OZARK FOOTHILLS REGIONAL TRANSPORTATION PLAN

June 2021

Prepared by:

Ozark Foothills Regional Planning Commission
Missouri Association of Councils of Governments
and
Missouri Department of Transportation

In consultation with the

Ozark Foothills Transportation Advisory Committee
and the elected officials of the five counties and sixteen cities within the Ozark Foothills Region

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EXECUTIVE SUMMARY

A regional transportation plan (RTP) is used to identify a region's needs and update Missouri's Long-Range Transportation Plan (LRTP). The Ozark Foothills Regional Planning Commission (OFRPC), working with the Missouri Department of Transportation (MoDOT) and the Ozark Foothills Transportation Advisory Committee (OFTAC), has developed a RTP for the five-county area. The regional transportation planning process contains identification of long-term goals, identification of needs, and public involvement. The plan will require the approval of the OFRPC's Board of Directors and the OFTAC. The RTP is considered in the development of Missouri's LRTP.

Chapter 1: Introduction / Goals and Objectives

Chapter 1 contains information regarding the purpose and tasks of the OFRPC and the OFTAC. Next is a brief overview of the five counties within the Ozark Foothills Region, including a discussion of major cities, size, and population density. The purpose of the RTP is explained as it relates to MoDOT's LRTP, Planning Framework Process, and the Planning Process. Lastly, the goals and objectives of transportation planning, as set forth by the OFTAC, are discussed.

Chapter 2: Population and Employment

Chapter 2 analyzes population, employment, and demographic data collections with regard to the five-county region. Population data collections include past population trends and future predictions based on data provided by the 2000 and 2010 Decennial Census and population forecasts provided by the Missouri Office of Administration (OA). Data obtained from the Missouri Department of Economic Development's (DED) Missouri Economic Research and Information Center (MERIC) then forecasts the expected growth or decline of 22

encompassing occupational fields for the south central region of Missouri, which includes all five counties of the Ozark Foothills Region and seven other similar counties. Births, Deaths, and migrations along with age, income, commuting patterns, and economic profiles are also studied. Geography, climate, natural and historic resources, and economic development factors are shown. Finally, land use in the area is evaluated as is relative demographic characteristics. Such characteristics include minority populations, unemployment rates, poverty levels, and education levels.

Chapter 3: Existing Transportation Facilities

Chapter 3 is a detailed inventory of the existing state and local transportation facilities in the Ozark Foothills Region. Such facilities include state highways, bridges, bike and pedestrian paths, airports, railroads, public transit services, waterways, ferries, and ports. The current condition of the state system is briefly discussed and all the roadways are classified according to a functional classification system. Finally, the annual average daily traffic and traffic volume of the region's roadways are discussed and evaluated.

Chapter 4: Existing Transportation Management

Chapter 4 discusses existing state- and region-wide transportation management. The bulk of the chapter discusses the various transportation management systems in Missouri. The ending of the chapter contains a summary of local transportation management in the Ozark Foothills Region. It mainly includes one Transportation Development District (TDD) and numerous signalized intersections.

Chapter 5: Needs Identification

Chapter 5 clearly identifies the transportation needs of the region. This chapter further discusses the purpose and tasks of the OFTAC and its process for identifying and prioritizing

needs. The 2020 Project Priority List, 2020 Maintenance Needs Priority List, and 2020 Multi-Modal Needs List, as created and approved by the OFTAC, are discussed.

Chapter 6: Future Project Plan and RTP for 10 Years

Chapter 6 describes a future project plan for the Ozark Foothills Region. The future project plan closely follows the State Transportation Improvement Program (STIP). The chapter discusses planned projects as classified by mode of transportation (road/bridge, aviation, railway, transit, and elderly/handicapped services), and then according to the county in which they will take place.

Chapter 7: Financing

Chapter 7 discusses both state and local transportation project financing. The beginning of the chapter is an educational section, which discusses statewide financing. The remainder of Chapter 7 discusses local transportation financing options. Included is a discussion of tax amounts set aside for a special road and bridge fund, the purpose of TDDs, TIFs, CIDS, multimodal funding options, MoDOT's Innovative Financing Program, and funding associated with other state and federal agencies.

Chapter 8/Conclusion: Plan Implementation

Chapter 8 discusses the process by which the RTP was implemented and the on-going process by which it will be revised and updated.

Chapter 1 – *Introduction/Goals and Objectives*

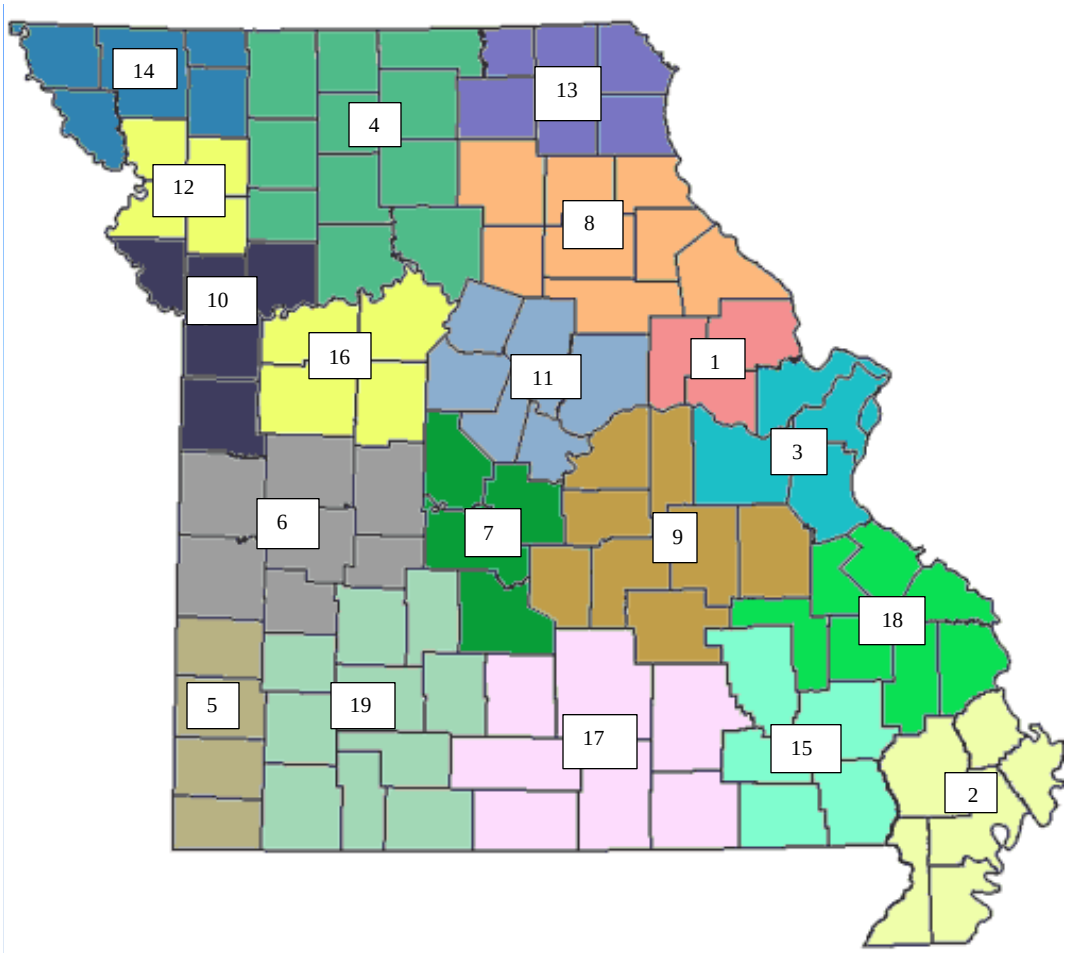
Organization

In 1965, the Missouri Legislature enacted the State and Regional Planning and Community Development Act. This Act, which appears as Chapter 251 of the Revised Statutes of Missouri (1969), created the Missouri Department of Community Affairs. The Act also authorized the governor to create regional planning commissions upon the petition of local governmental units. If the Governor finds there is a need for a regional planning commission, and if the governing bodies of local units within the proposed region include over 50 percent of the population of the proposed region, then the governor may create the regional planning commission.

Today, the State of Missouri's 114 counties and the City of St. Louis have been divided into 19 regional planning commissions. The map below provides a summary of the regional planning commissions and the counties they serve. According to the Revised Statutes of the State of Missouri, 1969, Section 251.300, regional planning commissions "…may conduct all types of research studies, collect and analyze data, prepare maps, charts, and tables and conduct all necessary studies for the accomplishment of its other duties…"

In matters relating to comprehensive planning, a regional planning commission "…may enter into a contract and cooperate with any federal, state, or local unit of government including other planning commissions or organizations within this or other states under the laws of Missouri….The comprehensive plan shall be made with the general purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the region which will, in accordance with existing and future needs, best promote public health, safety, morals, order, convenience, prosperity or the general welfare, as well as efficient and economy in the process of development."

Map 1-1
List of Regional Planning Commissions in Missouri



Number	Regional Planning Commission
1	Boonslick Regional Planning Commission
2	Bootheel Regional Planning and Economic Development Commission
3	East-West Gateway Coordinating Council
4	Green Hills Regional Planning Commission
5	Harry S Truman Coordinating Council
6	Kaysinger Basin Regional Planning Commission
7	Lake of the Ozarks Council of Local Governments
8	Mark Twain Regional Council of Governments
9	Meramec Regional Planning Commission
10	Mid-America Regional Council
11	Mid-Missouri Regional Planning Commission
12	Mo-Kan Regional Council
13	Northeast Missouri Regional Planning Commission
14	Northwest Missouri Regional Council of Governments
15	Ozark Foothills Regional Planning Commission
16	Pioneer Trails Regional Planning Commission
17	South Central Ozark Council of Governments
18	Southeast Missouri Regional Planning and Economic Development Commission
19	Southwest Missouri Council of Governments

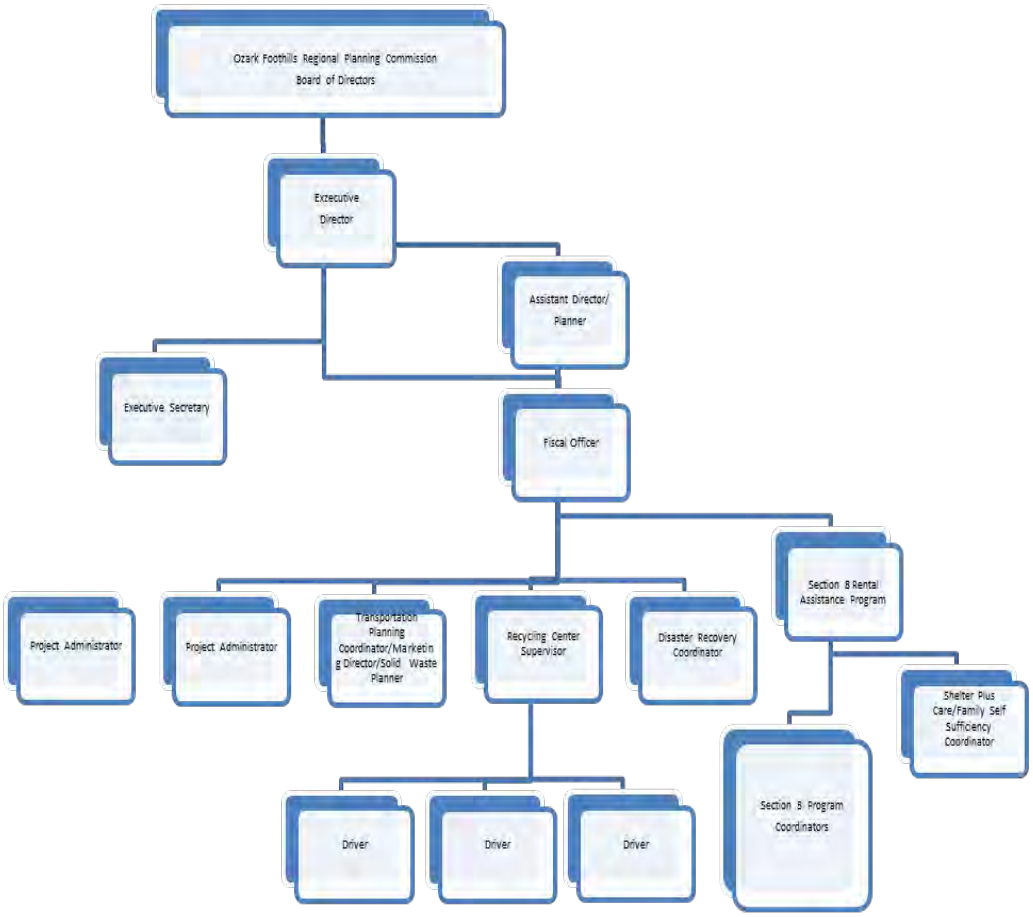
Two local planning and development organizations have cooperated in the development of the Ozark Foothills Regional Transportation Plan (RTP)—the Ozark Foothills Regional Planning Commission (OFRPC) and the Ozark Foothills Transportation Advisory Committee (OFTAC). Designated by Governor Hearnes in 1967, the commission consists of the elected officials of 5 counties and 16 cities and is charged with increasing economic development and improving the quality of life in the region. The OFRPC is a member of the Missouri Association of Councils of Government (MACOG), and is responsible for regional planning in Butler, Carter, Reynolds, Ripley, and Wayne Counties. An organizational chart of the OFRPC can be viewed on the following page (Figure 1-1). The Ozark Foothills Regional Planning Commission is comprised of the following members:

Table 1-1
Ozark Foothills Regional Planning Commission Membership

Butler County	Carter County	Reynolds County	Ripley County	Wayne County
Poplar Bluff	Van Buren	Bunker	Doniphan	Greenville
Fisk	Ellsinore	Centerville	Naylor	Piedmont
Qulin	Grandin	Ellington		Williamsville
Neelyville				Village of Mill Spring

The OFTAC is comprised of county representatives, general citizens, and ex-officio members from the Southeast District of the Missouri Department of Transportation (MoDOT). The OFTAC is charged with the task of developing and establishing criteria in which to prioritize transportation projects. The OFTAC meets once per quarter and includes representatives of each of the region's five counties.

Figure 1-1
Ozark Foothills Regional Planning Commission
Organizational Chart



Location

The area to be studied and discussed within this plan is the Ozark Foothills of Missouri. Located in south-central and southeastern Missouri and bordering the State of Arkansas, the five counties cover 3,410 square miles. The size of each county is shown in the Table 1-2 below. Reynolds County is the largest geographically while Carter County is the smallest.

Table 1-2
Ozark Foothills Region Square Mileage
2016

County	Square Miles
Butler	698
Carter	509
Reynolds	808
Ripley	632
Wayne	763

Source: The Missouri Roster: 2015-2016, Missouri Secretary of State

Municipalities

The Ozark Foothills Region includes 16 incorporated places within its five counties. The locations of the 16 cities can be viewed on the Base Map below (Map 1-2). Per the 2010 Decennial Census, Butler County has the largest population with 42,794 residents, more than half of the total population in the region. In terms of land area, Butler County ranks third with 698 total square miles and a population density of 61.3 persons per square mile. There are four incorporated places in the county, the cities of Fisk, Neelyville, Poplar Bluff, and Qulin. Poplar Bluff is the county seat and the largest incorporated place in the county and the region with 17,023 residents.

Carter County is the smallest county in terms of both geography and population. The county covers 509 square miles and has a population of 6,265 residents. There are three incorporated places in the county, Ellsinore, Grandin, and Van Buren. The City of Van Buren is the county seat and the largest town in the county with a population of 819 residents.

Reynolds County is the largest county in the region in terms of geography with a land area of 808 square miles. The county ranks fourth in population size with 6,696 residents.

There are three incorporated places in the county, the Cities of Bunker, Centerville, and Ellington. The City of Centerville serves as the county seat and has a population of 191.

Ripley County is the second largest county in terms of population and the fourth largest county in terms of geography. According to the 2010 US Census, the county is home to 14,100 residents and covers 632 square miles. There are two incorporated places in Ripley County, the Cities of Doniphan, and Naylor. The City of Doniphan serves as the county seat.

Wayne County is the third largest county in terms of population and the second largest in terms of geography. The county is home to 13,521 residents and covers a total land area of 763 square miles. There are four incorporated places in the county, the Cities of Greenville, Piedmont, and Williamsville, and the Village of Mill Spring. The City of Greenville serves as the county seat. The table (Table 1-3) and map (Map 1-3) below show the most recent population density of the region.

Table 1-3
Ozark Foothills Region Population Density
2016

County	Population Density (Persons Per Square Mile)
Butler	61.3
Carter	12.3
Reynolds	8.3
Ripley	22.3
Wayne	17.7

Source: The Missouri Roster: 2015-2016, Missouri Secretary of State

Geography, Geology, and Climate

The geography of the Ozark Foothills region is as varied as the people that reside in the

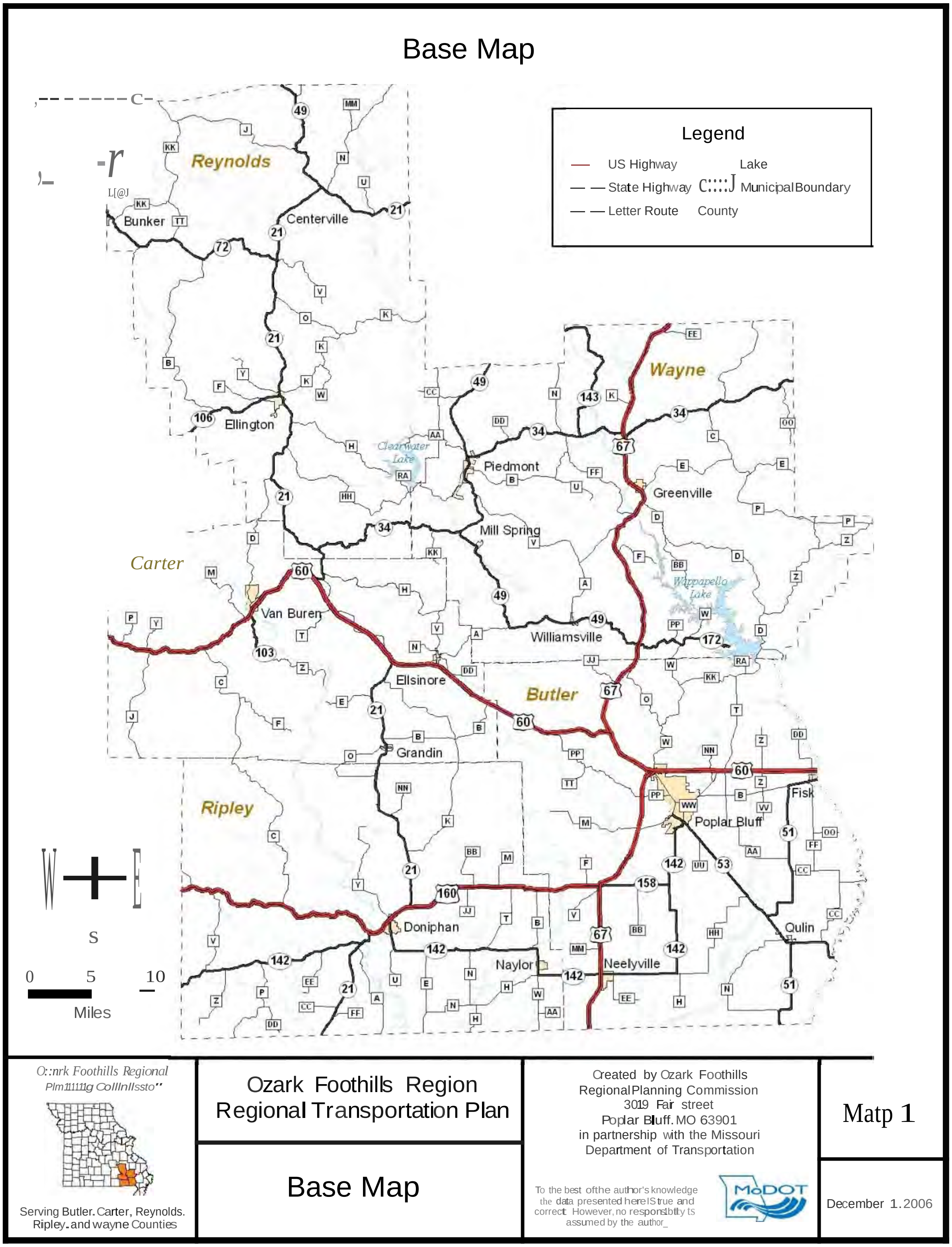
region. The eastern and southern portions of Butler County and the southeast section of Ripley County are flat, fertile farmlands. These areas are home to row crops such as cotton, soybeans, and rice. As you travel west through the region you enter the foothills of the Ozark Mountains. This hilly terrain is home to countless streams that cut through scenic hills and valleys of the area. There are three larger rivers that are part of the region; the St. Francis River marks the eastern boundary of Butler County. Traveling west the next river to cross is the Black River, and finally, the Current River.

The climate of the region can be described as humid continental with long summers and variable weather conditions. Summers are typically warm and humid with periods of extreme heat and humidity. The average daily temperature is 92.3 degrees in July. Winters are brisk, but seldom severe, and with periods of extreme cold or above average warmth. The average annual low temperature in January is 26 degrees Fahrenheit. Average annual snowfall is 7.6 inches, and the average annual rainfall is 46.2 inches. The region typically experiences 91 days with precipitation annually and 216 sunny days.

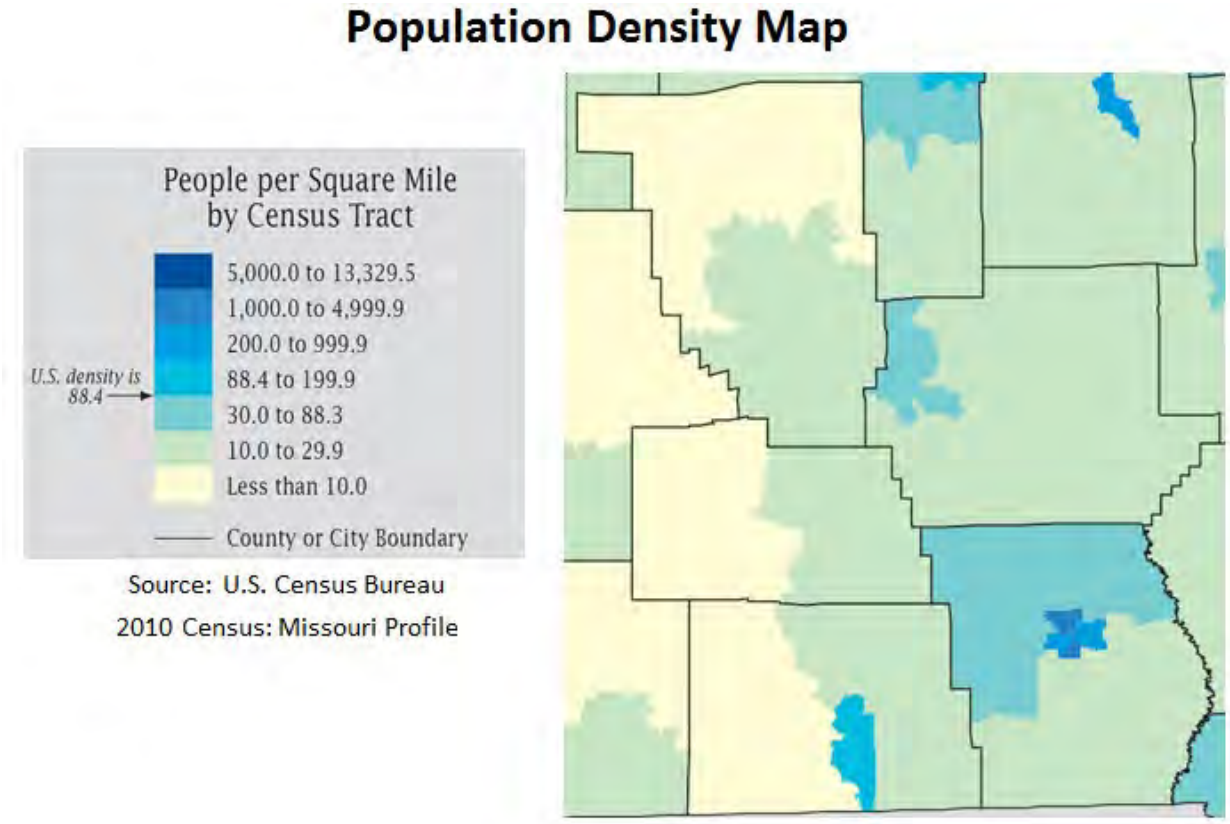
Image 1-1
Life in the Ozark Foothills

Credit: Ozark Foothills Regional Planning Commission, ofrpc.org

Map 1-2


Base Map
Legend
US Highway
Lake
State Highway
Municipal Boundary
Letter Route
County
Reynolds
Carter
Wayne
Butler
Ripley
Bunker
Centerville
Ellington
Piedmont
Greenville
Mill Spring
Van Buren
Williamsville
Ellsinore
Grandin
Poplar Bluff
Fisk
Qulin
Doniphan
Naylor
Neelyville
Clearwater Lake
Wappapello Lake
S
0 5 10
Miles
Serving Butler. Carter, Reynolds. Ripley. and wayne Counties
Ozark Foothills Region
Regional Transportation Plan
Base Map
Created by Ozark Foothills
Regional Planning Commission
3019 Fair street
Poplar Bluff. MO 63901
in partnership with the Missouri
Department of Transportation
MoDOT
Matp 1
December 1.2006

Map 1-3



While the entire Ozark Foothills Region is considered a rural area, Butler County reported a population density of over 60 people per square mile in 2010. The remaining four counties all had densities less than 23 persons per square mile. Reynolds County reported the lowest number of persons per square mile at 8.3. This is largely due to the expanse of national forestland throughout the county.

Natural and Historic Resources

The Ozark Foothills Region is home to many scenic natural settings. To begin, portions of all five counties are part of the Mark Twain National Forest. Butler County is home to 48,493 acres of the forest, Carter County has 90,641 acres, Reynolds County is covered by 89,812 acres, Ripley County 97,434 acres, and Wayne County 88,372 acres. In addition to the national forest,

there are several other outdoor recreation areas. The Current River in Carter County is part of the Ozark National Scenic Riverways, Sam A. Baker State Park is located in Wayne County, and Clearwater Lake is also located in Wayne County. Wappapello Lake, Mingo Wildlife Refuge, and the Coldwater State Forest are all also located in Wayne County. The Fourche Creek State Forest is located in Ripley County. Reynolds County is home to the Deer Run State Forest and Johnson Shut-Ins State Park.

In addition to the outdoor recreation facilities located throughout the region, the Ozark Foothills are also home to several historic landmarks. The table below lists the historic landmarks in each county.

Table 1-4

Historic Landmarks and Districts	
Butler County	Butler County Courthouse
	Alfred W. Greer House
	Hargrove Pivot Bridge
	Koehler Fortified Archeological Site
	Little Black River Archeological District
	Mark Twain School
	J. Herbert Moore House
	Thomas Moore House
	Moore-Dalton House
	John Archibald Phillips House
	Poplar Bluff Commercial Historic District
	Poplar Bluff Public Library
	Rodgers Theatre Building
	South Sixth Street Historic District
	St. Louis, Iron Mountain and Southern Railroad Depot
	St. Louis-San Francisco Railroad Depot
	Wheatley Public School
	Wilborn-Steinberg Site
	William-Kennedy School
	Wright-Dalton-Bell-Anchor Department Store Building
	Zehe Building
	Mrs. Louis Bedell House
	Big Spring Historic District
	Earl Boyer House
	Chubb Hollow Site

Carter County	J.W. Gibson House
	Gooseneck Site
	Delia Greensfelder House
	Loretta Herrington House
	James Hinton House
	Nettie Jacobson House
	Isaac Kelley Site
	Nola Kitterman House
	Wallace Knapp House
	Burford Lawhorn House
	Iva Lewis House
	Masonic Lodge
	Terry Mays House
	Thornton McNew House
	Mill Pond
	Della Nance house
	Hazel Owens House
	Phillips Bay Mill
	Ernie Phillips House
	Alvis Powers House
	Hazel Shoat House
	Sixth Street Historic District
	James Smith House
	Lawrence Smith House
	William F. Smith House
	Lee Tucker House
Reynolds County	Burford – Carty Homestead
	Civil War Fortification at Barnesville
Ripley County	B-9 Structure Archeological Site
	Randolph Columbus Barrett House
	Indian Ford
	Little Black River Archeological District
	Mule Camp Site
	Price Site
	Ripley County Courthouse
	Ripley County Jail, Sheriff's Office and Sheriff's Residence
	Sylvan School
Wayne County	Fort Benton
	Old Greenville
	Sam A. Baker State Historic District

Environmental Constraints and Concerns

The Ozark Foothills region is susceptible to natural hazards like hail, thunderstorms, high winds, floods, tornadoes, and extreme temperatures (severe winter weather or high heat waves). Hazard mitigation planning is an important component of disaster recovery since 1988 when the Disaster Relief and Emergency Assistance Act of 1974 were amended to implement Hazard Mitigation Planning. These plans are developed for all five counties and updated every five years. Hazard Mitigations Plans discuss in detail the issues such as historical statistics of the hazards, process followed to mitigate the hazards, and also the process to monitor, evaluate and update the plan. Apart from the hazard mitigation plans, each county develops an emergency operations plan, which clearly details out the process followed in case of any unanticipated emergency.

While the lack of both industrial development and dense population have made the Ozark Foothills economically depressed, they have also kept the area relatively free of major pollutants. This does not mean, however, that the area is free of environmental difficulties. Already mentioned have been the circumstances associated with regional flooding. In addition, water pollution and rural trash disposal problems also exist, and their cause can be traced to the rural chapter of the area.

For example, hired trash removal has not gained support in many rural areas. Rather, residents have disposed of refuse in the ways many of their parents did before them, by burning paper waste and dumping the rest in the rural woodlands and ravines. Of course, many of the urban inhabitants of the region dump trash by the roadside also. The result has been roads lined with rusting appliances, paper, and other discarded items.

Recent efforts to clean up the countryside, in the form of a Whitegoods Retrieval Project, have greatly improved the appearance of many rural roads, but without constant attention to the

problem, the roadsides could again revert to their previous squalid condition. As the practice of uncontrolled dumping continues, an adverse impact on the environment is assured. Furthermore, waste management comes at a high price for the Ozark Foothills Region by claiming resources that might otherwise promote the economy. The area economy clearly cannot afford the luxuries that would come with the "Cadillac" of solid waste management systems. It is understood, however, that the clean-up of the region would bring with it a heightened awareness and appreciation of features that would entice visitors to come to the area and spend money in our cities.

Just as the trash removal problem stems from the rural nature of the region, so do problems with water pollution. These problems, however, are complicated even further by local geography. Because the water tables are so high in parts of the delta areas, in particular in Butler County, private septic systems, as well as agriculture herbicides and pesticides can pollute rural water supplied by family wells. Topography in the Ozarks can cause similar problems due to agricultural runoff and leaking storage tanks. The possible resulting health problems, from hepatitis to typhoid, make this problem worthy of note.

Due to the fact that the region is a hub of many different transportation systems (roads, rails, and air), the potential is great for a variety of hazardous material spills and other related accidents to occur while such substances are in transit through our service area. Many instances of this have occurred in the past, particularly severe examples of which would include poison gas leakages from trains and toxic chemical spills from tanker trucks. The local units of government in our region have recognized the high risk of damage to the environment caused by such incidents and have organized as a Local Emergency Planning Commission. The planning activities of this group and the development of its emergency response capability have just

begun, but the potential of this new organization to deal with one of the most substantial environmental threats to our region is great.

Clearly, the environmental difficulties that plague a sparsely populated, rural area like the Ozark Foothills do not compare in magnitude to those of highly urbanized areas. Unfortunately, the comparatively few problems are exacerbated by the limited means available to deal with such difficulties. In the long view, however, the region is a land rich in resources, with only minor environmental problems. If care is taken, therefore, the potential is great for utilization of those resources with little damage to the environment.

Political Geography

Taking advantage of the potentials and working with the limitations, which exist, in the Ozark Foothills Region requires the cooperation of many local governments. Most of these come together as board members of the Regional Planning Commission. Contained in this group are locally elected officials representing twenty-one member governments. These include the Counties of Butler, Carter, Reynolds, Ripley and Wayne and the sixteen incorporated cities that lie within their boundaries. One easily observable characteristic which our units of government share is that most are of modest size. The chart that follows illustrates this point:

Table 1-5
Ozark Foothills Community Profiles

County	Population	City	Population	Form of Government	Planning
Butler	42,794	Fisk	342	Mayor/Council	No
		Neelyville	483	Mayor/Council	No
		Poplar Bluff	17,023	City Manager/Council	Yes
		Qulin	458	Mayor/Council	No
Carter	6265	Ellsinore	446	Mayor/Council	No
		Grandin	243	Mayor/Council	No
		Van Buren	819	Mayor/Council	No
Reynolds	6,696	Bunker	407	Mayor/Council	No

		Centerville	191	Mayor/Alderman	No
		Ellington	987	Mayor/Alderman	No
Ripley	14,100	Doniphan	1,997	Mayor/Council	Yes
		Naylor	632	Mayor/Council	No
Wayne	13,521	Greenville	511	Mayor/Council	No
		Village of Mill Spring	189	Board of Directors	No
		Piedmont	1,977	Mayor/Council	No
		Williamsville	342	Mayor/Council	No

Source: Community Profiles, prepared by Ozark Foothills Regional Planning Commission and Communities, January 2013

Cities in the region are limited not only in size, but also in resources. One such limited resource is tax money. As the chart below demonstrates, keeping property and city sales tax as low as possible is a major concern of many of the region's municipal governments. The area citizens, who are some of the poorest people in the nation, consistently vote down taxes that could provide more monetary resources for community development. This further emphasizes the need for cooperation among city, county, and regional governments and agencies.

Besides the regional economic planning agencies and city and county governments, the cities in the five counties also work with locally elected state officials. The sixteen Ozark Foothills cities fall into several Missouri House and Senate Districts. The table below identifies the Missouri Senate District and House of Representative District as well as the US Congressional District.

Table 1-6
City/County Sales and Property Tax and Electoral Districts

City	Sales and Property Tax	MO Senate District	MO House District	US Congressional District
Fisk	6.725/.7447	25	153	8
Neelyville	6.225/.57	25	153	8
Poplar Bluff	8.725/.76	25	152	8
Qulin	6.725/.46	25	153	8
Ellsinore	7.225/0	25	153	8

Grandin	6.725/.70	25	153	8
Van Buren	7.225/0	25	153	8
Bunker	7.225/.4751	03	143	8
Centerville	6.225/.35	03	144	8
Ellington	8.225/0	03	144	8
Doniphan	7.725/.398	33	153	8
Naylor	7.725/.671	33	153	8
Greenville	7.725/0	27	144	8
Mill Spring	6.725/.45	27	153	8
Piedmont	8.225/.480	27	144	8
Williamsville	7.225/.27	27	153	8

Source: Missouri Department of Revenue Sales/Use Tax Rate, April 2015
Ozark Foothills Regional Planning Commission Community Profiles 2016.

Regional Transportation Plan to Long-Range Transportation Plan

Since regional transportation planning and Missouri's Planning Framework Processes are continuous cycles, frequent local official and citizen participation is critical. The OFRPC is tasked to collect data, identify problems, and set goals for transportation planning. To complete the first step, RTPs are used to identify needs and update the state's Long-Range Transportation Plan (LRTP). After that step is completed, the needs are prioritized and preliminary design commitments are made. The next step is the project scoping stage, where projects are designed and developed. It is here that projects are first identified as part of Missouri's State Transportation Improvement Program (STIP). The projects are again prioritized and programmed. Finally, right of way and construction commitments will be made, and the projects will be listed in the STIP.

According to MoDOT, each of the Regional Planning Commissions will work with MoDOT to develop a RTP that includes identification of long-term goals, identification of needs, and public outreach. The RTP will require the approval of the OFTAC and the OFRPC's Board of Directors. Upon submission to MoDOT, the RTP will then be considered in the development of Missouri's LRTP.

Public Involvement

Local public involvement during regional transportation planning will allow the LRTP to develop a shared transportation vision in Missouri. A public involvement plan that works to capture the public's opinion on transportation issues and needs will be used. The plan will target all levels of public involvement including regional planning commissions, local officials, legislators, interest groups, and the public. MoDOT will use each RTP to help determine the public's expectations of the transportation system and the relative priority of each expectation.

The planning process utilized to prepare the RTP included local input via consultation with local elected officials at every step of the process. To begin, joint meetings of the OFTAC and the OFRPC staff were conducted.

An examination of regional demographic, economic, and transportation-related data was conducted. The identification of needs followed and depended, in part, on consultation with local officials and an analysis of public survey data. Needs were then prioritized and approved by the OFTAC and the list was approved by local elected officials. The OFTAC, MoDOT Southeast District's representatives, and OFRPC staff collaborated to plan solutions. The proposed projects are ranked by the OFTAC and approved by the region's local elected officials prior to submission to MoDOT.

Goals and Objectives

The OFTAC has identified and ranked the following six transportation-planning goals in the Ozark Foothills Region:

The first goal is to provide for the safe, efficient, and resilient transportation system in an environmentally responsible manner and promote and encourage transportation resiliency to

prepare the region for the future and reduce the impact of natural or manmade emergencies and disasters.

- Identify policies to make a more efficient use of existing transportation system to accommodate current and future travel demands and specify facilities that should function as part of the integrated transportation system.
- Maintain and improving road, bridge, and highway systems, such as the development of additional four-lane highway access to all parts of the five-county region, along with other modes of transportation while improving safety and resiliency in the system.
- Create an inventory of critical infrastructure and integration of resiliency into planning and project development.
- Encourage development of a transportation system, which can safely and efficiently accommodate unusual and unpredictable conditions.
- Promote transportation improvements, facility design and construction standards that withstand extreme demands and unexpected conditions.

The second goal is to develop a coordinated and comprehensive multimodal transportation system.

- Encourage alternate forms of transportation to the automobile including bicycle, pedestrian, public transit, air travel, rail, barge, or other modes.
- Increase transportation system diversity. Insure that there are opportunities for people to walk, cycle, rideshare, car share, and travel by transit.
- Plan and develop temporary and accessible pedestrian facilities to improve connectivity in the event of an emergency situation.

The third goal is to encourage the orderly development of the region's cities and counties and the connectivity within and outside the region. The plan must integrate local transportation plans into a regional plan, coordinating land use and development plans.

The fourth goal is to coordinate the regional transportation planning effort in partnership with MoDOT and represent the region in the development of statewide planning and prioritization processes. This requires the plan to encourage the development and expansion of statewide corridors serving the region.

The fifth goal is to promote and encourage public involvement in local, regional, and statewide transportation planning. To do so, the OFTAC and the OFRPC must monitor legislative and regulatory issues that influence transportation and educate the citizens of the region on transportation issues. Both OFTAC and the OFRPC must encourage, value citizen input, and improve the ability to communicate with transportation users. The agencies will encourage regional coordination as part of the long-range transportation planning to include interdependent sectors and stakeholders.

Finally, the sixth goal is to ensure adequate and sustainable funding for local, state, and federal transportation needs. The OFTAC and the OFRPC must work to keep elected officials aware of transportation needs, as well as propose solutions that will benefit the region's transportation system. Both the OFTAC and the OFRPC must support and encourage pursuit of federal initiatives that will bring additional funding to the state and region.

Chapter 2 – *Population and Employment*

According to 2010 data provided by the Decennial Census, 83,376 persons reside within the Ozark Foothills Region, with approximately one-half of the population claiming Butler County as home. Table 2-1 lists the 1990, 2000, and 2010 county and city populations as reported by the Decennial Census, as well as the county population forecasts through 2030.

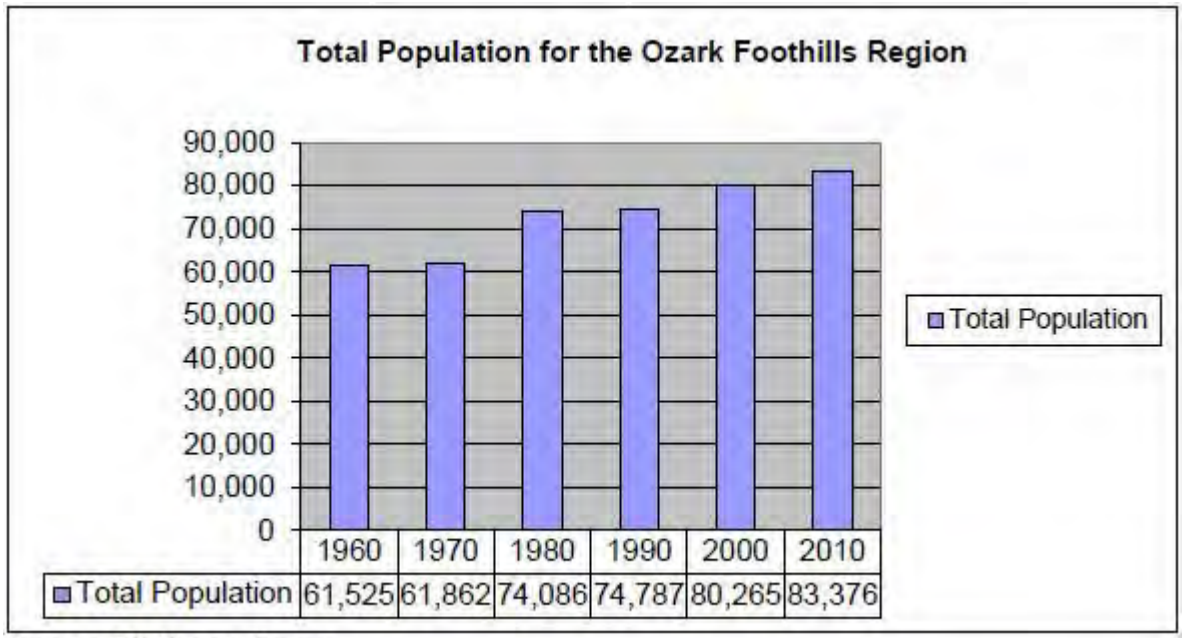
Table 2-1
Ozark Foothills Region Population Estimates
1990-2030

	Population Data			Population		
County/City	**1990**	**2000**	**2010**	**2020**	**2025**	**2030**
Butler	38,765	40,867	42,794	41,613	41,577	41,491
Fisk	424	363	342			
Neelyville	364	487	483			
Poplar Bluff	16,996	16,651	17,023			
Qulin	388	467	458			
Carter	5,515	5,941	6,265	5,936	5,905	5,837
Ellsinore	430	363	446			
Grandin	257	236	423			
Van Buren	900	845	819			
Reynolds	6,661	6,689	6,696	6,389	6,332	6,285
Bunker	390	427	407			
Centerville	82	171	191			
Ellington	1,004	1,045	987			
Ripley	12,303	13,509	14,100	14,003	14,024	14,008
Doniphan	1,704	1,932	1,997			
Naylor	651	610	632			
Wayne	11,543	13,259	13,521	12,001	11,594	11,200
Greenville	442	451	511			
Mill Spring	248	219	189			
Piedmont	2,166	1,992	1,977			
Williamsville	394	379	342			

Source: Missouri Populations Projections, 1990-2030, Missouri Office of Administration, Updated March 2008

The Ozark Foothills Region has experienced a 12.54% growth, 9,290 residents, from 1980 through 2010 according to the United States Census. This growth is less than that of the State of Missouri's growth of 21.8% during the same time period. Between 1980 and 2010, Wayne County experienced the highest percentage growth rate of 19.90% or 2,244 persons as compared to Reynolds County experiencing a decline in population of 534 residents, or 7.39%. Butler County experienced an increase in population of 5,101 residents or 13.53%. Carter County saw an increase in population from 1980 through 2010 of 837 residents or 15.42%. Ripley County's population grew by 1,642 residents or 13.18% during this 30 year time period.

