

Regional Transportation Plan

2021



Mo-Kan
An Economic & Community Development Organization

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Chapter 1: Introduction to the Regional Transportation Plan

Background on the planning organization

Mo-Kan Regional Council is an economic and community development organization serving county and municipal governments in four Missouri counties, two Kansas counties and one municipality in a non-member Kansas County: Andrew, Buchanan, Clinton, and DeKalb counties in Missouri; Atchison and Doniphan counties in Kansas; and Morrill municipality in Brown County, Kansas.

The concept of a regional council stemmed from the need to pool area resources for the purpose of securing professional services for counties and municipalities. One such service lacking at the time of conception was that of planning services for land use and zoning. Legislation providing for this pooling of effort was enacted in Kansas and Missouri in the 1950's and 60's. In 1957, Kansas authorized County Zoning and Planning Commissions, which could either employ a Zoning Officer or in the less populous counties contract for consulting services. In 1966, Missouri designated twenty areas permitted to pool planning resources. Included in the Missouri pooling zone were Andrew, Buchanan, Clinton and DeKalb (ABCD) counties.

The ABCD Regional Planning Commission was chartered in February 1968. In June of 1968, the Doniphan County, Kansas Planning and Zoning Commission sought membership with the Missouri Commission to create synergy in the outlying St. Joseph Metropolitan area. Consequently, permission was granted to create the Mo-Kan Bi-State Planning Commission whose name changed five years later to the entity we now know as Mo-Kan Regional Council. Immediately seeing the value in the regional planning commission, the City of Atchison sought and was granted membership in November of 1968. Kansas membership increased with the addition of Atchison County and the City of Horton in 1974. In 1984, the cities of Hiawatha and Morrill also elected to join, with the City of Valley Falls joining them in 2013.

Over the course of time, member governments developed a wider range of needs other than that of long-range planning. The organization began providing services such as grant procurement and administration, offset printing and cartography, and has continued to broaden its scope of services over the years.

The voting membership of the Mo-Kan Regional Council consists of 32 people, 16 each from Missouri and Kansas. Kansas members are named directly to the Council by Doniphan and Atchison counties and the municipalities of Atchison and Morrill. Missouri members are first named by the counties and municipalities to the ABCD Regional Planning Commission. This group then holds a caucus by county to name the 16 who will be the Mo-Kan Regional Council voting members from Missouri. The Council and the Commission meet simultaneously each month to transact council business.

Since 1996, Mo-Kan has partnered with the Missouri Department of Transportation (MoDOT) to perform both short-term and long-term transportation planning in Andrew, Buchanan, Clinton and DeKalb counties. These planning activities, as set forth by MoDOT and administered by a Transportation Advisory Committee (TAC), help to ensure all residents of northwest Missouri have access to a safe, efficient transportation system. The TAC meets quarterly to provide direction with regards to local planning initiatives and to provide a forum for communication between elected officials, state transportation staff and the general public with regards to transportation planning activities. Mo-Kan can provide a wide variety of transportation planning tools, such as transportation mapping, GIS services and traffic counters.

The area being reviewed for this study consists of Andrew, Buchanan, Clinton and DeKalb counties in the Missouri portion of Mo-Kan Regional Council (See Map 1 at the end of the chapter). Andrew, Buchanan, Clinton and DeKalb counties each have unique attributes consisting of history, geography and transportation that create the region known as Mo-Kan.

History

Andrew County

Andrew County was part of the Platte Purchase of 1836, which was relinquished by the Sac, Iowa, and Fox Native American tribes to the state of Missouri by treaty. Positioned between the Missouri River and the original western border of the state, the county was viewed as having considerable land opportunities, and, like most of the land included in the Platte Purchase, was well adapted to agriculture. These characteristics started a wave of people from Kentucky and Tennessee to the area in 1844, with the majority of them choosing to settle near timberlands and mill sites. Andrew County incorporated on January 29, 1841, and was named after the seventh president of the United States, Andrew Jackson. The county seat was founded in 1841, and at that time was called Union. In June of 1841, it was re-named to Savannah out of courtesy for Samuel Crowley, who was a member of the first county court and had a love for his native city of Savannah, Georgia.

Early settlers were divisive during and after the Civil War. Through the duration of the Civil War era, Savannah saw a vast amount of violence and destruction, largely due to the fact that both northern and southern factions routinely met on the square and set up camps in the area. Battles took place along Hackberry Ridge west of Savannah, and famous men like Joseph Hart and William “Bloody Bill” Anderson rode through the region. After the Civil War, the emergence of railroad lines provided the opportunity for several towns to develop, businesses to grow and the population to increase. The St. Joseph-Savannah Interurban Line was established in 1911, providing the availability of automobiles. From its incorporation to present day, Savannah has been a resource for civic, mercantile and agricultural endeavors. Besides Savannah, historical towns in Andrew County include Fillmore, Rochester, Amazonia (Nodaway City), Whitesville, Bolckow, Rosendale, Empire Prairie, Nodaway Station and Elizabethtown.

Buchanan County

The first non-Native American settlers in Buchanan County were fur traders who trapped along the Missouri River in the late 1700s. The river provided not only an abundant home for fur-bearing animals but also a relatively accessible and dependable means of transportation. Lewis and Clark passed through this area in the summer of 1804 as they explored the newly obtained Louisiana Purchase territory. On July 4, 1804, President Jefferson's Corps of Discovery celebrated the birth of the country in what is today Lewis and Clark Village, located on the east bank of the Missouri River in southwest Buchanan County. The early Native American settlers included the Kanza, Iowa, Sac, Fox, Delaware, Kickapoo and a few Pottawatomie Tribes. The area west of the then-western border of the state of Missouri and east of the Missouri River was granted to the Native American tribes in residence by the Prairie-du-Chien treaty with the French government, the landholders before the advent of the Louisiana Purchase. By June 1836, the treaty was amended to extinguish Indian claims to land in northwest Missouri. The federal government paid the resident tribes of Native Americans \$7,500 for the six counties of the Platte Purchase, as it is now known.

In 1837, President Van Buren declared the Platte Region an extension of the State of Missouri and open for settlement. Settlers from Virginia and Kentucky blossomed as the frontier grew even further westward. Businesses sprang up in St. Joseph supplying the pioneers that traveled westward, and they served the growing communities down the Missouri River. After the Platte Purchase, Buchanan County was organized in 1838 and was later named for President James Buchanan. President Buchanan signed the bill authorizing the State of Missouri to annex the Platte Purchase on June 7, 1836. The Missouri legislature agreed to accept the federal option on December 16, 1836. The resident Native American tribes of the Sacs and Foxes had agreed to the terms for the relinquishment of their lands on September 17, 1836, and on March 28, 1837.

Clinton County

The history of Clinton County commenced on January 2, 1833, by an act of State legislature. Clinton County was named after DeWitt Clinton, the distinguished Governor and Statesman of New York.

The earliest settlements were made nearest to Clay County. For some time previous to the organization of the county, there were no trading posts, stores, mills or blacksmith shops. The early settler was compelled to get his supplies from the Missouri River. Smith's (now Smithville) was the nearest mill for northern Clay County and all of Clinton County. The pioneers had no trouble in supplying their tables with wholesome food, for the groves and prairies alike abounded with game.

In 1826, the first settlers in the territory, now Clinton County, were William Castile who lived on the creek, which today bears his name, and Hiram Smith, a hunter whose cabin stood about the center of what is now Jackson Township. The first courthouse was built in Plattsburg (then called Springfield) in 1834. Also in 1834, the first Land Office was established in Plattsburg for the county of northwest Missouri. Judge James H. Birch was its first register and E.M. Samuel the first receiver.

When the Mexican War began in 1846, Clinton County was only 13 years old, but its people shared the war spirit that prevailed in western Missouri. In the Civil War, there was the same division among the people of Clinton County that prevailed in so many counties of Missouri, though there was less violence and bloodshed than occurred in Clay and Platte Counties. In the year of 1857, the Hannibal and St. Joseph Railroad was completed. By the 1870's, four railroads were operating in the county.

DeKalb County

The history of DeKalb County started when the Council Bluff Trace, a post road opened by the U.S. Army in 1823 from Liberty, Missouri, to Fort Atchison, Nebraska, ran through the county. Samuel Vesser, a French Canadian, who had a cabin north of the present site of Stewartsville in 1824, is thought to have been the first resident of the county. Settlers from Kentucky and Tennessee settled this area mainly in the late 1820's.

In January 1843, an act of the Legislature was passed establishing the boundaries of DeKalb County, and in February 1845, an act was passed providing for the organization of the county. The county was named after foreign-born Johann Kalb (known as Baron de Kalb) who was a member of the French Army and general in the American Revolution.

James T. Blair, Jr., inaugurated governor of Missouri in 1957 and formerly lieutenant governor from 1949 to 1957, was born in Maysville. His father was a Missouri Supreme Court judge from 1915 to 1924.

The following map is included at the end of this chapter:

- Map 1: Map of Area

Geography

According to the U.S. Census Bureau, Andrew County has a total area of 435 square miles; of that, 430 square miles is land, and five square miles is water. The topography of Andrew County is level to steep, with an equal distribution of timber and prairies, with bottoms and uplands. Soils in the uplands are mostly developed in loess. They are very fertile, mostly silty sands from alluvium. Andrew County is located approximately 65 miles north of Kansas City (measured from Savannah) and 120 miles south of Omaha, Nebraska. The area is served by Federal Interstate Highway (I-29) and has numerous state highways. The Missouri River flows west of the area and forms the border between Kansas and Missouri. Rail, truck, barge and air transportation is readily available. Savannah, the county seat of Andrew County, is located at 39°56'28" North, 94°49'51" West.

According to the U.S. Census Bureau, Buchanan County has a total area of 415 square miles; of that, 410 square miles is land, and five square miles of surface water. Buchanan County is located approximately 55 miles north of Kansas City (measured from St. Joseph) and 130 miles south of Omaha, Nebraska. The area is served by Interstate Highways (I-29 and I-229) and numerous federal and state highways. The Missouri River flows through the area and forms the border between Kansas and Missouri. Rail, truck, barge and air transportation are readily available. St. Joseph, the county seat of Buchanan County, is located at 39°47' North and 94°55' West. At 1,000 feet above sea level, Buchanan County is 400 feet above Chicago, and 600 feet above St. Louis.

Clinton County is landlocked, bordered by DeKalb County to the north, Buchanan and Platte Counties to the west, Clay County to the south and Caldwell and Ray Counties to the east. Clinton County encompasses 419 square miles and lies upon Pennsylvanian-Age bedrock. The clay found throughout the area is common clay and shale, and thin limestone makes up the sand and gravel deposits. Coal-bearing strata underlie the area. The topography consists of moderately dissected plains.

According to the U.S. Census Bureau, DeKalb County has a total area of 424 square miles. It is bound on the north by Gentry County; east by Daviess and Caldwell County; south by Clinton County; and west by Andrew and Buchanan Counties. Maysville, the county seat of DeKalb County, is located at 39°53' North and 94°21' West. At 900 feet above sea level, DeKalb County is 300 feet above Chicago and 500 feet above St. Louis.

The four Missouri counties Andrew, Buchanan, Clinton, and DeKalb all border each other creating the Missouri portion of the Mo-Kan service region. The four counties create a total area of 1,693 square miles. The majority of the area is made up of land, with a low percentage of water completing the remaining area.

Connection to the Planning Framework

Transportation infrastructure is an important part of the state's well-being and it is affected by decisions made in the public and private sectors. Missouri Department of Transportation (MoDOT) recognizes it must work with other state and federal agencies, metropolitan planning organizations, regional planning commissions, local organizations, businesses and communities and the general public to address issues that affect the transportation decision-making process.

With all planning organizations, needs identification and project prioritization processes will continue to be developed cooperatively. These processes will be based on the previously identified transportation investment goals and other important considerations.

Separate needs identification and project prioritization processes for the state highway and bridge system will be developed for maintenance and operations, rehabilitation and reconstruction and major project activities. These processes will be developed in coordination with MoDOT's transportation partners and used to add projects to future Statewide Transportation Improvement Programs (STIPs).

Federal and state laws establish different working relationships between MoDOT and various public entities.

Connection to the Missouri Department of Transportation L RTP

The L RTP (Long Range Transportation Plan) sets the overall transportation policy and tone for Missouri. MoDOT collaborates with the metropolitan planning organizations, regional planning commissions, local officials, the general public and other stakeholders to facilitate the L RTP development. This sets the vision for Missouri's transportation system and defines transportation goals that can take Missouri toward that vision.

Because they are established with broad public support, the L RTP goals will form the foundation of this Regional Transportation Plan (RTP). In the planning process, these basic goals will be refined to fit the unique nature of the region. This includes prioritizing goals and defining broad transportation strategies to help identify transportation needs to effectively meet the highest priority goals.

The statewide significant needs and priorities established in the RTPs will feed directly back into the statewide L RTP updates. Updates will take place approximately every five years. As these updates take place, the link between the plans will grow stronger.

Planning Process Used to Develop Plan

Safe and efficient transportation systems require highly coordinated planning between federal, state and local officials, centered on focus areas such as system preservation, safety, sustainable development and the movement of goods. Federal Highway Administration (FHA) and Federal Transit Administration (FTA) regulations grant local governments the opportunity to be involved in the statewide transportation planning process. MoDOT has a documented planning process to collect and analyze the input of local government officials. This process of regional transportation planning should give rural concerns a greater voice in state funding allocations.

Regional Planning Commissions (RPCs) play a vital role in ensuring that all relevant parties have a voice in Missouri's transportation planning process. The RPCs contribute in many ways to the overall planning effort with activities including coordination with local, state and federal elected officials, town hall meetings and transportation forums, informational transportation press releases and the promotion of transportation-centric policies and programs.

Mo-Kan Regional Council works in partnership with MoDOT to ensure effective transportation planning occurs in its service area. Utilizing its Transportation Advisory Committee (TAC), Mo-Kan facilitates two-way communication between the state and local elected officials. The TAC oversees all transportation planning completed by Mo-Kan, and annually prioritizes new transportation needs for possible inclusion on future STIPs.

TAC Members

NAME	REPRESENTING	TITLE
Bob Caldwell	Andrew County	Presiding Commissioner
Sarah Miller	Andrew County	County Clerk
Bruce Lundy	Andrew County	City of Savannah Administrator
Soctt Burnham	Buchanan County	County Commissioner
Andy Macias	Buchanan County	Citizen Member
Johnnie Hoggatt	Buchanan County	Citizen Member
Drew Bontrager	Clinton County	City of Cameron Public Works Director
Richard Riddell	Clinton County	County Commissioner
Michael O'Donnell	Clinton County	City of Cameron Planning and Zoning
Chet Owen	DeKalb County	County Commissioner
Bill Gray	DeKalb County	County Road and Bridge Supervisor
Meilissa Meek	DeKalb County	County Clerk

The Mo-Kan Regional Transportation Plan was completed with the assistance of several different stakeholders. The commissions of Andrew, Buchanan, Clinton and DeKalb counties were all directly solicited to provide long range transportation needs for the region. Each commission provided a comprehensive list of needs for inclusion in the RTP. After needs identification, the Mo-Kan TAC began the process of prioritizing the potential projects based on regional significance, effective usage of the public funds and impact. Finally, Mo-Kan staff, in cooperation with each county, various state agencies and the Missouri Spatial Data Information Service, created a number of spatial analyses and transportation maps to support the plan.

Goals and Objectives

The following goals and objectives have and will continue to be used as a guide in the development of the Mo-Kan Regional Transportation Plan. The Mo-Kan TAC, MoDOT and the Mo-Kan Regional Council developed the goals and objectives as a result of a collaborative effort. As with any planning process, these goals should only be considered a starting point for the development of the Regional Transportation Plan. As more public input is sought and the plan continues to take shape, the goals and objectives will likely be amended to reflect current transportation trends and regional needs.

GOAL 1:

Provide a fully functional road, bridge and highway transportation network to facilitate the efficient, effective movement of goods, services and people throughout Andrew, Buchanan, Clinton and DeKalb counties.

Objectives:

- 1.2 Improve existing infrastructure by maintaining state highways, lettered routes and other transportation assets.
- 1.3 Prioritize high-volume traffic routes for rehabilitation and reconditioning, and consider upgrading those routes with the highest traffic volume.
- 1.4 Continue a bridge assessment program, and repair/replace bridge components (deck, sub structure, superstructure) as needed.
- 1.5 Ensure transportation system is accessible to all citizens of the region.

GOAL 2:

Promote local alternatives to automobile transportation to reduce negative impacts on the regional environment, reduce congestion and improve the health of the region's citizens.

Objectives:

- 2.1 Promote the construction and use of public hiking/biking trails both within and between local communities.
- 2.2 Support and assist in the development of pedestrian-friendly roadways and communities.
- 2.3 Encourage continued support and expansion of public transit assets, including OATS and The Ride bussing networks.
- 2.4 Maintain and expand regional freight alternatives, including air, rail and barge.

GOAL 3:

Provide a safe transportation network throughout the region and promote safe driving habits by motorists.

Objectives:

- 3.1 Participate in local safety initiatives, including the joint MoDOT / Missouri Highway Patrol program Blueprint for Roadway Safety to reduce the number of fatalities on local roadways.
- 3.2 Work with local and state agencies and private citizens to reduce the number of vehicle collisions with deer and other animals.
- 3.3 Provide and continually reassess safety-related signage and roadway visibility.
- 3.4 Encourage the passage of a primary seatbelt law in the State of Missouri.
- 3.5 Continue working with local and state first responders to provide for rapid, safe response to emergent situations on the region's roadways.

GOAL 4:

Utilize existing transportation infrastructure and develop new assets to promote economic development across the region.

Objectives:

- 4.1 Maintain and increase the efficiency of the region's transportation networks to better facilitate the movement of goods and services.
- 4.2 When developing transportation expansions, plan for those that minimize impacts to the economic potential of local communities and businesses.
- 4.3 Incorporate local and regional land use plans, comprehensive development plans, and population forecasts in making transportation decisions.
- 4.4 Provide timely information on the resources available for transportation enhancements with regard to economic development.

Goal 5:

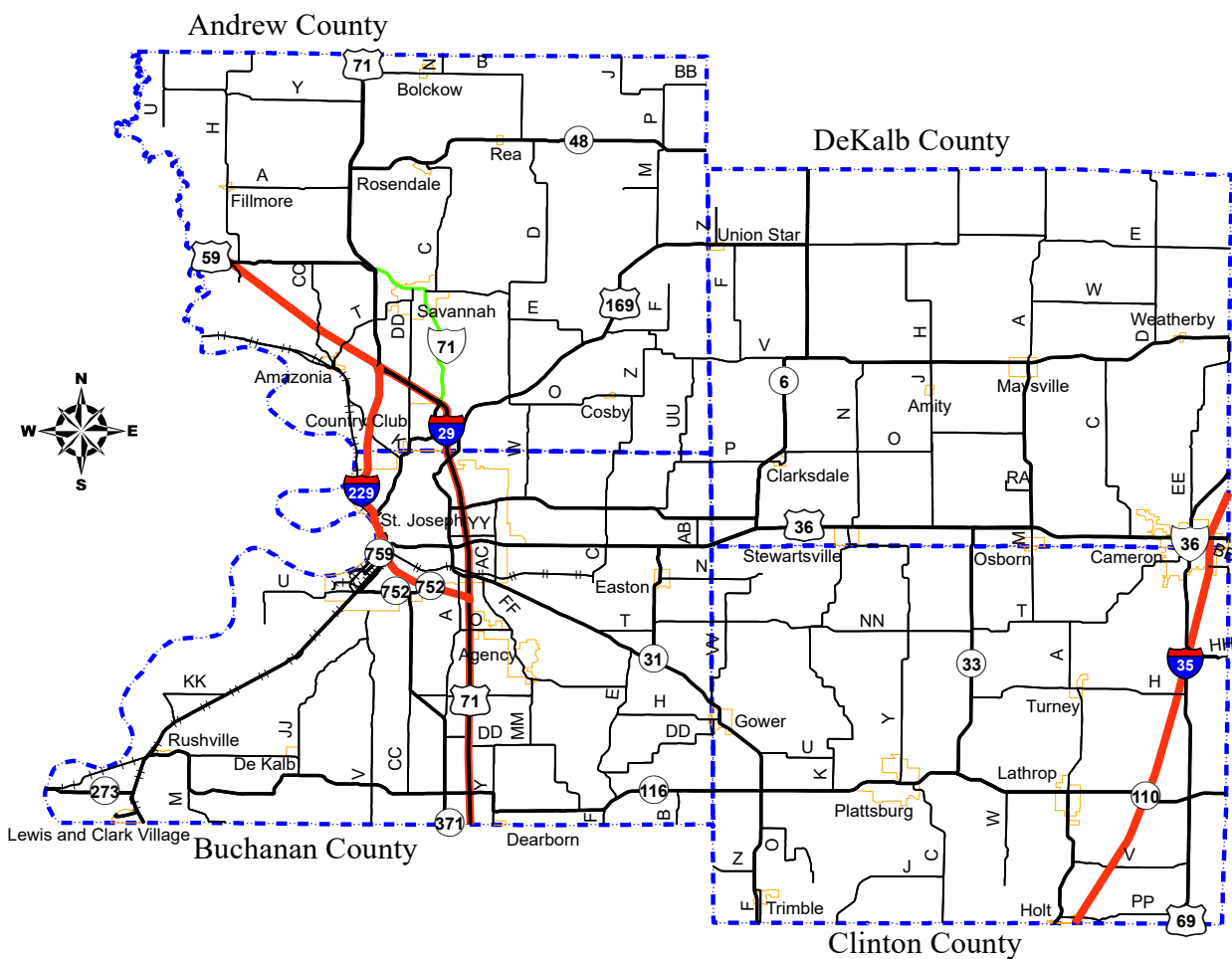
Ensure a transparent planning process that is accessible to all citizens within the region, encourages public participation, and complies with all state and federal regulations.

Objectives:

- 5.1 Include the region's citizens in all phases of developing plans related to transportation, including the Regional Transportation Plan.
- 5.2 Inform the general public about upcoming planning initiatives and ensure access to all interested stakeholders.
- 5.3 Approach transportation planning from a regional standpoint, involving interested parties from not only the local impact area, but also the region as a whole.

Mo-Kan Regional Transportation Network

Roadways Maintained by the Missouri Department of Transportation



Legend

- Interstate
- U.S. Highway
- Business Route
- Missouri Numbered Route
- Missouri Lettered Route
- Railroad
- MO_Cites
- MO_Counties

Mo-Kan Regional Transportation Plan, Map 1
 This map created by Mo-Kan Regional Council. April 2019
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 Sources: MoDOT Routes 2018; U.S. Census Bureau 2018



Chapter 2: Population and Employment

Population

According to the 2010 Census, the Missouri counties in the Mo-Kan region experienced an increase of population from the 2000 Census. Andrew County showed a population of 17,291, a 4.8 percent increase from the 16,492 in 2000. Buchanan County increased 3.7 percent in population from 85,998 in 2000 to 89,201 in 2010. Clinton County experienced a significantly higher increase rising 9.3 percent from 18,979 to 20,743. DeKalb County had the largest percent increase in population at 11.2 percent. The population in 2000 was 11,597 and grew to 12,892 in 2010.

The 2018 Census population estimates reflect a minor loss in population for Buchanan, Clinton and DeKalb counties and a minor gain in population for Andrew County from 2010 numbers. However, all four counties have experienced a population gain from 2000 to 2018, as the table below shows. While many rural counties across the county struggle with population loss, these four counties have experienced minor growth.

Figure 2.1 Population Changes from 2000 to 2018 in the ABCD Region

Population	Andrew County	Buchanan County	Clinton County	DeKalb County
2018 estimates	17,607	88,571	20,470	12,630
Change from 2000 to 2018	+6.76%	+2.99%	+7.86%	+8.9%
2010	17,291	89,201	20,743	12,892
Change from 2000 to 2010	+ 4.84%	+3.7%	+9.3%	+11.17%
2000	16,492	85,998	18,979	11,597

(Source: <http://www.census.gov/topics/population.html>)

The City of St. Joseph, located in Buchanan County, is the largest city in the Mo-Kan region with a population of 76,780. The population grew 3.77 percent from the 2000 Census which recorded a population of 73,990. The City of Cameron, located in Clinton County, experienced a population boom in 2000, with the opening of the Crossroads Correctional Center in 1997 and the addition of other non-manufacturing and distribution firms. Its current population is 9,933 which is 19.50 percent more than the 2000 population of 8,312.

Employment Forecast

The Mo-Kan region was not spared from the effects of the recession, with the number of unemployed rising from 3,304 in 2000 to 4,833 in the 2010 Census. Each of the counties in the region saw considerable increases in the number of their residents who are unemployed: Andrew County went from 257 to 623; Buchanan County went from 2,467 to 3,220; Clinton County went from 421 to 732; and DeKalb County 159 to 258. However, Figure 2.2 below shows that from 2000 - 2017 there has been an increase in the total employed.

Figure 2.2

<i>Population Age 16 Years and Over in the Civilian Labor Force, 2000-2017</i>									
Area Summarized		Civilian Labor Force for Persons 16 Years and Over							
County		Civilian Labor Force		Change 2000-2017		Total Employed		Change 2000-2017	
FIPS Code		2017	2000	Number	Percent	2017	2000	Number	Percent
	Mo-Kan Region	68,051	63,603	4,448	6.99%	64,501	60,299	4,202	6.97%
29003	Andrew County	8,877	8,410	467	5.55%	8,504	8,153	351	4.31%
29021	Buchanan County	44,654	41,498	3,156	7.6%	42,011	39,031	2,980	7.63%
29049	Clinton County	10,044	9,513	531	5.58%	9,661	9,092	569	6.26%
29063	DeKalb County	4,476	4,182	294	7.03%	4,325	4,023	302	7.50%

Source: USDC, Bureau of Census, 2000 Decennial Census, Summary File 3 and 2017 American Community Survey, 5-Year Estimates

Despite the major economic upheaval between 2000 and 2010, the distribution of workers in the Mo-Kan region across the different occupation classes remained very close to the distribution between 1990 and 2000. For 2000, Mo-Kan region sales and office staff was at 25.8 percent, following close behind the management professionals who employ 27.5 percent of the workforce. In 2017, these occupations were still ranked two and one in the region respectively, but the gap between them widened somewhat. Management professionals now make up 29.43 percent of the Mo-Kan workforce while sales and office workers make up 22.96 percent. Despite a statewide decline

in manufacturing jobs, the Mo-Kan region continues to boast a significant industrial workforce. Mo-Kan manufacturing industry consists of production, transportation and material workforce which was at 19.66 percent in 2017 up from approximately 18 percent in 2000. As of 2010, the Mo-Kan Region as a whole has 18.65 percent of the employee labor force working in a service occupation: Andrew County has nearly 15 percent, Buchanan County 19.5 percent, and 18.2 percent in Clinton and DeKalb County, as shown in Figure 2.3. Within the four county region, Clinton county has the highest percentages of construction workers with 13.8 percent each. In addition, Clinton County is absorbing the majority of urban sprawl from Kansas City,

Figure 2.3

Distribution of Employed Civilian Labor Force by Occupation, 2017							
Area Summarized		Employed					
County			Occupations				
FIPS Code		Total Employed	Management Professional and Related	Service	Sales and Office	Construction	Production Transportation and Material
	Mo-Kan area	64,501	29.43%	18.65%	22.96%	9.57%	19.66%
29003	Andrew County	8,504	35.4%	14.9%	22.6%	10.6%	16.5%
29021	Buchanan County	42,011	28.0%	19.5%	23.5%	8.1%	21%
29049	Clinton County	9,661	29.2%	18.2%	21.8%	13.8%	17%
29063	DeKalb County	4,325	31.1%	18.1%	20.6%	11.9%	18.4%

Source: 2017 American Community Survey 5-Year Estimates

The number of those having to commute outside of their home county or home state have remained relatively stable since 2000. Data from the 2010 American Community Survey shows that 35 percent of Missourians in the workforce commute outside of their home county, slightly higher than in 2000. Andrew County, which had the region's highest percentage of out-of-county commuters in 2000 at 73 percent, saw an increase to 74 percent. Clinton County's percentage did not change between 2000 and 2010, remaining at 66 percent, while DeKalb County's percentage dropped 3 percent to 56 percent. Buchanan County, because it houses a regional trading center (St. Joseph), had the lowest amount of out-of-county commuters at 14 percent.

According to the 2017 American Community Survey, Andrew County commuters travel an average of 22.5 minutes on their way to work while Buchanan County commuters travel an average of 17.4 minutes. DeKalb County is just slightly higher than the state average at 25 minutes for the average time to work, while Clinton County has the highest average commute time at 31.7 minutes.

Figure 2.4

Workers Commuting Outside County of Residence, 2000-2010							
FIPS Code	County	Total Workers 16 and Older 2010	No. of Workers Commuting Outside County of Residence 2010	Percent of Total Workers		Change 2000-2010	
				2000	2010	Number of Workers	Percent of Workers
29	Missouri	2,752,405	801,884	28%	29.1%	64,480	2.5%
29003	Andrew	8,669	6,339	72.7%	73.7%	491	5.7%
29021	Buchanan	40,238	5,790	9.3%	14.4%	-174	-4%
29049	Clinton	9,639	6,396	66.4%	66.4%	513	5.3%
29063	DeKalb	4,746	2,241	56.3%	56%	115	2.4%

Source: 2000 Decennial Census, Summary File 3 and 2010 American Community Survey 5-Year Estimates

Median Household Income

Andrew County

Andrew County’s median income for a household in 2017 (estimated) was \$56,658 and in 2010 was \$57,406. While the percentage of families in poverty dropped from the 2000 Census to 6.1 percent, it rose to 6.7 percent in the 2017 estimates. These estimates also show an increase in people in poverty and under the age of 18 in poverty. Those in poverty 65 years and older saw a slight decrease from 2010.

Buchanan County

Buchanan County’s median income for a household in 2017 (estimated) was \$48,652 and in 2010 was \$44,181. Poverty rates rose considerably, with 12.9 percent of families and 17.3 percent of the population were below the poverty line, including 26.5 percent of those under age 18. The poverty rate for those 65 years and older was stable.

Clinton County

Clinton County’s median income for a household in 2017 (estimated) was \$57,59 and 2010 was \$53,234. Similar to Buchanan County, Clinton County experienced an increase in families in poverty, people in poverty and under 18 in poverty (9.4 percent, 11 percent and 14.7 percent respectively). There was a minor decrease of 65 and over in poverty.

DeKalb County

DeKalb County’s median income for a household in 2017 (estimated) was \$46,517 and in 2010 was \$43,898. Poverty rates dropped for the most part in DeKalb County. Approximately 10.3 percent of families are living below the poverty line, and 12.5 percent percentage of people live in poverty. There has been a significant increase in under 18 in poverty, jumping up to 20.5 percent, while the 65 and over in poverty has experienced a notable decrease in poverty.

The state of Missouri’s median household income for 2017 is estimated at \$51,542, continuing the trend of Andrew and Clinton Counties have a higher median household income than the state average while Buchanan and DeKalb Counties are lower. The state and all four counties have experienced increases in families in poverty, people in poverty and under 18 in poverty. Some of these losses were minor, while others were significant, such as DeKalb County’s increase in under 18 in poverty. However, the state and all four counties experienced a decrease in 65 and over in poverty, although Buchanan County’s increase was only slight. Poverty continues to be a critical issue .

