

# Appendix E – Future Needs and Opportunities

## Introduction

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Identifying future needs and opportunities includes the combination of a multimodal technical analysis, consideration of growth trends, and input from local agencies, stakeholders, and the public. It builds off the 2045 MTP needs and recommendations and considers recent and on-going planning studies that could impact future transportation decision making and investments. Through this process, the needs assessment provides information to identify potential multimodal transportation improvements/projects that are evaluated against the MTP goals and objectives. It also helps guide decisions regarding which projects SJATSO funds in the Transportation Improvement Program (TIP), and helps inform future studies to include in the Unified Planning Work Program (UPWP). The needs assessment also supports SJATSO's on-going efforts to make meaningful strides to meet established Federal performance targets.

## Roadways

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### Future Roadway Needs and Opportunities

Highways and roadways facilitate the highest percentage of travel and providing a safe and efficient roadway system is critical to support the region's economy, quality of life, mobility, and social equity. While primarily serving vehicular traffic, roadways also accommodate freight (truck) movements, public transit operations, bicycling, and pedestrians. As such, it is critical to consider direct and secondary impacts and benefits that roadway improvements might have on other travel modes and the overall regional transportation system. In essence, the needs analysis is a "complete streets" approach, helping the SJATSO region in continuing to enhance the multimodal system and making it safer for all users.

The following discusses the priority future roadway needs and opportunities within the SJATSO area. Figure 1 illustrates the location of the roadway/freight needs and opportunities. This includes a numbered list of needs, and potential improvements when appropriate, which corresponds to a more detailed discussion that follows the map.

## Safety Improvements

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- 1 Belt Highway**  
Highest crash area in the MPA; explore targeted safety/geometric improvements.
- 2 I-29/I-229/US 71 Interchange**  
Geometric ramp deficiencies; explore improves to to reduce crashes.

## Capacity/Access Improvements

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- 3 I-29/US 169 Interchange**  
Heavy traffic, and truck volumes, with closely spaced intersections cause traffic congestion.
- 4 Riverside Road (Route AC)**  
Existing and projected congestion along the corridor; new development will add additional traffic along this corridor and potentially increase travel delays .
- 5 I-29 Access Study**  
Potential new interchange access to/from Faraon Street, including adding mainline capacity.

## Maintenance/Preservation Priority

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- 6 I-229 Double-Decker Bridge**  
The EA preferred alternative replaces the I -229 elevated structure with an at-grade arterial roadway.

## Network Connectivity Improvements

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- 7 Cook Road Improvements**  
Continue to improve geometrics, capacity, and regional connectivity to support continued growth.
- 8 New Bridge, with Cook Road Extension and Airport Access**  
A new Missouri river crossing would enhance regional connectivity by extending Cook Road west from US 59. It would also enhance airport access and support Missouri Air National Guard development. A new causeway, connecting to US 36, could be explored to enhance access.
- 9 New Southeast Access**  
Explore the long-term potential for a connecting roadway that would provide an alternative route to access growing developments along Route AC and relieve traffic volumes along I -29.

## Gateway Improvements

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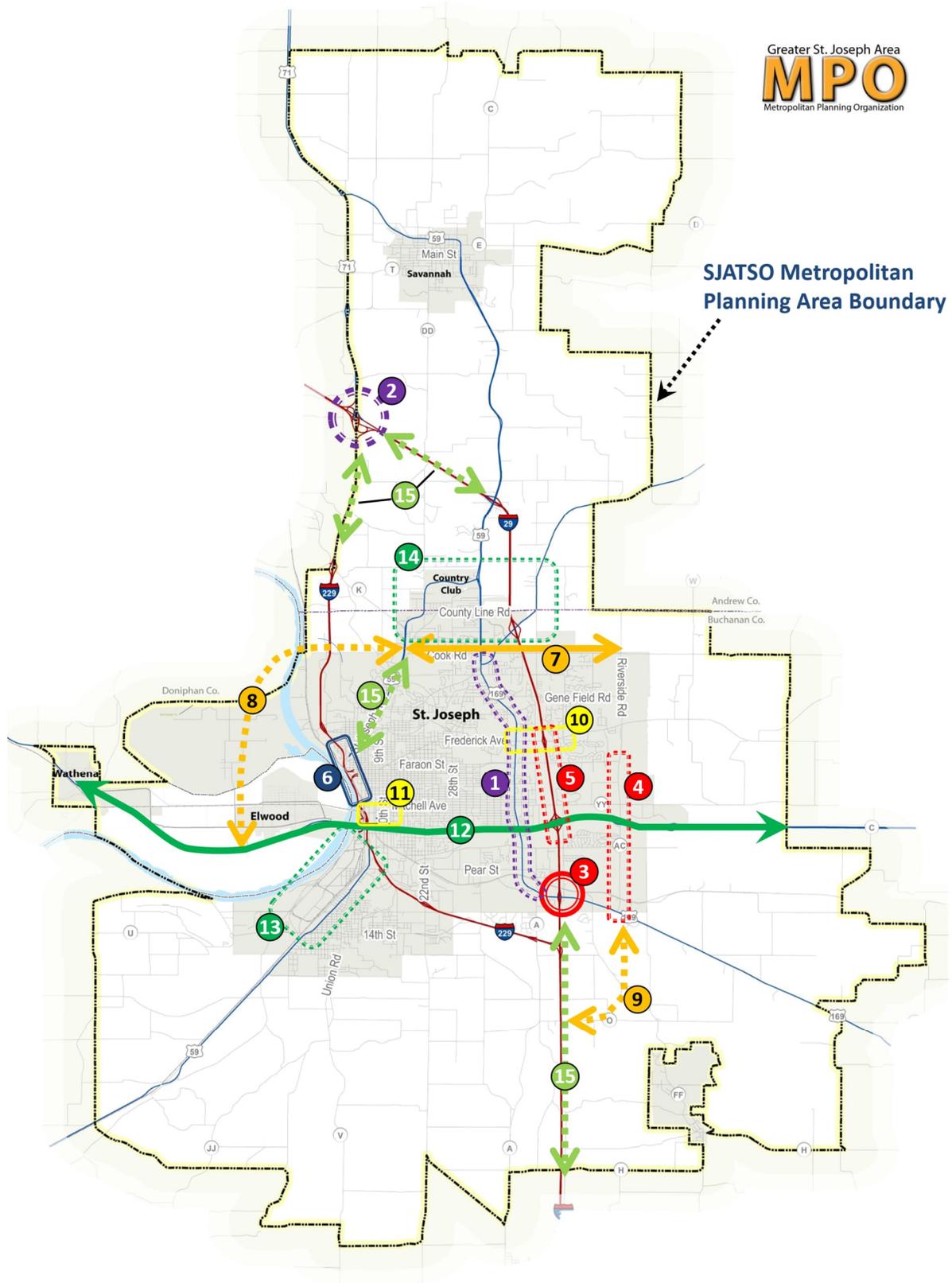
- 10 Frederick Avenue (from I-29)**  
Primary access into downtown St. Joseph; bike and pedestrian improvements would be incorporated into aesthetically pleasing infrastructure and urban design elements.
- 11 Downtown St. Joseph Access (from US-36)**  
Enhance multimodal access to downtown by incorporating improvements that are consistent with the I-229 Double Decker Bridge preferred alternative and Riverfront Development plans.

## Traffic Operations / Studies

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- 12 US 36 Corridor Study**  
Support a study to explore opportunities to enhance traffic operations, safety, capacity, and access.
- 13 Stockyards Industrial Area Improvements**  
Monitor truck/rail connectivity, safety, port access, and truck parking needs.
- 14 Spot Improvements to Enhance Traffic Operations**  
Monitor potential operational and capacity improvements as this area continues to develop.
- 15 Regional Freight Movements**  
Monitor growing truck volumes; identify potential operational and capacity improvements.

Figure 1: Priority Roadway Needs and Opportunities



**SJATSO Metropolitan  
Planning Area Boundary**

1

Belt Highway Safety Improvements

The Belt Highway is a north-south principal arterial serving major commercial activities in the region. The highest observed traffic volume is between Mitchell Avenue and Messanie Street with over 20,000 vehicles per day (vpd). While not a capacity concern, the five-lane cross section, high number of vehicles, high travel speeds, and numerous access points increases the potential crash exposure for all transportation users—including vulnerable roadway users (pedestrians and bicyclists). This corridor has consistently experienced the highest number of crashes in the MPA, recording 26 serious injuries and seven fatalities between 2018 and 2022. The Belt Highway is consistently identified by the public as a top safety concern as reflected in recent survey results, sector workshops, and general public and stakeholder comments. A meeting with regional emergency responders in Fall 2024 also reinforced the safety concerns along the corridor.

Previous MTPs have identified the Belt Highway as a safety concern and this corridor remains a safety priority in the 2050 MTP. Addressing safety along the Belt Highway would have a positive impact in addressing Federal safety performance targets. Lower cost Transportation System Management (TSM) improvements, that improve traffic operations and safety, may be an appropriate starting point for potential corridor improvements.

Since the completion of the 2045 MTP, the Belt Highway now accommodates a north-south transit route. As such, it is critically important to prioritize sidewalk and crosswalk enhancements to facilitate safe travel to bus stops (first- and last-mile connections). Currently, a large segment of the corridor lacks continuous sidewalks which makes walking to bus stops difficult. Future Belt Highway roadway/intersection improvements should address pedestrian/bicycle safety, as well as enhancing access to bus stop locations. Finally, SJATSO is evaluating the construction of a new transit hub along the corridor and as such it will be important to prioritize pedestrian bicycle connections in proximity to this facility.



Northbound on Belt Highway (approaching the intersection of Beck Road)

2

I-29/I-229/US-71 Interchange Improvements

Located in the northwest portion of the SJATSO MPA, the southbound ramp from US-71 to I-29 is a left exit ramp with a relatively short merge area. Over the years there have been several concerns regarding the interchange ramps. This concern was recently confirmed in a meeting with regional and local emergency responders. MoDOT is planning to make improvements to address the ramp issues in the next few years.



US 71 ramp (southbound) to I-29. Once under the I-29 overpass, there is a relatively short merge onto southbound I-29.

3

I-29/US 169 Interchange Improvements

The I-29/US 169 interchange (exit 44) is a heavily utilized interchange for trucks and passenger vehicles within the region. Current MoDOT traffic counts show an approximate I-29 mainline volume of 34,000 vpd (south of US 169) and 38,800 vpd (north of US 169). There is numerous truck facilities located within the interchange area making this a popular destination to exit, and reenter, I-29. Close interchange ramp spacing with US-169, along with a slow acceleration factor for trucks, contributes to congestion concerns, especially during AM and PM peak periods.

The I-29 bridge structure at this location is rated in fair condition; however, increasing volumes and truck activity could lead to higher congestion levels in the interchange/ramp area which should be monitored. This interchange remains a top regional priority for SJATSO and the City of St. Joseph as this project remains near the top of the list of regionally significant projects submitted to MoDOT.



Heavy Truck Traffic (I-29 Northbound off-ramp to US 169)



Close Intersection Spacing on US 169 (westbound at I-29 ramps)

4

Riverside Road (AC) Capacity Improvement

Development along the Riverside Road (Route AC) corridor has occurred over the past two decades and is expected to continue through the year 2050. The corridor serves Heartland Hospital, Missouri Western State University, and other regional destinations.

Riverside Road has traffic capacity issues near the US 36 interchange, and extending south of US 36, during AM and PM peak periods. This interchange is a top priority and MoDOT has programmed improvements in the coming years that will increase the bridge capacity from two-lanes to three-lanes. In addition, SJATSO has indicated that there are plans to evaluate the US 36 eastbound off-ramp to Route AC to identify potential operational improvements, which could include potential geometric improvements to enhance travel flow.

In addition, Picket Road, south of US 36, is expected to be improved from Riverside Road, extending to the east. This will open up more land for future year development which will result in increased traffic (and truck traffic) at the US 36 ramps, and along the Riverside Road corridor.