Table 2-2



Source: US Census Bureau

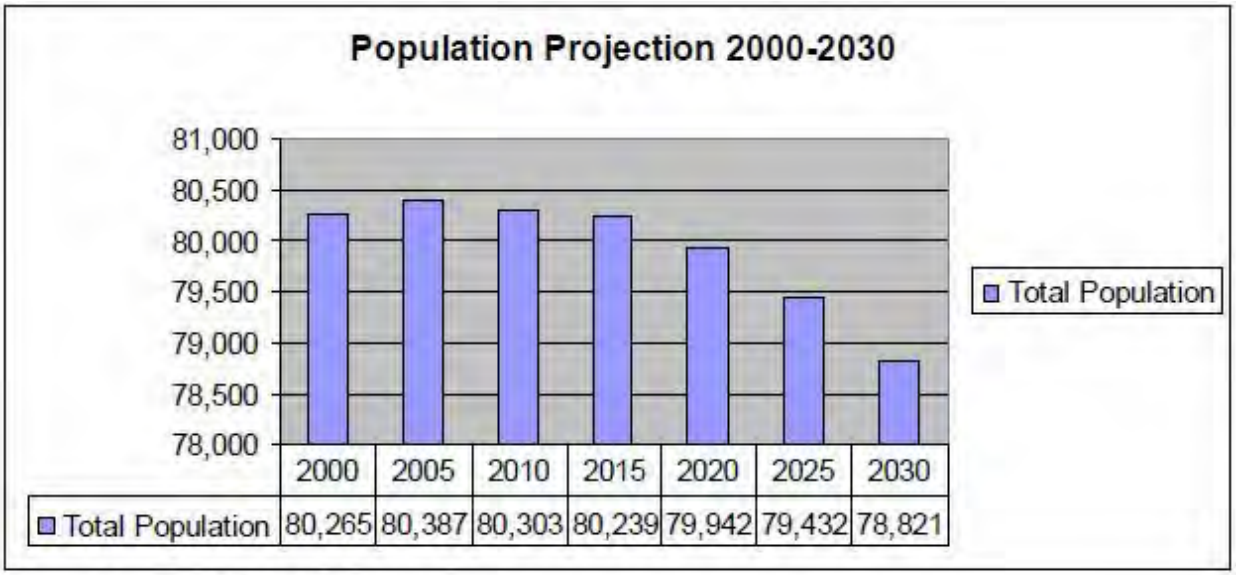
Although all five (5) counties showed an increase in the number of residents between 2000 and 2010, nine of the 16 cities indicated a decrease in total population. Using past trend data, the Missouri Office of Administration predicts that all counties will report a decrease in population by 2030 of 1.83% or 1,444 persons. According to OA's *Missouri Population*

Image 2-1
Butler, Carter, Reynolds, Ripley, and Wayne Courthouses

Credit: ofrpc.org

Projections, Ripley County will experience a percentage decrease of .65 percent from 2010 to 2030. Wayne County will experience the largest percentage decrease in population (-17.17 percent) from 2010 to 2030. Population projection data was not available at the municipal level.

Table 2-3



	2000	2005	2010	2015	2020	2025	2030
Total Population	80,265	80,387	80,303	80,239	79,942	79,432	78,821

Source: Missouri Office of Administration.

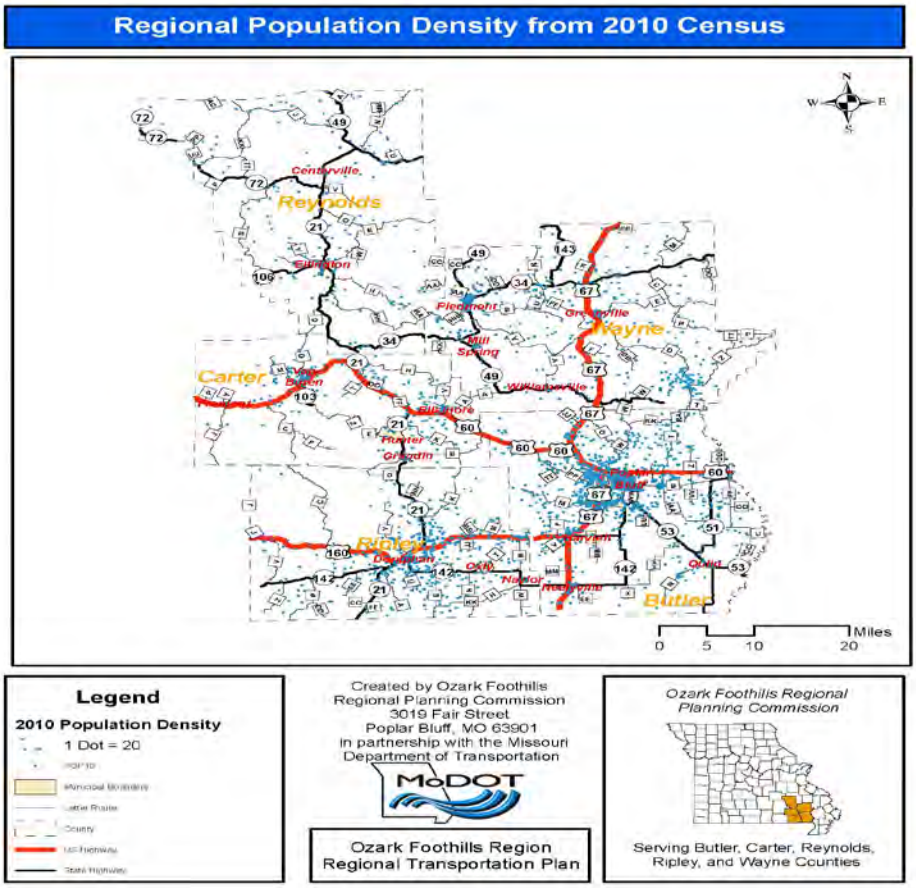
Map 2-1 on the following page shows the regional population density as was determined from the 2010 census. The Ozark Foothills Region is a sparsely populated area. The five counties of the region cover 3,410 square miles. With a population of 83,376 persons, this equates to a population density of 24.45 persons per square mile. The sparse population density can be seen when comparing the region's density to that of the State of Missouri's population density of 87.1 persons per square mile. Displayed in the table below is the population density by county based on the 2010 US Census.

Table 2-4
Population Density

County	Population	Land Area (Sq.Miles)	Population Density
Butler	42,794	698	58.59
Carter	6,265	508	11.70
Reynolds	6,696	811	8.25
Ripley	14,100	629	21.46
Wayne	13,521	761	17.42
Total	83,376	3,407	24.47

Source: 2010 US Decennial Census

Map 2-1


Regional Population Density from 2010 Census
Centerville
Reynolds
Carter
Wayne
Butler
Miles
0 5 10 20
Legend
2010 Population Density
1 Dot = 20
Created by Ozark Foothills Regional Planning Commission
3019 Fair Street
Poplar Bluff, MO 63901
In partnership with the Missouri Department of Transportation
MoDOT
Ozark Foothills Region Regional Transportation Plan
Ozark Foothills Regional Planning Commission
Serving Butler, Carter, Reynolds, Ripley, and Wayne Counties

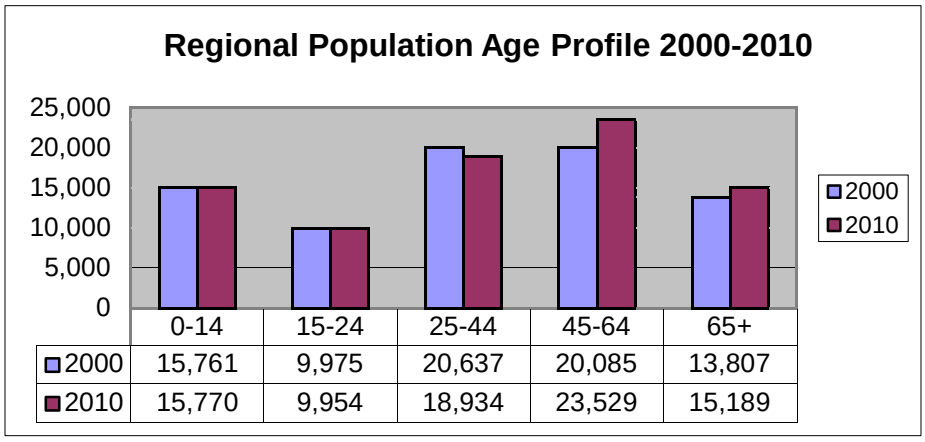
As displayed in the table below, the Ozark Foothills Region saw a modest growth in population from 2000 through 2010 resulting from migration into the area. The only county in the region to experience an out-migration of residents during this ten-year period was Reynolds County with an out-migration of fifteen residents.

Table 2-5
Births, Deaths, and Migrations 2000-2010

	Births	Deaths	Natural Increase Number	Rate	Net Migration Number	Rate
Butler	5,231	5,224	7	0.02%	2,095	5.40%
Carter	816	800	16	0.29%	410	7.43%
Reynolds	750	707	43	0.65%	-15	-0.23%
Ripley	1,687	1,694	-7	-0.06%	1,213	9.86%
Wayne	1,487	1,705	-218	-1.89%	1,934	16.75%

According to the United States Census, between 2000 and 2010 the Ozark Foothills Region experienced modest growth in all age groupings with the exception of the 25-44 and 15-24 age ranges. The 15-24 age range saw a decrease of 21 persons while the 25-44 age grouping saw a decrease of 1,703 persons. The other age groupings experienced the following growth; 0-14 year old residents increased by 9 persons, 45-64 year old residents increased by 3,444 residents, and finally, the number of residents over 65 increased by 1,382 persons.

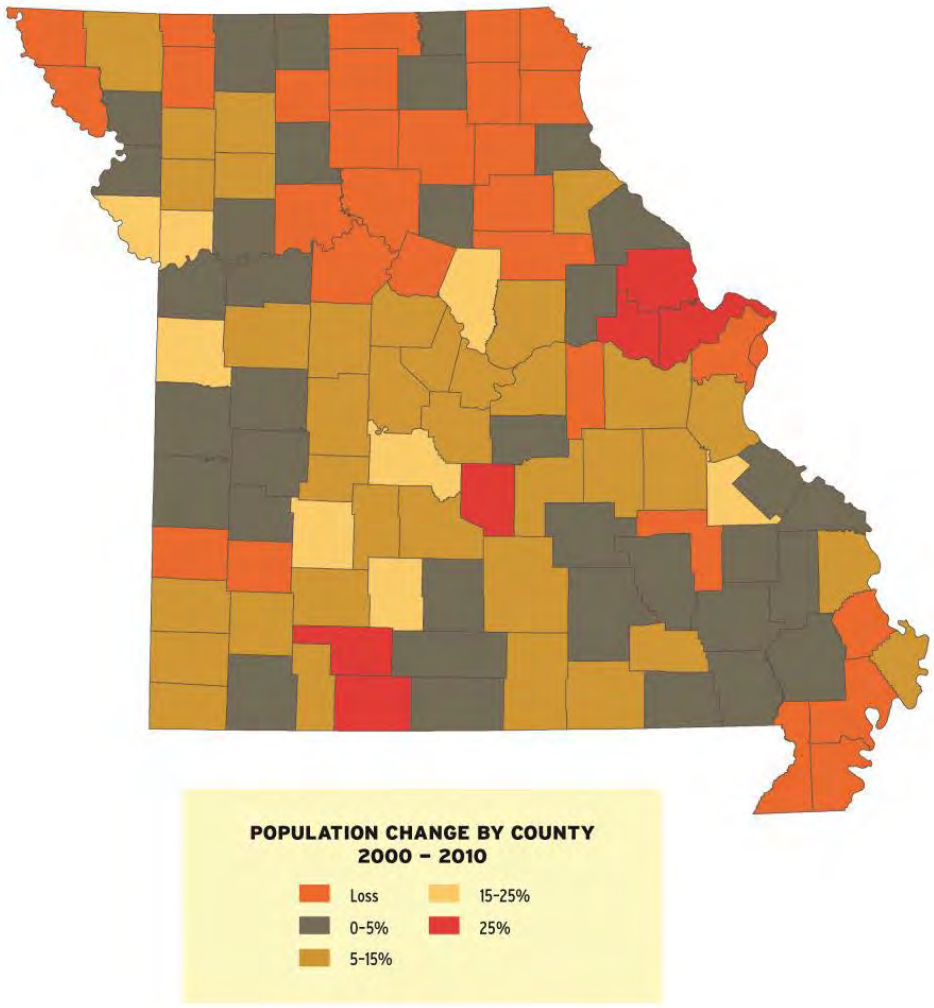
Table 2-6



	0-14	15-24	25-44	45-64	65+
2000	15,761	9,975	20,637	20,085	13,807
2010	15,770	9,954	18,934	23,529	15,189

The increase in residents between 45 and 64 suggests that the region has seen an increase of in-migration of residents. Persons in these age ranges are typically considered the prime workforce ages for current employment. This suggests that this increase is due to persons relocating to the region in search of employment opportunities.

Map 2-2
Population Change by County 2000-2010



Source: United States Census Bureau

According to the Missouri Economic Research and Information Center (MERIC), nearly all occupational fields are projected to experience growth in the south central region of Missouri, which includes all five counties of the Ozark Foothills Region and seven other similar counties.

The employment projections are created by MERIC to produce an overview of where the region's economy may be headed. The projections are based on past and present trends. The purpose is to offer insight into future growth and decline of industries and occupations.

MERIC qualifies their projections with the following statement, "The projection estimates assume a long-run, full-employment economy and should not be used as a measure of employment gaps." The projections are not "unconditional" predictions of the future. They are more appropriate as probability statements about future activity. Factors that could alter the projections include government policies, corporate decisions, economic swings, and natural or manmade disasters, among others.

The organization uses a four-step process when producing projections. First, MERIC uses past data to identify industry employment trends, and then uses these trends to estimate future employment. MERIC then also collects occupational employment data and uses those staffing patterns to construct occupational employment projections.

The industry employment data used for the projections is obtained from the U.S. Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages. This data is by place of work down to the county level and represents the number of jobs in an area. The employment data covers most non-farm employment, and MERIC supplements this information with additional employment data, including self-employed, agriculture, religious organizations, and railroads.

To project industry employment in the short-term, there are several different types of modeling techniques used including: trend analysis, value at risk (VaR), Bayesian vector autoregressive (BVAR), regression analysis, and autoregressive integrated moving average (ARIMA). Long-term projections trends are found using shift share modeling and regression

analysis. From these analyses, projections are made for base year employment, projected year employment, numeric change (difference between the base and projected year employment), and percentage change (numeric change expressed as a percent).

Occupational projection data is obtained through the Occupational Employment Statistics Survey, which is conducted by MERIC staff. This survey is a Bureau of Labor Statistics (BLS) and State of Missouri cooperative program, which surveys a sample of the businesses that are covered by the unemployment insurance program. In Missouri, this results in about 30,000 organizations out of about 168,000 being surveyed over a three-year period. To acquire the projections, staffing patterns are applied to the base and projected year industry employment. Because occupational employment changes over time and is not static, adjustments are made to the staffing patterns to predict future needs. The BLS provides the factors that are to be used to make the adjustments. The final projections again predict base year employment, projected year employment, numeric change, and percent change.

As can be seen in Table 2-7, two (2) occupational fields listed are projected to experience a decline in the area by 2022—Engineering technicians and Heating, A/C, and refrigeration mechanics and installers. At the same time, five (5) occupations will experience zero growth.

Office and administrative support positions in the south central region of Missouri are projected to see no growth (0.00%). Declines will take place among many subfields including office machine operators (-14.29%) and human resources assistants (-4.44%). Personal care and service occupations are projected to decline 13.33%. While the fields of hairdressers, hairstylists, and cosmetologists will increase by 7.32%, those who work in childcare are facing a 6.58% decline. Transportation and material moving occupations will increase 8.20%. The sub-field of hand packers and packagers will increase 9.17% while auto body repair and related occupations

will grow 12.40%. Production workers will grow 21.74% with the subfield of packing and filling machine operators growing by 4.35%.

Table 2-7
Employment Forecast for 2022 for South Central Missouri
2012-2022

Occupational Field	Projected Growth
Home health aides	41.71%
Occupational Therapist Assistants	40.91%
Health Specialties Teachers, Postsecondary	40.00%
Physical Therapist Assistants	29.87%
Production Workers	21.74%
Healthcare practitioners and technical employees	16.67%
Food preparation and serving occupations	14.81%
Sales and related workers	13.79%
Computer and Information Systems Managers	12.90%
Installation, maintenance, and repair occupations	11.11%
Transportation and material moving occupations	8.20%
Business Operations Specialists	6.38%
Human resources, labor relations	4.72%
Protective service occupations	4.55%
Farming, fishing, and forestry occupations	4.55%
Community and social services occupations	4.17%
Construction laborers	3.44%
Office and administrative support occupations	0.00%
Life, physical, and social science occupations	0.00%
Legal support workers	0.00%
Multi-media artists and animators	0.00%
Education, training, and library occupations	0.00%
Heating, a/c, and refrigeration mechanics/install	-0.93%
Engineering technicians	-10.53%

Source: Missouri Economic Research and Information Center (MERIC). Funding was provided by U.S. Department of Labor's Employment and Training Administration (ETA).

Five (5) fields will experience growth above 20%. Home health aides will see the most growth by 2022. This occupational field is expected to grow 41.71%; with the health specialties, teachers sub-field growing 40.00%. Occupational Therapist Assistants will also see a large increase with 40.91% projected growth. The next largest percentage of growth will be

experienced by Physical Therapy Assistants and Production workers, which are expected to grow 29.87% and 21.74% respectively.

Only one field listed will experience levels of growth between 15% and 20%. Healthcare practitioners and technical employees (16.67%), following a trend of strong projected growth in the field of healthcare. Registered Nurses will see a continuing growth through 2022 at a projected rate of 13.67%.

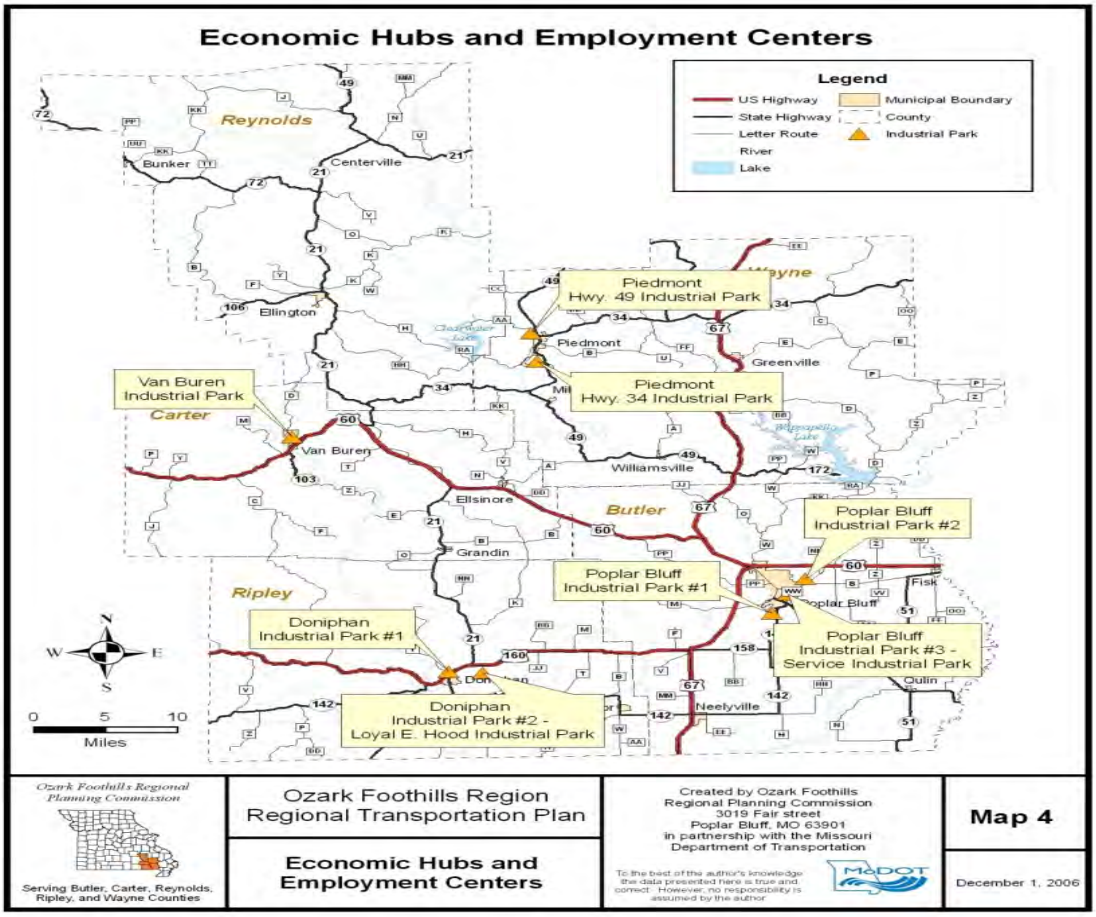
Four (4) fields will experience growth between 10% and 15%. Food preparation and serving occupations will see an expected increase of 14.81%. Sales occupations are expected to grow 13.79%, even with a decrease in first-line supervisors and managers of non-retail sales workers (-4.76%). Computer and informational systems occupations should climb 12.90% by 2022 in the area. Installation, maintenance, and repair occupations are expected to grow by 11.11%.

Two (2) fields will experience growth between 5% and 10%. Transportation and material moving occupations are expected to expand by 8.20%. Business operations specialists will continue to grow at 6.38%.

Ten (10) fields will experience growth between 0% and 5%. Human resources and labor relations should see growth of 4.72%. Overall, farming, fishing, and forestry occupations are to grow 4.55%. The sub-field of farming of farm and ranch animals is expected to increase by 11.36%. The field of protective service occupations is also expected to grow at 4.55%. Within this field, Police and Sheriff Patrol Officers will experience growth of 2.61%, while security guards will experience growth of 6.86%. Community and social service occupations will grow 4.17% and Construction and extraction occupations will grow at a similar 3.44%. Life, physical, and social science occupations are projected to grow 0.00%; this is due to a 5.71% growth in the

clinical, counseling, and school psychologists and a -3.57% and -3.70% decrease in conservation scientists and forest and conservation technicians, respectively. In the same field, there is a 0.00% growth in the agricultural and food science occupations. Finally, office and administrative support occupations, legal support workers, multi-media artists and animators and education, training, and library occupations are all projected to show zero growth (0.00%). Map 2-5 depicts the economic hubs and employment centers in the Ozark Foothills Region.

Map 2-3


Economic Hubs and Employment Centers
Legend
US Highway
State Highway
Letter Route
River
Lake
Municipal Boundary
County
Industrial Park
Reynolds
Bunker
Centerville
Ellington
Piedmont
Hwy. 49 Industrial Park
Piedmont
Hwy. 34 Industrial Park
Greenville
Van Buren
Industrial Park
Carter
Van Buren
Williamsville
Ellsinore
Butler
Poplar Bluff
Industrial Park #2
Grandin
Poplar Bluff
Industrial Park #1
Fisk
Ripley
Doniphan
Industrial Park #1
Poplar Bluff
Industrial Park #3 -
Service Industrial Park
Qulin
Neelyville
Doniphan
Industrial Park #2 -
Loyal E. Hood Industrial Park
N
W
E
S
0
5
10
Miles
Ozark Foothills Regional Planning Commission
Serving Butler, Carter, Reynolds, Ripley, and Wayne Counties
Ozark Foothills Region
Regional Transportation Plan
Economic Hubs and
Employment Centers
Created by Ozark Foothills
Regional Planning Commission
3019 Fair street
Poplar Bluff, MO 63901
in partnership with the Missouri
Department of Transportation
To the best of the author's knowledge the data presented here is true and correct. However, no responsibility is assumed by the author
MoDOT
Map 4
December 1, 2006

The Ozark Foothills Region is one of the most impoverished sections of the State of Missouri. According to the 2010-2014 American Community Survey 5-Year Estimates, the Median Household Income (MHI) for all residents of the State of Missouri is $47,764. Listed in the table below are the counties' MHI as reported in the ACS.

Table 2-8

Ozark Foothills Region Median Household Income	
Missouri	$47,764
Butler	$36,160
Carter	$32,656
Reynolds	$34,432
Ripley	$31,473
Wayne	$33,072
Source: American Community Survey 2010-2014 5-year Estimates	

Another factor that reveals the poverty of the Ozark Foothills Region is the percent of individuals below the federal poverty level. According to the 2010-2014 American Community Survey 5-Year Estimates, the percent of individuals below the federal poverty level in the State of Missouri is 15.6%. All five of the counties of the Ozark Foothills Region report a much higher percent of individuals living in poverty, the table below lists those counties and their respective percent of individuals living below the poverty level.

2-9

Ozark Foothills Region, Individuals Below Federal Poverty Level	
Missouri	15.6%
Butler	19.3%
Carter	23.0%
Reynolds	23.2%
Ripley	24.5%
Wayne	22.1%
Source: American Community Survey 2010-2014 5-Year Estimates	

Labor Force

A valuable resource of the Ozark Foothills Region is the labor force. The 2010 US Census reported a total population for the Region of 83,376 people. By 2015, 36,084 people were reported by the Missouri Economic Research and Information Center as comprising the labor force. The table below compares employment figures for the State of Missouri, the Ozark Foothills Region and all counties comprising the Region.

Table 2-10
Ozark Foothills Labor Force

	2000	2015
Missouri		
Total Civilian Labor Force	2,973,092	3,083,635
Total Employed	2,875,336	2,888,358
Butler County		
Total Civilian Labor Force	19,859	19,464
Total Employed	18,965	18,067
Carter County		
Total Civilian Labor Force	2,626	2,509
Total Employed	2,487	2,275
Reynolds County		
Total Civilian Labor Force	2,809	2,676
Total Employed	2,617	2,442
Ripley County		
Total Civilian Labor Force	5,836	5,742
Total Employed	5,555	5,239
Wayne County		
Total Civilian Labor Force	5,513	5,693
Total Employed	5,229	5,261
Ozark Foothills Region		
Total Civilian Labor Force	36,643	36,084
Total Employed	34,853	33,284

Butler County is the economic center of the five county region as can been seen in the population and workforce figures provided above. Carter, Reynolds, Ripley, and Wayne County are more sparsely populated with fewer employment opportunities. Butler County is home to three hospitals, multiple manufacturing firms, and Three Rivers College, in addition to numerous

retail outlets. Many industries that had been strong in the region have seen declines over the past several decades such as mining and logging. Although opportunities in the industries still exist, there are fewer available.

Commuting Patterns

The average drive time within the Ozark Foothills Region to their place of work was 24.28 minutes according to the 2010 US Census. The majority of the five county region is very rural and residents must commute to the nearest town for employment opportunities. Poplar Bluff, located in Butler County is the economic hub of the region with several factories and three hospitals as well as numerous retail outlets. Many residents of the surrounding counties commute to Butler County for employment.

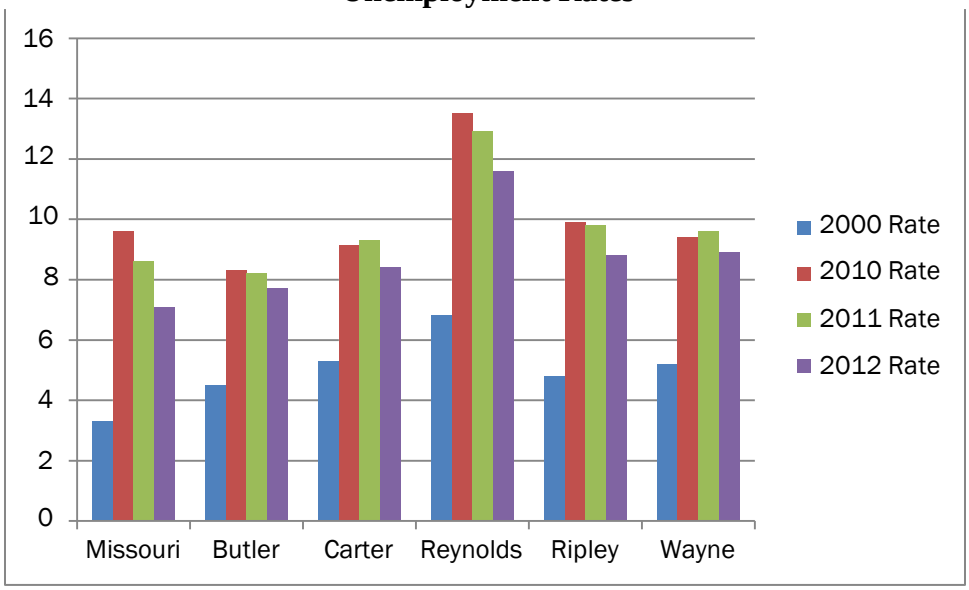
Table 2-11
Commuting Patterns of the Region

	Workers Age 16yrs or Older	Avg. Commute time in minutes	Drive alone	Carpool	Public Transportation	Bicycle or walk	Work at home
Butler	17,370	17.3	14,695	1,789	695	0	399
Carter	2,437	22.8	1,918	280	0	0	127
Reynolds	2,269	23.3	1,709	411	136	0	75
Ripley	5,074	23.6	4,135	731	152	51	406
Wayne	4,812	27.0	3,883	640	96	0	140
Total	31,962	22.8	26,340	3,851	1,079	51	1,147

Source: US Census Bureau, 2010-2014 American Community Survey

The unemployment rate for the State as well as the region has increased significantly between 2000 and 2011. It can be seen from the chart, that due to the economic downturn and business layoffs and closures, the unemployment rate has increased by more than 50% from 2000 to 2011, but has steadily decreased from 2012-2015.

Table 2-12
Unemployment Rates



Source: Missouri Economic Research and Information Center

Unemployment Rates				
	2000	2010	2011	2015
	Rate	Rate	Rate	Rate
Missouri	3.3	9.6	8.6	6.3
Butler	4.5	8.3	8.2	7.2
Carter	5.3	9.13	9.3	9.3
Reynolds	6.8	13.5	12.9	8.7
Ripley	4.8	9.9	9.8	8.8
Wayne	5.2	9.4	9.6	7.6
Source: Missouri Economic Research and Information Center				

Employment Trends

The total number of jobs in the Ozark Foothills Region increased by 6.7% from 2002-2011 while the number of jobs in the State of Missouri decreased by 3.0% during the same time frame. As can be seen in the table below, 2006 and 2005 were the years with the highest number of jobs in the region. Although the number of jobs grew during the middle of the decade, along with the national economy, the number of jobs began to decrease as the decade came to a close in 2010.

Table 2-13
Number of jobs in the Ozark Foothills Region 2002-2011

Jobs	Butler	Carter	Reynolds	Ripley	Wayne	Total
2011	18,673	1,542	1,505	3,036	2,752	27,508
2010	18,479	1,581	1,530	2,943	2,803	27,336
2009	18,599	1,492	1,594	2,880	2,642	27,207
2008	19,403	1,464	1,621	2,924	2,587	27,999
2007	19,146	1,471	1,640	2,942	2,533	27,732
2006	19,664	1,484	1,586	2,936	2,556	28,236
2005	20,065	1,472	1,607	2,866	2,557	28,567
2004	19,308	1,455	1,678	2,765	2,482	27,688
2003	18,213	1,421	1,589	2,658	2,523	26,404
2002	18,031	1,375	1,543	2,538	2,498	25,985
10-year change	642	167	-38	498	254	1,523
10-year Percent Change	3.5%	10.8%	-2.5%	16.4%	9.2%	5.5%

Source: STATS Indiana

Because of the low population for all of the counties of the region other than Butler, the change in the number of jobs in the region has very little impact on the statewide economy. However, these small downturns in employment opportunities have a great impact on the employment rates of the region. According to the data provided in the table above, Reynolds County was the only county in the region to experience a decline in the number of jobs from 2002 to 2011.

Establishments

The total number of establishments for Missouri increased by 6.9% from 2001-2011. For Butler County the increase was 21.2%, Carter County was 30.6%, Reynolds County was 44.2%, Ripley County was 57.2%, and Wayne County was 75.1%. The region, as a whole, saw an increase of 26.4% or 789 establishments. Figures can be seen in the below Table (2-14).

Table 2-14
Number of Establishments 2001-2010

Establishments	Butler	Carter	Reynolds	Ripley	Wayne	Total
2011	1,484	222	333	434	506	2,979
2010	1,452	229	343	426	501	2,951
2009	1,463	234	329	422	461	2,909
2008	1,427	229	312	395	424	2,787
2007	1,415	224	313	370	409	2,731
2006	1,366	219	299	336	381	2,601
2005	1,316	217	316	316	354	2,519
2004	1,300	208	319	306	344	2,477
2003	1,305	195	297	298	341	2,436
2002	1,270	186	277	292	324	2,349
2001	1,224	170	231	276	289	2,190
10-year change	260	52	102	158	217	789
10-year Percent Change	21.2%	30.6%	44.2%	57.2%	75.1%	26.4%

Source: STATS Indiana

Environmental Concerns

State and National Parks

There are three Missouri State Parks located within the Ozark Foothills Region. These state parks include Sam A. Baker State Park, Lake Wappapello State Park, and Johnson's Shut-Ins State Park. In addition to these three state parks, there are also two state parks that border the region and also must be considered for potential environmental concerns; these two parks are Elephant Rocks State Park and Taum Sauk Mountain State Park.

The Ozark Foothills Region is also home to the Mark Twain National Forest and the Poplar Bluff Ranger District of the National Forest. Carter County also includes large sections of the Ozark National Scenic Riverways that include the Current River.

Brownfields

Throughout the five county Ozark Foothills Region there are various Brownfield sites as well as hazardous waste generators, petroleum storage tanks and superfund sites. All of these locations should be considered during the economic and community development planning phases.

Floodplains

Each of the five counties that comprise the Ozark Foothills Region has areas that fall within the 100-year floodplain. Each of the counties has areas that are susceptible to flooding, both flash flooding and riverine flooding. All of the counties participate in the National Flood Insurance Program and have restrictions in place that regulate construction within the floodplain. For more specific flood maps, each county and municipality have floodplain coordinators.

Employment in Various Industries

Poplar Bluff in Butler County is the region's major economic center. The largest employment sectors are healthcare, manufacturing, and retail trade. This is due to three hospitals being located in Poplar Bluff, multiple manufacturers, and the city serving as the retail center for a broad rural area. Carter, Reynolds, Ripley, and Wayne Counties also report their largest employment sectors as being in the manufacturing, retail trade, and healthcare industries. These counties with lower populations have smaller establishments than those found in Butler County.

The Ozark Foothills Region has seen an increase in population as well as an increase in the number of establishments and jobs from 2001 through 2011. While the population has increased at a faster pace than the number of jobs in the region, resulting in an unemployment that rate is higher. All counties in the region have unemployment rates that exceed the unemployment rate of the State of Missouri.

Wages

The jobs that are available to residents of the Ozark Foothills Region are typically low wage jobs. When comparing the average wage per job for the region, there has been little increase from 2001 through 2011 with four of the five counties actually reporting a decrease in the average wage per job from 2001 through 2011. These jobs, typically, pay less on average than jobs throughout the State of Missouri. When comparing 2011 average wages per job of the five county region to those statewide ($41,461), Butler County's average wage per job is 74.4% of the state average, Carter County's average is 54.8% of the state's average, Reynolds County is 57.5%, Ripley County is 54.4% and Wayne County is 55.2% of the state's reported average wage per job.

Table 2-15
Average Wage Per Job 2001-2011

	Butler	Carter	Reynolds	Ripley	Wayne
2011	$30,823	$22,730	$23,854	$22,587	$22,784
2010	$31,436	$23,541	$27,826	$23,020	$23,584
2009	$30,949	$22,314	$26,757	$22,987	$24,213
2008	$30,126	$21,661	$28,835	$22,784	$22,953
2007	$30,103	$21,889	$27,223	$22,659	$23,390
2006	$29,344	$22,204	$29,335	$22,379	$23,057
2005	$29,441	$22,518	$28,557	$22,778	$22,871
2004	$30,204	$23,879	$24,809	$23,277	$23,142
2003	$31,132	$23,385	$25,324	$23,917	$22,993
2002	$31,181	$23,532	$25,075	$24,187	$23,103
2001	$30,861	$23,913	$23,720	$23,514	$23,513
10-year change	-$38	-$1,183	$134	-$927	-$729
10-year % change	-0.1%	-4.9%	0.6%	-3.9%	-3.1%

Source: US Bureau of Labor Statistics Adjusted for Inflation

The lower than average wages in the region, coupled with other factors such as low education attainment and high rates of unemployment have led to a higher percentage of people living in poverty than the state averages. The table below provides county-by-county comparisons from the 2000 and 2010 US Census. As shown in this table, each of the five counties in the Ozark Foothills Region has a much higher percentage of individuals living in poverty than the State of Missouri. The number of families receiving food stamps within the last twelve months is also much higher than the state average. Of the 33,777 total households in the Ozark Foothills Region, 20.99% of those households are receiving food stamps while the state average is 13.3%. Butler County has the highest rate with 22.9% of the total households receiving food stamps.

Table 2-16

Individuals Living in Poverty		
	2000	2011
Missouri	10.6%	15.8%
Butler	18.6%	20.8%
Carter	25.2%	19.6%
Reynolds	20.1%	21.3%
Ripley	22.0%	24.0%
Wayne	21.9%	19.8%
Source: US Census Bureau		

Within the last two decades, the development of lead and copper mining in Reynolds County has provided employment opportunities. Industrial development in Poplar Bluff, Doniphan, Piedmont, and Ellington have also diversified employment and given new vigor to the economy. People have moved from the country into small towns which concentrate on providing services. This demographic shift reflects the changing economic structure. Generally, the area has come to rely on manufacturing, service industries, and tourism to provide its residents with employment.

Education

The quality of local educational facilities is a significant consideration for companies seeking new locations, both from the standpoint of providing opportunities for company

employees and their families, and the ability of the local educational system to be able to provide a workforce capable of meeting increasingly technical demands. The following table provides information about the school districts within each county in the Ozark Foothills Region. Information includes the number of students, number of certified staff and grade span.

The quality of public education throughout the Ozark Foothills Region is at a level of attainment conducive to companies requiring a skilled work force. All of the 15 school districts in the Region are accredited by the Missouri Department of Elementary and Secondary Education.

Table 2-17
Ozark Foothills Schools

School District	Enrollment	Certified Staff	Grade Span
Butler County			
Neelyville	627	72	K-12
Poplar Bluff R-I	5,204	429	K-12
Twin Rivers R-X	947	90	K-12
Carter County			
East Carter R-II	778	85	K-12
Van Buren R-I	538	58	K-12
Reynolds County			
Centerville R-I	67	10	K-08
Southern Reynolds County R-II	527	48	K-12
Bunker R-III	263	37	K-12
Lesterville R-IV	257	48	K-12
Ripley County			
Naylor R-II	414	52	K-12
Doniphan R-I	1,624	150	K-12
Ripley County R-IV	179	20	K-08
Ripley County R-III	136	18	K-08
Wayne County			
Greenville R-II	765	92	K-12
Clearwater R-I	1,071	110	K-12
Source: Missouri Department of Elementary and Secondary Education			

The educational attainment level in the Ozark Foothills Region has been historically low when compared to the attainment level for the State of Missouri. The difference is most notable at the higher percentage of residents of the region that do not complete high school and the lower percentage of residents of the region that receive a bachelor's degree and higher.

Table 2-18

Educational Attainment	Percentage of Population					
	MO	Butler	Carter	Reynolds	Ripley	Wayne
Less than 9th grade	4.4	8.1	11.1	9.9	11.1	18
9th-12th grade, no diploma	8.7	15.5	13.3	17.3	18.3	22.3
High School graduate	31.9	34.2	38.2	42.6	38.7	34.3
Some college, no degree	22.6	21.6	20.2	17.0	14.3	15.8
Associate Degree	6.8	6.1	6.2	6.5	5.4	2.8
Bachelor's Degree	16.0	7.8	6.0	3.5	8.1	4.9
Graduate or profes0sional degree	9.5	6.7	5.1	3.2	4.1	1.9

Source: 2010 United States Census

When comparing the dropout rates of the Ozark Foothills Region with that of the State of Missouri, there were only three school districts that had a higher dropout rate in 2008 and only two schools with a higher dropout rate in 2009. The majority of the schools are so small that one or two students dropping out can have a major impact on the dropout rate for the district.

Graduation Analysis

The following table shows the number of high school graduates from each of the region's school districts in May of 2011 along with the percentage of graduates that entered a four-year college or university, a two-year college, post-secondary institution, the workforce, the

Table 2-19

Dropout Rate		
School District	2010	2011
Missouri	3.3	3.4
Poplar Bluff R-I	4.0	7.2
Twin Rivers R-X	2.5	3.7
Neelyville R-IV	9.4	6.5
East Carter Co. R-II	5.6	.9
Van Buren R-I	.6	.7
Southern Reynolds Co. R-II	1.3	.6
Bunker R-III	4.5	3.3
Lesterville R-IV	2.7	1.0
Doniphan R-I	6	4.3
Clearwater R-I	2.6	0.6
Greenville R-II	2.7	2.3

Source: Missouri Department of Elementary and Secondary Education

military, some other field, or whose status after graduation was unknown. In reviewing the data below, it can be seen that the local 2-year community colleges have a strong presence in the region and attract many high school graduates to their campuses. As can be seen when comparing the region's high school graduates to those of the entire State of Missouri, the percentage of students attending a 4- year college is lower in the Ozark Foothills Region, while the percentage of students attending a 2-year college is higher for graduates of the region's high schools.

Table 2-20
Number of Graduates

School District	No. of Grads	4-Year College%	2-Year College%	Post-Secondary%	Workforce%	Military%
State of Missouri	64,201	35.8	31.1	2.5	15.5	2.9
Bunker R-III	12	33.3	8.3	16.7	41.7	0
Clearwater R-I	85	14.1	32.9	0.0	34.1	4.7
Doniphan R-I	104	9.6	56.7	5.8	23.1	1.0
East Carter R-II	43	4.7	55.8	7.0	27.9	4.7
Greenville R-II	55	3.6	50.9	0.0	16.4	9.1
Lesterville R-IV	25	8.0	40.0	8.0	4.0	4.0
Naylor R-II	23	8.7	52.2	0.0	26.1	4.3
Neelyville R-IV	55	21.8	23.6	3.6	43.6	0.0
Poplar Bluff R-I	274	17.9	41.6	1.8	21.2	2.9
Southern Reynolds Co. R-II	41	24.4	22.0	0.0	4.9	7.3
Twin Rivers R-X	69	14.5	58.0	1.4	10.1	1.4
Van Buren R-I	37	2.7	51.4	5.4	21.6	16.2
Source: Missouri Department of Elementary and Secondary Education						

Land Use

As mentioned earlier, the five-county region is considered rural with the exception of Poplar Bluff, which is considered a Micropolitan Statistical Area with 17,023 people. Land use data, as provided by United States Department of Agriculture, National Agricultural Statistics Service, serves to support this assertion with its report that the percentage of total farmland in the

region ranges from 18.8 percent in Reynolds County to 52.7 percent in Butler County. Table 2-22 shows total acreage with the percentage of acreage in farms.

Table 2-21
Ozark Foothills Region Land Use
2007/2012

County	Total Land Area in Acres	Percentage Farmland	Percentage Farmland
		2007	2012
Butler	444,588	56.4%	52.7%
Carter	324,708	19.5%	22.7%
Reynolds	517,426	20.7%	18.8%
Ripley	402,837	34.1%	34.2%
Wayne	485,871	21.8%	24.0%

The type of farmland is then designated as cropland, woodland, rangeland/pastureland, or house/lots/roads/ponds/wasteland as depicted in Table 2-23.

Table 2-22
Ozark Foothills Region Land Use by Type of Farmland, 2012

County	Total Farmland	Percentage in Cropland	Percentage in Woodland	Percentage in Rangeland/ Pastureland	House Lots/Roads/Ponds/ Wasteland
Butler	250,653	85.8%	7.8%	4.2%	2.2%
Carter	63,333	23.1%	46.9%	27.7%	2.3%
Reynolds	107,281	23.2%	43.7%	28.3%	4.3%
Ripley	137,258	34.7%	34.3%	26.7%	4.3%
Wayne	106,055	27.5%	38.8%	29.9%	3.8%

Source: USDA, National Agriculture Statistics Service, 2012 Census of Agriculture, Volume 1, Table 8, Missouri County Level Data

An increase in acreage designated as farmland was seen in Carter, Ripley, and Wayne Counties. The remaining counties reported decreases in the percentage of total acreage designated as farmland during the five- (5) year period with Butler County decreasing the greatest amount. As shown above, Butler County is the only county with the majority of farmland designated as cropland (85.8%). Carter and Reynolds Counties reported that nearly one-half (1/2) of their farmland, and one-third (1/3) of Wayne County's farmland, was woodland

with the remainder as rangeland/pastureland and cropland. These data reflect the designation of state and national forestland within the three (3) counties. Ripley County was the second largest crop producer in the region in 2012.

Environmental Justice

According to the Central Ohio Transit Authority, "Environmental Justice is the concept of determining whether or not a project (like a new transit system, road, or waste disposal site) negatively impacts a disadvantaged community or population when measured against the positive impacts or value it brings to that community or population." To facilitate the consideration of environmental justice while identifying and prioritizing transportation needs within the Ozark Foothills Region, data regarding race, house value, employment status, poverty, educational attainment, and disability must be presented and examined.

With regard to race, Table 2-25, prepared by the Office of Social and Economic Data Analysis (OSEDA), identifies the concentration of minority populations among the five counties. As shown, Butler County contained the highest percentage of minorities in 2010. All counties besides Butler reported a decrease in minority populations from 2000 to 2010, with Reynolds County indicating the largest decrease at -37.5%.

Table 2-23
Minority Population in the Ozark Foothills Region
2000-2010

Area Summarized	Minority Population					
County	Year		Change, 2000-2010		Percent of Total Population	
	2010	2000	Number	Percent	2010	2000
Ozark Foothills RPC	4,845	4,861	-16	-0.3	5.8	6.1
Butler	3,711	3,432	279	8.1	9.5	8.4
Carter	189	256	-67	-26.2	3.6	4.3
Reynolds	202	323	-121	-37.5	3.1	4.8
Ripley	405	490	-85	-17.3	2.9	3.6
Wayne	338	360	-22	-6.1	2.6	2.7

Source: 2000 and 2010 Decennial Census
University of Missouri Outreach & Extension - Office of Social & Economic Data Analysis (OSEDA)

Another type of data to be examined when considering the concept of environmental justice in transportation planning is house value. As can be seen in Table 2-26, areas with the lowest category of house values included Reynolds, Ripley, and Wayne Counties, while Butler and Carter Counties also include a number of low house values, as well as some trending upward.