Figure 2.6

Poverty Percentages in the ABCD Region

	Families in Poverty		People in Poverty		Under 18 in Poverty		65 and Over in Poverty	
	2010	2017 Est.	2010	2017 Est.	2010	2017 Est.	2010	2017 Est.
Missouri	10%	10.3%	14%	14.6%	19.3%	20%	9.3%	8.8%
Andrew	6.1%	6.7%	8.5%	9%	7.5%	8.3%	11.4%	10.9%
Buchanan	9.7%	12.9%	14.6%	17.3%	21.8%	26.5%	8.4%	8.3%
Clinton	5%	9.4%	8.3%	11%	8%	14.7%	9.2%	8.6%
DeKalb	6.1%	10.3%	9.5%	12.5%	9.5%	20.5%	14.1%	8.2%

(Source: 2010 Census, 2017 American Community Survey Five-Year Estimates)

Figure 2.7

Median Household Income in the ABCD Region

	2000	2010	2017 Estimates
Missouri	\$37,934	\$46,262	\$51,542
Andrew	\$40,688	\$57,406	\$56,655
Buchanan	\$34,704	\$44,181	\$48,652
Clinton	\$41,624	\$53,234	\$57,591
DeKalb	\$31,654	\$43,898	\$46,517

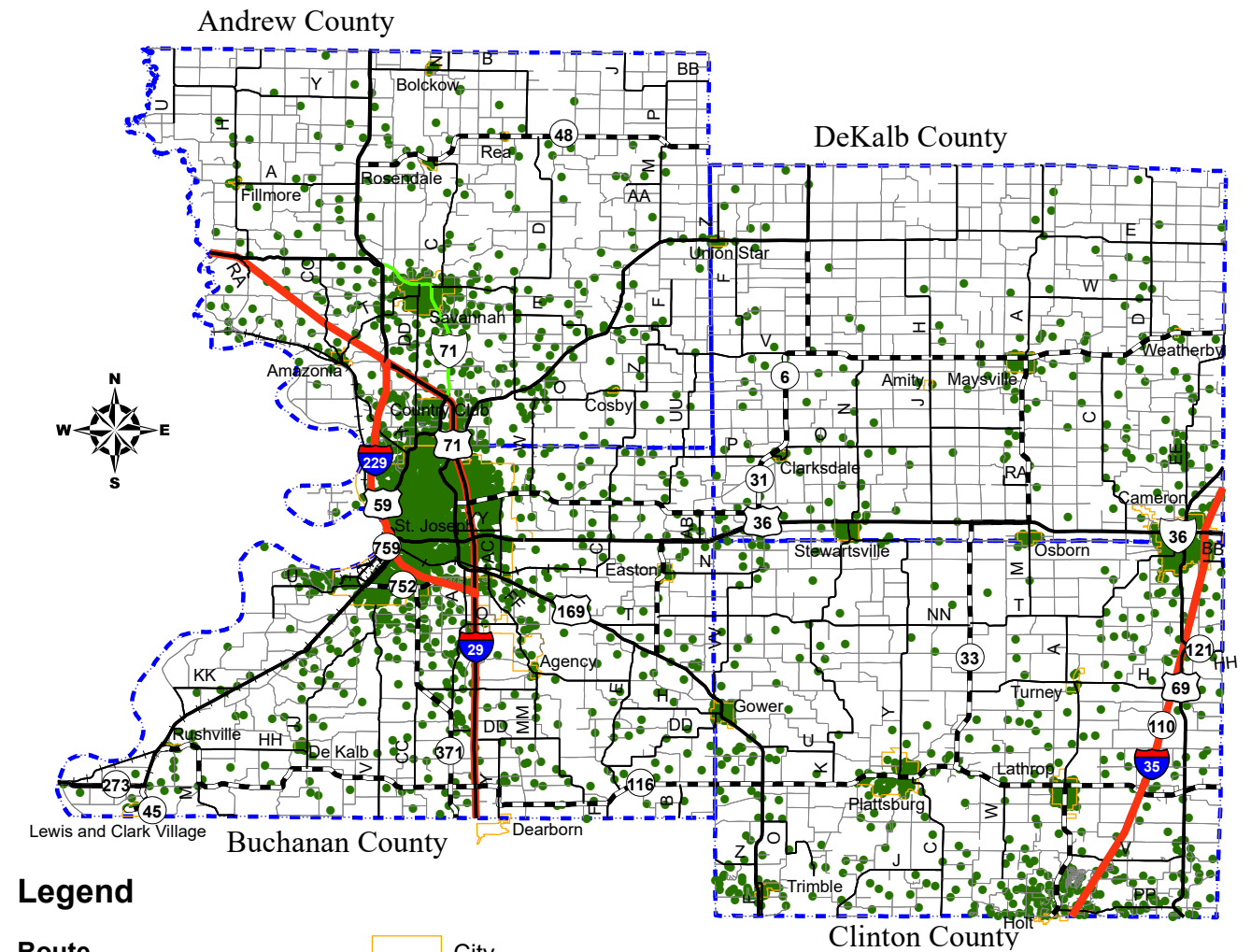
(Source: 2000 Census, 2010 and 2017 American Community Survey Five-Year Estimates)

The following maps are included at the end of this chapter:

- Map 2: Population Density
- Map 3a: Poverty Map (those persons under 185% of poverty), Real
- Map 3b: Elderly Map (those persons aged 65 years and older), Real
- Map 3c: Disabled Map (as defined by the U.S. Census Bureau), Real
- Map 3d: Disadvantaged Populations Map
- Map 4: Employment Centers
- Map 5: Population Change

Map 2

Population Density, Mo-Kan Region by Block, as determined by the 2010 U.S. Census



Legend

Route	City
Interstate	County
U.S. Highway	1 Dot = 20 People
Business Route	0 3.5 7 14 21 28 Miles
Missouri Numbered Route	
Missouri Lettered Route	
County Road	
Railroad	

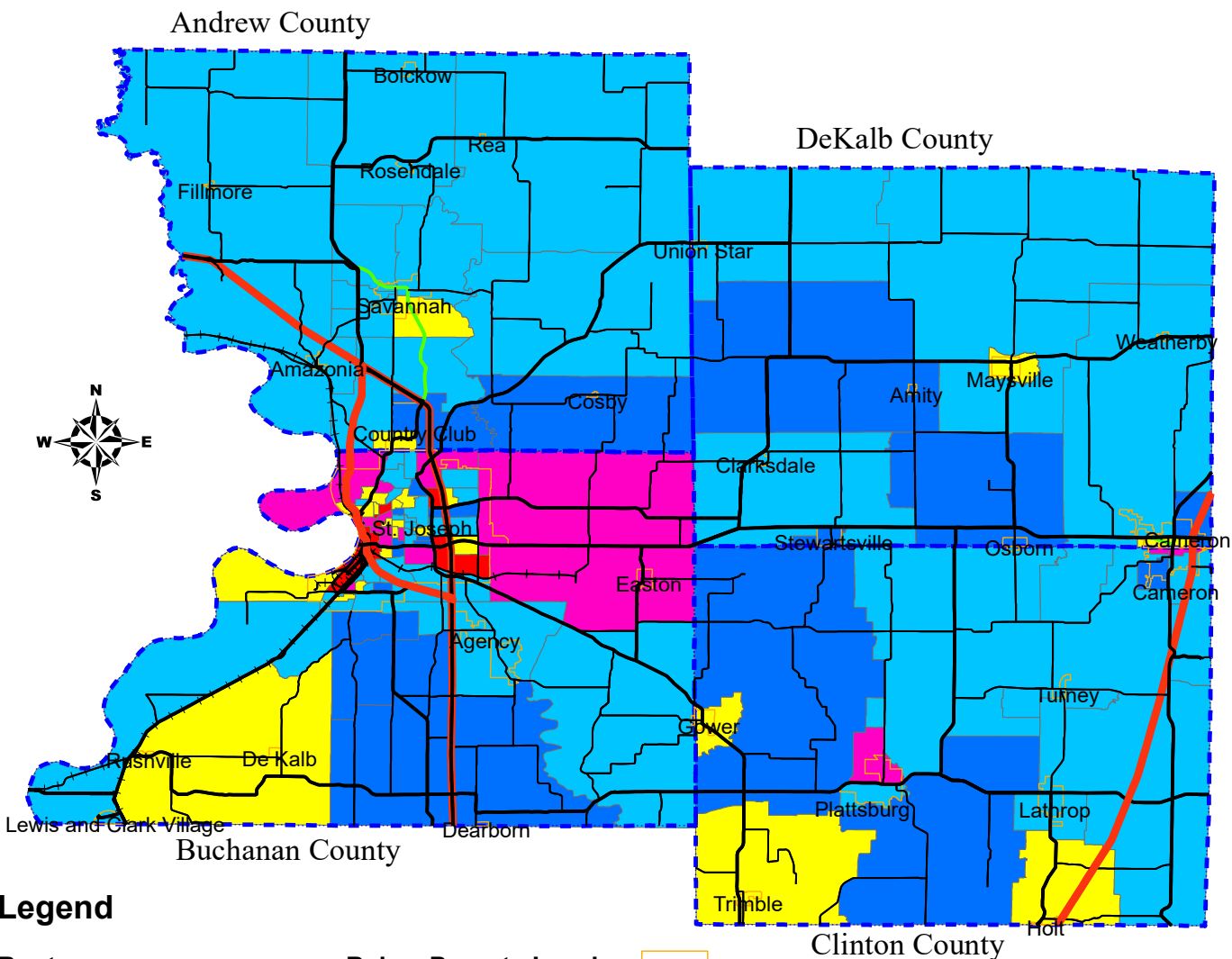
Mo-Kan Regional Transportation Plan, Map 2
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 Sources: MoDOT Routes 2018; U.S. Census Bureau, 2010 Census



Map 3A

Income Below Poverty Level Last Twelve Months

by Block Group, as determined by 2017 American Community Survey*



Legend

Route	Below Poverty Level	City
Interstate	0 - 36	County
U.S. Highway	37 - 84	
Business Route	85 - 146	
Missouri Numbered Route	147 - 281	
Missouri Lettered Route	282 - 514	
Railroad		

0 3.5 7 14 21 28 Miles

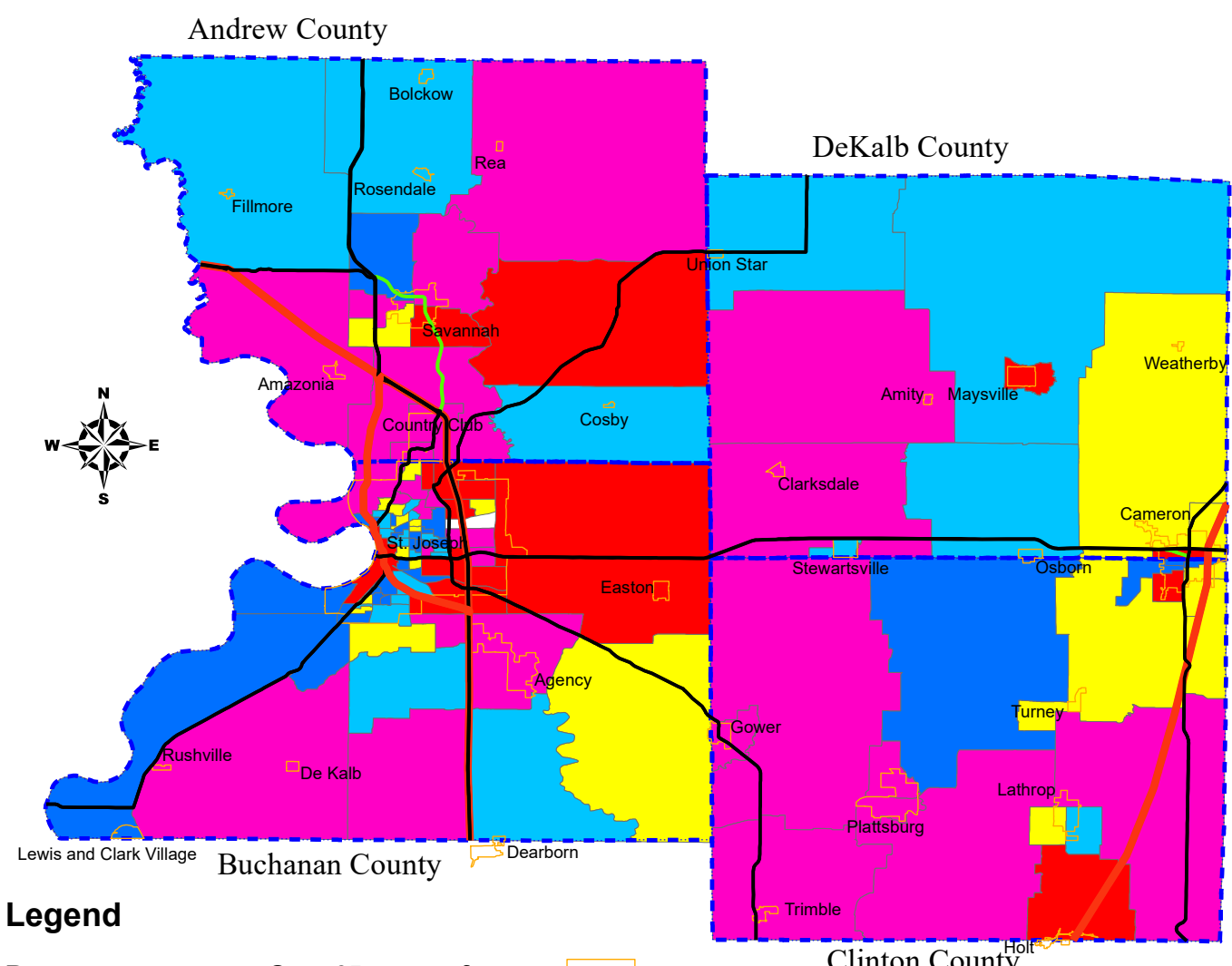
Mo-Kan Regional Transportation Plan, Map 3A
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 Sources: MoDOT Routes 2018;
 *U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates
 It is noted that the estimates reported in the survey are based on sampling techniques and associated with a margin of error.



Map 3B

Persons Over the Age of 65

by Block Group, as determined by 2017 American Community Survey*



Legend

Route	Over 65 years of age	City
Interstate	0 - 95	County
U.S. Highway	96 - 150	
Business Route	151 - 200	
	201 - 310	
	311 - 620	

0 3.5 7 14 21 28 Miles

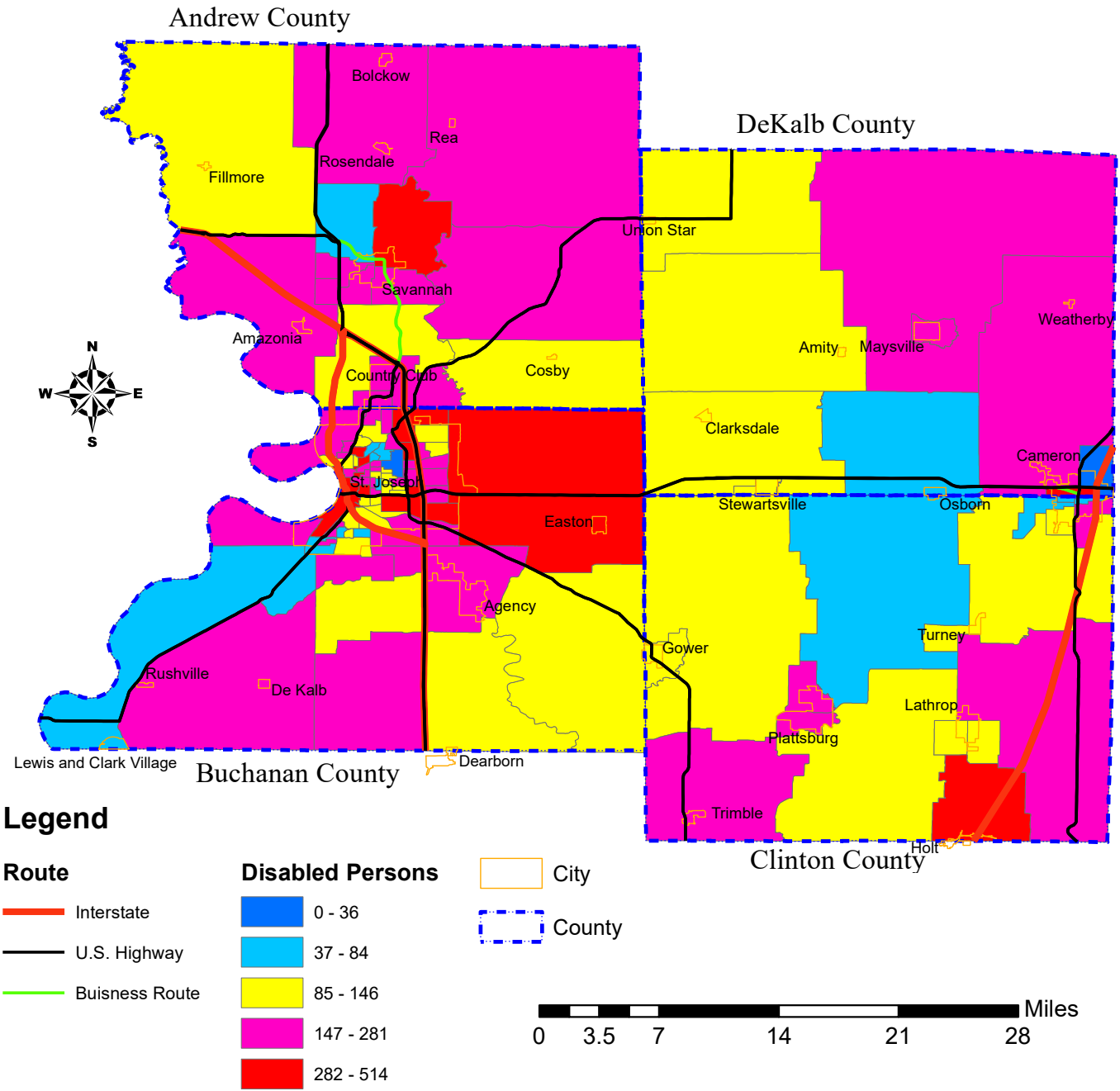
Mo-Kan Regional Transportation Plan, Map 3B
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 Sources: MoDOT Routes 2018; U.S. Census Bureau,
 American Community Survey 2013-2017 5-year Estimates.
 *It is noted the estimates reported in the survey are based on sampling techniques and associated with a margin of error.



Map 3C

Disabled Persons

by Block Group, as determined by 2017 American Community Survey*



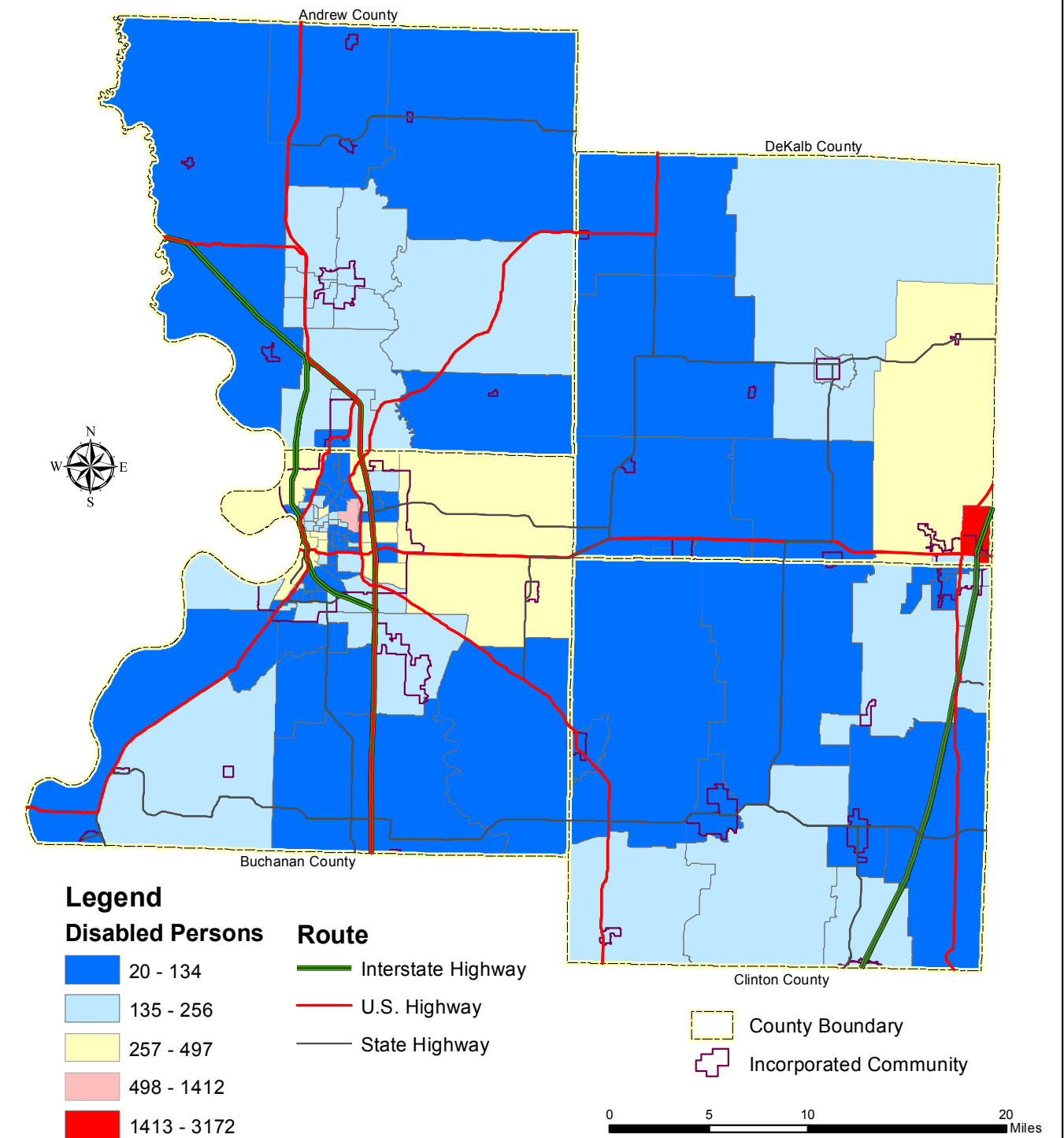
Mo-Kan Regional Transportation Plan, Map 3C
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 Sources: MoDOT Routes 2018; U.S. Census Bureau,
 American Community Survey 2013-2017 5-year Estimates.
 *It is noted the estimates reported in the survey are based on
 sampling techniques and associated with a margin of error.



Map 3D

Disabled Persons

by Block Group, as determined by 2014 American Community Survey*

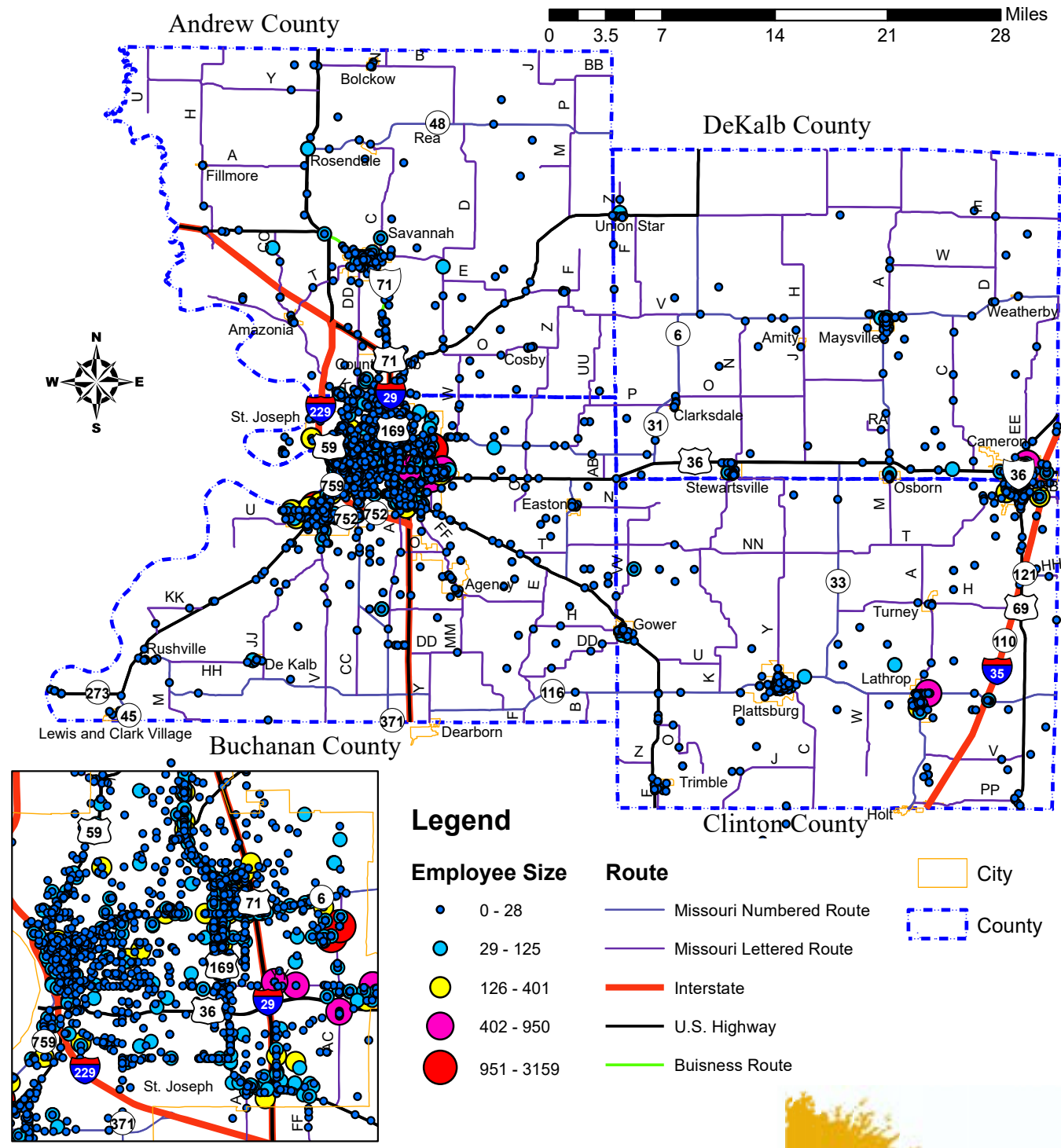


*Disabled person estimates were taken from the U.S. Census
 American Community Survey 2010 - 2014 5-year Estimates.
 It should be noted that the estimates reported in the survey
 are based on sampling techniques and associated with a margin
 of error.



Employment Centers 2019

Mo-Kan Region



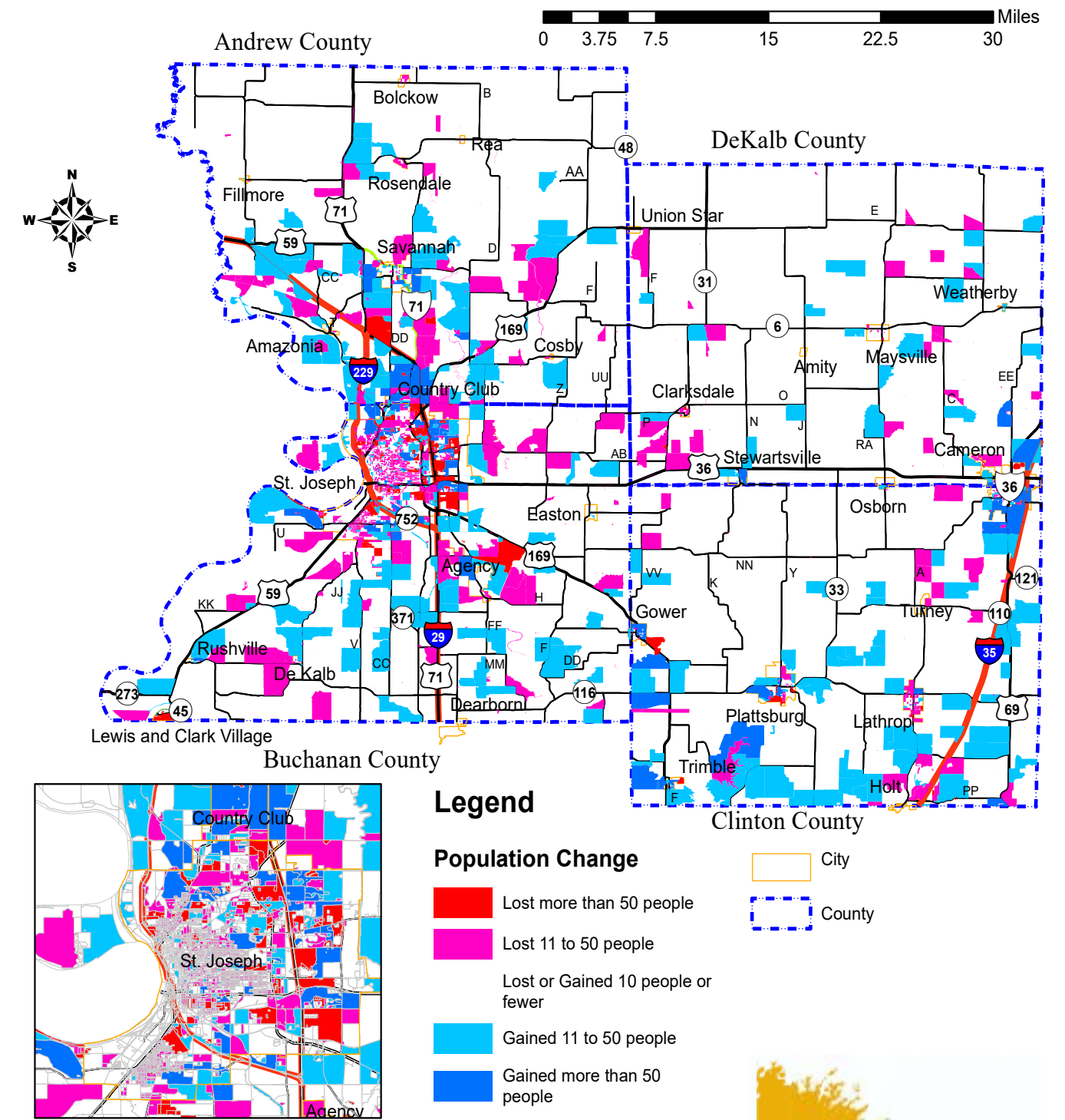
Excerpt of St. Joseph, Missouri.
(not to scale)

Mo-Kan Regional Transportation Plan, Map 4
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 Sources: MoDOT Routes 2018; U.S. Census Bureau;
 ReferenceUSA Business Database 04/2019.



Population Change, 2000 - 2010

by Block, as determined by the 2010 U.S. Census*



* - Based on the U.S. Census Bureau, 2000 and 2010 Census Total Population tables

Mo-Kan Regional Transportation Plan, Map 5
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 Sources: MoDOT Routes 2018; MoDOT Transportation 2017; U.S. Census Bureau



Chapter 3: Existing Transportation Facilities

Transportation

Sufficient and reliable transportation is essential to a successful community and overall region. Residents and businesses depend on accessibility within the modes of transportation to adequately move traffic and transport goods. The counties within Mo-Kan's region have access to multiple modes of transportation providing economic lineage to local residents, businesses and surrounding communities.

Annually, Mo-Kan and the two neighboring regional planning commissions within MoDOT's Northwest District meet to discuss short-term and long-term transportation goals and objectives. The activities are compiled in the Transportation Work Plan and passed through three different groups for approval. First, the Mo-Kan Transportation Advisory Committee (TAC) reviews the plans, then passes it on to Mo-Kan Regional Council's Board of Directors for evaluation. Finally, MoDOT approves the projects on a state level. This information is compiled into a five-year planning document called the Statewide Transportation Improvement Plan (STIP). The overall goal of this process is to ensure the safety and efficiency of the region's transportation system for all drivers and passengers.

The process of determining transportation needs in Kansas is different than in Missouri. Priorities and project ideas are gathered during regional information workshops and hearings. That information is then sent to Topeka, KS, where large public hearings are held and transportation decisions are finalized by Kansas Department of Transportation.

Roadways

Federal interstates, federal highways, state highways, county roads and local streets make up an intricate combination of roadways that serve the Mo-Kan region. Interstate 29 and 35 provide north and south transportation access while Interstate 229 serves the urban St. Joseph area. U.S. Highway 36 serves as the main route for east-west transportation. The option for upgrading this route to interstate status has been discussed. The only new major construction project in the region started on the folded diamond interchange on U.S. Highway 36 near the St. Joseph city limits called Ag Expo Way.

U.S. Highway 59 provides an alternative route to the western side of the Kansas City area. U.S. Highways 71, 73, 159 and 169 are other highways providing north-south access throughout the region.

Only one major highway, U.S. Highway 36, runs through Doniphan County, passing through the cities of Troy, Elwood and Wathena. Other highways in the county include K-7, K-20, K-120, K-136, K-137 and K-238. Atchison County operates with three major highways including two north to south routes, U.S. Route 59 and U.S. Route 73. The other major highway is U.S. Route 159, a secondary route of U.S. Route 59, which is a major agricultural corridor for Atchison County. Other minor highways in Atchison County include K-7, K-9 and K-116.

The two highway bridges crossing the Missouri River are the Pony Express Bridge (U.S. 36) and the Amelia Earhart Memorial Bridge (U.S. 59). The Amelia Earhart Bridge, which crosses the Missouri River at Atchison, KS, was replaced in 2012. The bridge is a four-lane, tied-arch structure that stretches over 2,500 feet. The bridge replacement was a \$60 million, cooperative project between KDOT and MoDOT. The state highways within the Mo-Kan's region are primarily dual lane routes and efficient in handling the current and projected traffic volumes.

Motor Freight

Mo-Kan's regional transportation system receives services from over 50 general commodity interstate motor carriers. Yellow Freight Systems Inc., ABE, Roadway Express and FedEx Freight are all larger motor carriers providing carrier services to the Kansas City and Omaha areas. A number of small carriers are also in operation in the region. In 2014, FedEx opened a 67,000 sq. foot distribution center in St. Joseph.

Railroads

Burlington Northern – Santa Fe Company and the Union Pacific Railroad are the two major railroads serving Mo-Kan's region. The railroads are accompanied by three switching lanes, with the switching yards located in St. Joseph and Atchison. One rail spur serves Elwood, KS, a town five miles into Doniphan County.

Currently, there is no rail passenger service available to the region. An Amtrak station is located in Kansas City. A rail passenger route from Kansas City to Omaha has been discussed, which would give St. Joseph access, but a service like this would require significant public financial support.

Airports

Rosecrans Memorial Airport, Cameron Memorial Airport, Amelia Earhart Airport and Hiawatha Municipal Airport make up the public airports in Mo-Kan's region. The largest, Rosecrans, provides airfreight service to the St. Joseph area and is home to the Missouri Air National Guard. A major renovation to the National Guard facility is in the planning stages. Cameron Memorial is located in Cameron, MO, the Amelia Earhart is located in Atchison, KS, and the Hiawatha Municipal is located in Hiawatha, KS. All are public airports offering general aviation service. The Kansas City International Airport (KCI), which offers air passenger service, is located about 30 miles south of St. Joseph.

Public Transportation

The region consists of several public transportation systems. Andrew, Buchanan, Clinton and DeKalb have access to the Organized Alternative Transit System (OATS), a not-for-profit organization offering specialized transportation for residents throughout the region. MO Rides operates a statewide database of the various car transportation providers available in each county. It's important to note that many of these providers are privately organized and specific in who they offer services to (such as providing transportation to only a specific church or transporting only veterans to medical appointments. HealthTran recently partnered with Northwest Health Services to provide transportation for medical appointments in Savannah, St. Joseph and Maysville.

The Ride, provides service within the City of St. Joseph and Elwood, KS. One regional bus system provides transportation from St. Joseph to KCI and downtown Kansas City.

The public transportation system in Kansas operates differently than in Missouri. The state is divided into 15 coordinated transit districts (CTD). One district within the CTD offers services to the two Kansas counties in Mo-Kan's region, Atchison and Doniphan. The Guidance Center and Project Concern, Inc., serves Atchison County, and the Doniphan County Services and Workskills and the Doniphan County Transport serve Doniphan County. While the KDOT oversees all the counties, each county has a local contact agency to manage the day-to-day operations.

Several firms are scattered throughout the region in St. Joseph, Atchison and Cameron. Uber operates in St. Joseph. Reviews show that a majority of customers are requesting taxis to and from health care facilities. Other organizations throughout the region provide forms of public transportation, but the ones highlighted above are the primary systems throughout the Mo-Kan counties.

Waterways and Ports

The Mo-Kan region is located along the Missouri River, which offers barge transportation access. As a port district, the St. Joseph Port Authority, located at Missouri River Mile 448, is classified as a political subdivision of the State. The building of a public terminal on a 15-acre tract of land near the U.S. 36 Bridge is one of the projects completed after the Port Authority began operating commercially in 2002. In 2015, equipment was added to unload bulk

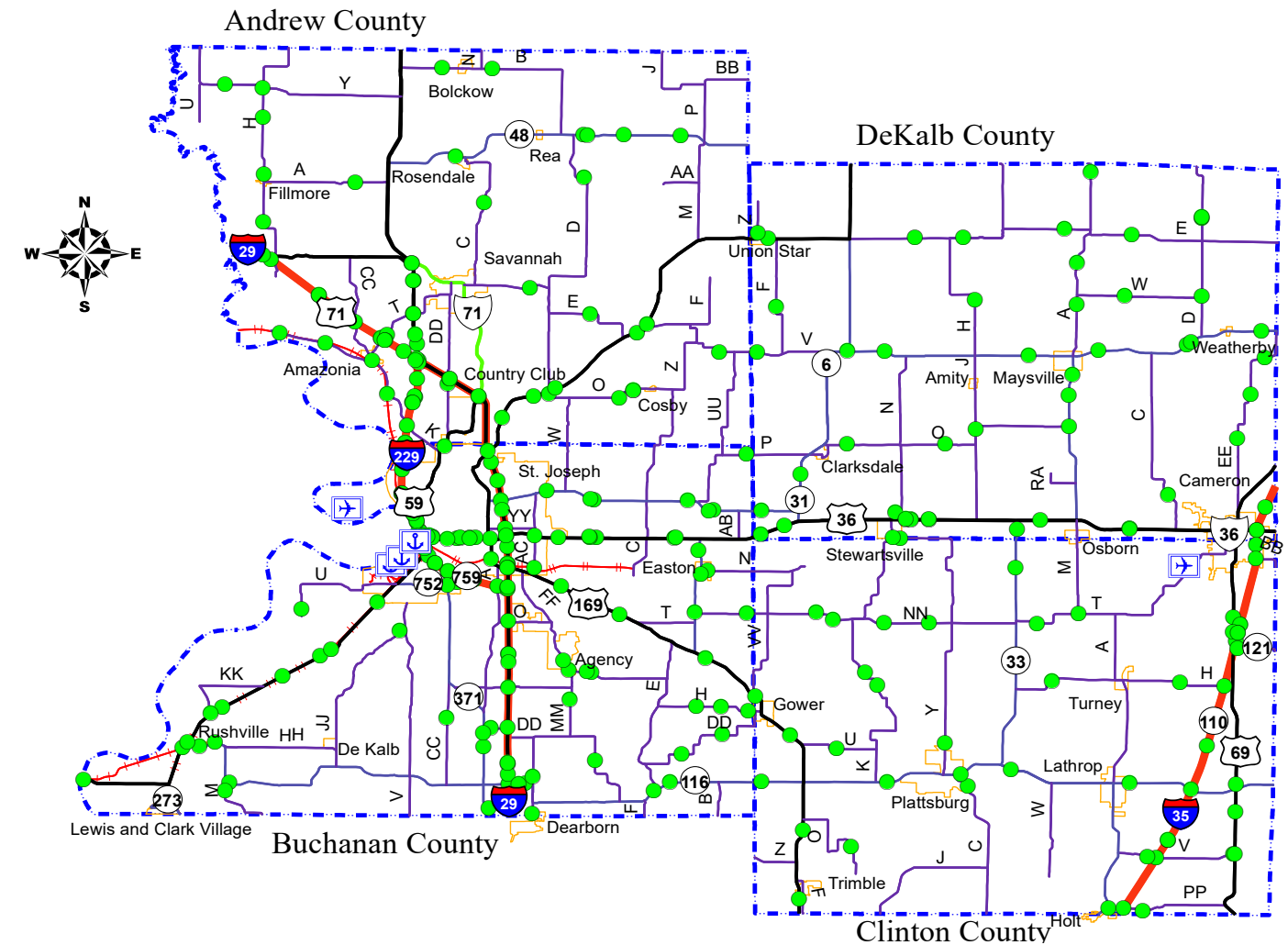
product from barges to trucks. The terminal provides transfers between inter-modal transportation resources. Coiled wire rod, steel products, grain, molasses, dry bulk, fertilizer and salt are among the resources funneled through the St. Joseph facility. Existing manufacturing firms, especially metal fabricators, have found that a more competitive cost product results from utilizing barge transportation.

