RIGHT OF WAY | Regional FA | $0 | | | | |
| DOT-D02-RPA01 | BRFN-150()--39-33 | **Project Total** | | **$208** | | | |
| | IA150: STREAM 1.8 MI N OF IA 3 | Federal Aid | | $0 | | | |
| | BRIDGE DECK OVERLAY | Regional FA | | $0 | | | |
| DOT-D02-RPA01 | BRFN-009()--39-96 | **Project Total** | | **$375** | | | |
| | IA9: SMITH CREEK 5.6 MI W OF IA 51 | Federal Aid | | $0 | | | |
| | BRIDGE DECK OVERLAY | Regional FA | | $0 | | | |
| DOT-D02-RPA01 | BRFN-018()--39-33 | **Project Total** | | | **$800** | | |
| | US18: HAUGH CREEK 0.4 MI W OF CO RDV68 | Federal Aid | | | $0 | | |
| | CULVERT REPLACEMENT | Regional FA | | | $0 | | |
| DOT-D02-RPA01 | BRFN-018()--39-22 | **Project Total** | | | | **$550** | |
| | US18: DRY RUN CREEK 0.6 MI W OF E JCT US 52 | Federal Aid | | | | $0 | |
| | BRIDGE DECK OVERLAY | Regional FA | | | | $0 | |
| DOT-D02-RPA01 | BRFN-009()--39-96 | **Project Total** | | | | **$420** | |
| | IA9: DRY RUN CREEK 0.1 MI W OF US52 | Federal Aid | | | | $0 | |
| | BRIDGE DECK OVERLAY | Regional FA | | | | $0 | |
| DOT-D02-RPA01 | BRFN-009()--39-96 | **Project Total** | | | | **$414** | |
| | IA9: TROUT CREEK 2.0 MI E OF US 52 | Federal Aid | | | | $0 | |
| | BRIDGE DECK OVERLAY | Regional FA | | | | $0 | |
| **STP - Surface Transportation Program** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| RPA-01 | RGPL-PA01(RTP)--ST-00 | **Project Total** | **$35** | **$35** | **$35** | **$35** | **$35** |
| | UERPC: UERPC 1 TRANS PLANNING | Federal Aid | $28 | $28 | $28 | $28 | $28 |
| | TRANS PLANNING | Regional FA | $28 | $28 | $28 | $28 | $28 |
| Allamakee CRD | STP-S-C003(54)--5E-03 | **Project Total** | **$1,800** | | | | |
| | W-60: FROM A52 TO LIDDIARD BOTTOMS ROAD | Federal Aid | $1,440 | | | | |
| | PAVEMENT REHAB | Regional FA | $1,440 | | | | |
| Clayton CRD | STP-S-C022(72)--5E-22 | **Project Total** | **$2,964** | | | | |
| | X3C: FROM C7X TO COLESBURG CITY LIMITS | Federal Aid | $1,964 | | | | |
| | PAVEMENT REHAB | Regional FA | $1,964 | | | | |
| Winneshiek CRD | STP-S-C096(118)--5E-96 | **Project Total** | **$3,800** | | | | |
| | A34: FROM CO. RD. W14 TO US HWY 52 | Federal Aid | $2,300 | | | | |
| | PAVEMENT REHAB | Regional FA | $2,300 | | | | |
| Garnavillo | STP-U-2835()--70-22 | **Project Total** | | | **$512** | | |
| | VAN BUREN ST. FROM HWY 52 EAST .3 MILES | Federal Aid | | | $400 | | |
| | PAVEMENT REHAB | Regional FA | | | $400 | | |

| Sponsor Name | Project Number<br>Location<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **STP-Continued…** | | | | | | | |
| Decorah | STP-U-1867()--70-96 | **Project Total** | | | **$1,126** | | |
| | NORTH COLLEGE DRIVE: FROM POLE LINE RD. TO CL | Federal Aid | | | $900 | | |
| | PAVEMENT REHAB/WIDEN | Regional FA | | | $900 | | |
| Fayette CRD | STP-S-C033()--5E-33 | **Project Total** | | | | **$2,835** | |
| | B64: FROM HARDING RD (US18) TO CEDAR RD (W51) | Federal Aid | | | | $2,200 | |
| | PAVEMENT REHAB/WIDEN | Regional FA | | | | $2,200 | |
| Ossian | STP-U-5785()--70-96 | **Project Total** | | | | **$650** | |
| | CITY OF OSSIAN: WEST/BROOKS/JESSE STREETS | Federal Aid | | | | $520 | |
| | PAVE, PAVEMENT REHAB | Regional FA | | | | $520 | |
| Howard CRD | | **Project Total** | | | | | **$2,250** |
| | A46: FROM HWY 63 TO V58 | Federal Aid | | | | | $1,800 |
| | PAVE | Regional FA | | | | | $1,800 |
| **STP-HBP - Surface Transportation Program - Bridge Program** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| Lansing | BROS-4205(603)--8J-3 | **Project Total** | **$877** | | | | |
| | SOUTH RD: OVER CLEAR CR. BTWN IA 9 & OAK HILL RD | Federal Aid | $701 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| Clayton CRD | BROS-C022()--5F-22 | **Project Total** | **$170** | | | | |
| | B56: OVER UNNAMED STREAM | Federal Aid | $136 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| Clayton CRD | BROS-C022(073)--8J-22 | **Project Total** | **$450** | | | | |
| | IOWA AVE: OVER ELK CREEK | Federal Aid | $330 | | | | |
| | BRIDGE REPLACEMENT, GRADING | Regional FA | $0 | | | | |
| Fayette CRD | BROS-C033()--8J-33 | **Project Total** | **$300** | | | | |
| | 300TH STREET: OVER NUTTING CREEK | Federal Aid | $240 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| Fayette CRD | BROS-C033(78)--8J-33 | **Project Total** | **$500** | | | | |
| | HAMLET RD: FROM 0.47MI SE OF NE CORNER TO SITE | Federal Aid | $400 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| Fayette CRD | BROS-C033(93)--5F-33 | **Project Total** | **$250** | | | | |
| | 18TH ST: ON 18TH ST OVER UNNAMED STREAM | Federal Aid | $200 | | | | |
| | CULVERT REPLACEMENT | Regional FA | $0 | | | | |
| Howard CRD | BROS-C045(72)--5F-45 | **Project Total** | **$200** | | | | |
| | V46: OVER TURKEY RIVER | Federal Aid | $160 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| Howard CRD | BROS-C045()--5F-45 | **Project Total** | **$400** | | | | |
| | RIVER RD: OVER BRANCH UPPER IOWA RIVER | Federal Aid | $320 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| West Union | BROS-8295(602)--8J-33 | **Project Total** | **$418** | | | | |
| | 220TH ST: OVER SMALL STREAM BETWEEN IA 150 & CL | Federal Aid | $334 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| Winneshiek CRD | BROS-C096(122)--8J-96 | **Project Total** | **$260** | | | | |
| | 210TH AVE: OVER CREEK | Federal Aid | $208 | | | | |
| | BRIDGE REPLACEMENT | Regional FA | $0 | | | | |