Table 2-24

Subject House Value	Butler County, Missouri		Carter County, Missouri		Reynolds County, Missouri		Ripley County, Missouri		Wayne County, Missouri	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Owner-occupied units	**11,089**		**1,761**		**2,102**		**4,043**		**4,225**	
Less than $50,000	**2,694**	**24.3**	390	22.1	505	24.0	**1,387**	**34.3**	1,445	34.2
$50,000 to $99,999	**3,568**	**32.2**	466	26.5	718	34.2	**1,353**	**33.5**	**1,386**	**32.8**
$100,000 to $149,999	2,155	19.4	328	18.6	421	20.0	681	16.8	682	16.1
$150,000 to $199,999	1,519	13.7	261	14.8	214	10.2	248	6.1	328	7.8
$200,000 to $299,999	695	6.3	167	9.5	122	5.8	176	4.4	266	6.3
$300,000 to $499,999	371	3.3	128	7.3	94	4.5	179	4.4	93	2.2
$500,000 to $999,999	75	0.7	21	1.2	19	0.9	7	0.2	11	0.3
$1,000,000 or more	12	0.1	-		9	0.4	12	0.3	14	0.3
Median home value	**$91,700**		**$102,900**		**$84,500**		**$74,000**		**$70,500**	
Average home value	**$113,287**		**$121,810**		**$108,945**		**$93,067**		$102,556	

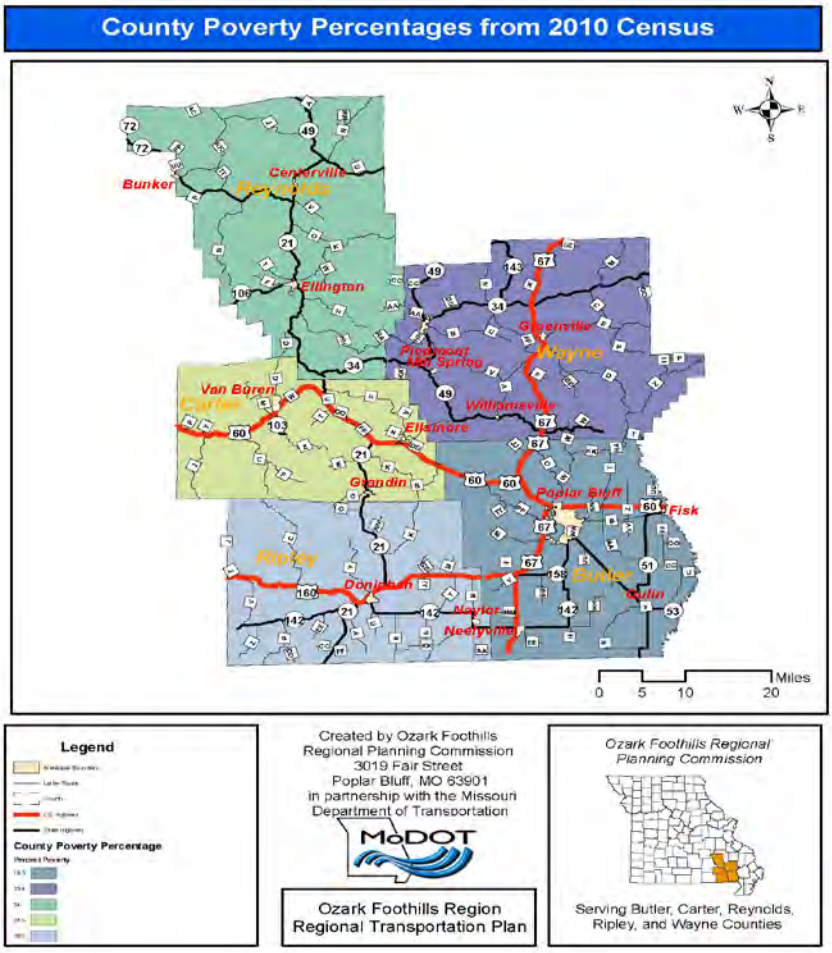
Table 2-27 below lists the number of residents with incomes below the federal poverty level for 2000 and 2010. While the percentage of the population falling into this category dropped for Carter and Wayne Counties within the ten-year period, the percentage increased for Butler, Reynolds, and Ripley Counties. All five (5) counties and the region were well above the state average of 14%. Ripley County reported the highest rate at 24%, while Carter reported the lowest at 19.6%. Butler, Reynolds and Wayne Counties all provided percentages around twenty (20) percent. Map 2-6 shows the County Poverty Percentages from the 2010 Census.

Table 2-25
Persons Below Poverty Level in the Ozark Foothills Region
2000-2010

Area Summarized	Persons Below Poverty Level					
County	Year		Change 2000-2010		Percent of All Persons	
	2010	2000	Number	Percent	2010	2000
Ozark Foothills RPC	17,731	16,011	1,720	10.7	21.3	20.3
Butler County	8,901	7,437	1464	19.7	20.8	18.6
Carter County	1,228	1,480	-252	-17.0	19.6	25.2
Reynolds County	1,426	1,313	113	8.6	21.3	20.1
Ripley County	3,384	2,925	459	15.7	24.0	22.0
Wayne County	2,792	2,856	-64	-2.2	19.8	21.9

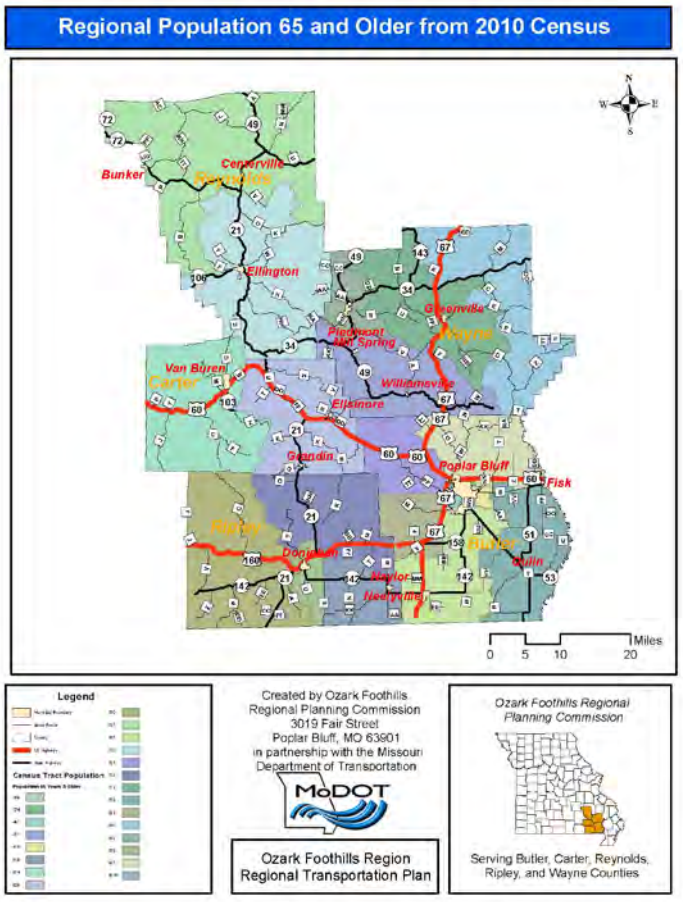
Source: USDC, Bureau of Census, 2000 and 2010 Decennial Census, American Community Survey
University of Missouri Outreach & Extension - Office of Social & Economic Data Analysis (OSEDA)

Map 2-4


County Poverty Percentages from 2010 Census
Bunker
Centerville
Reynolds
Ellington
Van Buren
Carter
Ellsinore
Grandin
Ripley
Doniphan
Naylor
Neelyville
Piedmont
Lost Spring
Wayne
Williamsville
Greenville
Poplar Bluff
Fisk
Butler
Qulin
0 5 10 20 Miles
Legend
County Poverty Percentage
Created by Ozark Foothills Regional Planning Commission
3019 Fair Street
Poplar Bluff, MO 63901
in partnership with the Missouri Department of Transportation
MoDOT
Ozark Foothills Region Regional Transportation Plan
Ozark Foothills Regional Planning Commission
Serving Butler, Carter, Reynolds, Ripley, and Wayne Counties

The elderly population should also be analyzed for the region. The elderly population 65 and older from the 2010 Census is reflected in Map 2-5.

Map 2-5



Chapter 3 – *Existing Transportation Facilities*

Missouri's highway system is the seventh largest in the nation, but ranks 47th in funding per mile. The Ozark Foothills Region contains a total of 4,053 miles of roadway. These miles consist of local roads, state highways, and US highways. According to MoDOT data, there are 1,276 miles of state highways in the Ozark Foothills Region. Together, these miles form the 12 numbered Missouri highways located within the region. The Missouri highways are numbered as follows and are shown on the map below (Map 3-1):

- MO 21 (Reynolds, Carter and Ripley Counties)
- MO 34 (Ripley, Reynolds, and Wayne Counties)
- MO 49 (Reynolds and Wayne Counties)
- MO 51 (Butler County)
- MO 53 (Butler County)
- MO 72 (Reynolds County)
- MO 103 (Carter County)
- MO 106 (Reynolds County)
- MO 142 (Ripley and Butler Counties)
- MO 143 (Wayne County)
- MO 158 (Butler County)
- MO 172 (Wayne County)

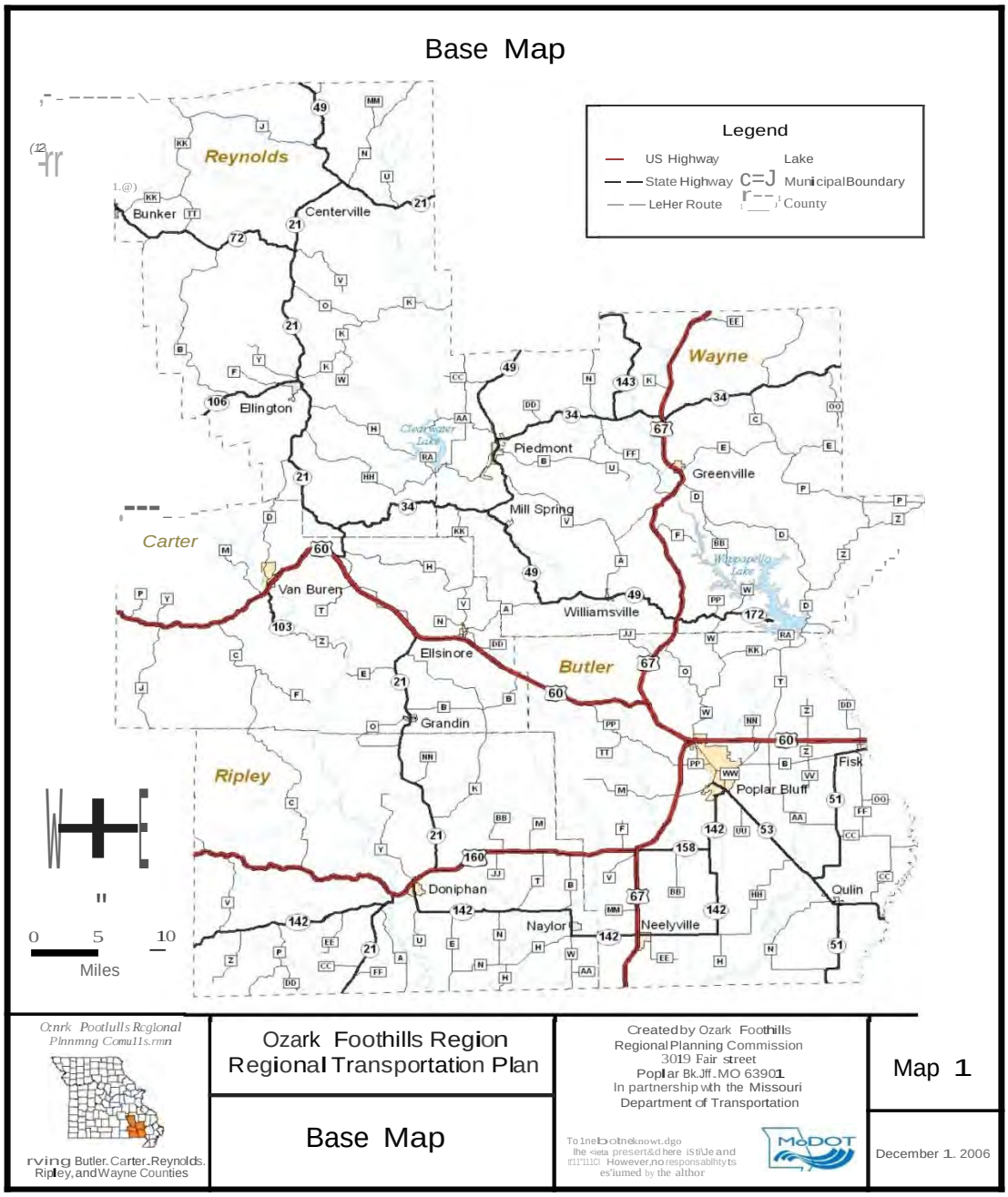
As shown in the table below (Table 3-1), Reynolds County contains the most numbered Missouri highways (five), while Carter County contains the fewest (two).

Table 3-1
Number of State Highways in Each County
2017

County	Number of State Highways
Reynolds	5
Carter	2
Ripley	3
Butler	4
Wayne	4

Map 3-1

Highways Base Map



Highways and Bridges – Current Conditions

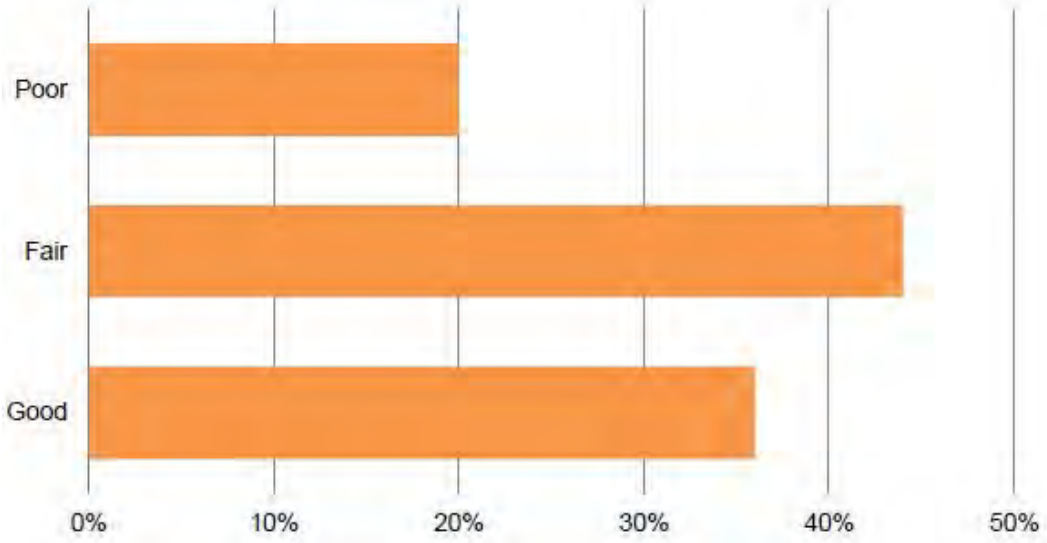
Since Poplar Bluff is the only area in the region not considered a rural area, a rural classification system will be utilized to analyze and functionally classify the area. In the hierarchy of functional classification systems, the largest and most highly trafficked transportation routes are known as arterial routes. Arterial routes consist of all interstate roadways and other major non-interstate roadways and generally are only about 7 percent to 10 percent of the transportation system in rural areas. Arterial routes are used for longer trips and substantial statewide or interstate travel. In the Ozark Foothills Region, there are no interstate highways. Three non-interstate United States (US) highways make up the region's arterial routes. These highways include US Highways 60, 67, and 160.

The middle level of the road system hierarchy is collector roads. Such roads are primarily used for intra-county transportation and are not typically used for longer trips. Collector roads make up approximately 20 percent to 25 percent of rural roadway systems and provide access to county seats, larger cities, and areas of importance, such as consolidated schools, shipping points, or agricultural bases. Together, the twelve numbered Missouri highways previously described create the collector level of the roadway system hierarchy in the Ozark Foothills Region.

Finally, the lowest level in the roadway system is the local road system. Local roads primarily serve to provide access between adjacent lands, to allow access to collector roads, and to use for short trips. Local roads make up anywhere from 65 percent to 75 percent of rural roadways. All other roads not previously mentioned, including state-lettered routes and county roads, make up the local road system.

Nearly 200 bridges lie within the Ozark Foothills Region. About 40 percent of the bridges are in Butler County (approximately 80), while the least number of bridges are located in Carter County (15). The American Society of Civil Engineers (ASCE) ranked Missouri's roads, aviation, and rail system with a grade of "C" in 2013. Roads in the state ranking as poor or mediocre make up 31% of the state's roadways. The state's bridges received a "C-"with 13.8% of bridges functionally obsolete and 14.5% structurally deficient according to ASCE. *The Safe and Sound Bridge Program* was launched in 2008 and improved 802 of the state's worse condition bridges. Improvements and rehabilitation occurred to 248 bridges with 554 complete bridge replacements. MoDOT's Long Range Transportation Plan indicates a funding gap of one billion dollars needed over the next twenty years to keep bridges in good condition.

Table 3-2
State Bridge Conditions



Source: Missouri Long Range Transportation Plan

Planned & Funded Projects

Though progress has been made, there is still need for more improvements. MoDOT currently cites several systems in the Ozark Foothills Region as needing development. These road and bridge projects are to be completed through MoDOT's STIP. The projects included in the current 2020-2024 STIP are shown on Map 3-2.

In Butler County, a bridge replacement will occur over Cane Creek on Highway 142, pavement resurfacing on US Highway 53 from Business 67 to US Highway 25, bridge replacement over the Black River on US Highway 60 and on Highway W, pavement resurfacing on US Highway 60 from US Highway 60 to Highway W, pavement resurfacing on US Highway 60 from Township Line Road to the end of state maintenance and from Highway W to Highway B, from the Arkansas State line to US Highway 160 on US Highway 67 and from Business 67 to Highway M, Bridge replacement over Drainage Ditch No. 1 on Highway B, pavement resurfacing on Highway CC from Highway 51 to Highway 53, pavement resurfacing on Highway F from US Highway 160 to the end of state maintenance, pavement resurfacing on Highway JJ from US Highway 67 to the end of state maintenance, pavement resurfacing on Highway KK from Highway T to Highway W, pavement resurfacing on Highway N from Highway 51 near Qulin to Highway 51 near Fagus, rumblestripes along Highway M from County Road 462 to County Road 441, bridge rehabilitation over the St. Francis River on Highway U, .

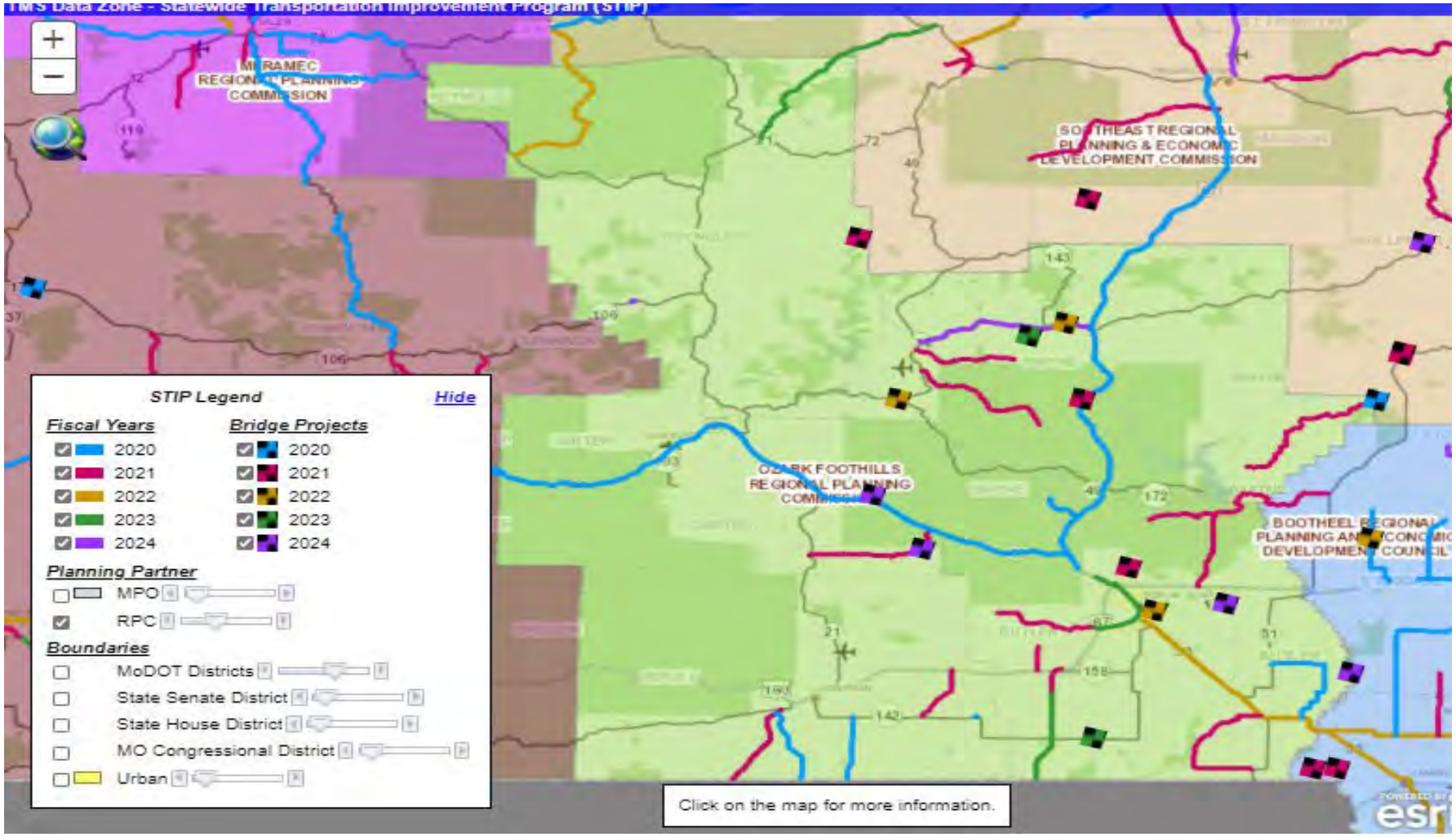
In Carter County, will also be completed on US Highway 60 Highway J to County Road 455, bridge replacement over Cane Creek on Highway A, pavement improvements from US Highway 21 to US Highway 60 on Highway B and bridge replacement over Ten Mile Creek on Highway B. In Reynolds County, guard rail installation from County Road 610 to 0.3 miles east of County Road 610 on Highway 106, along with bridge rehabilitation over the Black River on Highway K.

Projects in the 2020-2024 STIP for Ripley County include pavement improvements on Highway 21 from Highway 142 to the Arkansas State line, on Highway A from Highway 21 to the Arkansas State line, Highway E from Highway 142 to the end of state maintenance, and Highway T from US Highway 160 to Highway 142. A Bridge replacement on Highway 142 over the Little Black River is also scheduled.

Wayne County will see bridge improvements over Black River on Highway 34, over the St. Francis River on Highway 34, over Small Creek on Highway A, and over Lake Creek and Rings Creek on Highway FF. Additionally, pavement resurfacing will occur on Highway 49 from Highway 34 to US Highway 67, repairing slides at various locations on US Highway 67, pavement improvements on Highway B from Highway 34 to Highway U, pavement improvements on Highway V from Highway 34 to Highway A, and pavement resurfacing along Highway Z from Highway D near Wappapello to Highway P near Arab.

Image 3-1
Bridge over McGee Creek in Wayne County

Credit: Ozark Foothills Regional Planning Commission


MERAMEC REGIONAL PLANNING COMMISSION
SOUTHEAST REGIONAL PLANNING & ECONOMIC DEVELOPMENT COMMISSION
OZARK FOOTHILLS REGIONAL PLANNING COMMISSION
BOOTHEEL REGIONAL PLANNING AND ECONOMIC DEVELOPMENT COUNCIL
STIP Legend
Hide
Fiscal Years
2020
2021
2022
2023
2024
Bridge Projects
2020
2021
2022
2023
2024
Planning Partner
MPO
RPC
Boundaries
MoDOT Districts
State Senate District
State House District
MO Congressional District
Urban
Click on the map for more information.

Recent transportation corridor improvements are expected to improve the economy of the region. The first completed project was the upgrading to four-lane of US Highway 60 from Poplar Bluff to Willow Springs. With this section completed, US Highway 60 is now completely four-lane east to west across the southern end of Missouri. Secondly, US Highway 67 was upgraded to four-lanes from Fredericktown to Poplar Bluff. With this project now complete, Highway 67 is four-lanes from Poplar Bluff to St. Louis. The Missouri Department of Transportation is working with the Arkansas Department of Transportation to eventually complete the remaining two-lane sections of Highway 67 to four-lanes. Once this is completed, Highway 67 will be four-lanes from Little Rock, Arkansas to St. Louis.

Image 3-2
Highway 67 Ribbon Cutting in Greenville, MO in August 2011

Credit: Missouri Department of Transportation, Flickr

Other transportation corridor improvements that have been completed include Highway 34 between Piedmont and Highway 67, Highway 160 in Ripley County to Doniphan and Highway 21 to Ellington in Reynolds County. These three highways have had shoulders added, treacherous curves straightened, and lanes widened in sections. All three of these highways are vital transportation corridors in the Region. These routes connect the towns of Piedmont and Doniphan to Highway 67 and Ellington to Highway 60. Improvements to the roads provide safer commutes for residents and allow for economic growth through improved transportation access.

Traffic

According to MoDOT, "Annual Average Daily Traffic (AADT) measures the system usage for both primary and interstate systems." The AADT is found when the measure of the total volume of traffic on a highway segment for one-year is divided by the number of days in the year. To accurately assess and evaluate transportation needs in the region, it is vital that use of the roadway systems is examined.

Most roadways in the region are in the lowest category, ranging from 1 to 999 vehicles; however, the municipalities of Piedmont, Van Buren, and Doniphan and the northern and eastern areas surrounding Poplar Bluff all fall into the medium level category, meaning traffic volume in the areas range from 7,500 to 27,999 vehicles. The Micropolitan Area, Poplar Bluff, contains the only roadways in the region (US Highways 60 and 67) classified as high traffic volume with an AADT of 28,000 or greater. According to MoDOT, this segment of roadway is in the top 20 percent of busiest roadways in Missouri. A map of the region's AADT levels is shown on Map 3-4.

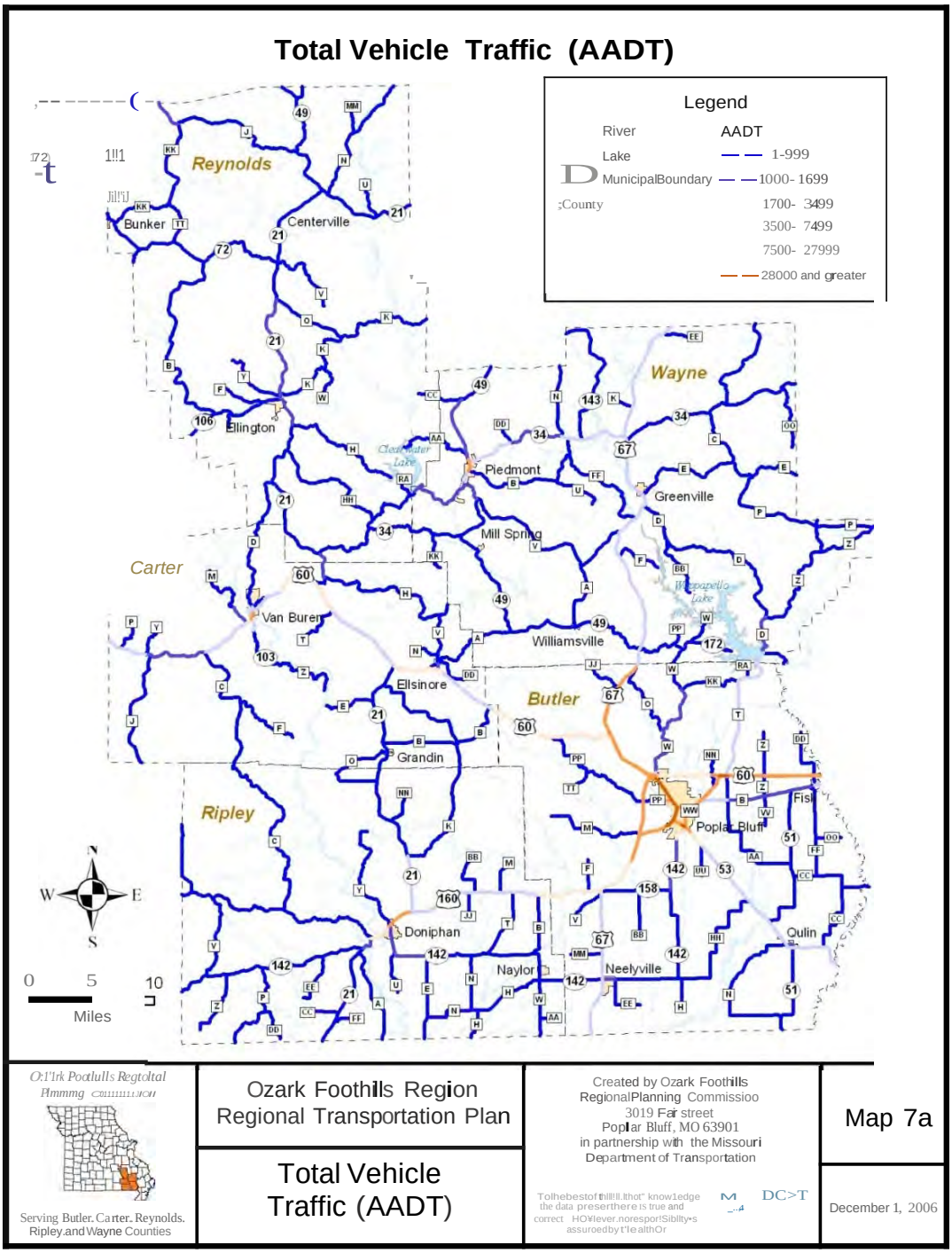
Another important factor when analyzing roadway use is truck volume. Truck volume is used to indicate movement of freight on the state roadway system. Similar to AADT, most of the

Ozark Foothills Region ranked as very low in truck volume. However, inside, northwest and northeast of Poplar Bluff are areas that fall into the medium categories of truck volume. The areas ranging from 1,000 to 2,999 in truck volume are inside and mostly northeast of Poplar Bluff. Truck volumes within the range of 3,000 to 7,999 are found mostly northwest of Poplar Bluff. There is no region in the high volume range with truck volume of 8,000 or greater. A second map (Map 3-5) depicts truck volumes in the Ozark Foothills Region.

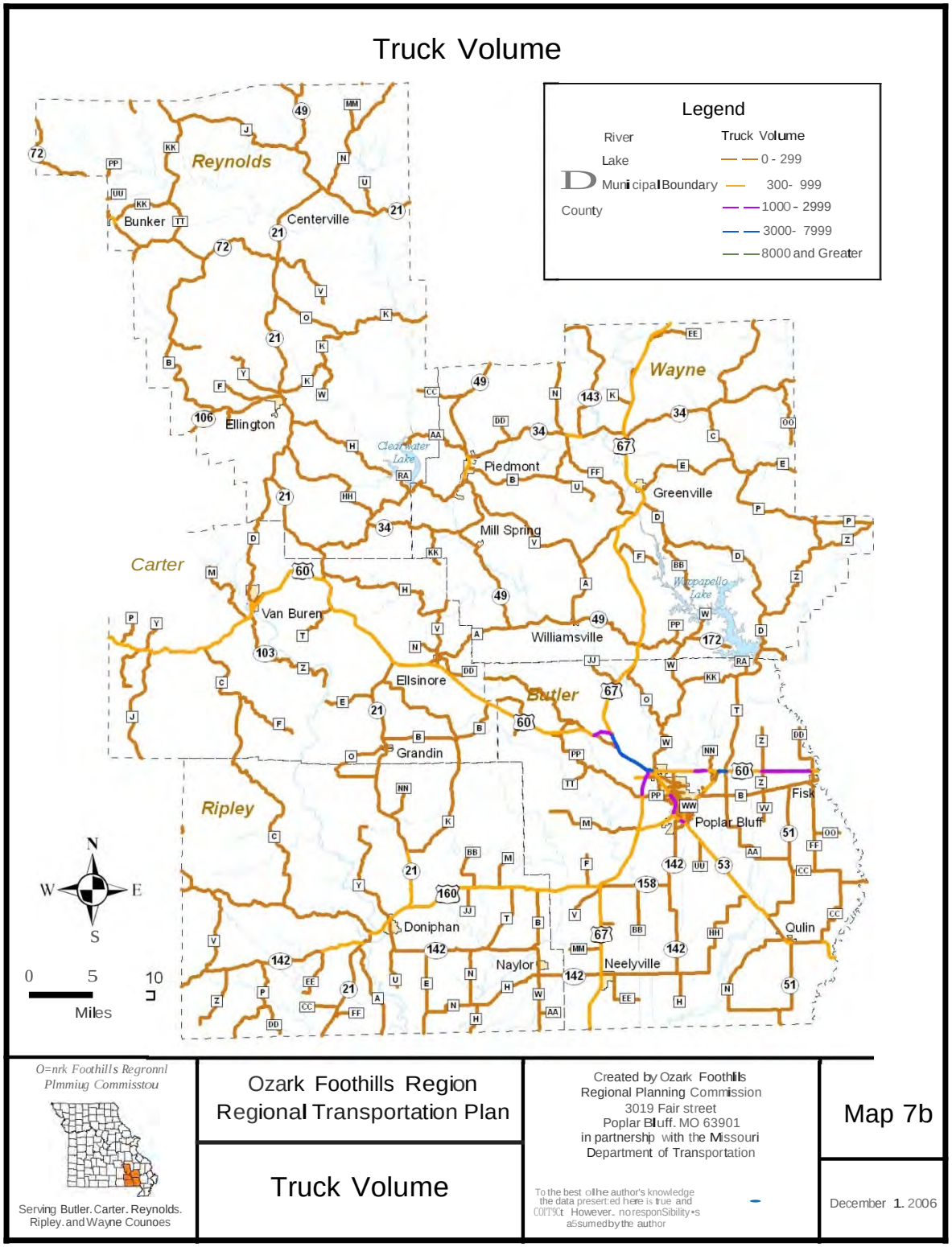
Image 3-3
Traffic Congestion

Credit: Missouri Department of Transportation, Flickr

Map 3-3


Total Vehicle Traffic (AADT)
Legend
River
Lake
MunicipalBoundary
County
AADT
1-999
1000- 1699
1700- 3499
3500- 7499
7500- 27999
28000 and greater
Reynolds
Bunker
Centerville
Ellington
Piedmont
Clearwater Lake
Wayne
Greenville
Mill Spring
Carter
Van Buren
Williamsville
Wappapello Lake
Ellsinore
Butler
Grandin
Ripley
Poplar Bluff
Doniphan
Naylor
Neelyville
Qulin
N
W
E
S
0 5 10
Miles
Ozark Foothills Regional Transportation Plan
Total Vehicle Traffic (AADT)
Created by Ozark Foothills Regional Planning Commission
3019 Fair street
Poplar Bluff, MO 63901
in partnership with the Missouri Department of Transportation
Map 7a
December 1, 2006
Serving Butler. Carter. Reynolds. Ripley. and Wayne Counties

Map 3-4


Truck Volume
Legend
River
Lake
Municipal Boundary
County
Truck Volume
0 - 299
300- 999
1000 - 2999
3000- 7999
8000 and Greater
Reynolds
Bunker
Centerville
Ellington
Clearwater Lake
Piedmont
Wayne
Greenville
Mill Spring
Wappapello Lake
Carter
Van Buren
Williamsville
Ellsinore
Butler
Grandin
Ripley
Fisk
Poplar Bluff
Doniphan
Naylor
Neelyville
Qulin
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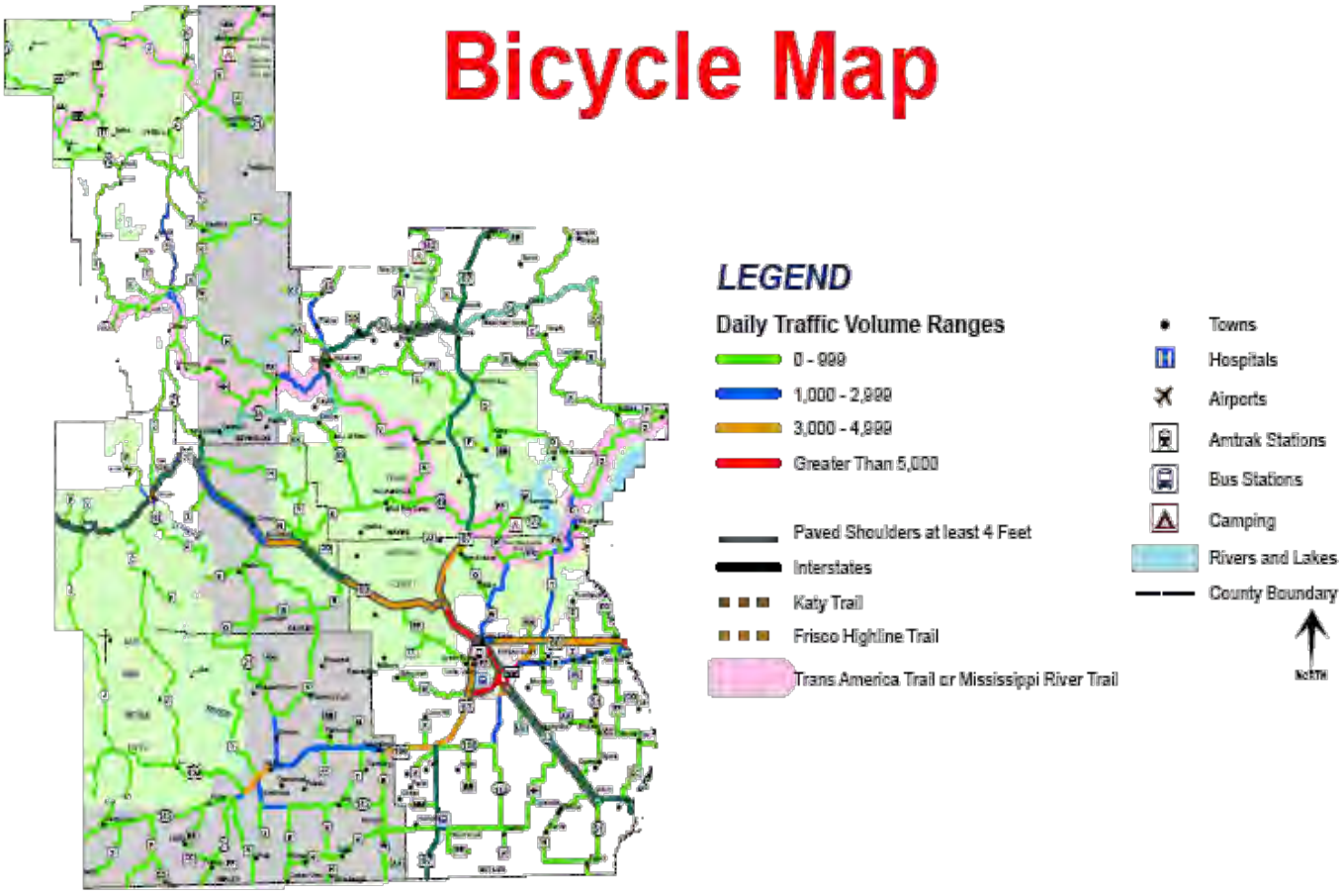
Miles
Ozarks Foothills Regional Planning Commission
Serving Butler, Carter, Reynolds, Ripley, and Wayne Counties
Ozark Foothills Region Regional Transportation Plan
Truck Volume
Created by Ozark Foothills Regional Planning Commission
3019 Fair street
Poplar Bluff, MO 63901
in partnership with the Missouri Department of Transportation
To the best of the author's knowledge the data presented here is true and correct. However, no responsibility is assumed by the author
Map 7b
December 1, 2006

Bikes and Pedestrians

As shown on the map below (Map 3-6), Leg Nine of the Transamerica Bicycling Trial runs through three counties of the Ozark Foothills Region—Wayne, Butler, and Reynolds. This trail runs the entire width of the United States from Astoria, Oregon to Yorktown, Virginia. The Transamerica Bicycling Trail, also known as the Bikecentennial Trail was created in 1976 to help bikers celebrate the United States' Bicentennial. The map also shows that many of the roadways within the region are safe for bicyclers due to the generally low level of daily traffic volume.

Map 3-5



Source: MoDOT, Bicycle Map Southeast Region

Also within the region are shared-use paths for pedestrians and cyclists. There are several recreational paths located in Sam A. Baker State Park in Wayne County (Map 3-7). The main shared-use path is 1.65 miles long and topped with asphalt. This path links two campgrounds, the visitor center, park store, and dining lodge. The path runs through the park's main public-use area and helps ensure safety and access to park facilities.

Map 3-6

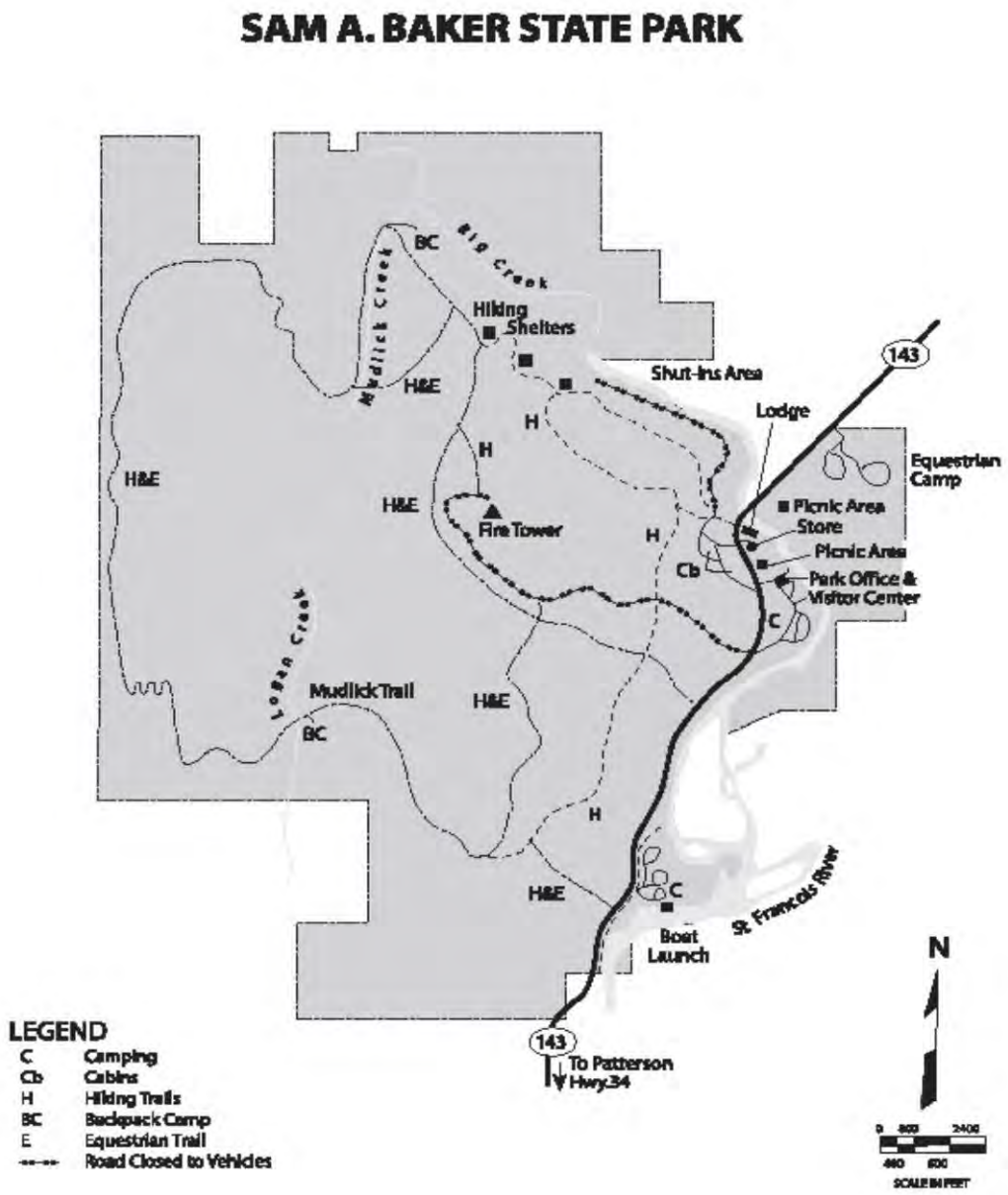


Image 3-4
Sam A. Baker State Park

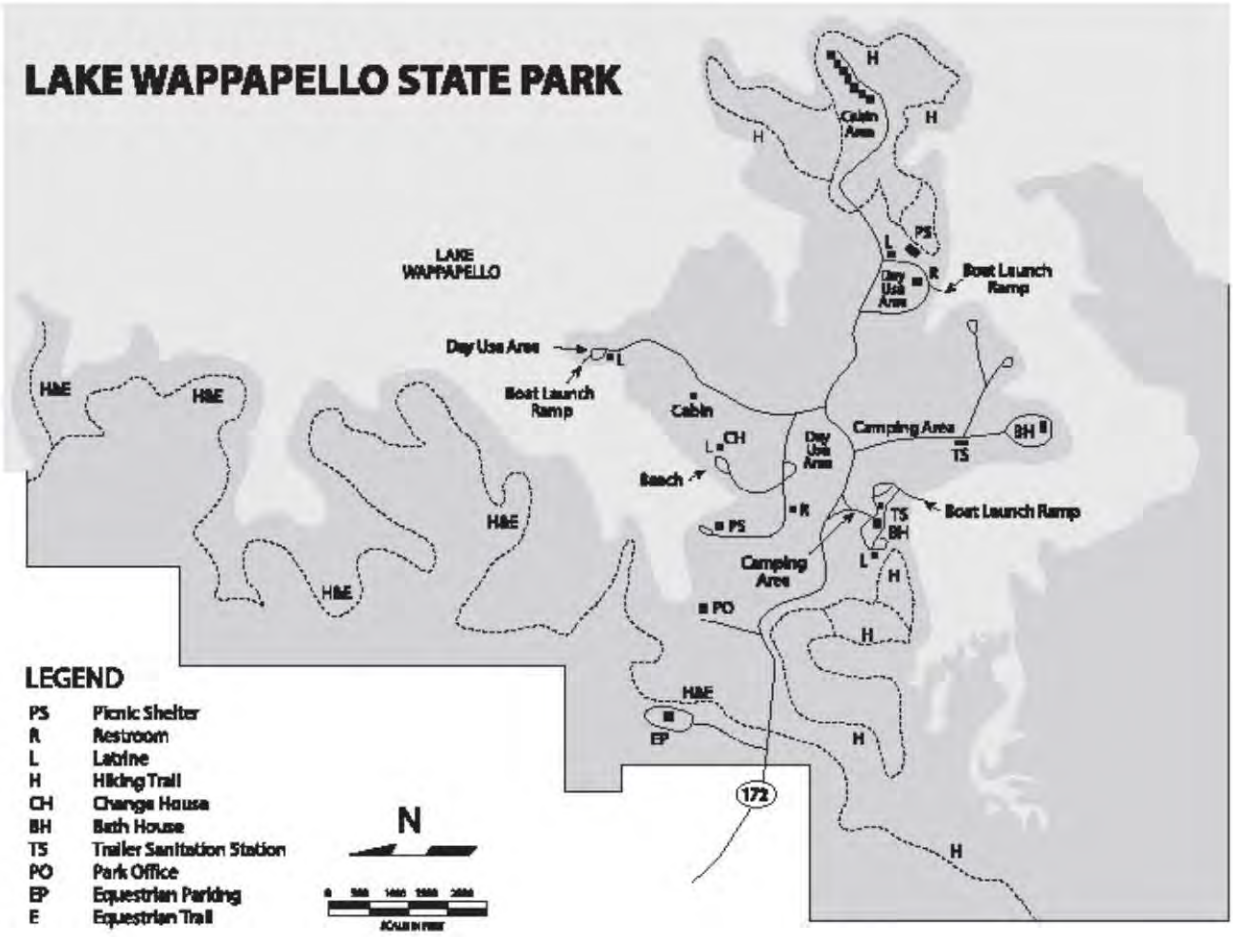
Credit: Mostateparks, Flickr

As identified on Map 3-6, there is one bicycle trail located in Reynolds County. This trail is near the Clearwater Lake area. The map also shows a recently added path in Wayne County. This new trail runs the entire length of the city limits of Piedmont, connecting the north and south ends of the town. The path runs along Main Street and provides safety and access to all parts of the town. Map 3-8 highlights the hiking trails and layout of Lake Wappapello State Park, which also resides in Wayne County. Additionally, a 2-mile trail connecting the City of Greenville with the Old Greenville Campgrounds was opened in 2014.

