Table of Contents

Int	roduction	I
Co	ounty Overview	2
Po	pulation Trends & Demographic Profile	3
	Population Trends in Pottawattamie County	
	Population Profile	
	Demographic Profile	7
	Employment Profile	7
	Projected Population & Employment	10
Ro	adways & Bridges	12
	Roadway Systems	
	Profile of County Roadways	
	Pavement Condition	
	Bridges in Pottawattamie County	
	Traffic Trends in Pottawattamie County	
	Roadway Safety	
Fre	eight Movement	
	Roadway Freight Overview	
	Railway Freight Overview	
	Freight Projections	
Ric	cycle & Pedestrian	
	Cycling Overview	
	, 3	
	Pottawattamie County Trail Plan	
_	Safe Routes to School	
۲u	blic Transit	36

Introduction

Overview of this Document

In 2015, the Pottawattamie County Board of Supervisors requested MAPA's assistance in developing a multi-modal transportation plan. Several major projects have been under consideration in recent years, and the transportation plan will provide guidance on the priority and impact of such projects.

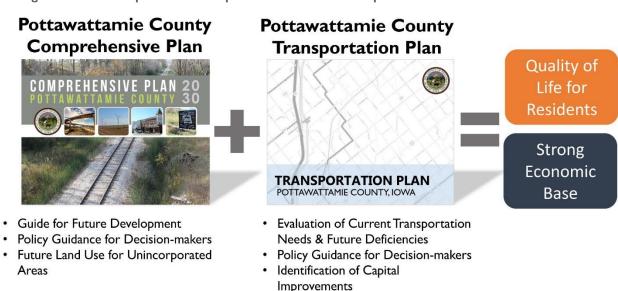
The Pottawattamie County Transportation Plan will provide a comprehensive glimpse at transportation in the metro area and propose a vision to guide the next 25 years. The plan will evaluate existing conditions, project future growth, and identify needs and deficiencies for roadways, bridges and other transportation infrastructure within the county. These needs will be developed into

projects and funding will be analyzed to establish the total amount of anticipated revenue for the County in the next 25 years.

Figure I (below) shows the relationship between the Comprehensive Plan and the Transportation Plan.

This document, Technical Memorandum I, includes chapters of the final plan related to existing conditions. Analysis of future needs, deficiencies and an analysis of potential revenue sources will be included in Technical Memorandum 2, or as part of the Draft Plan document.

Figure I: Relationship between Comprehensive Plan and Transportation Plan



County Overview

Overview

Pottawattamie County is located in west-central lowa, adjacent the Missouri River. Council Bluffs, lowa is the County Seat of Pottawattamie County, which is located in the southwest corner of the County and also located within the Omaha, Nebraska Metropolitan Area. Primary road networks in Pottawattamie County include U.S. Interstate's 29, 80 and 680, U.S. Highway's 6 and 59 and State Highways 92 and 83. Figure 2 illustrates the location of communities and major roadways in Pottawattamie County.

The County has a total land area of approximately 616,448 acres, or 963 square miles. The major waterway is the Missouri River, which flows from the north to the south and serves as the western boundary of the County and of the State. The Missouri river and its tributaries have sculptured the terrain of Pottawattamie County, creating steep Loess Hills or bluffs along the eastern edge of the river valley, gently rolling upland hills in the central and eastern portions, and the seven to one-half mile wide strip of land adjacent the east side of the Missouri River, which is very level, river bottom lands.

There are fifteen communities in Pottawattamie County: Avoca, Carson, Carter Lake, Council Bluffs, Crescent, Hancock, Macedonia, McClelland, Minden, Neola, Oakland, Shelby, Treynor, Underwood, and Walnut.

Overview Map **Pottawattamie County Transportation Plan** Shelby Walnut Avocc Minden Hencock Underwood Greecent) McClelland Carter Lake Council Bluffs Corson Treymor Macedonfa Henderson Stilver City

Figure 2: Overview Map of Pottawattamie County

Population Trends & Demographic Profile

100,000 90,000 2010, 93,158 80,000 2014, 93,128 70,000 1900, 54,336 1990, 82,628 1970, 86,991 60,000 50,000 40,000 30,000 1850, 7,828 20.000 10.000 1860 1870 1880 1940 2010 2014

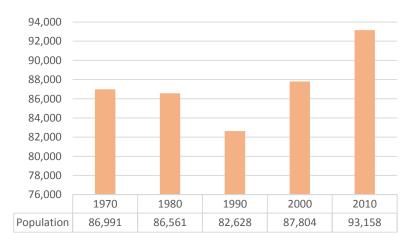
Figure 3: Historical Population of Pottawattamie County, 1850 to 2014

Population Trends in Pottawattamie County

In 2010, Pottawattamie County was the eighth most populous county in Iowa, with a total population of 93,158. This is largely due the large urban center of Council Bluffs in western Pottawattamie County—accounting for 62,391 of total population as of the 2010 Census.

Figure 3 (above) shows the historical trend of population in Pottawattamie County. Since 1970 the population of Pottawattamie County has grown over 7%. While population declined in the 1980s, steady growth since 1990 has increased the population of Pottawattamie County to 93,158 in 2010. Since 2010 population has remained relatively stable, with an estimated population of 93,128 in 2014. Figure 4 (right) shows recent population trends. This recent growth has occurred largely in areas in and around established communities—including Council Bluffs and other small communities throughout the county. Figure 5 (next page) shows the distribution of population within Pottawattamie County based on census tracts.

Figure 4: Recent Population Trends, 1970-2010



Source: US Census Bureau, Decennial Census

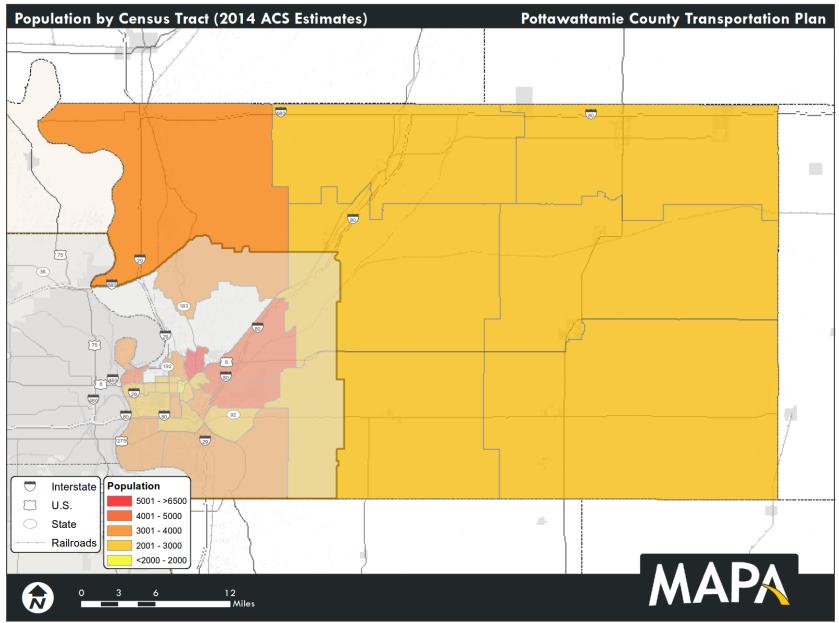


Figure 5: Population by Census Tract, 2014 American Community Survey

Source: US Census Bureau, American Community Survey

Population Profile

Table I (right) shows the distribution of population between the communities in Pottawattamie County. In 2010, unincorporated Pottawattamie County had approximately 18,003 residents based on the US Census (shrinking to 17,984 in 2014).

While the cities of Pottawattamie County comprise majority of the population in Pottawattamie County, they comprise less than 4% of the total land area within the County. However, as urban centers the density of the population is significantly higher in these communities. Table 2 (right) shows the population density of rural and urban areas of the county as of the 2010 Census. These figures provide further context to the distribution of population within the county.

Figure 6 (next page) shows the distribution of households in the county by Census tract. This graphic shows the concentration of households (and population) in the urban portion of the county, with fewer households in eastern portions of Pottawattamie County

Unlike many other counties in lowa, a significant portion of the recent growth in Pottawattamie County is attributable to natural increase, or the difference between births and deaths of county residents. This growth is shown in Table 3 to the right, with natural increase accounting for 4,100 new residents in the county between the 2000 and 2010 Census.