The following maps and document are included at the end of this chapter:

- Map 6: Regional Transportation Assets
- Map 7a: Average Traffic Volume
- Map 7b: Commercial Traffic Volume
- Map 8: Bridge Condition
- Map 9: Port Authority
- Map 10a: Andrew County Roads & Off System Bridges
- Map 10b: Buchanan County Roads & Off System Bridges
- Map 10c: Clinton County Roads & Off System Bridges
- Map 10d: DeKalb County Roads & Off System Bridges
- Insert: City Transportation Maps
- Insert: Transit Schedule, OATS
- Insert: Mo Rides Providers
- Insert: HealthTran information

Map 6

Regional Transportation Assets Mo-Kan Region



Legend

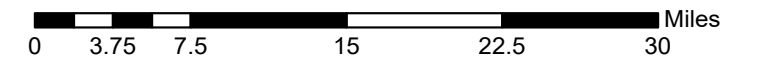
Route

- Missouri Numbered Route
- Missouri Lettered Route
- Interstate
- U.S. Highway
- Business Route
- Railroad

Other Assets

- Public Airports
- Port
- Bridge

- City
- County

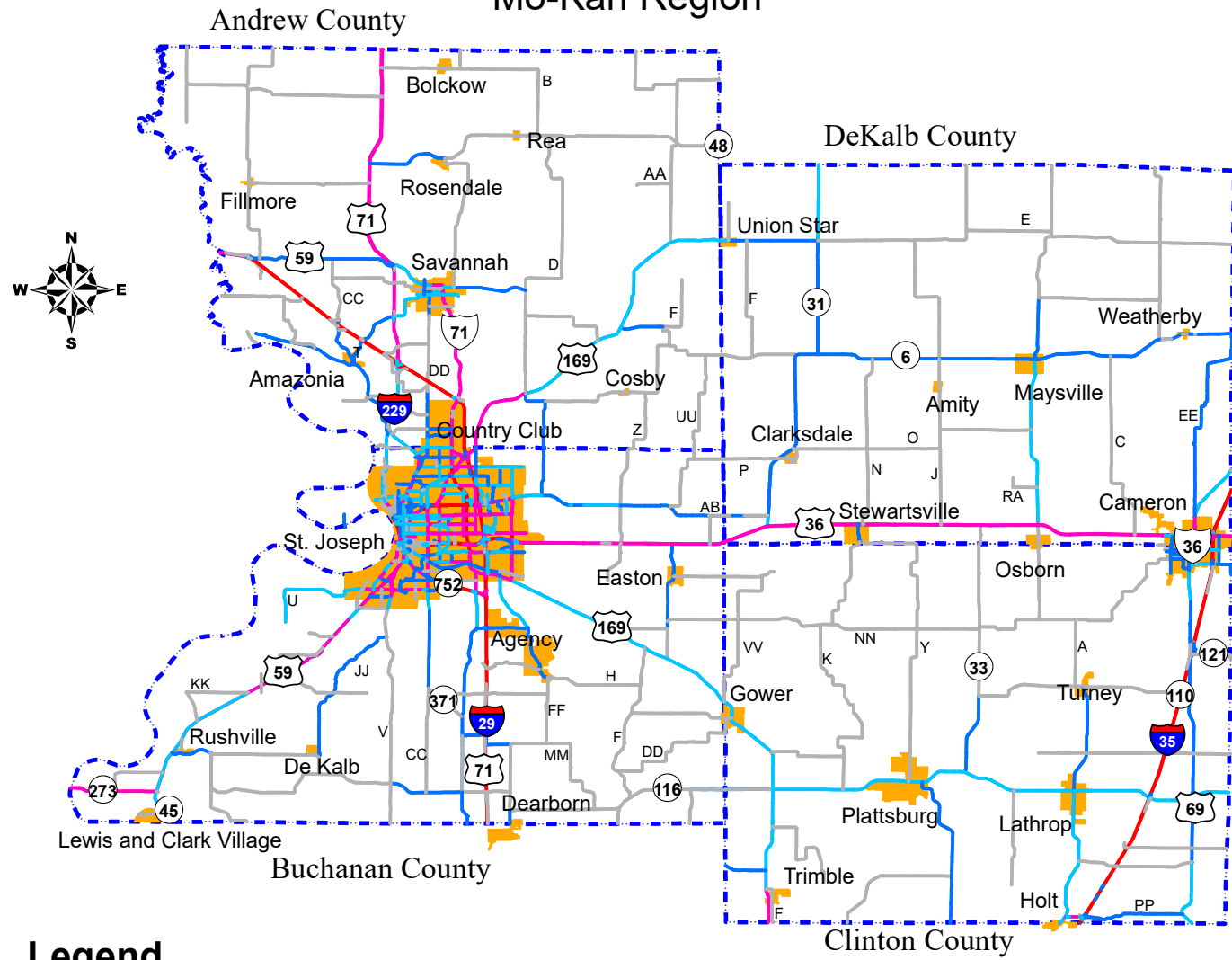


Mo-Kan Regional Transportation Plan, Map 6
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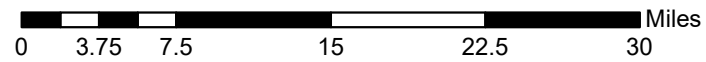
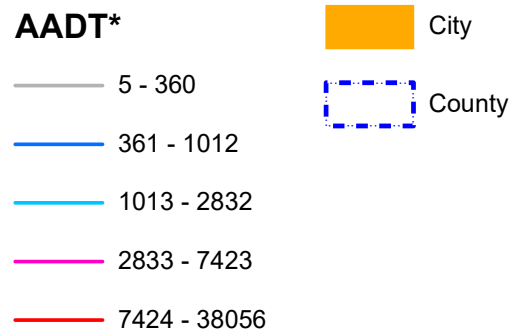


Map 7A

Average Daily Traffic* Mo-Kan Region



Legend



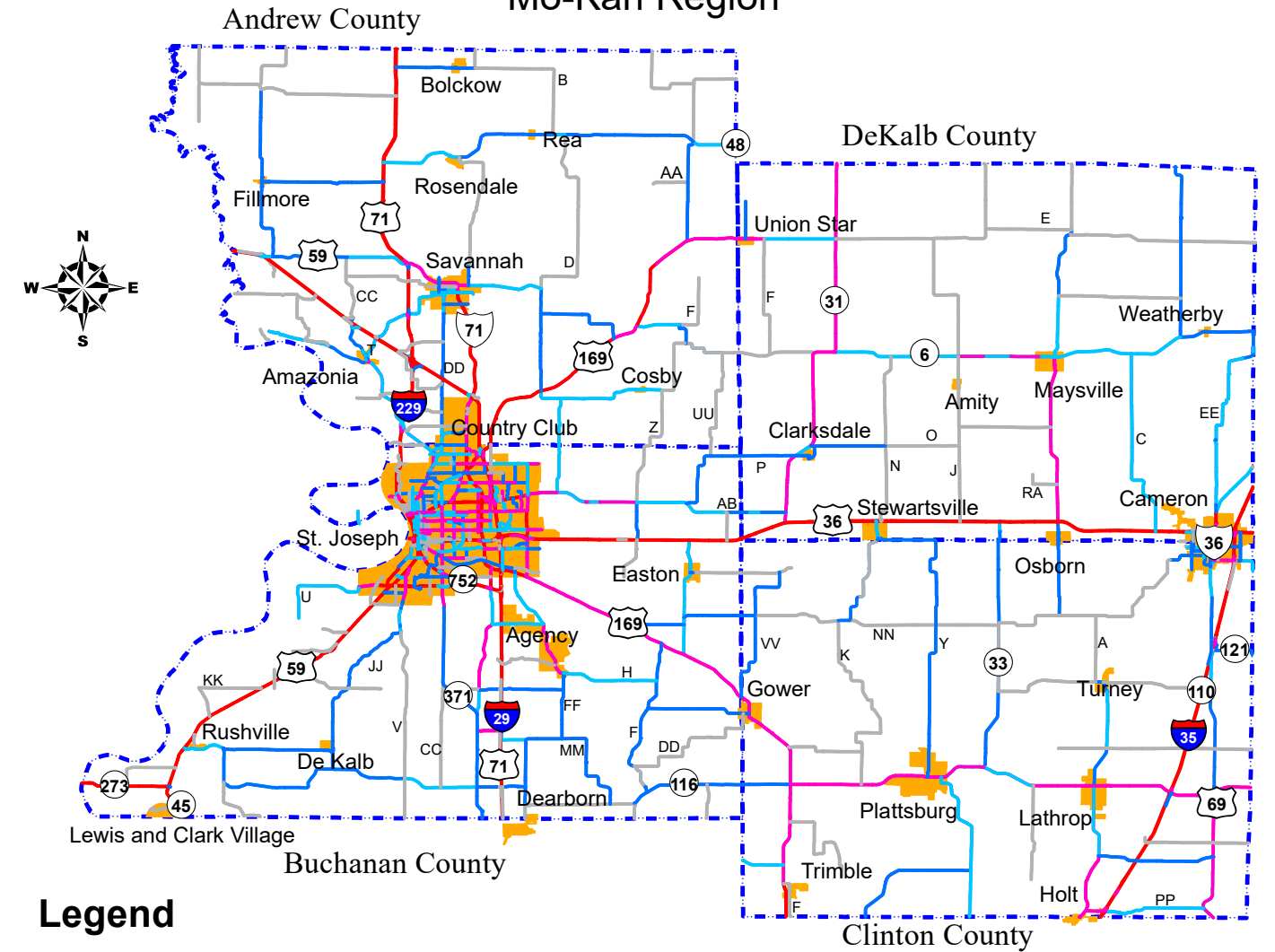
* - Based on the Annual Average Daily Traffic number

Mo-Kan Regional Transportation Plan, Map 7A
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 Sources: MoDOT Routes 2018; MoDOT Transportation 2017; U.S. Census Bureau

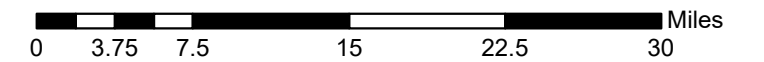
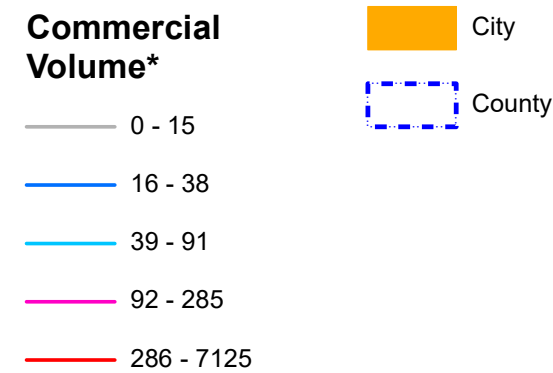


Map 7B

Average Commercial Volume* Mo-Kan Region



Legend



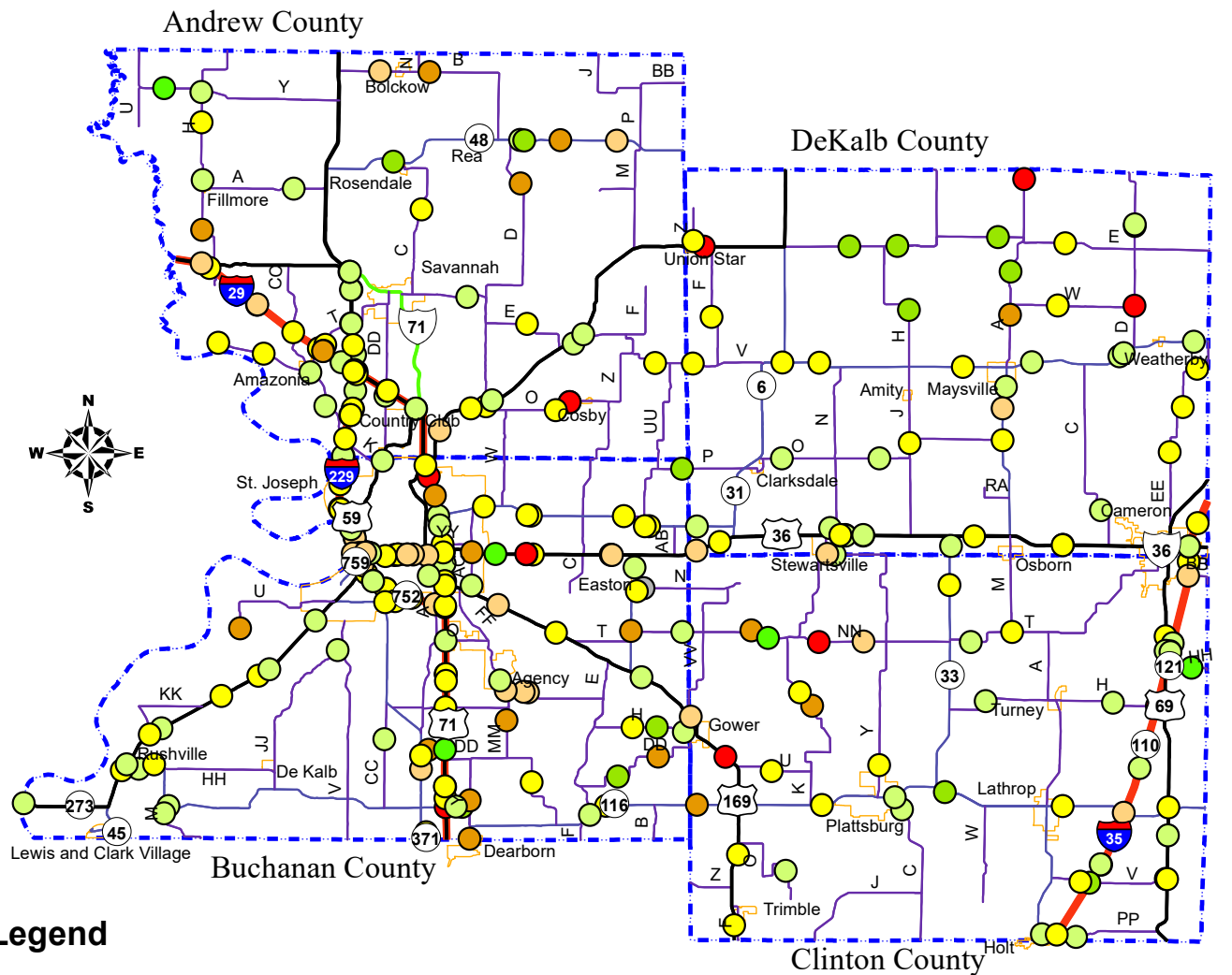
* - Based on the Annual Average Daily Traffic number

Mo-Kan Regional Transportation Plan, Map 7B
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 Sources: MoDOT Routes 2018; MoDOT Transportation 2017; U.S. Census Bureau



Map 8

Bridge Condition, Mo-Kan Region as determined by Minimum Rating*



Legend

- | | | |
|------------------------|-------------------------|--------|
| Minimum Rating* | Route | City |
| 9 | Missouri Numbered Route | County |
| 8 | Missouri Lettered Route | |
| 7 | Interstate | |
| 6 | U.S. Highway | |
| 5 | Business Route | |
| 4 | | |
| 3 | | |
| N/A | | |
- 0 3.75 7.5 15 22.5 30 Miles

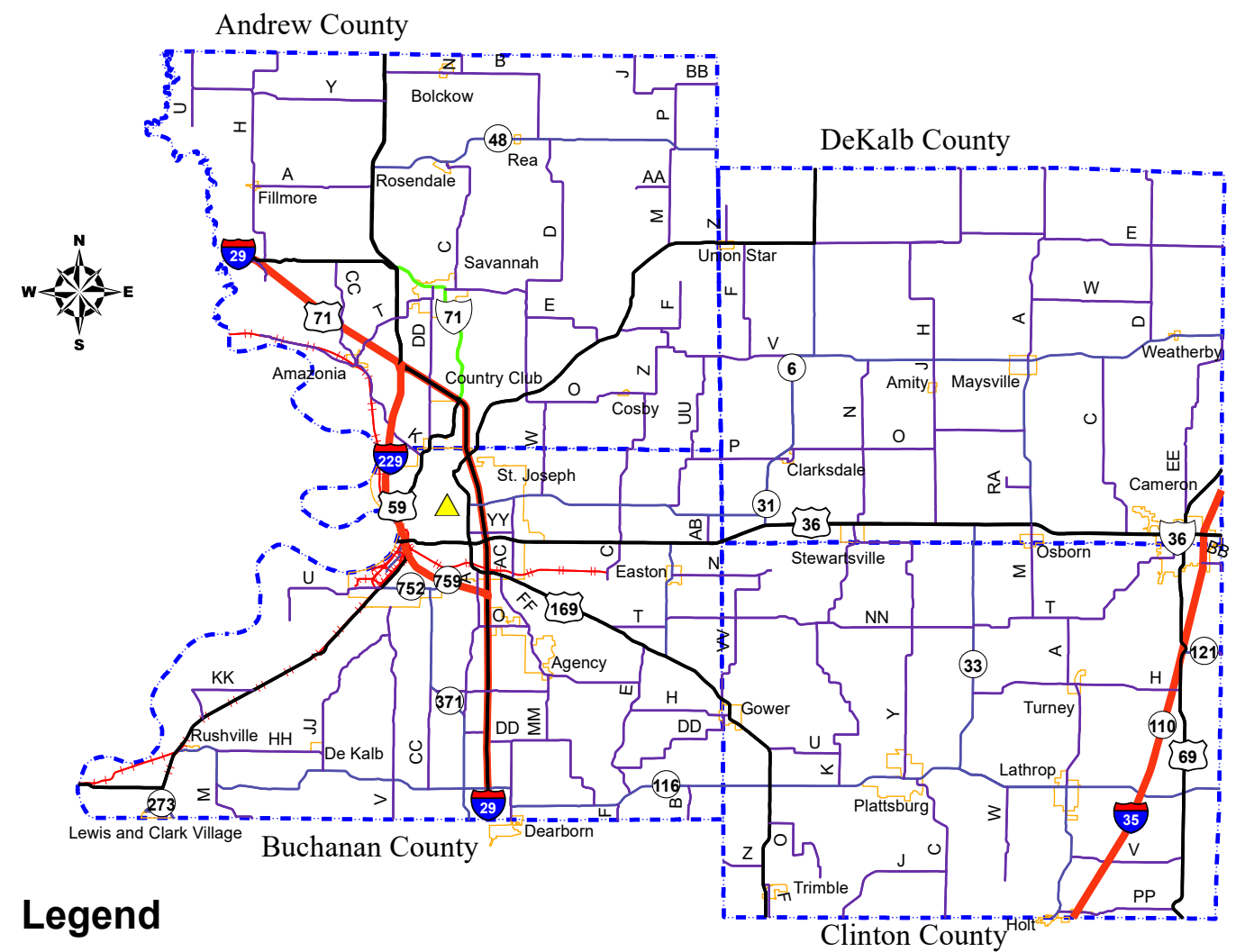
* - Minimum Rating is the value of the lowest rated component; i.e. deck, substructure, superstructure

Mo-Kan Regional Transportation Plan, Map 8
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Sources: MoDOT Routes 2018; MoDOT Transportation 2017



Map 9

Missouri Toll Ferries and Public Port Authorities Mo-Kan Region



Legend

- | | | |
|-------------------------|--------|---|
| Route | City | St. Joseph Regional Port Authority
Phone: (816) 232-4461 |
| Missouri Numbered Route | County | |
| Missouri Lettered Route | | |
| Interstate | | |
| U.S. Highway | | |
| Business Route | | |
| Railroad | | |
- 0 3.75 7.5 15 22.5 30 Miles

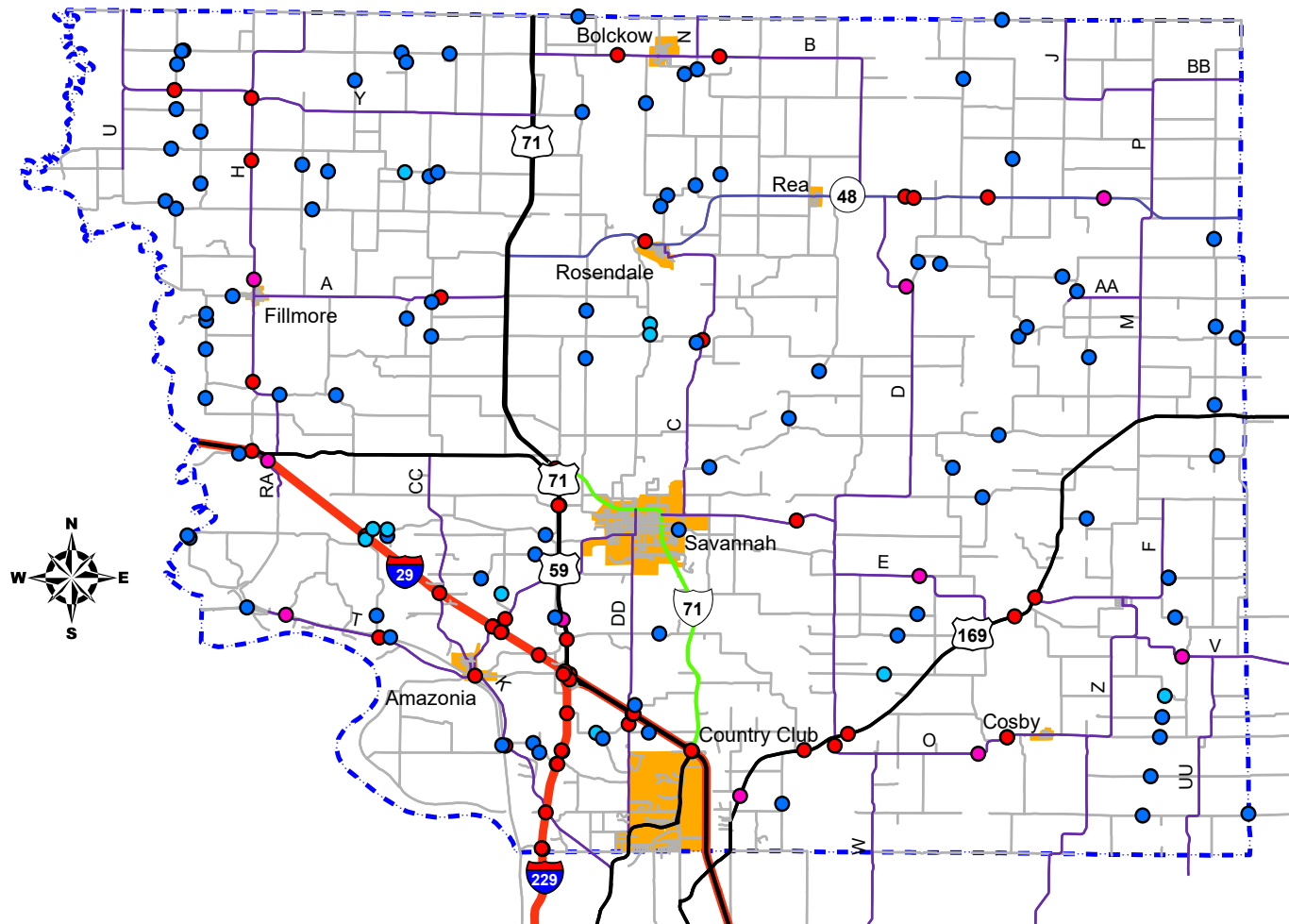
Mo-Kan Regional Transportation Plan, Map 9
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Sources: MoDOT Routes 2018; MoDOT Transportation 2017; U.S. Census Bureau



Map 10A

State and Non-State System Bridges and Culverts

Andrew County, Missouri



Legend

Route

- Missouri Numbered Route
- Missouri Lettered Route
- Interstate
- U.S. Highway
- Business Route

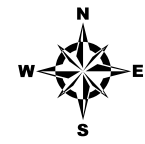
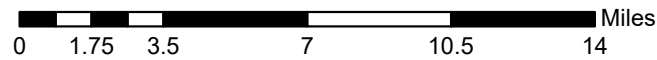
State System

- Bridge (57)
- Culvert (10)

Non-State System

- Bridge (92)
- Culvert (10)

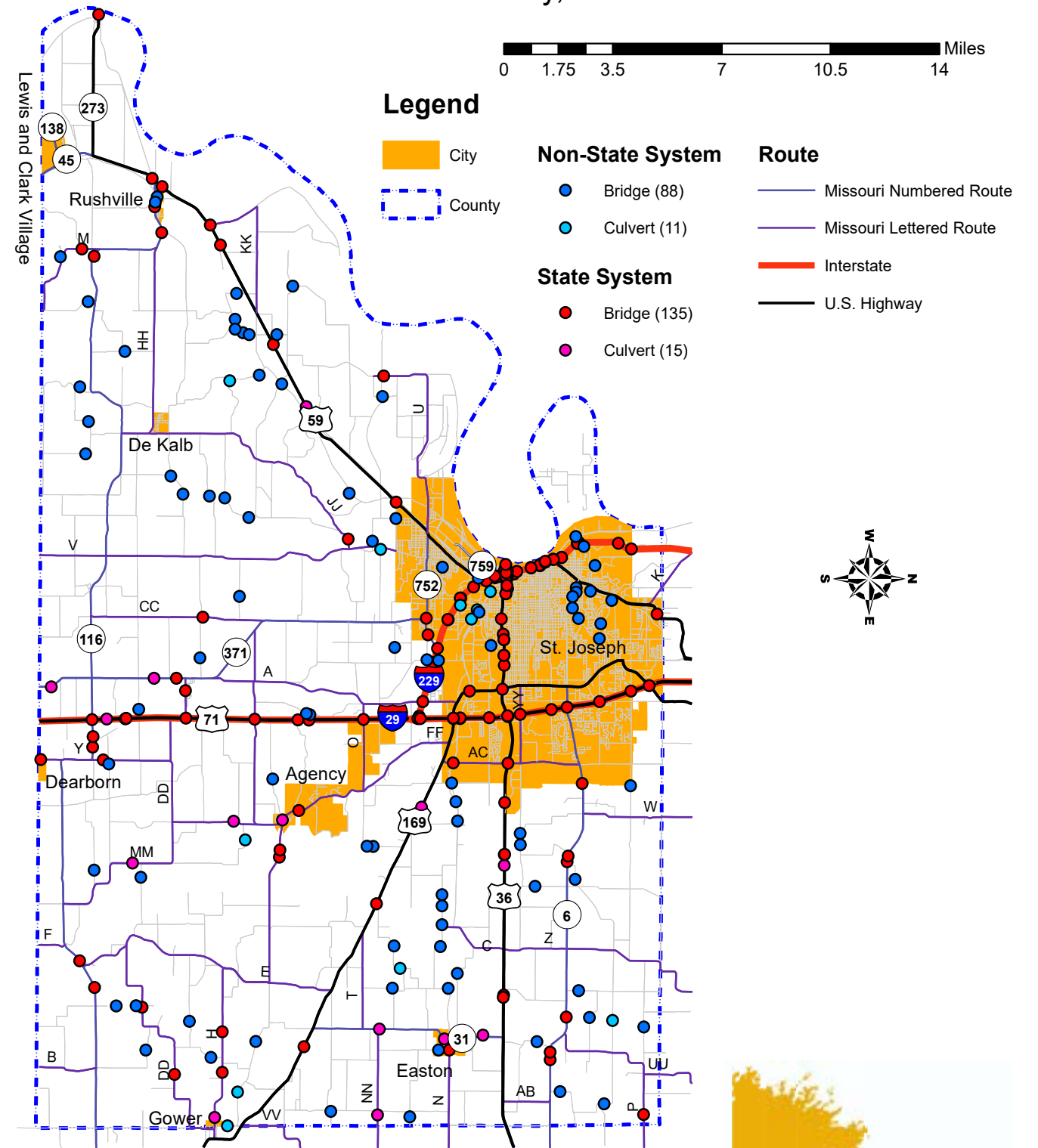
- City
- County



Map 10B

State and Non-State System Bridges and Culverts

Buchanan County, Missouri



Legend

- City
- County

Non-State System

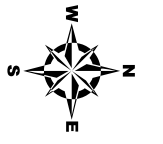
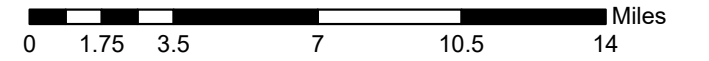
- Bridge (88)
- Culvert (11)

State System

- Bridge (135)
- Culvert (15)

Route

- Missouri Numbered Route
- Missouri Lettered Route
- Interstate
- U.S. Highway



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 Sources: MoDOT Routes 2018; MoDOT Transportation 2017; U.S. Census Bureau



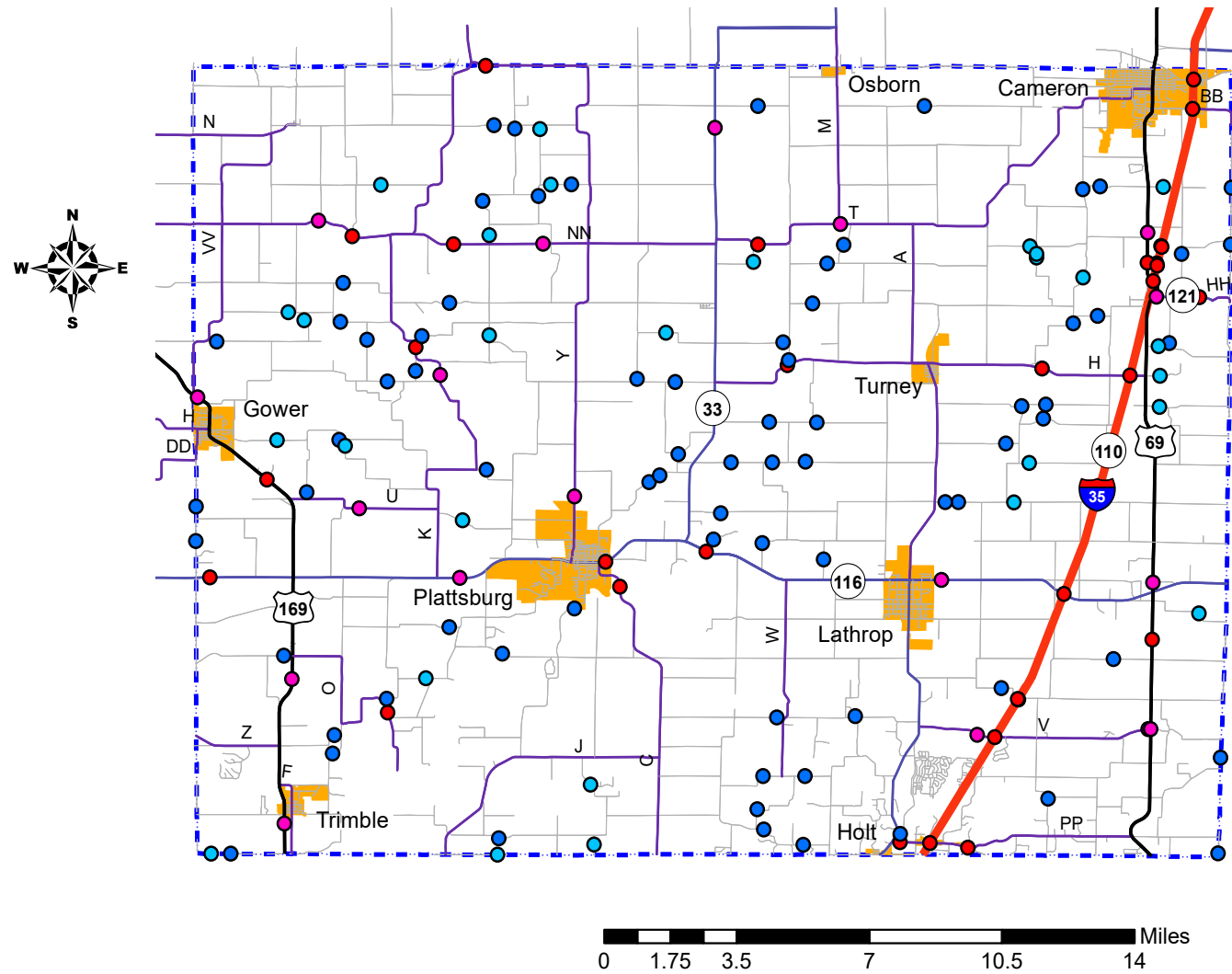
Mo-Kan Regional Transportation Plan, Map 10B
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 Sources: MoDOT Routes 2018; MoDOT Transportation 2017; U.S. Census Bureau



Map 10C

State and Non-State System Bridges and Culverts

Clinton County, Missouri



Legend

- | | | |
|-------------------------|-------------------------|--------|
| Route | Non-State System | City |
| Missouri Numbered Route | Bridge (75) | County |
| Missouri Lettered Route | Culvert (28) | |
| Interstate | State System | |
| U.S. Highway | Bridge (32) | |
| | Culvert (18) | |

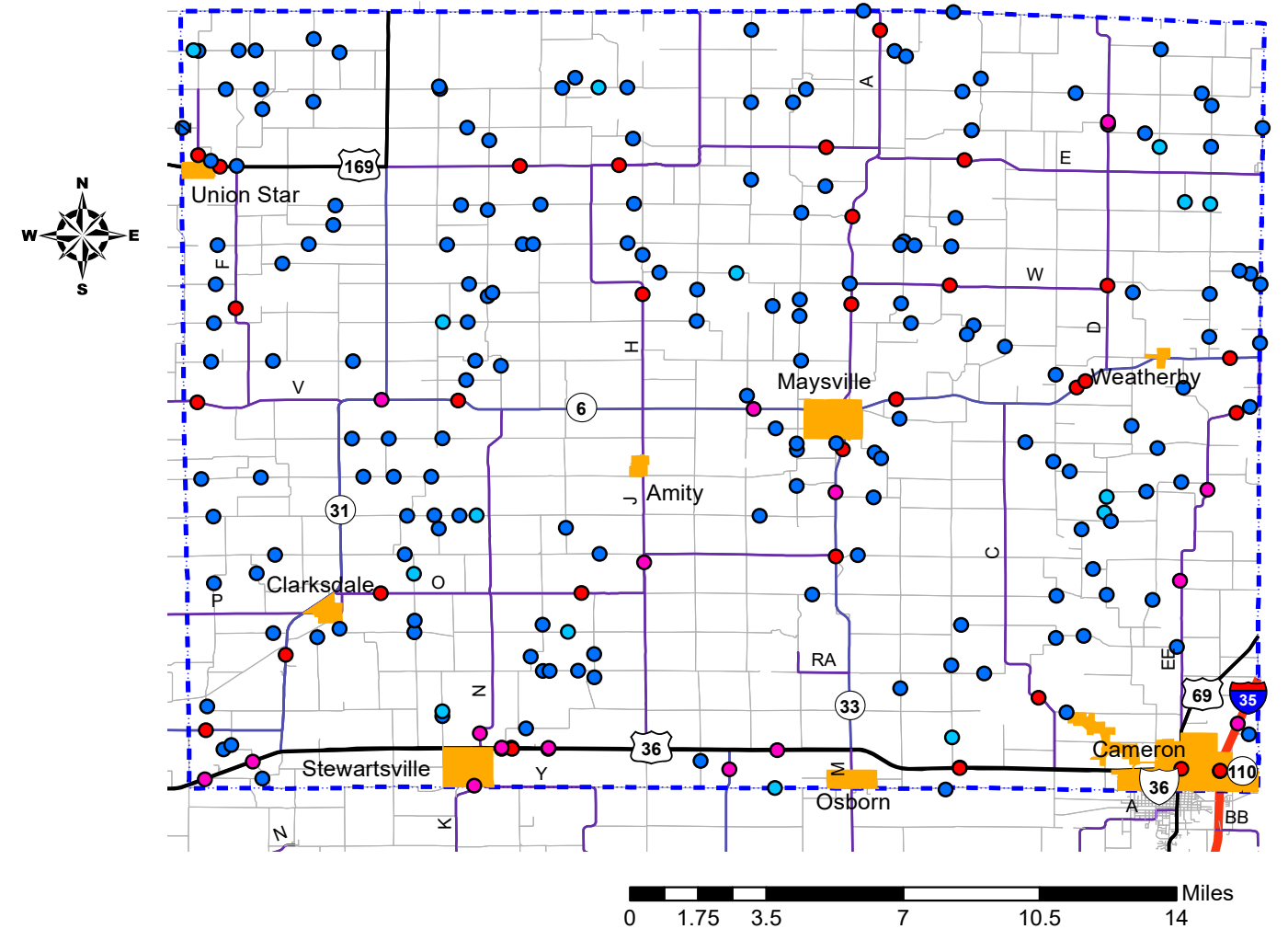


Mo-Kan Regional Transportation Plan, Map 10C
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Map 10D