Image 3-5
Lake Wappapello State Park

Credit: Missouri Department of Natural Resources, Flickr

Map 3-7



There are three bike paths located in Butler County. Two of the paths are in Poplar Bluff. The other is located near Fisk. In 2000, a walkway was constructed alongside the new Current River Bridge in Carter County to provide safety to local pedestrians and tourists. The walkway was added because the old Current River bridge and walkway were torn down after the construction of a new bridge, which forced pedestrians to walk along US 60 to travel from the north side of Van Buren to the south side of Van Buren. Ozark National Scenic Riverways has several trails in the Big Spring area. In addition, the Ozark Trail runs through all five counties.

Many identified bike and pedestrian trails in the region can be seen on the "Regional Transportation Assets" map (Map 3-9).

Aviation

Image 3-6
Butler, Carter, Ripley, and Wayne County Airports

Credit: ofrpc.org

Carter, Wayne, Ripley, and Butler Counties are each home to one public-use airport. No airport facility is located within Reynolds County. The closest airport certified for carrier services is located approximately 65 miles from Poplar Bluff in Cape Girardeau, Missouri. All identified airports can be viewed in the map below (Map 3-9). Butler County has the largest

airport in the region with the Poplar Bluff Municipal Airport runway measuring 5,008 feet in length.

Image 3-7
Poplar Bluff Municipal Airport

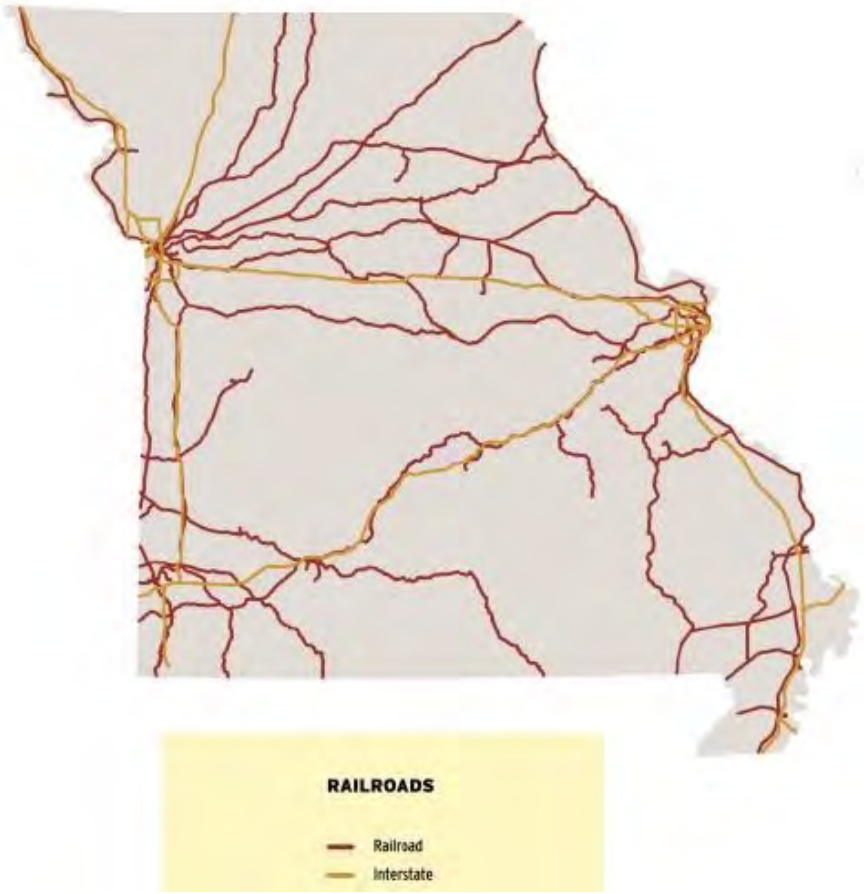
Credit: Missouri Department of Transportation, Flickr

Rail

Missouri is a rail-intensive state with the second and third largest rail hubs in the United States located in Kansas City and St. Louis, respectively. Missouri Also has the 10th largest rail system with over 4,822 miles of track that is owned and operated by 19 different railroad companies. Of the seven Class 1 railroads in the nation, six own tracks or have operating rights in Missouri. These are Burlington Northern Santa Fe Railway (BNSF), CSX Transportation (CSX),

Kansas City Southern Railway (KCS), Norfolk Southern Railway (NS), Soo Line Corporation (the U.S. operating arm of Canadian Pacific) and Union Pacific Railroad (UP).

Figure 3-1
Railroad Tracks



Source: Missouri's Long Range Transportation Plan

Butler County is the only county that houses a train station, which is located in Poplar Bluff. The station is used by the Union Pacific Railroad as a freight depot and as a crew changing point. Amtrak also uses the station for passenger stops and connects Poplar Bluff to cities such as Dallas, Little Rock, St. Louis, and Chicago. Recently a spur has been added in the industrial park for use by those manufacturers.

Figure 3-2
Passenger Rail Services

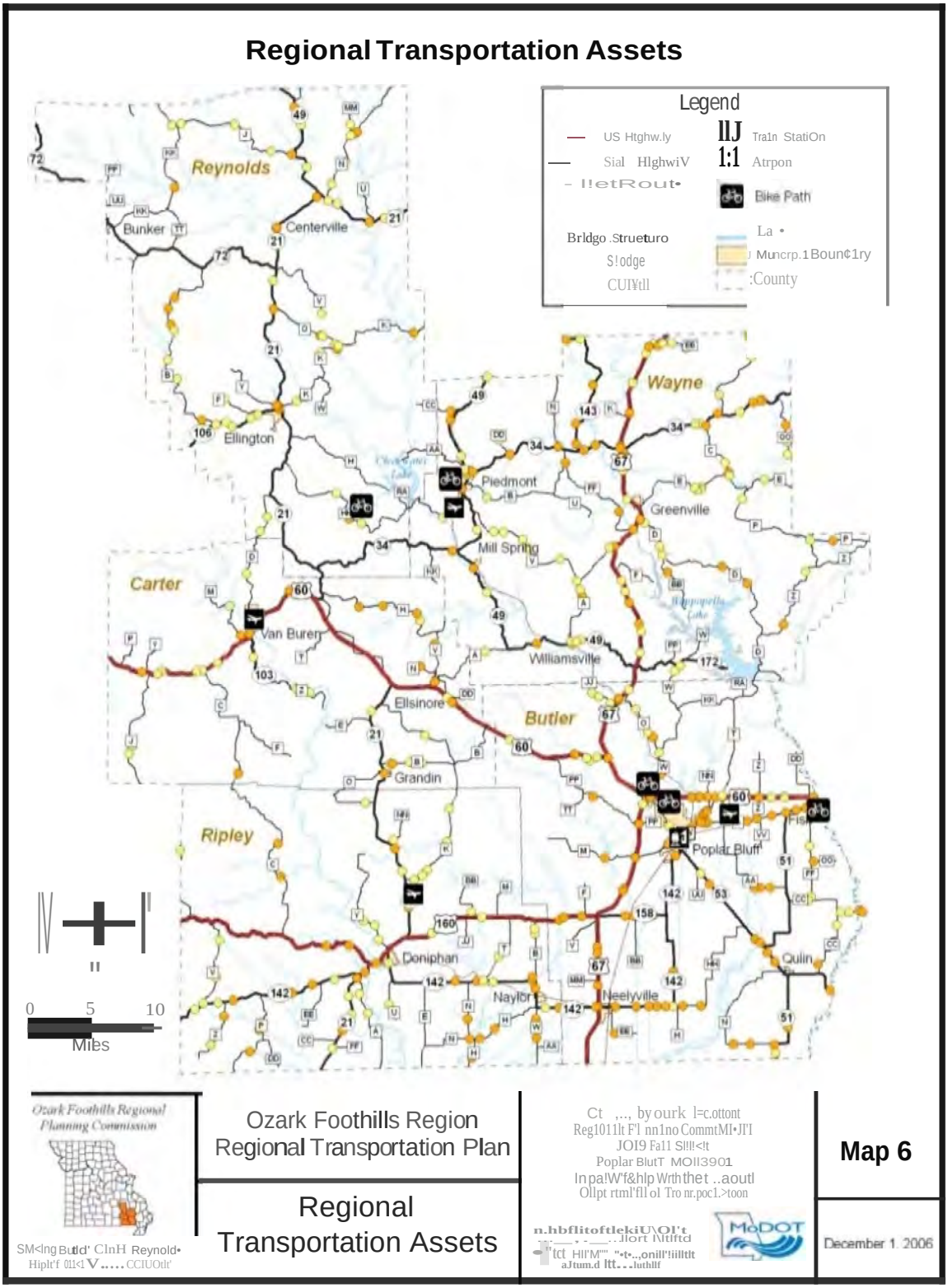
Source: Missouri's Long Range Transportation Plan

Over the past decade large amounts of restoration at the train depot has occurred, thanks in part to MoDOT Transportation Enhancement grants that have helped to complete a new roof and remodeling of the Grand Staircase constructed in 1910. The Class 1 railroad branches at Poplar Bluff. One branch travels north into Wayne County and passes through Piedmont, while the other branch heads east towards Fisk. Passenger Rail Services can be viewed in Figure 3-2. All railroads and Amtrak stations in the region can also be viewed on the map below (Map 3-9).

Image 3-8
Amtrak Train

Credit: Missouri Department of Transportation, Flickr

Map 3-8


Regional Transportation Assets
Legend
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CUI¥tll
Tra1n StatiOn
Atrpon
Bike Path
La •
Muncrp.1Boun¢1ry
:County
Reynolds
Bunker
Centerville
Ellington
Wayne
Piedmont
Greenville
Mill Spring
Carter
Van Buren
Williamsville
Ellsinore
Butler
Grandin
Ripley
Poplar Bluff
Doniphan
Naylor
Neelyville
Qulin
0 5 10
Miles
Ozark Foothills Regional Planning Commission
Ozark Foothills Region Regional Transportation Plan
Regional Transportation Assets
Map 6
December 1, 2006

Transit

Though public transportation systems in rural areas are usually sparse, there are 11 identified public transportation service providers present in the Ozark Foothills Region. The City of Poplar Bluff and Ripley County each run a public transportation system. Other providers, however, include associations such as the Adult Day Activity Personal Training (ADAPT), the Butler County Community Resource Council RSVP, the Manufacturers Assistance Group (MAG), and several sheltered workshops.

The Ozark Foothills Regional Planning Commission began preparing a coordinated Public Transit-Human Services Transportation Plan in June 2007. The plan was coordinated with participating organizations and the public and was approved by the Transportation Advisory Committee and the Ozark Foothills Regional Planning Commission in 2008. Updates to the plan began in June 2017 and were again approved by the Ozark Foothills Transportation Advisory Committee and the Ozark Foothills Regional Planning Commission in 2018. During the coordination and planning process, the Ozark Foothills Regional Planning Commission specifically invited eleven transit providers in the five- (5) county region to participate in the process: Ripley County Transit, Adult Day Activity Personal (ADAPT), Butler County RSVP, Current River Sheltered Workshop, Manufacturers Assistance Group, Reynolds County Sheltered Workshop, Inc., Ripley County Senior Service, Services for Extended Employment, the City of Poplar Bluff, Southeast Missouri Transportation Service, Inc., and Big Springs Sheltered Workshop, Inc.

Table 3-4 lists the transportation providers in the Ozark Foothills Region with descriptive information for each. Five providers, ADAPT, Big Spring Sheltered Workshop, Ripley County Senior Services, Ripley County Transit and Services for Extended Employment, are not listed because they did not complete and return an informative survey or because they fully contract

their services through one of the providers that is listed on the table.

Table 3-4
Transit Providers

Organization	Geographic Area Served	Type of Agency	Clientele Served	Type of Service	Days of Service	Hours of Service	Vehicles Used
Bluff Area Transit Service.	Poplar Bluff	Private non-Profit Transportation Provider	Elderly disabled and non-disabled, non-elderly disabled, low income, youth,	Fixed-route	M-Sat.	8:00 a.m. to 6:00 pm M-F 10:00 am to 4:00 p.m. Sat.	4- 20 passenger buses
Butler County Retired Senior Volunteer Program (RSVP)	Poplar Bluff	Private Non-Profit Human Services Agency	Elderly disabled and non-disabled	Fixed-route	M-F	8:00 a.m. to 4:00 p.m.	Volunteer
Current River Sheltered Workshop	Ripley County	Private Non-Profit Human Services Agency	Disabled	Fixed-route	T-F	6:30 a.m. to 8 a.m. and 4 p.m. to 5:30 p.m.	4-5 passenger vans
Manufacturers Assistance Group	Butler County	Private Non-Profit Human Services Agency	Elderly and non-elderly disabled	Fixed-route	M-Th	6:30 a.m. to 8:15 a.m. and 3:45 p.m. to 5:15	6 - 15 passenger vans and 3 - 20 passenger buses
Reynolds County Sheltered Workshop	Most of Reynolds County, small portion of NE Shannon County and SE Dent	Private Non-Profit Human Services Agency	Elderly and non-elderly disabled	Fixed-route	M-Th	7 a.m. to 3 p.m.	3- 15 passenger vans
Southeast Missouri Transport Service, Inc.	20 counties including Butler, Carter, Reynolds and Wayne Counties	Private Non-Profit Transportation Provider	Elderly disabled and non-disabled, non-elderly disabled, low income, youth, and general public	Fixed-route, demand-response, and route deviation	M-F	6 a.m. to 6 p.m.	4- 5 passenger vans, 9- 10 passenger vans, 2-32 passenger busses, and 1- 20 passenger bus

The Southeast Missouri Transportation System, Inc. (SMTS) is by far the largest transit operation in the region. SMTS runs a public transportation service, available to all residents regardless of age, in a 20-county region. Included in these 20 counties are Butler, Carter, Reynolds, and Wayne counties of the Ozark Foothills Region. SMTS offers local services to major cities within the region, such as Poplar Bluff, Piedmont, and Van Buren. According to SMTS, "The transportation is available for shopping, medical, nutrition, recreation, and personal business purposes."

Map 3-9
SMTS Service area

Credit: Southeast Missouri Transportation Service

Long distance medical services are also provided by SMTS. This service links rural residents with major medical facilities in three states. Transportation is offered to Missouri cities such as St. Louis, Cape Girardeau, and Springfield. Other optional destinations are Memphis, Tennessee and Paragould, Arkansas. Finally, SMTS also contracts with organizations to provide transportation for groups such as sheltered workshops, prisoner families, dialysis patients, and Medicaid recipients.

Image 3-9
SMTS Offices in Poplar Bluff, MO

Credit: Ozark Foothills Regional Planning Commission

Additionally, several entities in the Ozark Foothills Region provide transportation services specifically for their clients or employees. Public schools own busses or contract transportation services to move students from home to school and back, to, and from school-related activities. The federal Head Start program is a preschool program for children five (5) years and under from low-income families as well as disabled children. Head Start operated primarily by Community Action Agencies, transports children between their home and Head Start Centers using vans and small busses. Many churches also have their own church vans to transport parishioners to and from church, primarily on Wednesdays and Sundays. Some Senate Bill 40 boards, Sheltered Workshops, and other special needs facilities, including developmentally disabled group homes and nursing homes, operate vans to provide transportation to their workers and residents.

Riverways and Ports

Three major rivers run through the Ozark Foothills Region. Current River runs through Carter and Ripley Counties and the St. Francis River runs through Wayne County and forms the eastern border of Butler County, while the Black River travels through three counties in the region, including Reynolds, Wayne, and Butler Counties. None of these rivers is used for major transportation purposes.

In Shannon County, approximately 27 miles from Bunker in Reynolds County, is Akers Ferry. Located on the Current River, Akers Ferry is used for transportation services. It is the last ferry operating on the Ozark National Scenic Riverways and has been providing vehicle transportation across the Current River for around 65 years. It operates during the daylight hours and the charge is four dollars for ferry services.

There are no ports located within the region. However, there are three ports within 100 miles, all located on the Mississippi River. The closest port is New Madrid County Port, which is located about 70 miles from Poplar Bluff. It is accessible by barge, rail, or truck and is less than two miles from the New Madrid County Airport. Located a half mile off Interstate 55 just 175 miles south of St. Louis, Missouri and 110 miles north of Memphis, Tennessee, the excellent asphalt road exiting off I-55 is ideal for truck traffic. The well-lit general cargo dock located on the facility's harbor is available to all public and harbor tenants. . Located in the 4,200 acre St. Jude Industrial Park, the harbor is 1500 feet long with a 225 feet bottom width and a 9 feet river channel depth maintained by the Memphis District Corps of Engineers through yearly maintenance dredging.

The Southeast Missouri Regional Port Authority, commonly called the SEMO Port, is located in Scott City, Missouri, and is approximately 78 miles from Poplar Bluff. The SEMO

Port is on the Mississippi River, midway between St. Louis, MO and Memphis, TN. The 1800' slackwater harbor is located 48 miles upstream from Cairo, IL (Ohio River) and 147 miles downstream from St. Louis (Illinois River and Missouri River). The port offers barge access to the Gulf of Mexico ports and other ocean shipping services; same day truck services to St. Louis, Nashville, Memphis, and Kansas City; and next day truck services to Chicago, Atlanta, and Dallas. Land is available for lease to port-related industries, terminals, and distribution facilities. Team tracks are available for rail-truck transfer of cargo. Several companies operate terminals and provide cargo transfer between barge, rail, and truck.

Finally, the Pemiscot Port in Caruthersville, Missouri is located 100 miles from Poplar Bluff on State Highway 84 East in Pemiscot County and is also located on the Mississippi River. This port is within three miles from I-55 and is 60 miles from US Highway 60. It boasts transportation links to all surrounding cities such as St. Louis and Memphis. It is less than 25 miles from two airports and has access to the Burlington Northern-Santa Fe Railroad.

Image 3-10
Pemiscot Port

Credit: Missouri Department of Transportation, Flickr

Chapter 4 – Existing Transportation Management

Transportation Management Systems

Prior to 1991, MoDOT had begun development of several independent management systems, including pavement, bridge, safety, congestion, and traffic monitoring. MoDOT undertook a major effort to coordinate and automate these systems in 1991 and had actually begun development of these systems before the Intermodal Surface Transportation Efficiency Act (ISTEA) mandate. MoDOT realized the potential for the continuing benefits of these programs and they have continued to develop them since the ISTEA mandate was lifted.

TMS is MoDOT's Transportation Management Systems software that was first implemented in 1998. At that time, TMS consisted of four major business areas, which included Safety, Traffic, Bridge and Pavement.

Over the years, TMS has expanded to meet the needs of many business units and users. MoDOT continues to build applications and tools that assist the department and its partners with decision making. Most TMS applications/maps are available from the TMS Homepage: http://tms/home/. Many Metropolitan Planning Organization/Regional Planning Commission partners access TMS by using a virtual machine and logging into the MoDOT network.

TMS originated with business areas of Bridge, Pavement, Traffic and Safety but has expanded tremendously over the years.

Bridge Management System – this system includes:

- Inventory Management
- Media Loader

TMS is the single source for all bridge data in the department. The bridge part of the system includes National Bridge Inventory (NBI) data, inspection information, as well as media for that structure. Media could include things such as photographs, plans, correspondence, inspection reports, and other data related to a bridge.

MoDOT personnel inspect state maintained bridges and culverts and the majority of all of the locally owned (referred to as non-state) bridges and culverts. A small portion of non-state bridges and culverts are inspected by local agency staff or consultant engineers. All bridges and culverts that are part of the NBI are required to have a general inspection done on a two-year inspection cycle. In addition to the general inspection, some structures require fracture critical inspections, underwater inspections, or special inspections to look at specific items. Intervals for these other inspections vary depending on what is being looked at. Structures that are in "poor" or "serious" condition may have inspections done at more frequent intervals.

Bridge and culvert condition ratings have been supplied to the RPCs for the development of their Regional Transportation Plans (RTPs). This data is provided for the purpose of assisting the RPCs and MoDOT in identifying local needs and priorities for a region. These condition ratings are assessed by inspectors when the various types of inspections are done on a structure. These condition ratings basically describe the in-place condition of a structure. Ratings are assigned for the physical condition of the deck, superstructure and substructure components of a bridge and an overall rating is assigned for culvert structures.

The deck is the portion of the bridge that includes the riding surface. The superstructure is the girders and other span elements of the bridge that support the deck. These superstructure elements may be comprised of structural steel, concrete or timber, depending on the design of the bridge. The substructure is comprised of those elements of the structure that support the superstructure (girders, span elements, etc.). The substructure elements are the columns, footings and beam caps that the girders rest on. The deck, superstructure and substructure are rated independently; however, the lowest rating of the three is traditionally what is considered the overall rating for a structure. Culverts are typically buried structures built out of concrete or steel. An overall condition rating is assigned for a culvert and takes into account how all of the different

elements of the structure are functioning.

The following general condition ratings are used as a guide in evaluating the deck, superstructure, substructure and overall culvert.

Table
4-1
Bridge Evaluation Criteria
Ratings

Rating	Description
N	Not Applicable
9	Excellent Condition
8	Very Good Condition—some problems noted
7	Good Condition—some minor problems
6	Satisfactory Condition—structural elements show some minor deterioration
5	Fair Condition—all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour
4	Poor Condition—advanced section loss, deterioration, spalling, or scour
3	Serious Condition—loss of section, deterioration, spalling, or scour have seriously affected primary structural members. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
2	Critical Condition—advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.
1	"Imminent" Failure Condition—major deterioration or section loss present in critical structural members or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic until corrective action is completed.
0	Failed Condition—out of service—beyond corrective action

Traffic Management System

Traffic Data Acquisition System

Previously, traffic data was collected by a variety of methods. All traffic data reporting was done on the mainframe system. With the acquisition of Traffic Data Acquisition System (TRADAS), all traffic data is collected and processed uniformly. The traffic data collected includes such items as traffic volumes (both vehicular traffic and truck traffic), Level of Service (LOS) (congestion condition) and vehicle classifications. This data is used to understand traffic

patterns and identify locations of need. Inventories in the Traffic Management System include:

- Flasher Inventory
- Lighting Inventory
- Signal Inventory
- District Defined Types
- Highway Capacity Interface
- Site ID Maintenance
- Traffic Information Segment Maintenance
- Traffic Segment Hourly Volume

Congestion Management.

Traffic congestion and travel delay are among the most visible signs of transportation problems. Drivers experience congestion for the most part as a personal annoyance, although traffic congestion is a problem that wastes time, consumes energy resources and contributes to poorer air quality.

Traffic congestion in the urban area is typically confined to the morning and evening peak hours of travel. Delays from congestion occur on roadways with inadequate capacity or at specific locations such as interstate ramps and signalized intersections.

Congestion in the rural area can occur at any time when the roadway is unable to handle the traffic flow. This can be related to peak hours of travel, including work and holiday travel. It can also be because the typical two-lane roadway is restricted and traffic is unable to flow freely, often times because of incidents or slow moving vehicles.

Expanding the capacity of roadways is not the sole solution to congestion. The new roadways, bridges, and highways built to relieve congestion satisfy latent and shifted demand for travel. The use of alternate modes, land use regulation, access management, and improvements to intersections and traffic signals can all contribute to an overall program to manage traffic

congestion.

There are two major methods of gauging congestion: facility-based measures and travel time. The facility-based congestion method focuses on the road itself and usually is based on traffic volume and capacity comparisons. Such comparisons may include volume-to-capacity ratios and traffic volume per lane mile. The travel time method of measuring congestion indicates the same conclusion, however. These trip-based measures are tied to the individual traveler's congestion problems and oriented to the length of the trip. Average travel time to work is an example of one such measure.

A number of indicators may be used to gauge and manage congestion. These are divided into four categories.

1. Facility-based measures:

   Average vehicle speed in peak hour

   Ratio between peak volume & nominal capacity (V/C)

   Total vehicle hours of delay

   Proportion of daily travel by speed or V/C range

   Frequency and duration of incidents

   Average daily traffic (ADT) per freeway lane

2. Personal travel effects:

   Proportion of personal travel by speed range

   Delay added to average person's trips by time of day, travel purpose

   Delay added to average person's trip by place of residence

   Delay to transit vehicles

   Number of crashes due to congestion

3. Effects on the economy:

Delay added to average commuter trip by place of work

Percentage of truck travel by speed or V/C range

Vehicle hours of delay to trucks/delivery vehicles

Truck scheduling costs attributable to travel time uncertainty

Market perceptions of congestion as an influence on economic activity

4. Environmental impacts:

Extra vehicle emissions due to stop-and-go conditions

Extra gas consumption due to stop-and-go conditions

LOS is defined as conditions within a traffic stream as perceived by the users of a traffic facility. MoDOT's Transportation Management System provides LOS information in the Traffic Segment Browser. In practice, LOS has been defined by measures of effectiveness for each facility type, relating more to speed, delay and density than to qualitative factors or safety. LOS is rated A, representing the best operating condition, to F, representing the worst. The following describes LOS according to the Highway Capacity Manual.

LOS A describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at the boundary intersections is minimal. The travel speed exceeds 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.

LOS B describes reasonably unimpeded operations. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the boundary intersections is not significant. The travel speed is between 67% and 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.

LOS C describes stable operation. The ability to maneuver and change lanes at midsegment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may

contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed, and the volume-to-capacity ratio is greater than 1.0.

LOS D indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.

LOS E is characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.

LOS F is characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed or the volume-to-capacity ratio is greater than 1.0.

Transportation Demand Management (TDM)

This is a strategic response to roadway capacity deficiencies that involves the construction of new or expanded roadways. TDM actions are calculated to reduce vehicle demand by increasing vehicle capacity or providing an alternate mode. While new construction is the most direct and effective practice to eliminate congestion, this approach may not offer a complete solution. A variety of strategies is available to reduce congestion and may include methods to increase vehicle occupancy and promote alternative modes of transportation. Approaches may include:

a. Ridesharing programs, local and regional.

b. Transportation management associations which coordinate opportunities and incentives for shared travel, usually through employers or business associations.

c. Cash-out parking subsidies which allow employees to convert employer paid parking subsidies to transit subsidies or cash.

d. Restricted availability and/or increased parking cost for single occupancy vehicles.

e. Mixed use development of walking, cycling and transit alternatives.

f. Transportation enhancements projects such as improved bicycle paths and pedestrian facilities to improve choices available to commuters.

g. Staggered/flexible work hours to more evenly distribute the number of commuters.

h. Telecommuting and home-based businesses.

i. Electronic commerce that allows personal and business transactions electronically without physically making a trip.

Signalized Intersection Management

Signalized intersections may be necessary to allow the safe movement of vehicles through intersecting roadways. However, there is a physical limit to the number of through movements and turning movements that can be safely accommodated by a signalized intersection. When the demand for any movement at the intersection exceeds the available capacity, congestion and delays ensue, reducing the average travel speed and increasing the travel time. Roundabouts can also be constructed to facilitate the safe movement of vehicles through intersecting roadways. In some cases, roundabouts can accommodate traffic volume and movements more efficiently than traffic signals.

Safety Management System

Traffic crashes are entered into TMS by staff at the Missouri State Highway Patrol (MSHP). The crashes in the database date back to 1985, and crash images date back to 1997. MSHP enters fatal crashes into the database within 10 days of the crash. Crash data is utilized to identify where crashes occur and includes other information such as type of crash, contributing circumstances and

severity of the crash. Applications in this system include:

- Crash Summary
- Crash Browser
- Intersection Expected Crash Values
- Statewide Average Crash Rates

Travelway Safety Features – this includes inventories for:

- Guardcable
- Rumblestrips
- Concrete Barrier
- Guardrail
- Soundwall
- Emergency Reference Markers
- Curfews
- Points of Interest
- Controlled Routes

Travelways Management System

The travelways management system includes applications to manage the following data:

- Asset Management (Functional class, speed limit, access category, federal system class, etc.)
- Travelway Overlapping Browser
- Location Referencing System (Travelway Selection)
- Travelway Lane Inventory

Functional Classification and Access Management

Functional classification (FC) is the process by which streets and highways are grouped into

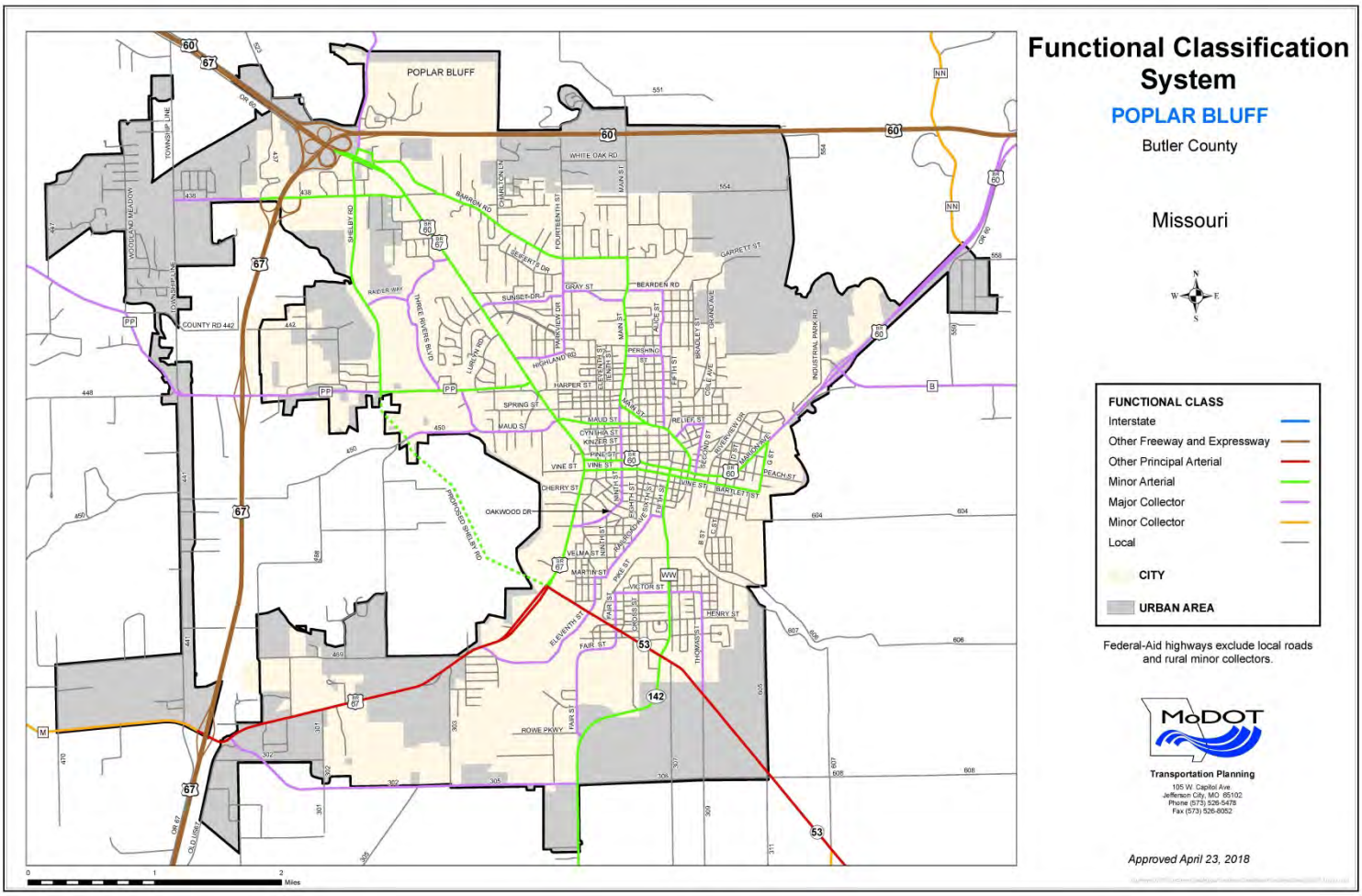
classes or systems according to the character of service they provide. FC defines the nature of this process by defining the part that any particular road or street should play in serving the flow of trips through a highway network.

Federal legislation requires the FC of roadways to determine the funding eligibility of transportation projects.

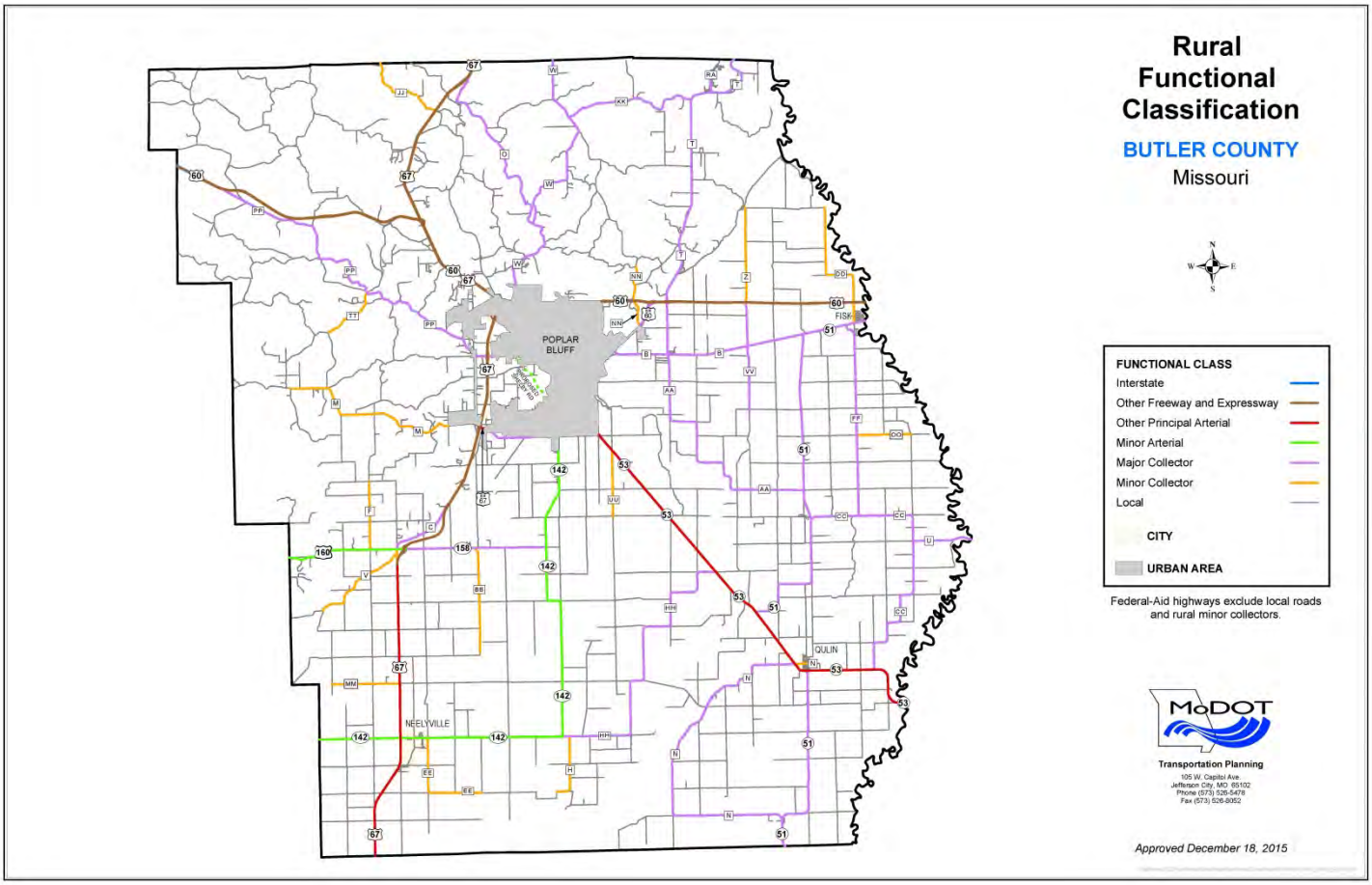
Urban and rural areas have fundamentally different characteristics as to density and land use, density of street and highway networks, nature of travel patterns and the way in which all of these elements are related in the definitions of the highway classifications.

Functional classification maps for the City of Poplar Bluff and Butler, Carter, Reynolds, Ripley, and Wayne Counties can be seen on Maps 4-1 to 4-6 respectively.