Table I: Population by Community, 2000 to 2014

	2000	2010	2014
Avoca	1,610	1,506	1506
Carson	668	812	812
Carter Lake	3,248	3,785	3766
Council Bluffs	58,268	62,230	62245
Crescent	537	617	622
Hancock	207	196	194
McClelland	129	151	150
Macedonia	325	246	244
Minden	564	599	592
Neola	845	842	856
Oakland	1,487	1,527	1506
Shelby	64	23	*
Treynor	950	919	940
Underwood	688	917	938
Walnut	778	785	773
Total County	87,704	93,158	93,128

Table 2: Population Density of Pottawattamie County, 2010 Census

	Population	Land Area (Sq. Miles)	Density (Pop/Sq. Mile)
Urban	68,546	37	1873
Rural	24,612	926	27
Total	93,158	963	97

Table 3: Natural Increase in Pottawattamie County, 2000 to 2010

	Births	Deaths	Natural Increase
Pottawattamie	13,168	9,068	4,100

Source: US Census Bureau, 2010 Census

^{*} Shelby is located in both Pottawattamie County and Shelby County, and the population in the table is the estimate of Pottawattamie residents only. This population split is not available through the American Community Survey (ACS).

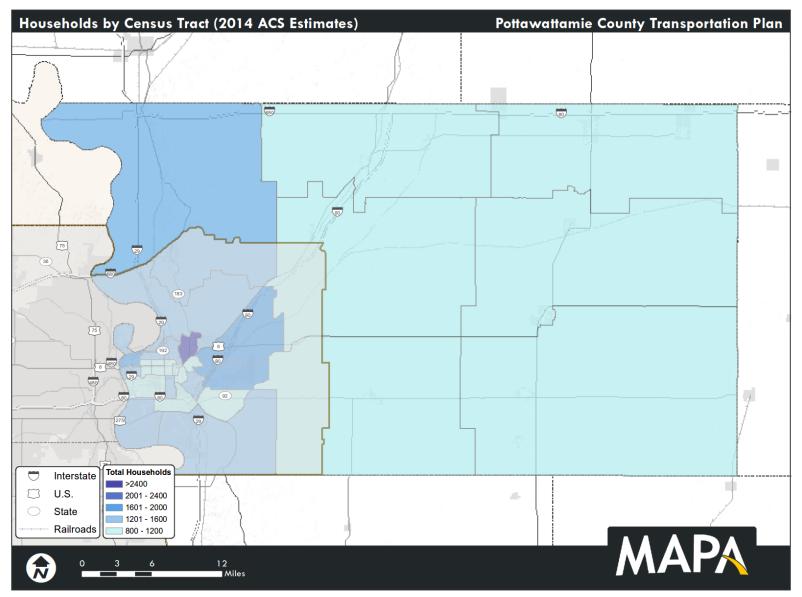


Figure 6: Households by Census Tract, 2014 American Community Survey

Source: US Census Bureau, American Community Survey

Figure 7: Racial & Ethnic Breakdown of County Population, 2014

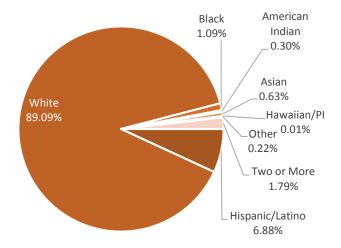
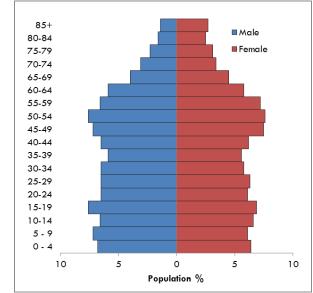


Figure 8: Population Pyramid for Pottawattamie County, 2014



Source: US Census Bureau, American Community Survey

Demographic Profile

Figure 7 (left) shows the breakdown of the Pottawattamie County population by race & ethnicity. Overall, the vast majority of residents in the county are white and non-Hispanic. Hispanic residents and Latinos comprise the largest non-white ethnic group within Pottawattamie County with nearly 7% of the county's population as of the 2014 American Community Survey. Black residents account for just over 1% of the population, with the remaining ~3% of the non-white population distributed through other racial and ethnic categories.

The population pyramid in Figure 8 (left) shows that the population of Pottawattamie County is aging. The large cohorts between ages 50 and 65 reflect the "Baby Boomer" generation that is approaching retirement. In 2014, the median age of residents in the county was 38.7— slightly higher than the statewide median of 38 years. Thus, while the increase of the statewide average has declined slightly, Pottawattamie County has continued to reflect an aging population. Table 4 (below) shows the trend in median age since 2000 for both Pottawattamie County and lowa.

Table 4: Median Age of Pottawattamie County, 2000 to 2014

	2000	2010	2014
Pottawattamie	36.5	38.5	38.7
Iowa (Statewide Avg.)	36.6	38.1	38.0

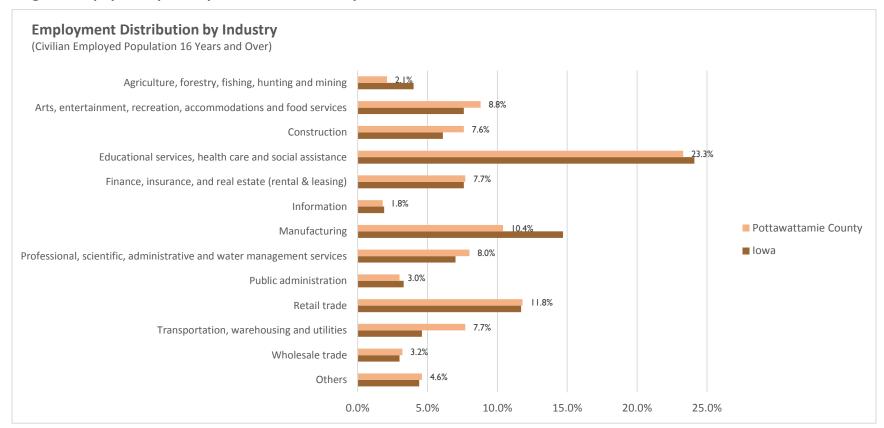
Source: US Census Bureau, 2010 Census

Employment Profile

Figure 9 (below) shows the distribution of employees by industry for Pottawattamie County residents. While much of the land in Pottawattamie County is devoted to agricultural production, this industry only accounts for 2.1% of the county's employment. Education, healthcare, and social services comprise the largest single industry within the county with over 23% of employees working those fields.

Figure 10 (next page) shows the distribution of unemployed residents throughout the county. While concentrations of unemployment exist within the unemployment is higher in the eastern portion of the county than in the areas immediately surrounding Council Bluffs.

Figure 9: Employment by Industry in Pottawattamie County, 2014



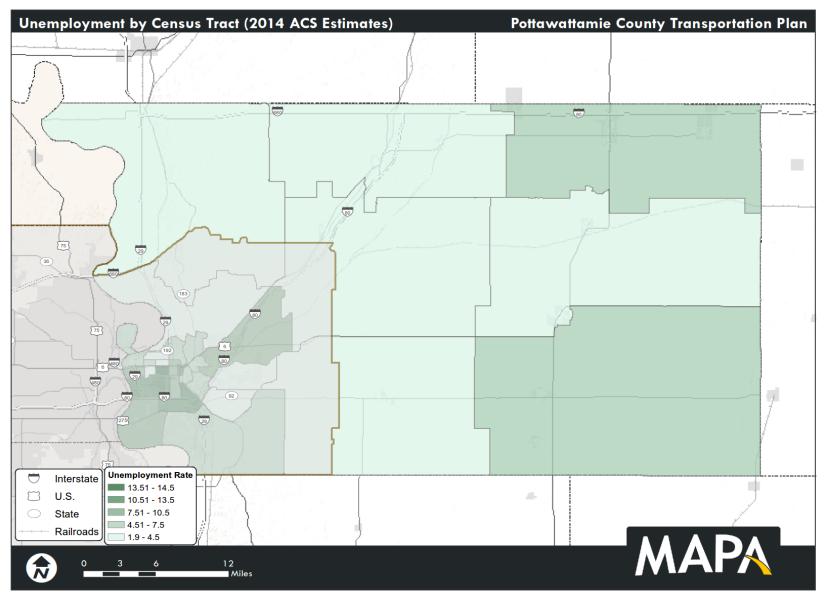


Figure 10: Distribution of Unemployed Residents in Pottawattamie County, 2014

Source: US Census Bureau, American Community Survey

Projected Population & Employment

During the Heartland 2050 Regional Visioning process, population and employment projections were developed for Pottawattamie County. The Pottawattamie County Comprehensive Plan utilized the 2030 population and employment projections as the basis for developing land use policy recommendations for the County. Additionally, the Comprehensive Plan also included 2030 population projections for each community in the county as well. These projections are shown in Figure 11 (below).