State and Non-State System Bridges and Culverts

DeKalb County, Missouri

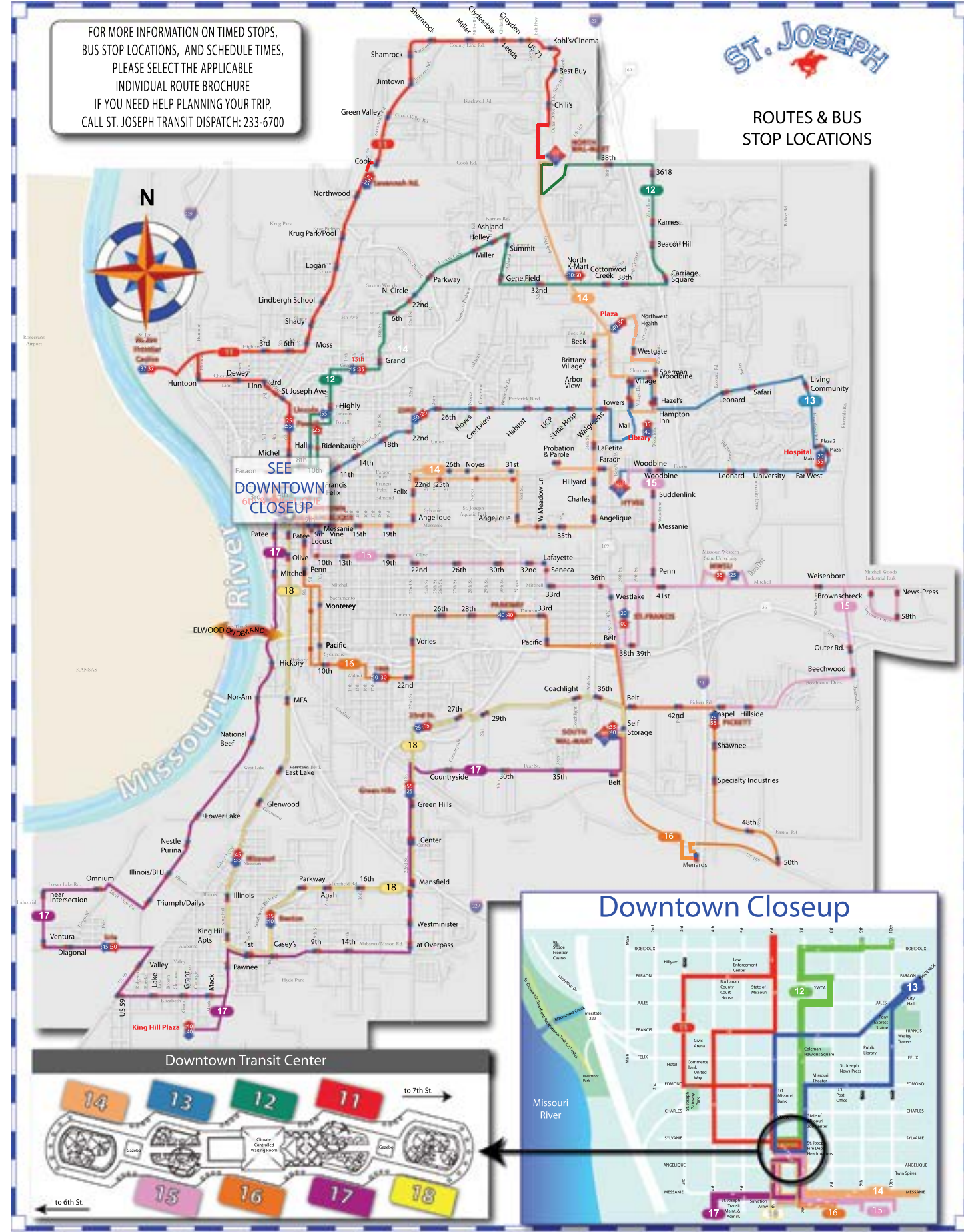


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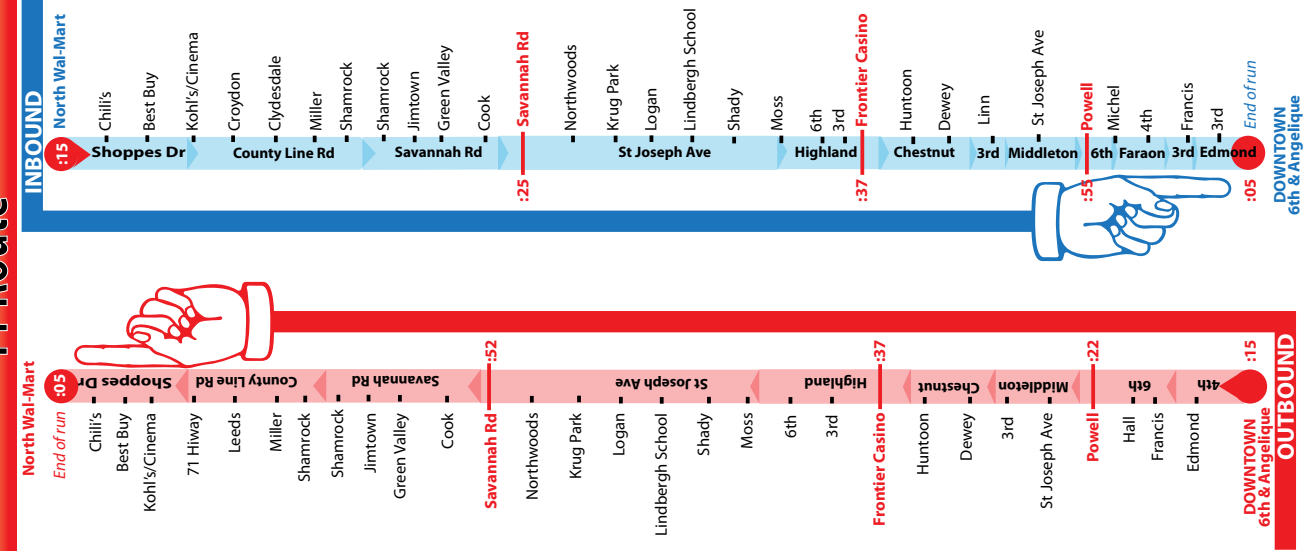
- | | | |
|-------------------------|-------------------------|--------|
| Route | Non-State System | City |
| Missouri Numbered Route | Bridge (170) | County |
| Missouri Lettered Route | Culvert (15) | |
| Interstate | State System | |
| U.S. Highway | Bridge (34) | |
| Business Route | Culvert (19) | |



Mo-Kan Regional Transportation Plan, Map 10D
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 Sources: MoDOT Routes 2018; MoDOT Transportation 2017; U.S. Census Bureau



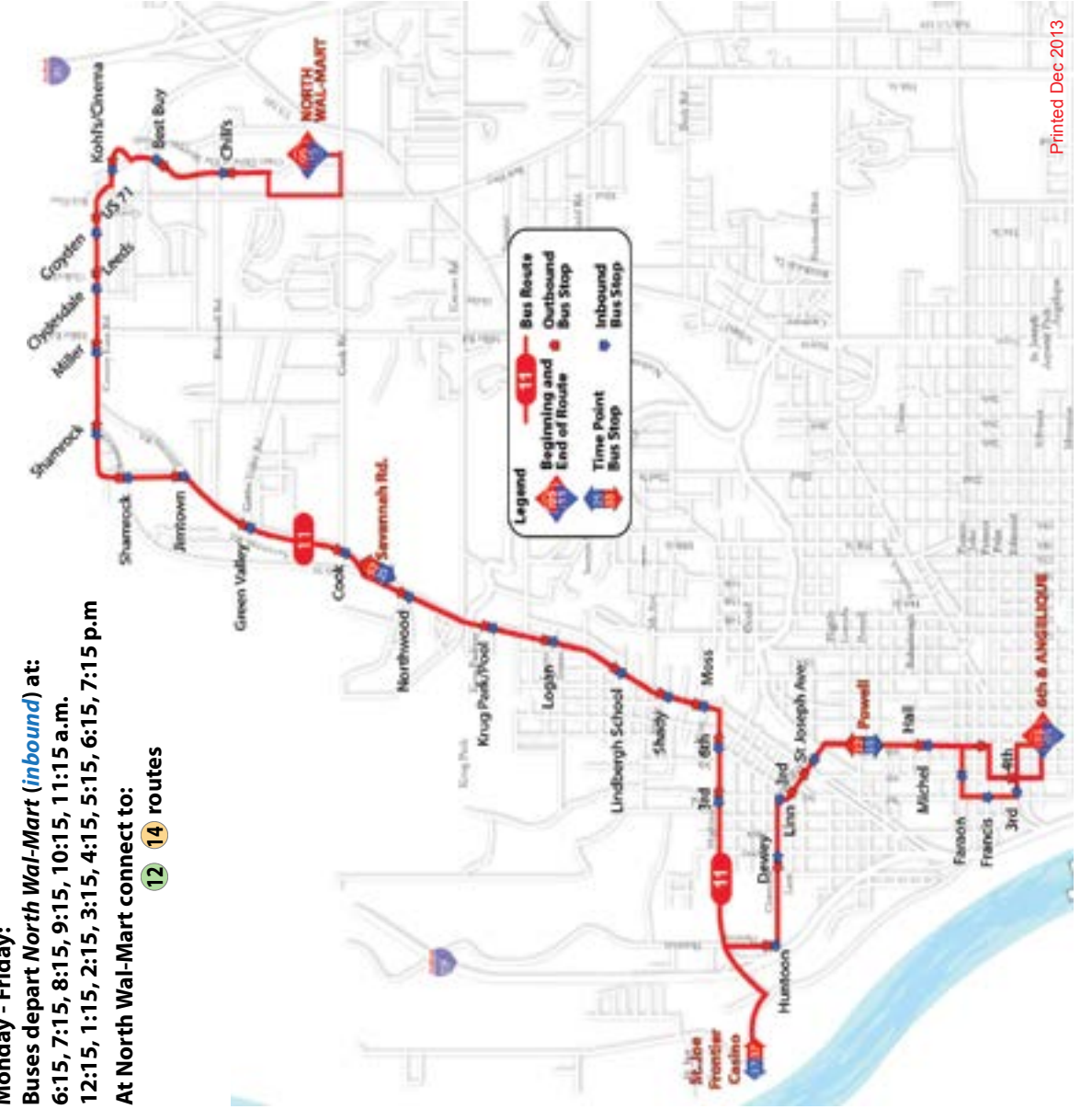
ST. JOSEPH AVENUE 11 Route



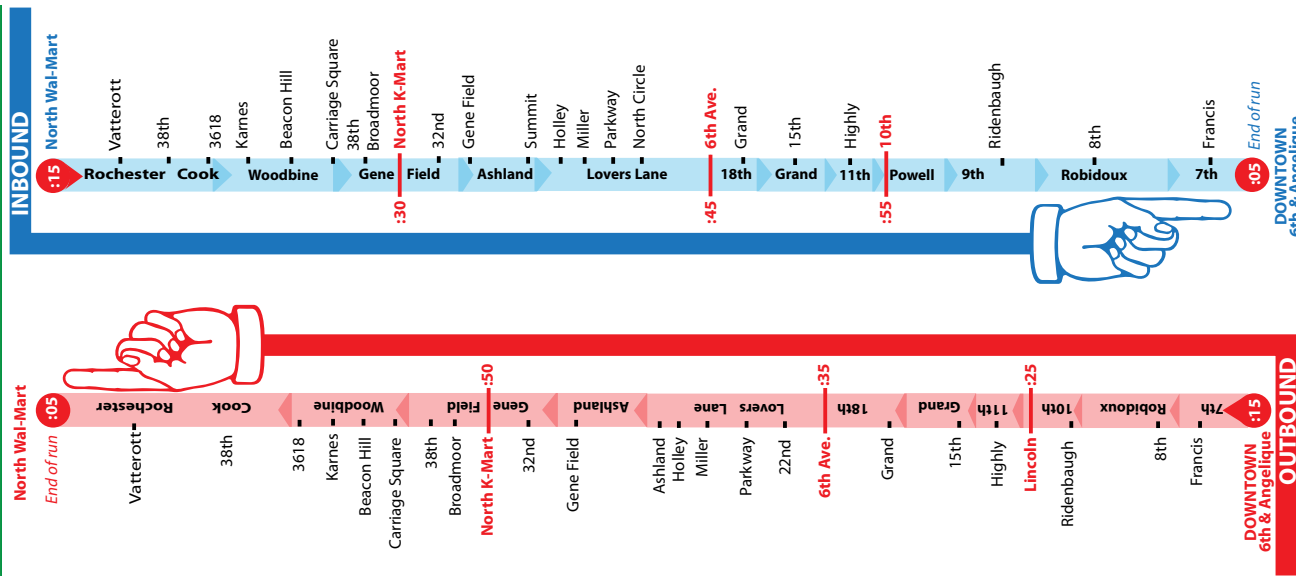
Monday - Friday:
Buses depart Downtown (outbound) at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15 p.m.
At Downtown connect to:
12 13 14 15 16 17 18 routes

Saturdays:
Buses depart Downtown (outbound) at:
9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.
At Downtown connect to:
12 14 routes

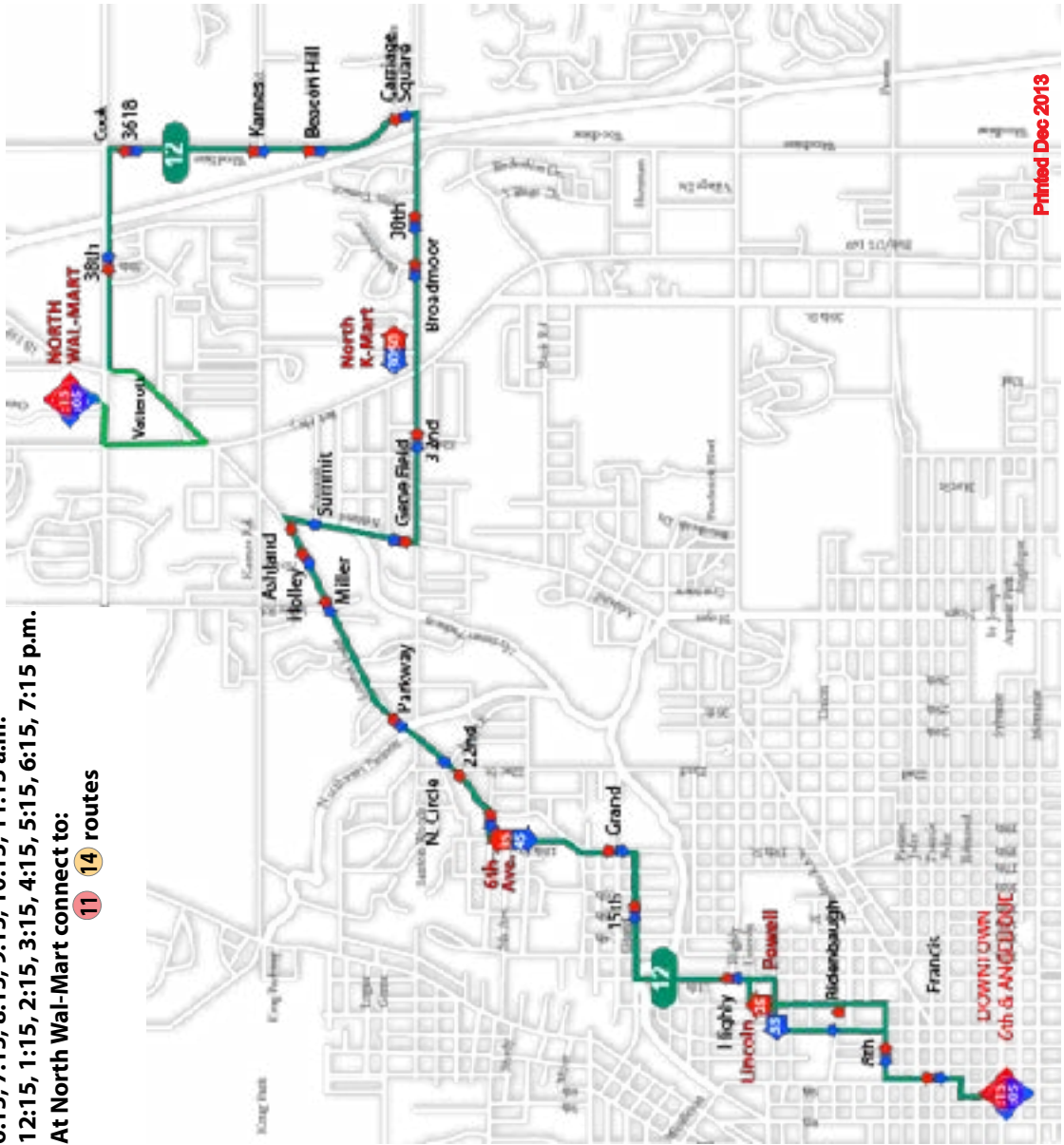
Sundays:
Buses depart Downtown (outbound) at:
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15 p.m.
At Downtown connect to:
12 14 routes



LOVERS LANE 12 Route

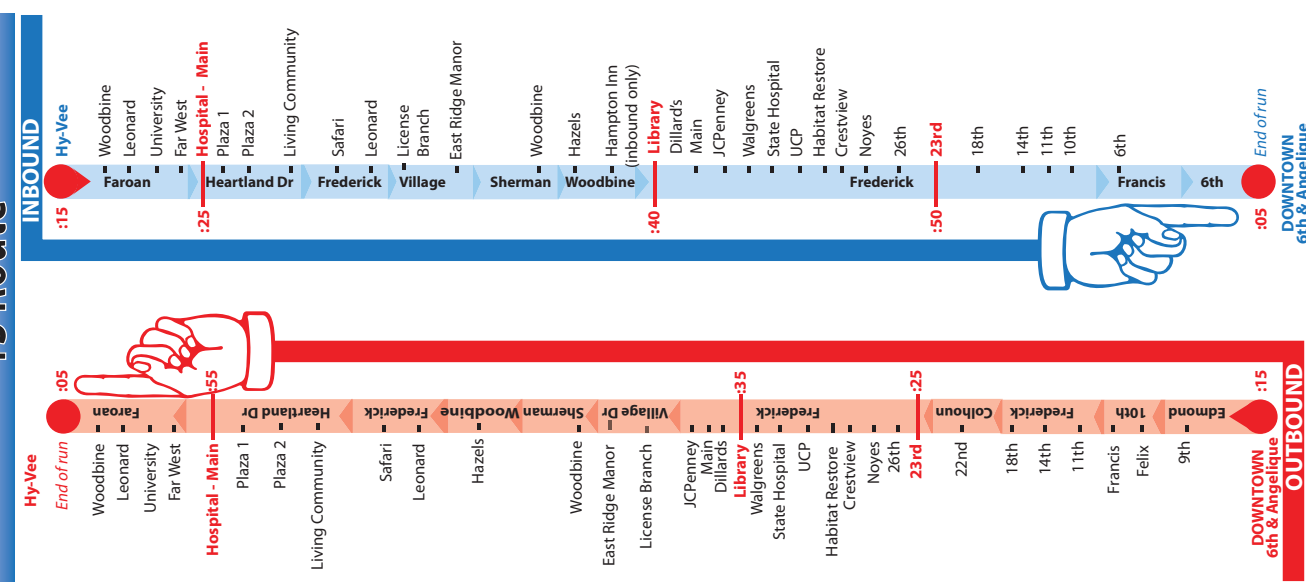


Saturdays:
Buses depart **Downtown (outbound)** at:
9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.
Saturdays:
Buses depart **North Wal-Mart (inbound)** at:
8:15, 10:15, a.m. and 12:15, 2:15, 4:15 p.m.

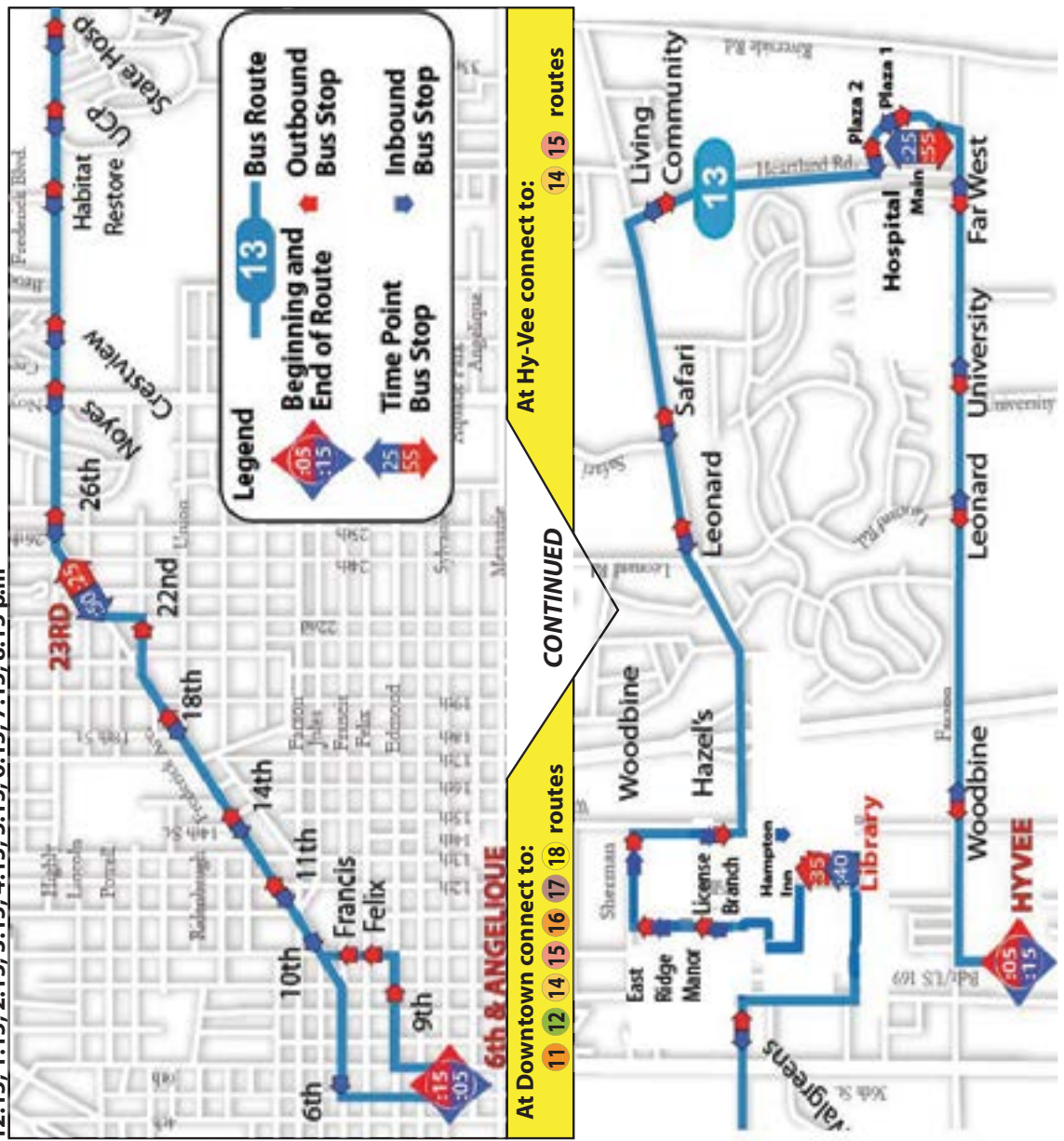


Monday - Friday:
Buses depart **Downtown (outbound)** at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15 p.m.
At Downtown connect to:
11 13 14 15 16 17 18 routes
Monday - Friday:
Buses depart **North Wal-Mart (inbound)** at:
6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15 p.m.
At North Wal-Mart connect to:
11 14 routes

FREDERICK 13 Route



Monday - Friday:
Buses depart **Downtown (outbound)** at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15 p.m.
Monday - Friday:
Buses depart **HyVee (inbound)** at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15, 8:15 p.m.
Saturdays:
Buses depart **Downtown (outbound)** at:
9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.
Saturdays:
Buses depart **HyVee (inbound)** at:
8:15, 10:15, a.m. and 12:15, 2:15, 4:15, 6:15 p.m.

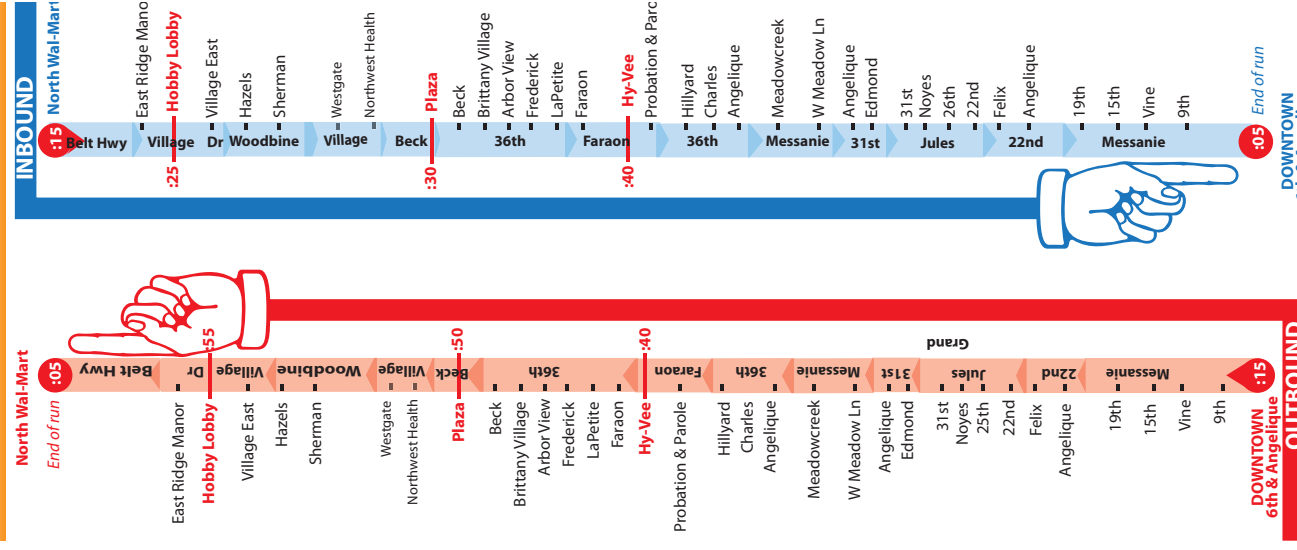
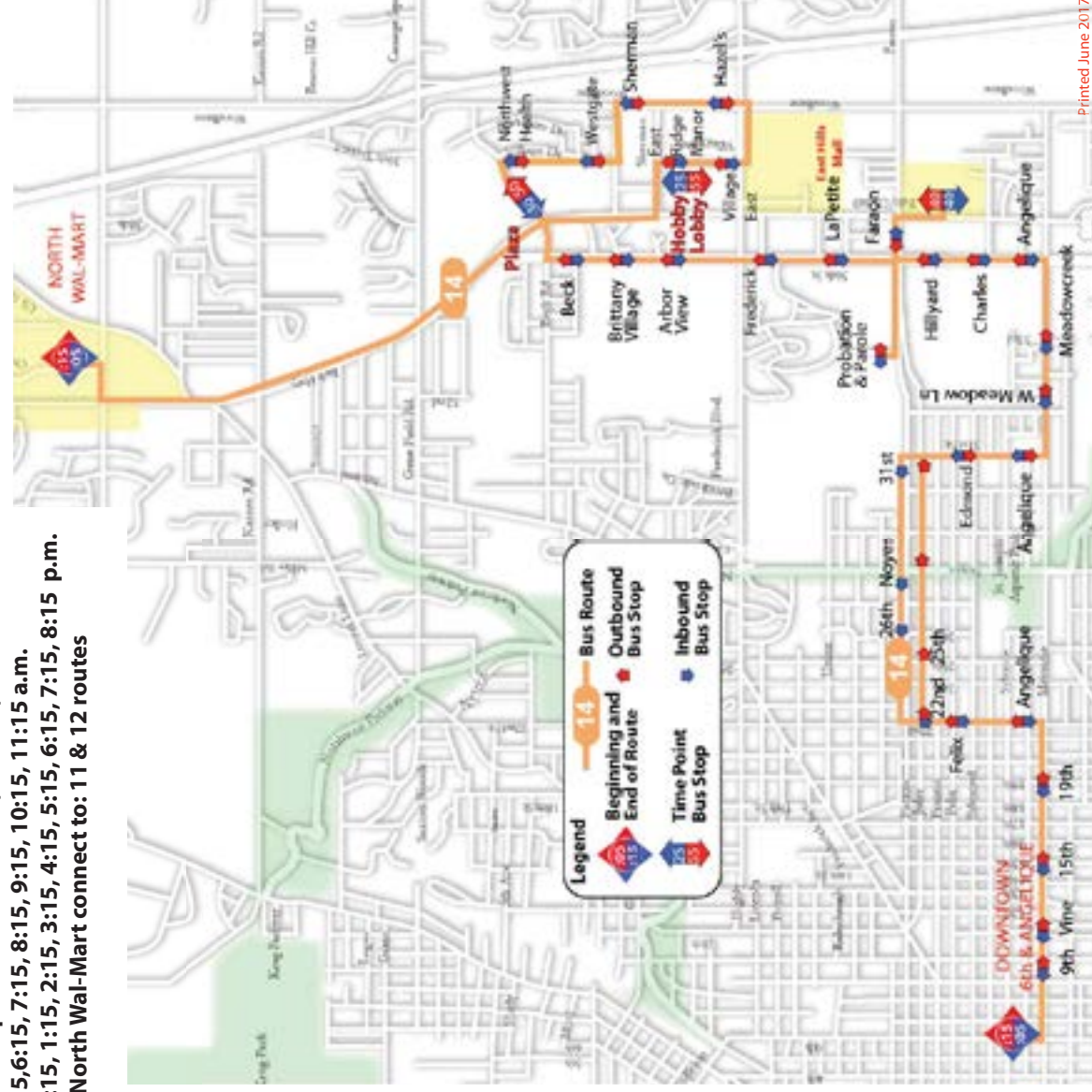


FARAON/JULES 14 Route

Monday - Friday:
Buses depart **Downtown (outbound)** at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15 p.m.
At Downtown connect to: All routes

Monday - Friday:
Buses depart **North Wal-Mart (inbound)** at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15, 8:15 p.m.
At North Wal-Mart connect to: 11 & 12 routes

Saturdays:
Buses depart **Downtown (outbound)** at:
9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.
Buses depart **North Wal-Mart (inbound)** at:
8:15, 10:15, a.m. and 12:15, 2:15, 4:15 p.m.



MISSOURI WESTERN 15 Route

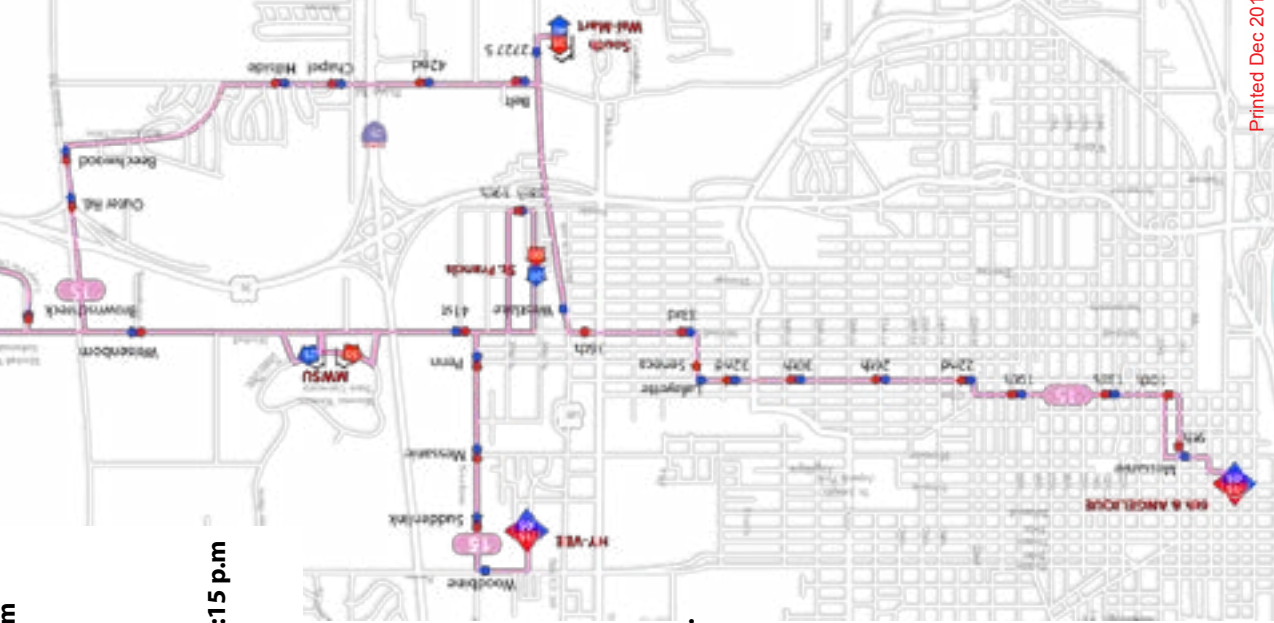
Monday - Friday:
Buses depart **Downtown (outbound)** at:
5:15, 6:15, 7:15^*, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15^*, 4:15, 5:15, 6:15, 7:15 p.m.
At Downtown connect to: 11, 12, 13, 14, 16, 17, 18 routes

Monday - Friday:
Buses depart **HyVee (inbound)** at:
5:15, 6:15, 7:15^*, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15^*, 4:15, 5:15, 6:15, 7:15, 8:15 p.m.
At Hy-Vee connect to: 14, 13 routes

^Specialty Industries serviced on 7:15 and 3:15 p.m. inbound and outbound runs only.

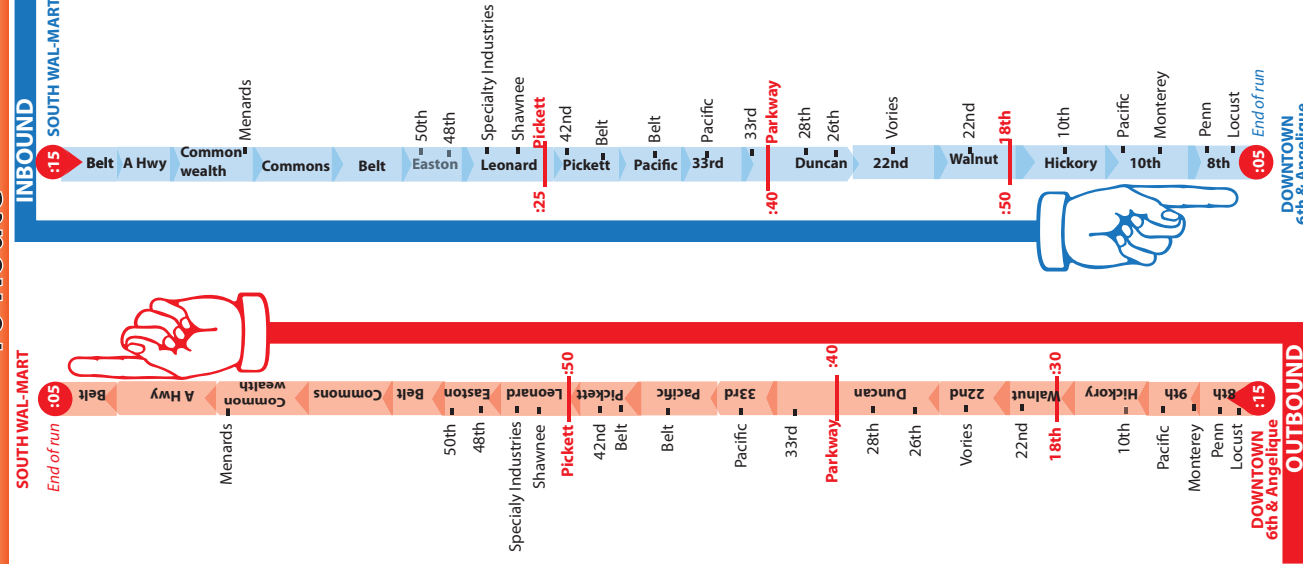
*South Wal-Mart and 2727 S Belt NOT serviced on 7:15 and 3:15 p.m. inbound and outbound runs

Saturdays:
Buses depart **Downtown (outbound)** at:
9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.
Buses depart **HyVee (inbound)** at:
8:15, 10:15, a.m. and 12:15, 2:15, 4:15, 6:15 p.m.
At South Wal-Mart connect to: 16, 17, 18 routes



INDUSTRIAL PARK

16 Route



Saturdays:
Buses depart Downtown (outbound) at:
9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.
Saturdays:
Buses depart South Wal-Mart (inbound) at:
8:15, 10:15, a.m. and 12:15, 2:15, 4:15 p.m.