Riverside Road (at US-36 interchange)

5

I-29 Access Study

I-29 provides the primary north-south access through the SJATSO region. It functions as gateway to the area at key interchanges between I-229 on the south and US 169 on the north, including a system-to-system interchange with US 36.

I-29, between US 36 and Frederick Avenue, has the highest traffic volumes in the region at close to 40,000 vpd. In addition, there are several large commercial/hotel developments planned along this stretch of I-29. As such, SJATSO is undertaking a study to evaluate a potential break-in access along I-29 at Faraon Street. This concept could potentially enhance access to new developments, including a planned hotel on the west side of the I-29 corridor and a new gas station in the southeast corner of I-29/Frederick Avenue.

Furthermore, it could also enhance access to MWSU, which could help improve traffic flow to the Kansas City Chiefs preseason training camp facility.



I-29 Corridor, north of US 36, could be a potential location for a new exit.

## 6

### I-229 Double Decker Improvements

Addressing the I-229 elevated structure, or what is commonly referred to by locals as the I-229 Double-Decker Bridge, remains a regional transportation priority. In May 2018, MoDOT started an Environmental Assessment (EA) that evaluated the potential long-term bridge maintenance and reconstruction options. While preliminary alternatives were being developed to address the long-term future of the facility, the EA identified approximately \$50 million in near-term maintenance/repairs. This consideration, along with the following, led to a preferred alternative that will replace the elevated structure with an at-grade arterial roadway:

- The bridge is nearing the end of its expected life: the expected lifespan of the bridge is 50 years. The bridge is currently 40 years old.
- The bridge is rated in poor condition: despite ongoing maintenance, the bridge continues to deteriorate and is rated in poor condition—the equivalent to a C- grade.
- Current structural problems on the bridge will be difficult and costly to repair: if the bridge was rehabilitated, it would either need a second rehabilitation or a complete replacement in approximately 25 years, with an estimated cost around \$200 million.
- Traffic volumes do not support the need for the current bridge structure: the amount of traffic using the bridge does not require a four-lane, elevated structure. At the time the bridge was conceptualized, a higher volume of traffic was expected to travel I-229 than does today.
- The economic development of St. Joseph's downtown and riverfront is more challenging with the current bridge in place: the current bridge is not compatible with the City of St. Joseph's current vision for riverfront development and continued growth.



Photo Credit: HG Consult; I-229 EA Study

In Spring 2024, the EA document was finalized and a Recommended Preferred Alternative based on stakeholder and public feedback was presented to the FHWA. The EA document was approved and signed by the FHWA in July 2024. In August 2024, the Recommended Preferred Alternative and supporting documents were made available for public review, and a formal public hearing was held on August 15, 2024.

#### What is Next?

At the time of this MTP development (Fall 2024), FHWA was set to consider the Recommended Preferred Alternative and would then issue a Finding of No Significant Impact (FONSI) or decide there is a need to develop an Environmental Impact Statement. If the FHWA issues a FONSI and SJATSO includes the Recommended Preferred Alternative in the TIP, then MoDOT will be able to move forward with the design process. Ultimately, the construction timeline will be determined by funding availability and priority of other major bridges around the state.

7

Cook Road Improvements and Extension

Cook Road functions as a minor arterial between US-59 (St. Joseph Avenue) and Riverside Road. It is in an area that has experienced both residential and commercial development (near Belt Highway) in recent years. The Oak Grove Elementary school, located approximately one mile east of I-29, serves students in preschool through sixth grade. Historic residential development patterns show continued growth near the school and in areas north around Country Club Village.

At the time of the 2050 MTP development, the I-29/Cook Road overpass was under construction as it had a functionally deficient rating in the 2045 MTP. West of Haverill Drive, Cook Road is a narrow two-lane road with minimal shoulders, or no shoulders. The road includes rolling hills which create vertical sight distance issues, and driveways with limited sight distance.



Cook Road, westbound approaching Belt Hwy.



I-29, southbound approaching Cook Road overpass



Cook Road, westbound west of Haverill Drive

Previous MTP planning efforts have identified the need to upgrade the Cook Road corridor to enhance regional east-west connectivity, and to strengthen the roadway functional classification system to help accommodate future growth. This project has been part of the region’s long-range vision for over two decades and the 2045 MTP included various phases of Cook Road improvements in the fiscally constrained projects. The long-term vision, including fiscally unconstrained or illustrative projects, includes an extension of Cook Road beginning at US-59 continuing west to connect to I-229 with a new interchange. Long-term plans also include a connection west of I-229 to connect to the riverfront area.

Cook Road is also envisioned as an important multimodal corridor that supports alternative transportation modes. An improved corridor creates opportunities to enhance bicycle and pedestrian travel within the region by creating a continuous east-west bicycle facility that would connect to the existing urban trail system. An improved Cook Road also creates an opportunity to accommodate a future transit route. In summary, the Cook Road improvements address several of the 2050 MTP goals and objectives, demonstrating the high priority SJATSO has historically placed on this project.

8

New River Crossing (New Airport Access)

From a regional access and economic development perspective, there has been discussion among local officials regarding the possibility of adding a new east-west airport connection across the Missouri River. In recent years the Air National Guard has begun the process of moving operations/facilities north of the current area which will eventually free up land that could be redeveloped to attract new industry/business. The addition of a river crossing would greatly enhance regional access and create a highly attractive business development opportunity for companies looking for multimodal access to the airport and proximity to interstate and freeway facilities. The construction of an additional river crossing would also be useful when the I-229/US-36/US-59 interchange requires repairs, or reconstruction.

The I-229 EA study included two preliminary alternatives that included a new river crossing. One alternative includes a bridge near the intersection of I-229, US-59, and St. Joseph Ave (see map at left, below). The other alternative would involve building a bridge near an interchange between I-229 and an extension of Cook Road (see map at right, below). The EA study did not explore these alternatives in detail as these river crossing locations are north of the study focus area (the I-229 elevated structure).



Source: HG Consult; I-229 EA Study.

Following the completion of the 2045 MTP, SJATSO hired a consultant to study the feasibility of a new crossing. The draft report estimates a new crossing would cost between \$138 million and \$200 million. A draft of a multimodal corridor planning study also evaluated potential future growth scenarios in and around the airport. That study identifies the potential for new jobs in the area.

9

New Southeast Access

As a long-term concept, the 2050 MTP planning process highlighted the potential for a new roadway connection in the southeast portion of the MPA, specifically in the area southeast of the I-29 and US 36 interchange. The new route (no specific alignment has been identified, this is conceptual only at this time) would enhance access to a growing industrial area along Riverside Road, fostering economic development and supporting local businesses. In addition, this connection would be beneficial during incidents on I-29 or US 36, providing an alternative route for traffic.

Moreover, this new roadway would enhance access to Missouri Western State University and the Kansas City Chiefs' preseason training camp, making it more convenient for students, staff, and visitors. By relieving traffic volumes on I-29, the connection would improve traffic flow and facilitate better regional mobility, making travel more efficient for residents and commuters alike.



Northbound I-29, approaching the Faraon Street overpass. This location will be studied for a potential new interchange.

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Frederick Avenue Gateway Improvements

Frederick Avenue functions as primary gateway from I-29 to the Belt Highway and continuing into downtown St. Joseph. Approximately 26,600 vpd use Frederick at the I-29 interchange and 16,400 vpd near 28th Street. There are approximately 42,200 vpd on the I-29 mainline near Frederick (an increase of 37% from 2000 when there were 30,900 vpd), making this interchange the most visible entry in the region.

As part of 2045 MTP process, the public expressed support for improving the I-29 overpass to incorporate context sensitive solutions (CSS) similar to bridge improvements in the Kansas City area. CSS is a collaborative, interdisciplinary approach that involves all stakeholders in providing a transportation facility that fits its unique setting. Enhancing the Frederick Avenue/I-29 interchange area, continuing west to the Belt Highway, could enhance bicycle and pedestrian conditions, improve safety, and create an attractive, welcoming gateway to St. Joseph.



I-29 (southbound), approaching the Frederick Avenue Overpass.



Frederick Avenue (westbound), just west of I-29.

11

Downtown St. Joseph Access (from US-36)

The upcoming reconstruction of the I-229 elevated structure as an at-grade road, along with projects included in the Riverfront Development Plan, creates an opportunity to incorporate improvements that enhance access to downtown St. Joseph, from a traffic operations and aesthetics standpoint. Similar to the Frederick Avenue gateway improvements, the US 36 corridor provides access to the downtown from the southern portion of the MPA.

These types of improvements are crucial for several reasons. They can significantly reduce congestion and improve traffic flow, making it easier and faster for residents and visitors to reach downtown St. Joseph. Enhanced access can also stimulate economic growth by attracting more businesses and tourists to the area. From an aesthetic perspective, well-designed roadways and gateways can create a more welcoming and visually appealing environment, which can boost community pride and enhance the quality of life. Additionally, improved infrastructure can increase safety for all road users, including pedestrians and cyclists, by providing better-designed and maintained routes. Overall, these improvements would support the city’s growth helping to ensure it remains a vibrant and accessible place for everyone.



US-36 (westbound), interchange to I-229 and US-59.

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US-36 Corridor Study / Improvements

The US-36 corridor is an important east-west freeway through the SJATSO region. Locally, US-36 provides access to the Stockyards industrial area, St. Joseph Regional Port, and Rosecrans Airport. The corridor serves as a gateway to downtown St. Joseph, accessed from the south at 4<sup>th</sup>, 10<sup>th</sup>, and 22<sup>nd</sup> Streets. From a regional/state perspective, US-36 provides an alternative to the I-70 corridor in Missouri and Kansas. Recent traffic counts on US-36 show approximately 27,900 vpd, of which nearly 2,000 (7%) were trucks. Historical truck volume data highlights the continued growth of freight in the region, increasing from approximately 1,600 trucks per day (2010), to 1,750 (2016), to over 2,000 trucks per day in a recent count.

US-36 at I-29 is a regionally significant system-to-system interchange, and the Route AC interchange just to the east, provides access to businesses and industries along Riverside Road. US-36 at I-229/US-59 is another critical regional interchange, providing access to industries to the south and downtown St. Joseph to the north along I-229. Maintaining safe, efficient connectivity and traffic operations within these interchange locations is vital to the regional and local economy – a 2050 MTP goal.



I-29/US-36 interchange



Short ramps along the US-36 corridor



US-36, approaching I-229/US-59 interchange

Previous planning efforts have recognized the regional significance of the US-36 corridor and the 2045 MTP recommended a US-36 corridor study to identify potential mainline improvements, ramp upgrades, access consolidation, and freight enhancements to improve safety for the traveling public. During the 2050 MTP development, MoDOT informed the SJATSO Coordinating Committee that they have plans to conduct a statewide needs assessment of the US-36 (no timeline was available; however, it was possible the study would be starting on the east side of the state and work west).

The US-36 at I-229/US-59 interchange is an aging structure that would benefit from geometric improvements to improve safety and enhance travel flow. This structure will likely require more significant maintenance investments through the 2050 planning horizon. As the only Missouri River crossing in the MPA it will be important for future maintenance and potential reconstruction to take this into account.

Public outreach conducted as part of the 2050 MTP identified US-36 safety upgrades as a priority. Some respondents are concerned about crashes along the corridor—particularly related to entrance and exit ramps. Furthermore, the US-36 corridor, and system-to-system interchanges with I-29 and I-229, could become even more important as I-229 is reconstructed.

On the Kansas side, US-36 through Wathena, beginning just south of St. Joseph Street and continuing west through town and beyond the MPA boundary, narrows to three-lanes. While not a capacity concern under normal conditions, it is a concern during major

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US-36 Corridor Study / Improvements [continued from previous page]

flooding events which results in traffic rerouting to US-36. During these events, traffic can become heavy causing congestion and safety concerns as some motorists are unfamiliar with the area and increased truck traffic creates bottlenecks. As part of a future US-36 corridor study, the traffic conditions during these types of events should be evaluated to identify potential improvements and mitigation measures.