A map of future land use in the county is included in Figure 13 (next page). In general, the county's land use policy focuses on protecting agricultural land in areas adjacent to Council Bluffs, and designating transitional areas around smaller communities to provide flexibility to local decision-makers.

Figure 12 shows MAPA's population and employment projections for Pottawattamie County in both 2030 and 2050. By 2050, MAPA projects that that the population of Pottawattamie County will grow to 131,060. This is an increase of 37,902 over 2010 population. Much of this growth is anticipated in the western portions of the county, but many communities in the county are expected to grow as well

Additionally, total employment is expected to grow to 51,336 jobs—17,417 jobs more than existed in 2010. The increase in population and in employment are important factors that must be considered when evaluating transportation investments over the next 25 years.

Figure 11: 2030 Population Projections by Community

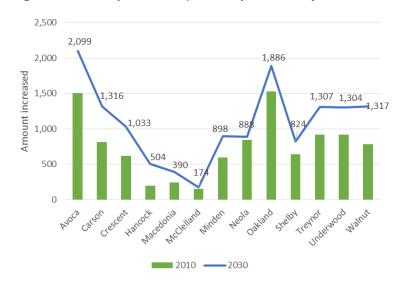
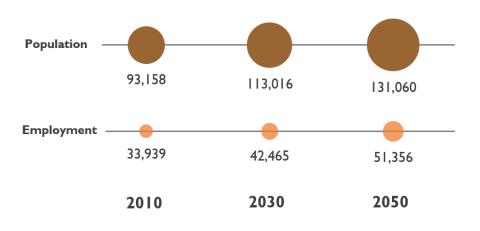


Figure 12: Population & Employment Projections for Pottawattamie County



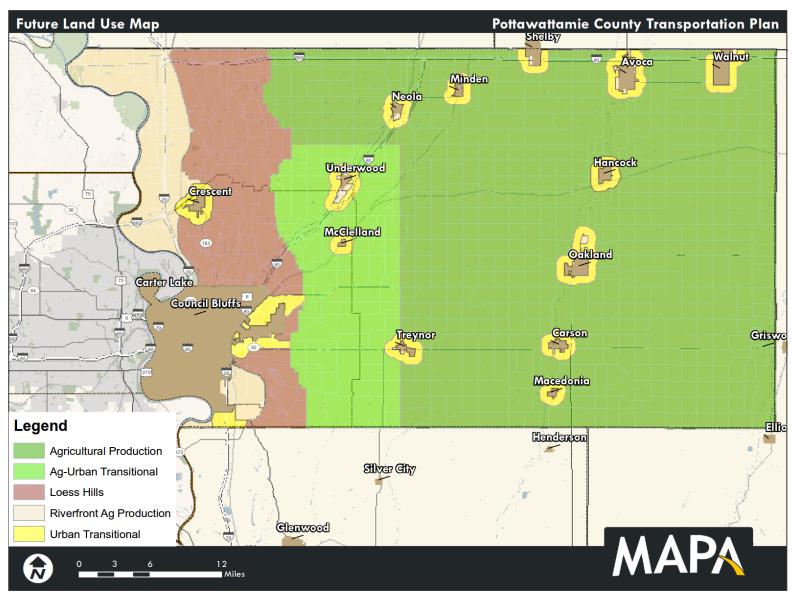


Figure 13: Pottawattamie County Future Land Use

Source: Pottawattamie County Comprehensive Plan

Roadways & Bridges

Table 5: Roadway System Mileage in Pottawattamie County

Roadway System	Mileage
Interstate (IDOT)	682
US Route (IDOT)	231
Iowa Route (IDOT)	188
Farm to Market Route (Pott. Co.)	1,007
Local Road (Pott. Co. & Locals)	1,232
Total	3,339

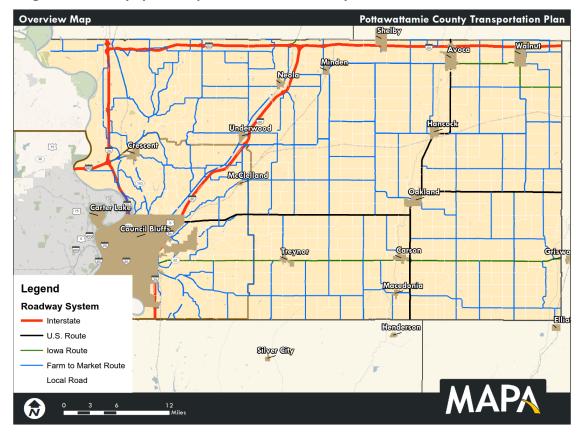
Roadway Systems

Pottawattamie County has over 3,330 miles of roadways split between the primary and secondary systems. Figure 14 (right) shows the roadway systems in Pottawattamie County. In general, Pottawattamie County is responsible for Farm-to-Market Routes and local roadways outside of municipal jurisdictions. The lowa Department of Transportation is responsible for the Primary System which includes the Interstate, U.S. Routes and Iowa Routes.

Table 5 (above) summarizes the total mileage for each system within the County. Overall, Pottawattamie County is responsible for 2/3 of the roadways in the county—approximately 2,239 miles of roadway facilities.

Figure 15 (next page) displays the functional classification of each of the roadways in the County. The functional classification of a roadway is a reflection of how the

Figure 14: Roadway System Map of Pottawattamie County



roadway operates today. Arterial roads (like highways) are major traffic and freight routes, while collectors funnel traffic to arterials roads. Local roads and minor collectors primarily exist to provide access to

residences and other smaller destinations. Each roadway type is an essential element of the transportation system— balancing mobility and access for roadway users

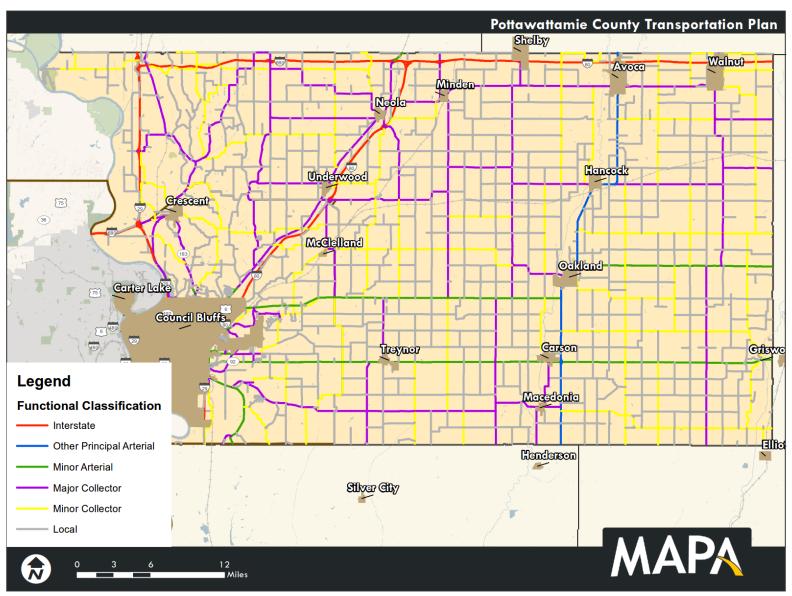


Figure 15: Functional Classification of Roadways in Pottawattamie County

Profile of County Roadways

Table 6 (right) shows the breakdown of roadway mileage by functional classification in Pottawattamie County. As can be seen from this table and the map in Figure 13, the vast majority of the roads in Pottawattamie County are local roadways.