| Sponsor Name | Project Number<br>Location<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **STP-HBP – Continued…** | | | | | | | |
| Winneshiek CRD | BROS-C096(117)--8J-96 | **Project Total** | **$50** | | | | |
| | COUNTY WIDE | Federal Aid | $40 | | | | |
| | BRIDGE INSPECTIONS | Regional FA | $0 | | | | |
| Winneshiek CRD | BRS-C096(119)--60-96 | **Project Total** | **$1,380** | | | | |
| | W20: OVER UPPER IOWA RIVER | Federal Aid | $552 | | | | |
| | GRADE AND PAVE, BRIDGE REPLACEMENT | Regional FA | $0 | | | | |
| Allamakee CRD | BROS-C003(50)--5F-03 | **Project Total** | | **$470** | | | |
| | W4B: NORFOLK CREEK | Federal Aid | | $376 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Clayton CRD | BRS-C022(60)--60-22 | **Project Total** | | **$520** | | | |
| | B64: OVER STREAM | Federal Aid | | $360 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Fayette CRD | BROS-C033()--8J-33 | **Project Total** | | **$200** | | | |
| | 20TH ST: WEST OF WILLOW RD OVER PRINCIPAL CR. | Federal Aid | | $160 | | | |
| | CULVERT REPLACEMENT | Regional FA | | $0 | | | |
| Fayette CRD | BROS-C033(77)--8J-33 | **Project Total** | | **$200** | | | |
| | 240TH ST.: FROM 0.21MI W OF N 1/4 CORNER TO SITE | Federal Aid | | $160 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Fayette CRD | BROS-C033(96)--8J-33 | **Project Total** | | **$150** | | | |
| | S AVENUE: OVER VOLGA RIVER | Federal Aid | | $120 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Fayette CRD | BROS-C033()--8J-33 | **Project Total** | | **$400** | | | |
| | Q AVE: OVER VOLGA RIVER | Federal Aid | | $320 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Winneshiek CRD | BROS-C096(121)--8J-96 | **Project Total** | | **$600** | | | |
| | 150TH ST.: OVER TURKEY RIVER | Federal Aid | | $480 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Winneshiek CRD | BROS-C096(113)--8J-96 | **Project Total** | | **$750** | | | |
| | BR#348: OVER UPPER IOWA RIVER | Federal Aid | | $600 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | **$115** | | | |
| | STATE LINE RD.: OVER CREEK | Federal Aid | | $92 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Winneshiek CRD | BROS-C096(123)--8J-96 | **Project Total** | | **$413** | | | |
| | 288TH AVE: OVER COLDWATER CREEK | Federal Aid | | $330 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | **$220** | | | |
| | 240TH ST: OVER CREEK | Federal Aid | | $176 | | | |
| | BRIDGE REPLACEMENT | Regional FA | | $0 | | | |
| Clayton CRD | BROS-C022()--8J-22 | **Project Total** | | | **$420** | | |
| | MESQUITE RD: OVER PECK CREEK | Federal Aid | | | $336 | | |
| | CULVERT REPLACEMENT | Regional FA | | | $0 | | |

| Sponsor Name | Project Number<br>Location<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **STP-HBP – Continued…** | | | | | | | |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | | **$162** | | |
| | BR#121: OVER UNNAMED STREAM | Federal Aid | | | $130 | | |
| | BRIDGE REPLACEMENT | Regional FA | | | $0 | | |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | | **$480** | | |
| | BR#320: OVER CANOE CREEK | Federal Aid | | | $384 | | |
| | BRIDGE REPLACEMENT | Regional FA | | | $0 | | |
| Winneshiek CRD | BROS-C096(HIGH 107-6)--8J-96 | **Project Total** | | | **$162** | | |
| | BR#377: BEAR CREEK ROAD | Federal Aid | | | $130 | | |
| | BRIDGE REPLACEMENT | Regional FA | | | $0 | | |
| Winneshiek CRD | BHOS-C096(112)--5N-96 | **Project Total** | | | **$150** | | |
| | BR#102: N WINN RD | Federal Aid | | | $120 | | |
| | BRIDGE REHABILITATION | Regional FA | | | $0 | | |
| Clayton CRD | BHS-C022()--63-22 | **Project Total** | | | | **$280** | |
| | OSTERDOCK RD: OVER TURKEY RIVER | Federal Aid | | | | $200 | |
| | BRIDGE DECK OVERLAY | Regional FA | | | | $0 | |
| Clayton CRD | BROS-C022()--8J-22 | **Project Total** | | | | **$300** | |
| | LARRIET RD: OVER SNY MAGILL | Federal Aid | | | | $240 | |
| | BRIDGE REPLACEMENT | Regional FA | | | | $0 | |
| Winneshiek CRD | BROS-C096(BUR 110-6)--8J-96 | **Project Total** | | | | **$290** | |
| | BR#407: OVER PINE CREEK | Federal Aid | | | | $230 | |
| | BRIDGE REPLACEMENT | Regional FA | | | | $0 | |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | | | **$432** | |
| | BR#185: OVER UNNAMED CREEK | Federal Aid | | | | $345 | |
| | BRIDGE REPLACEMENT | Regional FA | | | | $0 | |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | | | **$125** | |
| | BR#163: OVER UNNAMED CREEK | Federal Aid | | | | $100 | |
| | BRIDGE REPLACEMENT | Regional FA | | | | $0 | |
| Allamakee CRD | BROS-CO03()—8J-03 | **Project Total** | | | | | **$400** |
| | BR#061930: OVER NORFOLK CREEK ON N. FORK HOLLOW RD | Federal Aid | | | | | $320 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| Clayton CRD | | **Project Total** | | | | | **$300** |
| | KEYSTONE RD OVER SNYMAGIL CREEK | Federal Aid | | | | | $240 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| Clayton CRD | BROS-C022()--5F-22 | **Project Total** | | | | | **$300** |
| | IVORY RD OVER NORTH CEDAR CREEK | Federal Aid | | | | | $240 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| Fayette CRD | BROS-C033()--8J-33 | **Project Total** | | | | | **$180** |
| | L AVE: OVER VOLGA RIVER | Federal Aid | | | | | $144 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| Fayette CRD | BROS-C033()--8J-33 | **Project Total** | | | | | **$150** |
| | M AVENUE: OVER VOLGA RIVER | Federal Aid | | | | | $120 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |

| Sponsor Name | Project Number<br>Location<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **STP-HBP – Continued…** | | | | | | | |
| Winneshiek CRD | BROS-C096(BUR 110-6)--8J-96 | **Project Total** | | | | | **$290** |
| | BR#407: OVER PINE CREEK | Federal Aid | | | | | $230 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | | | | **$202** |
| | BR#121: OVER UNNAMED STREAM | Federal Aid | | | | | $162 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | | | | **$250** |
| | BR#163: OVER UNNAMED CREEK | Federal Aid | | | | | $200 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| Winneshiek CRD | BROS-C096()--8J-96 | **Project Total** | | | | | **$220** |
| | 240TH ST: OVER CREEK | Federal Aid | | | | | $176 |
| | BRIDGE REPLACEMENT | Regional FA | | | | | $0 |
| **TAP - Transportation Alternatives** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| Allamakee CCB | SB-IA-C003(053)--7T-3 | **Project Total** | **$2,724** | | | | |
| | GR RVR RD AND DRIFTLESS AREA BYWY VSTR CENTER | Federal Aid | $1,361 | | | | |
| | BUILDINGS, SCENIC OR HISTORIC HWY. | Regional FA | $0 | | | | |
| Clayton CCB | STP-E-C022()--8V-22 | **Project Total** | **$293** | | | | |
| | PRAIRIE FARMER TRAIL: FROM ELGIN TO BIG SPRINGS | Federal Aid | $234 | | | | |
| | ENGINEERING, PED/BIKE ROW, PED/BIKE GRADE/ PAVE | Regional FA | $234 | | | | |
| Fayette | STP-E-2525()--8V-33 | **Project Total** | **$1,449** | | | | |
| | FAYETTE-VOLGA RIVER MULTI-USE TRAIL | Federal Aid | $50 | | | | |
| | PED/BIKE GRADE & PAVE,PED/BIKE DEVELOPMENT | Regional FA | $50 | | | | |
| Howard CCB | STP-E-C045()--8V-45 | **Project Total** | **$230** | | | | |
| | WGWL TRAIL S 5 MI TOWARD ELMA | Federal Aid | $192 | | | | |
| | PED/BIKE GRADE & PAVE | Regional FA | $192 | | | | |
| Winneshiek CCB | STP-ES-C096(120)--8I-96 | **Project Total** | **$341** | | | | |
| | DRY RUN TRAIL ROW: W & S OF WINDRIDGE IMPLEMENT DR | Federal Aid | $206 | | | | |
| | PED/BIKE ROW | Regional FA | $0 | | | | |
| Decorah | STP-ES-1867(612)--8I-96 | **Project Total** | **$777** | | | | |
| | DRY RUN TRAIL: BOX CULVERT - US 52 & TO TROUT RUN TRL | Federal Aid | $544 | | | | |
| | PED/BIKE ROW,PED/BIKE STRCTRES,PED/BIKE DVLPMNT | Regional FA | $0 | | | | |
| RPA-01 | SRTS-PA01()--2U-96 | **Project Total** | **$45** | | | | |
| | UERPC: SAFE ROUTES TO SCHOOL LIAISON | Federal Aid | $36 | | | | |
| | PED/BIKE MISCELLANEOUS | Regional FA | $10 | | | | |
| Howard CCB | STP-E-C045()--8V-45 | **Project Total** | | **$190** | | | |
| | 9TH ST: FROM SOUTH RICEVILLE TO NORTH RICEVILLE | Federal Aid | | $152 | | | |
| | PED/BIKE GRADE & PAVE | Regional FA | | $152 | | | |
| Fayette CCB | | **Project Total** | | **2,120** | | | |
| | TRRC – BRIDGE & TRAIL CONSTRUCTION | Federal Aid | | $50 | | | |
| | PED/BIKE GRADE & PAVE | Regional FA | | $50 | | | |
| Winneshiek CCB | STP-E-C096()--8V-96 | **Project Total** | | | **$825** | | |
| | TRAIL ON A52 FROM WAL-MART TO FREEPORT | Federal Aid | | | $191 | | |
| | PED/BIKE GRADE & PAVE | Regional FA | | | $191 | | |

| Sponsor Name | Project Number<br>Project Type<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **TAP - Transportation Alternatives – Continued…** | | | | | | | |
| Winneshiek CCB | STP-E-C096()--8V-96 | **Project Total** | | | | **$169** | |
| | DRY RUN TRL: 2 BRIDGES BTWN DECORAH & CALMAR | Federal Aid | | | | $117 | |
| | ENGINEERING, PED/BIKE STRUCTURES | Regional FA | | | | $117 | |
| Winneshiek CCB | STP-E-C096()--8V-96 | **Project Total** | | | | | **$140** |
| | DRY RUN TRL: 2 BRIDGES BTWN DECORAH & CALMAR | Federal Aid | | | | | $115 |
| | ENGINEERING, PED/BIKE STRUCTURES | Regional FA | | | | | $115 |
| **Formula Grants for Other than Urbanized Areas (5311)** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| NEICAC-Transit | 1199 | **Project Total** | **$2,648** | **$2,727** | **$2,809** | **$2,894** | **$2,980** |
| | OTHER | Federal Aid | $581 | $598 | $616 | $635 | $654 |
| | GENERAL OPS/MAINTENANCE/ADMINISTRATION | State Aid | $335 | $345 | $355 | $366 | $377 |
| **Job Access and Reverse Commute Program (5316)** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| NEICAC-Transit | 2730 | **Project Total** | **$104** | **$104** | | | |
| | OTHER | Federal Aid | $83 | $83 | | | |
| | JARC MOBILITY MANAGER | Regional FA | $0 | $0 | | | |
| **Bus and Bus Facilities Program (5339)** | | **Inclusion in the LRTP does not guarantee funding** | | | | | |
| NEICAC-Transit | 2619 | **Project Total** | **$86** | | | | |
| | REPLACEMENT | Federal Aid | $73 | | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | $0 | | | | |
| NEICAC-Transit | 2620 | **Project Total** | **$86** | | | | |
| | REPLACEMENT | Federal Aid | $73 | | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | $0 | | | | |
| NEICAC-Transit | 2621 | **Project Total** | **$86** | | | | |
| | REPLACEMENT | Federal Aid | $73 | | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | $0 | | | | |
| NEICAC-Transit | 2622 | **Project Total** | **$86** | | | | |
| | REPLACEMENT | Federal Aid | $73 | | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | $0 | | | | |
| NEICAC-Transit | 2623 | **Project Total** | **$50** | | | | |
| | REPLACEMENT | Federal Aid | $43 | | | | |
| | MINIVAN | Regional FA | $0 | | | | |
| NEICAC-Transit | 2624 | **Project Total** | **$50** | | | | |
| | REPLACEMENT | Federal Aid | $43 | | | | |
| | MINIVAN | Regional FA | $0 | | | | |
| NEICAC-Transit | 2625 | **Project Total** | **$50** | | | | |
| | REPLACEMENT | Federal Aid | $43 | | | | |
| | MINIVAN | Regional FA | $0 | | | | |
| NEICAC-Transit | 2033 | **Project Total** | **$86** | | | | |
| | REPLACEMENT | Federal Aid | $73 | | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | $0 | | | | |
| NEICAC-Transit | 2294 | **Project Total** | **$86** | | | | |
| | REPLACEMENT | Federal Aid | $73 | | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | $0 | | | | |

| Sponsor Name | Project Number<br>Project Type<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **Bus and Bus Facilities Program (5339) – Continued…** | | | | | | | |
| NEICAC-Transit | 2296 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2297 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2034 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2035 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2036 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2028 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2029 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2031 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2032 | **Project Total** | | **$89** | | | |
| | REPLACEMENT | Federal Aid | | $76 | | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | $0 | | | |
| NEICAC-Transit | 2298 | **Project Total** | | | **$54** | | |
| | REPLACEMENT | Federal Aid | | | $46 | | |
| | MINIVAN | Regional FA | | | $0 | | |
| NEICAC-Transit | 2299 | **Project Total** | | | **$54** | | |
| | REPLACEMENT | Federal Aid | | | $46 | | |
| | MINIVAN | Regional FA | | | $0 | | |
| NEICAC-Transit | 2300 | **Project Total** | | | **$54** | | |
| | REPLACEMENT | Federal Aid | | | $46 | | |
| | CONVERSION VAN | Regional FA | | | $0 | | |
| NEICAC-Transit | 2301 | **Project Total** | | | **$93** | | |
| | REPLACEMENT | Federal Aid | | | $79 | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | $0 | | |
| NEICAC-Transit | 2302 | **Project Total** | | | **$93** | | |
| | REPLACEMENT | Federal Aid | | | $79 | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | $0 | | |