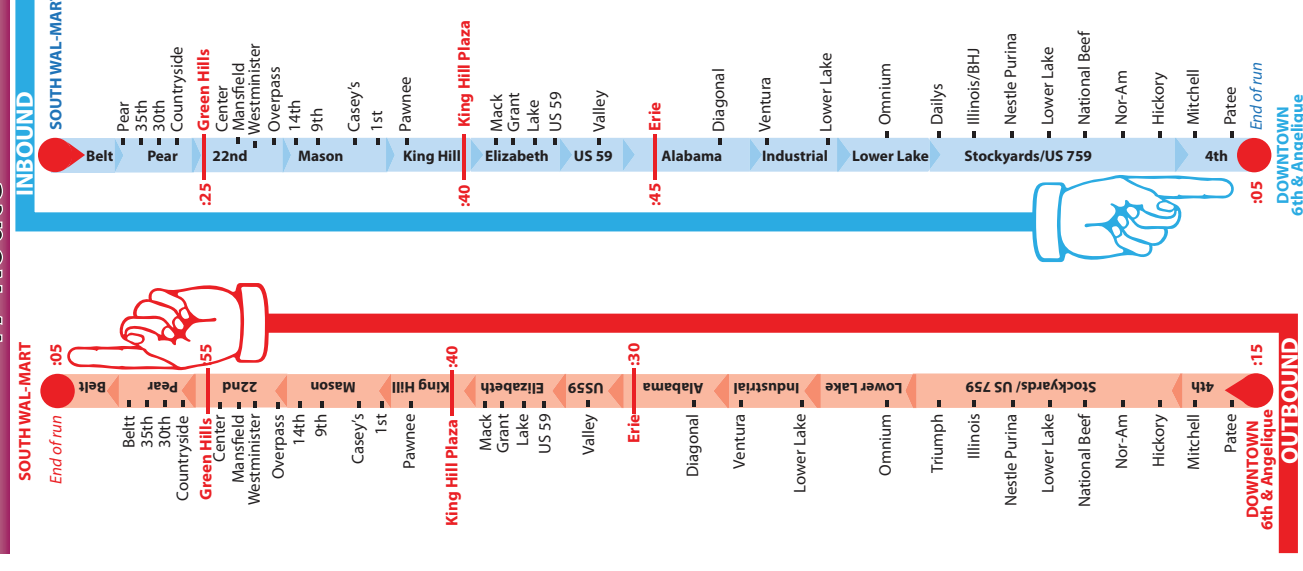
Monday - Friday:
Buses depart Downtown (outbound) at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15 p.m.
At Downtown connect to:
11 12 13 14 15 17 18 routes
Monday - Friday:
Buses depart South Wal-Mart (inbound) at:
6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15 p.m.
At South Wal-Mart connect to:
15 17 18 routes



Printed Sept 2017

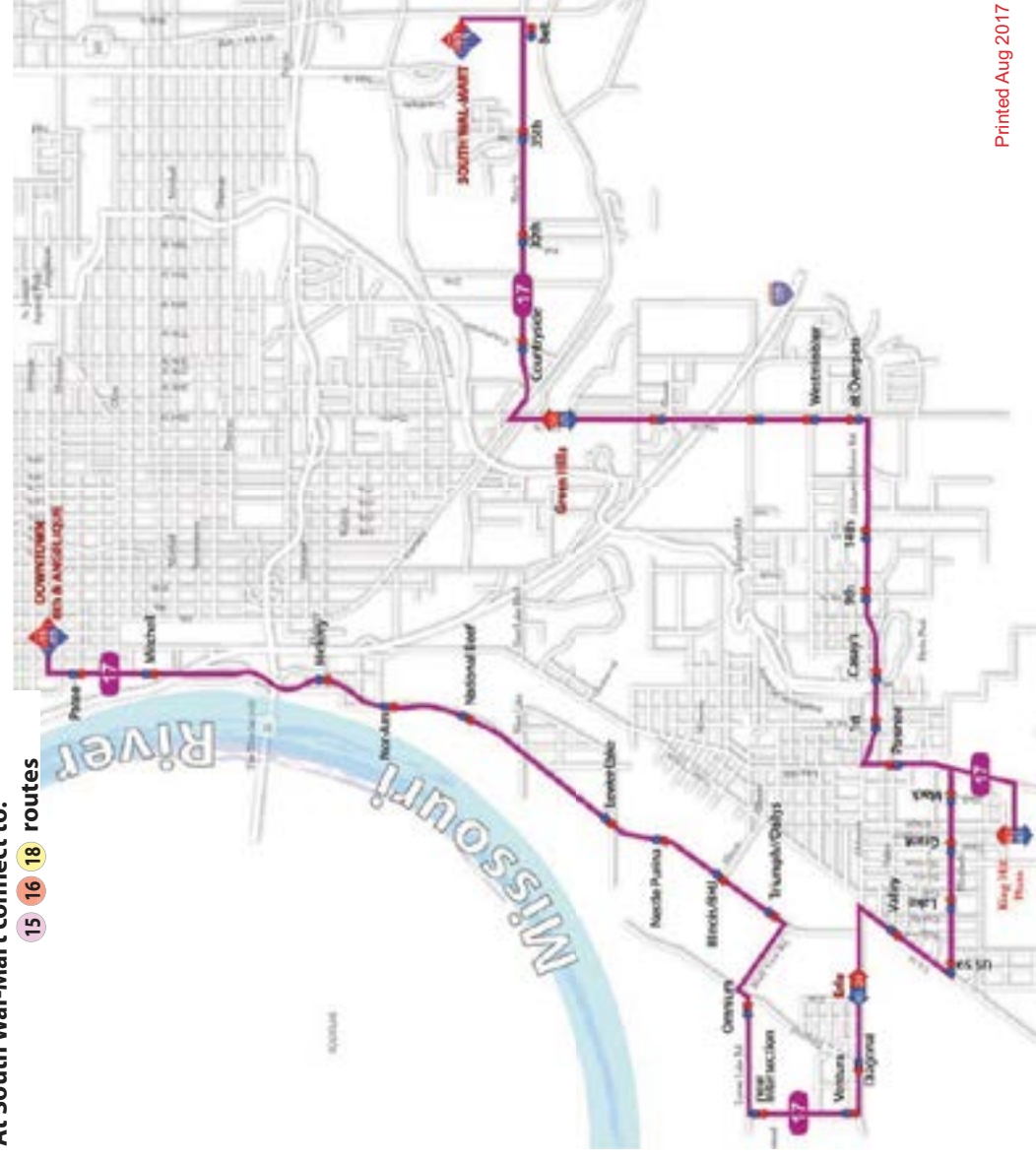
STOCKYARDS

17 Route



Saturdays:
Buses depart Downtown (outbound) at:
9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.
Saturdays:
Buses depart South Wal-Mart (inbound) at:
8:15, 10:15, a.m. and 12:15, 2:15, 4:15, 6:15 p.m.

Monday - Friday:
Buses depart Downtown (outbound) at:
5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15 p.m.
At Downtown connect to:
11 12 13 14 15 16 18 routes
Monday - Friday:
Buses depart South Wal-Mart (inbound) at:
6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15 p.m.
At South Wal-Mart connect to:
15 16 18 routes



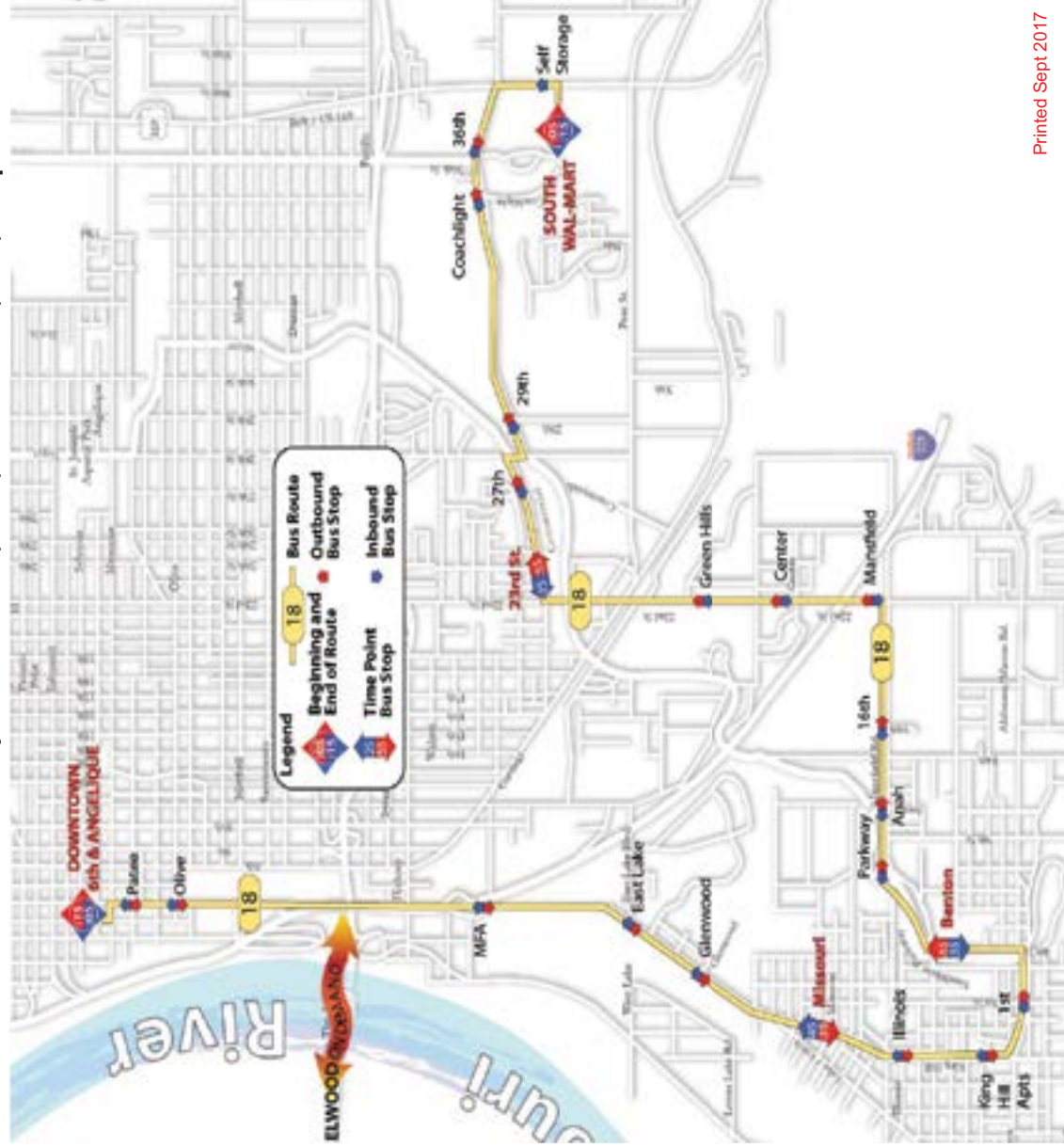
Printed Aug 2017

Monday - Friday:
 Buses depart **Downtown (outbound)** at:
 5:15, 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
 12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15 p.m.
 At Downtown connect to:
 11 12 13 14 15 16 17 routes

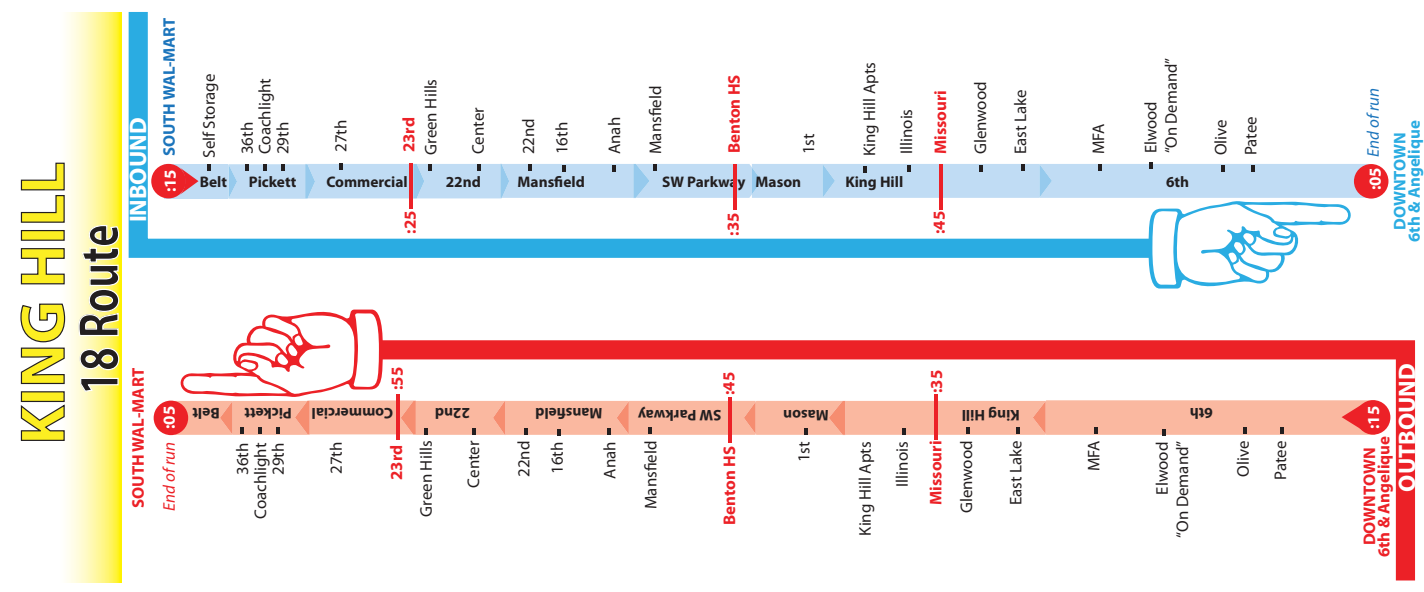
Saturdays:
 Buses depart **Downtown (outbound)** at:
 9:15, 11:15 a.m. and 1:15, 3:15, 5:15 p.m.

Monday - Friday:
 Buses depart **South Wal-Mart (inbound)** at:
 6:15, 7:15, 8:15, 9:15, 10:15, 11:15 a.m.
 12:15, 1:15, 2:15, 3:15, 4:15, 5:15, 6:15, 7:15 p.m.
 At South Wal-Mart connect to:
 15 16 17 routes

Saturdays:
 Buses depart **South Wal-Mart (inbound)** at:
 8:15, 10:15, a.m. and 12:15, 2:15, 4:15 p.m.

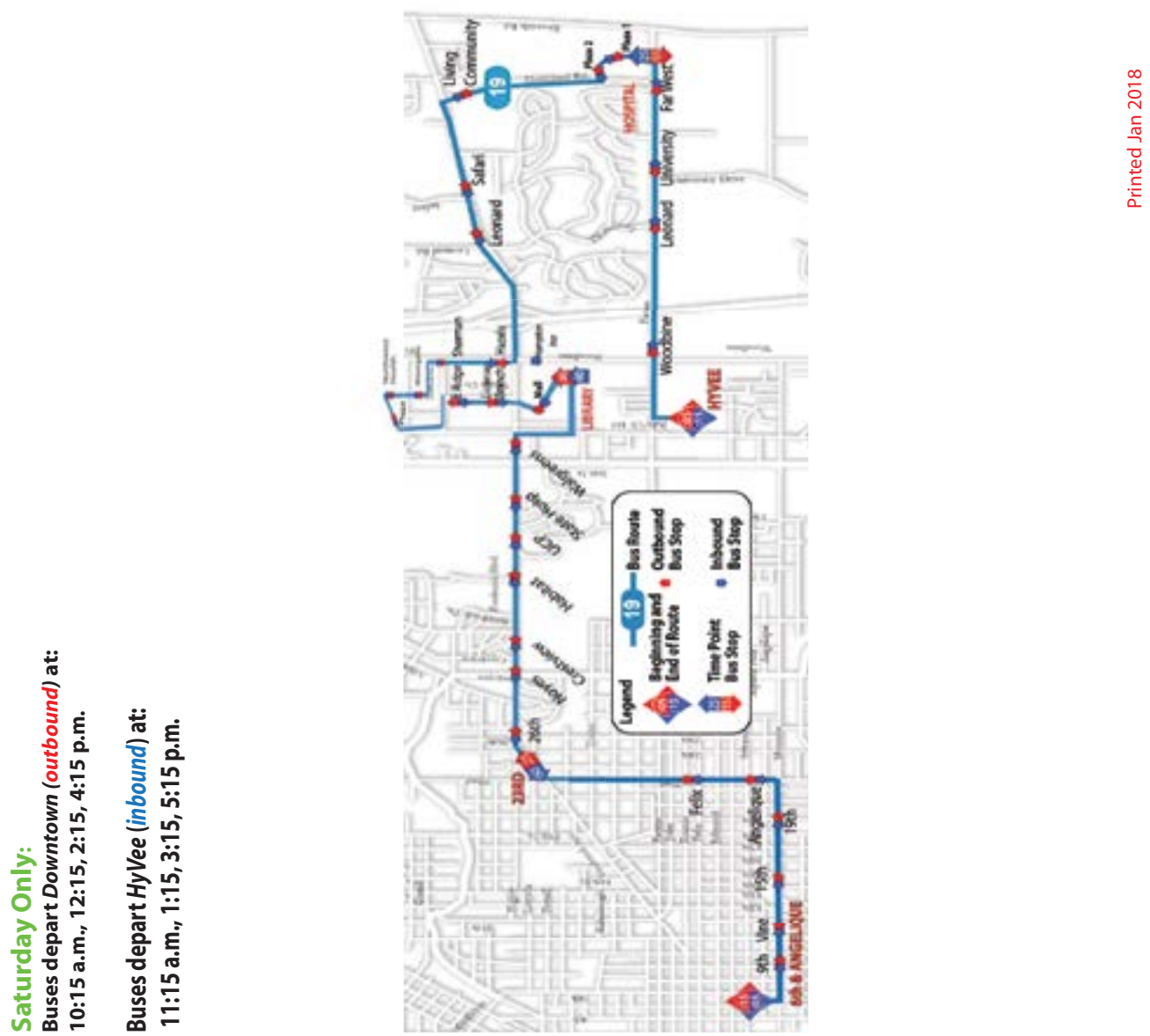


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Saturday Only:
 Buses depart **Downtown (outbound)** at:
 10:15 a.m., 12:15, 2:15, 4:15 p.m.

Buses depart **Hy-Vee (inbound)** at:
 11:15 a.m., 1:15, 3:15, 5:15 p.m.

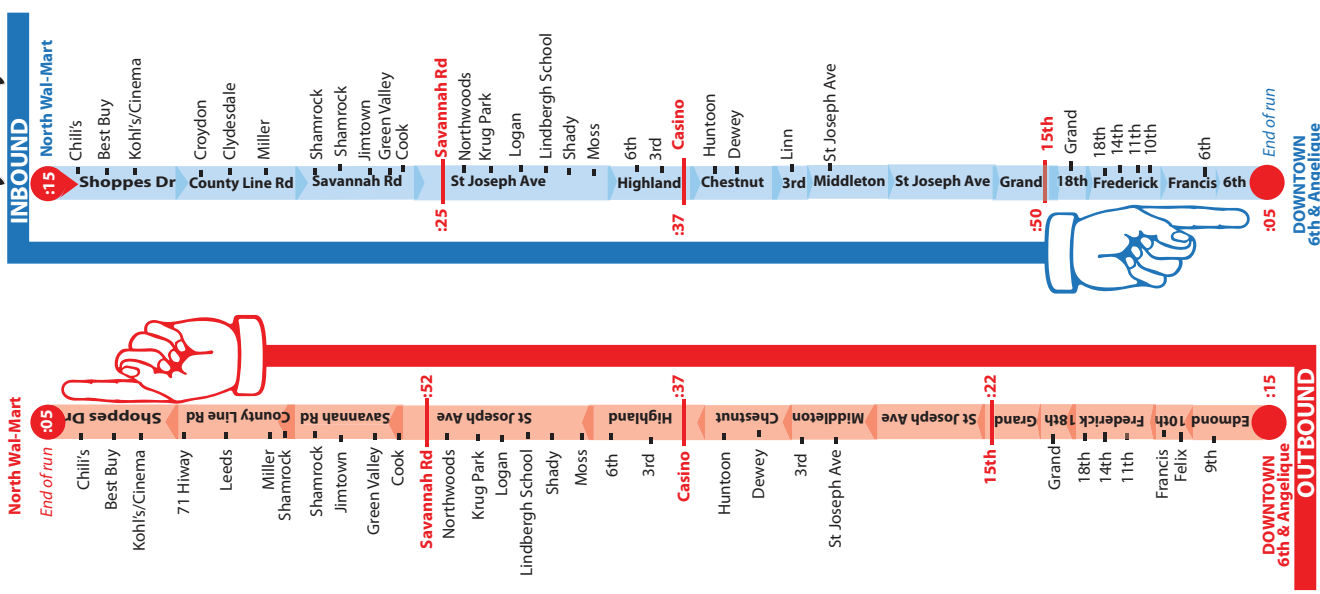


Printed Jan 2018



NORTH

20 Route -- Saturday Only



Saturday Only:
 Buses depart Downtown (outbound) at:
 10:15 a.m., 12:15, 2:15, 4:15 p.m.

Buses depart North Wal-Mart (inbound) at:
 11:15 a.m., 1:15, 3:15, 5:15 p.m.



Saturdays Only:

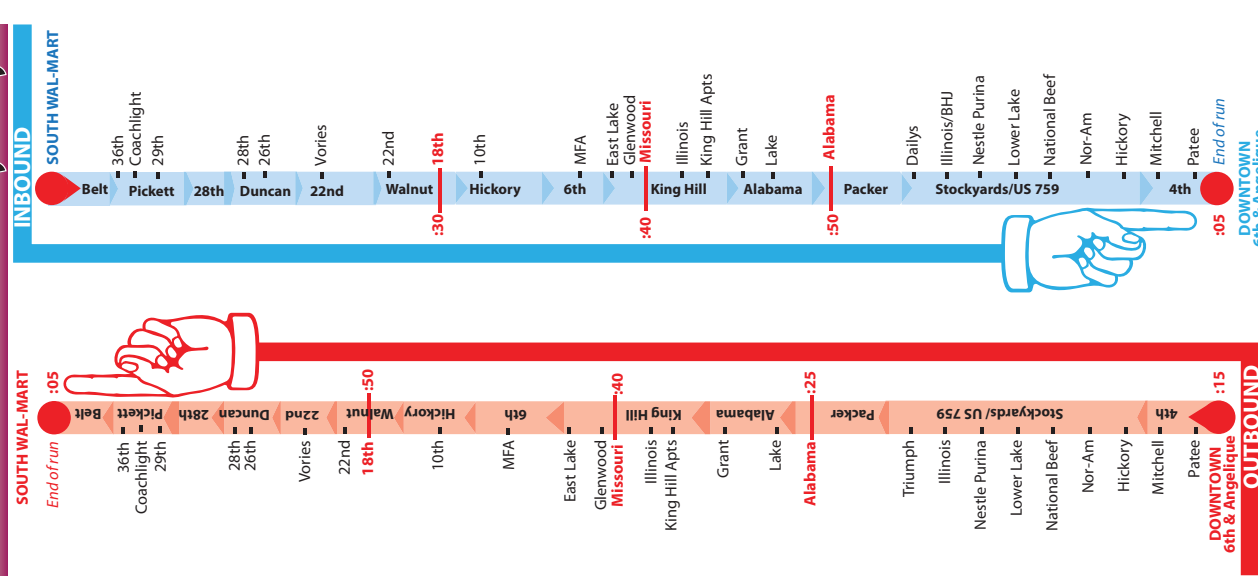
Buses depart Downtown (outbound) at:
 10:15 a.m., 12:15, 2:15, 4:15p.m.

At Downtown connect to these routes:

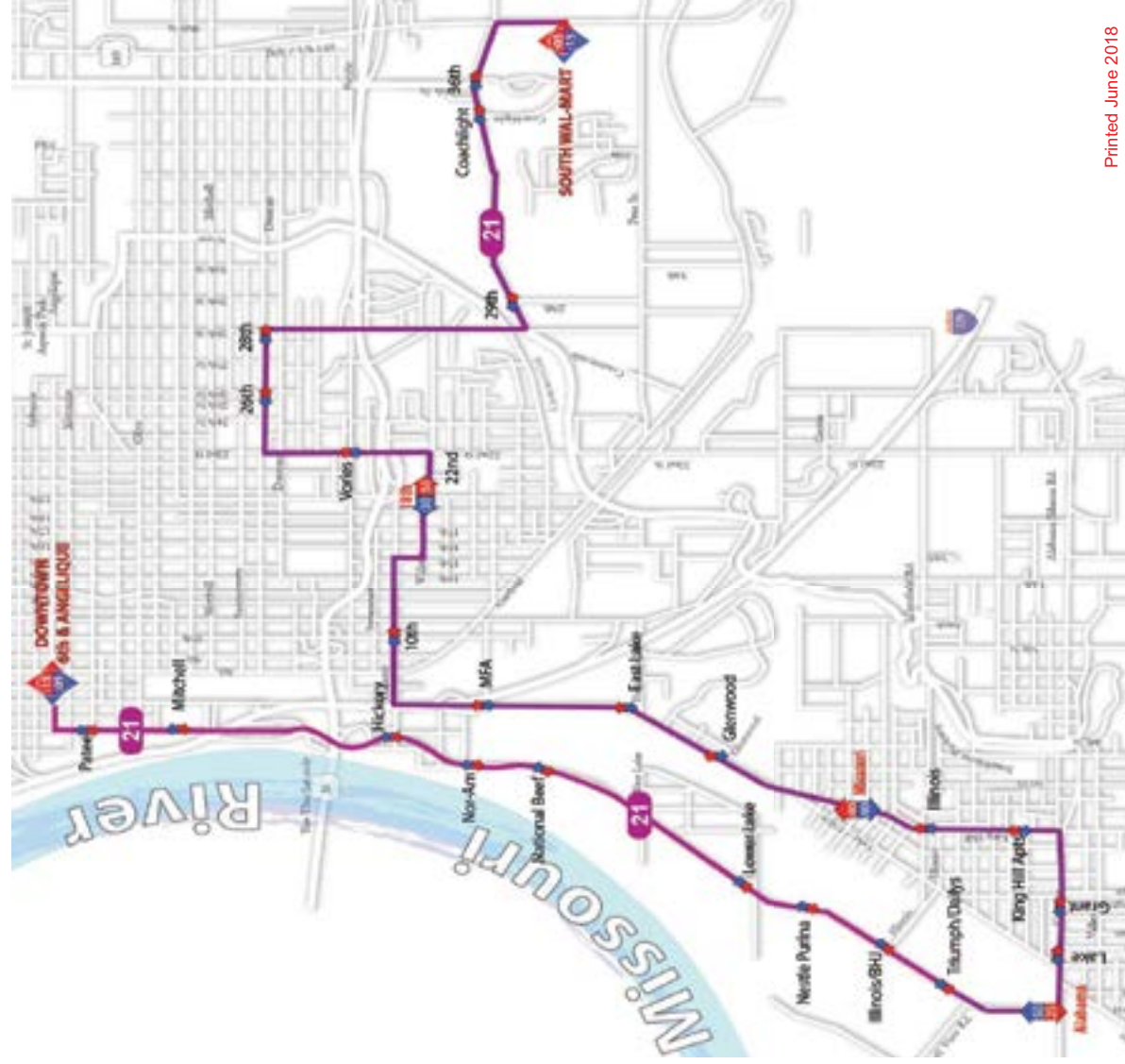
19 20

SOUTH

21 Route -- Saturday Only

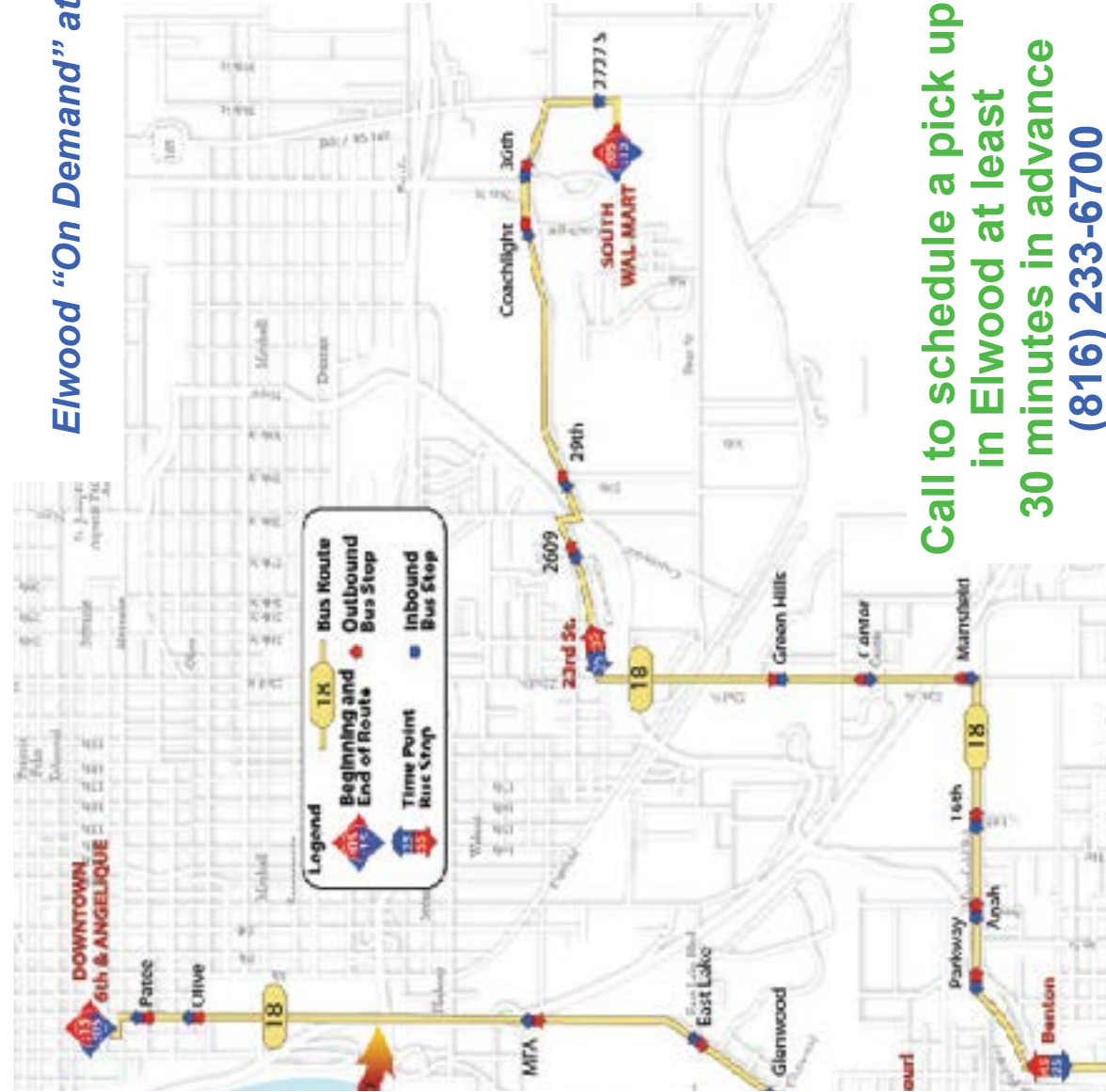


Buses depart South Wal-Mart (inbound) at:
 11:15 a.m., 1:15, 3:15, 5:15 p.m.



BUS SERVICE TO ELWOOD VIA #18 KING HILL ROUTE

Elwood "On Demand" at these times: Monday thru Friday



Call to schedule a pick up
in Elwood at least
30 minutes in advance
(816) 233-6700

FROM: Downtown St. Joseph TO: Elwood & South Wal-Mart		
Leave	Elwood	Arrive
Downtown 6:15 AM	6:20 AM	Wal-Mart 7:05 AM
8:15 AM	8:20 AM	9:05 AM
10:15 AM	10:20 AM	11:05 AM
12:15 PM	12:20 PM	1:05 PM
2:15 PM	2:20 PM	3:05 PM
4:15 PM	4:20 PM	5:05 PM
6:15 PM	6:20 PM	7:05 PM

FROM: South Wal-Mart TO: Elwood & Downtown St. Joseph		
Leave	Elwood	Arrive
Wal-Mart 6:15 AM	7:00 AM	Downtown 7:05 AM
8:15 AM	9:00 AM	9:05 AM
10:15 AM	11:00 AM	11:05 AM
12:15 PM	1:00 PM	1:05 PM
2:15 PM	3:00 PM	3:05 PM
4:15 PM	5:00 PM	5:05 PM
6:15 PM	7:00 PM	7:05 PM

Schedule effective January 12, 2015



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Buchanan County

OATS Transit is available to anyone regardless of age, income, disability, race, gender, religion, or national origin.

To schedule a ride on any of these routes call the St. Joseph OATS Transit office at 816-279-3131 or 800-831-9219.

Local medicals, essential shopping and business errands: Monday-Friday (8:00am-5:00pm)
 Long distance medical to Kansas City: 2nd Tuesday each month
 East Hills Shopping Center & Walmart: 1st & 3rd Tuesday each month (9:30am-1:00pm)
 Grocery Shopping: 2nd & 4th Thursday each month

Fares (one-way):

- Within county: \$3.00
- Long-distance (beyond 2 counties): \$2.00 per county
- \$2 each time you board the bus In-town.

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Clinton County

OATS Transit is available to anyone regardless of age, income, disability, race, gender, religion, or national origin.

To schedule a ride on any of these routes call the St. Joseph OATS Transit office at 816-279-3131 or 800-831-9219.

Cameron In-Town: Tuesday and Thursday
 Cameron to St. Joseph: 1st and 3rd Tuesdays each month
 Clinton County to Liberty: Last Thursday of the month

Fares (one-way):

- Within county: \$3
- Adjacent county: \$4
- Long-distance (beyond 2 counties): \$2 per county
- \$1 each time you board the bus In-town

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DeKalb County

OATS Transit is available to anyone regardless of age, income, disability, race, gender, religion, or national origin.

To schedule a ride on any of these routes call the St. Joseph OATS Transit office at 816-279-3131 or 800-831-9219. Calls must be made at least 24 hours in advance.

To Maysville and Cameron: Last Friday of each month
To St. Joseph: 1st and 3rd Friday each month

Fares (one-way):

- Within county: \$3
- Adjacent county: \$4
- Long-distance (beyond 2 counties): \$2 per county
- \$1 each time you board the bus in-town

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- LogistiCare [Expand](#)
- Medical Transportation Management, Inc. (MTM) [Expand](#)
- AEB Transport & Courier Service [Expand](#)
- American Cancer Society [Expand](#)
- Andrew County RGVIP [Expand](#)
- Andrew County Sunshine Factory [Expand](#)
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- LogistiCare [Expand](#)
- Medical Transportation Management, Inc. (MTM) [Expand](#)
- American Cancer Society [Expand](#)
- Disabled American Veterans (DAV) [Expand](#)
- Jefferson Line Bus Service [Expand](#)
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- Uber [Expand](#)
- Veterans Transportation Service (VTS) [Expand](#)

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HealthTran Partnership

HealthTran is a collaborative program designed to address rural transportation limitations and barriers. With a primary focus on healthcare, HealthTran is a flexible system that can coordinate and schedule rides within minutes or a month in advance.

Feonix is proud to partner with the Missouri Rural Health Association to launch the HealthTran program across the state.

The model is built on the premise that no one solution works for every community or organization. Communities and organizations have their own cultures, diverse transportation needs, and unique populations. Our experience demonstrates that local or community-based transportation solutions can more readily meet the transportation needs of the community -- most often more affordably and more quickly than other alternatives.

The fundamental framework of the HealthTran Model is a technology platform that links transportation providers, volunteer drivers, HealthTran members and HealthTran staff through one platform. There are both one-time and ongoing fees associated with a HealthTran launch, but the value for the community, providers and patients far outweighs cost.

Missouri HealthTran Deployments



Northwest Health Services
St Joseph, Savannah, Hamilton, Mound City, & Maysville,



Health Care Collaborative of Rural Missouri
Lexington, Carrolton, Buckner, & Waverly

Chapter 4: Existing Transportation Management

National Traffic Control Standards

National Traffic Control Standards are those standards specified by the US Department of Transportation in their Manual on Uniform Traffic Control Devices. These Standards specify which traffic signs, road markings, and signals are designed, installed, and used on the Federal Highway System, as well as on State and Local public roads. All traffic control devices must generally conform to these standards. First released in 1935, eight subsequent editions of the manual have been published under the aegis of the National Committee on Uniform Traffic Control Devices, with numerous minor updates taking into consideration changes in usage and size of the nation's system of roads as well as improvements in technology.