Finally, while extending beyond the 2050 horizon year, the long-term vision for the US-36 corridor includes being upgraded to interstate standards. This does not impact current MTP priorities, but it should be considered in future planning efforts to ensure improvements are consistent with the US-36 long-term vision.

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Stockyards Industrial Area Improvements

The Stockyards industrial area is home to local and regional employers, including the St. Joseph River Port which has plans to expand. US-59, and the Stockyards Expressway, provide the primary access to the area. Near Iowa Street, US-59 carries approximately 15,000 vpd of which 1,300 (9%) were trucks. South of Alabama Street (MO-752), US-59 carries approximately 6,100 vpd, of which 850 (14%) were trucks. MO-752, connecting to I-229, is also frequently utilized by trucks to access the industrial area. Near 22<sup>nd</sup> Street, MO-752 carries approximately 11,300 vpd, of which 1,100 (10%) were trucks and the eastbound ramp to I-229 carries 9,250 vpd, of which 900 (10%) were trucks.

The large number of trucks in the area frequently results in trucks parking/waiting along area roadways. A truck parking area, developed over the past few years, has helped alleviate some parking issues; however, the truck parking demand still exceeds available parking which results in a continued practice to park on the shoulder of area roadways.

The intersection of US-59 and Alabama Street is a specific area of concern. The BNSF rail line parallels US-59 to the west (approximately 600 feet) and is closely spaced to the Stockyards Expressway intersection (less than 1,000 feet). Various intersection improvement concepts have been considered and MoDOT has plans to improve the intersection. This improvement should enhance freight access and connectivity, improve safety, and support existing and future businesses located in the area.



Trucks frequently park on the shoulder of area roadway Alabama Street (eastbound near US-59, and BNSF at-grade rail crossing)

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#### Spot Improvements to Enhance Traffic Operations

As the northern portion of City of St. Joseph, and Country Club Village, continue to grow it is essential to monitor land use and development closely. This growth necessitates improvements to the aging infrastructure to keep pace with the increasing travel demands. Spot traffic improvements at key intersections may be necessary to address congestion and enhance safety. Additionally, the addition of turn lanes could be beneficial in ensuring efficient and safe traffic flow, accommodating the rising number of vehicles in these expanding areas.

In the north sector workshop, there was concern about traffic backups on major roadways near John Glenn School. Addressing these concerns is vital to maintaining smooth traffic operations and ensuring the safety of students and residents. By proactively planning and implementing infrastructure upgrades, the region can support sustainable growth, improve traffic conditions, and enhance the overall quality of life for its residents.

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#### Regional Freight Movements

Safely and efficiently accommodating the movement of freight within, and through, the SJATSO region is a critical priority to supporting the long-term economic well-being of the area. Freight activity in the region continues to grow as demonstrated by increasing truck traffic, especially along I-29 and US-36. As discussed in previous plans, the St. Joseph region has an opportunity to capitalize on the freight assets in the region—including the river port, airport, rail lines, and interstate and freeway facilities—to become an intermodal hub as part of a larger freight network.

The I-229 elevated reconstruction at-grade should be closely monitored for potential impacts to freight movement through the region. Under this scenario, it is possible that I-29 and US-36 will both see increased truck traffic which could require mainline and interchange improvements.



Truck traffic on I-29 (just north of Frederick Avenue interchange)

### Operations/Maintenance

The BIL/IIJA performance measures reinforce the importance for agencies to plan for the lifecycle of preventive maintenance with the goal of extending service life while minimizing cost. SJATSO adopts the federal performance measures that are related to maintaining pavement and bridges.

Public outreach efforts conducted as part of the 2050 MTP support the desire of area residents to prioritize future maintenance investments. This was confirmed in the 2023 ETC community survey which ranked preservation of existing assets as a top priority (see Appendix A).

In the SJATSO region, preventive maintenance focuses largely on the lifecycle of pavement and bridges. As major infrastructure investments, understanding the lifecycle of these transportation assets is critical for the SJATSO area to maintain high safety standards and consistent funding resources. Provided are examples of how preventative maintenance can benefit short- and long-term goals and performance measures in the 2050 MTP.

#### Pavement Conditions

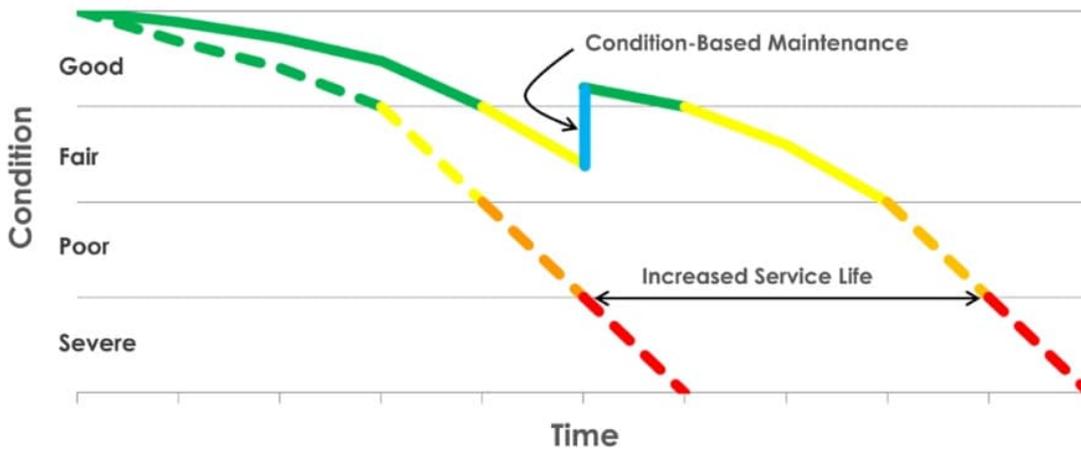
As a major infrastructure investment for the SJATSO area, maintaining roadway pavement throughout the MPA involves extensive planning to determine future roadway needs and conditions. Given typical roadway maintenance requirements, roadway maintenance can be forecasted by reviewing the lifecycle based on existing pavement condition ratings. Pavement conditions are defined as good, fair, or poor based on condition ratings criteria defined by FHWA. Roadway segments rated as “Fair” or “Poor” typically require maintenance within the short-term (approximately two years) while segments rated as “Good” likely need maintenance within five years.

Understanding existing pavement conditions helps agencies to ensure resources are in place to provide preventive roadway repairs prior to rapid depreciation. Deferred maintenance accelerates deterioration and reduces asset value. Since the lifecycle of typical pavement segments are five years, agencies can prioritize segments based on their pavement condition ratings. Ideally, the maintenance lifecycle of pavement improvements is consistent across each year. That way, agencies can fund and provide resources consistently rather than be overburdened by a large annual increase of work and maintenance costs.

#### Bridge Conditions

Similar to pavement, routine preventative bridge maintenance is a critical component in asset management. Bridge ratings are important indicators to help assess safety issues and avoid large, unexpected bridge expenses. Proactive bridge preservation helps to slow deterioration and extend bridge service life, leading to lower annualized costs required toward bridge rehabilitation or replacement. As illustrated in Figure 2, there is increased service life in providing cyclical, condition-based bridge maintenance.

Figure 2: Comparison of Bridge Condition (Preservation versus No Preservation)

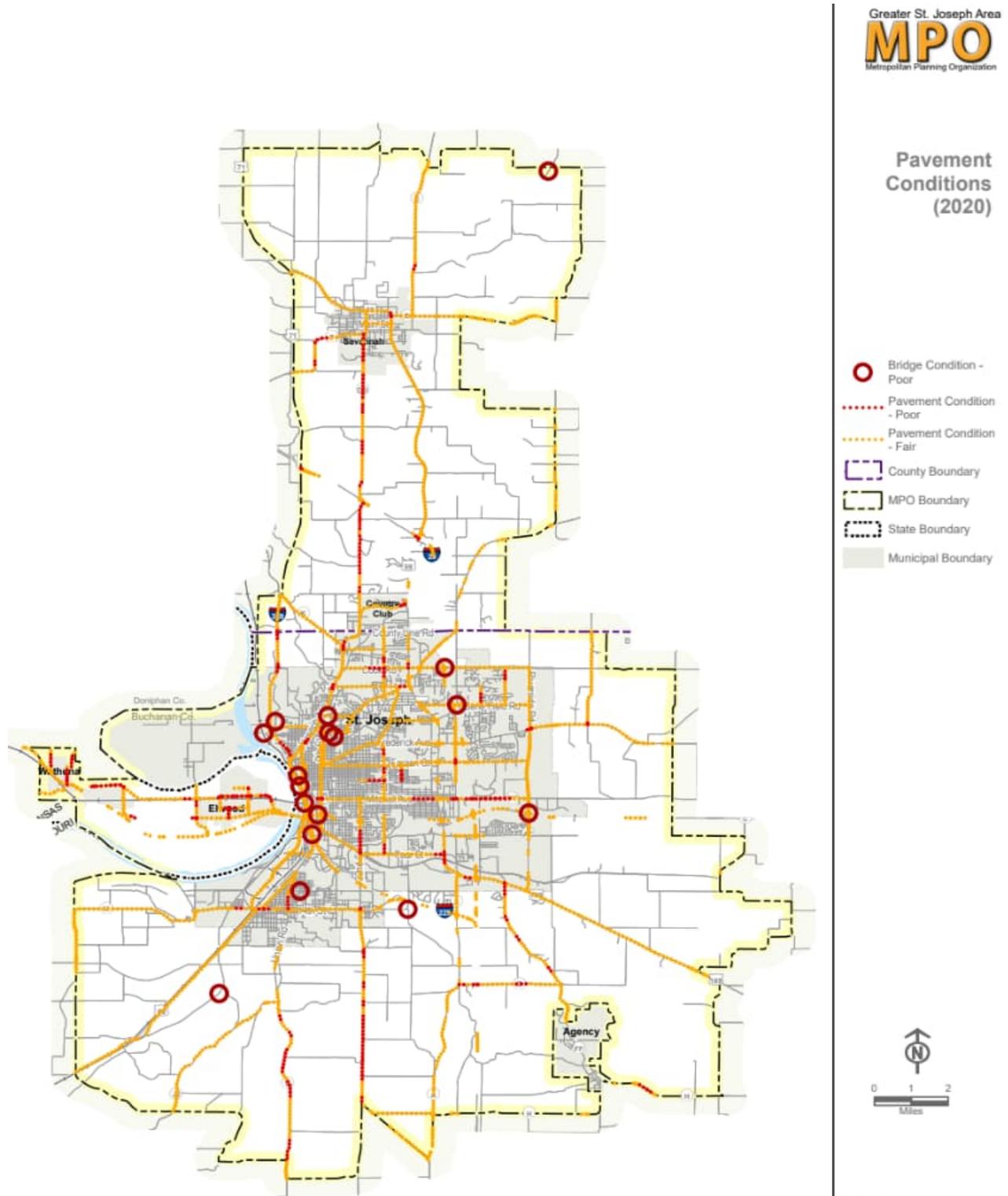


Source: FHWA Bridge Preservation Guide (2018).

Note: Solid-colored lines equal bridge with preservation (cyclical/condition-based maintenance). Dashed-colored lines equal bridge without preservation.

Figure 3 provides an overview of priority operating and maintenance issues and needs within the SJATSO MPA. Included are pavement condition ratings that show roadways with poor or fair condition, and bridges in poor condition. It is important to note that this information should be verified prior to using it for future planning and design purposes.

Figure 3: Priority Bridge and Pavement Needs



## Freight

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### Future Freight Needs and Opportunities

Truck traffic will likely remain the predominant mode of freight transportation within the SJATSO region through the year 2050. However, the St. Joseph region is positioned to take advantage of rail, waterway, and interstate/freeway connections. Given the location of the port along the Missouri River and its access to the Gulf of Mexico, the Port of St. Joseph is in a strategic location for economic development. Similarly, Rosecrans Memorial Airport—with its proximity to the port and existing freight rail—offers expanded intermodal opportunities (though there would be a need to extend a rail spur to the future redevelopment area once the National Guard relocates). All these facilities are connected to I-29 and I-229, which provide regional access to Kansas City, Omaha, and other national freight facilities. Alternatively, US-36 serves as an east-west option to I-70 for freight providers in Missouri and Kansas.