| Sponsor Name | Project Number<br>Project Type<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **Bus and Bus Facilities Program (5339) – Continued…** | | | | | | | |
| NEICAC-Transit | 2303 | **Project Total** | | | **$93** | | |
| | REPLACEMENT | Federal Aid | | | $79 | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | $0 | | |
| NEICAC-Transit | 2305 | **Project Total** | | | **$93** | | |
| | REPLACEMENT | Federal Aid | | | $79 | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | $0 | | |
| NEICAC-Transit | 2306 | **Project Total** | | | **$93** | | |
| | REPLACEMENT | Federal Aid | | | $79 | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | $0 | | |
| NEICAC-Transit | 2307 | **Project Total** | | | **$93** | | |
| | REPLACEMENT | Federal Aid | | | $79 | | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | $0 | | |
| NEICAC-Transit | 1220 | **Project Total** | | | **$2,000** | | |
| | EXPANSION | Federal Aid | | | $1,600 | | |
| | MAINTENANCE FACILITY | Regional FA | | | $0 | | |
| NEICAC-Transit | 2626 | **Project Total** | | | | **$97** | |
| | REPLACEMENT | Federal Aid | | | | $82 | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | | $0 | |
| NEICAC-Transit | 22627 | **Project Total** | | | | **$97** | |
| | REPLACEMENT | Federal Aid | | | | $82 | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | | $0 | |
| NEICAC-Transit | 2628 | **Project Total** | | | | **$97** | |
| | REPLACEMENT | Federal Aid | | | | $82 | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | | $0 | |
| NEICAC-Transit | 2629 | **Project Total** | | | | **$97** | |
| | REPLACEMENT | Federal Aid | | | | $82 | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | | $0 | |
| NEICAC-Transit | 2308 | **Project Total** | | | | **$97** | |
| | REPLACEMENT | Federal Aid | | | | $82 | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | | $0 | |
| NEICAC-Transit | 2309 | **Project Total** | | | | **$97** | |
| | REPLACEMENT | Federal Aid | | | | $82 | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | | $0 | |
| NEICAC-Transit | 2310 | **Project Total** | | | | $97 | |
| | REPLACEMENT | Federal Aid | | | | $82 | |
| | LIGHT DUTY BUS (176" WB) | Regional FA | | | | $0 | |
| NEICAC-Transit | 9291 | **Project Total** | | | | | **$316** |
| | REPLACEMENT | Federal Aid | | | | | $262 |
| | ADA MED DUTY | Regional FA | | | | | $0 |
| NEICAC-Transit | 10289 | **Project Total** | | | | | **$316** |
| | REPLACEMENT | Federal Aid | | | | | $262 |
| | ADA MED DUTY | Regional FA | | | | | $0 |

| Sponsor Name | Project Number<br>Project Type<br>Description | Project Funding | Programmed Amounts in 1000's | | | | |
|---|---|---|---|---|---|---|---|
| | | | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 |
| **Bus and Bus Facilities Program (5339) – Continued…** | | | | | | | |
| NEICAC-Transit | 10354 | **Project Total** | | | | | **$316** |
| | REPLACEMENT | Federal Aid | | | | | $262 |
| | ADA MED DUTY | Regional FA | | | | | 0 |
| NEICAC-Transit | 11033 | **Project Total** | | | | | **$54** |
| | REPLACEMENT | Federal Aid | | | | | $45 |
| | ADA MINIVAN | Regional FA | | | | | $0 |
| NEICAC-Transit | 11051 | **Project Total** | | | | | **$54** |
| | REPLACEMENT | Federal Aid | | | | | $45 |
| | ADA MINIVAN | Regional FA | | | | | $0 |
| NEICAC-Transit | 11052 | **Project Total** | | | | | **$54** |
| | REPLACEMENT | Federal Aid | | | | | $45 |
| | ADA MINIVAN | Regional FA | | | | | $0 |
| NEICAC-Transit | 11184 | **Project Total** | | | | | **$93** |
| | REPLACEMENT | Federal Aid | | | | | $79 |
| | ADA LDB | Regional FA | | | | | $0 |
| NEICAC-Transit | 12051 | **Project Total** | | | | | **$54** |
| | REPLACEMENT | Federal Aid | | | | | $45 |
| | ADA MINIVAN | Regional FA | | | | | $0 |
| NEICAC-Transit | 12052 | **Project Total** | | | | | **$54** |
| | REPLACEMENT | Federal Aid | | | | | $45 |
| | ADA MINIVAN | Regional FA | | | | | $0 |

## CHAPTER TEN: LONG RANGE POLICY PLAN (YEARS 6 – 20)

This section discusses the long range direction and policy plan for each transportation mode. The region's main goal is to maintain and improve transportation infrastructure to support the safe and efficient movement of people and commerce. To that end, the RPA will focus on the following strategies and policies over the long term of this plan:

### Roads and Bridges

- Seek and support transportation funding that results in increased revenue for road and bridge projects
- Support funding proposals that incorporate an automatic increase to remove uncertainty in the project planning process
- Support proposals that allow the region to maintain local control over the distribution of funds
- Consider sharing staff or contract work (e.g. bridge inspection) regionally.
- Seek ways to collaborate on projects to save taxpayer money
- Support the rehabilitation of the Lansing Bridge
- Ensure that major routes in and out of the region are sufficient for safe and efficient travel
- Continue the on-going rehabilitation and preservation of existing roads, streets and bridges to improve the overall condition of the existing transportation system
- Consider the construction of new roadways when necessary to promote economic development opportunities
- Target investments to reduce fatalities and major injuries
- As infrastructure is improved, consider the hydrologic impact of the watershed on public and private infrastructure

### Active Transportation

- Conduct an economic impact study of the proposed "backbone" trail system to support funding applications
- Prioritize projects that are part of the "backbone" system when making funding decisions
- Continue to develop connectivity throughout the regional trail system
- Properly plan for long-term trail maintenance
- Consider ways to market the region's Scenic Byways and encourage cooperative development of the Byways
- Support Safe Routes to School programming
- Support the ongoing development of the Mississippi River Trail through the region
- Encourage the implementation of the Iowa Water and Land Legacy (IWiLL) amendment to fund the Natural Resources and Outdoor Recreation Trust Fund
- Support the continuation of State Recreational Trail funding
- Support the State's participation in the Federal Recreation Trails program

## Public Transportation

- Replace aging public transit vehicles
- Continue image upgrades throughout fleet
- Add amenities to fleet (electronic payment options, bike racks, wi-fi…)
- Expand service with self-sustaining routes
- Develop partnerships with local businesses to support commuter routes (e.g. shift alignment, financial support, employee perks, advertising)
- Embed Mobility Management into normal operations
- Develop "Wheels for Work" to a self-sustaining program
- Create regional maintenance hub and office space

## Aviation

- Encourage airport projects that support regional economic development
- Maintain airport facilities to provide for quality and safe air service
- As feasible, implement improvements as identified in the Iowa Aviation System Plan, 2010-2030

## Rail/Water Transportation

- Improve access to rail and water transportation modes
- Improve highway-rail crossings to improve safety as warranted
- Support the construction of rail spurs or terminals that promote economic development and business expansion projects
- Support the development and expansion of the water trail network in the region

# CHAPTER ELEVEN: FUNDING THE PLAN

The success or failure of the region's ability to implement the Long Range Transportation Plan relies on funding from a variety of sources. Many sources are beyond the decision-making capacity of the region and are offered through apportionment or grants. The short term projects listed in Chapter 9 utilize federal funding programs which were briefly described in that section. This chapter will identify potential and established funding mechanisms for each transportation mode and the source of those funding streams.