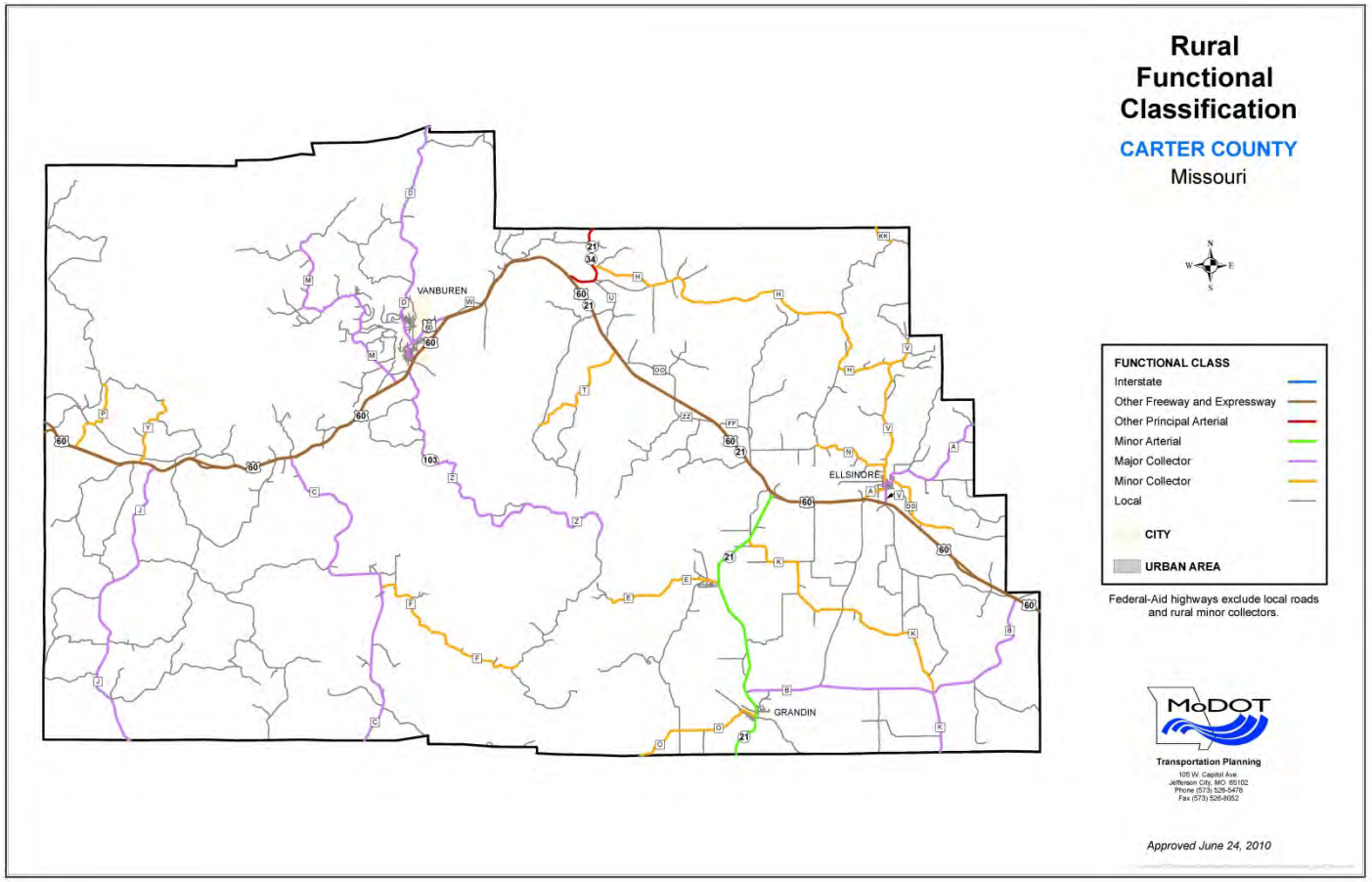
Map 4-1
Functional Classification Map for Poplar Bluff, Missouri



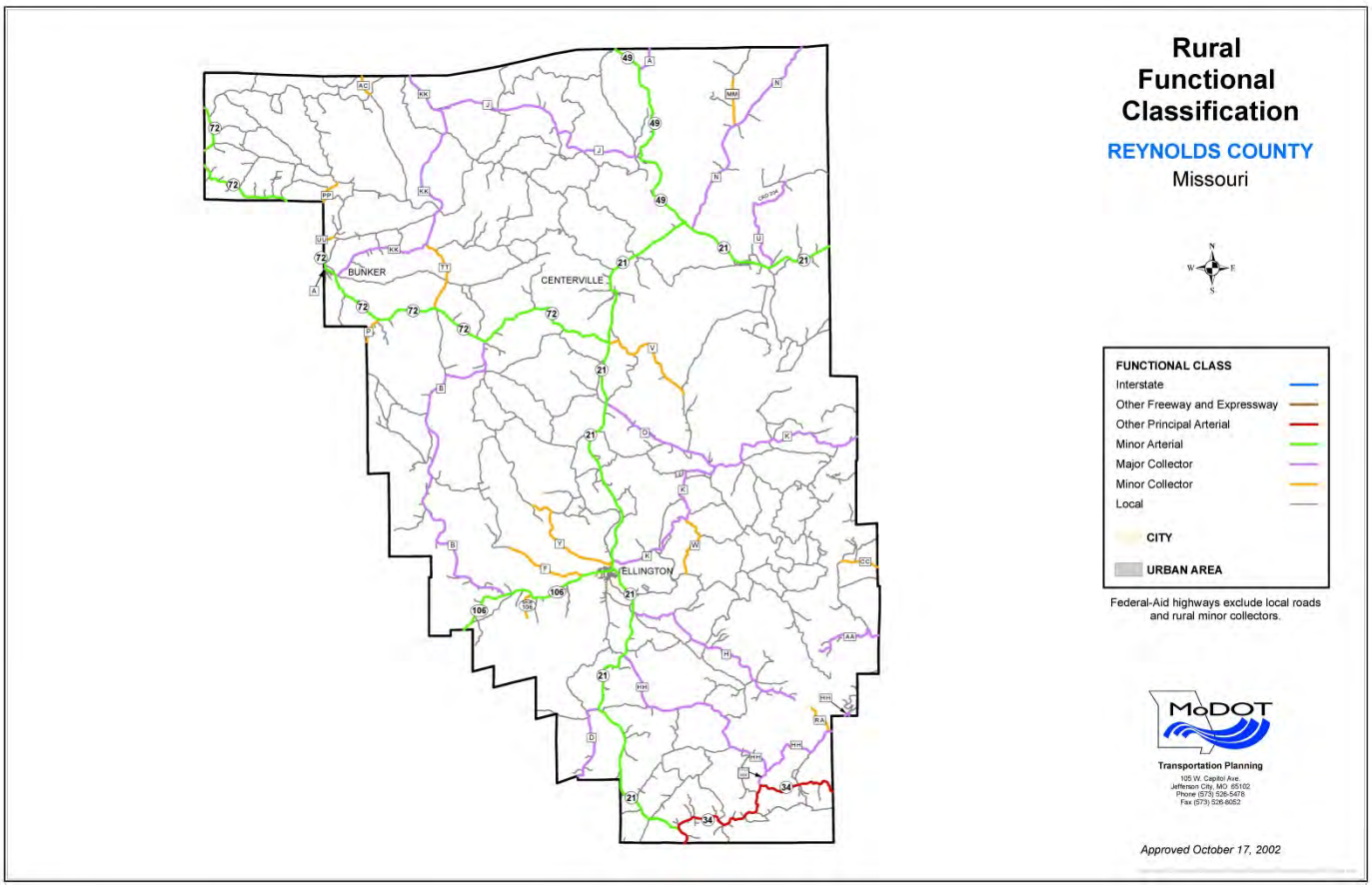
Map 4-2
Functional Classification Map for Butler County



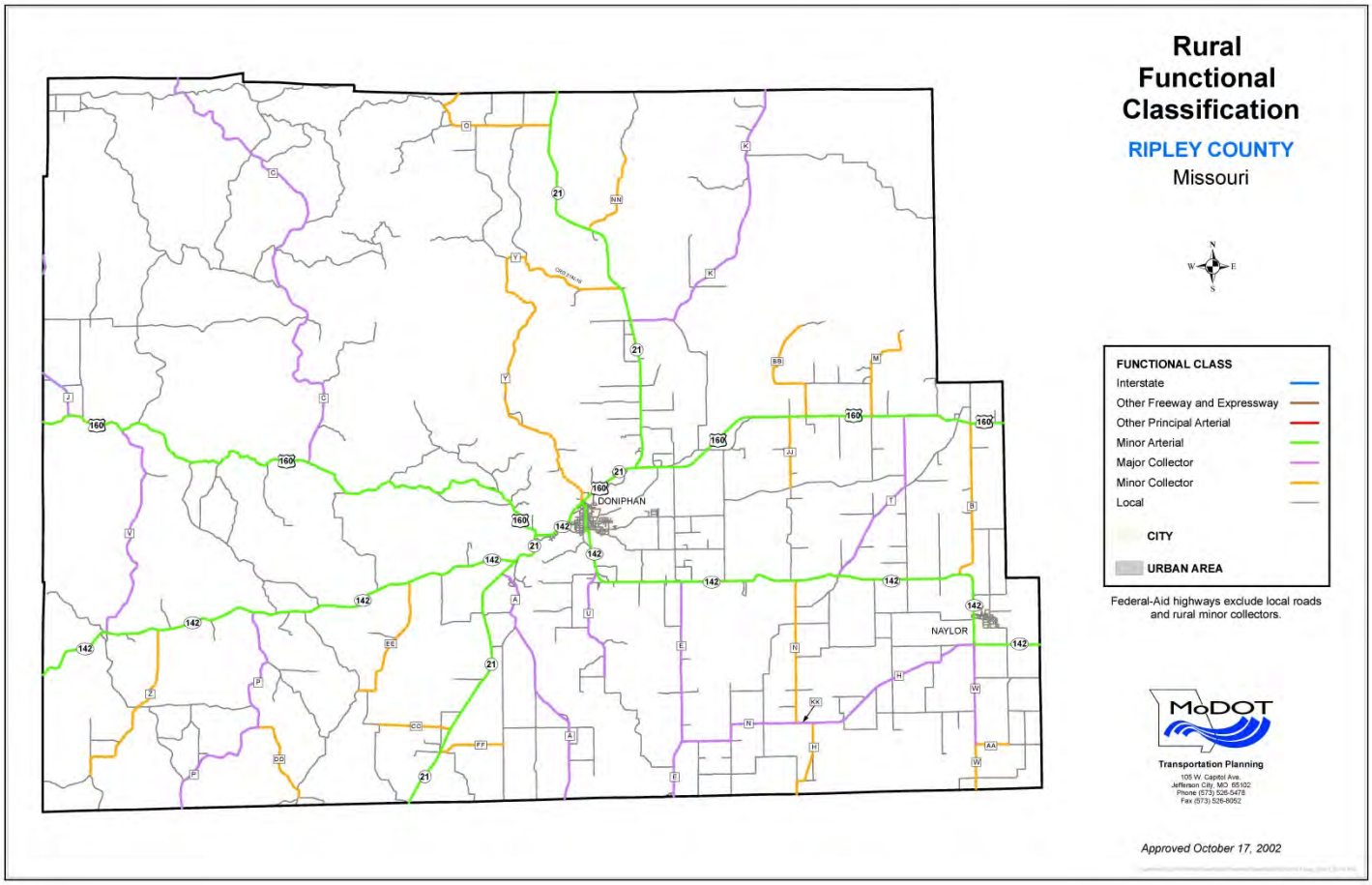
Map 4-3
Functional Classification Map for Carter County



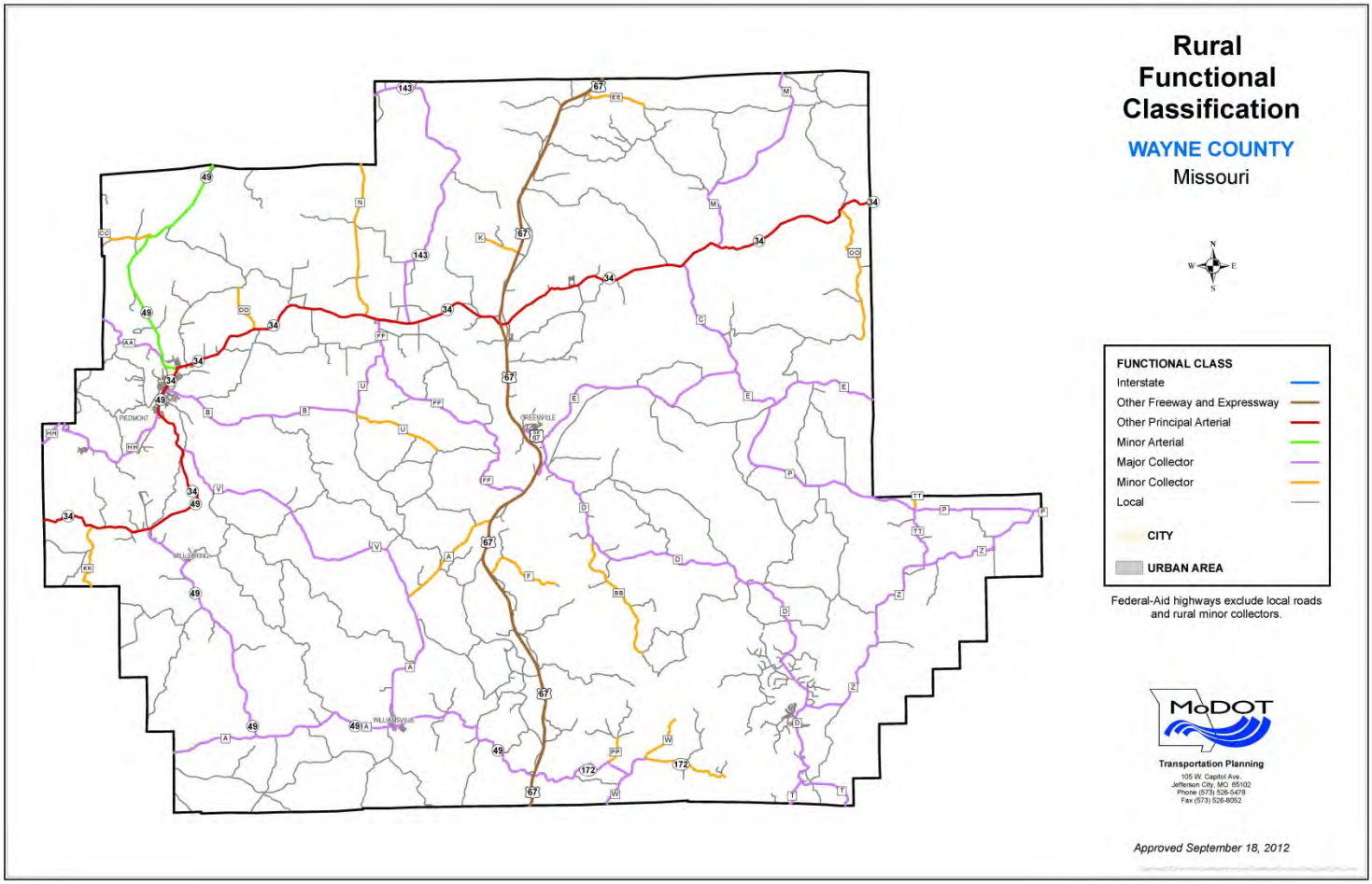
Map 4-4
Functional Classification Map for Reynolds County



Map 4-5
Functional Classification Map for Ripley County



Map 4-6
Functional Classification Map for Wayne County



Area Definitions

Small Urban—Areas designated by the Bureau of the Census having a population of 5,000 (5,000 to 49,999).

Urbanized—Designated as such by the Bureau of the Census with a population of 50,000 or more.

Rural—Comprise the areas outside the boundaries of small urban and urbanized.

There are three principal roadway classifications: arterial, collector and local roads. All highways and streets are grouped into one of these classes, depending on the character of the traffic and the degree of land access they allow.

The following information was taken from FHWA's website at https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/section03.cfm.

To assist transportation planners responsible for determining the FC of roadways, the charts below offer a helpful tool that can make the classification process of classifying "borderline" roadways a bit easier. **Table 4-2** illustrates the range of lane width, shoulder width, AADTs, divided/undivided status, access control and access points per mile by FC categories.

Table 4-2: VMT and Mileage Guidelines by Functional Classifications - Arterials

	Arterials			
	Interstate	**Other Freeways & Expressway**	**Other Principal Arterial**	**Minor Arterial**
Typical Characteristics				
Lane Width	12 feet	11 - 12 feet	11 - 12 feet	10 feet - 12 feet
Inside Shoulder Width	4 feet - 12 feet	0 feet - 6 feet	0 feet	0 feet
Outside Shoulder Width	10 feet - 12 feet	8 feet - 12 feet	8 feet - 12 feet	4 feet - 8 feet

AADT[1] (Rural)	12,000 - 34,000	4,000 - 18,500[2]	2,000 - 8,500[2]	1,500 - 6,000
AADT[1] (Urban)	35,000 - 129,000	13,000 - 55,000[2]	7,000 - 27,000[2]	3,000 - 14,000
Divided/Undivided	Divided	Undivided/Divided	Undivided/Divided	Undivided
Access	Fully Controlled	Partially/Fully Controlled	Partially/Uncontrolled	Uncontrolled
Mileage/VMT Extent (Percentage Ranges)[1]				
Rural System				
Mileage Extent for Rural States[2]	1% - 3%	0% - 2%	2% - 6%	2% - 6%
Mileage Extent for Urban States	1% - 2%	0% - 2%	2% - 5%	3% - 7%
Mileage Extent for All States	1% - 2%	0% - 2%	2% - 6%	3% - 7%
VMT Extent for Rural States[2]	18% - 38%	0% - 7%	15% - 31%	9% - 20%
VMT Extent for Urban States	18% - 34%	0% - 8%	12% - 29%	12% - 19%
VMT Extent for All States	20% - 38%	0% - 8%	14% - 30%	11% - 20%
Urban System				
Mileage Extent for Rural States[2]	1% - 3%	0% - 2%	4% - 9%	7% - 14%
Mileage Extent for Urban States	1% - 2%	0% - 2%	4% - 5%	7% - 12%
Mileage Extent for All States	1% - 3%	0% - 2%	4% - 5%	7% - 14%
VMT Extent for Rural States[2]	17% - 31%	0% - 12%	16% - 33%	14% - 27%
VMT Extent for Urban States	17% - 30%	3% - 18%	17% - 29%	15% - 22%
VMT Extent for All States	17% - 31%	0% - 17%	16% - 31%	14% - 25%

Qualitative Description (Urban)	• Serve major activity centers, highest traffic volume corridors, and longest trip demands • Carry high proportion of total urban travel on minimum of mileage • Interconnect and provide continuity for major rural corridors to accommodate trips entering and leaving urban area and movements through the urban area • Serve demand for intra-area travel between the central business district and outlying residential areas	• Interconnect with and augment the principal arterials • Serve trips of moderate length at a somewhat lower level of travel mobility than principal arterials • Distribute traffic to smaller geographic areas than those served by principal arterials • Provide more land access than principal arterials without penetrating identifiable neighborhoods • Provide urban connections for rural collectors
Qualitative Description (Rural)	• Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel • Serve all or nearly all urbanized areas and a large majority of urban clusters areas with 25,000 and over population • Provide an integrated network of continuous routes without stub connections (dead ends)	• Link cities and larger towns (and other major destinations such as resorts capable of attracting travel over long distances) and form an integrated network providing interstate and inter-county service • Spaced at intervals, consistent with population density, so that all developed areas within the State are within a reasonable distance of an arterial roadway • Provide service to corridors with trip lengths and travel density greater than those served by rural collectors and local roads and with relatively high travel speeds and minimum interference to through movement

1- Ranges in this table are derived from 2011 HPMS data.

2- For this table, Rural States are defined as those with a maximum of 75 percent of their population in urban centers.

Table 4-3: VMT and Mileage Guidelines by Functional Classifications - Collectors and Locals

	Collectors		**Local**
	Major Collector[2]	**Minor Collector[2]**	

Typical Characteristics			
Lane Width	10 feet - 12 feet	10 - 11 feet	8 feet - 10 feet
Inside Shoulder Width	0 feet	0 feet	0 feet
Outside Shoulder Width	1 feet - 6 feet	1 feet - 4 feet	0 feet - 2 feet
AADT[1] (Rural)	300 - 2,600	150 - 1,110	15 - 400
AADT[1] (Urban)	1,100 - 6,300[2]		80 - 700
Divided/Undivided	Undivided	Undivided	Undivided
Access	Uncontrolled	Uncontrolled	Uncontrolled
Mileage/VMT Extent (Percentage Ranges)[1]			
Rural System			
Mileage Extent for Rural States[3]	8% - 19%	3% - 15%	62% - 74%
Mileage Extent for Urban States	10% - 17%	5% - 13%	66% - 74%
Mileage Extent for All States	9% - 19%	4% - 15%	64% - 75%
VMT Extent for Rural States[3]	10% - 23%	1% - 8%	8% - 23%
VMT Extent for Urban States	12% - 24%	3% - 10%	7% - 20%
VMT Extent for All States	12% - 23%	2% - 9%	8% - 23%
Urban System			
Mileage Extent for Rural States[3]	3% - 16%	3% - 16%[2]	62% - 74%
Mileage Extent for Urban States	7% - 13%	7% - 13%[2]	67% - 76%
Mileage Extent for All States	7% - 15%	7% - 15%[2]	63% - 75%
VMT Extent for Rural States[3]	2% - 13%	2% - 12%[2]	9% - 25%

VMT Extent for Urban States	7% - 13%	7% - 13%[2]	6% - 24%
VMT Extent for All States	5% - 13%	5% - 13%[2]	6% - 25%
Qualitative Description (Urban)	• Serve both land access and traffic circulation in higher density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often for significant distances • Distribute and channel trips between local streets and arterials, usually over a distance of greater than three-quarters of a mile	• Serve both land access and traffic circulation in lower density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often only for a short distance • Distribute and channel trips between local streets and arterials, usually over a distance of less than three-quarters of a mile	• Provide direct access to adjacent land • Provide access to higher systems • Carry no through traffic movement
Qualitative Description (Rural)	• 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 of equivalent intra-county importance such as consolidated schools, shipping points, county parks, important mining and agricultural areas • Link these places with nearby larger towns and cities or with arterial routes • Serve the most important intra-county travel	• Be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within reasonable distance of a minor collector • Provide service to smaller communities not served by a higher class facility • Link locally important traffic generators with their rural hinterlands	• Serve primarily to provide access to adjacent land • Provide service to travel over short distances as compared to higher classification categories • Constitute the mileage not classified

	corridors		as part of the arterial and collectors systems

1- Ranges in this table are derived from 2011 HPMS data.

2- Information for Urban Major and Minor Collectors is approximate, based on a small number of States reporting.

3- For this table, Rural States are defined as those with a maximum of 75 percent of their population in urban centers.

Pavement Management System

Currently, MoDOT's emphasis is on keeping good roads in good condition and doing their best with the resources available. Because resources are scarce and MoDOT desires to provide the best service possible to the most customers, roadways are stratified into three tiers: Major Roads, Minor Roads and Low Volume Roads. Major Roads account for almost 80% of the Vehicle Miles Traveled (VMT) on state-owned roadways. Minor Roads are other routes that are not Major but have an AADT greater than 400. Low Volume routes are all other routes with an AADT less than 400. MoDOT track's performance on these routes by category. Our resulting measures are "Good" and "Not Good". They are calculated as follows:

- Major Roads speed limit > 45 Good: IRI < 100
- Major Roads speed limit < 50 Good: Condition_Index >=7 (visual surface distress rating)
- Minor Roads Good: IRI < 140
- Minor Roads Good: IRI between 140 and 170 and Condition_Index >=6
- Low Volume Good: IRI < 170
- Low Volume Good: IRI between 170 and 220 and Condition_Index >=6

In the state of the system tables, this measurement has been calculated, and the results are maintained in the column *Tracker Condition* with the values of “Good”, “Not Good” and “NA” or null.

Additional Business Areas with TMS include the following:

Outdoor Advertising – this system includes:

- Adopt A Highway
- Outdoor Advertising ◦Billboard
- Junkyard
- Transfer Permit
- Media for billboards and junkyards

Routine Maintenance

- Travelway Routine Maintenance is an application containing job numbers for routes and bridges throughout the state. This application enables Routine Maintenance job numbers from the Financial Management System (FMS) to be tied to a location in TMS.

Intelligent Transportation System

SIMS (five-year Statewide Transportation Improvement Program)

Realty Asset/RW Parcel Acquisition

State of the System (yearly summarized roadway, bridge, crash and pavement data)

Traffic Permitting for Right-of-Way – this application tracks the status of permits issued for conducting work on MoDOT right-of-way.

Striping Inventory

Traveler Information System

These applications are used to keep information current on MoDOT’s Traveler Information Map. The Traveler Information Map is essential to the safety of Missouri’s traveling public.

Traffic Impact

- Work Zone
- Winter Road Conditions
- Flood Condition
- OSOW Restrictions
- Traveler Information Map (TIM) Auto Editor

  This application is used to choose and update layers which will display on the TIM. This application is used only by MoDOT Communications staff.

- TIM Alert Management

  This application will assist users in changing the alert message for the desktop TIM and the mobile TIM apps for iOS/Android mobile phones. The desktop web application only allows one message to be displayed in the upper left corner of the map. The mobile apps allow multiple messages and will display them in a list for the user. This application is used only by MoDOT Communications staff.

The following is a list of newer applications in TMS:

Stormwater

- This application helps MoDOT regulate under a National Pollutant Discharge Elimination System storm water permit. The permit requires MoDOT to develop and implement a comprehensive program to prevent pollution of surface waters resulting from storm water run-off from MODOT's system.

Local Program Application (LPA) Locations

- The LPA is used to manage jobs located on our city streets and county roads. There is a federal mandate to assign locations to these local projects.

Emergency Operations Map

- This map is for internal use only should a natural disaster occur. It tracks the status of MoDOT roads and bridges during and after a disaster.

TMS Data Zone

This is an internal web page containing maps and other tools that allow MoDOT customers to easily retrieve data and statistics. It contains data in the following areas: Traffic, Safety, Planning, Bridge, Design, Map-21, Construction and Multimodal. The Data Zone also houses the Pavement Tool which is used for planning pavement maintenance activities and surface treatments. The intent is to eventually open this tool to the public. For detailed information regarding MoDOT business and engineering policy, visit the Engineering Policy Guide at http://epg.modot.org/index.php?title=Main_Page.

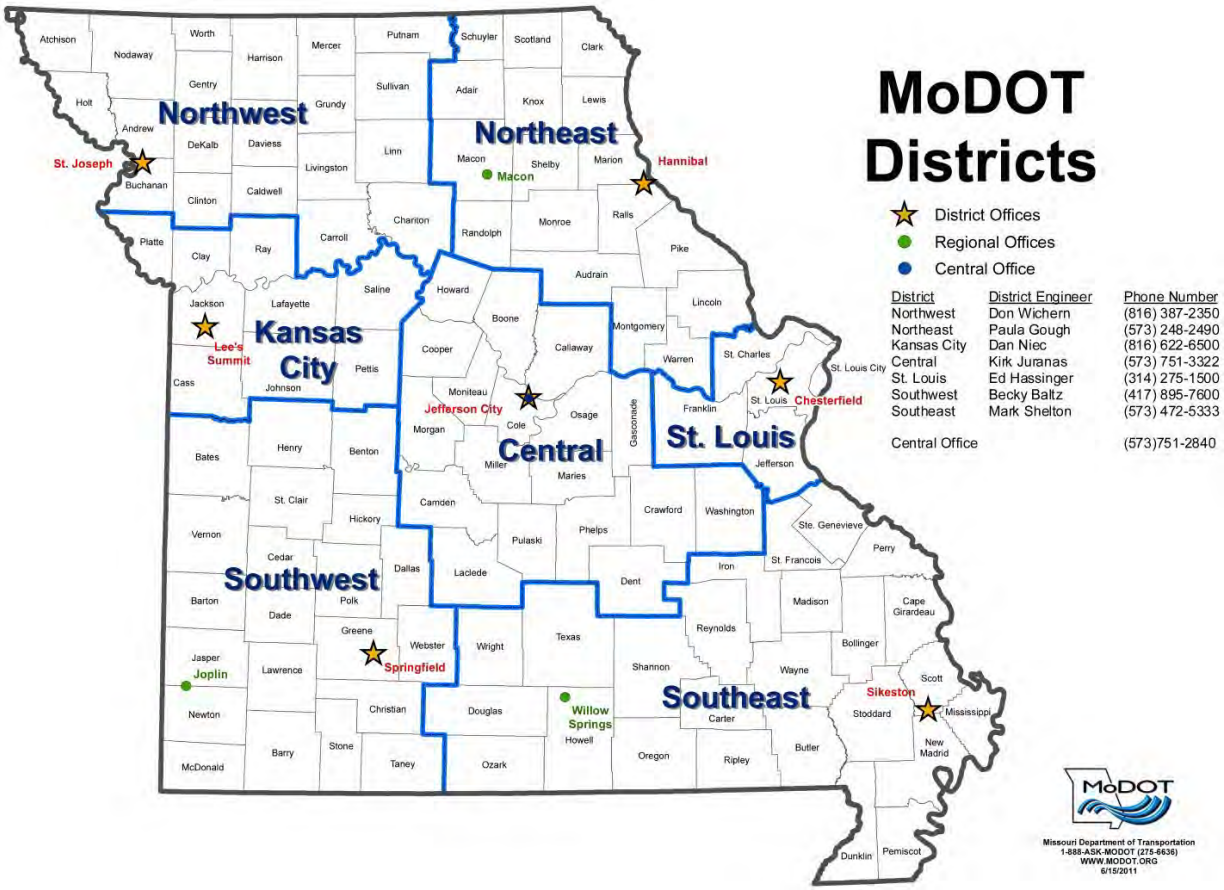
Existing Transportation Management

One regional Transportation Development District exists in the Ozark Foothills Region in the City of Poplar Bluff in Butler County. The regional TDD replaced two smaller TDDs (the Cripple Creek Transportation Development District near State Route PP and the Poplar Bluff Conference Center Transportation Development District located in Poplar Bluff, near Route WW). The new regional TDD places a 1% sales tax the entire length of the Highway 67 Business corridor in Poplar Bluff and will fund a variety of projects including a signalized intersection, grading, drainage, pavement, curb, gutter, sidewalk, storm water facilities, structures, signing, striping, lighting, landscaping, etc. The purpose of this TDD is to expand areas of Poplar Bluff that are currently underdeveloped. Stage One projects included a new grand entrance into Three Rivers College and development on Oak Grove Road, while later projects will include the expansion of Shelby Road to Highway 53.

Most local transportation management in the region is overseen by the OFTAC in partnership with the OFRPC. Together, these organizations evaluate and prioritize the needs in the region. On December 19, 1991, President George Bush signed the Intermodal Surface Transportation Efficiency Act (ISTEA). With this federal legislation came new responsibilities for transportation planning to include public, private, and governmental input at a grassroots level. The Missouri Highway and Transportation Committee stated their intention to work with the regional planning commissions to fulfill the requirement of the new legislation. From March 1992 to August 1994, staff worked toward a final agreement with the Missouri Association of Councils of Governments (MACOG) to assist with this public planning process.

The Ozark Foothills Regional Planning Commission formed the Ozark Foothills Transportation Advisory Committee in Fiscal Year 1995 with the help of the Missouri Department of Transportation and MoDOT's two District Engineers who oversaw the region. Until July 2011, the Ozark Foothills region was split with two counties belonging in MoDOT District 10 and three counties in District 9. After restructuring, the entire region now belongs in the Southeast District. Membership on the TAC covers the five county region and includes five members from each county that act as representatives from the business, industrial, educational, financial, health care, and government fields.

Map 4-7
MoDOT District Map



Chapter 5 – *Needs Identification*

MoDOT requires that each RPC host a minimum of four TAC meetings per year. These meetings may vary in content, but all prioritized project lists must be submitted to the local district office in August each year. Beyond this responsibility, the TAC forum is used for public education. Guest speakers are useful in expanding the knowledge base of the OFTAC concerning engineering, legislation, safety, funding, and a host of other topics.

The goal of any transportation plan is the efficient and safe movement of goods, services, and people from one place to another. This needs to occur with minimal impact to communities and the environment. With such limited resources for addressing needs, the region must strive to spend each and every dollar wisely—and to do that, must use information and data—not just emotion—to make those recommendations and decisions. That kind of information may vary from region to region, and this Regional Transportation Plan allows for and actually encourages that variation and flexibility. Even different people looking at the same data may draw different conclusions, all of which can benefit the decision process.

Without the public's input and ideas, state and local planners cannot have a true understanding of a community's needs. The goal of the OFRPC is to have significant and ongoing public involvement in the transportation planning process. A period for public comment is provided for the updates and major amendments to all of the primary transportation planning projects. One of the main goals of the planning framework is to ensure that the general public and local officials actively participate in the process. MoDOT has been able to achieve this with its MPO and RPC planning partners.

To identify the transportation problems and needs within a region, public input is imperative. It is important to consider public input from several sources during the needs

identification process. The Ozark Foothills Transportation Advisory Committee (OFTAC) is a committee comprised of local elected officials (mayors and presiding commissioners), local business owners, and citizens from an assortment of communities within the Ozark Foothills Region. The OFTAC's primary tasks are to identify, evaluate, and prioritize transportation needs within the region. Voting members of the Ozark Foothills TAC are expected to perform the following functions:

1) **Actively attend and participate at OFTAC meetings.**

Each county has five voting members and if any members are missing, that county is at a disadvantage. The OFTAC makes recommendations on many issues that affect transportation in the region. When one county is not fully represented, then the transportation needs for that county may not be fairly and adequately represented.

2) **Understand the scope of work to be accomplished by the OFTAC and the Ozark Foothills Regional Planning Commission.**

Each year, the Ozark Foothills RPC signs a contract with MoDOT to provide certain services and deliverables. The OFTAC plays a critical role in fulfilling those obligations. Each OFTAC Member needs to know what the scope of work for each year entails and what the OFTAC's role will be for each year.

3) **Understand the planning framework process and how the OFTAC's involvement is incorporated into the process.**

It is important for OFTAC members to understand the overall planning process, to know how their input is used and how it is combined with other input and information for a final recommendation to the Missouri Highways and Transportation Commission.

4) **Provide input on transportation needs in their county and its communities.**

The best resources for determining transportation needs in a community are the people who live in that community. OFTAC representatives will be called upon to present those needs to the OFTAC and MoDOT for discussion. Although MoDOT and the OFRPC receive some input from the public on particular needs, it does not reflect the entire picture of needs in the region. OFTAC members must be able to provide additional information to insure that all needs are identified and incorporated into the planning process.

5) **Disseminate information to communities and residents.**

OFTAC members attend meetings quarterly. At these meetings, community representatives and MoDOT personnel discuss all aspects of transportation across the region. It is important that this information be shared with the public. Equally important is the support of the OFTAC for MoDOT activities essential to the success of the department.

6) **Prioritize transportation needs for the region.**

At least once a year, each MoDOT district asks for the needs of the area in a prioritized listing. The OFTAC plays a key role in how the needs are prioritized. OFTAC members are also accountable to their communities in how the needs of the area are represented. At times, MoDOT may call upon the OFTAC to prioritize projects for a certain pool of funds or grant activity. OFTAC members should be present to adequately represent the priorities of their communities and region.

7) **Prioritize projects for the region.**

High priority needs move forward in the Planning Framework process. These needs are evaluated by MoDOT to find the best solutions based on engineering, public input and financial

considerations. Design plans are started and the need then becomes a project. Projects must then be prioritized to determine how they fall into the Statewide Transportation Improvement Program (STIP). Again, OFTAC members are tasked with providing MoDOT a prioritized listing of projects in the region. Additionally, OFTAC members are accountable to their communities for how projects are included in the STIP.

8) **Provide ideas to the OFRPC staff on ways to improve the planning process and OFTAC meetings.**

It is important for the OFTAC to provide staff with feedback on ways to improve OFTAC meetings. Each meeting usually includes an education component, and members can assist by letting staff know what information would be useful. It is also helpful to staff if OFTAC members suggest ways to improve any processes used.

The committee members' primary task is to represent local opinions about transportation conditions, needs, and priorities. Different opinions arise from the different interpretations of problems and consequences created by social constructs. People or groups of people will perceive and interpret a problem and consequence differently and will each be affected by the problem and consequence differently. Therefore, a variety of needs is identified with varying priority levels. Consequently, a systematic way of identifying and prioritizing needs is vital to transportation planning within the Ozark Foothills Region.

Based on information gathered during OFTAC meetings, through discussion with local officials, citizen surveys, accident reports, an examination of regional demographic, economic, and other transportation-related data, and a review of needs previously identified by

MoDOT staff, a list of transportation needs within the region is compiled. The OFTAC and local officials annually review and update the list and determine which situations are accurately being

identified as needs or problems. Knowing the costs of transportation improvements are also vital and can be viewed in the below table (5-1).

Table 5-1
Typical Costs for Transportation Improvements (2013 dollars*)

Type of Improvement/Component	Cost
Thin pavement sealing	$20,000 / mile
Thin minor road resurfacing	$50,000 / mile
Thin major road resurfacing	$300,000 / mile
Thin interstate resurfacing	$325,000 / mile
New two-lane road	$1.8 million / mile
New four-lane road	$5 million / mile
New shared four-lane	$2.2 million / mile
New sidewalk	$100 – $200 / foot
Small bridge replacement	$700,000
Bridge deck replacement	$300,000
Major river bridge replacement	$50 – $100 million
Light rail	$60 – $90 million / mile
Streetcar	$50 million / mile
Construct guard cable	$100,000 / mile
New interchange	$10 million
Bus rapid transit	$35 million / route
Large transit bus	$300,000
Rural transit bus	$100,000
Railroad lights and gates	$250,000
Add narrow shoulder to minor road	$150,000 – $200,000 / mile
Pave a county gravel road	$300,000 / mile

** The amounts represent upfront costs only and do not include ongoing operating and maintenance costs*

Identified needs are defined as situations within the transportation system that result in less efficient, impaired, or hazardous travel or transport conditions. Specific guidelines could include bridges rated as being in poor or serious condition, roadways that experienced reduced

AADT or unacceptable volume levels due to worsened roadway conditions, or mandated projects, such as the required widening of shoulders on particular roadways per MoDOT. The list of needs is continuously considered by the OFTAC throughout the year to maintain accuracy.

After needs have been identified, each need is assessed to see which of the following two "need categories" it falls into: (1) physical system condition needs or (2) functional needs. According to MoDOT, physical system condition needs "target the state of repair of road and bridge components," while functional needs "target how well the transportation system is operating."

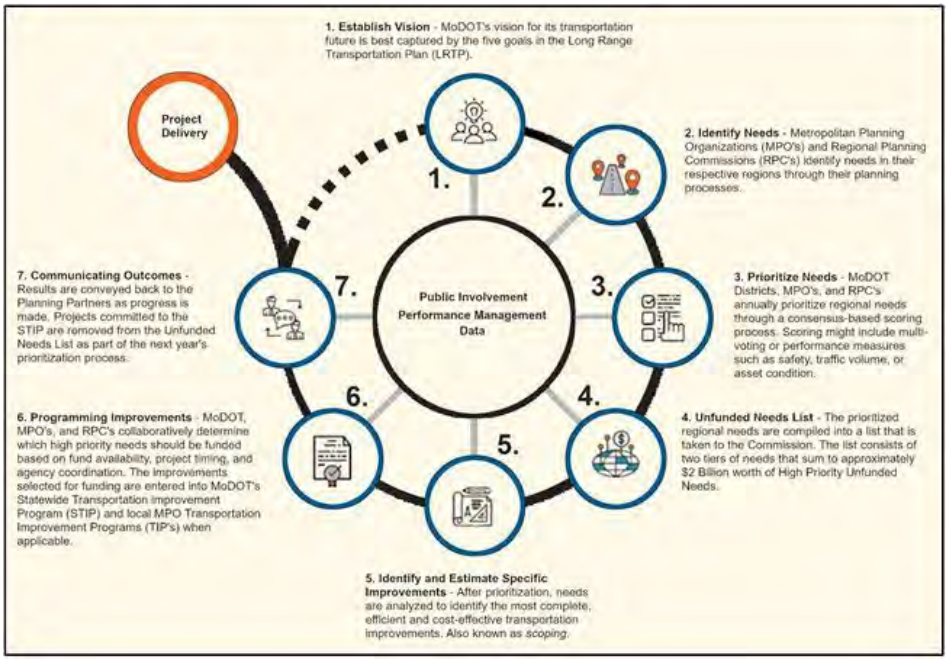
From the list of identified needs, a prioritized list is created, determining which needs should be addressed first. This is a very important, but difficult process. Needs are not only evaluated in three major subject areas (safety, maintenance, or economic development), but according to predicted project completion times, as well.

A bridge in serious condition, for example, may be a more immediate need than other projects, but is not necessarily a high priority because the bridge may no longer be needed and is able to be closed. Another less immediate project, such as a road resurfacing, however, may be considered a high priority because the particular road carries a heavy traffic volume.

Needs are prioritized by the OFTAC based on the goals set by MoDOT's LRTP, MoDOT's Southeast District, and the goals and objectives previously mentioned that were created and approved by the OFTAC. After needs are prioritized, the list is approved by local elected officials and submitted to the applicable MoDOT district. Needs are divided into three category levels as stated by MoDOT. It is important to note that placing a project on a prioritized list is not a commitment for design or construction.

High priorities are addressed first, and resources are typically directed toward these projects. The high priority list is fiscally limited to approximately 10 years, and it is from this list that the first projects are selected for preliminary design and engineering. Medium priorities are addressed, as additional resources are made available. Low priority projects are “not in-progress” and no work is being done to address the need.

Figure 5-1



Source: Missouri Department of Transportation, Missouri’s Planning Framework for Transportation Decision

According to MoDOT, the prioritization processes have been developed to address roadway and bridge funding categories and do not address projects from all modes of transportation. There is, however, some flexibility within regions to consider other projects, such as multimodal projects. In 2014, the OFTAC began prioritizing a multi-modal list with rail,

aviation, and bicycle/pedestrian projects included with the normal prioritization process. Funds designated for multimodal projects are appropriated for specific projects. Examples include Transportation Alternative grants for a variety of projects incorporating the former Safe Routes to School and Transportation Enhancement programs to improve biking and walking conditions.

The Planning Process

The OFTAC prioritized and approved an updated list of all priority transportation project needs and maintenance needs, as well as multimodal needs, for the Ozark Foothills Region during the OFTAC Meeting on September 24, 2020. Additionally, the OFTAC had prioritized projects throughout 2014 for the Constitutional Amendment 7 ballot initiative that would have placed a ¾-cent sales tax statewide to fund transportation projects for the next ten years. MoDOT's construction budget has been plummeting due to a diminishing revenue stream that is generated by fuel taxes, and because of bond repayments that funded over $2 billion worth of transportation infrastructure improvements between 2005-2010. Constitutional Amendment 7 was on the August 2014 ballot and would have generated $540 million per year over the next decade. It failed by a 60-40 margin. The table below lists the top 30 projects as prioritized by the general public and the OFTAC leading to creation of the Constitutional Amendment 7 project list.

Table 5-2
OFTAC Project list for CA7

Project Description	County
1. Eliminate one-lane bridges between Naylor and Doniphan	Ripley
2. Replace Hwy F bridge	Reynolds
3. Hwy 67 South four lane to state line	Butler
3. Route N; Widen and eliminate one lane bridge	Carter
5. Hwy 49 repair bridge over McKenzie Creek	Wayne
6. Hwy 49 and A straighten and widen from Highways 67 and 60	Wayne
7. I-57 to I-24 at Paducah (US 60) Cairo - Bridge	Butler
8. Hwy B add shoulders, rumble strips and repave	Reynolds
9. Hwy 49 corridor widen and straighten throughout county	Wayne
10. Hwy 49 add shoulders, rumble strips and repave	Reynolds
11. Route A; Eliminate narrow bridge at Ellsinore	Carter
12. Remove dead hazardous trees from lettered routes	Carter
12. Improve VB Airport road	Carter
12. Straighten "S" curve on St. Hwy K	Ripley
12. Widen Road and entrance south Ind. Park HH Hwy	Wayne
16. Extend airport runway	Butler
16. Three Lane Township Line Rd from Oak Grove to 67	Butler
18. Improve US 60 to Interstate Standards PB to I-57	Butler
18. Sidewalks and Ramps	Carter
18. Build new Helipad at each end of County	Carter
18. Sidewalk construction and rehab in Williamsville	Wayne
18. Repair sidewalks in Greenville	Wayne
23. New Port @ confluence of Mississippi and Ohio Rivers	Butler
23. Fence and gate at VB Airport	Carter
23. Caution Light at Hwy 60 and A Hwy and V Hwy	Carter
26. Increase transit hours, routes, stops in town and rural areas	Butler
26. Modify Highway PP to township line (Forest Service)	Butler
26. Extension of Industrial Park to Hwy 53/Bypass from east of PB to South Industrial Park	Butler
26. Hwy 21 Overlay from Centerville to Ellington	Reynolds
26. Pedestrian bridge across RR trestle at Williamsville	Wayne

At the September 2020 meeting, each county formulated their top three “project needs” priorities, their top three “maintenance needs” priorities, as well as their top three “multi-modal needs” priorities. During the meeting, a consensus was obtained regarding the top needs for the

counties in the district. The tables below (Tables 5-3, 5-4, and 5-5) show these priorities in alphabetical order by county.

Table 5-3
Identified Project Needs in Ozark Foothills Region for 2020

Area	Priority
Butler	**1. 4-lane Highway 67 from Highway 160 to the state line** **2. Route T: 2 foot asphalt shoulders from Butler County line to Highway 60** **3. Route M 2 miles west of Route 67 – Add Shoulders and level hill or reroute County Road 459/M Highway Junction and straighten Twin Springs Hill**
Carter	**1. Overlay and add shoulders to D Highway** **2. Route A: Eliminate narrow bridge in Ellsinore** **3. Route N: Widen and eliminate one-lane bridge over Middle Brushy Creek**
Reynolds	**1. Highway K: Ellington to Annapolis, add shoulders** **2. Add bike lane for TransAmerica Bike Trail on Highway 76 Bike Route** **3. Guardrails on Highway 106 at landslide area**
Ripley	**1. Highway 142 West at Gatewood – Narrow bridge** **2. Repair Highway 21 South at Briar Creek – Dip in Road from flooding** **3. Highway 160 – Repair poor construction so people do not get sea sick**
Wayne	**1. Low Water Dip on C Highway approximately 1 mile northwest of C & E Junction** **2. Safety Shoulders on Highway 49 from Highway 67 to Mill Spring and Piedmont to Iron County line and widen existing box culverts** **3. Repair small bridge on A Highway (1/2 mile west of Highway 67) with large box culvert**

Table 5-4
Identified Maintenance Needs in Ozark Foothills Region for 2020

Area	Priority
Butler	**1. Resurface Route O** **2. Repair/Resurface Butzen Drive** **3. Resurface Route NN**
Carter	**1. Redesign median crossover of Highway V & Highway A at Highway 60 in Ellsinore** **2. Overlay Highway V & H in East Carter County** **3. Add Shoulders and rumblestrips to Highway 103**
Reynolds	**1. Overlay O Highway** **2. Repair 3 bridges over Black River on Highway 21 where bridges connect with Highway** **3. Highway 72 overlay from 72/21 Junction to 72/32 Junction**
Ripley	**1. Add Shoulders on Highway 160 W from Doniphan to C Highway** **2. Overlay EE Highway** **3. Overlay T Highway**
Wayne	**1. Highway 49: Resurface from Williamsville to Iron County Line** **2. Overlay Route 49 from Highway 67 to west junction of Route A** **3. Overlay Route A from west junction of Highway 49 to US Highway 60 East**

Table 5-5
Identified Multi-Modal Needs in Ozark Foothills Region for 2020

Area	Priority
Butler	**1. Extend the Poplar Bluff airport runway** **2. Improve Amtrak Depot service facility** **3. Pedestrian Overpass over UP Railroad along Highway 53**
Carter	**1. Construct new helipads** **2. Improve road to the Van Buren Airport** **3. Ramps for various sidewalks in Van Buren**
Reynolds	**1. Add bike lane for TransAmerica Bike Trail on Highway 76 Bike Route** **2. Sidewalk repair/construction in City of Ellington** **3. Sidewalk repair/construction in Bunker on main and 4th Streets**
Ripley	**1. Add/repair sidewalks on Walnut Street, from Summit to Highway Street, and Highway Street, from Lafayette to Walnut Street, for safe pedestrian and wheelchair access to north end of shopping center** **2. Sidewalks on Highway 142 E (Walnut Street) and west on Washington Street to Courthouse** **3. Ellington to Van Buren to Grandin to Doniphan bike trail extension that ties in with TransAmerica Trail in Ellington**
Wayne	**1. Extend pedestrian trail to tie Handy Park to existing trail system in Piedmont** **2. Sidewalk construction on Cemetery Road in Williamsville** **3. Sidewalk repair/construction in City of Greenville**

The OFTAC, MoDOT District representatives, and the OFRPC then worked together to plan solutions. The proposed projects, which had been previously ranked by the OFTAC, were approved by local elected officials in the region. The prioritized list of needs and proposed

projects, identified previously in Table 5-3, Table 5-4, and Table 5-5 were presented to the applicable MoDOT District Offices within the Ozark Foothills Region to be included in the MoDOT Planning Framework Process.

MoDOT works closely with the regional planning commissions to develop regional transportation plans that include long-term goals, needs identification, and public outreach. These plans must be approved by the regional planning commission's board of directors, which consists of local officials. The regional plans are then forwarded to the state for consideration in the development of the state's transportation plan

Chapter 6 – Future Project Plan and RTP for Ten Years

The Ozark Foothills Region's Future Project Plan (FPP) focuses on projects that have been prioritized by the OFTAC, local officials, and MoDOT's Statewide Transportation Improvement Program (STIP). The STIP plans for five fiscal years at a time and an updated plan is created every year. Therefore, the Ozark Foothills Region's FPP will follow MoDOT's STIP, which, at the time of this writing, has a draft published through 2024, a total of five currently planned years, starting with FY20. After reviewing and combining previously published Missouri plans and Missouri's current draft, a working and revisable RTP for the Ozark Foothills Region was created.