Highway Standards

Standards for Interstate Highways are defined by the American Association of State Highway and Transportation Officials (AASHTO) in the publication A Policy on Design Standards - Interstate System. For a certain highway to be considered an Interstate, it must meet these construction requirements or obtain a waiver from the Federal Highway Administration. These standards are:

- **Controlled access.** All access onto and off the roadway is to be controlled with interchanges and grade separations (including railroad crossings). Interchanges should provide full access; ramps are to be designed with the appropriate standards in mind. Minimum interchange spacing should be 1 mi (1.5 km) in urban areas and 3 mi (5 km) in rural areas; collector-distributor roads or other configurations that reduce weaving can be used in urban areas to shorten this distance. Access control (from adjacent properties) should extend at least 100 ft (30 m) in urban areas and 300 ft (90 m) in rural areas in each direction along the crossroad from the ramps.
- **Minimum speed of safe travel.** Minimum design speed of 70 mph (110 km/h) in rural areas, with 60 mph (100 km/h) acceptable in rolling terrain, and as low as 50 mph (80 km/h) allowed in mountainous and urban areas. Sight distance, curvature and super elevation according to the current edition of AASHTO's A Policy on Geometric Design of Highways and Streets for the design speed.
- **Maximum grade.** Maximum grade is determined by a table, with up to 6 percent allowed in mountainous areas and hilly urban areas.
- **Minimum number of lanes.** At least two lanes in each direction, and more if necessary for an acceptable level of service in the design year, according to the current edition of AASHTO's A Policy on Geometric Design of Highways and Streets. Climbing lanes and emergency escape ramps should be provided where appropriate.
- **Minimum lane width.** Minimum lane width of 12 ft (3.6 m).
- **Shoulder width.** Minimum outside paved shoulder width of 10 ft (3.0 m) and inside shoulder width of 4 ft (1.2 m). With three or more lanes in each direction, the inside paved shoulder should be at least 10 ft (3.0 m) wide. If truck traffic is over 250 Directional Design Hour Volume, shoulders at least 12 ft (3.6 m) wide should be considered. In mountainous terrain, 8 ft (2.4 m) outside and 4 ft (1.2 m) inside shoulders are acceptable, except when there are at least four lanes in each direction, in which case the inside shoulders should also be 8 ft (2.4 m) wide.

- **Pavement sloping.** Pavement cross slope of at least 1.5 percent and preferably 2 percent to ensure proper drainage on straight sections. This can be increased to 2.5 percent in areas of heavy rainfall. Shoulder cross slope should be between 2 percent and 6 percent but not less than the main lanes.
- **Land slopes within the clear zone** should be at most 4:1 and preferably 6:1 or flatter. Roadside barriers should be used for slopes of 3:1 or steeper, in accordance with the current edition of AASHTO's Roadside Design Guide.
- **Median width.** Minimum median width of 36 ft (11 m) in rural areas, and 10 ft (3.0 m) in urban or mountainous areas. To prevent median-crossing accidents, guardrail should be installed in medians in accordance with the current edition of AASHTO's Roadside Design Guide, based on traffic, median width and crash history. When possible, median openings between parallel bridges less than 30 ft (9.0 m) in width should be decked over; otherwise barriers or guardrails should be installed to exclude vehicles from the gap.
- **Recovery areas.** No fixed objects should be in the clear recovery area, determined by the design speed in accordance with the current edition of AASHTO's Roadside Design Guide. When this is not possible, breakaway supports or barriers guarding the objects shall be used.
- **Curb slope.** Vertical curbs are prohibited. Sloping curbs are to be at the edge of the paved shoulder, with a maximum height of 100 mm (4 in). The combination of curbs and guardrail is discouraged; in this case the guardrail should be closer to the road than the curb.
- **Vertical clearance.** Minimum vertical clearance under overhead structures (including over the paved shoulders) of 16 ft (4.9 m) in rural areas and 14 ft (4.3 m) in urban areas, with allowance for extra layers of pavement. Through urban areas at least one routing should have 16 ft (4.9 m) clearances. Sign supports and pedestrian overpasses must be at least 17 ft (5.1 m) above the road, except on urban routes with lesser clearance, where they should be at least 1 ft (0.3 m) higher than other objects. Vertical clearance on through truss bridges is to be at least 17 ft (5.1 m).
- **Horizontal clearance under or along a bridge** shall be the full paved width of the rest of the road. Bridges longer than 200 ft (60 m) can be narrower, with a minimum of 4 ft (1.2 m) on both sides of the travel lanes.
- **Bridge strength.** New bridges are to have at least MS 18 (HS-20) structural capacity. Weaker bridges that can continue to serve the route for 20 more years are allowed to remain. Additionally, existing bridges can remain if they have at least 12 ft (3.6 m) lanes with 10 ft (3.0 m) outside and 3.5 ft (1.1 m) inside shoulders. Long bridges are to have at least 3.5 ft (1.1 m) on each side of the travel lanes; bridge railing should be upgraded to current standards if necessary.
- **Tunnel clearance.** Tunnels should in theory be equivalent to long overcrossings, but because of cost the standards can be reduced. Vertical clearance is the same as under bridges, including the provision for alternate routing. Width should be at least 44 ft (13.1 m), which consists of two 12 ft (3.6 m) lanes, 10 ft (3.0 m) outside and 5 ft (1.5 m) inside shoulders, and 2.5 ft (.7 m) safety walkways on each side. If necessary to meet the dimensions of the approach, this can be shifted left or right. A reduced width is acceptable due to high cost. In this case, the minimum width is 30 ft (9.0 m), with at least 2 ft (0.6 m) more than the approach for the sum of the shoulder widths, but at least 24 ft (7.2 m) total, and at least 1.5 ft (0.5 m) on each side for a safety walkway. If there is no safety walkway, a 3 ft (1.0 m) offset with a "safety shape" in the wall is acceptable. The standards have been changed over the years, resulting in many older Interstates not being built to the current standards. Other roads were grandfathered into the system, and yet others are not built to standards because to do so would be too costly or environmentally unsound.

Street Standards

Street standards address the same issues as Highway Standards, but on the smaller scale of local roadways - city streets and county or township roads whose construction and maintenance are not within the scope of MoDOT's operations. These standards may vary greatly and are met with varying degrees of compliance.

Signalized Intersections

American association of State Highway and Transportation Officials' (AASHTO) Strategic Highway Safety Plan includes standards for non-signalized and signalized intersections. The goal is to reduce the annual number of highway deaths. These standards may prompt actions ranging from low-cost measures such as modifying signal timing and signage, to high-cost measures such as intersection reconstruction or grade separation. These standards are built on fundamental principles of user needs, geometric design, and traffic design and operation; safety and operational analysis techniques to address a range of concerns, from individual movements and approaches, pedestrian and bicycle issues, to major corridors. The standards are designed with safety, operational performance, multimodal issues, and physical and economic factors in mind, and are based on the latest research on available methods and best practices in use by jurisdictions across the United States.

Transportation System Management (TSM)

Transportation System Management is a discipline which seeks to identify improvements to enhance the capacity of existing transportation systems. Through better management and operation of existing transportation facilities, these techniques are designed to improve traffic flow, air quality, and movement of vehicles and goods, as well as enhance system accessibility and safety.

Transportation systems management strategies are low-cost but effective in nature, which include, but are not limited to:

- Intersection and signal improvements
- Freeway bottleneck removal programs
- Data collection to monitor system performance
- Special events management strategies

Traffic signal and intersection improvements include such elements as:

- signal timing optimization
- controller/ cabinet and signal head upgrades
- vehicle detectors repair / replacement
- communication with a central system
- turning lanes
- grade separations
- pavement striping
- lane assignment changes
- signage and lighting

Freeway and arterial bottleneck removal consist of identifying congested locations and improving such elements as:

- insufficient acceleration/deceleration lanes and ramps
- weaving sections
- sharp horizontal/vertical curves
- narrow lanes and shoulders
- inadequate signage and pavement striping
- other geometric deficiencies

The identification and elimination of traffic bottlenecks can greatly improve traveling conditions and enhance system capacity, reliability, and safety, especially during peak periods. TSM projects can complement the major capacity improvements and infrastructure by providing improved traffic flow on arterials and local streets. Transportation System Management can be broken down into several main elements, detailed below.

Congestion Management

A congestion management system is designed to avoid "capacity expansion", literally the building of more roadways, if at all possible. Typically analysis takes place first, viewing data (i.e. traffic volume) in relation to the geographic elements ("segments" or "corridors") of a transportation system. Once a preliminary analysis of the entire system highlights the areas of highest congestion, a more detailed analysis of those specific areas can be conducted. Potential causes of congestion are reviewed, and a list of possible solutions is evaluated using a qualitative selection process, leaving only the most likely strategies to pass on to the pre-planning and modeling phase.

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) is federally mandated in SAFETEA-LU. The federal transportation bill reserves funding for projects that improve air quality in affected areas. Affected areas are defined as areas that are required by the Clean Air Act to address air quality issues. MoDOT distributes funding to eligible areas for project selection. The EPA determines the geographical boundaries for this program. The Federal Highway Administration and the EPA establish the Congestion Mitigation and Air Quality Improvement Program funding levels and eligible work types. The purpose of these funds is to reduce transportation-related emissions and improve air quality. Missouri receives approximately \$24.3 million annually during SAFETEA-LU. The Missouri Highways and Transportation Commission approved a funding distribution during SAFETEA-LU of \$2.7 million to Kansas City (MARC), and \$21.6 million to St. Louis (EWGCG), provides funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide, and particulate matter which reduce transportation related emissions.

Priority in distributing funds is geared towards projects and programs involving diesel retrofits and other cost-effective emission reduction activities, and cost effective congestion mitigation activities that provide air quality benefits including projects and programs that:

- establish or operate advanced truck stop electrification systems
- improve transportation systems management and operations that mitigate congestion and improve air quality
- involve the purchase of diesel retrofits that are for motor vehicles or non-road vehicles and non-road engines used in construction projects located in ozone or particulate matter non- attainment or maintenance areas and funded under 23 USC

- conduct outreach activities that provide assistance to diesel equipment and vehicle owners and operators regarding the purchase and installation of diesel retrofits.

Additionally Missouri, with a number of other Midwestern states is permitted to use program funding for the purchase of alternative fuels or biodiesel.

Access Management

Road systems serve two necessary, but often conflicting, functions: traffic movement and access to land. Access management is the regulation of interchanges, intersections, driveways and median openings to a roadway. Its objectives are to enable access to land uses while maintaining roadway safety and mobility through controlling access location, design, spacing and operation.

Access management is most evident on freeways where access is grade separated and all movements are via dedicated ramps. It is very important on arterial roads where at-grade inter-sections and private driveways greatly increase the number of conflicts involving vehicles, cyclists, and pedestrians. It is also important on minor roadways for safety considerations such as driver sight distance. Planners, engineers, architects, developers, elected officials, citizens and attorneys all play a significant role in access management. Businesses frequently view any attempt to limit access to their land uses as economically detrimental. This can make implementation controversial. However, there is a growing body of evidence showing that access management can have the positive effect of increasing market area through reducing travel times on major roadways, and that minor increases in circuitry do not cause customers to stop patronizing businesses.

Traditionally, the goal of access management has been to provide adequate access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity and speed. However, it has become increasingly apparent that the planning and design of both roadways and neighboring land uses must be coordinated not only to simultaneously preserve the functional integrity of the highway system while allowing efficient access to and from abutting properties, but also to serve the desired land use objectives of local communities.

As cities expand, increased development along arterial highways generates more and more demand for driveways and intersecting local roads to serve abutting and nearby businesses, industries and neighborhoods. Without access, planning and management, arterials become increasingly congested and safety is compromised. Planning the number of and controlling the location of access points helps to ensure both the safe and efficient flow of traffic and improved service to adjacent lands. The functional integrity of the arterial is maintained and major capacity improvements are often not needed or can be delayed until a later date. At the same time, bicycle and pedestrian travel is made safer due to fewer sites for potential conflicts with vehicles turning into and out of intersecting driveways.

In the older, developed portions of urban areas, access management is only possible on an ad hoc basis, with consolidation or removal of existing access being sought in conjunction with roadway reconstruction or urban redevelopment projects. It is primarily on the urban fringes that it is possible to coordinate transportation system improvements with land development to avoid creating situations where too much poorly spaced access renders a facility incapable of effectively serving its traffic-carrying function. When access management and land use planning are coordinated, it is possible to ensure that when properties are developed, site designs are compatible with efficient movement of traffic onto and off of public roadways and, at the same time, are conducive to pedestrian movements, bicycle traffic and transit usage.

Proper access management, particularly with regard to spacing and type of access, can also be used as a tool, in conjunction with proper zoning, to help shape development patterns in a manner consistent with local community plans and desires.

Right of Way and Corridor Preservation

There is a growing awareness that land use decisions affect transportation needs and transportation improvements, in turn, affect land use decisions. Freeway interchanges and arterial road junctions have become focal points for new shopping centers, industrial parks and office complexes. Urban and suburban arterial roadways are lined with strips of roadside development.

It has been argued that highway improvements have exacerbated problems of sprawling, uncontrolled development by providing easier access to urban fringe areas and beyond. This development has, at the same time, affected the functional integrity of roadways by causing problems of congestion and capacity loss.

Rapid, often unplanned, peripheral development has frequently been the source of major problems for both local and state transportation systems: buildings have often been constructed close to the roadways, making future capacity expansion difficult and costly; and too many access points onto roadways have resulted in vehicle conflicts, reduced safety and a general deterioration in traffic flow. Once areas have been fully, or even partially, developed, there is often little that can be done to alleviate these problems. However, toward the peripheries of urban areas, where development occurs, how close it will be to existing roadways and the type of access it will have to existing and future facilities.

Those who take part in the Transportation Planning process should always keep in mind the relationship of transportation and land use. This includes a consideration of the likely effects of transportation decisions on land use and development and the consistency of transportation plans and programs with the provisions of local land use and development plans. Corridor preservation is one means of coordinating transportation planning with land use planning and development. Its goal is to prohibit, or at least minimize, development in areas which are likely to be required to meet transportation needs in the future. These areas include: lands adjacent to existing roadways which are projected to require capacity expansion; areas which might be needed to construct entirely new routes for urban bypasses or to serve new neighborhoods or commercial developments; and land needed for bicycle, transit and pedestrian facilities (e.g. bikeways, walkways, transit turnouts, bus ways and light rail corridors).

When corridors are preserved in advance, negative land use and social impacts, as well as the costs of transportation improvements, are minimized. However, when land is not preserved for future needs, disruption of residences and businesses is a frequent result and the cost of obtaining the land to accommodate improvements is likely to be considerably higher. At times, the needed improvement can not even be made because the disruption and cost would be too great.

Transportation Demand Management (TDM)

Transportation-demand management, or Transportation Demand Management, succinctly is described as being “the art of influencing traveler behavior for the purpose of reducing or redistributing travel demand.” The primary purpose of Transportation Demand Management is to reduce the number of vehicles using highway facilities while providing a wide variety of mobility options for those who wish to travel. A major emphasis of Transportation Demand Management strategies and actions exists to reduce single-occupant-vehicle travel and the number of trips made by single-occupant vehicles. Reducing this type of travel limits congestion and enables the existing transportation infrastructure to move traffic more efficiently. Commuters frequently are the focus of Transportation Demand Management actions because of their regular, predictable driving patterns, the possibilities of employer partnerships and the opportunities for ridesharing programs.

Transportation Demand Management has assumed a significant role in federal and local transportation policies through regional ridesharing agencies, transportation management associations, employers, local ordinances and development agreements. Transportation Demand Management encompasses both alternatives to driving alone and the techniques or supporting strategies that encourage the use of these modes, tying it closely to transportation energy conservation. Application of Transportation Demand Management alternatives and supporting strategies can occur at many different levels of government and the private sector.

Common areas for Transportation Demand Management planning are those sites where there are many employers grouped together, such as a central business district, business park or shopping center, as well as large entertainment complexes or areas of highly concentrated housing. These areas highlight Transportation Demand Management's integral relationship with other elements of transportation planning, like access and congestion management. Transportation Demand Management is also applied on a regional basis (i.e. a corridor, such as I-70) where government agencies often direct the initiative.

For this type of application the primary focus of the Transportation Demand Management program is to affect as many travelers as possible within the travel region. However, experience shows that the effectiveness of regional Transportation Demand Management programs depends greatly on the type and amount of participation by local entities in the region. Development of effective Transportation Demand Management programs therefore should be approached from the perspective of how community leaders, government, citizens, and private commercial and industrial interests can work together to meet the goals of providing greater mobility.

Transportation Demand Management strategies include:

- Public mode support -- Publicly provided alternatives to single-occupant vehicle travel, including services and facilities that encourage and support other travel modes.
- Employer-based support -- Private-sector programs and services that encourage employees to change their commuting practices; typical TDM alternatives to single-occupant vehicles may include carpools and vanpools; public and private transit, including bus pools and shuttles; and Non-motorized travel such as bicycling and walking.
- Telecommunications -- Emerging demand-management solutions that are based on advanced telecommunications technologies.
- Land-use policies, Planning and zoning is the most effective long-term TDM strategies which have the abilities to shape population density, urban design, land-use mix, travel needs and travel patterns.
- Public policy and regulation -- Restrictions and regulations that govern private vehicle use and provide political support and guidance to new institutional relationships.

Energy Conservation

In United States, about half the air pollution comes from cars and trucks. Educating the public on ways to driving less and use smart driving practices reduces emissions. Some methods of “driving less” are:

- Carpool (Missouri Rideshare and Carpool Programs) RIDESHARE is a free publicly funded commuter service designed to inform people about less expensive and environmentally friendly commuting alternatives. These include carpooling, vanpooling, transit program, and employer services such as flextime and telecommuting. MARC Rideshare program serves Cass, Clay, Jackson, Platte, and Ray counties in Missouri and Johnson, Leavenworth and Wyandotte counties in Kansas. The Mid-Missouri Rideshare Program serves the counties of Audrain, Boone, Callaway, Camden, Cole, Cooper, Crawford, Gasconade, Howard, Maries, Miller, Moniteau, Morgan, Osage, Pettis, Phelps, Pulaski, and Randolph. RideFinders is a free public service authorized and funded by the Federal Highway Administration for the purpose of lowering the amount of ozone pollution and traffic congestion in the St. Louis Metro area. RideFinders works in partnership with employers and commuters in the region to provide new transportation options that meet the above goals. Free services include carpool matching/vanpool formation and public transit information. RideFinders serves St. Louis City, St. Louis County, Franklin, Jefferson and St. Charles Counties in Missouri and Madison, Monroe, and St. Clair counties in Illinois. The City of Springfield offers a carpool matching service for the counties of Barry, Barton, Cedar, Christian, Dade, Dallas, Douglas, Greene, Jasper, LaClede, Lawrence, Ozark, Polk, Stone, Taney, Webster, and Wright.
- Walk or ride a bicycle.
- Shop by phone or mail.
- Ride public transit.
- Telecommute.

Some examples of “smart driving” practices are:

- Accelerate gradually.
- Use cruise control on the highway.
- Obey the speed limit.
- Combine errands into one trip.
- Keep vehicles tuned and support the smog check program.
- Don't top off the fuel tank.
- Replace air filters regularly.
- Keep tires properly inflated.

Also, when purchasing a new vehicle, consumers should be encouraged to select the most efficient, lowest polluting model they can find, ideally either a non-polluting car or zero emission vehicle, which typically use “alternative” fuels. There are many fuels today being used as “alternatives” to gasoline. In most instances, the alternative fuel is less polluting than gasoline, resulting in fewer harmful emissions into the air and a lower negative impact on human health. Many organizations in cities in the United States have voluntarily adopted programs to use alternative fuels in their fleets. These same cities are making efforts to provide the fueling infrastructure necessary to operate alternatively fueled vehicles, which are becoming more and more widely available.

Biofuels are chemicals made from cellulosic biomass such as herbaceous and woody plants, agricultural and forestry residues, and a large portion of municipal solid and industrial waste. The two most common types of biofuels that are being developed and used in the United States are corn ethanol and soy-based biodiesel, which burn more cleanly than gasoline and diesel. Their use strengthens rural economies, decreases America's dependence on imported oil, reduces air and water pollution, and reduces greenhouse gas emissions. Biofuels are domestically grown renewable fuels - reducing our reliance on foreign oil.

The Fuel Conservation for State Vehicles, Section 414.400-414.417 RSMo, and the Energy Policy Act establishes opportunities for Missouri state agencies such as MoDOT to better manage transportation fuel consumption, reduce waste, and promote the use of cleaner, domestic alternative fuels.

Local City/County Systems

Local city and county road systems are, for the most part, maintained on an ongoing basis in the counties and larger communities and on an annual basis for the smaller communities. A mixture of road pavement surfaces occurs throughout the region, ranging from dirt to gravel to chip seal to asphalt. Most counties throughout the region have dirt and gravel roads with a few sparsely located chip and seal roads. These are mostly maintained on a monthly basis and similarly are the maintenance of county-owned bridges. The cities, large and small, within the Mo-Kan region support a more balanced combination of gravel, chip and seal, asphalt, and in a few cases brick streets. Depending on the size of the community, these roads are maintained on a monthly or annual basis, and utilize either a city work crew or a contract to perform the maintenance.

The majority of communities in the Mo-Kan Region have minor traffic congestion problems that center around large production facilities and schools. These issues are currently monitored by the individual communities' local governments and are dealt with on a case by case basis. Another issue, however, that affects some of the larger communities is a need for more signalization on major state routes that intersect with local streets.

All four counties and a majority of the communities throughout the region have policies in place that address access management, right of way and new road construction standards.

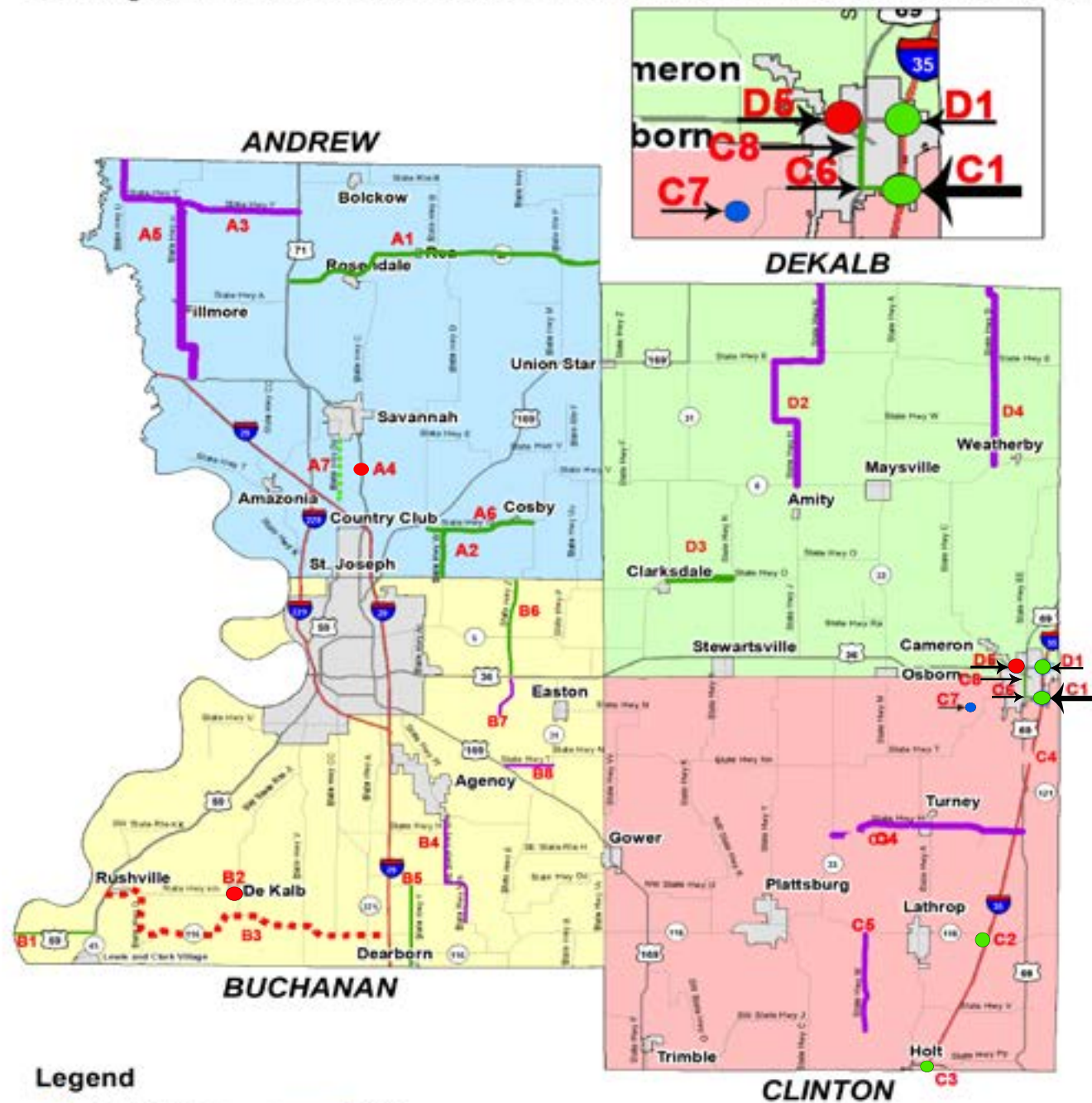
Chapter 5: Identification of Needs

The first step in any kind of long range planning is the identification of needs. Planning for future transportation needs requires both an examination of the current state of transportation (as detailed earlier in this plan) and a certain degree of prediction of the events that may occur several years removed from present day. While some characteristics of transportation planning are generally easy to predict (the deterioration of pavement, maintenance and repair of bridges), other regional features can be much more difficult to anticipate (new developments, changing traffic patterns, road closures).

This chapter identifies the transportation needs for the Mo-Kan region for the next 10 years, as determined by the county commissions of Andrew, Buchanan, Clinton, and DeKalb counties and the Mo-Kan TAC. The needs were identified by the county commissions and ranked by the TAC. The rankings will need to be revisited at least every other year. Rankings were based on immediacy of the issue, cost effectiveness, feasibility, and impact. Each location is given a map number, which allows identification of the location on the maps provided at the end of this chapter.

At the suggestion of the Central MoDOT Office and in an effort to prolong the life of our rural roads, the prioritization process was modified in 2011. Rather than considering all Mo-Kan region projects for the Statewide Transportation Improvement Plan (STIP), the TAC drafts two lists: a STIP inclusion list and a maintenance list. The maintenance list includes minor improvement projects on roads with fewer than 400 Average Annual Daily Traffic (AADT). The maintenance projects are then submitted to the area engineers for consideration in the use of local maintenance funds for a more immediate response. The STIP list includes bridge projects, major safety improvements, and projects on roads with greater than 400 AADT. Both lists are included and prioritized in the RTP.

Transportation Priorities in the Mo-Kan Service Area



Transportation Priorities

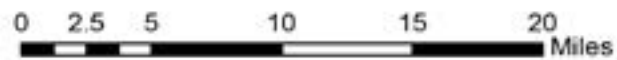
February 18, 2021

ANDREW, BUCHANAN, CLINTON AND DEKALB COUNTIES



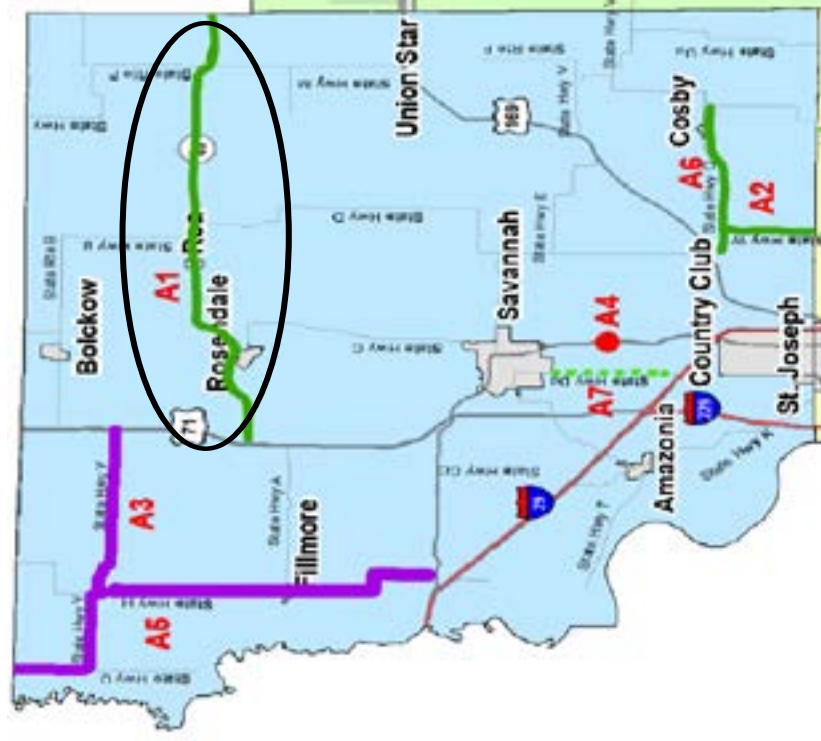
Legend

- STIP Bridges
- Safety Enhancements
- Expansion Project
- STIP
- Maintenance
- Bridge Removal
- - - Bike Trail
- - - Safety Enhancements



This map is for visual purposes only. The data is provided "as is" and there is no liability assumed for the use or misuse of this information.
Created on September 09, 2018





LOCATION: HWY 48 FROM HWY 71 TO GENTRY COUNTY

NEED: RESURFACING

FUNDING TYPE: STIP (ABOVE 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1,244

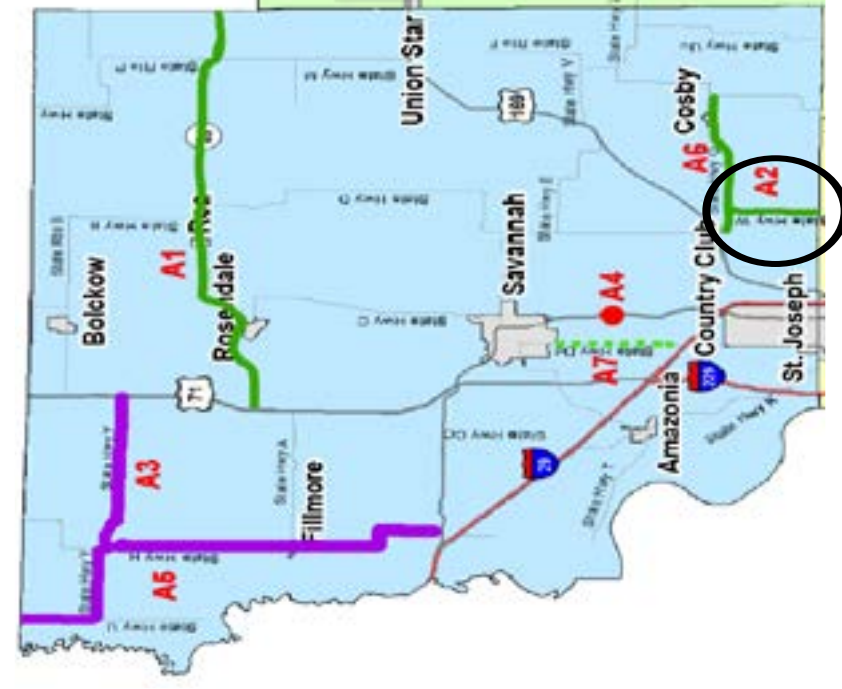
PAVEMENT/BRIDGE CONDITION: 7

CRASH RATE: .99

INTERNATIONAL ROUGHNESS INDEX (IRI): 101

SAFETY FEATURES: NO SHOULDERS OR RUMBLE STRIPS

A-1



LOCATION: ROUTE W FROM ROUTE O TO BUCHANAN COUNTY

NEED: WIDEN THE ROAD (CURRENT WIDTH IS 21 FT FROM PAVEMENT EDGE TO PAVEMENT EDGE), DUE TO THE EXPECTED TRAFFIC VOLUME INCREASE.

FUNDING TYPE: STIP (ABOVE 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1,038

PAVEMENT/BRIDGE CONDITION: 5

CRASH RATE: 2.09

INTERNATIONAL ROUGHNESS INDEX (IRI): 149

SAFETY FEATURES: NO SHOULDERS AND RUMBLE STRIPS.

A-2



LOCATION: ROUTE Y FROM NODAWAY COUNTY TO HWY 71

NEED: RESURFACING

FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 248

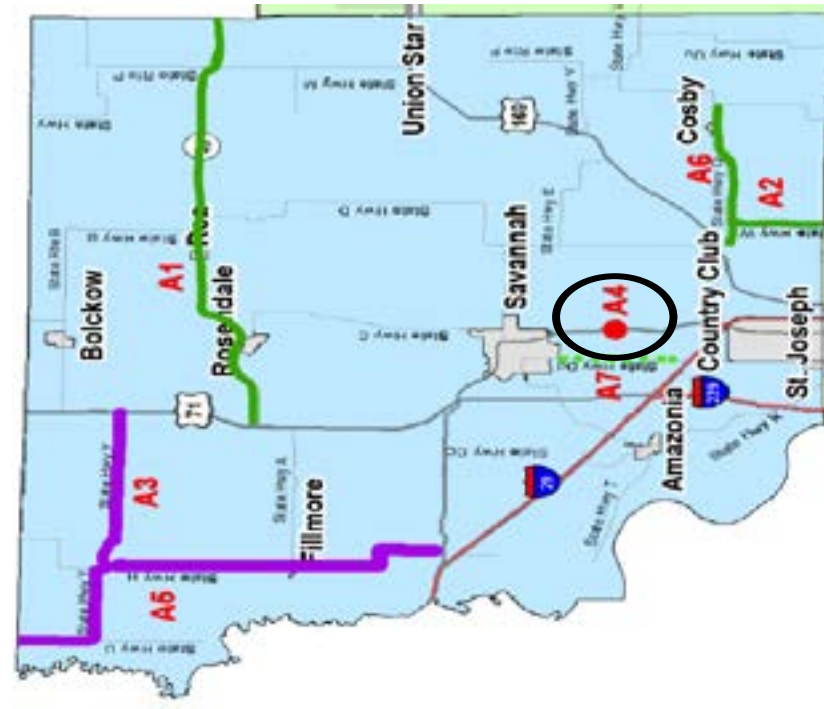
PAVEMENT/BRIDGE CONDITION: 6.4

CRASH RATE: 1.95

INTERNATIONAL ROUGHNESS INDEX (IRI): 185

SAFETY FEATURES: THE ROAD LACKS PAVED SHOULDERS AND RUMBLE STRIPS.

A-3



LOCATION: BUSINESS 71

NEED: TURNING LANE IN S. BOUND LANE AT NORRIS QUARRY, SAVANNAH

FUNDING TYPE: SAFETY

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 10,7200

PAVEMENT/BRIDGE CONDITION:

CRASH RATE:

INTERNATIONAL ROUGHNESS INDEX (IRI): 120

SAFETY FEATURES: THE ROAD LACKS RUMBLE STRIPS.

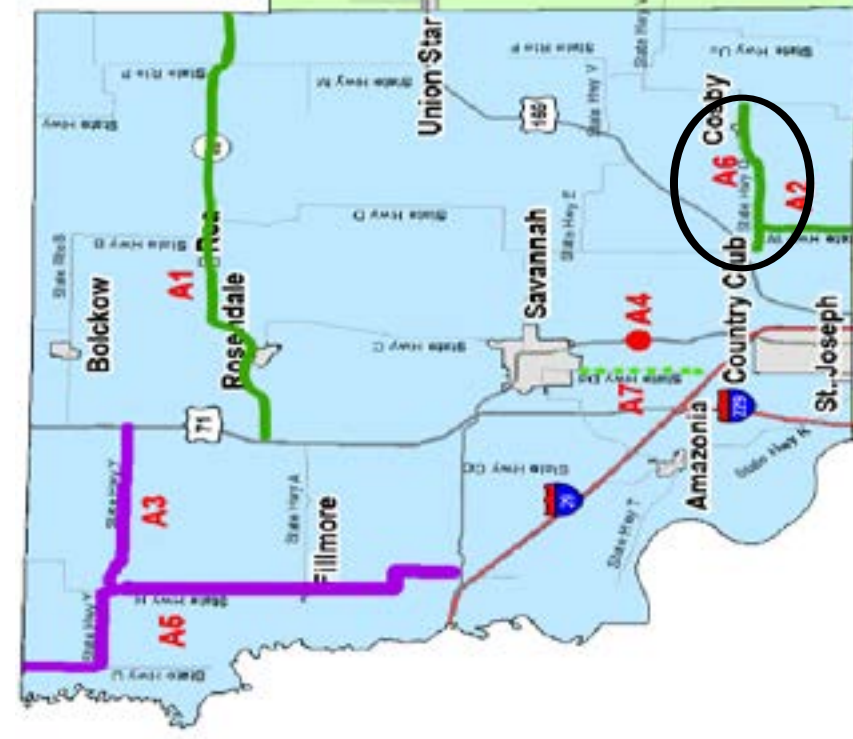
A-4



LOCATION: ROUTE H FROM ROUTE Y TO HWY 59
NEED: RESURFACING
FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 266
PAVEMENT/BRIDGE CONDITION: 7

CRASH RATE: 4.68
INTERNATIONAL ROUGHNESS INDEX (IRI):
SAFETY FEATURES: THE ROAD LACKS SHOULDERS AND
 RUMBLE STRIPS.