Locally, the expansion of rail freight transport could occur if key freight infrastructure improvements were made. One is the expansion of rail capacity with an additional spur at the St. Joseph Port Authority facility. Another is maximizing the utility of the rail line adjacent to the Rosecrans Memorial Airport to become an intermodal facility to facilitate rail to air freight movement. It is important to note, however, that if the demand for rail freight lines increases, some of the rail rights-of-way identified as possible rails-to-trails projects could be potentially put back into service for freight purposes. This should be considered in ongoing active transportation planning efforts. The airport master plan, which was recently updated, should also be reviewed to coordinate future intermodal opportunities and freight enhancements.

Earlier in this appendix, several roadway needs and potential opportunities were discussed. In large part, many of these projects address existing and/or future year truck and freight issues. These issues are briefly summarized here:

- Long-term impacts related to the reconstruction of the I-229 elevated structure (Double Decker bridge) as an at-grade arterial. Ultimately, what impacts will this have on traffic patterns and operations in downtown St. Joseph?
- US-36 corridor, long-term improvements
- Potential new airport access, or new Missouri River crossing

There has been increased airport activity thanks to structural changes at Rosecrans Memorial Airport (STJ), the trend toward increased general aviation activities, and the need to relieve congestion at existing commercial air hubs. The planned consolidation and relocation of Missouri Air National Guard (MOANG) facilities is expected to expand potential space for businesses that benefit from proximity to air services.

General aviation experienced a slowdown during the 2008 global economic crisis, but the market has since recovered. The most recent FAA Aerospace Forecast for FY 2024–2044 indicates that general aviation activity remains stable to optimistic. The forecast projects that general aviation hours flown will increase at an average annual rate of 0.8% through 2044. This is the same as the projected rate from the 2045 MTP.

The same FAA report indicates that commercial aviation activity is expected to grow significantly, driven primarily by U.S. airline and business aviation activity. The report projects a steady growth rate for both sectors, with commercial aviation showing a more robust increase.

As previously discussed, STJ possesses an infrastructure asset in the form of a nearby rail link onto airport property. Intermodal freight transfers are a source of potential future aviation activity if US-36 is upgraded to interstate standards. Air traffic congestion at the Kansas City International Airport and vehicular traffic on Kansas City area roadways may compel businesses to look for an alternative to meet their air freight needs and STJ could potentially meet that future demand.

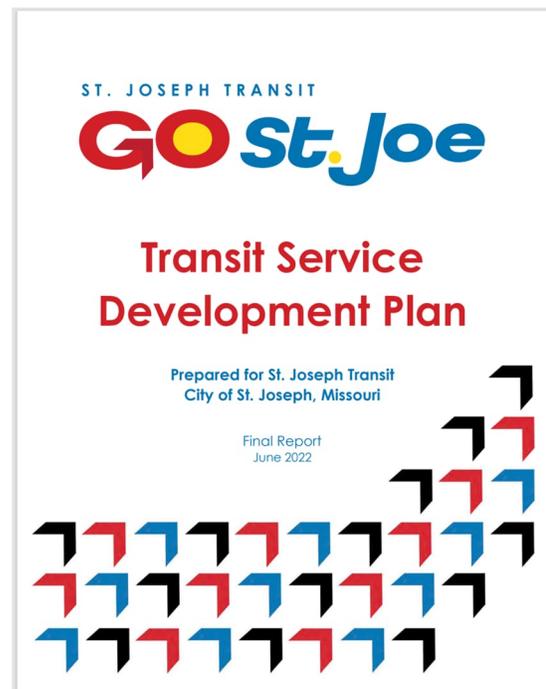
Given the access to roadway, rail and air transportation, STJ has potential to link distribution center tenants such as FedEx and Amazon to intermodal freight opportunities. As land becomes available with the MOANG relocation, STJ has an appealing opportunity for freight tenants interested in benefitting from STJ's long runway, access to US-36, and nearby freight rail access. Moreover, airport improvements are moving forward which include future operational upgrades including runways, taxiways, traffic control and hangar areas.

## Public Transportation

### Future Needs and Opportunities

Maintaining a viable public transportation system provides an important mobility option to residents, workers, and students throughout the SJATSO region. In many instances public transportation is the only available and/or affordable travel mode for area residents. Without it, some individuals could be unable to pursue economic opportunities or complete daily personal, medical, and social tasks or activities. Identifying the future needs of transit captive and choice riders is an important element in an on-going effort to develop an expanded, reliable multimodal transportation system.

Public transportation needs are included in the 2050 MTP and were documented in detail as part of the Coordinated Public Transit – Human Services Transportation Plan (completed June 2023) and the Transit Service Development Plan (completed June 2022). Please refer to these reports which document transit needs and opportunities.



## Active Transportation

### Future Issues and Needs

The active transportation network is comprised of several on-street and trail facilities. Needs and issues related to the improvement of the system include expanding the existing network to provide local and regional connections.

SJATSO has made significant progress in planning, designing, and constructing components of its trail system which already includes a robust urban parkway system through St. Joseph. Since the vision of greenway development was introduced, many phases of network have

been designed by the City of St. Joseph and more are contemplated by Country Club Village, Savannah, Elwood, and Wathena. However, many components of the main north/south axis remain, as well as opportunities to expand the trail system on an east/west basis. Planning for 2050 should include strengthening St. Joseph's active transportation trail systems by bridging gaps in the network. This will be accomplished by addressing both local and regional components of the non-motorized system.

While trails represent a substantial piece of the SJATSO active transportation network, on-street bicycle accommodations, or active transportation improvements incorporated into roadway projects, could provide critical connections to supplement the trail system. The application of complete streets principles can further strengthen the SJATSO active transportation network. Complete streets is a concept that can be applied in planning or designing a new roadway or repairing/replacing an existing roadway. Finding ways to eliminate non-motorized system gaps could be as easy as restriping roadways to allocate more space to bicyclists or could involve more extensive improvements such as reconstructing roadways to incorporate on-street bicycle facilities or adjacent sidewalks and/or trails. The consideration of active transportation should become common practice in evaluating future transportation infrastructure improvements throughout the SJATSO region.

The following discusses the future active transportation needs and opportunities within the SJATSO MPA. Figure 8 illustrates the location of the needs and opportunities. This includes a numbered list of needs, and potential improvements when appropriate, which corresponds to a more detailed discussion of the active transportation issues that follows the map.

## Riverfront Development

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- 1 Trail and Pedestrian Improvements**  
The Riverfront Development plan includes bicycle and pedestrian improvements that would connect to existing local and regional bicycle/pedestrian facilities.
- 2 Bike/Pedestrian Rail & Missouri River Crossings**  
Preserve the long-term potential to use the Missouri River railroad bridge as a bicycle/pedestrian crossing. This would enhance connectivity between the riverfront and the Elwood/Wathena.

## Multimodal Corridors/Connections

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- 3 Riverside Road (AC) Bicycle Connection**  
Complete the partially constructed multi-use trail that already exists in the corridor.
- 4 Cook Road Bicycle Connection**  
As a priority roadway improvement, this corridor provides an opportunity to accommodate an east-west bicycle facility that connects to the existing urban trail system.
- 5 Missouri Western State University Connection**  
Enhance connections to MWSU, and Riverside Road, to downtown St. Joseph. This would likely occur through a I-29 underpass with a connection to the existing urban trail system.

## Local Bicycle/Pedestrian Improvements

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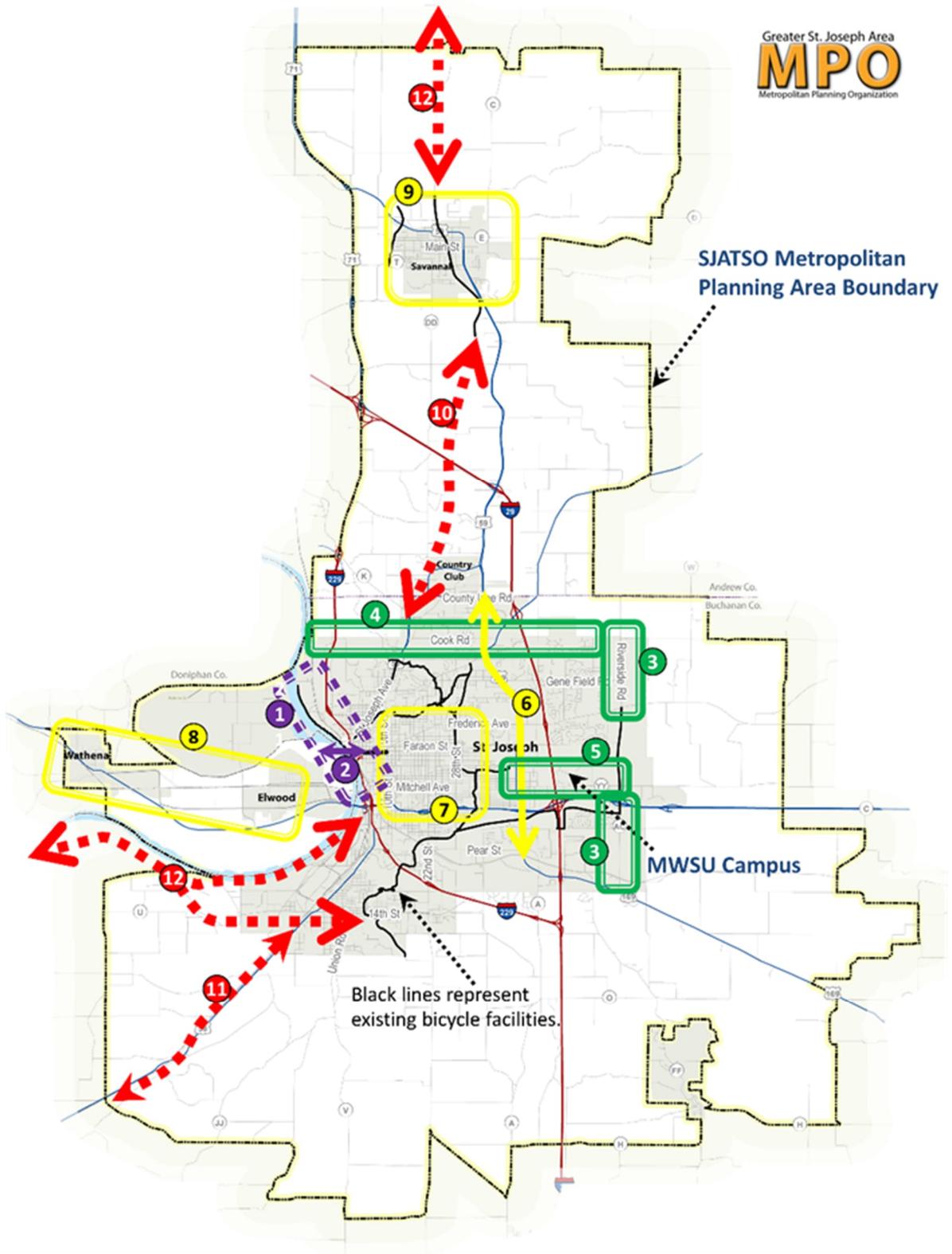
- 6 Belt Highway Sidewalk Improvements**  
Develop a comprehensive sidewalk network along the corridor, with a priority focus on improving areas around transit stops along the corridor, including access to a planned/new transit facility.
- 7 St. Joseph Bicycle/Pedestrian Improvements**  
Continue to invest in sidewalk improvements throughout the neighborhoods and in the downtown.
- 8 Elwood/Wathena Bicycle/Pedestrian Improvements**  
Explore opportunities to enhance bicycle and pedestrian connections, including the possible use of the abandoned rail line for a multi-use trail.
- 9 Savannah Bicycle/Pedestrian Improvements**  
Explore opportunities to expand bicycle and pedestrian infrastructure, especially in new residential development areas.