In Butler County, a bridge replacement will occur over Cane Creek on Highway 142, pavement resurfacing on US Highway 53 from Business 67 to US Highway 25, bridge replacement over the Black River on US Highway 60 and on Highway W, pavement resurfacing on US Highway 60 from US Highway 60 to Highway W, pavement resurfacing on US Highway 60 from Township Line Road to the end of state maintenance and from Highway W to Highway B, from the Arkansas State line to US Highway 160 on US Highway 67 and from Business 67 to Highway M, Bridge replacement over Drainage Ditch No. 1 on Highway B, pavement resurfacing on Highway CC from Highway 51 to Highway 53, pavement resurfacing on Highway F from US Highway 160 to the end of state maintenance, pavement resurfacing on Highway JJ from US Highway 67 to the end of state maintenance, pavement resurfacing on Highway KK from Highway T to Highway W, pavement resurfacing on Highway N from Highway 51 near Qulin to Highway 51 near Fagus, rumblestripes along Highway M from County Road 462 to County Road 441, bridge rehabilitation over the St. Francis River on Highway U, .

In Carter County, will also be completed on US Highway 60 Highway J to County Road 455, bridge replacement over Cane Creek on Highway A, pavement improvements from US

Highway 21 to US Highway 60 on Highway B and bridge replacement over Ten Mile Creek on Highway B. In Reynolds County, guard rail installation from County Road 610 to 0.3 miles east of County Road 610 on Highway 106, along with bridge rehabilitation over the Black River on Highway K.

Projects in the 2020-2024 STIP for Ripley County include pavement improvements on Highway 21 from Highway 142 to the Arkansas State line, on Highway A from Highway 21 to the Arkansas State line, Highway E from Highway 142 to the end of state maintenance, and Highway T from US Highway 160 to Highway 142. A Bridge replacement on Highway 142 over the Little Black River is also scheduled.

Wayne County will see bridge improvements over Black River on Highway 34, over the St. Francis River on Highway 34, over Small Creek on Highway A, and over Lake Creek and Rings Creek on Highway FF. Additionally, pavement resurfacing will occur on Highway 49 from Highway 34 to US Highway 67, repairing slides at various locations on US Highway 67, pavement improvements on Highway B from Highway 34 to Highway U, pavement improvements on Highway V from Highway 34 to Highway A, and pavement resurfacing along Highway Z from Highway D near Wappapello to Highway P near Arab.

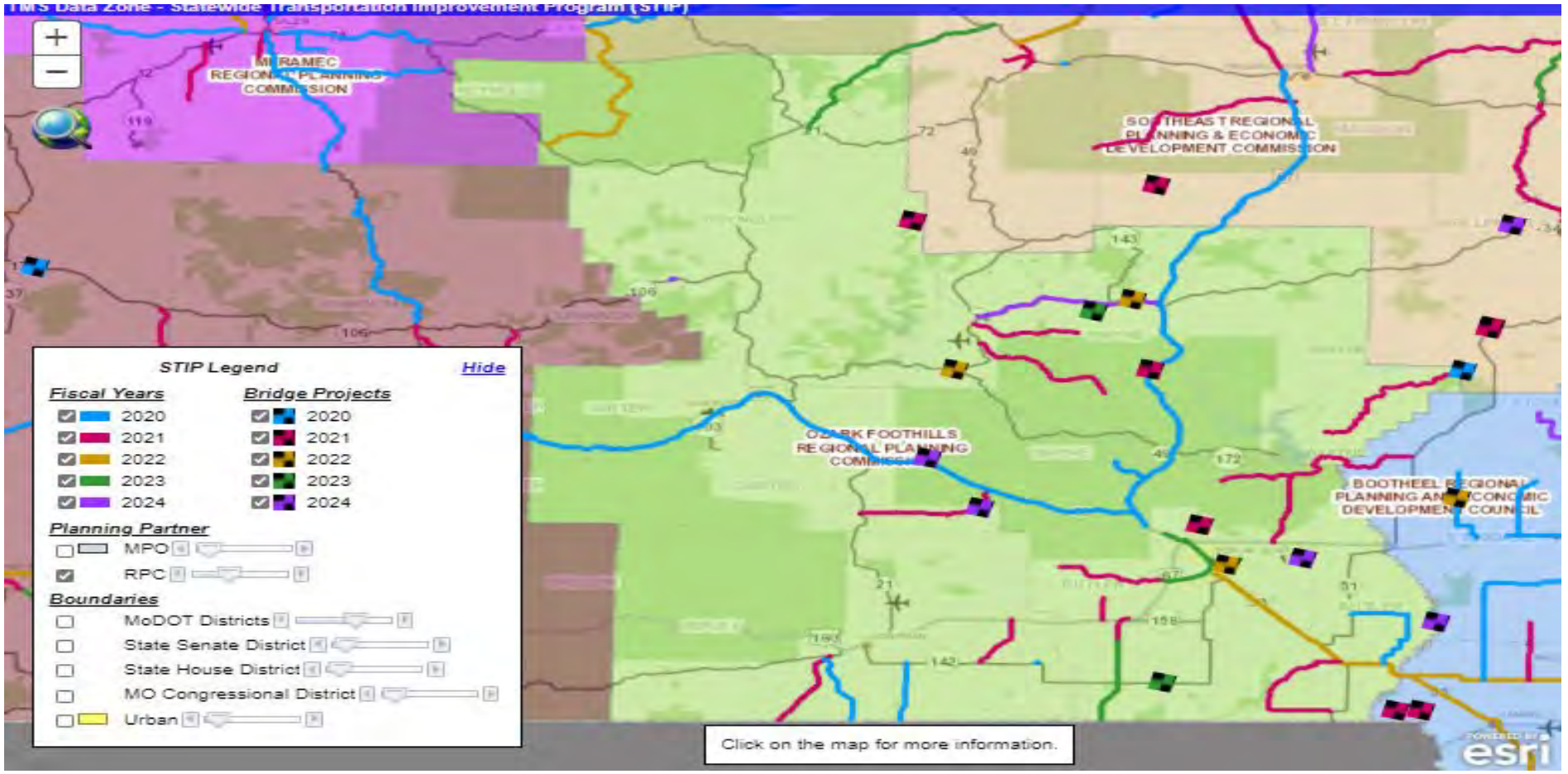
Various projects will also be completed across the Southeast District. These projects include payback for ADA Transition Plan improvements, guard cable and guardrail repair, surveying to sell excess right of way parcels, pavement improvements, and safety improvements. Many of the safety projects are possible from statewide open container funds.

Aviation improvements include runway reconstruction at the Poplar Bluff (2020-2021) municipal facilities. There will also be various statewide programs affecting the region's airports between 2020 and 2024.

Concerning public transportation, roadway transit systems will be provided both by Missouri and Federal resources in the Ozark Foothills Region. Ripley County will receive funding for the Ripley County Transit System. SMTS, Inc. will receive funds to operate in Butler, Carter, Reynolds, and Wayne counties along with other counties in MoDOT's Southeast District.

Lastly, several programs in the area will receive funds to improve elderly and handicapped transportation assistance. Butler County will have two programs receiving funding, the Butler County Community Resource Council and Manufacturers Assistance Group. In Ripley County, the Current River Sheltered Workshop receives assistance. In Reynolds County, the Reynolds County Sheltered Workshop, Inc. will receive aid. The Big Springs Sheltered Workshop in Carter County and the Services for Extended Employment, located in Wayne County will also receive funding.

Depicted below is the map of the STIP projects for the 2020-2024 Fiscal Years (Map 6-1) Furthermore, a table of all 2020-2024 STIP Projects, sorted by county, can be found in the Appendix. Projects identified in the current STIP are the most achievable in the next five years. These projects are listed in the STIP with both a timeframe and cost estimate and are the easiest to include in the RTP. Again, the above updated prioritized list of needs and projects has been presented to the applicable MoDOT District Office within the Ozark Foothills Region for ranking and consideration in future STIPs.


TMS Data Zone - Statewide Transportation Improvement Program (STIP)
MERAMEC REGIONAL PLANNING COMMISSION
SOUTHEAST REGIONAL PLANNING & ECONOMIC DEVELOPMENT COMMISSION
OZARK FOOTHILLS REGIONAL PLANNING COMMISSION
BOOTHEEL REGIONAL PLANNING AND ECONOMIC DEVELOPMENT COUNCIL
STIP Legend
Hide
Fiscal Years
2020
2021
2022
2023
2024
Bridge Projects
2020
2021
2022
2023
2024
Planning Partner
MPO
RPC
Boundaries
MoDOT Districts
State Senate District
State House District
MO Congressional District
Urban
Click on the map for more information.
esri

Chapter 7 – *Financing*

Federal Funding Sources

Federal revenue sources include the 18.4 cents per gallon tax on gasoline and 24.4 cents per gallon tax on diesel fuel. Other sources include various taxes on tires, truck and trailer sales, and heavy vehicle use.

Federal Funding - FAST Act

According to the US Department of Transportation, the Fixing America's Surface Transportation (FAST) Act is a $305 Billion five-year bill to improve the Nation's surface transportation infrastructure, including roads, bridges, transit systems, and rail transportation network. The bill, which was signed by President Obama on Dec. 4, 2015, is the first long-term transportation bill to be passed in 10 years, and was granted a one-year continuing resolution upon its expiration in September 2020. Since the 2012 expiration of the previous bill, MAP-21, 36 extensions had been filed to maintain transportation funding. The following information, according to the U.S. House of Representative's Committee on Transportation and Infrastructure, provides a summary of the bill:

Roads and Bridges

- Facilitates commerce and the movement of goods by refocusing existing funding for a National Highway Freight
- Program and a Nationally Significant Freight and Highway Projects Program
- Expands funding available for bridges off the National Highway System
- Converts the Surface Transportation Program (STP) to a block grant program, increases flexibility for states and local governments, and rolls the Transportation Alternatives Program into the STP Block Grant
- Streamlines the environmental review and permitting process to accelerate project approvals

- Eliminates or consolidates at least six separate offices within the Department of Transportation and establishes a National Surface Transportation and Innovative Finance Bureau to help states, local governments, and the private sector with project delivery
- Increases transparency by requiring the Department of Transportation to provide project-level information to Congress and the public
- Promotes private investment in our surface transportation system
- Promotes the deployment of transportation technologies and congestion management tools
- Encourages installation of vehicle-to-infrastructure equipment to improve congestion and safety
- Updates research and transportation standards development to reflect the growth of technology

Public Transportation

- Increases dedicated bus funding by 89 percent over the life of the bill
- Provides both stable formula funding and a competitive grant program to address bus and bus facility needs
- Reforms public transportation procurement to make federal investment more cost effective and competitive
- Consolidates and refocuses transit research activities to increase efficiency and accountability
- Establishes a pilot program for communities to expand transit through the use of public-private partnerships
- Eliminates the set aside for allocated transit improvements
- Provides flexibility for recipients to use federal funds to meet their state of good repair needs

- Provides for the coordination of public transportation services with other federally assisted transportation services to aid in the mobility of seniors and individuals with disabilities
- Requires a review of safety standards and protocols to evaluate the need to establish federal minimum safety standards in public transportation and requires the results to be made public

Highway and Motor Vehicle Safety

- Focuses funding for roadway safety critical needs
- Increases percentage of National Priority Safety Program states can spend on traditional safety programs
- Ensures more states are eligible for safety incentive grant funds and encourages states to adopt additional safety improvements
- Encourages states to increase safety awareness of commercial motor vehicles
- Increases funding for highway-railway grade crossings
- Requires a feasibility study for an impairment standard for drivers under the influence of marijuana
- Improves the auto safety recall process to better inform and protect consumers
- Increases accountability in the automobile industry for safety-related issues

Truck and Bus Safety

- Overhauls the rulemaking process for truck and bus safety to improve transparency
- Consolidates truck and bus safety grant programs and provides state flexibility on safety priorities
- Incentivizes the adoption of innovative truck and bus safety technologies
- Requires changes to the Compliance, Safety, Accountability program to improve transparency in the FMCSA's oversight activity

- Improves truck and bus safety by accelerating the introduction of new transportation technologies

Hazardous Materials

- Grants states more power to decide how to spend training and planning funds for first responders
- Requires Class I railroads to provide crude oil movement information to emergency responders
- Reforms an underutilized grant program for state and Indian tribe emergency response efforts
- Better leverages training funding for hazmat employees and those enforcing hazmat regulations
- Requires real-world testing and a data-driven approach to braking technology
- Enhances safety for both new tank cars and legacy tank cars
- Speeds up administrative processes for hazmat special permits and approvals
- Cuts red tape to allow a more nimble federal response during national emergencies

Railroads

- Provides robust reforms for Amtrak, including reorganizing the way Amtrak operates into business lines
- Gives states greater control over their routes, by creating a State-Supported Route Committee
- Speeds up the environmental review process for rail projects
- Creates opportunities for the private sector through station and right-of-way development
- Consolidates rail grant programs for passenger, freight, and other rail activities
- Establishes a Federal-State Partnership for State of Good Repair grant program

- Strengthens Northeast Corridor planning to make Amtrak more accountable and states equal partners
- Allows competitors to operate up to three Amtrak long-distance lines, if at less cost to the taxpayer
- Strengthens passenger and commuter rail safety, and track and bridge safety
- Preserves historic sites for rail while ensuring that safety improvements can move forward
- Unlocks and reforms the Railroad Rehabilitation and Improvement Financing (RRIF) loan program
- Includes reforms to get RRIF loans approved more quickly with enhanced transparency
- Provides commuter railroads with competitive grants and loans to spur timely Positive Train Control implementation
- Provides competitive opportunities for the enhancement and restoration of rail service

Additional Provisions

- Includes strongly bipartisan measures to simplify rules and regulations, aid consumers, enhance our capital markets, assist low-income housing residents, and help build a healthier economy
- Includes bipartisan provisions to provide energy infrastructure and security upgrades
- Streamlines the review process for infrastructure, energy, and other construction projects

Financing Provisions

- Includes fiscally responsible provisions to ensure the bill is fully paid for
- Ensures the Highway Trust Fund is authorized to meet its obligations through FY 2020
- Directs offsets from the FAST Act into the Highway Trust Fund to ensure fund solvency
- Reauthorizes the dedicated revenue sources to the Highway Trust Fund, which periodically expire

What the Fast Act Means for Missouri

In early January 2016, MoDOT produced an executive summary that provides an overview of the impact of the FAST Act on Missouri's transportation system. The following information is taken from that executive summary:

From Fiscal Year 2016 to Fiscal Year 2020, the availability of federal funds Missouri will be able to match will be approximately $1 billion, which is an increase of 9.8 percent over the previous federal bill – MAP 21. Federal dollars represent the largest source of funds in MoDOT's budget. With current state revenue projections, it is anticipated that MoDOT will be able to fully match its available federal funds. The best news for Missouri is the FAST Act allows for a five-year period of funding certainty which will allow for effective project planning.

Safety

The Office of Highway Safety will be required to conduct a survey every two years of all automated traffic enforcement systems to include red light running cameras and speed enforcement camera systems. The legislation requires a separate grant application for states to implement the 24-7 sobriety programs.

A study will be conducted on marijuana impaired driving including the issues of methods used to detect and measure marijuana levels and identify the role and extent of marijuana impairment in motor vehicle accidents.

States will be allowed to submit a multi-year plan detailing motor carrier safety efforts. These reports will include annual updates. States will undertake efforts to emphasize and improve enforcement of state and local traffic safety laws and regulations.

Freight

The bill establishes a new competitive grant program for very large, predominantly highway projects that benefit the national freight network. One condition of this program is a project

estimated cost of $100 million or 30 percent of a state's annual federal appropriation. The minimum grant is $25 million. However, there are some reserves (10 percent) for smaller projects of less than $5 million and 25 percent for rural areas (population less than 200,000).

A local match will be required for funds used to support the capital needs of public ferries. FAST revises the formula for apportionment. The biggest change is the minimum fiscal year allocation of $100,000.

Performance metrics will be developed on the nation's top 25 ports in each category of tonnage, containers and dry bulk. The St. Louis port is the only one that qualifies as a mandate on the list.

New funding is designated to improve the freight highway network. The language includes requirements to be designated as a "freight project." MoDOT will need to add these elements to its planning processes. Missouri has more than two percent of the national freight mileage so its apportionment must be spent on the primary freight network, critical urban and critical rural freight corridors instead of the broader freight system.

State Freight Plans are now mandated and must be in place within two years for Missouri to be able to access the freight funds. State Freight Advisory Committees remain as an encouraged activity, but not mandated.

Transit

The FAST Act provides transit increases of 9 to11 percent over five years and also increases the annual statewide allocation for buses and bus facilities.

Based on the estimated apportionments, the new surface transportation bill provides modest increases of approximately 3.5 percent in the first year and approximately 2 percent per year increase through Fiscal Year 2020.

The statewide allocation for the Bus & Bus Facilities program has increased from $1.25 million to $1.75 million per year. This is an increase for much needed capital projects. This program also includes a new competitive grant program.

Rural Area Funding program appears to remain the same with no significant changes. The funding in Missouri appears to increase modestly in each year based in preliminary estimates from $17.7 million in 2016 to $19.4 million in 2020 (8.7 percent).

Enhanced Mobility of Seniors and Individuals with Disabilities program will see modest increased funding from $4.86 million in 2016 to $5.37 million in 2020 (9 percent). There is a provision added for a new “pilot program for innovative coordinated access and mobility.” Grant money could be available for eligible entities.

Environment

The environmental provisions of the bill are intended to streamline the project delivery process and ensure interagency cooperation. New language under Efficient Environmental Review for Project Decision making changes definition of “project” to include multimodal projects and “lead federal agency” to “operating administration” so that projects benefit from review efficiencies; takes into account any source of federal funding. This should be helpful to multimodal projects. Similar streamlining of rail projects can be achieved once regulatory procedures are put in place.

Integration of Planning and Environmental Review: Clarifies and defines the planning products that can be adopted during National Environmental Policy Act development. Includes: Financing, modal choice, purpose and need, preliminary screening of alternatives, description of the environmental setting, methodology for analysis and programmatic level mitigation.
DOT and Heads of Federal Agencies will develop coordinated and concurrent environmental review and permitting process for Environmental Impact Statements.

Planning

The FAST Act expands the scope of the planning process to include addressing resiliency and reliability of the transportation system, mitigating storm water impacts of surface transportation and enhancing travel and tourism of the transportation system.

The act requires state DOTs to incorporate the performance measures for rural transit agencies into its planning documents. In addition, the FAST Act requires states to establish a state freight plan in order to receive National Highway Freight Program funds. The state freight plan may be part of the state's long-range transportation plan, but is more granular in requirements than a long-range transportation plan.

Performance Management

If a state DOT does not achieve or make significant progress toward achieving targets after one reporting cycle (instead of two reporting cycles), then the state DOT must include a description of the actions they plan to take to achieve their targets in the future in a report.

The penalty for falling below the minimum condition levels for pavements on the interstate system is imposed after the first reporting cycle (instead of after two reporting cycles); eliminates the need to collect safety data and information on unpaved or gravel roads.

USDOT will now assess if the state DOT has made significant progress toward the achievement of freight performance targets. If the state DOT has not made significant progress, then there are additional reporting requirements but not penalties associated with obligating freight funds.

Establishes a performance management data support program to enable the USDOT to better support state DOTs, Metropolitan Planning Organizations and the Federal Highway Administration in the collection and management of data for performance-based planning and programming.

Motor Carrier Services

Changes language to make sure that a tow vehicle is equal to or exceeds the gross vehicle weight of the disabled vehicle it is towing.

The act will allow emergency vehicles that travel the interstate to weigh 86,000 pounds.

The act increases the length limit of some automobile transport trucks; this will require legislative action.

Research

Every Day Counts Program has been continued.

The FAST Act establishes a new National Surface Transportation and Innovative Finance Bureau. Highway Research, Technology and Education Authorization Program funding mostly stays the same or has small increases.

The Innovative Pavement Research and Deployment Program have been expanded. It now requires the Secretary to develop a program to stimulate deployment of advanced transportation technologies to improve system safety, efficiency and performance.

The goals for the Intelligent Transportation System have been expanded, but are mostly freight-related.

ITS program funds for operational tests can't be used for building physical surface infrastructure unless the construction is incidental and critically necessary to implement the ITS project.

The new Assistant Secretary for Research and Technology's responsibilities would include coordinating departmental Research & Technology activities, advancing innovative technologies, developing comprehensive statistics and data and coordinating multimodal and multidisciplinary research. The Secretary can enter into cooperative contracts with federal, state and local and other agencies to conduct departmental research on a 50/50 cost share basis.

The Transportation Research Board will be required to do a study ($5 million; report due in 3 years) on how to restore the interstate highway system to premier status.

University Transportation Center funding has been increased; funding levels within ranges will be flexible instead of fixed. No change in matching requirements.

Rail

This is the first surface transportation bill to include a rail title; passenger rail and other rail investments total $10.4 billion over the five-year life of the legislation. Federal funding for intercity passenger rail does not begin until Federal Fiscal Year 2017.

FAST Act's most significant language to Missouri pertains to operating assistance. For the first time, Congress has provided states a chance to compete for $20 million per year to offset costs for state-sponsored service. This primarily targets states' new cost from the Passenger Rail Investment and Improvement Act of 2009 (PRIIA).

In Missouri's case, costs were relatively the same after PRIIA. Therefore, it is uncertain how much Missouri will be able to obtain from this new funding source. States can compete for this funding to improve infrastructure and vehicles used in the delivery of intercity passenger rail. This is similar to what Congress did through ARRA and the creation of the High Speed and Improved Passenger Rail Program – which delivered much needed projects like the Osage River Railroad Bridge.

Grade crossing safety remained a distinct safety program targeting improvements at highway rail grade crossings.

Congress also put funding towards a committee currently working on costs. This committee stems is made up of the Federal Railroad Administration, states, and Amtrak. The committee continues to work to help ensure states are paying only their fair share of costs. For example, this committee is addressing call center costs.

Missouri has identified to Amtrak for years that its call center costs are too high and they need a better system to track where these costs are allocated. It seems they are primarily allocated to states, instead of Amtrak, where appropriate. This should continue to help lower costs to Missouri and other states.

Highway and Bridge Revenue Sources

State motor fuel tax

The largest source of revenue from Missouri user fees is the state fuel tax. Assessed at a rate of 17-cents per gallon, it produced over 45 percent of state transportation revenues in 2016. However, the motor fuel tax is not indexed to keep pace with inflation, and there has been no rate increase since 1996. History shows that even when fuel prices rise dramatically, Missourians are generally unwilling or unable to turn to other modes of transportation, continuing to drive their personal vehicles and to purchase fuel to do so. Trends show motor fuel tax revenues increase about one percent annually. However, if fuel prices rise and stay at higher rates, more Missourians may turn to more fuel-efficient vehicles, make fewer trips or seek other transportation options they had previously avoided. While good for the environment, these actions erode motor fuel tax revenues.

Motor vehicle sales and use taxes

Motor vehicle sales and use taxes provided approximately 26 percent of state transportation revenues in 2016. This is the one source of state revenue that has recently provided substantial additional resources for transportation. In November 2004, Missouri voters passed Amendment 3. This set in motion a four-year phase in, redirecting motor vehicle sales taxes previously deposited in the state's General Revenue Fund to a newly created State Road Bond Fund. In accordance with this constitutional change, MoDOT began selling bonds to fund road improvements. From 2000-2010, MoDOT sold bonds that provided additional resources for highway improvements. Bonds are

debt and similar to a home mortgage – this debt must be repaid over time. The total debt payment in fiscal year 2016 totaled $280 million.

MoDOT has three kinds of bonds: senior bonds that were authorized by the Missouri General Assembly in 2000; Amendment 3 bonds that were authorized by Missouri voters in 2004; and federal GARVEE (Grant Anticipation Revenue Vehicle) bonds that financed specific projects. Borrowing accelerated construction and allowed MoDOT to avoid inflation in labor and materials costs. It gave Missourians improvements that would not have been built for many years with pay-as-you-go funding. Without borrowing, many of those projects still would not be completed. Senior bonds will be paid off by 2023, Amendment 3 bonds will be paid off by 2029 and GARVEE bonds will be paid off by 2033. The average interest rate on all outstanding debt combined is 2.98 percent.

Motor vehicle and driver's licensing fees

Motor vehicle and driver's licensing fees also provided approximately 21 percent of Missouri's state transportation revenue in 2016. Similar to motor fuel tax, these fees are not indexed to keep pace with inflation, and there have been no annual registration fee increases since 1984. This revenue source increases at a rate of about 2.5 percent annually.

Transportation revenues are shared

It is important to remember that cities and counties receive a substantial portion of these state transportation revenues. For example, cities and counties receive approximately 4.5 cents of the state's 17-cent per gallon fuel tax. They also receive approximately 14 percent of the remaining state transportation revenues discussed earlier. These funds go directly to cities and counties to fund local transportation.

Interest earned on invested funds and other miscellaneous collections

The remaining 8 percent of state transportation revenues comes from interest earned on invested funds and other miscellaneous collections in 2016. During the Amendment 3 bonding program, cash balances in state transportation funds have been unusually high. Bond proceeds are received in large increments and are paid out over time as project costs are incurred. When the Amendment 3 projects are completed, the balance of state transportation funds will be substantially less, and interest income will also decline.

Cities and counties in Missouri may opt to earmark part of their property tax levies for transportation purposes. Research shows that since 2002, Butler County has had a 0.04 percent property tax and a 0.25 percent retail sales tax that went towards a Special Road and Bridge Fund. Since 2003, Wayne County had a 0.11 percent property tax for a special road and bridge fund. Reynolds County collects a 0.20 percent property tax for the Special Road and Bridge Fund. Ripley County has 19 Special Road Districts that receive property tax collections from property within each district. The taxes levied are set and retained by each road district. Carter County collects a 0.2354 percent property tax for the special road and bridge fund.

In the Ozark Foothills Region, the Cities of Doniphan, Piedmont, and Poplar Bluff are the only cities that collect a transportation tax. Both Doniphan and Piedmont collected a 0.5 percent transportation tax on retail purchases while the City of Poplar Bluff utilizes a transportation development district that collects a 1 percent sales tax along the Business 67 corridor. Of the 214 cities in Missouri that collect a transportation tax, 90.2 percent of these cities collect at a 0.5 percent rate.

Funding for Alternative Modes of Transportation

Transportation funding for alternative modes has historically been less than 5 percent of all MoDOT transportation revenue (approximately $96 million annually). Funding for alternate modes of transportation comes from a variety of sources including motor vehicle sales taxes, aviation fuel

and sales taxes, railroad regulation fees, state general revenue funds and federal grants. MoDOT Multimodal Operations is responsible for supporting alternative transportation programs within the state. The division functions to continue the advancement and strategic planning for Aviation, Rail, Transit, Waterways, and Freight Development initiatives designed to expand Missouri's infrastructure and facilitate travel and commerce. Through the integration of the various modes, the traveling public enjoys greater accessibility to the resources of the state while industry capitalizes on improved transportation efficiencies.

Multimodal Operations Functional Overview

- Assists in the development of port authorities through the distribution of capital and administrative funding while championing the efficiencies of waterborne transportation to industry and the general public.
- Administers federal and state capital improvement funding for Missouri's eligible public aviation facilities.
- Conducts airports safety inspections.
- Provides financial and technical assistance to public transit and specialized mobility providers across the state.
- Partners with industry and local communities to promote economic development and improved freight traffic efficiency by examining existing infrastructure obstructions and proactively assessing potential obstacles.
- Regulates freight and passenger rail operations, oversees rail crossing safety and construction projects, conducts railroad safety inspections, and provides outreach educational opportunities.
- Supports the continued operation of Amtrak in the state and provides direction for the development of expanded passenger rail service.

The amalgamation of the non-highway transportation modes into a single regulatory division traces its lineage back to the formation of the Missouri Highways and Transportation Department in 1980. With the subsequent merger and reorganization, Multimodal Operations assumed charge of consolidated authority over Aviation, Rail, Transit, and Waterway operations within the state as the definitive administrative body. The division has since evolved into a very specialized organization, centered on engaging partnership participation that focuses on safe, accessible, efficient, and environmentally responsible alternative transportation solutions. In fiscal year 2012, Multimodal Operations functioned with an operating budget of $2.5 million and a staff of 31, maintained over 4,000 internal and external partnership contacts, and cumulatively delivered over $79 million in multimodal projects with partners across the state (nearly $47 million federal funds, over $14 million in state funds, and over $18 million in local match funds).

Multimodal Operations Profile – Activities by Mode

- Aviation
    - Administer grants and provide guidance for public use airports (State Block Grant Program & State Aviation Trust Fund Program)
    - Conduct airport safety inspections
    - Publish Aeronautical Chart, Airport Directory, and Show Me Flyer
    - Maintain State Airport System Plan (SASP)
    - Approve Airport Master Plans (AMP) and Airport Layout Plans (ALP)
    - Maintain Automated Weather Observing System (AWOS) equipment
    - Promote education to the aviation community and other enthusiasts
- Rail
    - Conduct railroad infrastructure safety inspections (including track, grade crossing signals, and operating practices)

- Support Amtrak passenger rail service through Missouri and promote ridership both through operations and project delivery
- Maintain Statewide Rail Plan to identify the framework for freight and passenger rail development in Missouri for the next twenty years (including High Speed Intercity Passenger Rail (HSPIR))
- Regulate safety for freight rail and passenger rail in Missouri
- Enforce safety regulations for light rail operations (Metrolink)
- Administer the Missouri Highway/Rail Crossing Safety Program
- Plan and administer funding for rail/highway construction projects
- Present outreach seminars on railroad grade crossing safety in conjunction with Missouri Operation Lifesaver
- Catalog freight and passenger rail maps of Missouri

- Transit
  - Administer federal grant funding under Section 5310 Agencies Serving Seniors and Persons with Disabilities
  - Transportation Assistance Vehicle Program
  - Administer federal grant funding under Section 5311 Non-Urbanized Transit Assistance Formula Grant Program, Section 5311(b) Rural Transit Assistance Program (RTAP), and 5311(f) Intercity Bus Program
  - Administer federal grant funding under Section 5316 Job Access and Reverse Commute Program (JARC)
  - Administer federal grant funding under Section 5317 New Freedom Program
  - Administer federal grant funding under Section 5309 Discretionary Transit Capital Program

- Administer federal grant funding under Section 5305 Statewide Transit Planning Grant Program
- Administer federal grant funding under Section 5339 Bus & Bus Facilities Grant Program
- Administer state funded Missouri Elderly and Handicapped Transportation Assistance Program (MEHTAP)(RSMo 208.250-208.265)
- Administer state funded Missouri State Transit Assistance Program (RSMo 226.195)
- Administer federal grant funding consistent with the new MAP-21 transportation funding provisions
- Provide technical support and program assistance to partners and external customers

- Waterways
  - Assist in the formation and operation of port authorities in Missouri
  - Provide technical assistance and promote use of Missouri's navigable rivers
  - Represent port interests in industry and governmental bodies
  - Assist in distributing capital and administrative funding for port improvements
  - Provide financial assistance to two ferryboat operations
  - Maintain waterways map of port authorities
- Freight Development
  - Encourage freight initiatives that promote economic development and efficient movement of goods
  - Conduct studies to determine opportunities for enhanced system capacity
  - Evaluate performance of state infrastructure to improve efficiencies
  - Host public forums and outreach opportunities for public comment and contribution

Unlike highways, MoDOT does not own multimodal facilities. Instead, MoDOT's role is to administer funding and provide an oversight role for multimodal improvements. Many of the multimodal entities receive local tax revenue and direct federal funding, which are not included in these amounts. MoDOT administered $35 million of aviation funds in fiscal year 2016. Missouri has dedicated taxes on aviation fuel to fund improvements to public use airports in Missouri. MoDOT also administers federal funding to improve airfield pavement conditions and lighting systems, eliminate obstructions and for expansion projects.

In fiscal year 2016, MoDOT administered $34 million of transit funds. The majority of these funds are from federal programs that support operating costs and bus purchases for transit agencies across the state. There is a small amount of state and General Revenue funding to support operating costs for transit agencies. MoDOT administered $19 million of rail funds in fiscal year 2016. These funds are used to support two programs – the Amtrak passenger rail service between St. Louis and Kansas City, and safety improvements at railroad crossings. The Amtrak funding is from General Revenue, and safety improvements at railroad crossings are from state and federal sources.

Waterways funding totaled $6 million in fiscal year 2016. These funds provided operating and capital assistance to Missouri's river ports and ferry boat operators. MoDOT also administers a $1 million freight enhancement program that provides assistance to public, private or not-for-profit entities for non-highway capital projects that improve the efficient flow of freight in Missouri.

Internal operating costs to administer the various multimodal programs totaled $3 million, including salaries, wages and fringe benefits. In fiscal year 2016, MoDOT administered $98 million for multimodal needs. Since only $96 million was available, MoDOT used $2 million of cash balances dedicated by law to multimodal activities to provide these projects and services.

Missouri's transportation needs are substantial, and the costs of the needs are enormous. Yet, the sources that have traditionally provided transportation funding in Missouri and in the nation are not adequate. They do not keep pace with the rising cost of construction and maintenance, and they provide little for alternative modes of transportation. Another complicating factor is that Missouri's transportation revenues are small in comparison to many other states. Missouri's revenue per mile of state highway is one of the lowest in the region and in the country. Missouri ranks 47th nationally in revenue per mile which leads to significant unfunded transportation needs across the state. Missouri receives both state and federal transportation funds. Much of the funding comes with strings attached, limiting the activities for which it can be used. For example, the state motor fuel tax can only be spent on highways and bridges. It is not available for alternative modes of transportation. Federal funds may be earmarked for specific projects or limited to specific types of construction such as interstate maintenance. Some federal and state funds are allocated to specific modes of transportation such as transit or passenger rail.

Funding Tools for the Local or Regional Level

Funding for local county and municipal roadway maintenance and construction comes primarily from the state-distributed motor fuel tax, individual city and county capital improvement sales taxes and transportation sales taxes. Additional potential revenue options are available for local or regional transportation projects.

Economic Development Administration - Public Works and Economic Development Program

Through the Public Works and Economic Development Act of 1965, the United States Department of Commerce, through its EDA branch, offers project grants to enhance regional competitiveness and promote long-term economic development in regions experiencing substantial economic distress. EDA provides Public Works investments to help distressed communities and regions revitalize, expand, and upgrade their physical infrastructure to attract new industry,

encourage business expansion, diversify local economies and generate or retain long-term private sector jobs and investment. Current priorities include proposals that help support existing industry clusters, develop emerging new clusters or attract new economic drivers.

Project grants may be used for investments in facilities such as water and sewer systems, industrial access roads, industrial and business parks, port facilities, railroad sidings, distance learning facilities, skill-training facilities, business incubator facilities, redevelopment of brownfields, eco-industrial facilities and telecommunications infrastructure improvements needed for business retention and expansion. Eligible activities include the acquisition or development of public land and improvements for use for a public works, public service or development facility, and acquisition, design and engineering, construction, rehabilitation, alteration, expansion, or improvement of publicly-owned and operated development facilities, including related machinery and equipment. A project must be located in a region that, on the date EDA receives an application for investment assistance, satisfies one or more of the economic distress criteria set forth in 13 C.F.R. 301.3(a). In addition the project must fulfill a pressing need of the region and must:

1. Improve the opportunities for the successful establishment or expansion of industrial or commercial plants or facilities in the region;
2. Assist in the creation of additional long-term employment opportunities in the region; or
3. Primarily benefit the long-term unemployed and members of low-income families.

In addition, all proposed investments must be consistent with the currently approved Comprehensive Economic Development Strategy (CEDS) for the region in which the project will be located, and the applicant must have the required local share of funds committed, available and unencumbered. Also, the project must be capable of being started and completed in a timely manner.

USDA Rural Development

Community Programs, a division of the Housing and Community Facilities Programs, is part of the United States Department of Agriculture's Rural Development mission area. Community Programs administers programs designed to develop essential community facilities for public use in rural areas. These facilities include schools, libraries, childcare, hospitals, medical clinics, assisted living facilities, fire and rescue stations, police stations, community centers, public buildings and transportation. Through its Community Programs, the Department of Agriculture is striving to ensure that such facilities are readily available to all rural communities. Community Programs utilizes three flexible financial tools to achieve this goal: the Community Facilities Guaranteed Loan Program, the Community Facilities Direct Loan Program, and the Community Facilities Grant Program.

Community Programs can make and guarantee loans to develop essential community facilities in rural areas and towns of up to 20,000 in population. Loans and guarantees are available to public entities such as municipalities, counties, and special-purpose districts, as well as to non-profit corporations and tribal governments. Applicants must have the legal authority to borrow and repay loans, to pledge security for loans, and to construct, operate and maintain the facilities. They must also be financially sound and able to organize and manage the facility effectively. Repayment of the loan must be based on tax assessments, revenues, fees, or other sources of money sufficient for operation and maintenance, reserves and debt retirement. Feasibility studies are normally required when loans are for start-up facilities or existing facilities when the project will significantly change the borrower's financial operations. The feasibility study should be prepared by an independent consultant with recognized expertise in the type of facility being financed.

Community Programs can guarantee loans made and serviced by lenders such as banks, savings and loans, mortgage companies which are part of bank holding companies, banks of the Farm Credit System or insurance companies regulated by the National Association of Insurance

Commissioners. Community Programs may guarantee up to 90percent of any loss of interest or principal on the loan. Community Programs can also make direct loans to applicants who are unable to obtain commercial credit. Loan funds may be used to construct, enlarge, or improve community facilities for health care, public safety and public services. This can include costs to acquire land needed for a facility, pay necessary professional fees and purchase equipment required for its operation. Refinancing existing debts may be considered an eligible direct or guaranteed loan purpose if the debt being refinanced is a secondary part of the loan, is associated with the project facility and if the applicant's creditors are unwilling to extend or modify terms in order for the new loan to be feasible.

Additionally, Community Programs also provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population. Grants are authorized on a graduated scale. Applicants located in small communities with low populations and low incomes will receive a higher percentage of grants. Grants are available to public entities such as municipalities, counties, and special-purpose districts, as well as non-profit corporations and tribal governments. In addition, applicants must have the legal authority necessary for construction, operation, and maintenance of the proposed facility and also be unable to obtain needed funds from commercial sources at reasonable rates and terms.

Grant funds may be used to assist in the development of essential community facilities. Grant funds can be used to construct, enlarge, or improve community facilities for health care, public safety and community and public services. This can include the purchase of equipment required for a facility's operation. A grant may be made in combination with other Community Facilities financial assistance such as a direct or guaranteed loan, applicant contributions or loans and grants from other sources. The Community Facilities Grant Program is typically used to fund projects under special initiatives, such as Native American community development efforts, child

care centers linked with the Federal government's Welfare-to-Work initiative, Federally-designated Enterprise and Champion Communities and the Northwest Economic Adjustment Initiative area.

Statewide Transportation Assistance Revolving (STAR) Fund

The STAR Fund, authorized by the Missouri General Assembly in 1997, provides loans to local entities for non-highway projects such as rail, waterway and air travel infrastructure. The STAR fund can also provide loans to fund rolling stock for transit and the purchase of vehicles for elderly or handicapped persons. The STAR fund can assist in the planning, acquisition, development and construction of facilities for transportation by air, water, rail or mass transit; however, STAR fund monies cannot fund operating expenses. The local district engineer must endorse projects in cooperation with MoDOT's Multimodal Team. The Cost Share Committee evaluates STAR applications and provides a recommendation to the Missouri Highways and Transportation Commission (MHTC), which is the deciding body.

Delta Regional Authority - Delta Development Highway System

The Delta Regional Authority (DRA) was established by Congress in 2000 to enhance economic development and improve the quality of life for residents of this region. The DRA encompasses 252 counties and parishes in Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee.

There are 29 counties in Missouri that are a part of the DRA region. The counties are in the southeast part of the state and make up the Eighth Congressional District, including all five counties in the Ozark Foothills region. They are: Bollinger, Butler, Cape Girardeau, Carter, Crawford, Dent, Douglas, Dunklin, Howell, Iron, Madison, Mississippi, New Madrid, Ozark, Pemiscot, Perry, Phelps, Oregon, Reynolds, Ripley, Scott, Shannon, St. Francois, Ste. Genevieve, Stoddard, Texas, Washington, Wayne and Wright. There are a total of 566 DDHS miles identified in Missouri, which constitutes 14.7 percent of the total DDHS miles, of which 346 miles are 2-lane

facilities. The Missouri DDHS improvements consist of widening and upgrading portions of US 60, US 63, US 67, US 412 and MO 8.

As a key part of its effort to improve the lives of Delta residents, the DRA operates a grant program in the eight states it serves. The DRA works closely with local development districts, which provide technical assistance to grant applicants. Once grant applications are submitted each year, the federal co-chairman determines which applications are eligible for funding and which are ineligible. There is an appeals process for those applicants whose submissions are deemed ineligible. From the list of eligible applicants, the governors of the eight states then make recommendations to the full board. The board decides which projects are funded based on the funds available. Congress has mandated that transportation and basic public infrastructure projects must receive at least 50 percent of appropriated funds. The authority may provide matching funds for other state and federal programs.

During a planning retreat in February 2005, the Delta Regional Authority board voted to make transportation one of the authority's three major policy development areas. The DRA Highway Transportation Plan/Delta Development Highway System Plan (DDHS) was developed following input from transportation executives and local organizations in the eight states covered by the DRA. Public meetings were held throughout the region in the fall of 2006. The plan was presented to the President and Congress. The DDHS consists of 3,843 miles of roads throughout the region. The estimated cost to complete the planned improvement projects for these roads is $18.5 billion. Of the roads in the plan, 27 percent provide four or more travel lanes already and the remainder is two-lane roads.

Missouri Department of Economic Development - Community Development Block Grants

Through the Missouri Department of Economic Development, the Community Development Block Grant Program (CDBG), a federal program through HUD, offers grants to

small Missouri communities to improve local facilities, address critical health and safety concerns and develop a greater capacity for growth. The program offers funds for projects that can range from housing and street repairs to industrial loans and job training. State CDBG funds are only available to non-entitlement areas (incorporated municipalities under 50,000 and counties under 200,000 in population).

Larger cities receive funds directly through the Entitlement Communities Grants program. The entitlement program provides annual grants on a formula basis to entitled cities and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low-income and moderate-income persons. HUD awards grants to entitlement community grantees to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development and providing improved community facilities and services. Entitlement communities develop their own programs and funding priorities. However, grantees must give maximum feasible priority to activities which benefit low- and moderate-income persons. A grantee may also carry out activities which aid in the prevention or elimination of slums or blight. Additionally, grantees may fund activities when the grantee certifies that the activities meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other financial resources are not available to meet such needs. CDBG funds may not be used for activities which do not meet these broad national objectives.

Sales Tax

The 4.225 percent state sales/use tax rate in Missouri is lower than the rates in 38 other states, as of Jan. 1, 2017, according to Taxfoundation.org. Missouri communities have the option of adopting a local sales tax, generally ranging from one-half to one percent. Counties may also

adopt a sales tax generally ranging from one-fourth to one percent that can be used for transportation.

Use Tax

Use tax is similar to sales tax, but is imposed when tangible personal property comes into the state and is stored, used or consumed in Missouri. Communities have the option of adopting a local use tax equal to the local sales tax for that community to use for transportation expense.

Local Option Economic Development Sales Tax

The Local Option Economic Development Sales Tax, approved by the Missouri General Assembly in 2005, allows citizens to authorize a supplemental sales tax dedicated exclusively for certain economic development initiatives in their home municipality. The state statute section governing this program is found at 67.1305 RSMo. The voter-approved tax of not more than one half per cent is charged on all retail sales made in the municipality that are subject to sales taxes under Ch.144 RSMo. Missouri statutes define "municipality" as an incorporated city, town, village or county. Revenues generated by the tax may not be used for retail developments unless such retail projects are limited exclusively to the redevelopment of downtown areas and historic districts. A portion of the revenues may be used for project administration, staff and facilities, and at least twenty per cent of the funds raised must be used for projects directly related to long-term economic preparation, such as land acquisition, installation of infrastructure for industrial or business parks, water and wastewater treatment capacity, street extensions and for matching state or federal grants related to such long-term projects. Any remaining funds may also be used for marketing, training for advanced technology jobs, grants and loans to companies for employee training, equipment and infrastructure and other specified uses.

Neighborhood Improvement District

A Neighborhood Improvement District (NID) may be created in an area desiring certain public-use improvements that are paid for by special tax assessments to property owners in the area in which the improvements are made. The kinds of projects that can be financed through an NID must be for facilities used by the public, and must confer a benefit on property within the NID. An NID is created by election or petition of voters and/or property owners within the boundaries of the proposed district. Election or petition is authorized by a resolution of the governing body of the municipality in which the proposed NID is located. Language contained in the petition narrative or ballot question must include certain information including, but not limited to a full disclosure of the scope of the project, its cost, repayment and assessment parameters to affected property owners within the NID.

Community Improvement District

A Community Improvement District (CID) may be either a political subdivision or a not-for-profit corporation. CIDs are organized for the purpose of financing a wide range of public-use facilities and establishing and managing policies and public services relative to the needs of the district. By request petition, signed by property owners owning at least 50 percent of the assessed value of the real property, and more than 50 percent per capita of all owners of real property within the proposed CID, presented for authorizing ordnance to the governing body of the local municipality in which the proposed CID would be located. Unlike a Neighborhood Improvement District, a CID is a separate legal entity, and is distinct and apart from the municipality that creates the district. A CID is, however, created by ordinance of the governing body of the municipality in which the CID is located, and may have other direct organizational or operational ties to the local government, depending upon the charter of the CID.