A-5



LOCATION: ROUTE O FROM ROUTE D TO ROUTE Z
NEED: RESURFACING
FUNDING TYPE: STIP (OVER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 683
PAVEMENT/BRIDGE CONDITION: 5

CRASH RATE: .11
INTERNATIONAL ROUGHNESS INDEX (IRI): 192
SAFETY FEATURES: THE ROAD LACKS SHOULDERS AND
 RUMBLE STRIPS.

A-6



LOCATION: ROUTE DD FROM SAVANNAH TO COUNTRY CLUB VILLAGE
NEED: BIKE/PEDESTALANE BESIDE ROAD
FUNDING TYPE: OTHER
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1,248

PAVEMENT/BRIDGE CONDITION:
CRASH RATE:
INTERNATIONAL ROUGHNESS INDEX (IRI):
SAFETY FEATURES:

A-7



LOCATION: HWY 59 FROM JUNCTION TO MO RIVER
NEED: RESILIENCY IMPROVEMENTS TO MAKE ROAD LESS SUSCEPTIBLE TO FLOODING
FUNDING TYPE: STIP (OVER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 3,800

PAVEMENT/BRIDGE CONDITION: 4
CRASH RATE: .03
INTERNATIONAL ROUGHNESS INDEX (IRI): 77
SAFETY FEATURES: HAS PAVED SHOULDERS.

B-1



LOCATION: ROUTE HH - WEST SIDE OF DEKALB CITY LIMITS
NEED: SAFETY IMPROVEMENTS – LIMITED SIGHT DISTANCE
FUNDING TYPE: SAFETY
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 424

PAVEMENT/BRIDGE CONDITION: 7
CRASH RATE: .28
INTERNATIONAL ROUGHNESS INDEX (IRI): 239
SAFETY FEATURES: THERE ARE NO SHOULDERS OR RUMBLE STRIPS.

B-2



LOCATION: HWY 116 FROM HWY 59 TO ROUTE V
NEED: GUARD RAILS NEAR DROP OFFS
FUNDING TYPE: SAFETY
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1,140
PAVEMENT/BRIDGE CONDITION:

CRASH RATE: .77
INTERNATIONAL ROUGHNESS INDEX (IRI): 114
SAFETY FEATURES: NO SHOULDERS OR RUMBLE STRIPS.

B-3



LOCATION: ROUTE MM FROM AGENCY TO OLD FRAME RD
NEED: RESURFACE
FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 398
PAVEMENT/BRIDGE CONDITION: 5.2/8

CRASH RATE: .05
INTERNATIONAL ROUGHNESS INDEX (IRI): 106
SAFETY FEATURES: THERE ARE NO SHOULDERS OR RUMBLE STRIPS.

B-4



LOCATION: ROUTE Y FROM ROUTE DD TO PLATTE COUNTY
NEED: MAINTENANCE
FUNDING TYPE: STIP (OVER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 953
PAVEMENT/BRIDGE CONDITION: 7.5

CRASH RATE: .01
INTERNATIONAL ROUGHNESS INDEX (IRI): 140
SAFETY FEATURES:

B-5



LOCATION: ROUTE Z FROM HWY 36 TO ANDREW

COUNTY

NEED: RESURFACE

FUNDING TYPE: STIP (OVER 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 471

PAVEMENT/BRIDGE CONDITION: 5

CRASH RATE: 0

INTERNATIONAL ROUGHNESS INDEX (IRI): 203

SAFETY FEATURES: NO SHOULDERS OR RUMBLE STRIPS.

B-6



LOCATION: ROUTE C FROM SAXON RD TO HWY 36

NEED: RESURFACE

FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 78

PAVEMENT/BRIDGE CONDITION: 6.2

CRASH RATE: .73

INTERNATIONAL ROUGHNESS INDEX (IRI): 226

SAFETY FEATURES: NO SHOULDERS OR RUMBLE STRIPS.

B-7

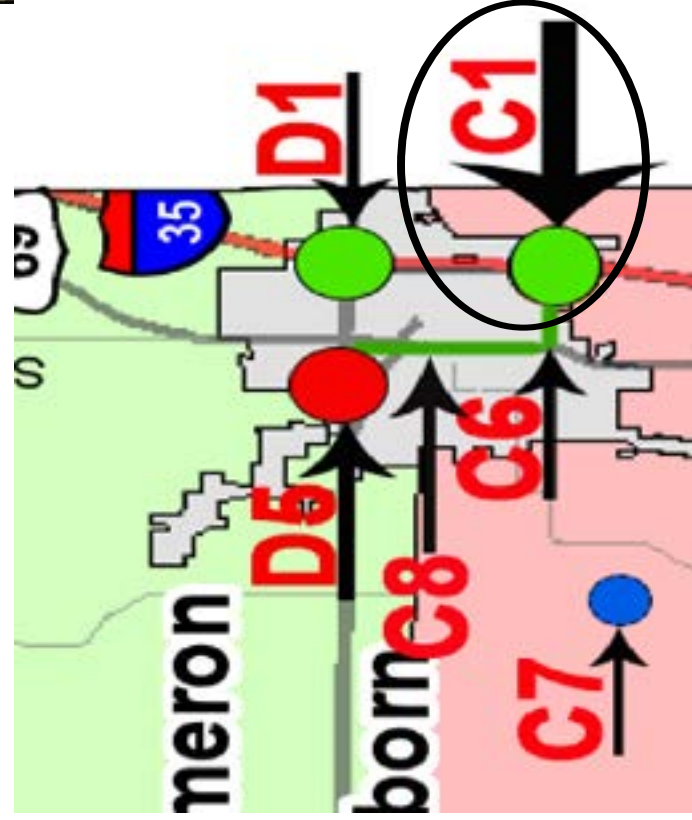


No Photo at this time

LOCATION: ROUTE T FROM HWY 169 TO HWY 31
NEED: RESURFACE
FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 150
PAVEMENT/BRIDGE CONDITION: 8

CRASH RATE: .16
INTERNATIONAL ROUGHNESS INDEX (IRI): 220
SAFETY FEATURES:

B-8



LOCATION: BRIDGE OVER I-35 (RO277), ROUTE BB AND BOB GRIFFIN ROAD
NEED: EXPAND BRIDGE WIDTH, ADDING MIXED USE ACCESS, EXPANDED RAMPS, ROW ACQUISITION & NEW SIGNALIZED OR ROUNDABOUT INTERSECTIONS
FUNDING TYPE: STIP (OVER 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1,418
PAVEMENT/BRIDGE CONDITION: 5.2/8
CRASH RATE: 15.20 (SKEWED)/2018 CRASH RATE: 2.8 (LOW)
INTERNATIONAL ROUGHNESS INDEX (IRI): ---
SAFETY FEATURES: THERE ARE NO SHOULDERS OR RUMBLE STRIPS.

C-1



ROUTE(S) INVOLVED: BRIDGE OVER I-35 ON HWY 116 (A1058)
NEED: EXPAND BRIDGE WIDTH, EXPANDED RAMPS,
FUNDING TYPE: EXPANSION - STIP (OVER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 3,393



PAVEMENT/BRIDGE CONDITION: DECK – 5/SUPERSTRUCTURE
 – 5/SUBSTRUCTURE-7/OVERALL -GOOD
CRASH RATE: 15.63 (SKEWED)
INTERNATIONAL ROUGHNESS INDEX (IRI): --
SAFETY FEATURES: THERE ARE NO SHOULDERS OR RUMBLE STRIPS.

C-2

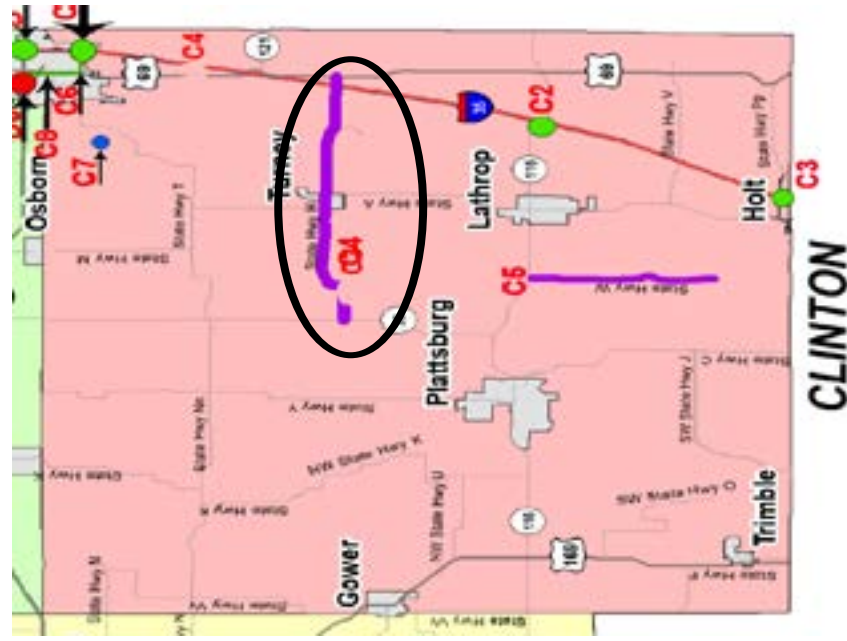


LOCATION: BRIDGE OVER I-35 ON ROUTE PP (A0996)
NEED: REPLACE
FUNDING TYPE: STIP (OVER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1,264



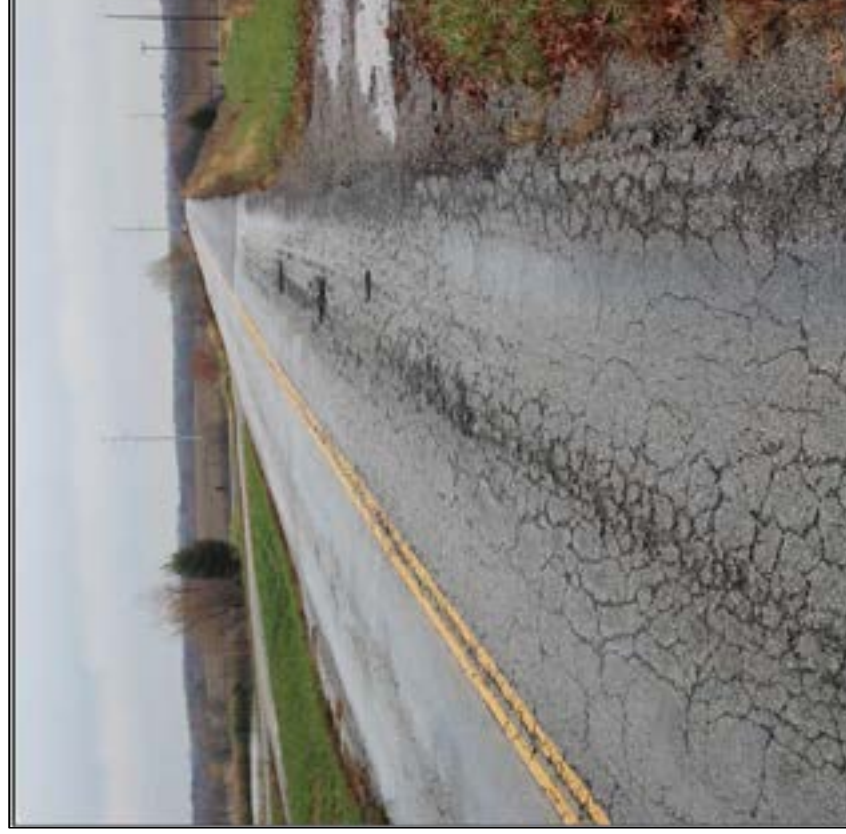
PAVEMENT/BRIDGE CONDITION: DECK –
 7/SUPERSTRUCTURE – 6/SUBSTRUCTURE-6/OVERALL -
 FAIR
CRASH RATE: 49.54 (SKEWED)
INTERNATIONAL ROUGHNESS INDEX (IRI): --

C-3



LOCATION: ROUTE H FROM MO HWY 33 TO HWY 69
NEED: RESURFACING
FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 186
PAVEMENT/BRIDGE CONDITION: 6.48

CRASH RATE: 2.25 (LOW)
INTERNATIONAL ROUGHNESS INDEX (IRI): 229
SAFETY FEATURES: THERE ARE NO SHOULDERS OR RUMBLE STRIPS.



C-4

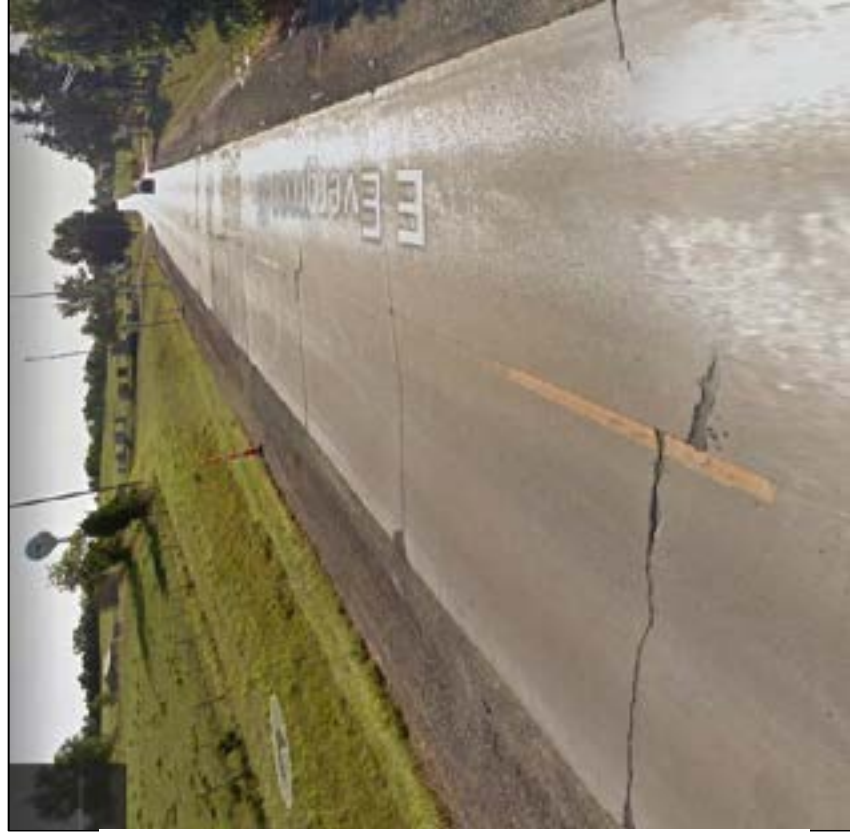
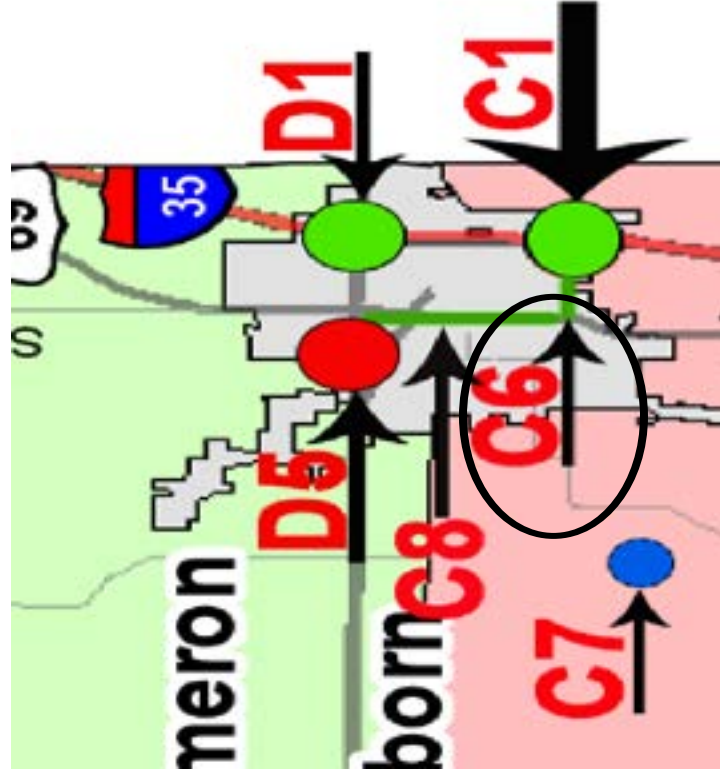


LOCATION: ROUTE W FROM HWY 116 TO THE END OF THE ROAD
NEED: RESURFACING
FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 101
PAVEMENT/BRIDGE CONDITION: 5

CRASH RATE: .14
INTERNATIONAL ROUGHNESS INDEX (IRI): 382
SAFETY FEATURES: THERE ARE NO SHOULDERS OR RUMBLE STRIPS.



C-5



LOCATION: ROUTE BB FROM BOB F. GRIFFIN TO S. WALNUT ST.

NEED: RESURFACING

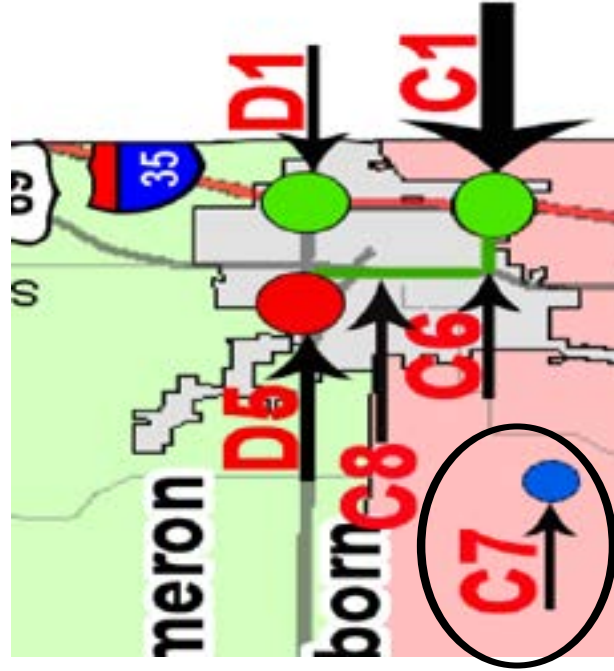
FUNDING TYPE: STIP (OVER 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 251

PAVEMENT/BRIDGE CONDITION: 6.75

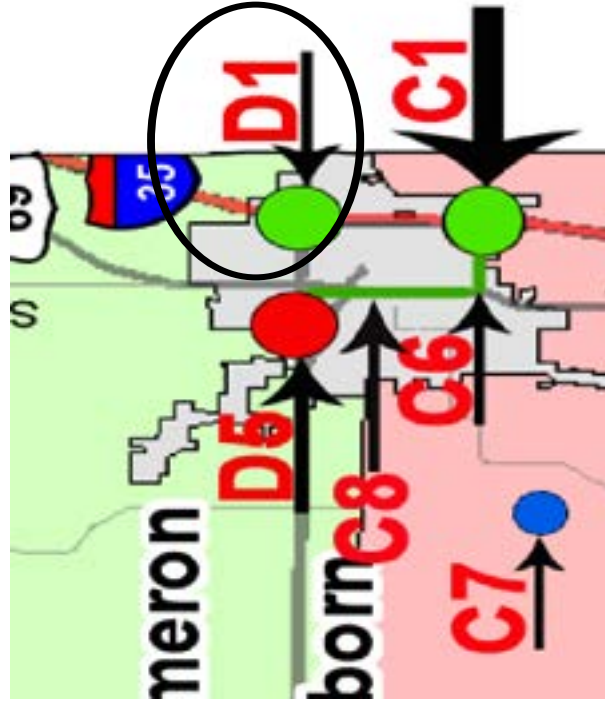
CRASH RATE: .09
INTERNATIONAL ROUGHNESS INDEX (IRI): 161
SAFETY FEATURES:

C-6



LOCATION: CAMERON AIRPORT
NEED: EXPANDING RUNWAY BY APPROX. 1000 FT.
FUNDING TYPE: OTHER

C-7



LOCATION: INTERSECTION OF I-35 & US HWY 36

NEED: EXPANSION

FUNDING TYPE: STIP (OVER 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 16,194

PAVEMENT/BRIDGE CONDITION: DECK –9/

SUPERSTRUCTURE – 7/ SUBSTRUCTURE – 7/OVERALL -

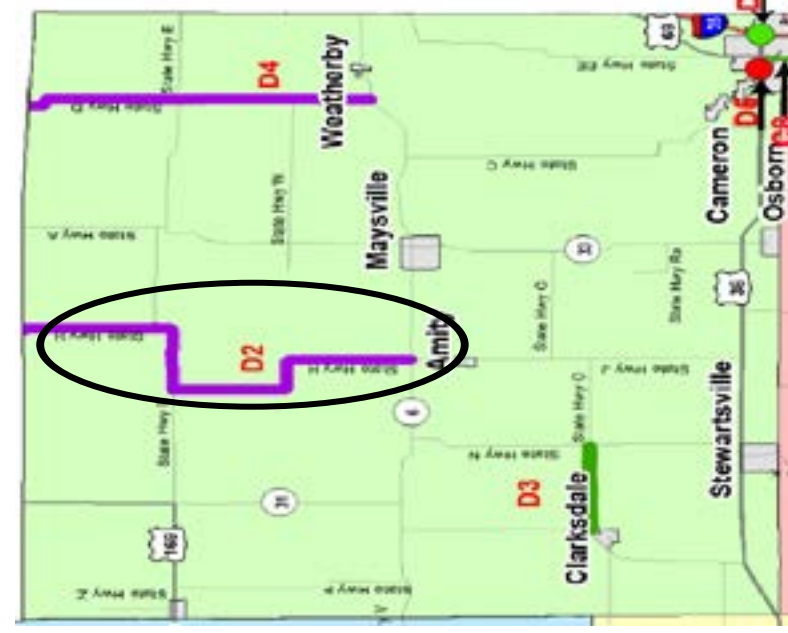
GOOD/FAIR

CRASH RATE: 16.08 (HIGH) (SKEWED) 2018 RATE WAS 3.21 (LOW)

INTERNATIONAL ROUGHNESS INDEX (IRI):

SAFETY FEATURES:

D-1



LOCATION: ROUTE H FROM HWY 6 to GENTRY COUNTY

NEED: RESURFACING

FUNDING TYPE: MAINTENANCE (under 400 AADT)

AVERAGE ANNUAL DAILY TRAFFIC (AADT): 81

PAVEMENT CONDITION: 6.3

CRASH RATE: 2.02

INTERNATIONAL ROUGHNESS INDEX (IRI): 235

SAFETY FEATURES: NO SHOULDERS OR RUMBLE STRIPS.

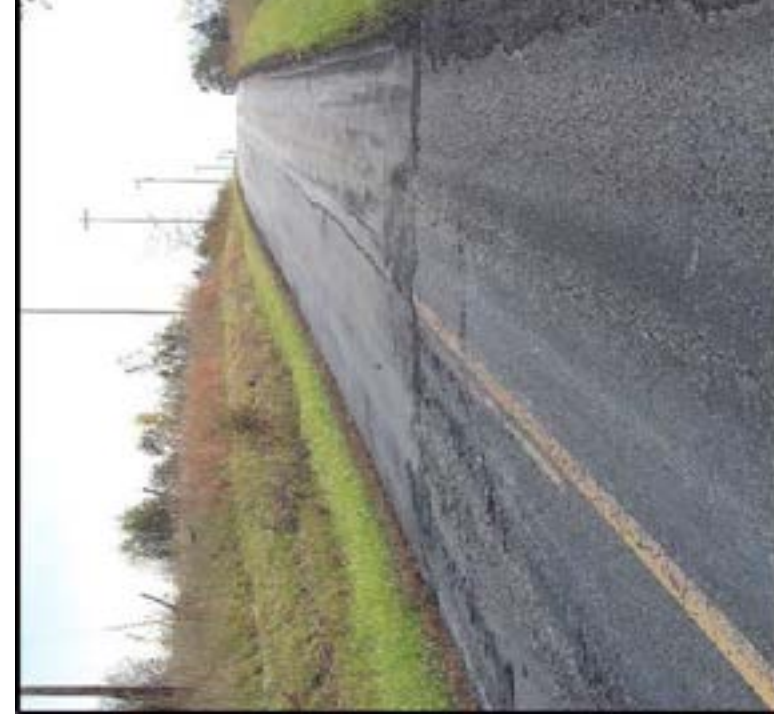
D-2



LOCATION: ROUTE O FROM HWY 31 TO ROUTE J
NEED: RESURFACING
FUNDING TYPE: STIP (OVER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 408

PAVEMENT/BRIDGE CONDITION: 9.25
CRASH RATE: 0
INTERNATIONAL ROUGHNESS INDEX: 135
SAFETY FEATURES: NO PAVED SHOULDERS OR RUMBLE STRIPS.

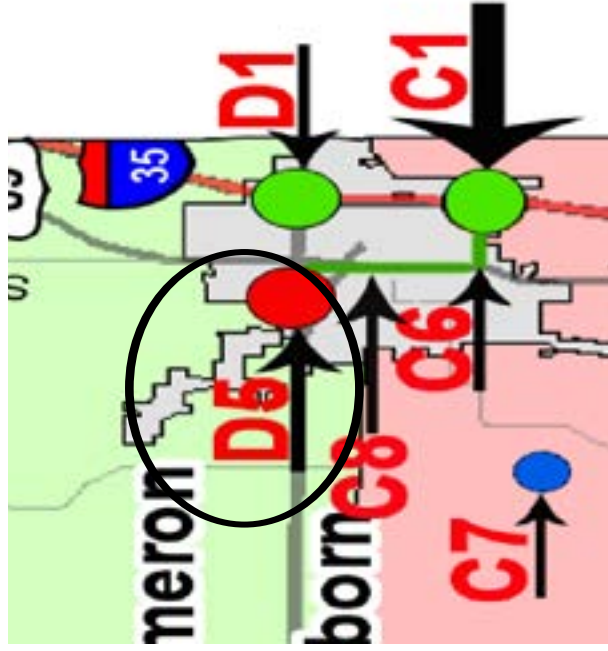
D-3



LOCATION: ROUTE D FROM HWY 6 TO GENTRY COUNTY
NEED: RESURFACING
FUNDING TYPE: MAINTENANCE (UNDER 400 AADT)
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 341
BRIDGE/PAVEMENT CONDITION: 5.8

CRASH RATE: 0.87 (LOW)
INTERNATIONAL ROUGHNESS INDEX (IRI): 250
SAFETY FEATURES: NO EDGE RUMBLE STRIPS AND SHOULDERS.

D-4



LOCATION: HWY 36 AND ENSIGN TRACE

NEED: SAFETY IMPROVEMENTS

FUNDING TYPE: SAFETY

AVERAGE ANNUAL DAILY TRAFFIC (AADT):

11,537 HWY 36/2,846 ENSIGN TRACE

PAVEMENT/BRIDGE CONDITION:

CRASH RATE: .76

INTERNATIONAL ROUGHNESS INDEX: 150

SAFETY FEATURES:

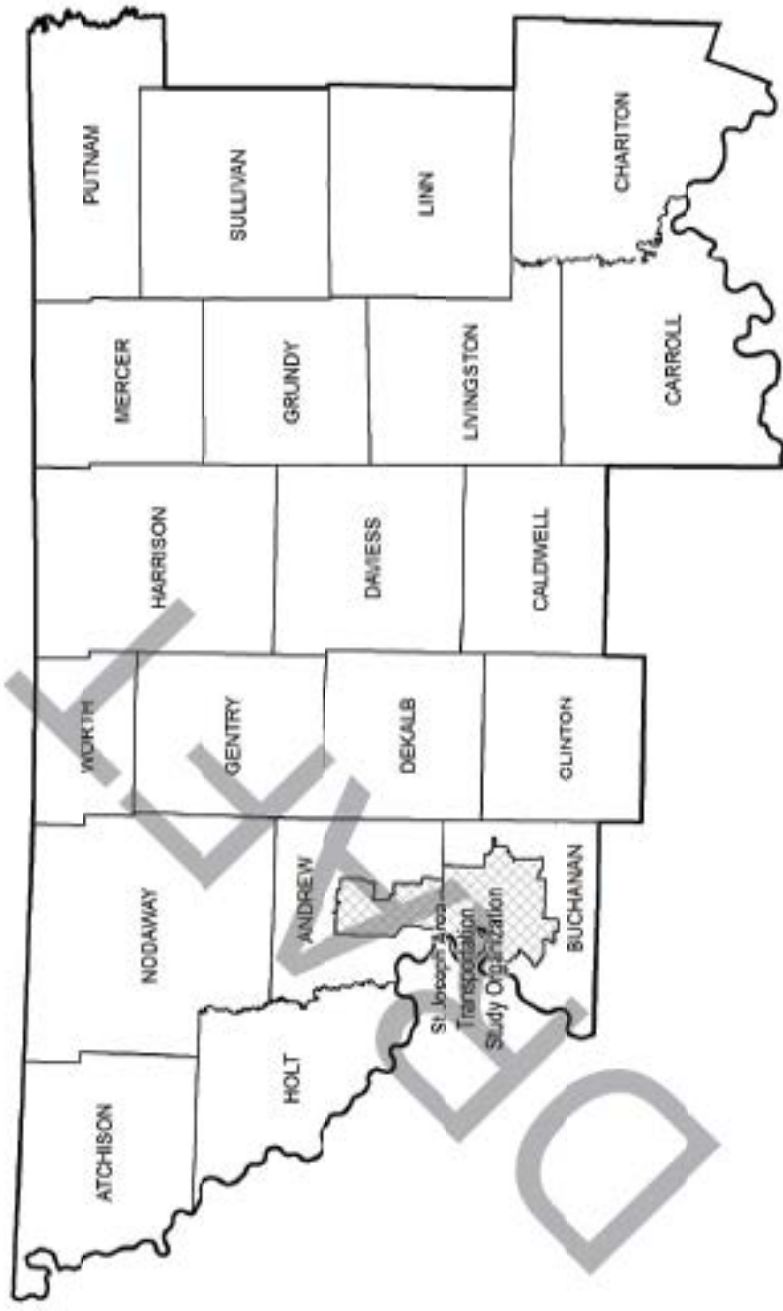
D-5

Chapter 6: Future Project Plan for 10 Years

This chapter lists the needs for the Mo-Kan region which have progressed into “projects”; that is to say, they have been identified as priorities for the region, programmed and funded for completion during the next 10 years by MoDOT District One. The following pages list the projects included on the current Statewide Transportation Improvement Plan (STIP) for the Mo-Kan Region. An updated STIP will not be released during the summer of 2020 due to funding uncertainties.