## State/Regional Trails (Quad State Trail Elements)

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- 10 Rails to Trails (connecting north to Savannah)**  
Explore opportunities to construct the rails to trails connection that would use an abandoned rail line to connect St. Joseph, Country Club Village, and Savannah.
- 11 US-59 Hike and Bike Trail**  
Explore opportunities to construct an approximately 10-mile trail connecting St. Joseph to Rushville using former BNSF right-of-way.
- 12 Quad State Trail Connection**  
Explore opportunities to construct a multi-state trail that connects to, and through, the region.

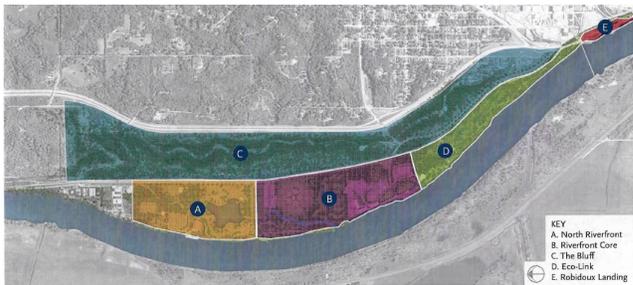
Figure 4: Priority Non-Motorized Issues and Needs



1

St. Joseph Riverfront Master Plan – Bicycle and Pedestrian Elements

The St. Joseph Riverfront Master Plan, completed in 2019, identifies improvements to the active transportation network. The final concept divides the riverfront into five sections: North Riverfront, Riverfront Core, The Bluff, Eco-Link, and Robidoux Landing (see below). The existing Riverfront Trail would undergo improvements in the Riverfront Core area and be extended into North Riverfront, and streetscape improvements would be implemented along Waterworks Road. East of Waterworks Road, in the area called The Bluff, new bike/pedestrian trails would be created with views over the river, and a long-term extension of Cook Road would provide a new access route to the riverfront. The Eco-Link area would have numerous non-motorized paths and trails, as would Robidoux Landing. Notably, Robidoux Landing is proposed to have a Trail Center that builds on the opportunities identified by the National Park Service in their plans to expand trails connected to the Pony Express, as well as a pedestrian bridge across the river and a grade-separated pedestrian bridge over the railroad tracks to improve non-motorized access to the riverfront.



Riverfront Development Plan



Existing Riverfront Trail

As noted in the Riverfront Plan, there are opportunities to improve the existing infrastructure along the riverfront. The current northern terminus of the existing riverfront trail could be extended farther north, and the connectivity and condition of the southern portion could be improved. A multimodal trail is proposed on the bluff, offering scenic overlooks with and non-motorized trails with views of the riverfront and the river itself. This Bluff Trail would be integrated with the larger Riverfront trail network. Illustrations of potential improvements are provided in Figure 5.

In conclusion, the Riverfront Master Plan improvements should be closely coordinated with the I-229 reconstruction, which will eliminate the Double Decker bridge and replace it with an at-grade arterial roadway.

Figure 5: Riverfront Trail, Bluff Trail, Cook Road Connection



2

Bike/Pedestrian Bridge and Missouri River Crossing

The Riverfront Plan calls for the development of bicycle/pedestrian bridge that would connect Missouri and Kansas, crossing the Missouri River. The plan includes a standalone bridge alternative which would be a long-term, capital-intensive priority; however, other options exist. First, if a new river crossing (roadway) was constructed there would be an opportunity to incorporate bike and pedestrian facilities into that bridge design. Second, the current UP rail crossing bridge is a relatively low use facility and if rail service were to ever stop this bridge could potentially be converted into a bike and pedestrian facility.



Riverfront Development Plan – Pedestrian Bridge Rail Crossing and Missouri River Bridge Crossing



The Riverfront Development Plan includes a Pedestrian Bridge Rail Crossing to enhance connectivity between the downtown area and the riverfront.

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Multimodal Corridors/Connections

The urban trail system provides the foundation for the core bicycle network within St. Joseph. This network could be enhanced by the development of key corridors that would include bicycle accommodations. The following highlights the key multimodal corridors/connections.

Riverside Road (Route AC)

Riverside Road includes a partially completed multi-use trail (between Messanie and Frederick Avenue). The long-term vision for this corridor involves developing a comprehensive trail that would extend north to connect with Cook Road.



The long-term vision for Riverside Road includes a continues multi-use trail.

Cook Road Corridor

Cook Road was identified as a priority roadway improvement in the 2045 MTP and remains a priority in the 2050 MTP. As the corridor is improved, it would create an opportunity to develop an east-west active transportation connection that could potentially extend from the Missouri River to the Riverside Road corridor. Current Cook Road conditions, primarily west of the Belt Highway, are not suitable for safe bicycle travel given the narrow road conditions. The Cook Road overpass at I-29 is currently under construction which when complete should better accommodate bicycles and pedestrians.



Current Cook Road conditions, west of the Bleth Highway, do not currently accommodate bicyclists and pedestrians.

[continued on next page]

Multimodal Corridors/Connections [continued from previous page]

Missouri Western State University Connection to Downtown

There is a need to provide a safe and comfortable non-motorized connection between the MWSU campus and the growing Riverside Road corridor with downtown St. Joseph. This facility would focus on enhancing a connection to the existing urban trail system and would require improvements to accommodate an I-29 underpass (see existing underpass below). Public outreach during the MTP development process, and previous MTP efforts, have indicated support for enhanced bicycle and pedestrian connections, including potential improvements along Mitchell Avenue. As part of the 2050 MTP, input from the Bicycle Advisory Committee suggested that other east-west routes could be explored. As part of a related comment, committee members indicated that improving the east-west crossing of the Belt Highway was important to improve safety for vulnerable roadway users.



A connection under I-29 could potentially be used to connect to the existing urban trail system which would enhance bicycle travel between downtown St. Joseph and WMSU campus, and to the Riverside Road corridor.

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### Local Bicycle/Pedestrian Improvements

The following highlights local bicycle/pedestrian improvements that would enhance the regional multimodal system. These include the following:

#### Belt Highway Sidewalk Improvements

Sidewalk conditions along the Belt Highway vary from recently constructed (new) sidewalks, existing sidewalks that require repair, to segments that do not have any sidewalks. These conditions make walking the corridor difficult and potentially unsafe. Furthermore, the inconsistent sidewalk network makes it difficult to provide bus stops along the Belt Highway as riders become pedestrians after leaving the bus. This has become even more important given that the *Go. St. Joe* now operates a north-south route along the Belt Highway and is exploring sites for a new transit center along the corridor. Sidewalk, and intersection crosswalk, connectivity should be an important component of any future study of the Belt Highway. Finally, SJATSO is looking for opportunities to replace, or construct, sidewalks along the Belt Highway as opportunities present themselves.

#### St. Joseph Bicycle/Pedestrian Improvements

The City of St. Joseph has invested in downtown sidewalk and streetscaping in recent years. These improvements have been very helpful in enhancing the pedestrian environment, making it safer for all transportation users. During previous MTP updates some stakeholders indicated a desire to continue to improve sidewalk conditions, not only in the downtown but in surrounding neighborhoods.

Recently, the National Park Service expressed interest in opportunities to promote and/or expand the Historic Pony Express trail, among other improvements to the active transportation network, such as a pedestrian bridge across the Missouri River and an elevated pedestrian rail crossing in St. Joseph. As St. Joseph was the original starting location of the Pony Express, suggested improvements from an MTP outreach meeting included the development of a historic bike tour around St. Joseph to build upon this piece of local history and support local tourist destinations like the Pony Express Museum and others. Such a program would also support federal requirements to identify projects that support tourism and local economic activity.

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Local Bicycle/Pedestrian Improvements [continued from previous page]

Elwood/Wathena Bicycle/Pedestrian Improvements

Perhaps the biggest opportunity to improve bicycle/pedestrian facilities in the Elwood and Wathena area would be converting the Union Pacific rail line to a multiuse trail. Such an improvement would make a bicycle ride between the two communities an easy day's outing for local residents, in addition to attracting tourists interested in camping and fishing, with access to the Missouri River.

Savannah Bicycle/Pedestrian Improvements

Opportunities to add bicycle/pedestrian improvements should continue to be a priority in new development/growth areas. As the regional trail network expands, Savannah will be an important destination along the system and can capitalize on these opportunities.



State/Regional Trail Connections

There are numerous opportunities to bridge gaps in the non-motorized trail network, such as within existing conservation areas, rails-to-trails projects, or utilizing utility easements, as described below. It is incumbent on local governments and advocacy organizations to remain observant of notices of rail abandonments and take advantage of opportunities to preserve rail right-of-way for future active transportation trails.

Trails within Existing Greenways	Rails to Trails	Utility Corridors
<ul style="list-style-type: none"> <li>• Includes conservation areas such as the Missouri River levee system and areas within the St. Joseph Parkway System or within state parks that must connect to the network.</li> <li>• Drainage areas, or conservation trails, also offer future trail options and include various rivers, creeks, and streams within the area over which most communities already maintain easements.</li> <li>• This option is often expensive and challenging to explore but provides benefits in accessing properties at a neighborhood scale. For example, natural areas along the One Hundred and Two River, Whitehead Creek, and connected sub-basins offer trail opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>• Includes both the re-acquisition and retention of railroad corridors.</li> <li>• The category has proven itself on a national basis and operates as one of the safest, cheapest (mile for mile), and most popular environments for trails.</li> <li>• With the majority of rail corridors being entirely grade separated, there are fewer conflict points between the trail users and automobiles. When these conflict points occur, the Manual on Uniform Traffic Control Devices provides appropriate mitigation measures.</li> </ul>	<ul style="list-style-type: none"> <li>• Includes electric utilities and underground pipeline easements that crisscross the region.</li> <li>• It is common in some regions for utilities to allow the use of their easements for trails. This is often considered advantageous for utility owners as another jurisdiction is responsible for vegetation maintenance and it offers an opportunity for supporting public welfare that many corporations strive for.</li> <li>• Such uses also enhance utility access for system maintenance.</li> </ul>

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State/Regional Trail Connections [continued from previous page]

### Rails-to-Trails Connections

In a planning study completed in 2012, SJATSO conducted a Rails-to-Trails inventory as an initial step to assess the feasibility of the extending a regional trail from St. Joseph to Savannah and St. Joseph to Wathena. Discussions with local officials in the northern section of the MPA highlighted a need to not only expand the regional trail connection, but to identify opportunities to identify and develop future east-west connections that would connect to the primary north-south regional trail.

Moving forward with implementation of the St. Joseph Rail-to-Trail relies on development of a strong advocacy organization or committee made up of local government officials and community leaders. Just as important is to develop a list of trail user groups (i.e., bicycle clubs, running clubs, hikers, etc.) to provide local knowledge and support.

While the two railroad corridors have varying requirements, which will need to be addressed separately, the study resulted in the following general conclusions:

- There is consensus that the trail segments that are in the more populated areas would eventually have an asphalt surface treatment, while those in outlying areas may be developed with lower-cost limestone screenings surfacing.
- Priority segments should tie key community locations together first. Higher trail traffic areas provide a greater spectrum of benefits.
- Build first where opposition is low, as trail popularity will prompt further development in areas where opposition may be higher.
- Avoid difficult crossing areas and high expense alignments in favor of those which direct trail traffic into and through community downtowns and commercial areas.

The Elwood and Wathena connection examined a 5.6-mile rail line as part of the 2012 St. Joseph Rail-to-Trail Corridor Plan. Roughly following the route of the Pony Express, the line is mostly abandoned now, though there is a portion that is still active (supporting just a few trains a week) within the Elwood city limits, from the river to 15<sup>th</sup> Street. About 2/3 of the right-of-way is owned by Union Pacific, and 30 percent is unassigned ownership according to parcel data. Further investigation of ownership will be needed but generally the right-of-way acquisition potential is there. This corridor would however require crossing the Missouri River, and there will be tradeoffs regarding whether to rebuild the dismantled bridges or to investigate alternative routes (as suggested in the Riverfront Development Master Plan).