Tax Increment Financing

Local Tax Increment Financing (Local TIF) permits the use of a portion of local property and sales taxes to assist funding the redevelopment of certain designated areas within your community. Areas eligible for Local TIF must contain property classified as a "Blighted", "Conservation" or an "Economic Development" area, or any combination thereof, as defined by Missouri Statutes. The idea behind Local TIF is the assumption that property and/or local sales taxes (depending upon the type of redevelopment project) will increase in the designated area after redevelopment, and a portion of the increase of these taxes collected in the future (up to 23 years) may be allocated by the municipality to help pay the certain project costs, partially listed above.

Transportation Development Districts

Transportation Development Districts (TDDs) are organized under the Missouri Transportation Development District Act, Sections 238.200 to 238.275 of the Missouri State Statutes. The district may be created to fund, promote, plan, design, construct, improve, maintain and operate one or more projects or to assist in such activity.

A TDD may issue notes, bonds, and other debt securities to fund projects. The debt is solely the responsibility of the district and is only payable with TDD funds. The TDD can levy sales taxes, impose tolls, impose property taxes, and use special assessments within the TDD to repay the debt. The revenue can only be used for public transportation and transportation-related improvements. The tax rate must be the same rate throughout the district, and proposed funding is subject to the qualified voters' consent. If the TDD cannot generate enough revenue to fund the project, its options include restructuring the debt financing, changing the tax rate, or seeking additional funds elsewhere. There is currently one TDD in the Ozark Foothills Region, located in Butler County, and totally within the City of Poplar Bluff.

Transportation Development Corporations

Transportation Development Corporations (TDCs) are organized under the Missouri Transportation Corporation Act, Sections 238.300 to 238.367 of the Missouri State Statutes. TDCs act in promoting and developing public transportation facilities and systems and in promoting economic development. Demands for transportation improvements have greatly outpaced the funds available to meet them. In response to this demand, the Missouri Department of Transportation has established various mechanisms for successful public/public and public/private partnerships. These expand financing options for transportation projects that serve a public purpose, including: highway and rail projects, transit equipment, air and water transportation facilities and elderly/handicapped vehicles. The benefits to a project assisted by these partnerships may include: inflation cost savings, early economic and public benefits, financing tailored to the project's needs and a reduced cost of project financing.

Partnership Debt-Financing Programs

Debt-financing programs make loans to a project that has to be repaid. The Missouri Transportation Finance Corporation's (MTFC*)* authority to form and operate is initially derived from the Transportation Equity Act for the 21st Century (TEA-21). The MTFC incorporated in August 1996, adopted bylaws and subsequently entered into a Cooperative Agreement with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Federal Railroad Administration (FRA), agencies of the United States Department of Transportation (USDOT) and the Missouri Highways and Transportation Commission (Commission). Under the authority granted initially by TEA-21, as amended by 23 U.S.C. 610, the Missouri Non Profit Corporation Act, Chapter 355, RSMo, and pursuant to the Cooperative Agreement, the Commission organized the MTFC to assist in financing transportation improvements.

The MTFC provides direct loans for transportation projects within the state of Missouri. Loans are funded from available MTFC resources. The MTFC assistance may be any type authorized by 23 U.S.C. 610. The following are examples of potential financing options included in 23 U.S.C. 610: Primary or subordinated loans, Credit enhancements, Debt reserve financing, Subsidized interest rates, Purchase and lease agreements for transit projects, and Bond security. These direct loans must help assist the Commission to achieve continued economic, social and commercial growth of Missouri, act in the public interest, or promote the health, safety and general welfare of Missouri citizens.

Bridge Replacement Off-System (BRO)

The Off-System Bridge Replacement and Rehabilitation (BRO) program provides funding to counties for replacement and rehab of bridges. A minimum amount of approach roadway construction may be allowed under the program. Federal Funds are available to finance up to 80% of the eligible project cost, but may be increased with the use of credit earned from replacing an eligible bridge that is not on the federal-aid system. It will be necessary for the local agency to provide the necessary matching funds. The fair market value of donated right-of-way may be credited to the local agency's matching share with the amount not to exceed the local agency's share. Both Missouri Department of Economic Development CDBG funds and EDA Local Public Works funds can be used to match BRO funds, if used on the project.

BRO Funds are administered according to the following policy:

- The current Highway Act requires that at least 15% and no more than 35% of the state's total bridge appropriation be allocated to the counties and the City of St. Louis for use on off-system bridges (BRO). The Missouri Highway and Transportation Commission approves the amount of bridge funds allocated to this program. Off-system bridges are

bridges that are on roads that are functionally classified as a local road or street and rural minor collectors.

Federal Aviation Administration - Airport Improvement Program

The Airport Improvement Program (AIP) provides grants to public agencies - and, in some cases, to private owners and entities - for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). For large and medium primary hub airports, the grant covers 75 percent of eligible costs (or 80 percent for noise program implementation). For small primary, reliever, and general aviation airports, the grant covers 95 percent of eligible costs. AIP grants for planning, development or noise compatibility projects are at or associated with individual public-use airports (including heliports and seaplane bases). A public-use airport is an airport open to the public that also meets the following criteria:

1. Publicly owned, or
2. Privately owned but designated by the FAA as a reliever, or
3. Privately owned but having scheduled service and at least 2,500 annual enplanements.

Further, to be eligible for a grant, an airport must be included in the NPIAS. The NPIAS, which is prepared and published every two years, identifies public-use airports that are important to public transportation and contribute to the needs of civil aviation, national defense, and the postal service. The description of eligible grant activities is described in the authorizing legislation and relates to capital items serving to develop and improve the airport in areas of safety, capacity and noise compatibility. In addition to these basic principles, a grantee must be legally, financially and otherwise able to carry out the assurances and obligations contained in the project application and grant agreement.

Eligible projects include those improvements related to enhancing airport safety, capacity, security and environmental concerns. In general, sponsors can use AIP funds on most airfield

capital improvements or repairs except those for terminals, hangars, and non-aviation development. Any professional services that are necessary for eligible projects - such as planning, surveying and design - are eligible as is runway, taxiway and apron pavement maintenance. Aviation demand at the airport must justify the projects, which must also meet Federal environmental and procurement requirements. Projects related to airport operations and revenue-generating improvements are typically not eligible for funding. Operational costs - such as salaries, maintenance services, equipment and supplies - are also not eligible for AIP grants.

FAA Airport and Airway Trust Fund (AATF)

The Airport and Airway Trust Fund (AATF), created by the Airport and Airway Revenue Act of 1970, provides funding for the federal commitment to the nation's aviation system through several aviation-related excise taxes. Funding currently comes from collections related to passenger tickets, passenger flight segments, international arrivals/ departures, cargo waybills, aviation fuels and frequent flyer mile awards from non-airline sources like credit cards.

Transportation Alternatives Program (TAP) Funding

Transportation Alternatives Program (TAP) was authorized under the Moving Ahead for Progress in the 21st Century Act (MAP-21) to provide for a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. The TAP replaces the funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, and Scenic Byways, wrapping them into a single funding source. The TAP remains in place with the 2015 passage of the FAST ACT. The mission of the Transportation Alternatives Program is to improve our nation's communities through leadership, innovation, and program delivery. The funds are available to develop a variety of project types located in both rural and urban communities to create safe, accessible, attractive, and environmentally sensitive communities where people want to live, work, and recreate. The

Transportation Alternatives Program consists of: Transportation Enhancement (TE) activities, Recreational Trails Program (RTP), Safe Routes to School (SRTS) activities, and Boulevards from Divided Highways.

Traffic Engineering Assistance Program (TEAP)

The Traffic Engineering Assistance Program (TEAP) allows local public agencies (LPA) to receive engineering assistance for studying traffic engineering problems. Typical traffic engineering related projects include: corridor safety and/or operational analysis, intersection(s) safety and/or operational analysis, speed limit review, sign inventory, pedestrian/bike route analysis, parking issues, and other traffic studies, etc. Local public agencies are reimbursed for eligible project costs at a rate of 80 percent with the local agency providing a 20-percent match. Funds administered by MoDOT, will provide 80 percent of the TEAP project costs, up to $8,000 per project. If the total cost is greater than $10,000, the local agency can pay more than 20 percent to complete the TEAP project, if desired.

Federal Lands Access Program (FLAP)

The Federal Lands Access Program (FLAP) provides funds for projects on Federal Lands Access Transportation Facilities that are located on or adjacent to, or that provide access to Federal lands as provided for in the FAST Act. The FLAP, as an adjunct to the Federal-Aid Highway Program, covers highway programs in cooperation with federal-land managing agencies. It provides transportation-engineering services for planning, design, construction and rehabilitation of the highways and bridges providing access to federally owned lands. The Federal Highway Administration (FHWA) also provides training, technology, deployment, engineering services and products to other customers. The FHWA administers the Federal Lands Access Program, including survey, design and construction of forest highway system roads, parkways and park roads, Indian reservation roads, defense access roads and other federal-lands roads. The FHWA, through

cooperative agreements with federal-land managing agencies such as the National Park Service, Forest Service, Military Traffic Management Command, Fish and Wildlife Service and the Bureau of Indian Affairs, administers a coordinated federal-lands program consisting of forest highways, public-lands highways, park roads and parkways, refuge roads and Indian reservation roads. This program provides support for approximately 30,000 miles of public roads serving Federal and Indian lands to support the economic vitality of adjacent communities and regions.

Cost Share Program Guidelines

The purpose of the Cost Share Program is to build partnerships with local entities to pool efforts and resources to deliver state highway and bridge projects. The Missouri Department of Transportation (MoDOT) allocates Cost Share funds based on the Missouri Highways and Transportation Commission's (MHTC) approved funding distribution formula. At least 10 percent is set-aside for projects that demonstrate economic development through job creation. Projects are selected by the Cost Share Committee, which consists of the Chief Engineer, Chief Financial Officer and the Assistant Chief Engineer. They are then recommended for approval by the MHTC via a STIP amendment.

MoDOT participates up to 50 percent of the total project costs on the state highway system. While contributions are expected on economic development projects, the Cost Share Committee may increase MoDOT's participation up to 100 percent for economic development projects that create new jobs. Job creation will be verified by the Department of Economic Development. The project agreement will identify requirements for returning funds if jobs are not created as planned. Retail development projects do not qualify as economic development.

MoDOT's participation includes the amount of Cost Share funds allocated to the project, District STIP or Operating Budget funds and activities performed by MoDOT such as preliminary engineering, right of way incidentals and construction engineering.

Generally, the Cost Share funding per project is limited to $10 million in total and $2.5 million per year. However, projects exceeding this limit can be considered based on factors such as project need, the opportunity for economic development and the willingness of the local partners to be flexible and bring resources to the table. Project applications should not expand the state highway system or increase maintenance costs for MoDOT. Project applications that significantly expand the state highway system or increase maintenance costs for MoDOT must seek pre-approval by the Chief Engineer prior to submittal.

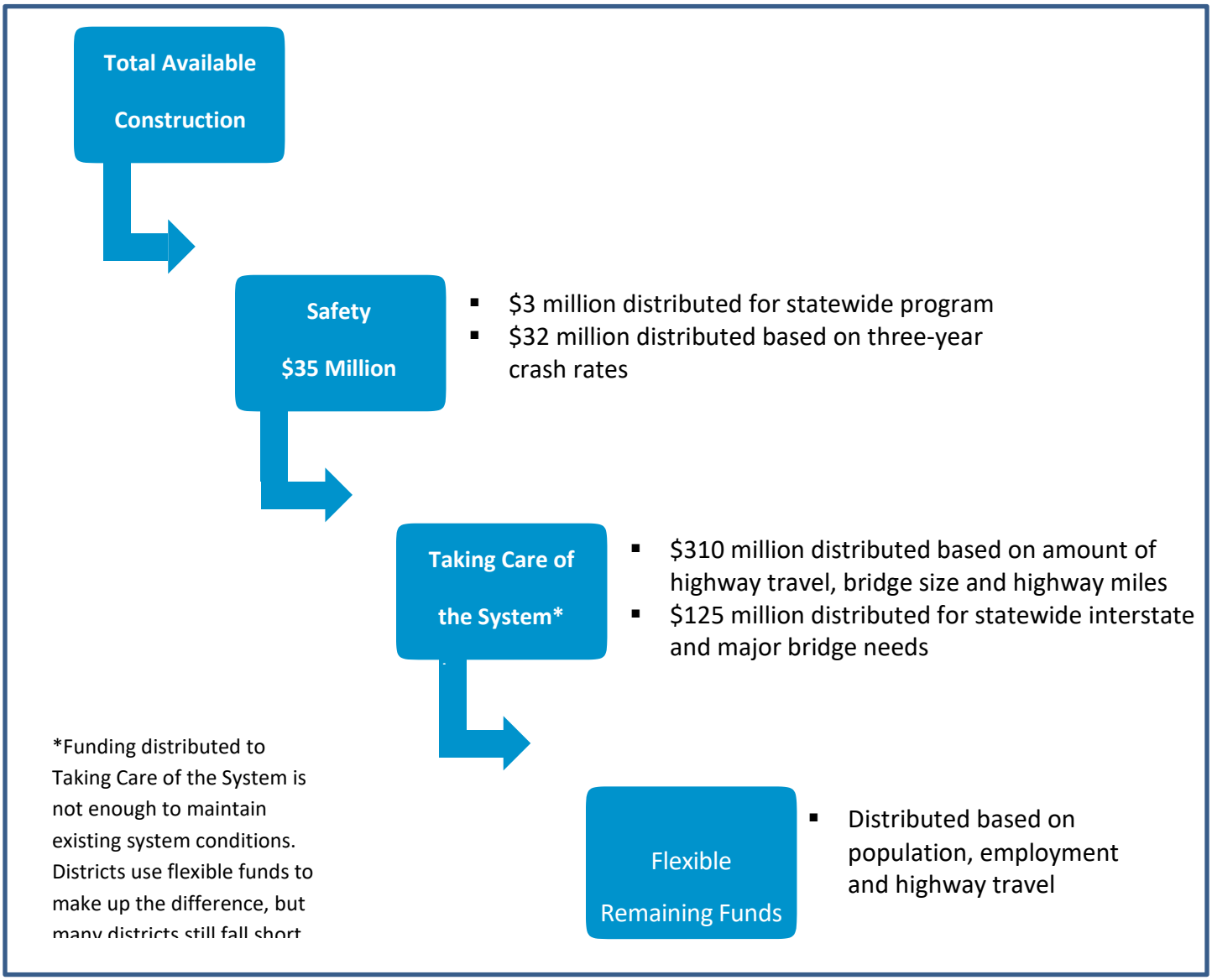
Funding Distribution

On Jan. 10, 2003, the Missouri Highways and Transportation Commission adopted an objective method to distribute transportation funds using factors reflecting system size and usage and where people live and work. The distribution of funds has been the subject of debate for over a decade. The method for determining where and on what to spend limited transportation dollars has changed several times. Changes have been a result of both long-term project plans and political pressure centered on dividing funds between the urban and rural areas of the state. This method goes beyond the narrow discussions of geography and allows for allocation of funding based on objective, transportation-related factors that are representative indicators of physical system needs.

Since 2003, the Missouri Highways and Transportation Commission has used a formula to distribute construction program funds for road and bridge improvements to each of its districts (seven since 2011). This is the largest area of MoDOT's budget that provides funding for safety improvements, taking care of the system and flexible funds that districts can use to take care of the system or invest in major projects that relieve congestion and spur economic growth. In many districts, taking care of the system funds are not sufficient to maintain current system conditions. Districts use flexible funds to make up the difference, but often times still fall short. Figure 7.1

identifies how construction program funds are allocated annually to districts using the following formula:

Figure 7.1 MoDOT Funding Distribution for Construction Funds

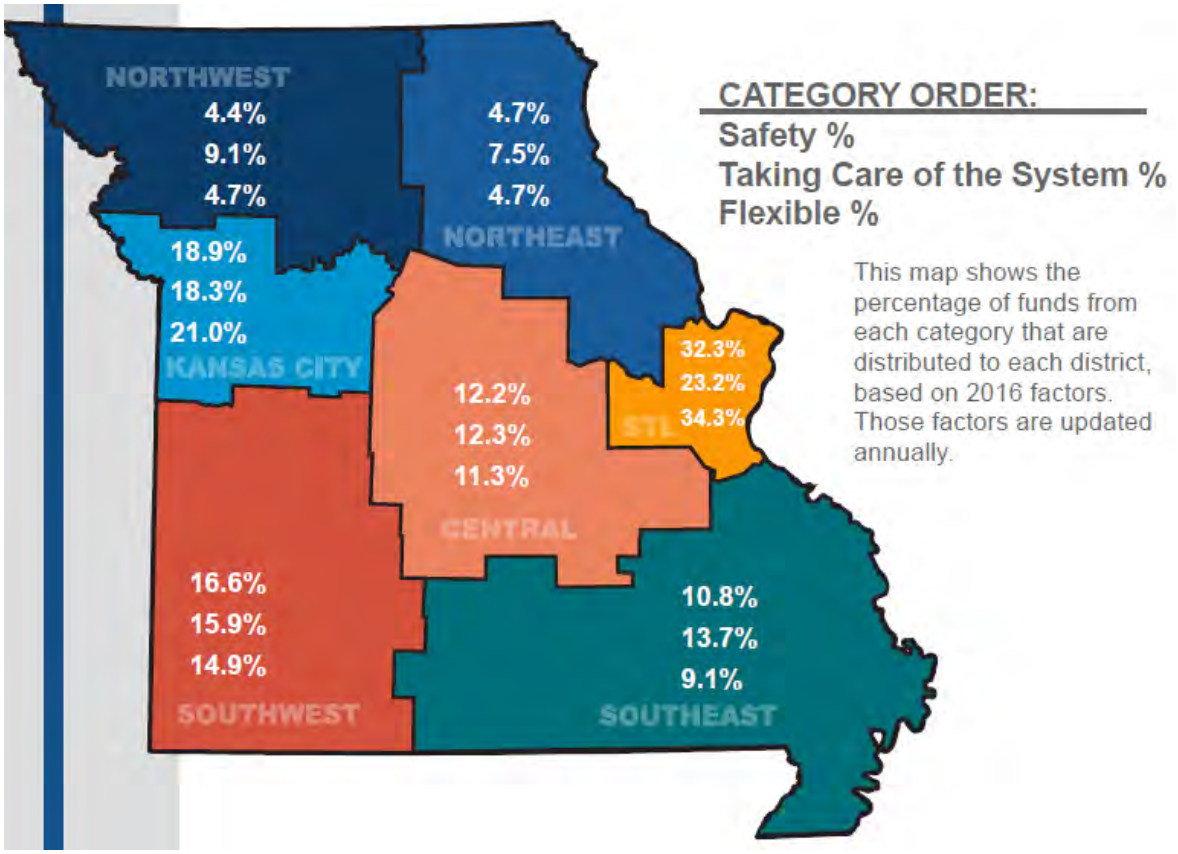


Source: MoDOT's Citizen's Guide to Transportation Funding in Missouri, 2016

Funding Distribution Overview

Once construction program funds are distributed to districts, MoDOT collaborates with regional planning groups to identify local priorities based on projected available funding. The regional transportation improvement plans are brought together to form the department's Statewide Transportation Improvement Program, which outlines five years of transportation improvements. As one year of the plan is accomplished, another year is added.

Figure 7.2 MoDOT Funding Distribution by District



Source: MoDOT's Citizen's Guide to Transportation Funding in Missouri, 2016

When adding the construction program, operations, administration and highway safety programs together, the following amounts were spent in districts based on the three-year average from fiscal years 2014 through 2016:

Table 7.1 MoDOT Funding Distribution – Total by District ($ Millions)

District	Construction Program	Operations	Admin	HWY Safety Programs	Total
Northwest	$46	$57	$2	-	$105
Northeast	$41	$50	$2	-	$93
Kansas City	$217	$52	$3	-	$272
Central	$90	$65	$2	-	$157
St. Louis	$229	$62	$3	-	$293
Southwest	$132	$80	$2	-	$214
Southeast	$84	$76	$2	-	$162
Statewide	$36	$67	$35	$16	$154
Total	$875	$509	$51	$16	$1,450

Source: MoDOT's Citizen's Guide to Transportation Funding in Missouri, 2016

Chapter 8 – *Plan Implementation*

A copy of the original RTP was submitted to each OFTAC member for his/her review. At the subsequent OFTAC meeting, the RTP was open for discussion. Any revisions that were approved by the OFTAC were incorporated and a revised copy of the plan was again submitted to the OFTAC members. Upon the OFTAC's approval of the revised plan, implementation of the plan was begun.

The entire RTP is to be reviewed by the OFTAC every two years. Specific sections, such as the needs prioritization and STIP projects, must be reviewed annually, as relevant information is made available for those applicable sections each year. The revised portion of the RTP shall be reviewed and approved by the OFTAC.

The OFTAC will continue to update and review the "needs lists" annually. The annually updated lists are to include a prioritized list of the top "project needs," top "maintenance needs," and "multi-modal needs" for the Ozark Foothills region of MoDOT's Southeast District, along with the other remaining prioritized project and maintenance needs in each county.

According to MoDOT, implementation of the Planning Framework Process and Missouri's LRTP, "includes specific tasks and target dates that must be completed in order to implement the improved processes." Starting with the Fiscal Year 2009-2013 STIP, MoDOT began fully using the framework processes.

As stated in chapter one, the RTP will be used to identify needs in the area and update Missouri's LRTP. Implementation of this plan will occur as the following steps are completed. The needs are prioritized and reported in the RTP. If the TAC "needs" are selected, preliminary design commitments will be made. Next is the project scoping stage, where the projects will be

designed and developed. It is here that projects will first be identified as possibilities to be part of the STIP. The projects will then again be prioritized and programmed. Finally, right of way and construction commitments will be made, and the projects will be listed in the STIP. The transportation improvements will then be completed, resulting in the citizens of Missouri and, more specifically, the Ozark Foothills Region leading a more connected, prosperous, and improved life.

To revise this plan, it is essential that the OFTAC, OFRPC staff, and community members constantly monitor and check the development of the RTP. It is the role of the OFTAC to annually evaluate and revise the list of the region's transportation needs. The OFRPC must then do its job of reporting these changing needs to MoDOT Central Office and to MoDOT's district office for inclusion of the identified needed improvements in Missouri's LRTP and the current STIP. As described in previous chapters, several of the region's identified needs are already included in the current STIP and progress is being made towards the goal of getting more of the region's needs included in the STIP. Of course, new needs are surely to arise and be identified in following years, perpetuating the annual cycle of transportation planning.

Appendix A:

2020-2024
STIP Projects by County

BUTLER COUNTY					
Mode	**Project**	**Location**	**Job Number**	**FY**	**Est. Cost**
Road/Bridge: MO 142	Bridge replacement	Over Cane Creek. Bridge S0524	9S3557	2023	$890,000
Road/Bridge: MO 53	Pavement resurfacing	Bus. 67 to Rte. 25	9P3524	2023	$6,292,000
Road/Bridge: BU 60	Bridge improvements	Over Black River. Bridge K0263	9S3381	2022	$4,199,000
Road/Bridge: US 67	Pavement resurfacing	Arkansas State line to Hwy 160	9P3514	2023	$2,678,000
Road/Bridge: RT CC	Pavement resurfacing	Hwy 151 near Broseley to Rte. 53	9S3360	2020	$773,000
Road/Bridge: RT F	Pavement resurfacing	Rte. 160 to end of state maintenance	9S3359	2021	$230,000
Road/Bridge: RT JJ	Pavement resurfacing	Rte. 67 to end of state maintenance	9S3362	2020	$252,000
Road/Bridge: RT KK	Pavement resurfacing	Rte. T to Rte. W	9S3361	2021	$426,000
Road/Bridge: RT M	Add Rumblestripes	County Road 462 to CR 441	9S3556	2021	$974,000
Road/Bridge: RT N	Pavement resurfacing	Rte. 51 Qulin to Rte. 51 near Fagus	9S3358	2021	$1,057,000
Road/Bridge: RT U	Bridge rehabilitation	Over St. Francis River, Bridge	9S3608	2024	$1,233,000
Road/Bridge: RT W	Bridge improvements	Over Black River. Bridge F0559	9S3386	2022	$3,402,000
Aviation	Runway 18/36 Reconstruction	Poplar Bluff	Not Available	2021	$4,200,000
Elderly/Handicap Assistance	Butler County Community Resource Council	Butler County	Not Available	2020	$4,200
Elderly/Handicap Assistance	Manufacturers Assistance Group	Poplar Bluff	Not Available	2020	$15,800

CARTER COUNTY					
Mode	**Project**	**Location**	**Job Number**	**FY**	**Est. Cost**
Road/Bridge: Rte. A	Bridge Replacement	Over Cane Creek, Bridge	9S3609	2024	$831,000
Road/Bridge: RT B	Pavement improvements	Rte. 21 to Rte. 60	9P3426	2020	$908,000
Road/Bridge: RT B	Bridge Replacement	Over 10 Mile Creek	9S3612	2024	$934,000
Elderly/Handicap Assistance	Big Springs Sheltered Workshop	Van Buren	Not Available	2020	$7,600

REYNOLDS COUNTY					
Mode	**Project**	**Location**	**Job Number**	**FY**	**Est. Cost**
Road/Bridge: MO 106	Guardrail Installation	County Road 61- to 0.3 miles east	9S3648	2024	$121,000
Road/Bridge: RT K	Bridge rehabilitation	Over Black River. Bridge T1000	9S3561	2023	$2, 464,000
Elderly/Handicap Assistance	Reynolds County Sheltered Workshop	Reynolds County	Not Available	2020	$7,200

RIPLEY COUNTY					
Mode	**Project**	**Location**	**Job Number**	**FY**	**Est. Cost**
Road/Bridge: MO 21	Pavement Improvements	Rte. 142 to Ark.	9P3369	2021	$1,032,000
Road/Bridge: MO 142	Bridge Improvements	Over Little Black River.	9S3209	2021	$871,000
Road/Bridge: RT A	Pavement improvements	Rte. 21 to Ark.	9S3420	2020	$576,000
Road/Bridge: RT B	Pavement improvements	Rte. 160 to Rte. 142	9S3409	2019	$378,000
Road/Bridge: RT E	Pavement improvements	Rte. 142 to end of state maintenance	9S3421	2020	$451,000
Road/Bridge: RT T	Pavement improvements	Rte. 160 to Rte. 142	9S3372	2021	$402,000
Elderly/Handicap Assistance	Current River Sheltered Workshop	Ripley County	Not Available	2020	$15,000
Transit System	Ripley County Transit	Ripley County	Not Available	2020	$60,000
Transit System	Ripley County Transit	Ripley County	Not Available	2020	$364,000

WAYNE COUNTY					
Mode	**Project**	**Location**	**Job Number**	**FY**	**Est. Cost**
Road/Bridge: MO 34	Bridge improvements	Over Black River	9P3218	2022	$7,013,000
Road/Bridge: MO 34	Bridge improvements	Over St. Francis River	9P3380	2022	$1,952,000
Road/Bridge: MO 49	Pavement resurfacing	Rte. 34 to Rte. 67	9S3294	2020	$1,478,000
Road/Bridge: US 67	Repair slides	Various locations	9P3501	2020	$2,091,000
Road/Bridge: RT A	Bridge improvements	Over Small Creek	9S3383	2021	$817,000
Road/Bridge: RT B	Pavement improvements	Rte. 34 to Rte. U	9S3414	2021	$543,000
Road/Bridge: MO 34	Pavement Resurfacing	Rte. 49 to Rte. 67	9P3515	2024	$2,412,000
Road/Bridge: Rte. FF	Bridge improvements	Over Rings Creek	9S3568	2023	$998,000
Road/Bridge: Rte. V	Pavement improvements	Rte. 34 to Rte. A	9S3408	2021	$813,000
Road/Bridge: Rte. Z	Pavement improvements	Rte. D to Rte. P	9S3364	2021	884,000
Elderly/Handicap Assistance	Services For Extended Employment	Piedmont	Not Available	2021	$7,600

Appendix B:

Ozark Foothills Regional Planning Commission

Sidewalk Inventory

Background

During Fiscal Year 2012, Ozark Foothills Regional Planning Commission began a sidewalk assessment program for the Ozark Foothills region in two phases. The purpose of the project was to collect information regarding general information about pedestrian infrastructure as well as assess the existing sidewalk systems in the region. Such information may be utilized for planning purposes, the establishment of local priorities, as well as potential grant applications and participation in the Transportation Alternative Program grant application cycle.

The first phase was a survey to identify existing sidewalks and assess the importance of sidewalks to each of the communities in the five county region. A simple questionnaire was mailed out to each of the municipalities. Of the 16 communities, all returned surveys, most of which indicated an interest in the creation and maintenance of a sidewalk system in their town.

The second phase was a more intensive assessment of sidewalk systems in towns over 1,000 in population. The planning commission extended these criteria to include the five largest cities in the region, even though two cities have populations below 1,000. Beginning in the fall of 2011, OFRPC employees worked to identify existing sidewalks and with this information in hand, each sidewalk was then visually assessed and categorized. During Fiscal Year 2016, staff from the OFRPC updated current maps and statistics as communities created new sidewalks through grants received.

Communities included in Phase 2 Assessment:

The sidewalks in each community included the following cities:

Butler County	Poplar Bluff
Carter County	Van Buren*
Reynolds County	Ellington*
Ripley County	Doniphan
Wayne County	Piedmont

*These cities' official population using 2010 census data is below 1,000. In order to include all counties in the assessment, OFPRC chose to address the five largest cities in the region.

Assessment Methods:

Condition:	**Criteria:****
Good	Unlikely to hinder mobility of the average pedestrian. The sidewalk is free from significant cracking, buckling, gravel surfaces, or other debris that would impede pedestrian traffic.
Fair	Uneven and distressed surface that hinders mobility of the average pedestrian. The sidewalk contains surface cracks, vegetation overgrowth, or debris.
Poor	Impassable to mobility impaired pedestrian; hinders mobility of average pedestrian. The sidewalk has deep cracking or buckling, significant vegetative overgrowth, poor drainage, bulging surface (due to tree roots) and/or debris such that pedestrian travel would be impeded.
**	ADA compliance and guidelines were not included in the assessment.

Five County Totals:

When considered in its entirety, OFRPC's five county area has a combined total of 278,928.02 linear feet (52.83 miles) of existing sidewalks to serve its citizens in the cities surveyed. The overall sidewalk conditions are summarized below by county in linear feet:

Condition:	Butler County	Carter County	Reynolds County	Ripley County	Wayne County	Five County Area
Good	96,537.12	2,327.65	2,546.2	6,916	16,735.7	125,062.67
Fair	51,058.4	1,403.15	3,761.58	10,687.71	8,159.91	75,070.75
Poor	43,330.07	2,688.52	4,925.36	19,762.95	8,087.7	78,794.6
Combined total	190,925.59	6,419.32	11,233.14	37,366.66	32,983.31	278,928.02

Butler County

City of Poplar Bluff

Sidewalk Assessment

Poplar Bluff Totals:

When considered in its entirety, Poplar Bluff has a combined total of 190,448.59 linear feet (36.07 miles) of existing sidewalks to serve its citizens. The overall sidewalk conditions are summarized below in linear feet:

Condition:	Linear Feet:	% of Total
Good	96,537.12	50.56
Fair	51,058.4	26.74
Poor	43,330.07	22.70
Combined total	190,925.59	100.00

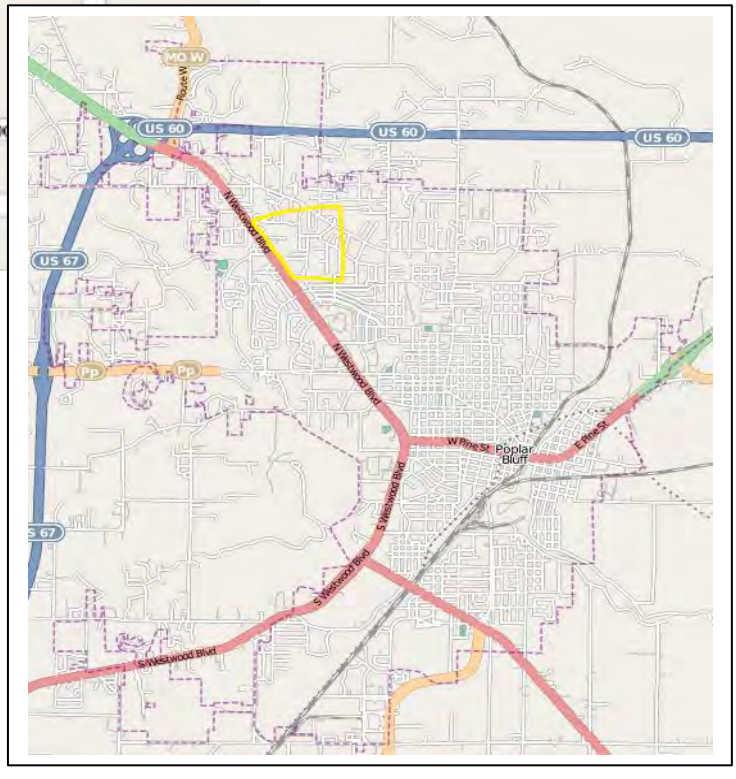
Photo Examples:

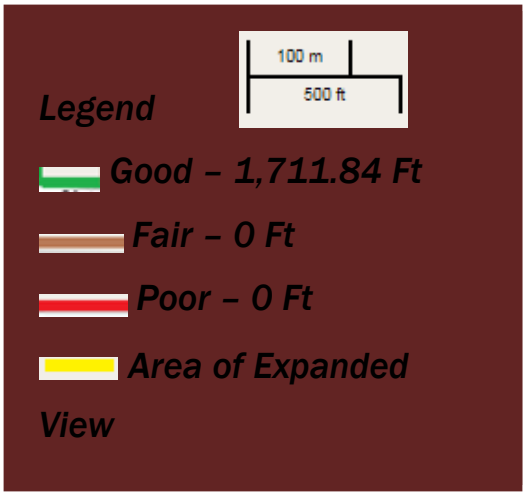
Good Condition: Tennessee St. facing south

Fair Condition: Riverview facing north

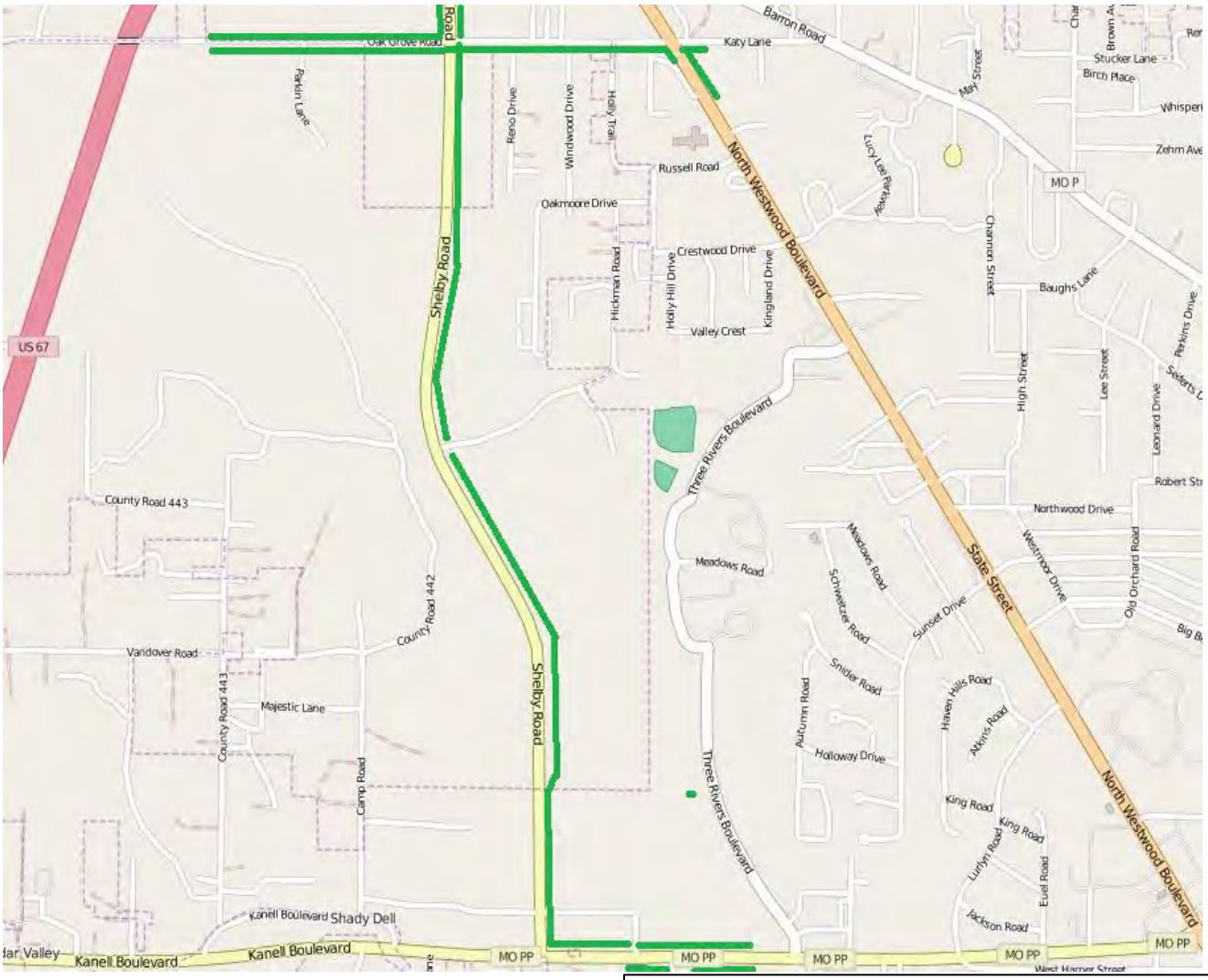
Poor Condition: Victor and Ditch Road facing east

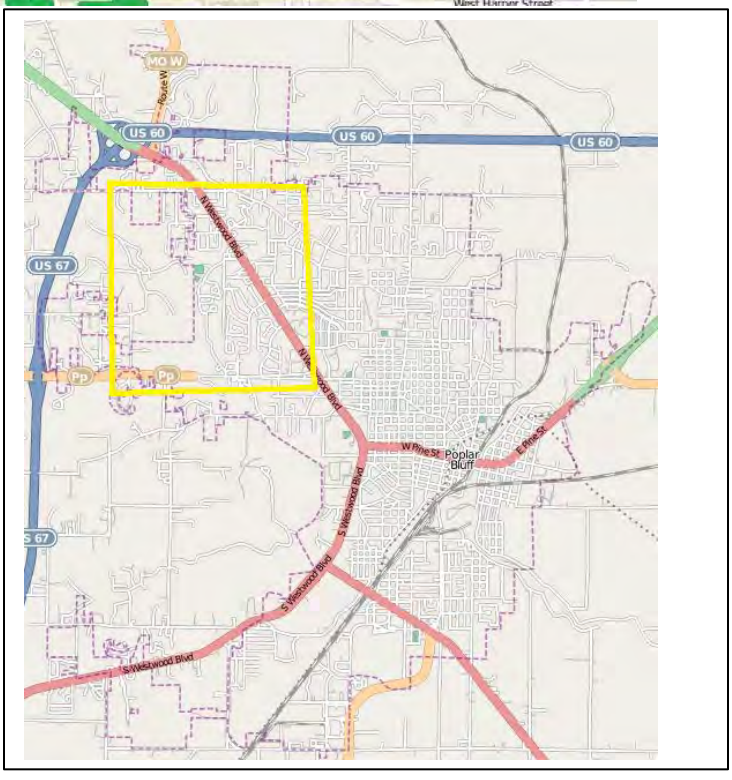
Poplar Bluff, MO - North





Poplar Bluff, MO – Shelby





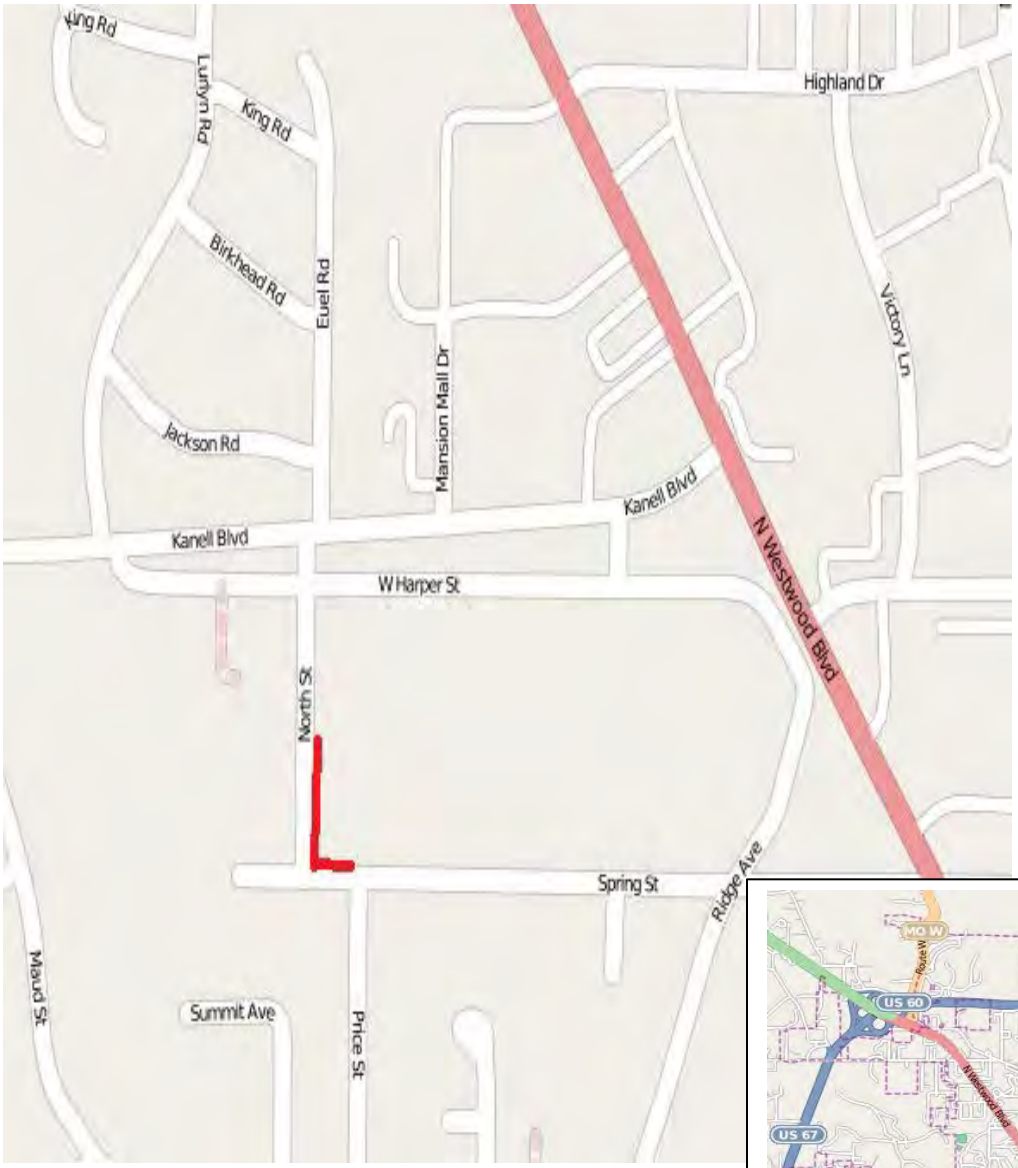
100 m
500 ft

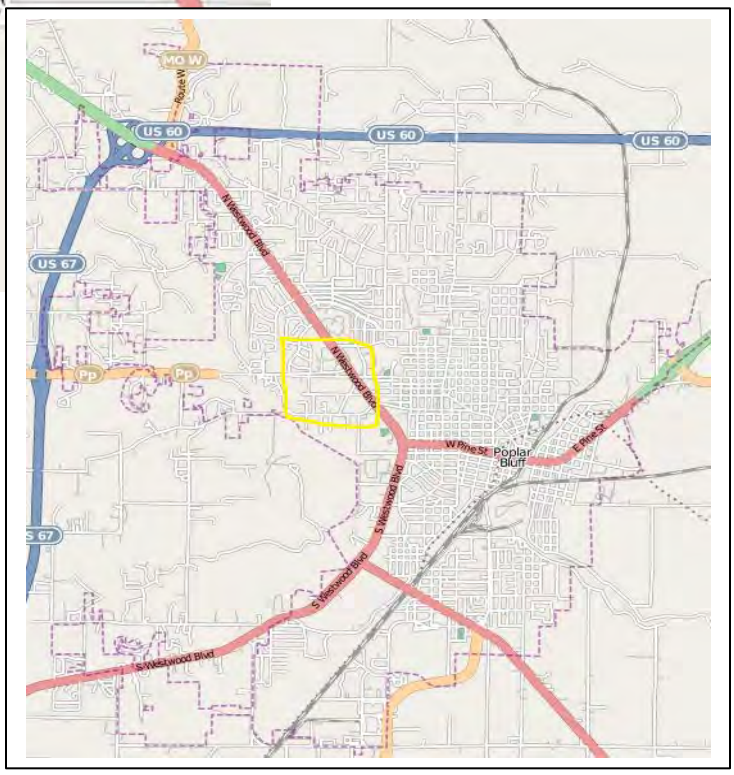
N

Legend

- *Good – 17,646.68 Ft*
- *Fair – 0 Ft*
- *Poor – 0 Ft*
- *Area of Expanded View*
- *City Limits*