Figure 16 (next page) shows the total mileage of roadways in Pottawattamie County by the type of roadway surface. The breakdown between these categories can be seen in Table 7 (right). Over 40% of the total mileage of roadways in Pottawattamie County is gravel. Asphalt and paved roads (47.5%, combined) account for the majority of other roadways in the county. The majority of these roadways are located within cities and not in the unincorporated areas of the county. Furthermore, the majority of paved roadways outside of cities are part of the Primary System and are the responsibility of the lowa Department of Transportation.

As such maintenance and improvements to gravel roads will continue to be a critical area of focus for Pottawattamie County. As development continues to occur in areas around existing communities, the County Engineer evaluates the need to pave additional roadways. These decisions are made primarily based upon the volume of the roadway and the type of traffic that is anticipated for the roadway.

Table 6: Functional Classification of Roadways

Roadway Classification	Mileage	% of Total
Interstate	127	3.8%
Other Principal Arterial	43	1.3%
Minor Arterial	123	3.7%
Major Collector	302	9.0%
Minor Collector	322	9.6%
Local Road	2,422	72.5%
Total	3,339	100%

Table 7: Roadway Surfaces in Pottawattamie County

Surface Type	Mileage	% of Total
Concrete or Paved	691	20.7%
Asphalt	896	26.8%
Bituminous	119	3.6%
Gravel	1465	43.9%
Dirt	144	4.3%
Brick	5	0.2%
Total	3,339	100%

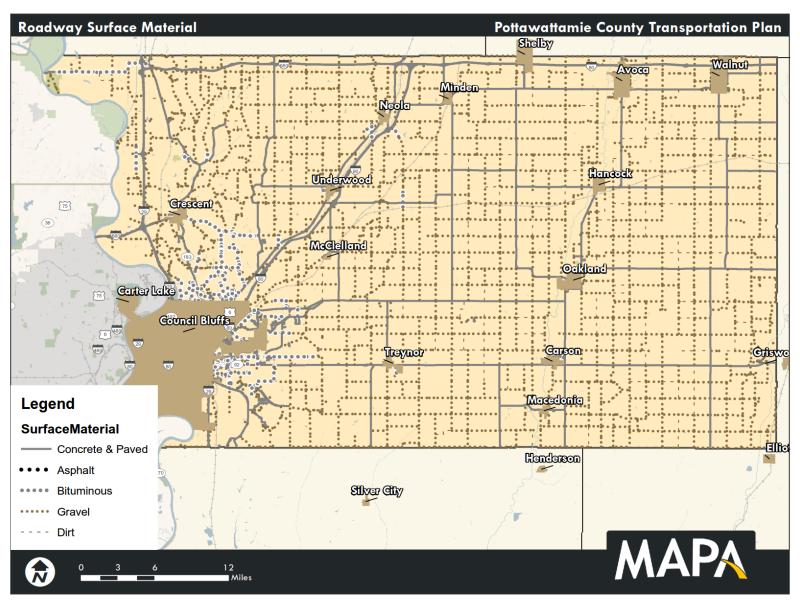


Figure 16: Surface Material of Roadways in Pottawattamie County

Pavement Condition

The condition of pavements in the county was evaluated based on two measures of pavement condition collected by Iowa DOT: the secondary roads Pavement Condition Index (PCI) and International Roughness Index (IRI). Figures 16 and 17 summarize the results below.

The Pavement Condition Index (PCI) rates secondary roadways on a five-tier scale ranging from Very Poor to Excellent. The PCI was used to evaluate approximately 637 miles of roadways in Pottawattamie County. Overall, the majority of roadways (79.2%) are rated Fair or better, with 20.8% in Poor or Very Poor condition. Tables 8 summarizes this data by total mileage.

Roadways evaluated by Iowa DOT using the International Roughness Index showed poorer performance. Over 29% of the roadways evaluated were in poor condition. Tables 9 summarizes this data by total mileage. Figures 18 and 19 (next two pages) show the PCI and IRI results by roadway throughout the county.

Figure 16: Pavement Condition Index (PCI) of County Roadways

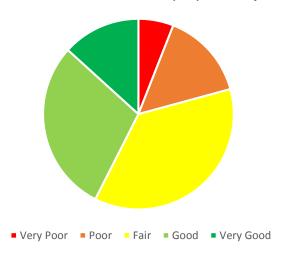


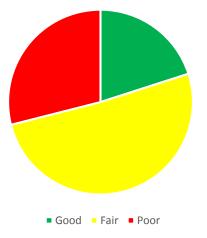
Table 8: Pavement Condition Index (PCI) of County Roadways

PCI Rating		Mileage	Percentage
Very Poor		38	6.0%
Poor		94.4	14.8%
Fair		233.8	36.7%
Good		186.5	29.3%
Very Good		84.5	13.3%
	Total	637.1	100.0%

Table 9: International Roughness Index (IRI) of County Roadways

IRI Rating	Mileage	Percentage
Good (0 – 99)	127.7	20.0%
Fair (100-249)	324.9	51.0%
Poor (250+)	184.5	29.0%
To	otal 637.1	100.0%

Figure 17: International Roughness Index (IRI) of County Roadways



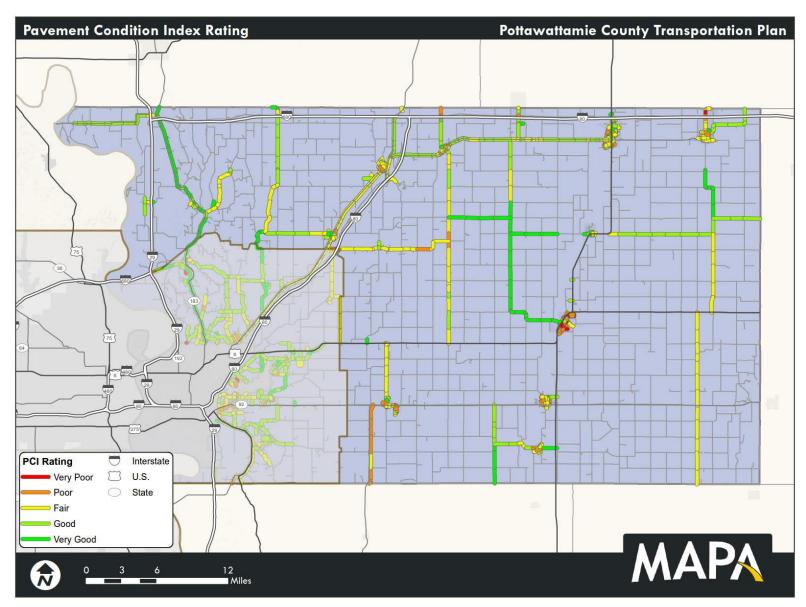


Figure 19: Pavement Condition Index (PCI) of Roadways in Pottawattamie County

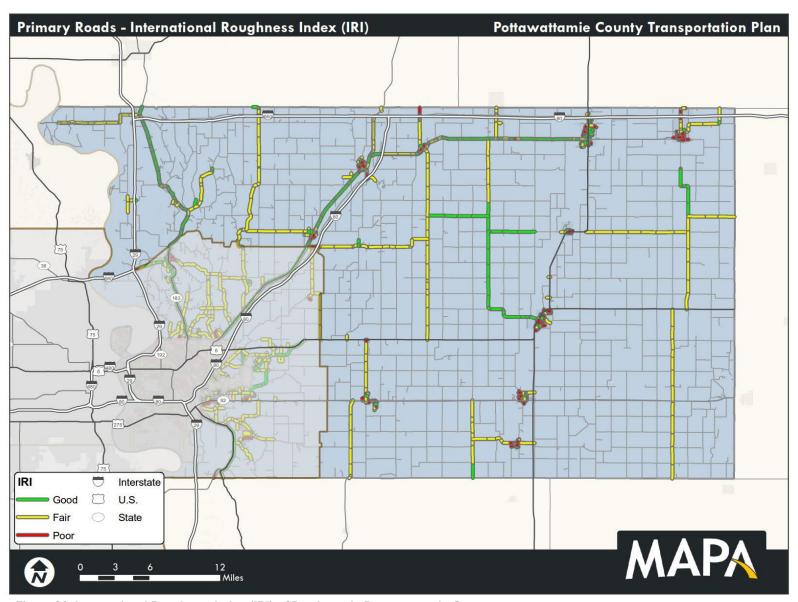


Figure 20: International Roughness Index (IRI) of Roadways in Pottawattamie County

Bridges in Pottawattamie County

Bridges are important links in the transportation network that allow roadways to cross natural features (such as rivers and stream) and other infrastructure (such as railways). The Pottawattamie County Engineer maintains a database of 324 bridges that are part of the County's roadway network.