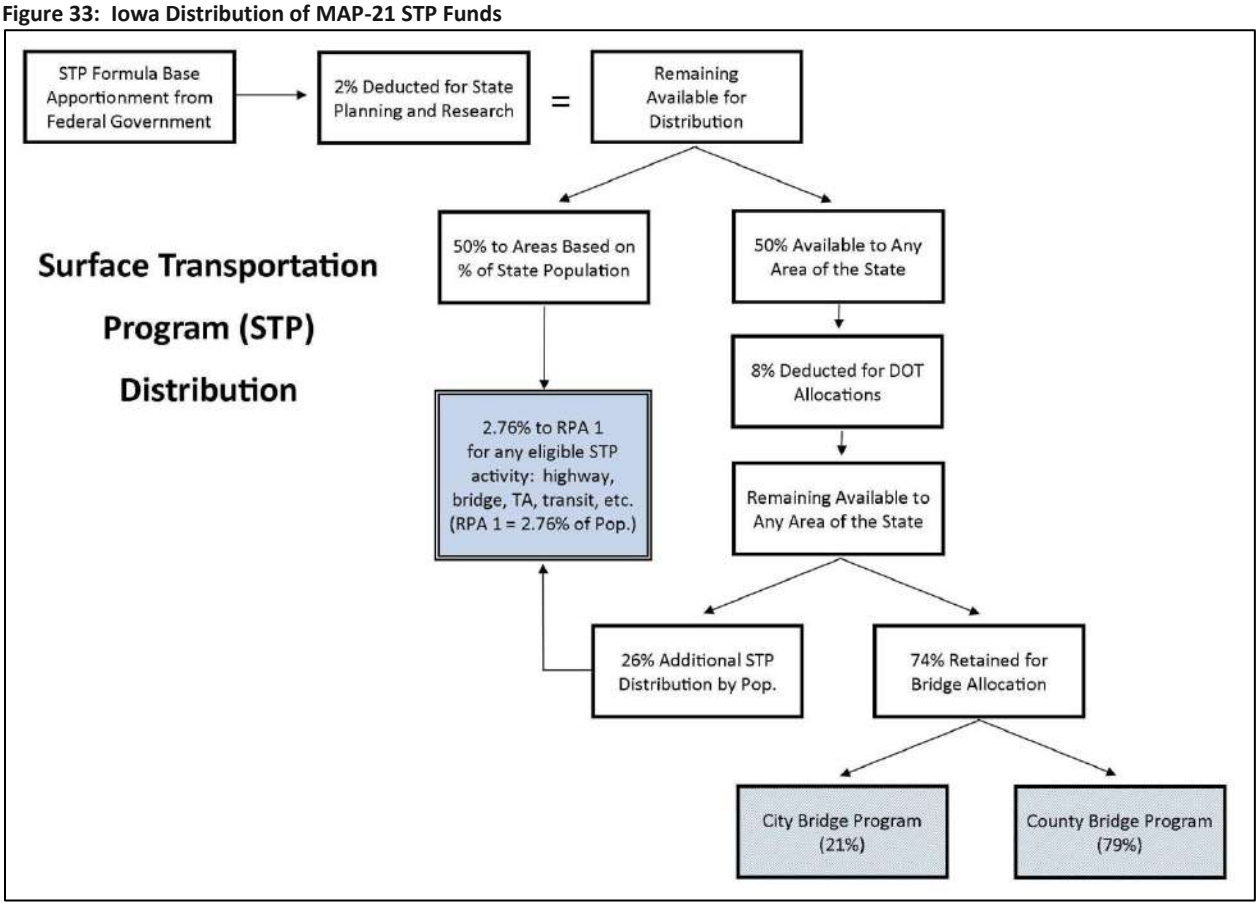
## Roads and Bridges

### Federal Funding

*Surface Transportation Program (STP)*

STP funds are available to the region as flexible funding that may be used for projects on Federal-aid eligible roads, bridges, pedestrian and bicycle infrastructure, and transit capital projects. Figure 33 illustrates how STP funds coming into the state are distributed to the region and are allocated based on population. Local decisions as to the distribution of the region's final allocation are made by the RPA 1 Policy Board and its committees.

**Figure 33: Iowa Distribution of MAP-21 STP Funds**



*STP Bridge Program (STP-HBP)*

Although the Highway Bridge Program was eliminated by MAP-21, the State of Iowa continues to provide funding directly to counties and cities for bridges on public roads, both on and off the federal-aid system. This allocation of STP funds is illustrated in Figure 33. Individual counties receive a distribution based on the county's Road Use Tax fund distribution and a qualifying deficient bridge factor. Cities make requests to add a bridge to the City Bridge Candidate List and each year, the DOT selects bridges from the Proposed City Bridge Candidate List based on their ranking and available funding. Cities are limited to one bridge per city per fiscal year.

*Highway Safety Improvement Program (HSIP)*

Federal safety funding through HSIP previously contained a set-aside for High Risk Rural Roads (HRRR) to complete safety projects on the county road system. Under MAP-21, HRRR no longer exists. However the Iowa DOT is continuing that safety program under a new name, HSIP – Secondary Program. The HSIP – Secondary Program will be funded by a set-aside from the HSIP distribution.

**State Funding**

*Road Use Tax Fund (RUTF)*

The RUTF is highway user revenue, collected through a state excise tax on fuels and is dedicated to roadway projects. After some off-the-top diversions, the RUTF is distributed by a formula of 47.5 % to the primary road system, 24.5% to secondary county roads, 8% to farm-to-market county roads, and 20% for city streets. The Secondary and Farm-to-Market Road funds are distributed to counties based 70% on each county's share of total statewide system needs and 30% based on each county's share of total statewide land area. The City Street Fund is distributed to cities based upon each city's share of total statewide city population.

*TIME-21*

TIME-21 was developed in 2008 and is funded by registration fees and other fees. Time-21 revenue is dedicated 60% to the maintenance and construction of certain primary highways in the state, 20% to secondary roads and 20% to municipal streets.

*Revitalize Iowa's Sound Economy (RISE)*

The RISE program was developed to promote economic development in Iowa by constructing, improving and maintaining roads and streets that encourage economic diversification, new business opportunities, small business development, exporting, import substitution and tourism in Iowa. RISE is funded by a percentage of the motor fuel tax. Cities or counties can apply for RISE funding for projects that support local economic development and for projects where an immediate commitment of funding is required as an incentive to influence the location decision of a firm or developer.

*City Bridge Construction Fund*

The City Bridge Construction Fund is capitalized by the Road Use Tax Fund for the reconstruction or replacement of highway bridges within or touching a city's corporate limits, regardless of who owns the bridge. City Bridge funds are allocated to cities in the same manner as the STP-HBP funds are distributed.

*County Bridge Construction Fund*

Also funded by the Road Use Tax Fund, the county bridge construction fund is used for the construction, reconstruction, or replacement of highway bridges on the Secondary Road System. Annually, the Iowa DOT requests one candidate bridge application from each county for these funds. Candidates are then ranked according to their priority points and projects are selected from the listing until the available funds are spent.