### US-59 Hike and Bike Trail

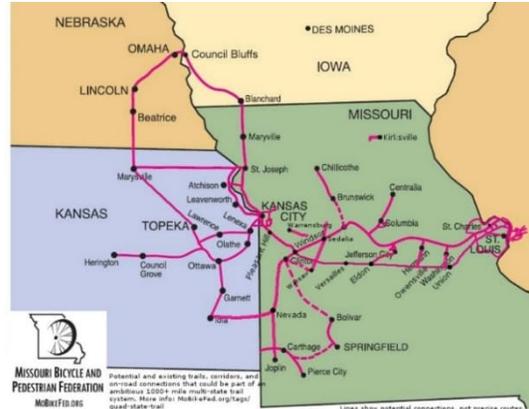
Buchanan County is currently working on a project that would construct an approximately 10-mile trail connecting St. Joseph to Rushville using former BNSF right-of-way. This facility would greatly enhance access to the existing St. Joseph area bicycle facilities.

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State/Regional Trail Connections [continued from previous page]

Quad State Trail Connection

The Quad State Trail is a planned non-motorized trail network of over 700 miles, including existing segments extending from St. Louis to Omaha and Lincoln, NE. Some of the existing trail passes through the St. Joseph area adjacent to the Missouri River on sections of the Riverfront Trail. An alternative alignment would allow bicyclists to traverse the City through the existing parkway system, which would require some potential connector improvements. The alignment of trail through the MPA has not been determined. Completion of the Quad State Trail through the St. Joseph area would substantially enhance the current active transportation network at the local and regional level.



Sections of the Quad State Trail that are expected to pass through the MPA include:

<p><b>Union Pacific &amp; Chicago &amp; Great Western Corridors</b></p> <ul style="list-style-type: none"> <li>• Middleton North through Country Club Village to Savannah</li> </ul>	<p><b>Union Pacific Corridor</b></p> <ul style="list-style-type: none"> <li>• Elwood through Wathena to the West</li> </ul>	<p><b>Inter Urban, Rock Island Corridor, BN Corridor</b></p> <ul style="list-style-type: none"> <li>• South toward Platte City</li> <li>• Southern MPA connection</li> </ul>	<p><b>Missouri River Levee System</b></p> <ul style="list-style-type: none"> <li>• Conservation Areas North and South</li> </ul>
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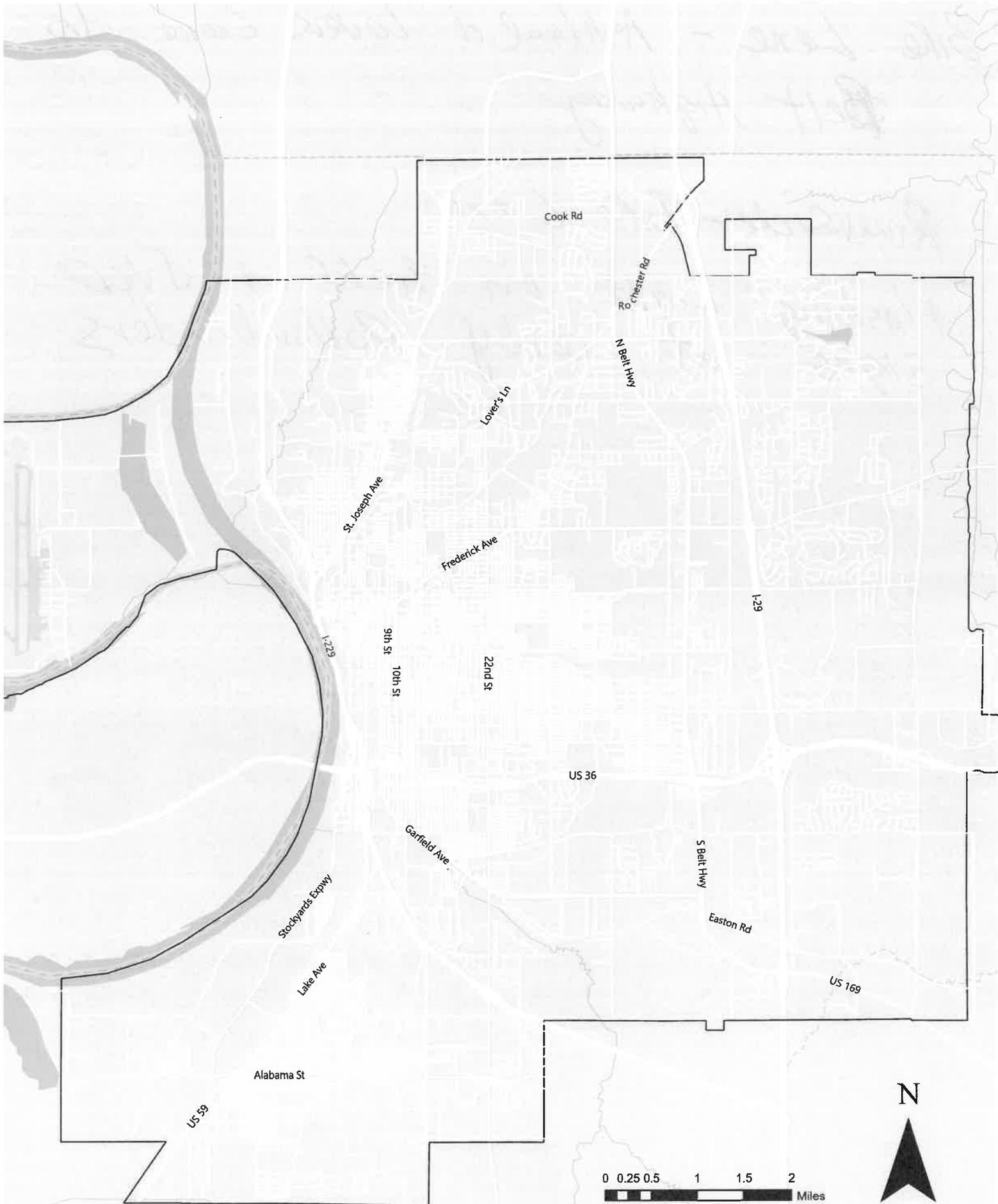
Appendix

The following comments were provided by members of the Bicycle Advisory Committee during the development of the 2050 MTP. These comments help reinforce previous active transportation plan elements, as well as helping identify new issues/concerns. These comments are also helpful to review in future updates of the Active Transportation Plan.

Bike Lane - Ashland & Lovers Lane to  
Belt Highway

Riverside - Bike Lane

Flashing Light on Yield & Stop  
Signs at Corby Rollerbladers



Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Frederick - bike lane at least on section marked (downtown to Noyes)

Lovers Lane - not bike / running friendly, no sidewalk

Ashland - connects N Parkway to Corby / Noyes, sidewalk is terrible, should feel continuous, bike lane would be helpful

Cook Rd. - Shoulder or wider road (not bike friendly) - a lot of cyclists ride this and it's very busy.

Faraon - great connector from east to west but foot traffic / no bike lane. Bike lane to downtown would be great! Or at least look at an option to cross Belt @ North end (Cook!)

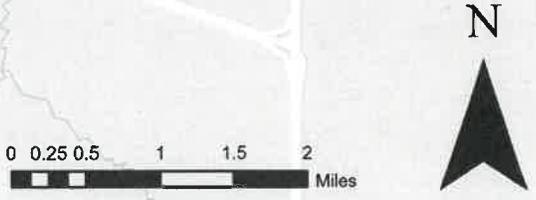
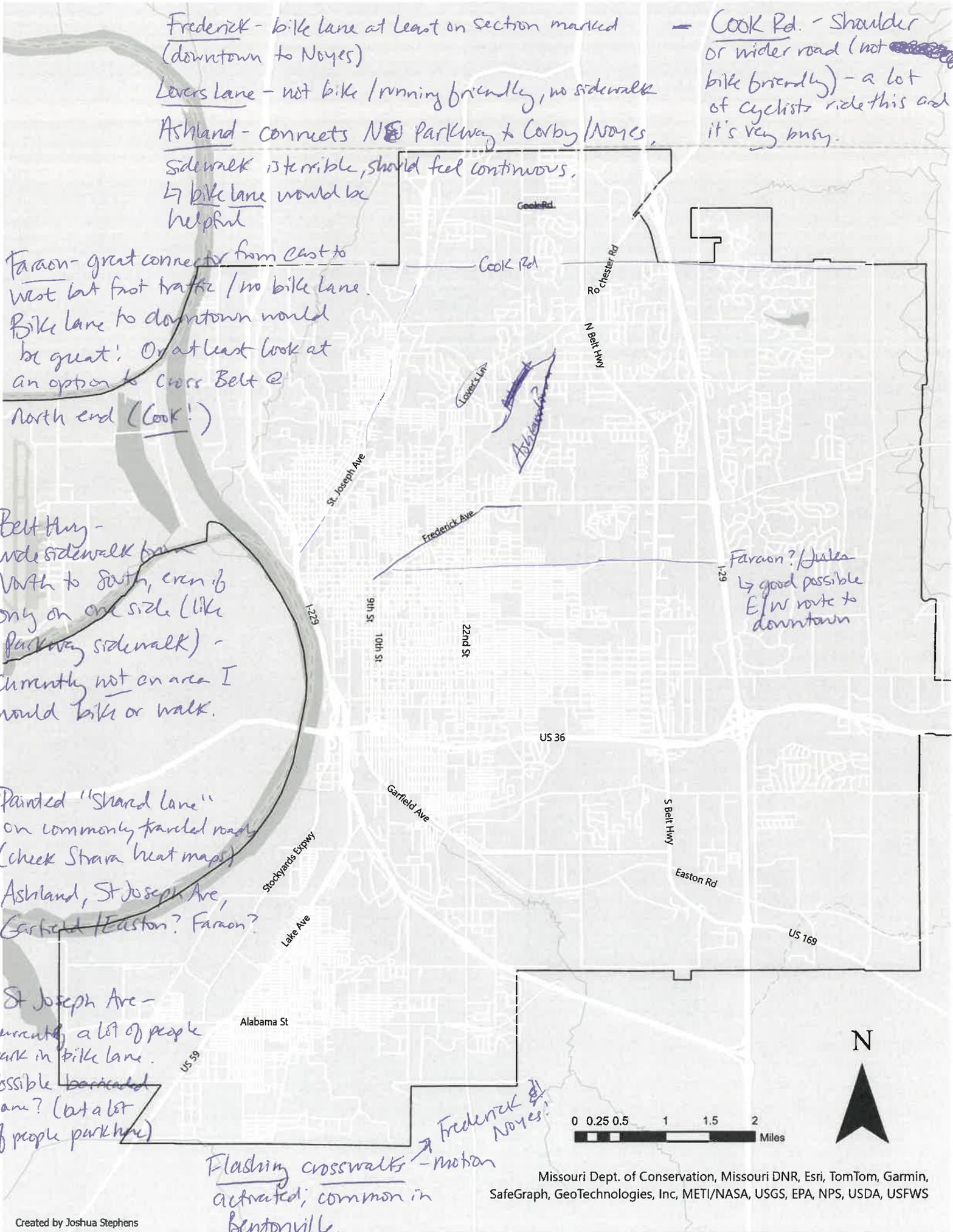
Belt Hwy - wide sidewalk from North to South, even if only on one side (like Parkway sidewalk) - currently not an area I would bike or walk.

Painted "shared lane" on commonly traveled roads (check Strava heat maps) Ashland, St Joseph Ave, Garfield / Easton? Faraon?