More than half of these bridges (216 in total) have been built or reconstructed since 1980. Many of the remaining bridges may be approaching or may have exceeded the end of their useful life and may need substantial rehabilitation or replacement. Figure 21 (right) shows the distribution of age of bridges in the county based on the date of construction or reconstruction.

In total, 37 bridges in the county have been identified as Structurally Deficient— meaning that key components of the bridge (such as superstructure, substructure or deck) have a rating of 4 or below out of 10. These bridges are not inherently unsafe, but do require significant maintenance. 76 bridges are Functionally Obsolete, meaning that the lane widths, shoulder widths, or other design features are not adequate for current traffic demands. Figure 22 shows the portion of total bridges that have one of these designations.

Additionally, 14 bridges in Pottawattamie County have been identified as "fracture critical" structures. This designation means that if a steel element within the bridge were to fail, the entire structure would collapse. These structures are significant priorities for rehabilitation or replacement.

Figure 23 (next page) shows the sufficiency rating of bridges in Pottawattamie County, in addition to the location of fracture critical structures.

Figure 21: Date of Bridge Construction or Reconstruction in Pottawattamie County

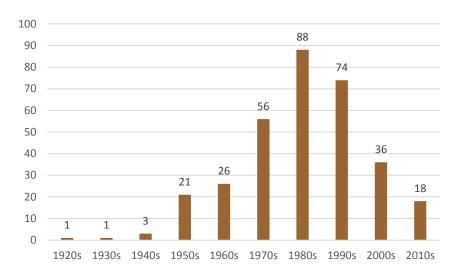
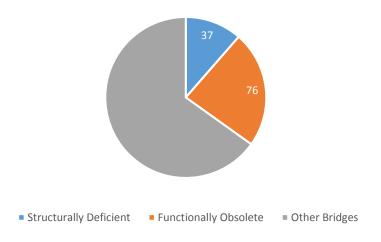


Figure 22: County Bridges by Structural Deficiency and Functional Obsolescence



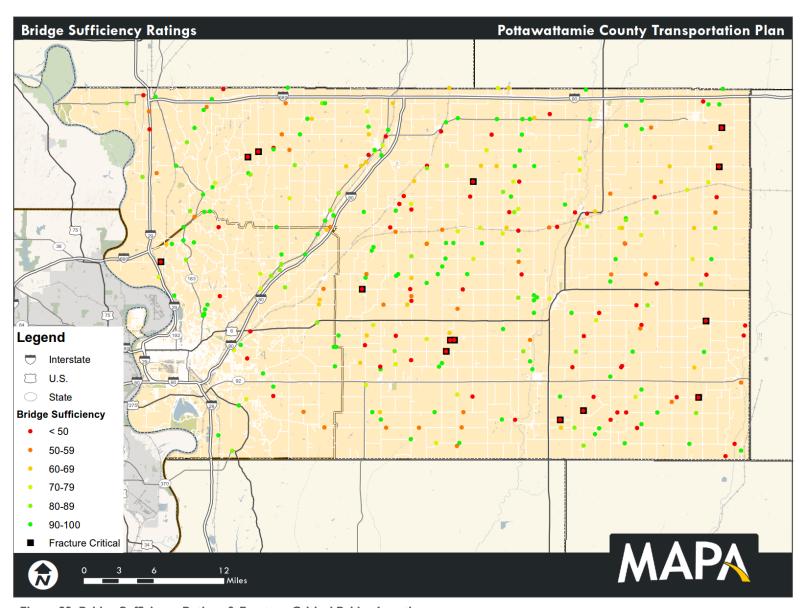


Figure 23: Bridge Sufficiency Ratings & Fracture Critical Bridge Locations

Traffic Trends in Pottawattamie County

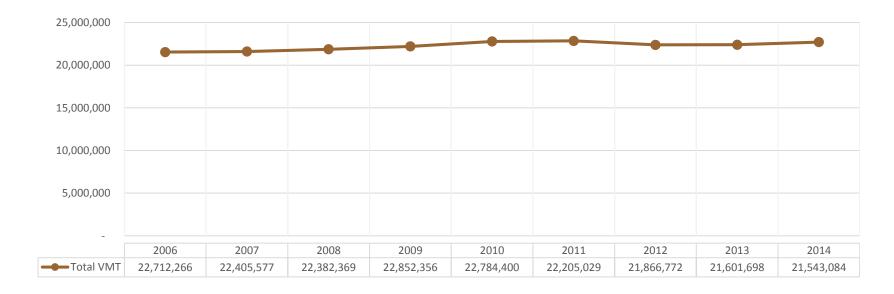
Traffic volumes vary widely between urban and rural parts of Pottawattamie County. The largest volume roadways are Interstates 29, 80 and 680 with traffic volumes in excess of 10,000 per day along most segments. The highest volume roadways in Pottawattamie County can be found in Council Bluffs, where interstate traffic is greatest. Figure 25 (next page) shows the Average Annual Daily Traffic (AADT) for roadways in Pottawattamie County.

Total traffic in Pottawattamie County has grown slowly in the last decade. Figure 24 below shows the trend of Total Vehicle Miles Travelled (VMT) for county roadways since 2006. In general, this growth trend is quite flat– fluctuating less than 1% in most years.

While the overall trend shows relatively stable traffic volumes, many roadway segments have shown significant growth in recent years. The most significant growth on roadways in the county can be observed in the urban areas, while many rural segments show decreases in traffic volume.

Figure 26 (page after next) shows the growth in Vehicle Miles Travelled on roadway segments since 2010. Some segments that show significant growth or decline due to the relatively low-volume on those roadways. As such small changes in the number of vehicles on the road can reflect a large percentage change.

Figure 24: Trend in Vehicle Miles Travelled in Pottawattamie County, 2006 to 2014



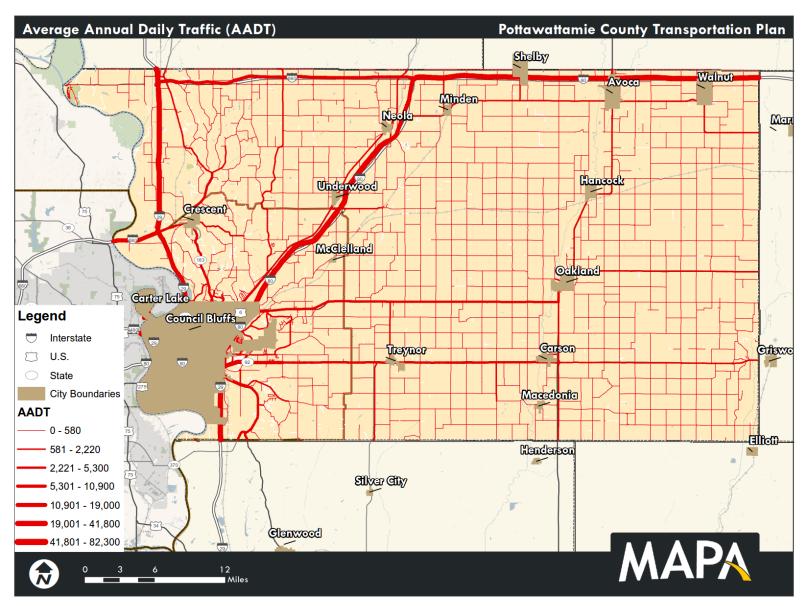


Figure 25: Average Annual Daily Traffic in Pottawattamie County

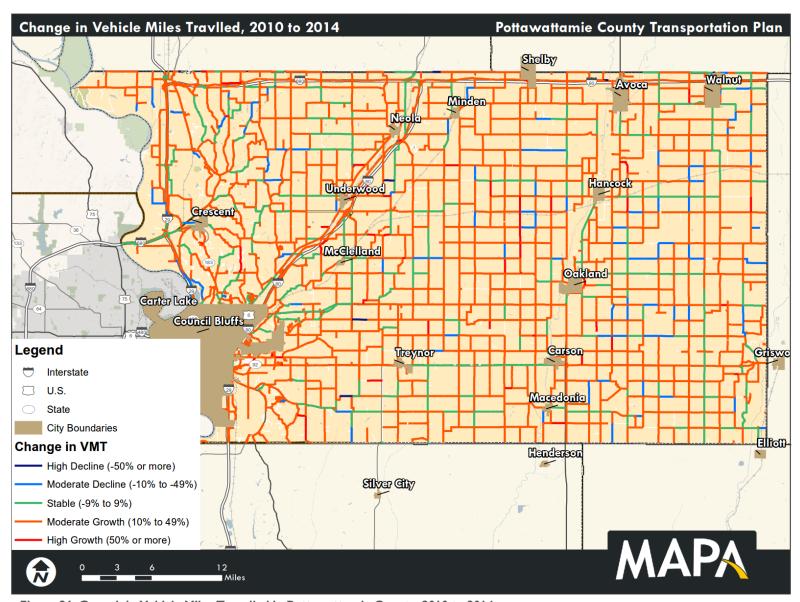


Figure 26: Growth in Vehicle Miles Travelled in Pottawattamie County, 2010 to 2014