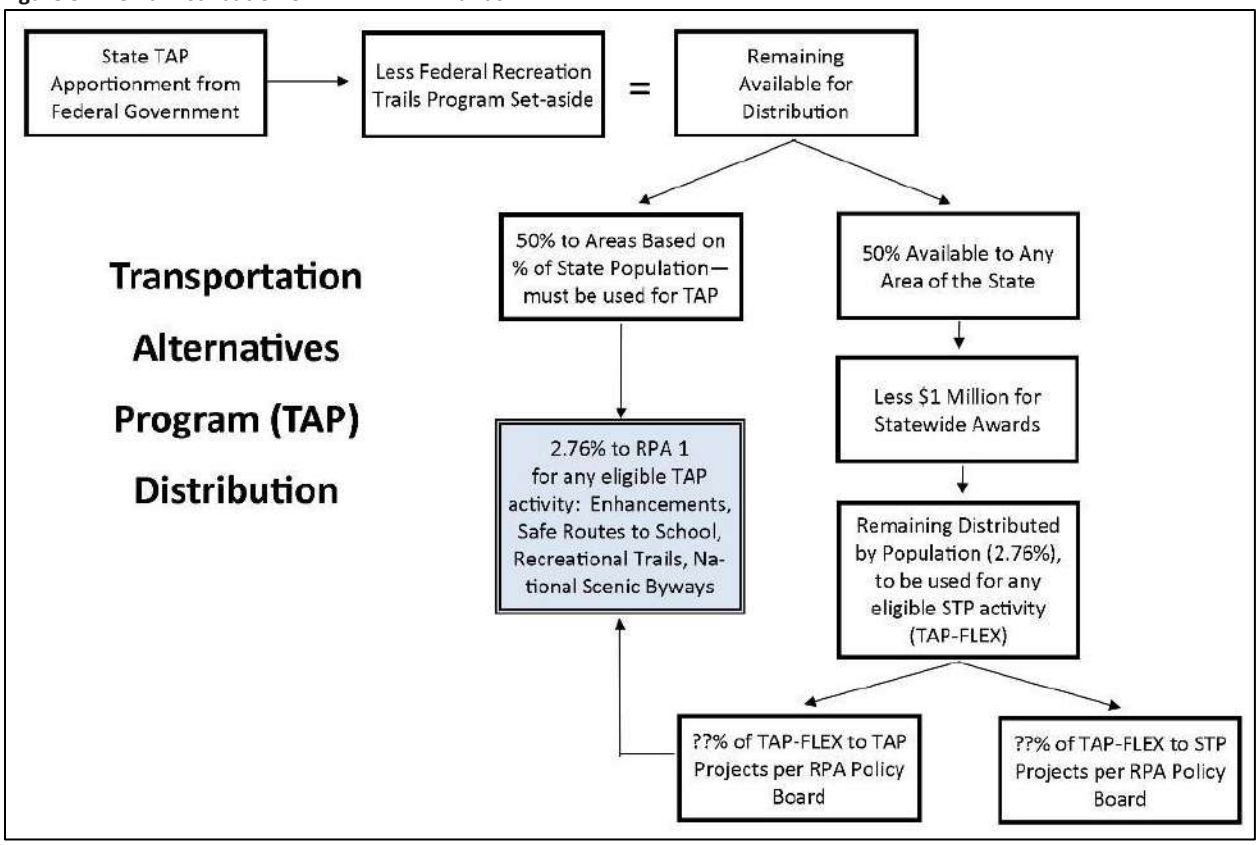
## Active Transportation

### Federal Funding

*Transportation Alternatives Program (TAP)*

Federal TAP funding is available for Transportation Enhancements, Recreational Trails, Safe Routes to School, Scenic Byways and several other discretionary programs that improve the cultural, historic, aesthetic and environmental aspects of transportation infrastructure and include bicycle and pedestrian facilities. TAP funds are allocated as shown in Figure 34, with local decision-makers determining the regional distribution of the RPA's TAP funds.

**Figure 34: Iowa Distribution of MAP-21 TAP Funds**




*The Federal Recreational Trails (FRT) Fund*

As noted in Figure 34, the state has "opted in" to the Federal Recreational Trails Program, which is a set-aside from the State's TAP distribution. FRT funds are available for trails, trailside and trailhead projects

through a statewide application process. The FRT funds are intended for recreational trails only and cannot be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads.

*Statewide TAP*
Also noted in Figure 34 is a set-aside for statewide TAP projects. These funds are distributed through an application process for projects and initiatives that are statewide or multi-regional in nature.

**State Funding**

*State Recreation Trails*
Funded annually by a legislative appropriation, the state recreational trails program provides funds to establish recreational trails in Iowa for the use, enjoyment and participation of the public. Funds are distributed through a statewide application process.

## Public Transportation

Funding for Public Transportation comes from local, state and federal sources. In Iowa, regional transit operations are funded by a split of approximately 60% local funding, 16.5% state funding and 23.5% federal funding. Local funding for transit comes from user fees, contracts with human service agencies and local taxes.

**Federal Funding**

*Bus and Bus Facilities Program (Section 5339)*
These funds provide capital to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. The State DOT allocates these funds through an application process and by formula to transit agencies throughout the state.

*Formula Grants for Rural Areas Program (Section 5311)*
This funding is used for capital and planning projects, job access reverse commute projects, operating assistance and administration expenses. The State DOT allocates these funds to regional systems through the Consolidated Transit Funding Application process utilizing a formula for Individual allocations based on 40% of the system's percentage contribution to total regional transit ridership and 60% on the system's percentage contribution to total regional revenue miles.

**State Funding**

*State Transit Assistance (STA)*
STA is funded by 4% of the fees for new registration collected on sales of motor vehicle and accessory equipment. This money is in large part distributed by a formula based on each transit system's previous years' ridership, miles driven and local funding support. These funds can be used to support operating, capital or planning expenses.

## Aviation

### Federal Funding

*Federal Airport Improvement Plan (AIP)*
Three of the airports in the region are part of the National Plan of Integrated Airport System and are eligible for federal funding through the federal Airport Improvement Plan (AIP). Applications for AIP funding are channeled through the Iowa DOT. Eligible projects include: runway, apron and taxiway construction and rehabilitation; pavement maintenance; drainage; obstruction removal; signage and lighting; navigation and communication aides; land acquisition; fuel facilities, terminals and hangars; airport layout/master plans; snow removal equipment and equipment storage buildings.

*AIP Nonprimary Entitlements (NPE)*
The two general aviation and one basic service airports in the region also receive nonprimary entitlement (NPE) funds up to $150,000 per year. Nonprimary entitlements are designated for use at specific airports; however, projects must still be eligible and justified. NPE can be carried over and accumulate for four years.

### State Funding

*State AIP*
The State AIP is funded through the State Aviation Fund, with revenues collected from aircraft registration fees and aircraft fuel taxes, and is used to support airport grants, ongoing aviation related services, special projects and statewide planning. The fund offers grants for immediate safety improvements, wildlife mitigation, airport development, service development, and land use planning.

*General Aviation Airport Vertical Infrastructure Program (GAVI)*
GAVI is funded through annual appropriations from the state legislature for general aviation airports. Funds are available for the preservation and development of the vertical infrastructure at general aviation airports. Eligible projects are expected to be in the Aviation System Plan and include construction and renovation of airport terminals, hangars, maintenance buildings, and fuel facilities.

## Rail Transportation

According to the Iowa Office of Rail Transportation, railroads operating in the state generally invest about 25 to 30% of their revenues earned in Iowa into maintaining and improving the track system. Funds are available to help cities, counties and railroads with crossing surface repairs.

### Federal Funding

*Federal-Aid Highway/Rail Crossing Safety Program*
The Federal-Aid Highway/Rail Crossing Safety Program will help pay for safety improvements such as new crossing signal devices, upgrades to existing signals, improve crossing surfaces, and other low-cost improvements such as increased sight distance, widened crossings, increased signal lens size or crossing closures.

*Railroad Rehabilitation and Improvement Financing (RRIF)*
Administered by the Federal Railroad Administration, the RRIF program provides direct loans and loan guarantees to acquire, improve, or rehabilitate rail equipment or facilities, including track, bridges, yards, buildings and shops; refinance outstanding debt; and develop or establish new railroad facilities.

**State Funding**

*Grade Crossing Surface Repair Program*
The State's Grade Crossing Surface Repair Fund will help pay for crossing surface repairs, with match money provided by both the responsible roadway jurisdiction and the railroad company. Eligible projects are generally funded in the order applications are received by the department.

*Iowa's Grade Crossing Safety Program*
The Iowa Grade Crossing Safety Program assists railroads with funding for the maintenance of crossing signals. Railroads can be reimbursed annually for maintenance of its active warning devices.

*Railroad Revolving Loan and Grant Program (RRLGP)*
The RRLGP is appropriate annually by the state legislature and provides loans or grants to improve rail facilities to spur economic development through job growth; the preservation and improvement of the railroad transportation system; and through rail port planning and development. RRLGP funds are awarded through a competitive application process.

## Water Transportation

*Inland Waterway Trust Fund*
Funds to improve the lock and dam system on the nation's inland waterways come from the Inland Waterway Trust Fund, which is funded by a tax on barge diesel fuel. These funds provide 50% of the cost of major capital improvements made by the Army Corps of Engineers on the system.

*Ferry Boat Discretionary Program*
This federal program provides funding for the development, operation or construction of ferry boats and ferry terminal facilities.