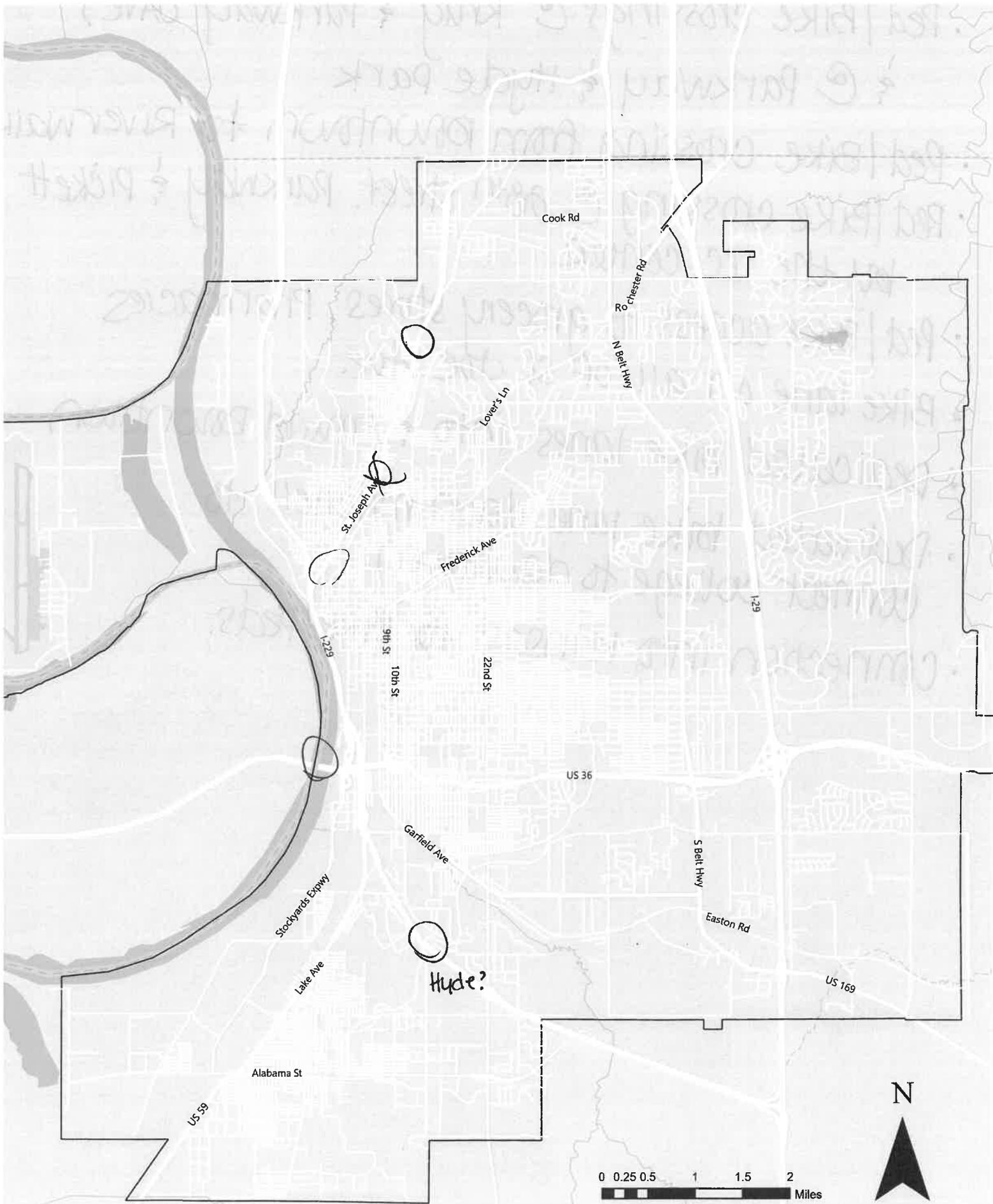
St Joseph Ave - currently a lot of people park in bike lane. Possible barricaded lane? (but a lot of people park here)

Flashing crosswalks - motion activated; common in Bentonville

Frederick @ Noyes!

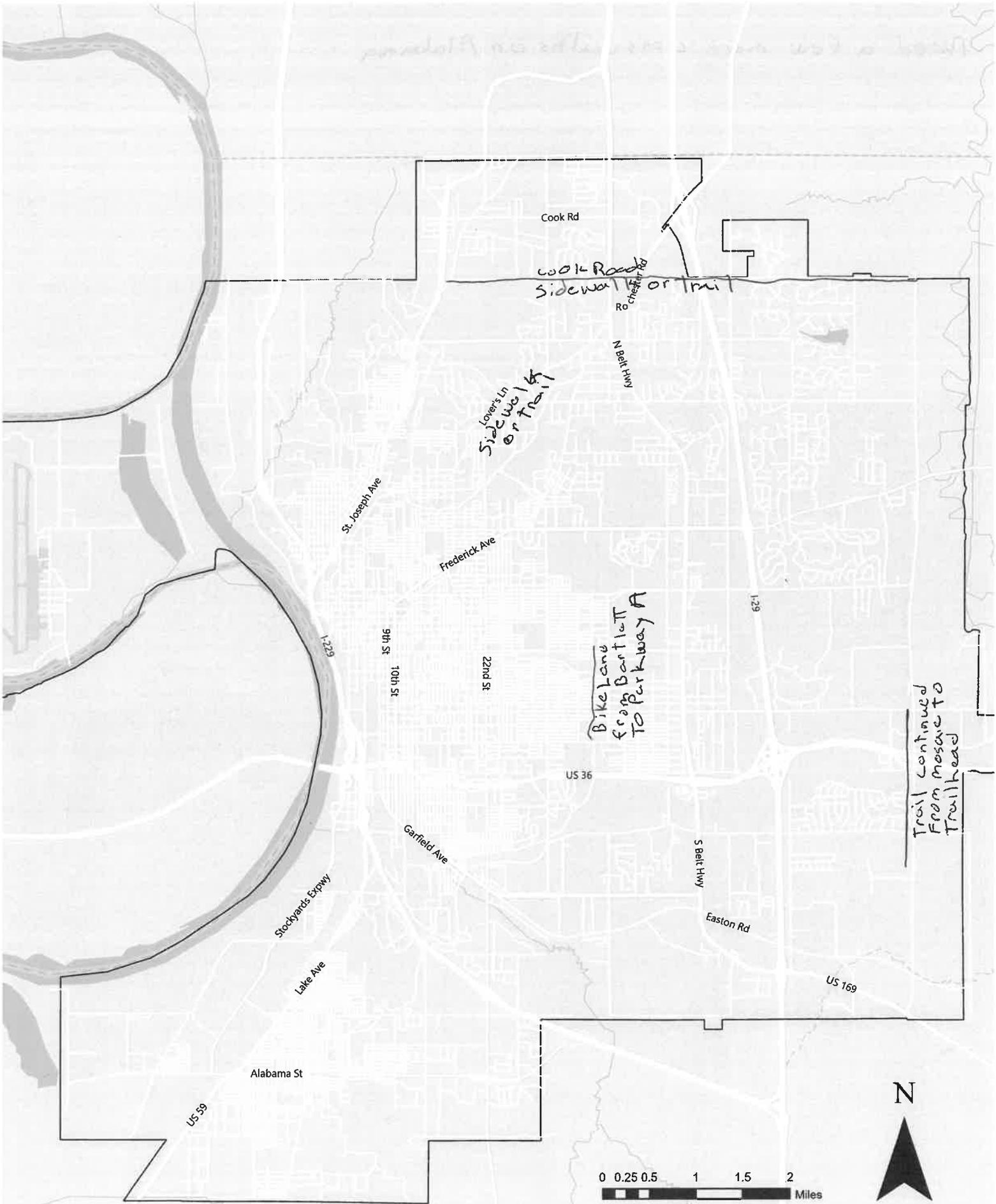


Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS



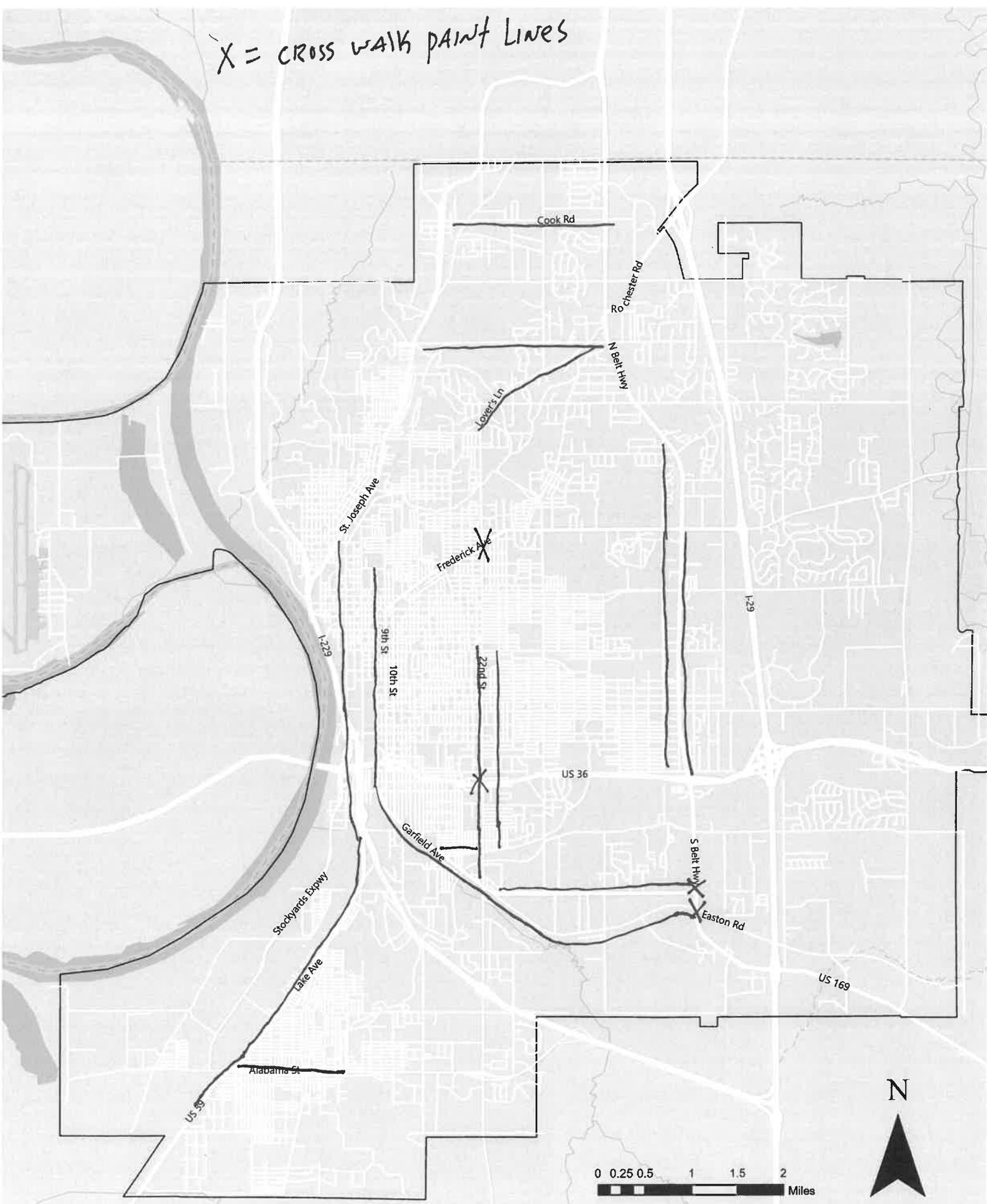
Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

- Ped/Bike crossings @ Krug & Parkway (Ave)  
& @ Parkway & Hyde Park
- Ped/Bike crossing from downtown to Riverwalk
- Ped/Bike crossing @ 28th street, Parkway & Pickett  
by the rec center
- Ped/Bike access to grocery stores, Pharmacies
- Bike lane on all of St. Joe Ave.
- Dedicated bike lanes into & around downtown
- Dedicated bike lane down Mitchell to  
connect college to downtown.
- Connection into Kansas for Bike/Peds.