Table 10: Iowa DOT Top 5 Safety Improvement Candidate Locations (SICL)

Jurisdiction	Location	Jurisdiction	Location
Pottawattamie	Old Lincoln Highway & Coldwater Ave (L36)	Council Bluffs	South Expressway & 30th Avenue
Pottawattamie	US 6 & 330th Street	Council Bluffs	Kanesville Blvd & S 1st Street & Harrison Street
Pottawattamie	Iowa 92 & 220th Street	Council Bluffs	US 275 & Piute Street & South Expressway
Pottawattamie	L34 & 210th Street	Council Bluffs	N 16th Street (IA 192) & Avenue G
Pottawattamie	I-29 NB Ramp at Mormon Bridge Road	Council Bluffs	West Broadway (US 6) & 8th Street

Roadway Safety

Improving the safety of roadway facilities and operations is a critical element of transportation planning. Crash data provides planners and engineers with information about the location of crash incidents, who was involved, and the severity of the crash.

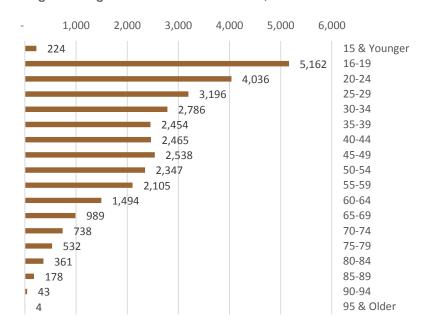
Figure 27 (right) shows the age of the driver involved in Pottawattamie County crashes since 2005. Younger drivers are much more likely to be involved in crashes than older drivers, based on this analysis.

The lowa Department of Transportation (lowa DOT) prioritizes safety improvement locations for the entire state based upon crash statistics. These Safety Improvement Candidate Locations (SICLs) are priority locations for state and federal programs that target roadway safety. Table 10 (above) shows the Top 5 locations for both Council Bluffs and rural Pottawattamie County. Of the locations in the rural areas of the county, three of them are at intersections or interchanges with lowa DOT's Primary System.

Figure 28 shows the distribution of crashes since 2005 in Pottawattamie County as a heat map. This type of graphic shows the density of crashes that occur at a particular location (red showing more crashes, blue showing fewer). The severity of the crash (whether it was fatal, or whether the driver or passenger was injured) was used to weight each crash point.

Due to the high amount of traffic and crash activity in the urban area Figure 29 is presented to show the distribution of crashes in the County with urban crashes excluded.

Figure 27: Age of Driver Involved in Crash, 2005-2014



Both of these maps show that the majority of recurring crash locations are along the County's busiest roadways—including the Interstate and state highways. Additionally, the winding roadways that are located in the Loess Hills have a higher incidence of crashes as well.

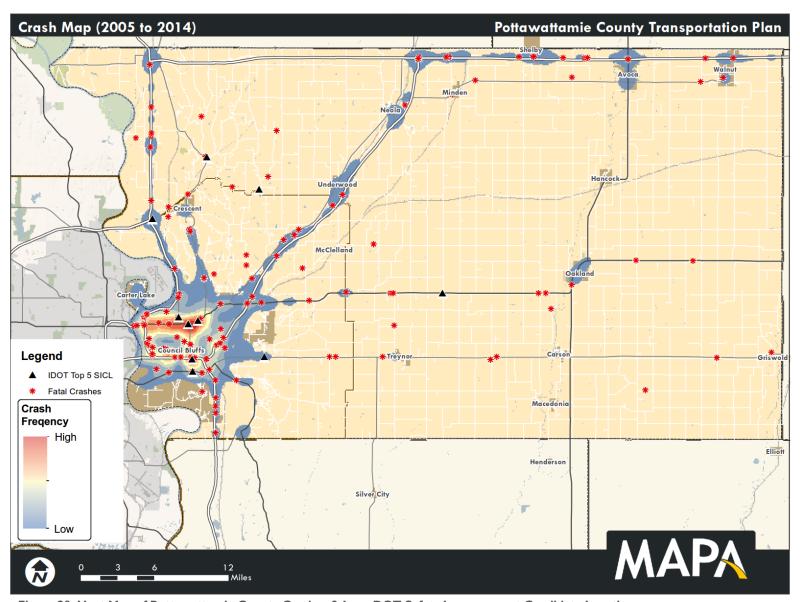


Figure 28: Heat Map of Pottawattamie County Crashes & Iowa DOT Safety Improvement Candidate Locations

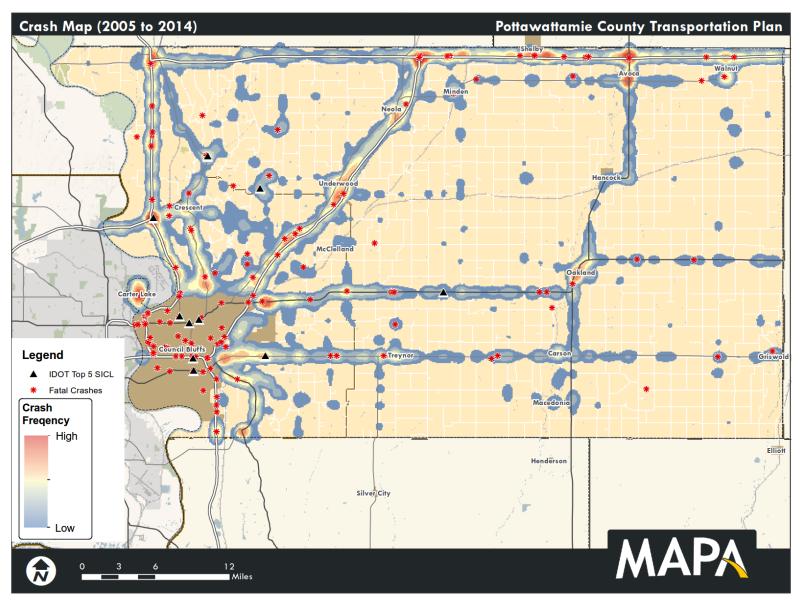
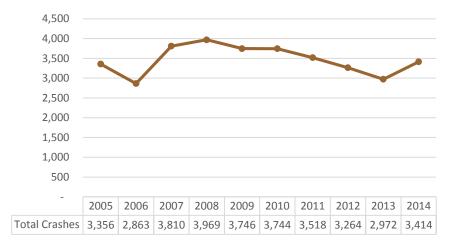


Figure 29: Heat Map of Non-Council Bluffs Crashes & Iowa DOT Safety Improvement Candidate Locations

Table 11: Top 20 Known Causes of Crashes, 2005-2014

Major Cause of Crash	Count
Animal	2,298
Followed too close	2,149
Other improper action	1,689
Lost Control	1,294
Swerving/Evasive Action	1,230
Ran off road - right	1,139
FTYROW: From stop sign	946
Driving too fast for conditions	910
FTYROW: Making left turn	809
Ran Stop Sign	691
Ran off road - left	679
No improper action	627
Other (Described in Narrative)	573
Made improper turn	516
Crossed centerline	478
FTYROW: From driveway	378
FTYROW: At uncontrolled intersection	299
Reckless Driving	286
Exceeded authorized speed	232
Over correcting/over steering	122

Figure 30: Trend in Total Crashes, 2005-2014



Roadway Safety (Continued)

Overall, the total number of crashes in Pottawattamie County has fluctuated in recent years. Figure 30 (above) illustrates this trend. Significant increases between 2006 and 2007 are partially attributable to more severe winter conditions. Between 2008 and 2013, the trend in crashes was generally downward, and in 2014 crashes increased by 442 over the previous year.