Poplar Bluff, MO – Central





100 m
500 ft

N

Legend

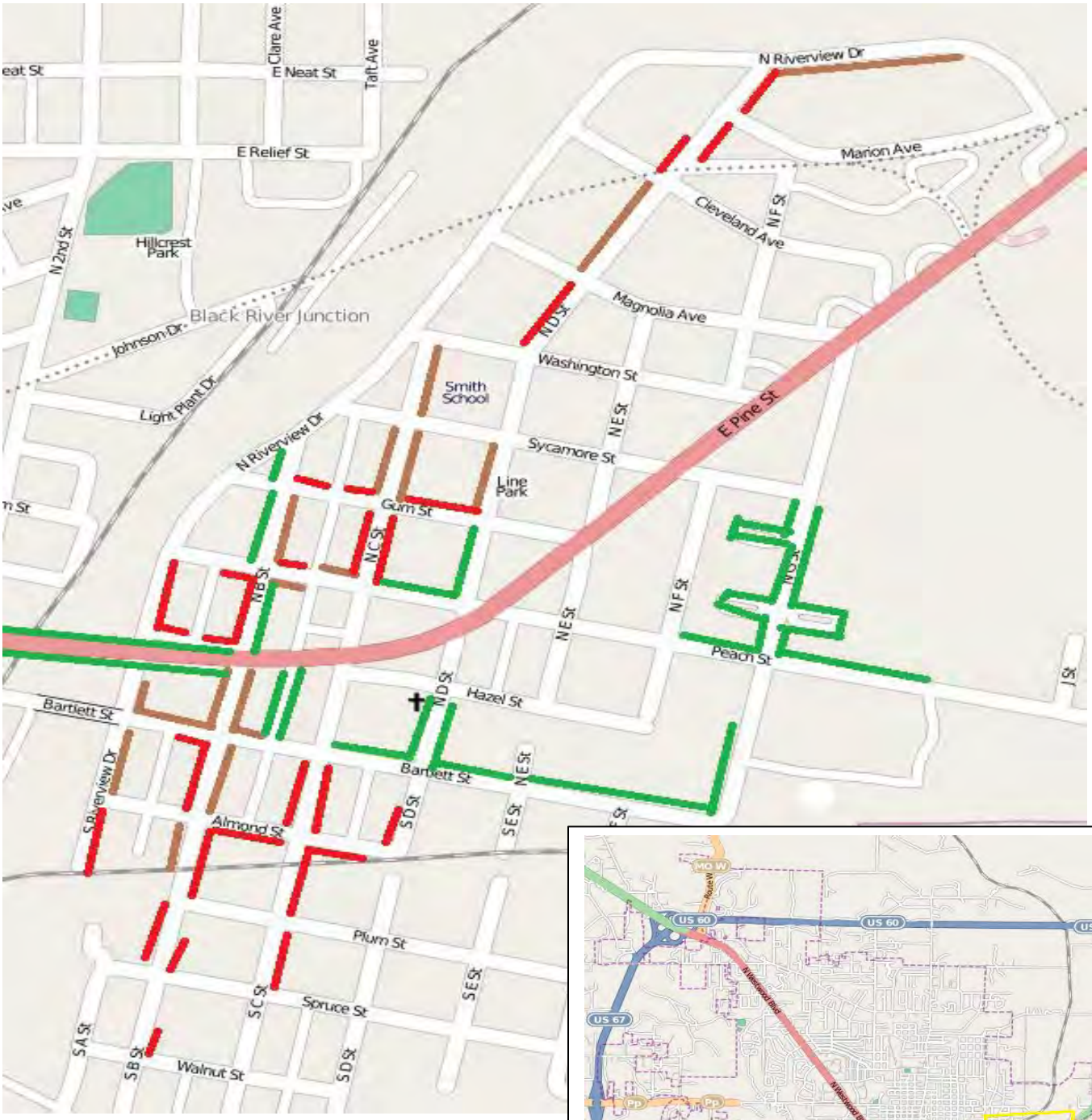
Good – 0 Ft Fair

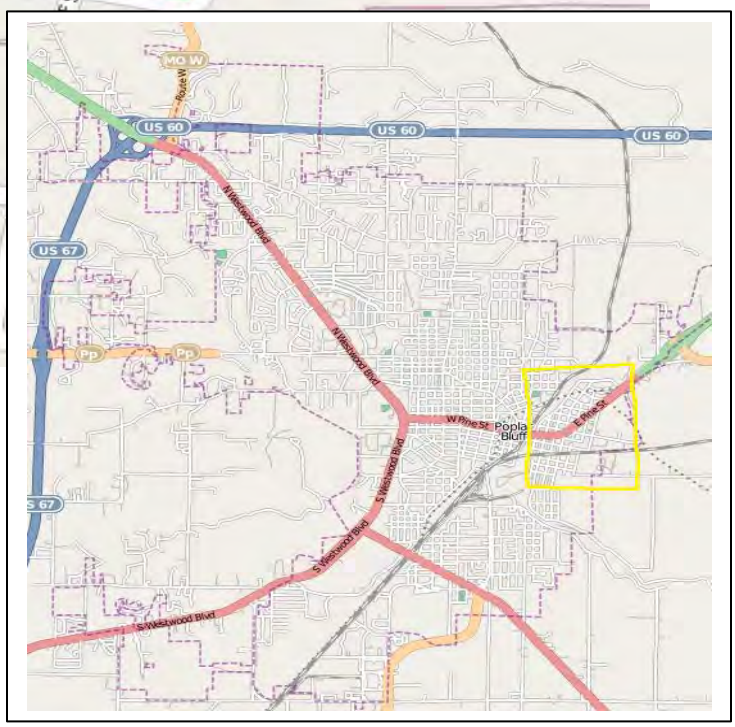
– 0 Ft Poor –

420 Ft

Area of Expanded View

Poplar Bluff, MO – East





Legend

100 m
500 ft

Good – 10,459.45 Ft

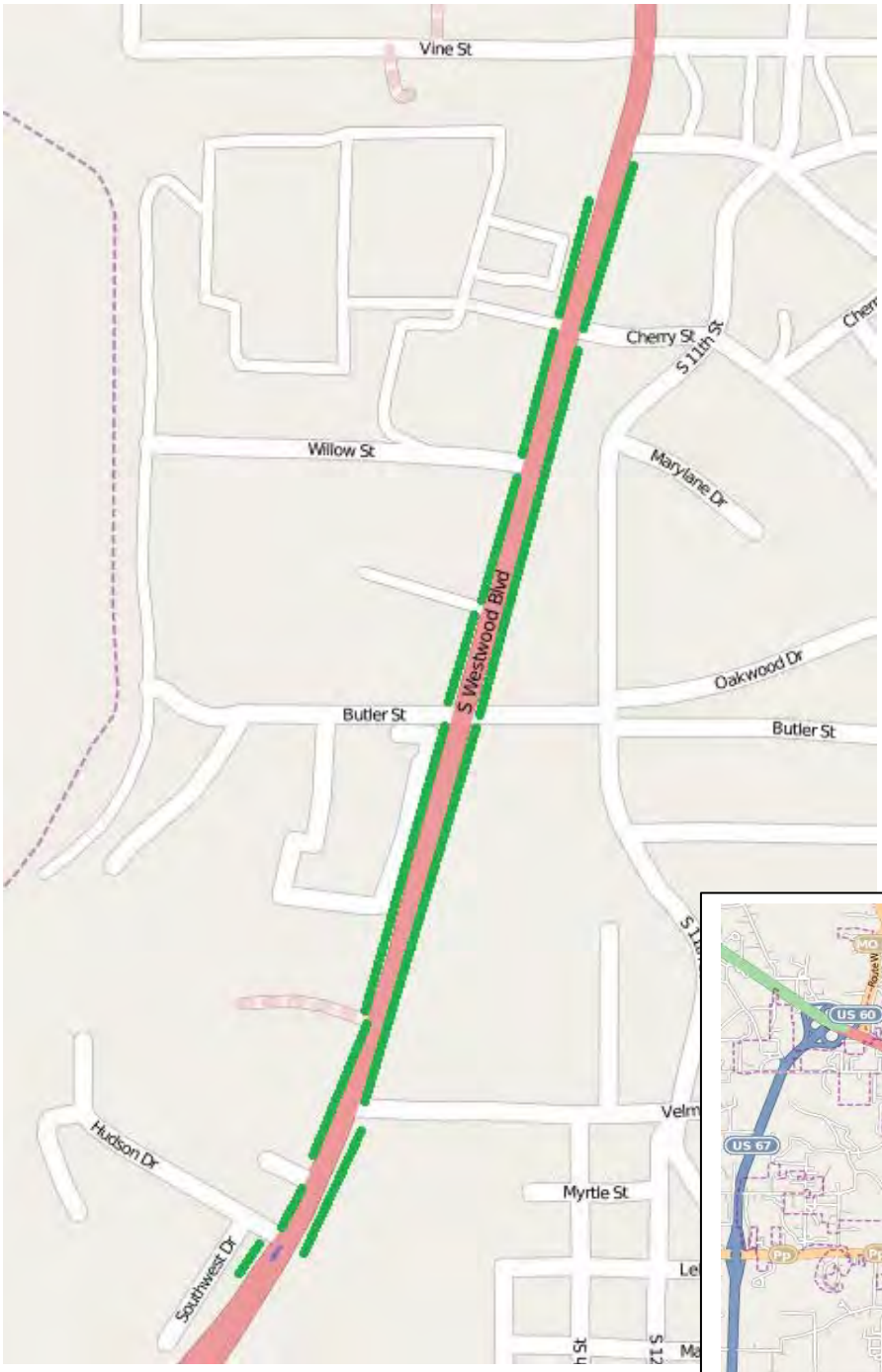
Fair –6,078.17 Ft

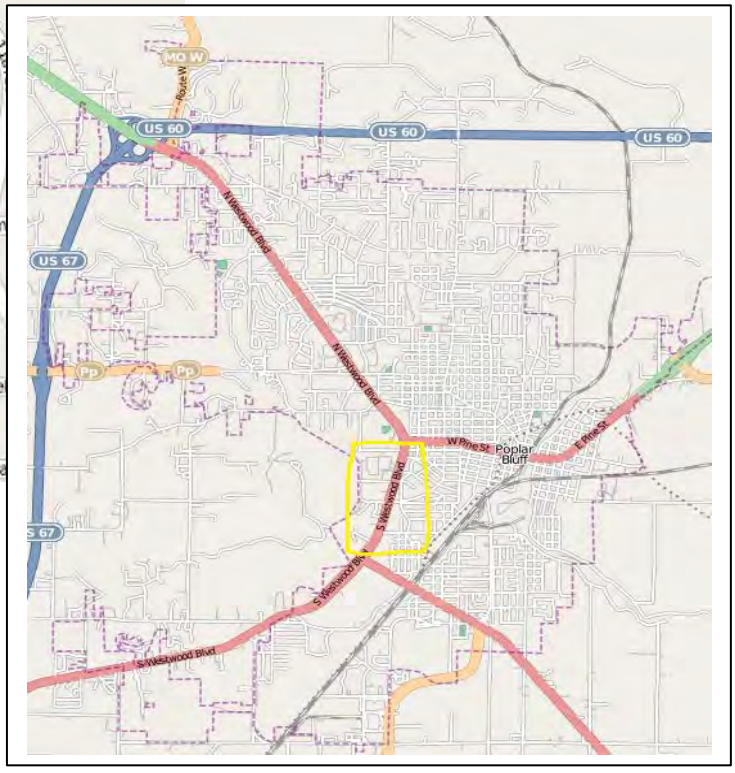
Poor – 6,504.26 Ft

Area of Expanded View

N

Poplar Bluff, MO – HWY 67 South





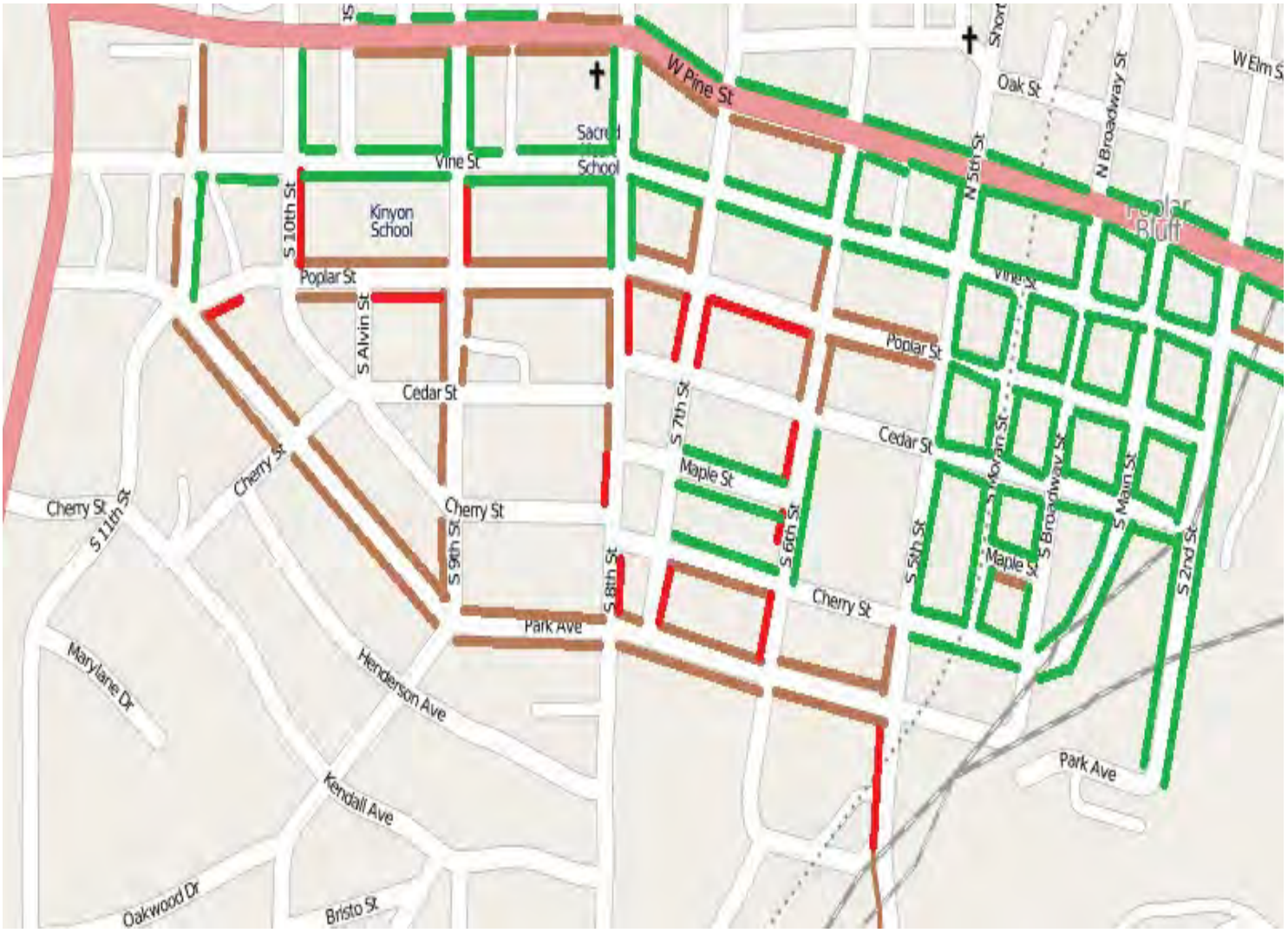
100 m
500 ft

N

Legend

- *Good – 3,421.54 Ft*
- *Fair – 0 Ft*
- *Poor – 0 Ft*
- *Area of Expanded View*
- *City Limits*

Poplar Bluff, MO - Downtown

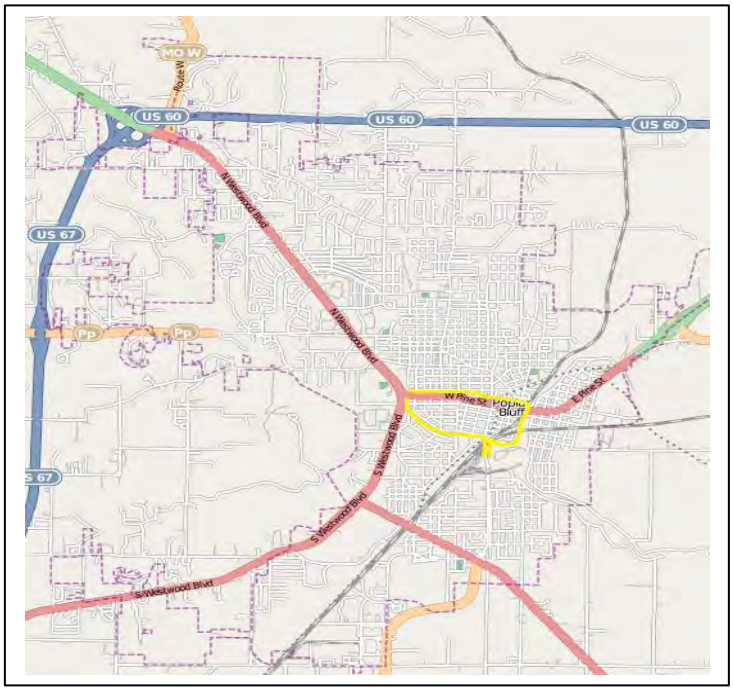


Legend

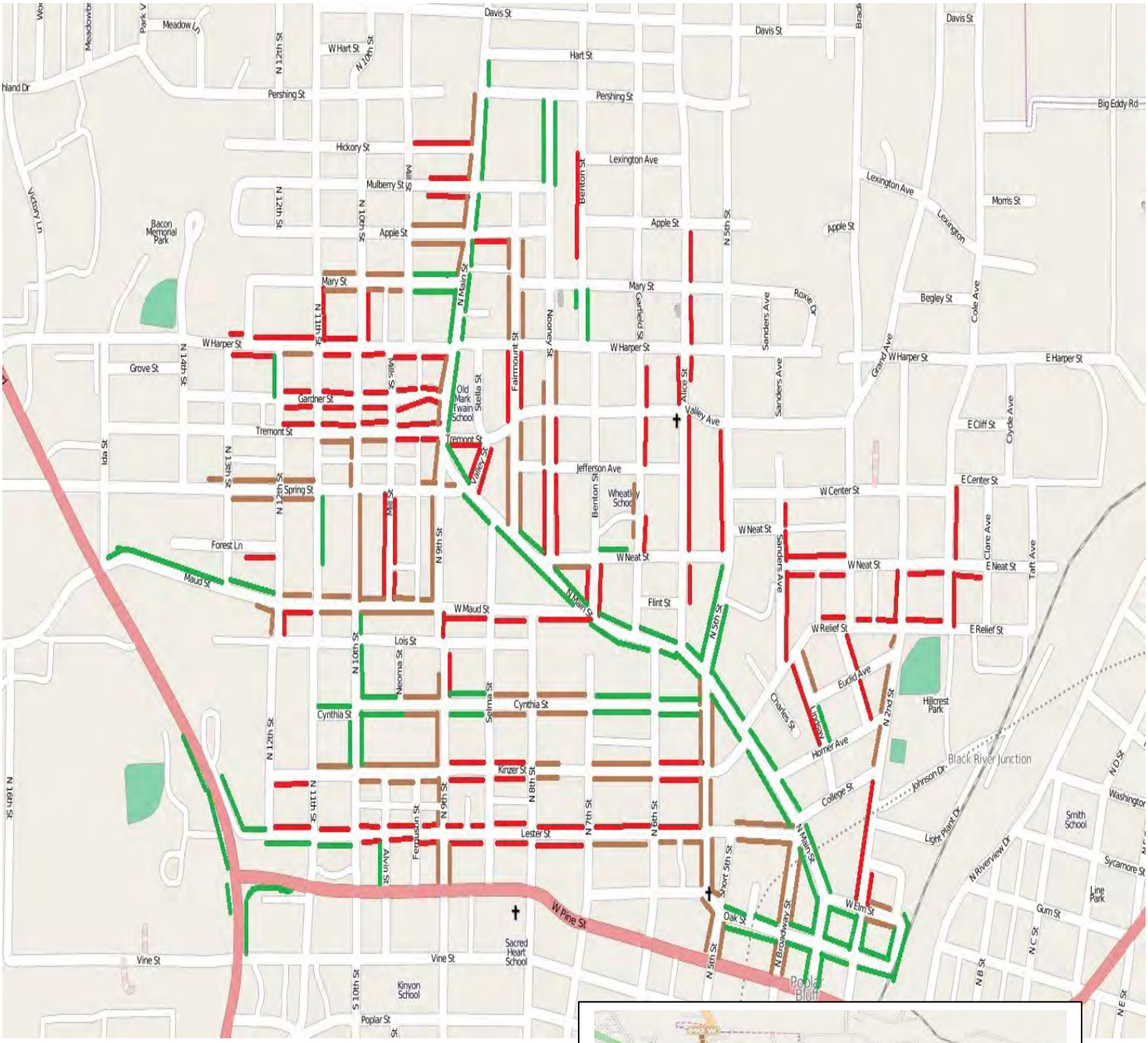
100 m
500 ft

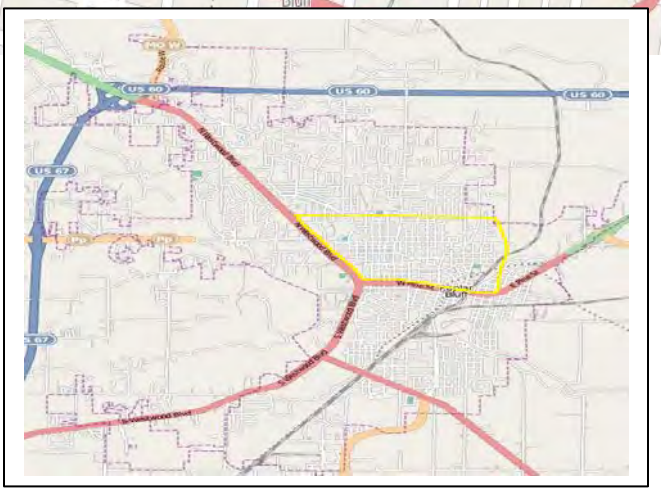
- Good – 23,976.78 Ft
- Fair – 15,308.42 Ft
- Poor – 4,691.64 Ft
- Area of Expanded View
- City Limits

N



Poplar Bluff, MO – North Central





200 m
1000 ft

N

Legend

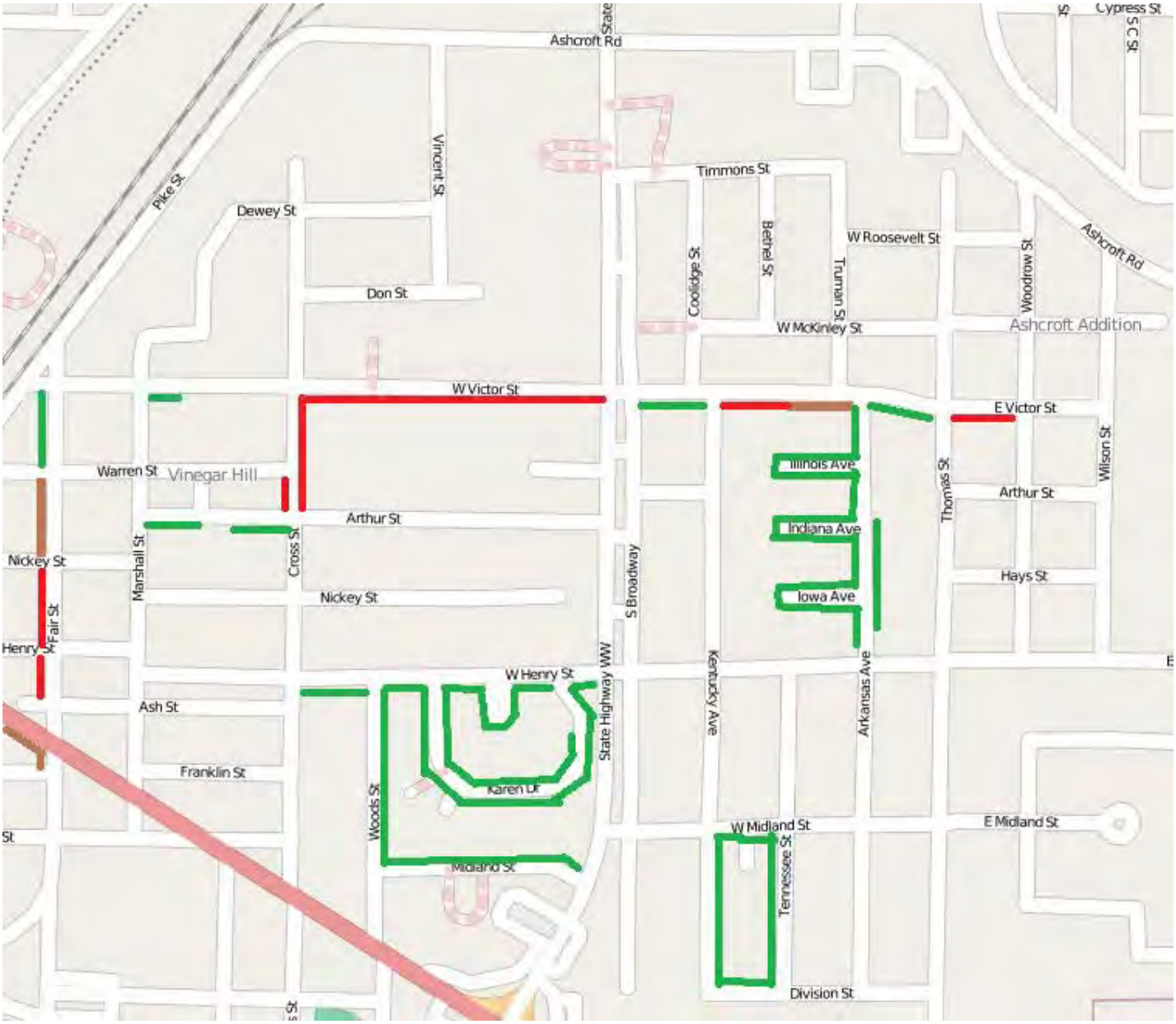
Good – 27,460.44 Ft

Fair – 28,127.15 Ft

Poor – 29,305.59 Ft

Area of Expanded View

Poplar Bluff, MO - South

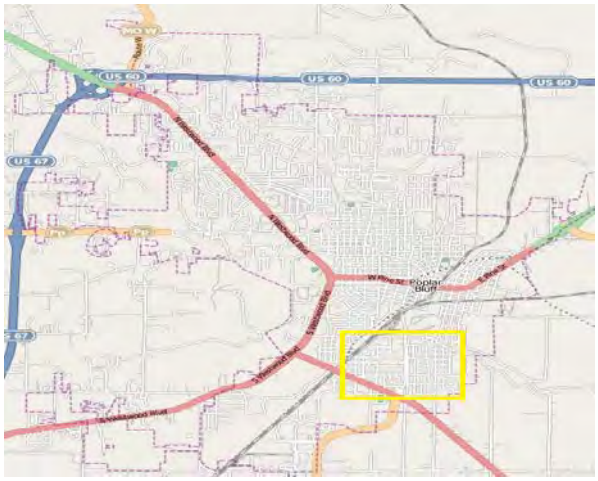


100 m
500 ft

N

Legend

- *Good – 11,860.39 Ft*
- *Fair – 1,544.66 Ft*
- *Poor – 2,408.63 Ft*
- *Area of Expanded View*
- *City Limits*



Carter County

City of Van Buren

Sidewalk Assessment

Van Buren Totals:

When considered in its entirety, Van Buren has a combined total of 6,419.32 linear feet (1.22 miles) of existing sidewalks to serve its citizens. The overall sidewalk conditions are summarized below in linear feet:

Condition:	Linear Feet:	% of Total
Good	2,327.65	36.26
Fair	1,403.15	21.86
Poor	2,688.52	41.88
Combined total	6,419.32	100.00

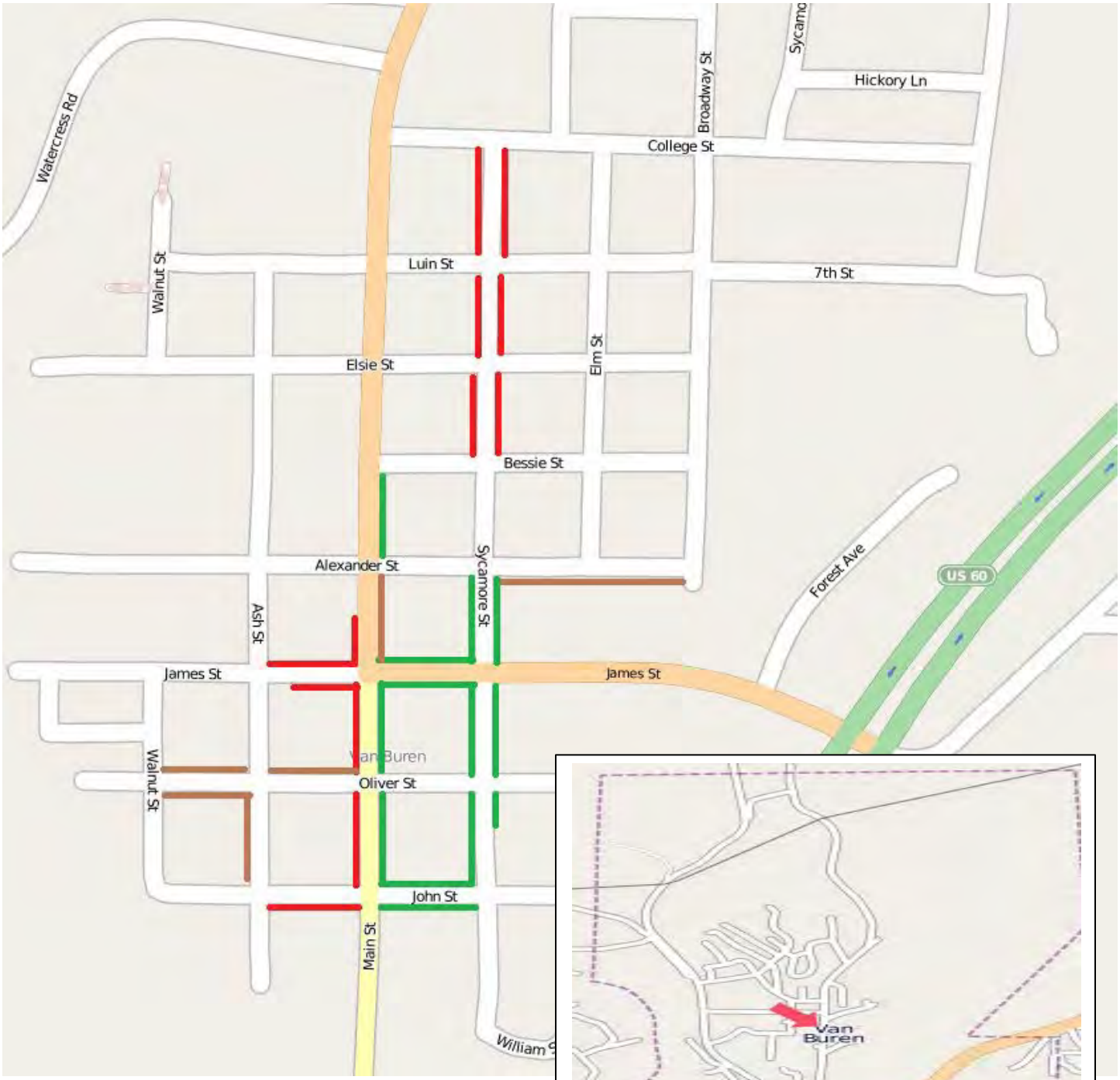
Photo Examples:

Good Condition: James and Sycamore streets

Fair Condition: Main Street facing north

Poor Condition: Main Street facing south

Van Buren, MO



50 m
200 ft

N

Legend

Good – 2,327.65 Ft

Fair – 1,403.15 Ft

Poor – 2,688.52 Ft

City Limits

Reynolds County

City of Ellington

Sidewalk Assessment

Ellington Totals:

When considered in its entirety, Ellington has a combined total of 11,233.14 linear feet (2.13 miles) of existing sidewalks to serve its citizens. The overall sidewalk conditions are summarized below in linear feet:

Condition:	Linear Feet:	% of Total
Good	2,546.2	22.66
Fair	3,716.58	33.49
Poor	4,925.36	43.85
Combined total	11,233.14	100.00

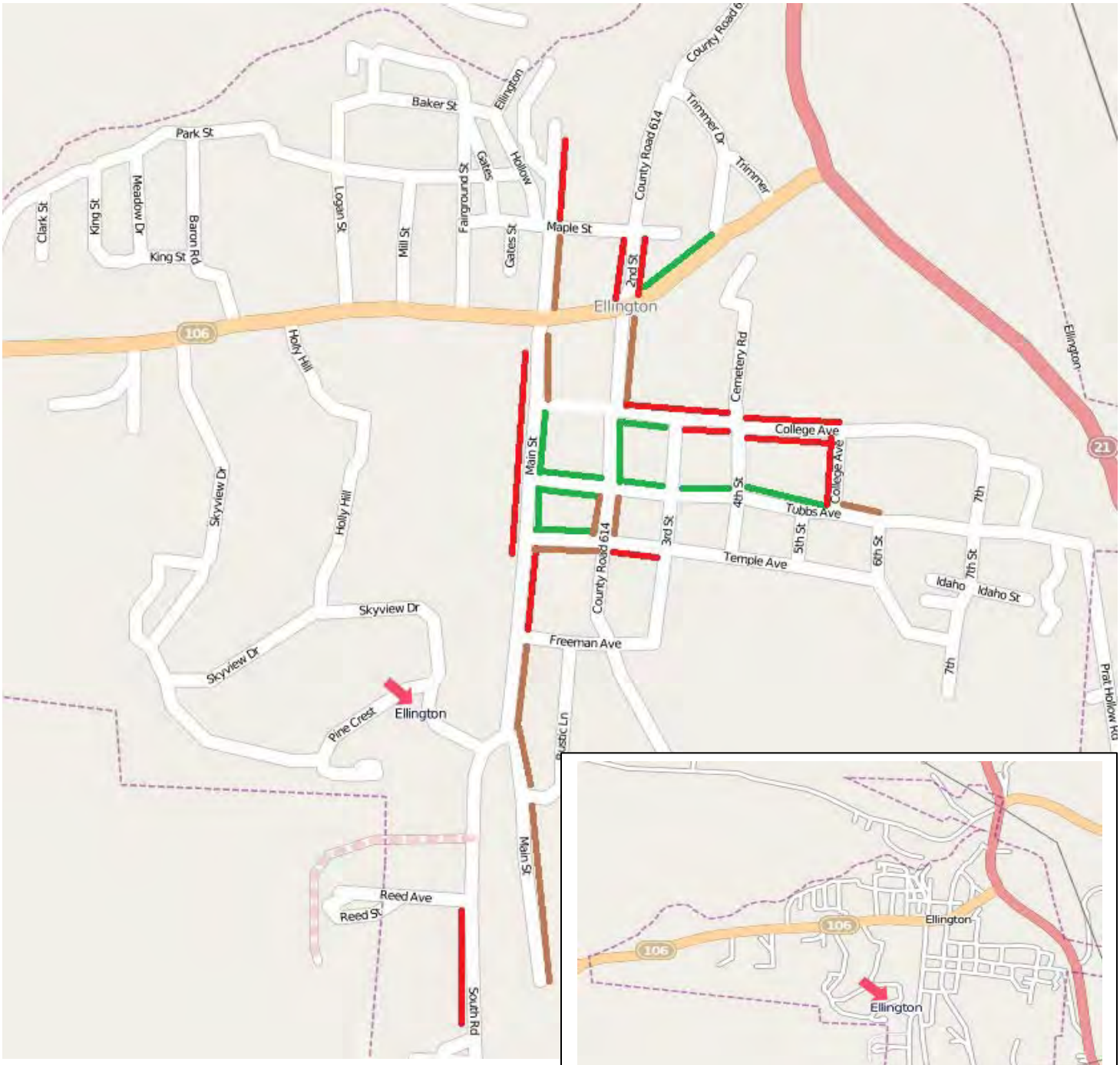
Photo Examples:

Good Condition: Main Street facing north on Tubbs

Fair Condition: Main Street South of Temple

Poor Condition: Main Street North of Maple

Ellington, MO



Legend

Good – 2,546.2 Ft

Fair – 3,761.58 Ft

Poor – 4,925.36 Ft

City Limits

N

Ripley County

City of Doniphan

Sidewalk Assessment

Doniphan Totals:

When considered in its entirety, Doniphan has a combined total of 37,366.66 linear feet (7.08 miles) of existing sidewalks to serve its citizens. The overall sidewalk conditions are summarized below in linear feet:

Condition:	Linear Feet:	% of Total
Good	6,916	18.51
Fair	10,687.71	28.60
Poor	19,762.95	52.89
Combined total	37,366.66	100.00

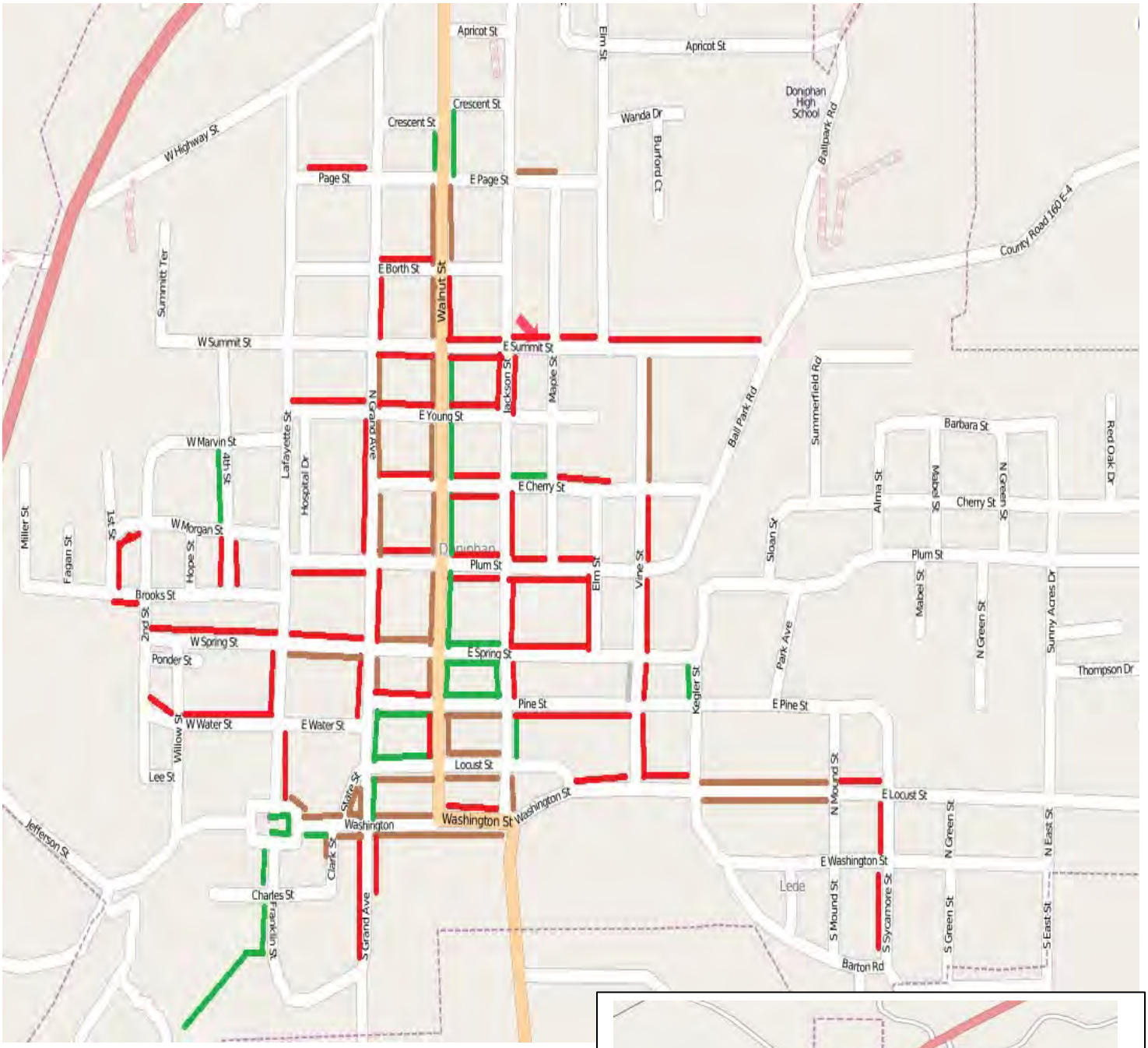
Photo Examples:

Good Condition: Washington and Charles Streets

Fair Condition: East on Spring

Poor Condition: Young Street west of Walnut

Doniphan, MO



Legend

100 m
500 ft

Good – 6,916 Ft

Fair – 10,687.71 Ft

Poor – 19,762.95 Ft

N

Wayne County

City of Piedmont

Sidewalk Assessment

Piedmont Totals:

When considered in its entirety, Piedmont has a combined total of 32,983.31 linear feet (6.25 miles) of existing sidewalks to serve its citizens. The overall sidewalk conditions are summarized below in linear feet:

Condition:	Linear Feet:	% of Total
Good	16,735.7	50.74
Fair	8,159.91	24.74
Poor	8,087.7	24.52
Combined total	32,983.31	100.00

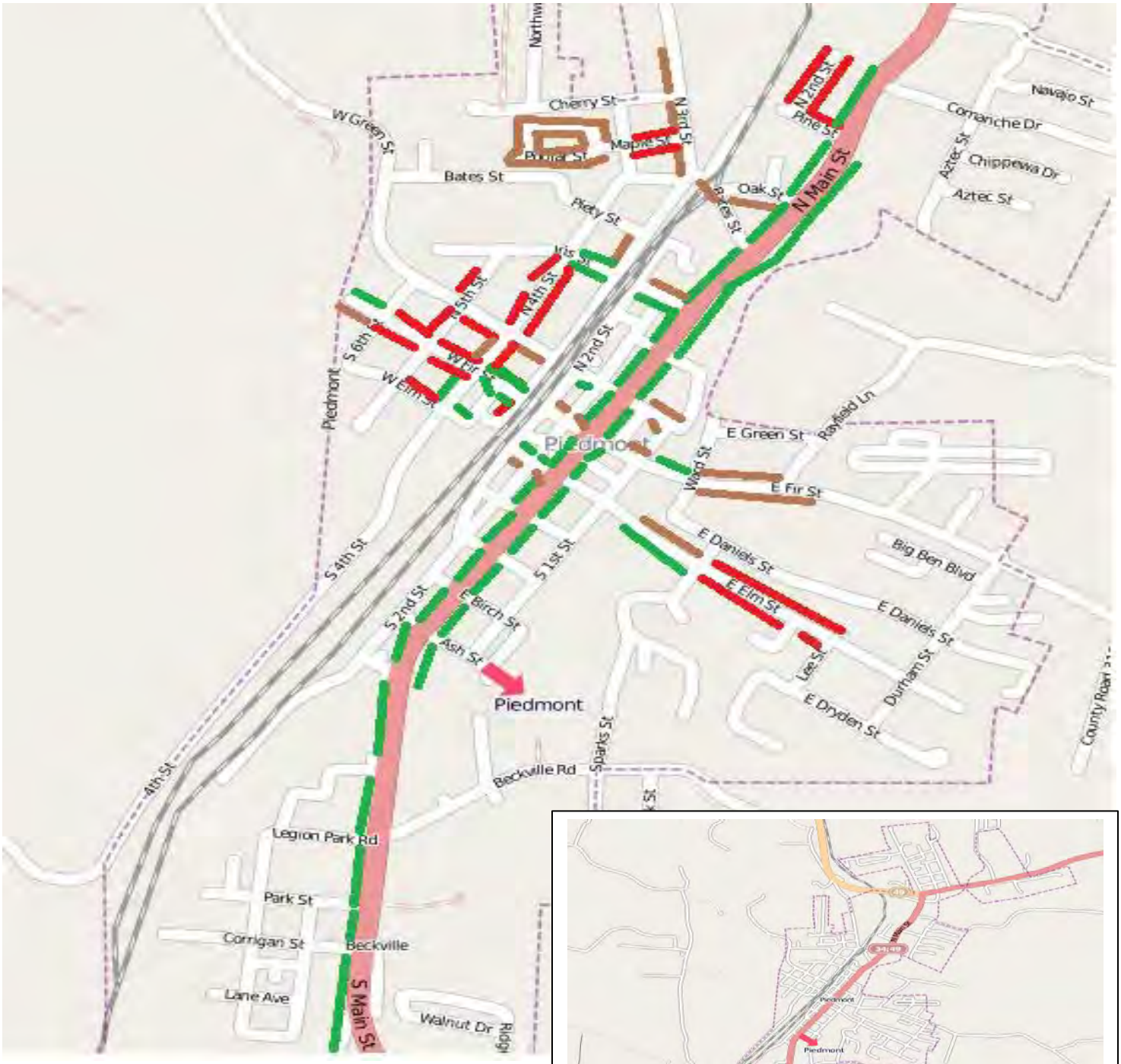
Photo Examples:

Good Condition: Fir Street

Fair Condition: Green and Forth Street facing west

Poor Condition: Green Street facing west

Piedmont, MO



Legend

200 m
1000 ft

- *Good – 16,735.7 Ft*
- *Fair – 8,159.91 Ft*
- *Poor – 8,087.7 Ft*
- *City Limits*

N