## CHAPTER TWELVE: PUBLIC INVOLVEMENT PROCESS AND RESULTS

The general public was involved in the long range transportation planning process to gather input on the draft document. Feedback was sought on the plan's goals and objectives and its short and long-term projects and policy intentions. The public was invited to attend a Supervisor's meeting in each county held during the week of February 24th for a short presentation on the plan (see PowerPoint in Appendix A). The plan was also placed on the "Items for Public Comment" page on the Upper Explorerland Transportation webpage, and links to the page were placed on government, economic development and chamber websites throughout the region. The public was notified of the availability of the plan for review through a press release distributed to each of the region's news outlets and radio stations. In addition, committee members shared the plan with their respective boards and governing bodies.

Public comments received in writing and at the public presentations did not result in any substantive revisions to the draft plan. Comments (and some responses) are listed and/or summarized as follows:

- The Black Hawk bridge in Lansing has been determined by state and local studies to be a critical regional transportation facility and that the continuing maintenance schedule committed to by the DOT in a corridor study 10 years ago is essential
- Strengthening regional transit services is critical
- The Plan's comment about a regional airport is important, considering the regional and state approved regional airport site for Allamakee County in the 1990's. This study also identified a site for a two county regional airport site that could serve Decorah, Postville, and Waukon perhaps toward the end of the Plan's planning period as design requirements and funding points to consolidation of facilities.
- Include Lansing's Clear Creek & Mt. Hosmer trails, which are part of an adopted city-wide trails plan.
- Questions with answers provided from public presentations:
    - How and who decided on the 18 RPA districts?
        - From *The Profiles of Metropolitan Planning Organizations and Regional Planning Affiliations*: "In 1968, Iowa officially recognized the concept of regional oriented planning for non-urban areas through the delineation of 16 rural transit planning regions, also called Councils of Government (COG). These regions were designated to address existing and future needs for planning; coordination and administration of state services; common issues, goals and opportunities; and a base for better allocation of resources. In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) required states to establish a transportation planning process to serve areas outside the MPOs and TMAs. Iowa adopted a process where non-metropolitan transportation planning, project prioritization and funding are undertaken primarily by local governments through a regional planning agency. As a starting point for creating a state/regional partnership, the Iowa Transportation Commission designated the 16 existing rural transit planning regions as a basis for local consultation. Local members

were given the opportunity to stay with an existing rural transit agency, join an adjacent COG, or form a new regional affiliation. As a result, Iowa has 18 regional planning affiliations to implement transportation planning and programming in non-metropolitan areas. In 1993, the Iowa Transportation Commission (Commission) adopted a new planning process patterned after the MPOs that created the regional planning affiliations (RPAs). In 1997 with the passage of TEA-21, the Commission reaffirmed its commitment to this regional transportation planning and programming process."

- How much annual federal dollars go to transit for their buses and minivans and do they really get used that much?
  - They usually try to replace nine vehicles a year – although they have to be on the some list at the state. For FFY2014 we programmed for nine buses totaling 566,000 in Federal Aid – these are 5339 "Bus and Bus Facilities" funds.
  - For operations, Transit gets both state and federal support (580,622 FA and 335,238 SA programmed in FFY14).
  - State Transit Assistance (STA) distributes approximately 97% of that program's funding among eligible transit systems using a performance-based distribution formula calculated on prior year statistics for rides, miles, operating cost, and local support.
  - Formula Grants for Rural Areas (5311 funds) is the accompanying federal pot of money to STA funds. RPA planning and intercity bus assistance funding is off-the-top. The remaining funds are distributed among all eligible transit systems using a performance-based distribution formula based on prior year statistics. 5311 funds require a match depending on what the agency is using them for (50% match for operations, 20% for preventative maintenance or capital projects, 15% for vehicles that are ADA and CAAA compliant.
  - We didn't have to do a PTP update this year, but as of last year's update, Transit provided over 173,000 rides in the region - 1,091,259 vehicle miles.
- Question on the future of Motor Mill trail:
  - Clayton County Conservation director explained that he is working with the Iowa Department of Transportation (IDOT) requirements to get to the point of being able to start construction.
- Concern was expressed about the lack of progress on the Motor Mill trail - as no shovel of dirt has been moved in four years. The revenue and the expense have been included in the county budget for four years. Wonders if the Conservation Board has changed its emphasis on trails as there is only one line of the annual report that is regarding trails.
  - Clayton County Conservation Director explained that the engineering cost has been paid on the project and next will be archeological work. He is working through the regulations of the IDOT. Landowners were not to be talked to prior to the grant award (DOT regulations). That made the landowners mad and distrustful of the administration of the trail project. He stated that relations with the landowners have improved. Grant funds are still available as long as the project is progressing. The progress so far has been sufficient to keep the grant award. *(Concern remained, with dissatisfaction with the progress and fear of losing funding)*

- Transit affordability is an issue for riders
- Farm to market roads were the predominant priority in the past and still are.
- A Clayton County group is interested in the trails aspect and would like to see more emphasis placed on trails to be used for snowmobiling, hiking, horseback riding and biking. NEIA resources can be capitalized if worked into the trails.
- Would like to see the recreational and tourism aspects added to the plan for the sake of the residents of the county and the visitors. Some statistics for tourism are that the Motor Mill site has seen approximately 1400 visitors in the past year. The City of Elkader campground has around 400 campers this past year. The county conservation parks have seen fees reflecting 953 campers.
    - The City of Elkader has responded that there are many more than 400 campers per year
- It is important to have good roads to promote the area for people to come and stay to help the area economically.
- Trails are a big thing and money makers in Wisconsin and Minnesota.
- Trails are not just for biking and hiking. The annual trail rides in the area are a big promotion of the area. These people come back to look around more and spend money.
- Horseback riding is not big with the upcoming generation. Others agreed that interests do change such as increased interest in mountain biking, kayaking, geode catching, etc., but trails still play a part of it.
- The Mississippi River Parkway regional planning for this region has a goal of promoting tourism and recreation.
- Would like/suggest, that an additional goal be added that "Roads and bridges bring economic value to the region by providing transportation linkages for the transport of agricultural, commercial and industrial goods along with visitors and tourists to northeast Iowa." The idea was to include tourism and how important that industry has become to northeast Iowa. We need to be able to get our visitors and tourists from place to place as well.
- The second suggestion that has been made is to include additional comments under trails portion to include snowmobiles and equestrian. Not sure where that should be included or how, but this too is an important component to transportation and trails.

A final public hearing was held on March 20th, 2014. The Transportation Policy Board reviewed and accepted these comments and incorporated them into the plan as appropriate.

## CHAPTER THIRTEEN: FUTURE REGIONAL TRANSPORTATION PLANNING ACTIVITIES

The LRTP is a document that considers how the regional transportation system could evolve over the next 20 years. This document will be updated every five years to ensure that new data and trends are still being addressed by the goals and objectives set forth in the plan. Additionally, RPA 1 will continue to maintain related, shorter term transportation planning documents including the Passenger Transportation Plan (PTP), the Transportation Improvement Program (TIP), the Public Participation Plan and the Transportation Planning Work Program (TPWP).

The region is also interested in conducting special transportation studies or plans that will help secure future funding and determine the feasibility of projects. Specifically, the region is considering:

- A Regional Trail Assessment to analyze the potential economic impact of completing the "backbone" section of the trail system is desired by many regional stakeholders and;
- A Regional Airport Feasibility study to help identify whether there would be any economic impact to consolidating, and what the resulting community impacts might be throughout the region.