Table 11 (left) shows the top 20 known causes of collisions since 2005. Collisions with animals top this list followed by drivers following other drivers too closely on the roadway. Additionally, drivers failing to yield the right of way at intersections and during turning are, in aggregate, significant causes of crashes. These crash factors are import considerations for developing projects to mitigate these issues.

Freight Movement

Roadway Freight Overview

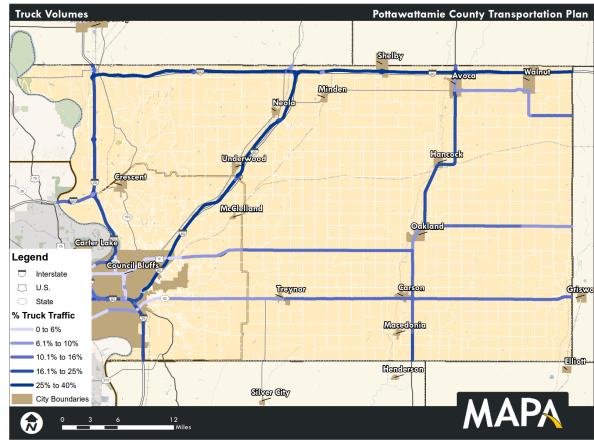
One of the most important functions of the transportation system is to provide for the movement of goods and services between communities. Pottawattamie County sits at the crossroads of Interstate 29 and Interstate 80 creates an ideal location for the movement of freight into and out of the Omaha-Council Bluffs metropolitan area.

The interstate and major highways are the in the county are the primary system for freight movement.

Truck volumes for primary system roadways are shown in Figure 31 to the right. This volume data from the lowa Department of Transportation is only available for Primary Routes (i.e. the Interstate System, U.S. Routes, and Iowa Routes). On many of these highways, truck traffic accounts for more than ½ of total traffic.

The County's Farm to Market system connects to and supports these major freight corridors— providing access to small communities and agricultural producers. Figure 32 (next page) shows the Farm to Market System and other primary roadways in Pottawattamie County.

Figure 31: Truck Volumes on Primary System Routes



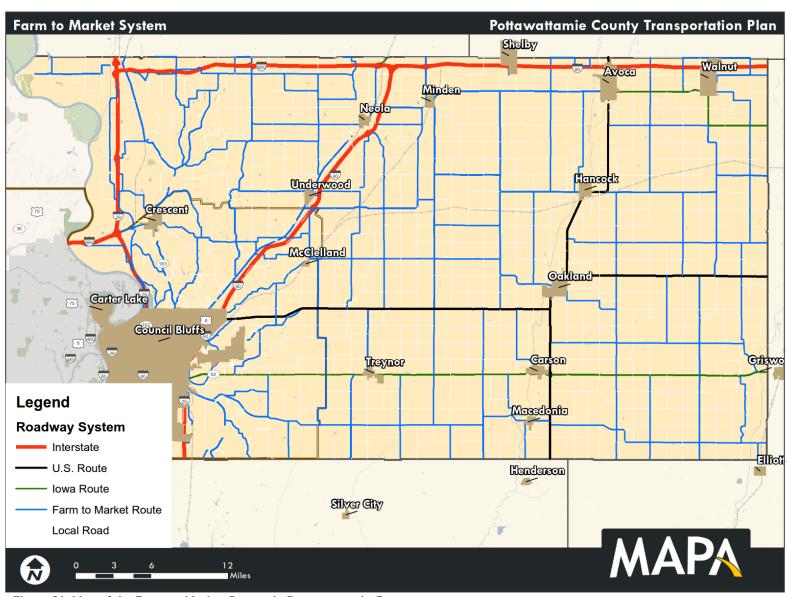


Figure 31: Map of the Farm to Market System in Pottawattamie County

Railway Freight Overview

Multiple railroads operate in Pottawattamie County. While Council Bluffs serves as hub for many of the railroads, rail lines connect 5 other communities in the county as well. Union Pacific and BNSF Railroads are two Class I carriers that both have mainline operations through Pottawattamie County. Additionally, several other railroad operators (including CBEC, Canadian Northern, and the lowa Interstate Railroad) own railroad facilities in the county as well. Figure 33 shows a map of railroad facilities in Pottawattamie County.

Significant changes to the railway network in Council Bluffs are taking place as part of the Council Bluffs Interstate Project lead by Iowa DOT. The Railroad Relocation project consolidates the CBEC and BNSF railroad operations into a new common corridor west of Mosquito Creek under I-29 and lowa 92. This will improve operations at the South Expressway interchange in Council Bluffs and greatly reduce roadway/railway conflicts between trains and vehicles by eliminating numerous at-grade rail crossings and the CBEC corridor that bisects Lewis Central High School. These changes will allow some BNSF trains to bypass the City of Council Bluffs entirely.

Figure 34 (next page) provides an overview of the railroad consolidation that is taking place as part of the Council Bluffs Interstate Project.

Figure 33: Railroads in Pottawattamie County

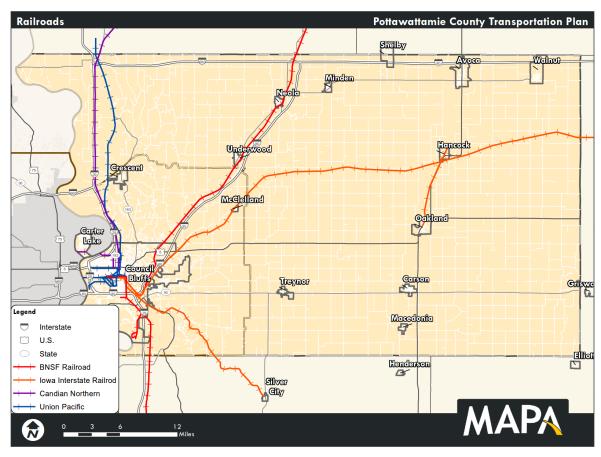
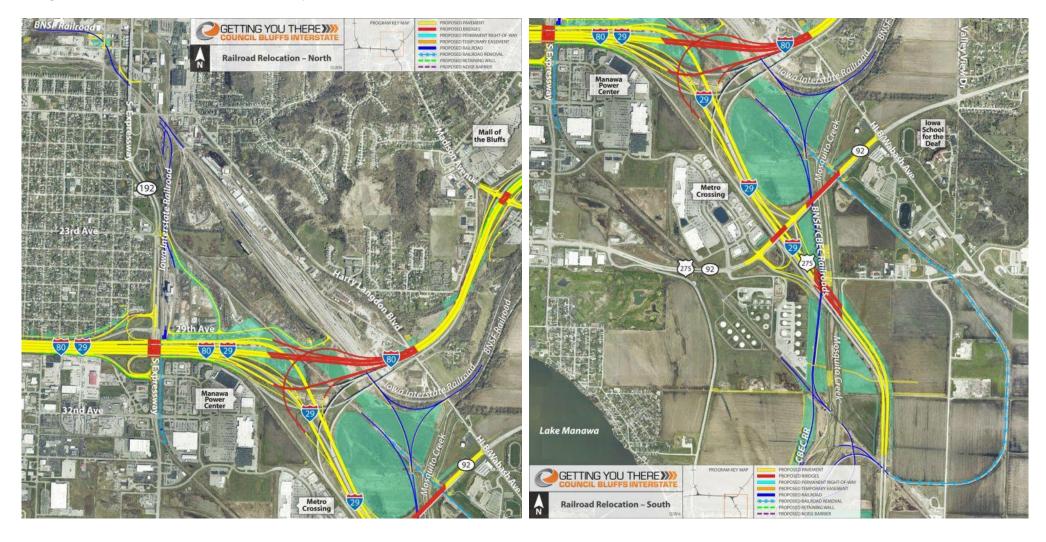