The following documents are included at the end of this chapter:

- Insert: Statewide Transportation Improvement Plan Map (Draft)



MoDOT's Northwest District

PROJECT DESCRIPTION KEY

Construction contingency applied to construction cost in the year the project is awarded.
Three percent project growth factor compounded annually is applied to right-of-way and construction in program years 2, 3, 4, and 5.
No inflation is applied to the Funding From Other Sources (FFOS) or Payments.
Engineering includes PE costs, CE costs, and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING					
	Prior Prog.	7/2021 6/2022	7/2022 6/2023	7/2023 6/2024	7/2024 6/2025	7/2025 6/2026
County:	99	0	0	0	0	0
Route:	0	0	99	0	0	0
Job No.:	0	0	0	0	0	0
Length:	0	0	0	999	0	0
Fund Cat.:	0	0	0	0	0	0
Sec Cat.:	0	0	0	99	0	0
TIP#:	0	0	0	0	0	0
MPO:						
Award Date:						
Anticipated Fed Cat.:						
Future Cost:						
Anticipated Federal Funding Category^						
Estimated cost range beyond 2026.						
Date project is to be awarded to begin construction (Season and calendar year for 2021 & 2022. SFY only beyond 2022).						
Projects let in combination.						
Metropolitan Planning Organization (Y/N).						
Project description and location.						
County location of project.						
Route location of project.						
Project number used to track project costs.						
Total length in 1/100 miles.						
Primary Funding Category.*						
Secondary Funding Category.**						
Transportation Improvement Program number (MPO projects only).						
Engineering:						
R/W:						
Construction:						
FFOS:						
Payments:						
Estimate Total:						
Total project cost estimate.						
Federal, Advanced CN-State, State and Local share of project costs.						
Take Care of System						
Statewide Interstate & Major Bridge Safety						
Statewide Safety						
Flexible & Other						
Amendment 3						
Enhancements						
Low Type Resurfacing						
N - Ada Trans (ADA Transition Plan)						
Preventive Maint (Preventive Maintenance)						
Regional						
Rehab And Reconst (Rehabilitation and Reconstruction)						
Routine Maintenance						
Safety						
Systems Operations						
Thin Lift Overlay						
Urban Safety						

(All Costs in Thousands)



2022-2026 Highway and Bridge Construction Schedule

Transportation Planning
P.O. Box 270
Jefferson City, MO 64102

Construction contingency applied to construction cost in the year the project is awarded. Three percent project growth factor compounded annually is applied to right-of-way and construction costs in program years 2, 3, 4, and 5. No inflation is applied to the Funding From Other Sources (FFOS) or Payments. Engineering includes PE costs, CE costs and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING					
	Prior Prog.	7/2021-6/2022	7/2022-6/2023	7/2023-6/2024	7/2024-6/2025	7/2025-6/2026
County: Andrew Route: IS 29 Job No.: I13262 Length: 0.05 MPO: N Fund Cat: Taking Care Of System Sec Cat: Rehab And Reconst Awd Date: 2024 Let With:	15	5	27	124	0	0
Bridge rehabilitation over Mill Creek 2.2 miles north of Rte. K near Amazonia. Project involves bridges A1290 in the northbound and southbound lanes. Fed: 1,536 State: 384 Local: NHPP Anticipated Fed Cat: 0 Estimate Total: 1,935 Future Cost:	0	0	0	0	0	0
County: Andrew Route: IS 29 Job No.: I13268 Length: 14.05 MPO: Y Fund Cat: Taking Care Of System Sec Cat: Thin Lift Overlay Awd Date: Summer 22 Let With:	12	40	513	0	0	0
Pavement resurfacing from Bus. 71 to 1.5 miles south of Rte. O near St. Joseph. Fed: 7,255 State: 806 Local: NHPP Anticipated Fed Cat: 0 Estimate Total: 8,073 Future Cost:	0	0	0	0	0	0
County: Andrew Route: US 59 Job No.: I13323 Length: 53.76 MPO: Y Fund Cat: Taking Care Of System Sec Cat: Preventive Maint Awd Date: 2023 Let With:	4	32	153	0	0	0
Pavement preservation treatment on Rte. 59, Rte. 71, Rte. E, Rte. C (Andrew Co.); LP 29 (Andrew and Buchanan Co.); Rte. 6, Rte. AC, Rte. A, Rte. MM, Rte. JJ (Buchanan Co.); Rte. VV (Buchanan and Clinton Co.). AC-State: 1,834 State: 459 Local: STBG Anticipated Fed Cat: 0 Estimate Total: 2,297 Future Cost:	0	0	0	0	0	0
County: Andrew Route: US 59 Job No.: I13251 Length: 0.05 MPO: N Fund Cat: Taking Care Of System Sec Cat: Rehab And Reconst Awd Date: Summer 21 Let With:	14	26	0	0	0	0
Bridge rehabilitation over I-29, 1.2 miles south of the Nedaway River, near Savannah. Project involves bridge A1288. AC-State: 308 State: 77 Local: STBG Anticipated Fed Cat: 0 Estimate Total: 399 Future Cost:	0	0	0	0	0	0
County: Andrew Route: RT M Job No.: I13305 Length: 5.45 MPO: N Fund Cat: Taking Care Of System Sec Cat: Low Type Resurfacing Awd Date: Fall 21 Let With:	8	32	0	0	0	0
Pavement resurfacing from Rte. 48 to Rte. 169 near Union Star. AC-State: 343 State: 85 Local: STBG Anticipated Fed Cat: 0 Estimate Total: 436 Future Cost:	0	0	0	0	0	0

* Subject to the approval of the Transportation Improvement Program by the governing Metropolitan Planning Organization.
 Apr-19-2021 Section 4 - 1 District Northwest Dollars in Thousands



2022-2026 Highway and Bridge Construction Schedule

Transportation Planning
P.O. Box 270
Jefferson City, MO 64102

Construction contingency applied to construction cost in the year the project is awarded. Three percent project growth factor compounded annually is applied to right-of-way and construction costs in program years 2, 3, 4, and 5. No inflation is applied to the Funding From Other Sources (FFOS) or Payments. Engineering includes PE costs, CE costs and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING					
	Prior Prog.	7/2021-6/2022	7/2022-6/2023	7/2023-6/2024	7/2024-6/2025	7/2025-6/2026
County: Atchison Route: IS 29 Job No.: I13280 Length: 0.03 MPO: N Fund Cat: Taking Care Of System Sec Cat: Rehab And Reconst Awd Date: 2024 Let With:	13	5	30	116	0	0
Bridge rehabilitation over Mill Creek 0.2 mile south of Rte. Z near Corning. Project involves bridge A2714. Fed: 1,336 State: 335 Local: NHPP Anticipated Fed Cat: 0 Estimate Total: 1,684 Future Cost:	0	0	0	0	0	0
County: Atchison Route: IS 29 Job No.: I13390 Length: 108.00 MPO: Y Fund Cat: Taking Care Of System Sec Cat: Preventive Maint Awd Date: 2023 Let With:	0	4	5	0	0	0
Job Order Contracting for pavement repair from the Iowa State line to Platte County line. Includes I-229 in Andrew and Buchanan Counties. AC-State: 935 State: 104 Local: NHPP Anticipated Fed Cat: 0 Estimate Total: 1,039 Future Cost:	0	0	0	0	0	0
County: Atchison Route: IS 29 Job No.: I13436 Length: 16.27 MPO: N Fund Cat: Taking Care Of System Sec Cat: Preventive Maint Awd Date: Summer 22 Let With:	0	15	98	0	0	0
Pavement preservation treatment from the Iowa State line to Rte. 111 near Rock Port. AC-State: 1,288 State: 144 Local: NHPP Anticipated Fed Cat: 0 Estimate Total: 1,432 Future Cost:	0	0	0	0	0	0
County: Atchison Route: US 59 Job No.: I13326 Length: 36.46 MPO: N Fund Cat: Taking Care Of System Sec Cat: Low Type Resurfacing Awd Date: Fall 22 Let With:	6	108	272	0	0	0
Pavement resurfacing from Rte. 46 near Fairfax to 1.1 miles west of Rte. O near Oregon. AC-State: 3,022 State: 755 Local: STBG Anticipated Fed Cat: 0 Estimate Total: 3,783 Future Cost:	0	0	0	0	0	0
County: Buchanan Route: MO 116 Job No.: I13385 Length: 0.27 MPO: N Fund Cat: Statewide Interstate And Major Bridge Sec Cat: Preventive Maint Awd Date: Fall 21 Let With:	10	10	0	0	0	0
Bridge rehabilitation over the Platte River 0.1 mile west of Rte. E. Project involves bridge A6618. Fed: 72 State: 18 Local: NHPP Anticipated Fed Cat: 0 Estimate Total: 100 Future Cost:	0	0	0	0	0	0

* Subject to the approval of the Transportation Improvement Program by the governing Metropolitan Planning Organization.
 Apr-19-2021 Section 4 - 3 District Northwest Dollars in Thousands



2022-2026 Highway and Bridge Construction Schedule

Transportation Planning
P.O. Box 270
Jefferson City, MO 64102

Construction contingency applied to construction cost in the year the project is awarded. Three percent project growth factor compounded annually is applied to right-of-way and construction costs in program years 2, 3, 4, and 5. No inflation is applied to the Funding From Other Sources (FFOS) or Payments. Engineering includes PE costs, CE costs and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING					
	Prior Prog.	7/2021-6/2022	7/2022-6/2023	7/2023-6/2024	7/2024-6/2025	7/2025-6/2026
County: Buchanan	0	115	382	0	0	0
Route: IS 229	0	0	0	0	0	0
Job No.: I13386	0	0	0	0	0	0
Length: 0.32	0	0	4,963	0	0	0
Fund Cat: Statewide Interstate And Major Bridge	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: Summer 22	0	0	0	0	0	0
MPO: Y Fed: 4,368 State: 1,092 Local: 0 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 5,460						
County: Buchanan	81	672	0	0	0	0
Route: US 36	0	0	0	0	0	0
Job No.: IP3295	0	9,000	0	0	0	0
Length: 0.23	0	4,500	0	0	0	0
Fund Cat: Statewide Interstate And Major Bridge	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: Winter 22	0	0	0	0	0	0
MPO: Y Fed: 5,037 State: 135 Local: 4,500 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 9,753						
County: Buchanan	0	30	112	0	0	0
Route: MO 752	0	0	0	0	0	0
Job No.: IP3406	0	0	0	0	0	0
Length: 5.50	0	0	1,524	0	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Low Type Resurfacing	0	0	0	0	0	0
TIP #: Let With: Summer 22	0	0	0	0	0	0
MPO: Y AC-State: 1,333 State: 333 Local: 0 Anticipated Fed Cat: STBG Future Cost: 0 Estimate Total: 1,666						
County: Buchanan	42	10	38	111	0	0
Route: RT AC	0	0	0	0	0	0
Job No.: IS3030	0	0	0	0	0	0
Length: 0.05	0	0	0	1,378	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: 2024	0	0	0	0	0	0
MPO: Y Fed: 1,229 State: 308 Local: 0 Anticipated Fed Cat: STBG Future Cost: 0 Estimate Total: 1,579						
County: Buchanan	10	1	23	61	0	0
Route: CST COOK RD	0	0	0	0	0	0
Job No.: I13330	0	0	0	0	0	0
Length: 0.04	0	0	0	787	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: 2024	0	0	0	0	0	0
MPO: Y Fed: 698 State: 174 Local: 0 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 882						

* Subject to the approval of the Transportation Improvement Program by the governing Metropolitan Planning Organization. District Northwest
Apr-19-2021 Section 4 - 4 Dollars in Thousands



2022-2026 Highway and Bridge Construction Schedule

Transportation Planning
P.O. Box 270
Jefferson City, MO 64102

Construction contingency applied to construction cost in the year the project is awarded. Three percent project growth factor compounded annually is applied to right-of-way and construction costs in program years 2, 3, 4, and 5. No inflation is applied to the Funding From Other Sources (FFOS) or Payments. Engineering includes PE costs, CE costs and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING					
	Prior Prog.	7/2021-6/2022	7/2022-6/2023	7/2023-6/2024	7/2024-6/2025	7/2025-6/2026
County: Buchanan	10	1	43	60	0	0
Route: CST GENE FIELD RD	0	0	0	21	0	0
Job No.: I13332	0	0	0	0	0	0
Length: 0.08	0	0	0	774	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: 2024	0	0	0	0	0	0
MPO: Y Fed: 719 State: 180 Local: 0 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 909						
County: Buchanan	12	50	126	0	0	0
Route: RT KK	0	0	0	0	0	0
Job No.: IS3331	0	0	0	0	0	0
Length: 0.74	0	0	1,437	0	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: Summer 22	0	0	0	0	0	0
MPO: N Fed: 1,291 State: 322 Local: 0 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 1,625						
County: Buchanan	22	32	0	0	0	0
Route: RT U	0	0	0	0	0	0
Job No.: IS3058	0	0	0	0	0	0
Length: 0.10	0	401	0	0	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: Summer 21	0	0	0	0	0	0
MPO: N Fed: 346 State: 87 Local: 0 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 455						
County: Buchanan	59	92	132	0	0	0
Route: RT Y	0	0	0	0	0	0
Job No.: IS3360	0	11	0	0	0	0
Length: 0.04	0	0	1,228	0	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: Summer 22	0	0	0	0	0	0
MPO: N Fed: 1,171 State: 292 Local: 0 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 1,522						
County: Caldwell	21	86	0	0	0	0
Route: MO 116	0	0	0	0	0	0
Job No.: IS3266	0	0	0	0	0	0
Length: 0.03	0	803	0	0	0	0
Fund Cat: Taking Care Of System	0	0	0	0	0	0
Sec Cat: Rehab And Reconst	0	0	0	0	0	0
TIP #: Let With: Fall 21	0	0	0	0	0	0
MPO: N Fed: 711 State: 178 Local: 0 Anticipated Fed Cat: NHPP Future Cost: 0 Estimate Total: 910						

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Apr-19-2021 Section 4 - 5 Dollars in Thousands



2022-2026 Highway and Bridge Construction Schedule

Transportation Planning
P.O. Box 279
Annapolis City, MD 21402

Construction contingency applied to construction cost in the year the project is awarded. Three percent project growth factor compounded annually is applied to right-of-way and construction costs in program years 2, 3, 4, and 5. No inflation is applied to the Funding From Other Sources (FFOS) or Payments. Engineering includes PE costs, CE costs and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING					
	7/2021- 7/2022-		7/2023- 7/2024-		7/2025- 6/2026	
	6/2022	6/2023	6/2024	6/2025	6/2026	6/2026
County: Chariton	Bridge rehabilitation over Palmer Creek 0.4 mile west of Rte. MM near Brunswick. Project involves bridge G0448.					
Route: US 24						
Job No.: IP3270						
Length: 0.03	MPO: N					
Fund Cat: Taking Care Of System	Fed: 485 State: 121 Local: 0					
Sec Cat: Rehab And Reconst	Fall 21 Anticipated Fed Cat: NHPP					
TIP #:	Let With: IS3218, 2S0502, 1S3263 Future Cost: 0 Estimate Total: 631					
County: Chariton	Pavement resurfacing from Rte. 24 to the Saline County line and from Rte. 36 in Linn County to the Chariton County line including Rte. 41 in Carroll County from Rte. 24 to the Saline County line.					
Route: MO 5						
Job No.: IP3223						
Length: 41.90	MPO: N					
Fund Cat: Taking Care Of System	AC-State: 1,968 State: 491 Local: 0					
Sec Cat: Low Type Resurfacing	Summer 22 Anticipated Fed Cat: STBG					
TIP #:	Let With: Future Cost: 0 Estimate Total: 2,466					
County: Chariton	Bridge rehabilitation over Palmer Creek, Bee Creek and old channel of the Chariton River. Project involves bridges R0405, R0611 and N0714.					
Route: RT F						
Job No.: IS3210						
Length: 0.12	MPO: N					
Fund Cat: Taking Care Of System	Fed: 859 State: 215 Local: 0					
Sec Cat: Rehab And Reconst	Summer 22 Anticipated Fed Cat: NHPP					
TIP #:	Let With: Future Cost: 0 Estimate Total: 1,132					
County: Chariton	Bridge rehabilitation over Turkey Creek 1.1 miles east of Rte. 139 near Summer. Project involves bridge N0700.					
Route: RT TT						
Job No.: IS3263						
Length: 0.02	MPO: N					
Fund Cat: Taking Care Of System	Fed: 348 State: 87 Local: 0					
Sec Cat: Rehab And Reconst	Fall 21 Anticipated Fed Cat: NHPP					
TIP #:	Let With: IS3218, 2S0502, 1P3270 Future Cost: 0 Estimate Total: 447					
County: Clinton	Add roundabout at Rte. 116 near Lathrop. \$796,000 Open Container funds.					
Route: US 69						
Job No.: IS3341						
Length: 0.20	MPO: N					
Fund Cat: Taking Care Of System	Fed: 1,063 State: 119 Local: 0					
Sec Cat: Rehab And Reconst	Summer 21 Anticipated Fed Cat: Safety					
TIP #:	Let With: Future Cost: 0 Estimate Total: 1,282					

* Subject to the approval of the Transportation Improvement Program by the governing Metropolitan Planning Organization.
Apr-19-2021 Section 4 - 9 District Northwest

Dollars in Thousands



2022-2026 Highway and Bridge Construction Schedule

Transportation Planning
P.O. Box 279
Annapolis City, MD 21402

Construction contingency applied to construction cost in the year the project is awarded. Three percent project growth factor compounded annually is applied to right-of-way and construction costs in program years 2, 3, 4, and 5. No inflation is applied to the Funding From Other Sources (FFOS) or Payments. Engineering includes PE costs, CE costs and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING					
	7/2021- 7/2022-		7/2023- 7/2024-		7/2025- 6/2026	
	6/2022	6/2023	6/2024	6/2025	6/2026	6/2026
County: Clinton	Bridge replacement over I-35 6.5 miles south of Cameron. Project involves bridge R0228.					
Route: RT H						
Job No.: IS3363						
Length: 0.04	MPO: N					
Fund Cat: Taking Care Of System	AC-State: 1,368 State: 342 Local: 0					
Sec Cat: Rehab And Reconst	Fall 22 Anticipated Fed Cat: STBG					
TIP #:	Let With: Future Cost: 0 Estimate Total: 1,774					
County: Clinton	Bridge replacement over Castile Creek 0.9 mile east of Rte. K near Stewartville. Project involves bridge T0045.					
Route: RT NN						
Job No.: IS3211						
Length: 0.03	MPO: N					
Fund Cat: Taking Care Of System	Fed: 1,075 State: 270 Local: 0					
Sec Cat: Rehab And Reconst	Fall 22 Anticipated Fed Cat: NHPP					
TIP #:	Let With: Future Cost: 0 Estimate Total: 1,381					
County: Daviess	Pavement resurfacing from Rte. 69 to Clinton County line near Cameron.					
Route: IS 35						
Job No.: I13232						
Length: 14.94	MPO: N					
Fund Cat: Taking Care Of System	Fed: 8,818 State: 980 Local: 0					
Sec Cat: Thin Lift Overlay	Fall 21 Anticipated Fed Cat: NHPP					
TIP #:	Let With: IS3431, 1S1045, 1P3366 Future Cost: 0 Estimate Total: 9,993					
County: Daviess	Scour repair due to flooding at the Grand River 1.9 miles north of Rte. DD near Pattonsburg. Project involves bridge A1756. Potential ER project.					
Route: IS 35						
Job No.: I13434						
Length: 0.25	MPO: N					
Fund Cat: Taking Care Of System	Fed: 449 State: 112 Local: 0					
Sec Cat: Rehab And Reconst	Summer 21 Anticipated Fed Cat: NHPP					
TIP #:	Let With: Future Cost: 0 Estimate Total: 566					
County: Daviess	Pavement resurfacing from Rte. C at Pattonsburg to I-35.					
Route: US 69						
Job No.: IP3366						
Length: 9.50	MPO: N					
Fund Cat: Taking Care Of System	AC-State: 877 State: 219 Local: 0					
Sec Cat: Low Type Resurfacing	Fall 21 Anticipated Fed Cat: STBG					
TIP #:	Let With: IS3431, 1S1045, 1I3232 Future Cost: 0 Estimate Total: 1,101					

* Subject to the approval of the Transportation Improvement Program by the governing Metropolitan Planning Organization.
Apr-19-2021 Section 4 - 10 District Northwest

Dollars in Thousands



2022-2026 Highway and Bridge Construction Schedule

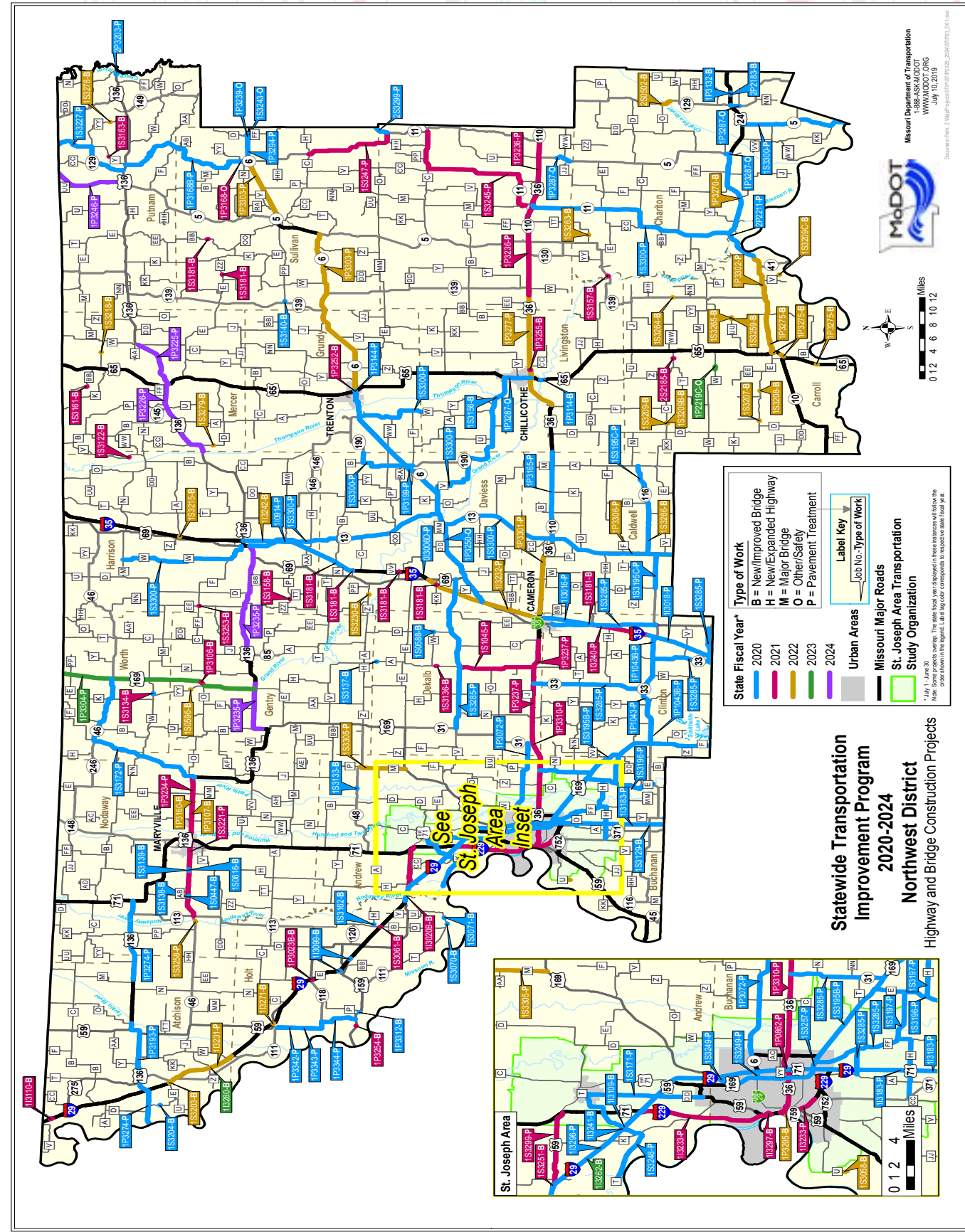
Transportation Planning
 P.O. Box 270
 Jefferson City, MO 64102

Construction contingency applied to construction cost in the year the project is awarded. Three percent project growth factor compounded annually is applied to right-of-way and construction costs in program years 2, 3, 4, and 5. No inflation is applied to the Funding From Other Sources (FFOS) or Payments. Engineering includes PE costs, CE costs and R/W incidentals.

	STATE FISCAL YEAR PROJECT BUDGETING				
	Prior Prog.	6/2022	6/2023	6/2024	6/2025 - 6/2026
County: Daviess Route: RT Z Job No.: IS3230 Length: 0.03 Fund Cat: Taking Care Of System Sec Cat: Rehab And Reconst TIP #: Let With:	Engineering: 25 R/W: 6 Construction: 0 FFOS: 0 Payments: 0	42	0	0	0
County: DeKalb Route: US 169 Job No.: IS3324 Length: 50.05 Fund Cat: Taking Care Of System Sec Cat: Low Type Resurfacing TIP #: Let With:	Engineering: 3 R/W: 0 Construction: 0 FFOS: 0 Payments: 0	113	321	0	0
County: DeKalb Route: US 36 Job No.: IP3318 Length: 23.64 Fund Cat: Taking Care Of System Sec Cat: Thin Lift Overlay TIP #: Let With:	Engineering: 4 R/W: 0 Construction: 0 FFOS: 0 Payments: 0	60	432	0	0
County: DeKalb Route: US 36 Job No.: IP3368 Length: 11.00 Fund Cat: Taking Care Of System Sec Cat: Low Type Resurfacing TIP #: Let With:	Engineering: 100 R/W: 0 Construction: 0 FFOS: 0 Payments: 0	255	0	0	0
County: DeKalb Route: US 36 Job No.: IP3388 Length: 212.46 Fund Cat: Taking Care Of System Sec Cat: Preventive Maint TIP #: Let With:	Engineering: 0 R/W: 0 Construction: 0 FFOS: 0 Payments: 0	56	251	0	0

* Subject to the approval of the Transportation Improvement Program by the governing Metropolitan Planning Organization.
 Apr-19-2021 Section 4 - 11 District Northwest

Dollars in Thousands



Chapter 7: RTP for 10 Years

Chapter 7 documents the prioritization of the needs presented in Chapter 5, as determined by the Mo-Kan TAC and the Andrew, Buchanan, Clinton, and DeKalb county commissions. It is anticipated that these rankings will change as time progresses, and are voted on annually by the TAC. Projects were placed on the Tier 1 list if they were asset management projects, Tier 2 if they were an expansion projects, Safety if they were safety improvements or Maintenance if the road has under 400 AADT. Only Tier 1 projects are eligible for the STIP.

Prioritization

Points	Rank	Map #	Route	Description	Project List	Estimated Cost
21	1st	D1	Hwy 36	Improve interchange I-35 and US 36	Tier 2 - unfunded needs	\$5,850,000
18	2nd	D4	Route D	Resurface from Hwy 6 to Gentry County	Maintenance	\$248,002 to Rt N
16	3rd	C1	Bridge at BB	Bridge improvements at I-35 and Route BB	Tier 2 - unfunded needs	\$1,650,000
14	4th	A3	Route Y	Resurface from Nodaway County to Hwy 71	Maintenance	\$1,280,664
13	5th - tie	B1	Hwy 59	Flood resiliency - Junction to Missouri River	Tier 2 - unfunded needs	\$12,870,000
13	5th - tie	D5	Hwy 36	Safety improvements at Hwy 36 and Ensign Trce	Safety	
10	7th - tie	C2	Bridge at 116	Bridge improvements at I-35 and Hwy 116	Tier 1 - STIP (?)	\$1,850,000
10	7th - tie	D2	Route H	Resurface from Hwy 6 to Gentry County	Maintenance	\$837,514
7	9th - tie	A1	Hwy 48	Resurface from Hwy 71 to Gentry County	Tier 1 - STIP	\$1,570,000
7	9th - tie	A5	Route H	Resurface from Route Y to Hwy 59	Maintenance	
6	11th - tie	C4	Route H	Resurface from Hwy 33 to Hwy 69	Maintenance	\$744,005
6	11th - tie	C8	Hwy 69	Resurface from Evergreen Street to Hwy 36	Tier 1 - STIP	\$500,000
5	13th - tie	A4	BUS 71	Turning lane in south bound lane in front of Norris Quarry, Savannah	Safety	\$500,000
5	13th - tie	B4	Route MM	Resurface from Route H to Old Frame Road	Maintenance	
5	13th - tie	C3	Bridge PP	Bridge improvements at I-35 and Route PP	Tier 1 - STIP (?)	\$2,300,000
5	13th - tie	C6	Route BB	Resurface from Bob F. Griffin to S. Walnut Street	Tier 1 - STIP	\$250,000
5	13th - tie	D3	Route O	Resurface from Hwy 31 to Route J	Tier 1 - STIP	
4	18th - tie	A6	Route O	Resurface from Route D to Route Z	Tier 1 - STIP	
4	18th - tie	B3	Hwy 116	Guard rails near ravines from Hwy 59 to Route V	Safety	No idea
2	20th - tie	B2	Route HH	Sight distance improvement at hill in Dekalb	Safety	No idea
2	20th - tie	B7	Route C	Resurface from Saxon Rd to Hwy 36	Maintenance	
1	22nd - tie	A7	Route DD	Bike/Ped lane near road from Savannah to CCV	Bike -Ped - Other	
1	22nd - tie	B5	Route Y	Resurface from Route DD to Platte County	Tier 1 - STIP	
0		A2	Route W	Widen & add shoulders from Route O to Buchanan County	Tier 2 - unfunded needs	\$1,100,000
0		B6	Route Z	Resurface from Hwy 36 to Andrew County	Tier 1 - STIP	
0		B8	Route T	Resurface from Hwy 169 to Hwy 31	Maintenance	
0		C5	Route W	Resurface from Hwy 116 to end of road	Maintenance	
0		C7	Cameron Airport	1,000 ft. runway extension	Expansion - Other	

Chapter 8: 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. 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. However, the five year period of funding is coming to a close.

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 to 11 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 inter-agency 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 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.

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. 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 cer-

tifies 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. More recent estimates place Missouri's funding at 48th. 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. A recent vote to increase the sales tax, Proposition D, failed to pass in November 2018.

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 manag-

ing 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 ordinance 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.

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) and Safe Routes to School (SRTS) activities.

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

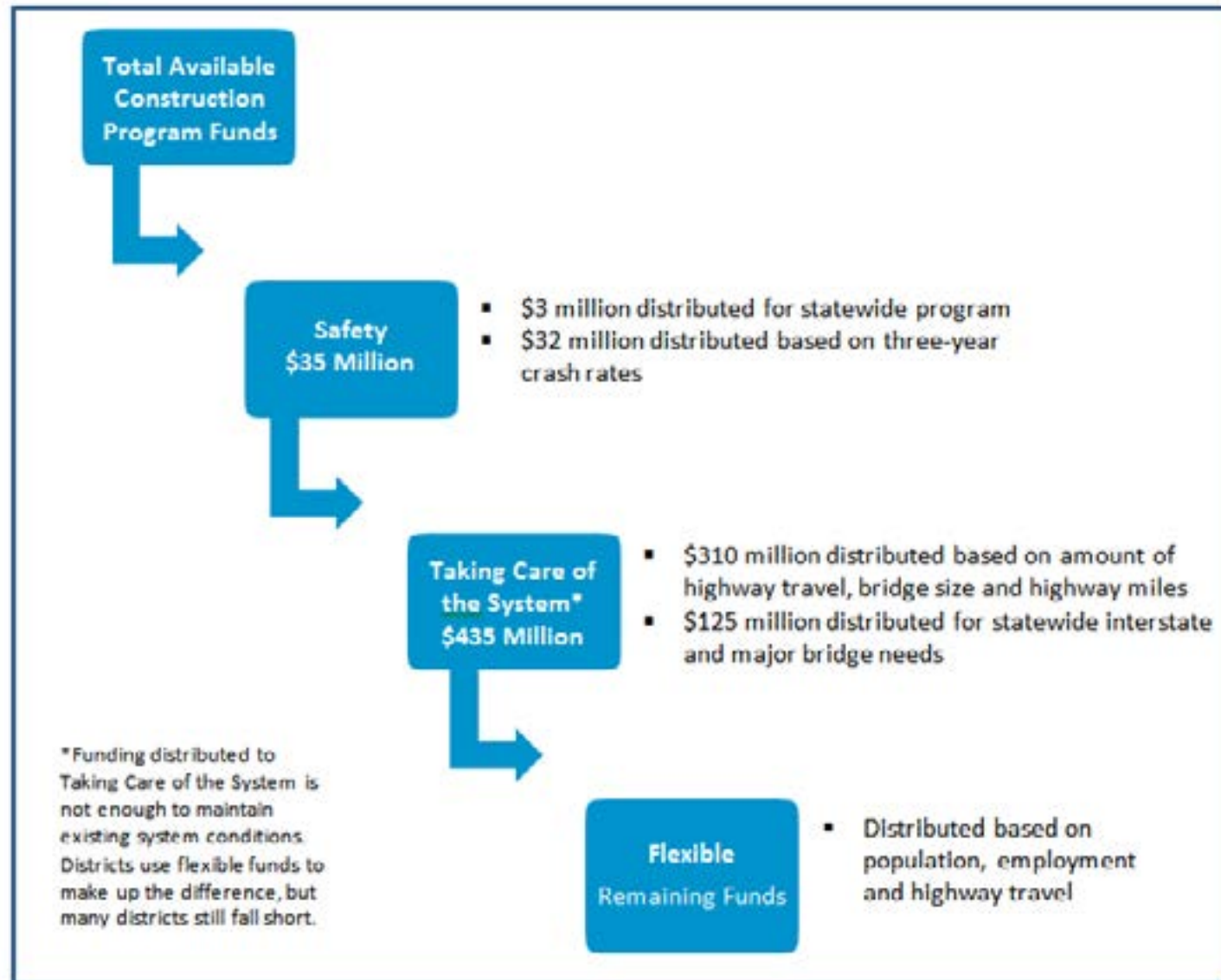
On Jan. 10, 2003, the Missouri Highways and Transportation Commission adopted an objective method to distribute transportation funds using factors reflecting system size and usage and where people live and work. The distribution of funds has been the subject of debate for over a decade. The method for 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:

Funding Distribution Overview

Figure 8.1 MoDOT Funding Distribution for Construction Funds



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

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.

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:

Figure 8.2 MoDOT Funding Distribution by District

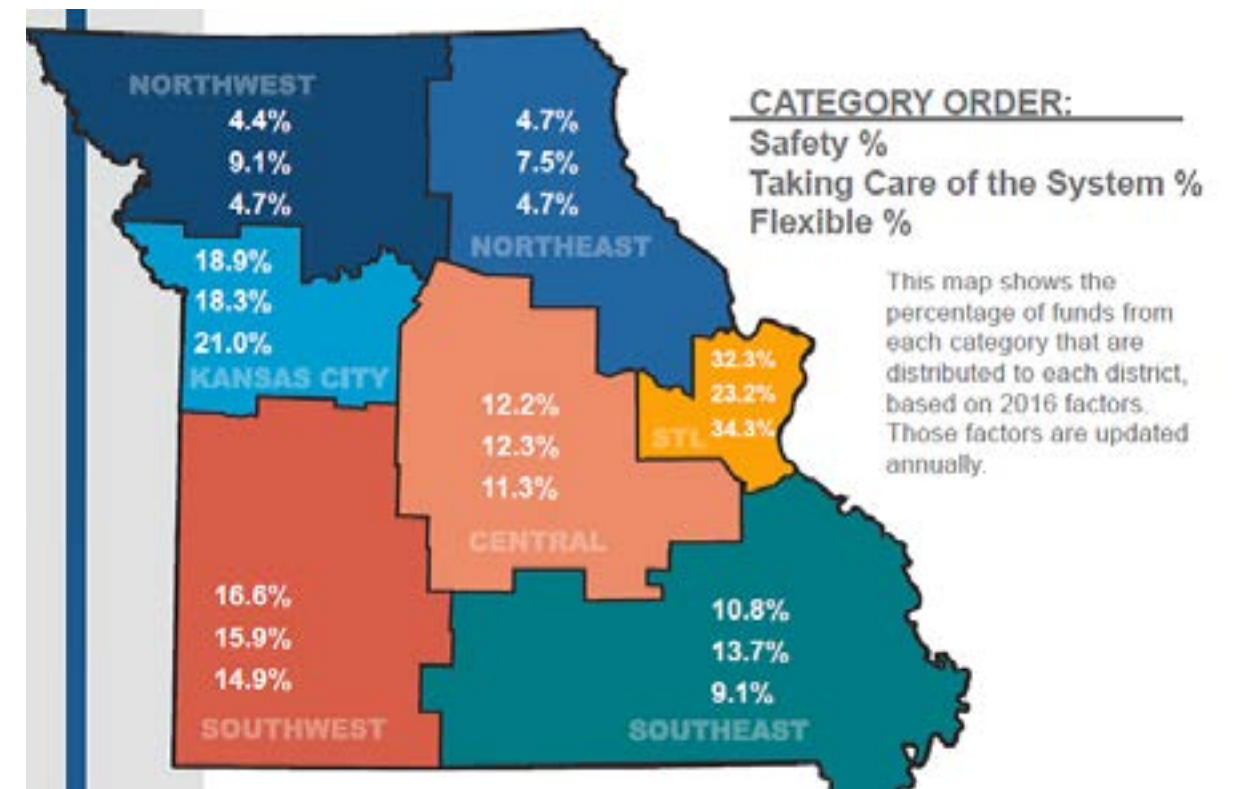


Table 8.3 MoDOT Funding Distribution - Total by District (\$ Millions)

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 9: Plan Implementation

The RTP is designed to provide a direct, unfettered method in which local elected officials, the general public, and other interested stakeholders can identify and prioritize important transportation needs in the aforementioned counties. Using that prioritization, the Mo-Kan TAC can then recommend projects to MoDOT's Northwest District. The District then uses that input to help determine which projects in the region are funded for construction.

Smooth Roadways

The ability to travel anywhere in the state on a smooth roadway not only enhances the attractiveness of Missouri, but can also have a positive economic impact on a region. Further, a smooth roadway reduces avoidance accidents and automobile repair bills. Per the request of MoDOT Northwest District staff, road surface needs are categorized into two lists: a maintenance list for rural roads with less than 400 AADT, and a list for roads with higher traffic volumes that will be considered for the STIP. There are additional lists for multi-modal and safety improvements. The Mo-Kan TAC identified the following projects as addressing smooth roadways for the region:

STIP Eligible

Map Number	Description
A1	Hwy 48 - from Hwy 71 to Gentry County
A2	Route W - from Route O to Hwy 6 (Buchanan County)
A6	Route O - from Route Y to Hwy 59
B5	Route Y- from Route DD to Platte County
B6	Route Z - from Hwy 36 to Andrew County
B4	Guard Rails on Route 116- from Rushville to Route Y
C6	Route BB from Bob F. Griffin to S. Walnut Street
C8	Hwy 69 - from Evergreen Street to Hwy 36
D3	Route O - from Hwy 31 to Hwy N

Maintenance List:

Map Number	Description
A3	Route Y from U.S. Highway 71 to Route H
A5	Route H- from Route Y to Hwy 59
B4	Route MM - from Route H to Old Frame Road
B7	Route C - from Saxon Road to Hwy 36
B8	Route T - from Hwy 169 to Hwy 31
C4	Route H - from Hwy 33 to Hwy 69
C5	Route W - from from Hwy 116 to end of road
D2	Route H - from Gentry County to Hwy 6
D4	Route D - from Gentry County to Hwy 6

Bridge Improvements

Bridges play a critical role in the transportation of people and goods. When a bridge is closed the time and expense for traffic to detour can be significant. Therefore, keeping bridges operational is essential in transportation planning. Bridge construction/repair projects are to be considered for STIP inclusion.

Map Number	Description
C2	Bridge over I-35 on Route 33/116
C3	Bridge over I-35 on Route PP

Congestion and Development Considerations

In addition to roadway enhancements, the Mo-Kan RTP seeks to identify future significant development in its service area which will have an impact on traffic patterns and volumes. New development, particularly in the City of Cameron area will impact the capacity of the transportation in those areas. These are eligible for the STIP.

Map Number	Description
C1	I-35, Route BB to Bob Griffin Road
D1	Intersection of I-35, US 36, Bob Griffin Road

Safety Enhancements

Safety improvements are essential to include in transportation priorities. Mixed use developments requires an examination of certain intersections/interchanges and other roadway features, such as turn lanes, traffic signals, and acceleration/deceleration lanes. The lack of guard rails near ravines and road realignment are also examined.

Map Number	Description
A4	Business 71 - Turning lane in south bound lane in front of Norris Quarry, Savannah
B2	Route HH - Improve visibility on west and east side of DeKalb city limits
B3	Hwy 116 - Lack of guard rails on areas from Rushville to Route Y
D5	Hwy 36 - Safety improvements at Hwy 36 and Ensign Trace

Bike/Pedestrian Enhancements

Non-motorized forms of transportation, such as biking and walking, are becoming more common. Investments in hiking and pedestrian trails have been linked to benefits that include improved connectivity, healthier communities and economic development. Mo-Kan staff aims to create a regional bike/pedestrian plan. No bike/pedestrian transportation priorities were identified this year.

Flood Resiliency

The Mo-Kan region suffered from historic flooding in 2019 and there were major transportation disruptions. Building flood resiliency into roads can lessen the transportation and economic disruptions in the area.

Map Number	Description
B1	Hwy 59 - From Missouri River to junction of Hwy 59 and Hwy 45 at three-way junction

MultiModal

Multi-modal needs exist in the Mo-Kan region and should be included in the transportation priorities for when funding opportunities arise.

Map Number	Description
C7	Cameron Airport - 1,000 ft. runway extension