## REFERENCES


AAA. (2012). *NewsRoom*. Retrieved 2013, from AAA: http://newsroom.aaa.com/2012/04/cost-of-owning-and-operating-vehicle-in-u-s-increased-1-9-percent-according-to-aaa%E2%80%99s-2012-%E2%80%98your-driving-costs%E2%80%99-study/

AirNav, LLC. (2013). *Search Airports*. Retrieved 2013, from AirNav.com: http://www.airnav.com/airports/get

Association of American Railroads. (2013). *Freight Railroads in Iowa.* www.aar.org: Association of American Railroads.

Bureau of Labor Statistics. (2014). *Labor Force Statistics from the Current Population Survey*. Retrieved 2013, from United States Department of Labor: http://www.bls.gov/cps/

Cassville Ferry Commission. (n.d.). *Monthly Report.* Cassville.

Federal Highway Administration. (2009). *National Bridge Inventory*. Retrieved 2013, from U.S. Department of Transportation: http://www.fhwa.dot.gov/bridge/nbi/county09.cfm

Federal Highway Administration. (2012). *Planning Processes*. Retrieved 2012, from U.S. Department of Transportation Federal Highway Administration: http://www.fhwa.dot.gov/planning/processes/statewide/related/functional_classification/fc01.cfm

Federal Railroad Administration. (2011). *Office of Safety Analysis*. Retrieved 2013, from Federal Railroad Administration: http://safetydata.fra.dot.gov/OfficeofSafety/Default.aspx

Iowa Department of Transportation. (2011). *River Barge Terminal Directory.* Ames: IDOT.

Iowa Department of Transportation. (2012). *Office of Rail Transportation*. Retrieved 2013, from Iowa Department of Transportation: http://www.iowadot.gov/iowarail/railroads/industry/profiles.aspx

Iowa Department of Transportation. (2012). *Office of Systems Planning*. Retrieved 2013, from Iowa.gov: http://www.iowadot.gov/systems_planning/planning_resource_guide.html

Iowa Department of Transportation. (2012). *Vehicle Miles of Travel (VMT)*. Retrieved 2013, from Iowa DOT Transportation Data: http://www.iowadot.gov/maps//msp/vmt/index.htm

Iowa DNR. (2010). *Antidegradation*. Retrieved from Iowa Department of Natural Resource: http://www.iowadnr.gov/InsideDNR/RegulatoryWater/WaterQualityStandards/Antidegradation.aspx

Iowa DNR. (2012). *Iowa's Section 303(d) Impaired Waters Listings*. Retrieved from Iowa Department of Natural Resources: http://www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/ImpairedWaters.aspx

Iowa DNR. (2013). *Recreation Atlas*. Retrieved from Iowa Department of Natural Resources: http://programs.iowadnr.gov/maps/recreationatlas/

Iowa DNR. (n.d.). *Iowa Natural Areas Inventory (INAI) Interactive Website*. Retrieved from Iowa Department of Natural Resources: http://www.iowadnr.gov/Environment/ThreatenedEndangered/NaturalAreasInventory.aspx

Iowa DOT, CMAT. (2012). *Crash Mapping Analysis Tool*. Retrieved from DOT FTP Site: ftp://165.206.203.34/TrafficSafety/TrafficSafetyPublic/

Iowa DOT, Geospatial Technologies. (2012). *Iowa DOT REST Directory*. Retrieved from Iowa Department of Transportation: https://geonexusr.iowadot.gov/ArcGIS/rest/services/Pavement_Management/PavementConditionIndex/MapServer

Iowa DOT, Office of Aviation. (2013). *Aviation System Plans, 2010-2030*. Retrieved 2013, from Iowa Department of Transportation: http://www.iowadot.gov/aviation/airports/municipal.aspx

Iowa DOT, Office of Transportation Data. (2012). *Iowa Miles of Rural Secondary Roads as of January 1, 2012.* Ames: Iowa Department of Transportation.

Iowa Economic Development Authority - Iowa Tourism Office. (2012). *The Economic Impact of Travel on Iowa Counties, 2011.* Washington, D.C.: U.S. Travel Association.

Iowa Workforce Development. (2014). *Labor Force Data*. Retrieved from Iowa.gov: http://www.iowaworkforce.org/lmi/laborforce/index.html

Northeast Iowa RC&D. (n.d.). *Northeast Iowa Scenic Byway Project*. Retrieved 2013, from Northeast Iowa Resource Conservation & Development: http://northeastiowarcd.org/scenic-byways/

Office of the Iowa State Archaeologist. (2013). *I-Sites*. Retrieved from Geographic Information Services: http://ags.gis.iastate.edu/IsitesPublicAccess/

State Data Center of Iowa. (n.d.). *State Data Center of Iowa*. Retrieved 2013, from Iowa Data Center: http://data.iowadatacenter.org/

U.S. Army Corps of Engineers - St. Paul District. (2012). *Lock & Dam 9, Lock & Dam 10.* St. Paul: U.S.A.C.E.

U.S. Census Bureau. (2012). *American FactFinder*. Retrieved 2013, from U.S. Census Bureau: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

U.S. Census Bureau, Center for Economic Studies. (2011). *OnTheMap*. Retrieved 2013, from OnTheMap: http://onthemap.ces.census.gov/

U.S. Fish & Wildlife Service. (2013). *Iowa*. Retrieved from Endangered Species, Midwest Region: http://www.fws.gov/midwest/endangered/LISTS/iowa_cty.html

U.S. PIRG Education Fund; Frontier Group. (2013). *A New Direction: Our Changing Relationship with Driving and the Implications for America's Future.* U.S. PIRG Education Fund.

UERPC. (2013). Upper Explorerland Regional Planning Commission.

USDA NRCS. (2013). *Field Office Technical Guide*. Retrieved from United States Department of Agriculture: Natural Resources Conservation Service: http://efotg.sc.egov.usda.gov/efotg_locator.aspx?map=US

USGS. (2013). *The National Map Viewer*. Retrieved from United States Geological Survey: http://viewer.nationalmap.gov/viewer/

Wapsi-Great Western Line Committee. (2012). *Home*. Retrieved 2013, from Trailhead: Wapsi-Great Western Line: http://wgwltrail.com/

## APPENDIX A: PUBLIC MEETING PRESENTATION

### The Long Range Plan

- Describes the region's existing conditions (population, economy, infrastructure)
- Identifies current and projected future multi-modal transportation problems and needs
- Identifies transportation improvement strategies for all modes
- Lays out the short-term projects and long-range policy goals for the region

### Regional Transportation Goals – Road and Bridges

- Roads and bridges are in good condition and can support the movement of people and goods safely throughout the region
- Roads and bridges bring economic value to the region by providing transportation linkages for the transport of agricultural, commercial and industrial goods

## Regional Transportation Goals – Transportation Alternatives & Public Transportation

- The built environment provides safe and well-connected access for bicycles, pedestrians and other non-motorized forms of transportation
- The region's economy is enhanced through tourism and a growing population as the trail system increases the quality of life in the area
- Public transportation is available and affordable to all residents in the region, regardless of their location, income or ability

## Regional Transportation Goals – Air, Rail and Water

- The region's airports support the aviation needs of business and industry, while providing safe facilities for recreational use
- Railroads through the region support local economic activity while ensuring the safety of residents in the communities with railroads, and travelers at all crossings
- The region's economy is enhanced by access to water transportation options

## Also in the plan – Learn about RPA 1

- Demographics
- Family Economics
- Business Economics
- Commuting Patterns
- Environmental Distinctions
- Special Places

## Learn about our transportation system

- Roads and bridges
- Transportation alternatives
- Public transportation
- Aviation
- Rail
- Water

## The plan considers…

- Opportunities and threats
- Key needs and issues
- Alternative actions to address needs and issues
- Long range policy plans

## Get the Details - Give your Comments!

The full plan is available for review at the following link:

http://www.uerpc.org/tip-comments.html

Hard copies are available upon request:

Upper Explorerland Regional Planning Commission:

563-382-6171