Figure 34: Overview of Railroad Relocation Project

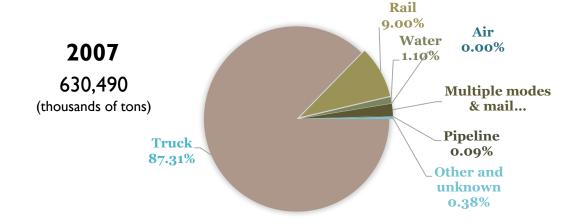


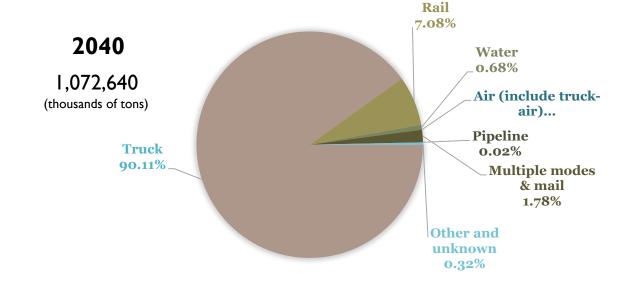
Freight Projections

The FHWA utilizes Freight Analysis Framework (FAF) to project freight growth by mode for the entire US as well as for individual states. Additionally, the analysis shows the origin and final destination for freight traffic by state. This serves as the basis for freight data and projections in the MAPA region as there is currently no local or regional data source from which to extrapolate trends. Given Pottawattamie County's location, we assume freight patterns will mirror the characteristics of the states of lowa and Nebraska.

The vast majority of freight is transported via highway truck traffic in both states. Pipelines and unknown means make up less than .5% of the total transported materials. Goods transported by rail make up almost 9% of the total tonnage transferred. All other modes constitute the total tonnage transported by the USPS or other currier service, water transport, and unidentifiable intermodal transport. Figure 35 shows the estimates of freight movement in 2007.

The projected 2040 values for all modes of freight transport in Iowa and Nebraska are shown in Figure 35 as well. The overall growth in tonnage from 2007 to 2040 is projected to be 70%. For the most part, the breakdown by mode is expected to similar to the current breakdown with slight growth in the share of truck freight tonnage by 2040.





Bicycle & Pedestrian

Cycling Overview

Pottawattamie County has many recreational trails that serve as amenities to residents and draw visitors from neighboring counties and throughout the region. The Wabash Trace in southwestern Pottawattamie County is a regional trail that connects Council Bluffs to Blanchard, lowa, on the border with Missouri.

Other communities in the county (including Shelby, Walnut, and Oakland) have designated recreational trails as well. While few designated routes existing outside communities, low-volume roadways in rural parts of the county show significant amounts of cycling activity.

Figure 36 to the right shows data collected through the Strava cycling application for mobile phones. This map shows that routes in the Loess Hills around Council Bluffs, along Railroad Avenue, and around many small communities are utilized extensively by cyclists.

Strava Heat Map McClelland Macedonia

Figure 36: Heat Map of Cycling Activity in Pottawattamie County

Source: Strava Labs, map available at http://labs.strava.com/heatmap

County Trail Map Walnut Legend **Existing Trail** ····· Proposed Trail Θ

Figure 37: Existing and Planned Trail Facilities in Pottawattamie County

Source: Pottawattamie County Trails Committee, Pottawattamie County GIS

Pottawattamie County Trail Plan

Countywide trail planning has been underway in the Pottawattamie County for nearly five years and a trail plan was adopted by the County in 2013. This trail plan will guide the construction of recreational trails to small communities throughout the county—increasing transportation options for residents and supporting recreational activity in those communities. Figure 37 (left) shows the existing trail network and the planned routes included in the Pottawattamie County Trail Plan.

Since 2013 the Pottawattamie County Trails Committee and Pottawattamie County Conservation Board have secured over \$3 million in funding for the first phase of this project. Significant support for this project has come from the Iowa West Foundation, the Federal Recreational Trails Program (RTP) and Transportation Alternatives funding from MAPA and Regional Planning Affiliation 18 (RPA-18).

Safe Routes to School

Many communities in Pottawattamie County have school facilities, and significant gaps exist in the many of the local sidewalk networks in small communities. An important component of promoting walkability in Pottawattamie County communities is ensuring that children have "Safe Routes to School" and choices about how families make school trips.

Improving sidewalk networks around schools provides families with choices about making trips to school, and improves the safety of the transportation network for users of all ages.

Figure 38 (right) shows the school locations in Pottawattamie County. These locations will be priority locations for recommendations related to improving pedestrian infrastructure.

Pottawattamie County Transportation Plan **School Locations** Shelby Walnut Avoca Minden Hencek Underwood McClellond Conter Lake Garson Treymor Macedonia Henderson Silver City

Figure 38: School Locations in Pottawattamie County

Public Transit

Overview of Transit Service

Public transit is an important service for many residents of Pottawattamie County. Three agencies provide public transportation services in the county: Metro Transit, the City of Council Bluffs, and the Southwest Iowa Transit Agency (SWITA). Table 12 summarizes important transit statistics for all three agencies.

Metro Transit provides fixed route transit service in Council Bluffs on two routes. These routes connect to the existing transit network in Omaha and operate seven days a week. The City of Council Bluffs Special Transit Services program provides curb-to-curb Americans with Disabilities Act service within ³/₄ of a mile of Metro's route transit service in Council Bluffs.

SWITA provides scheduled rides and demandresponse service in eight southwest lowa counties, including Pottawattamie. Transportation services are available to residents for activities including medical appointments, shopping, work, and school-related trips.

Table 12: 2015 Transit Statistics for Pottawattamie County

	SWITA	Metro Transit	Council Bluffs STS
Total Rides	55,415	165,007	16,388
Revenue Miles	212,566	180,832	112,777
Revenue Hours	10,511	12,627	10,545

Table 13: SWITA Contract Service Routes, 2015

		Annual
Contract	SWITA	Rides
Menards	Council Bluffs to Shelby: Daily transportation for employees	7,284
Oakland Foods (Uptown Staffing)	Council Bluffs to Oakland: Daily transportation for employees	8,400
Iowa West Community College	Council Bluffs to Atlantic Campus: Transportation for Design Technology Students	583
Oakland Foods #2 (Anticipated)	Council Bluffs to Oakland: Daily Transportation for employees	7,200

In 2015, SWITA regularly scheduled rides in the following Pottawattamie County Communities

- Avoca
- Carson
- Council Bluffs
- Crescent
- Honey Creek
- Minden
- Neola
- Oakland
- Underwood

In addition to operating demand response service throughout southwest lowa, SWITA provides a number of contracted routes. These routes provide regularly scheduled trips for major employers and educational institutions in Pottawattamie County.

Table 13 summarizes these contract service routes and their anticipated ridership for the current year.

Figure 39 (next page) shows transit routes and frequent service locations in Pottawattamie County.

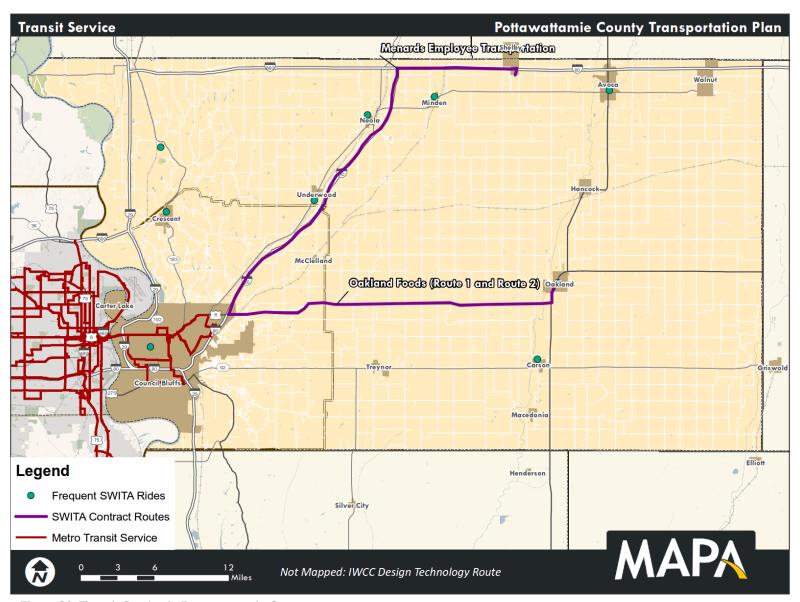


Figure 39: Transit Service in Pottawattamie County