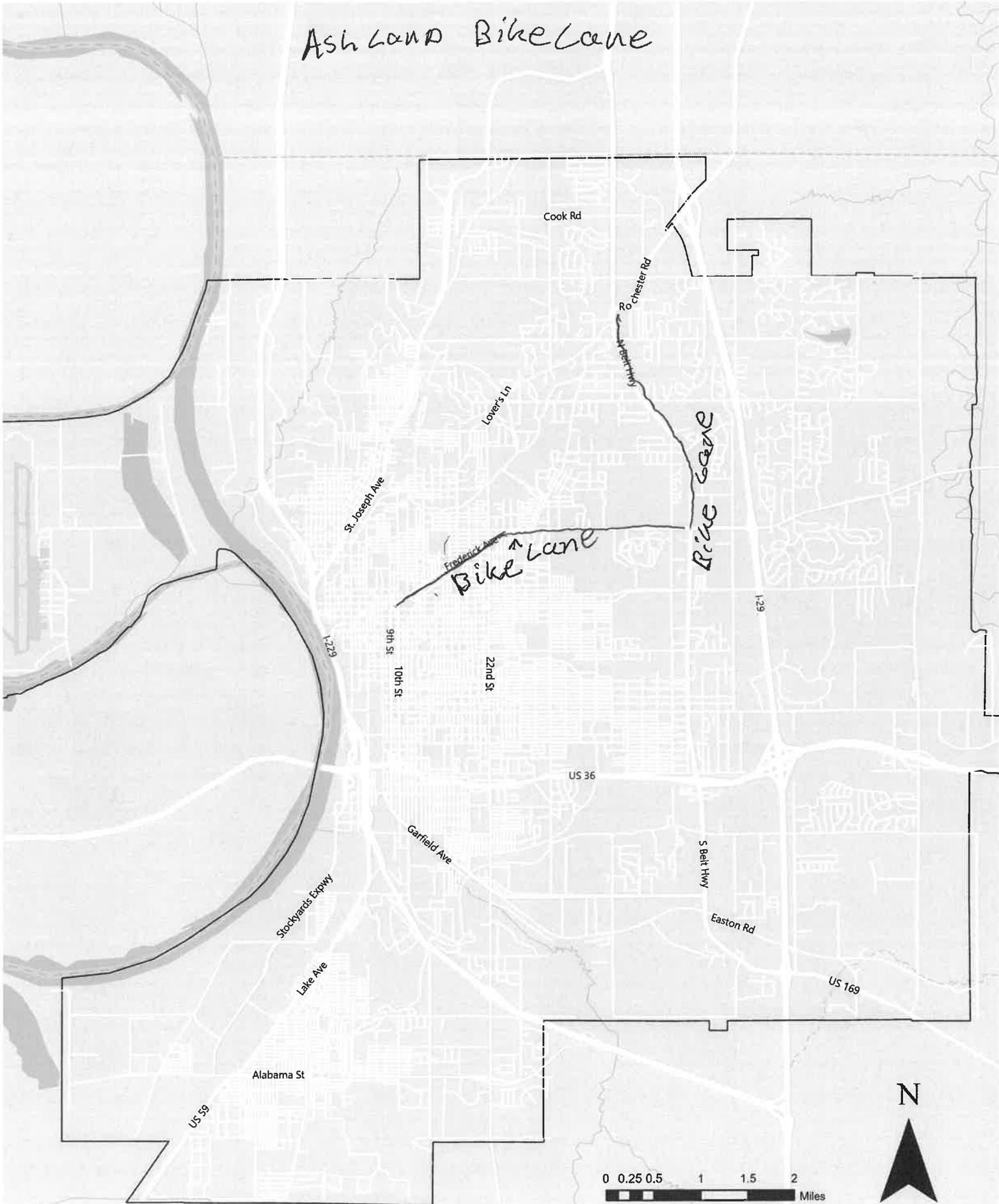
Need a few more crosswalks on Alabama

X = CROSS WALK PAINT LINES



Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

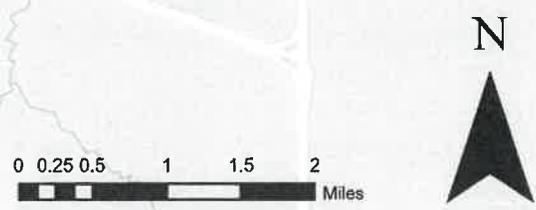
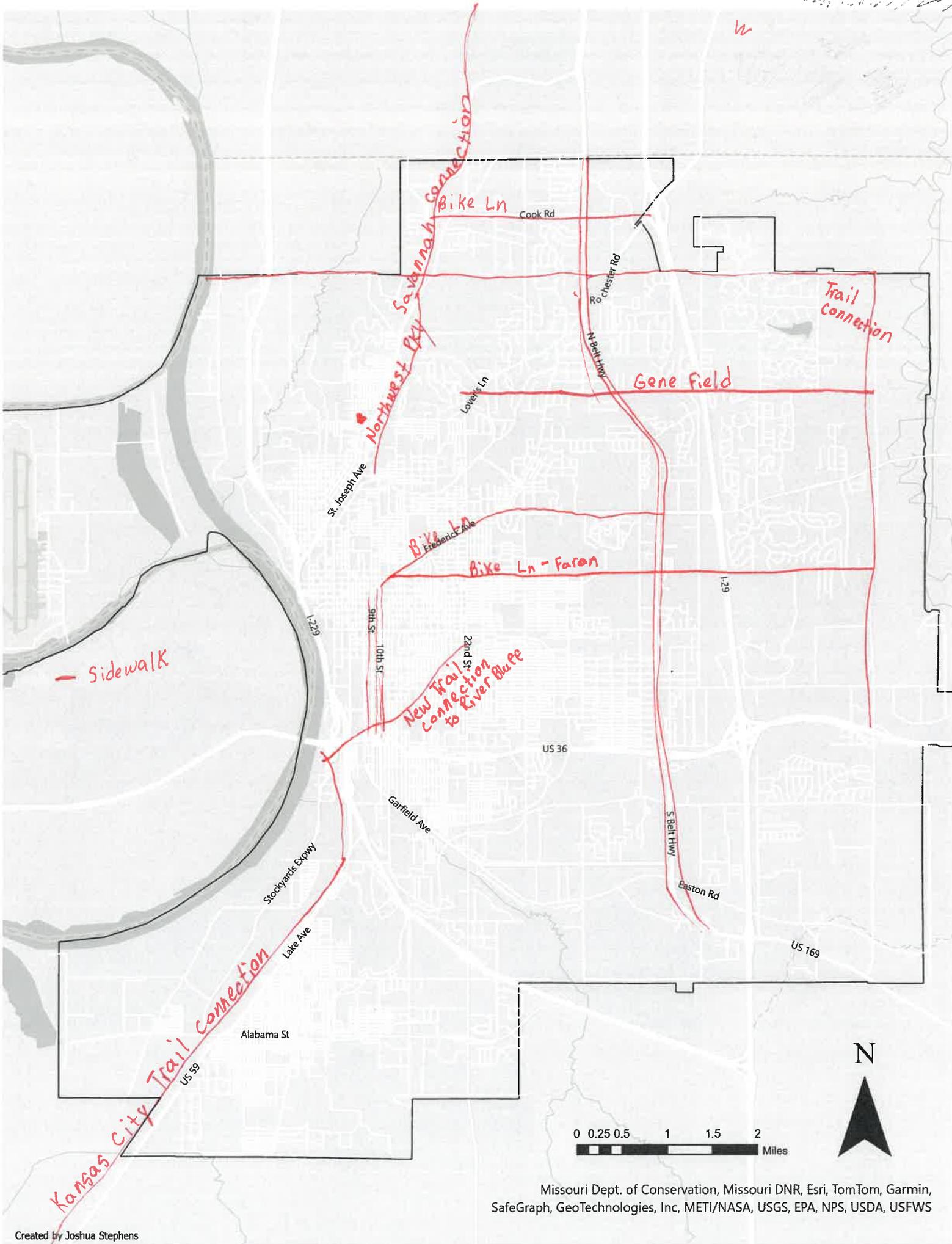
# Ashland Bike Lane



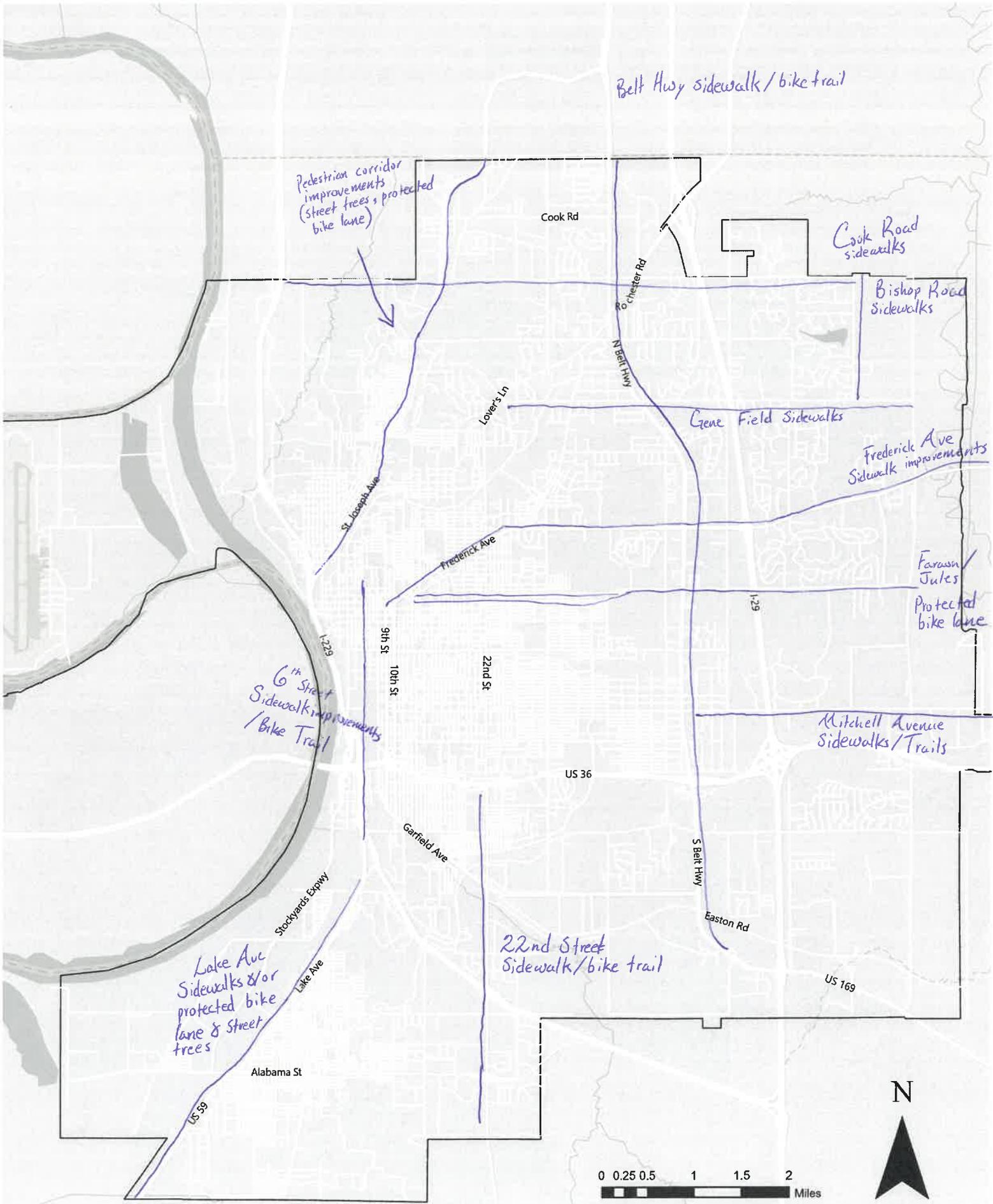
Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

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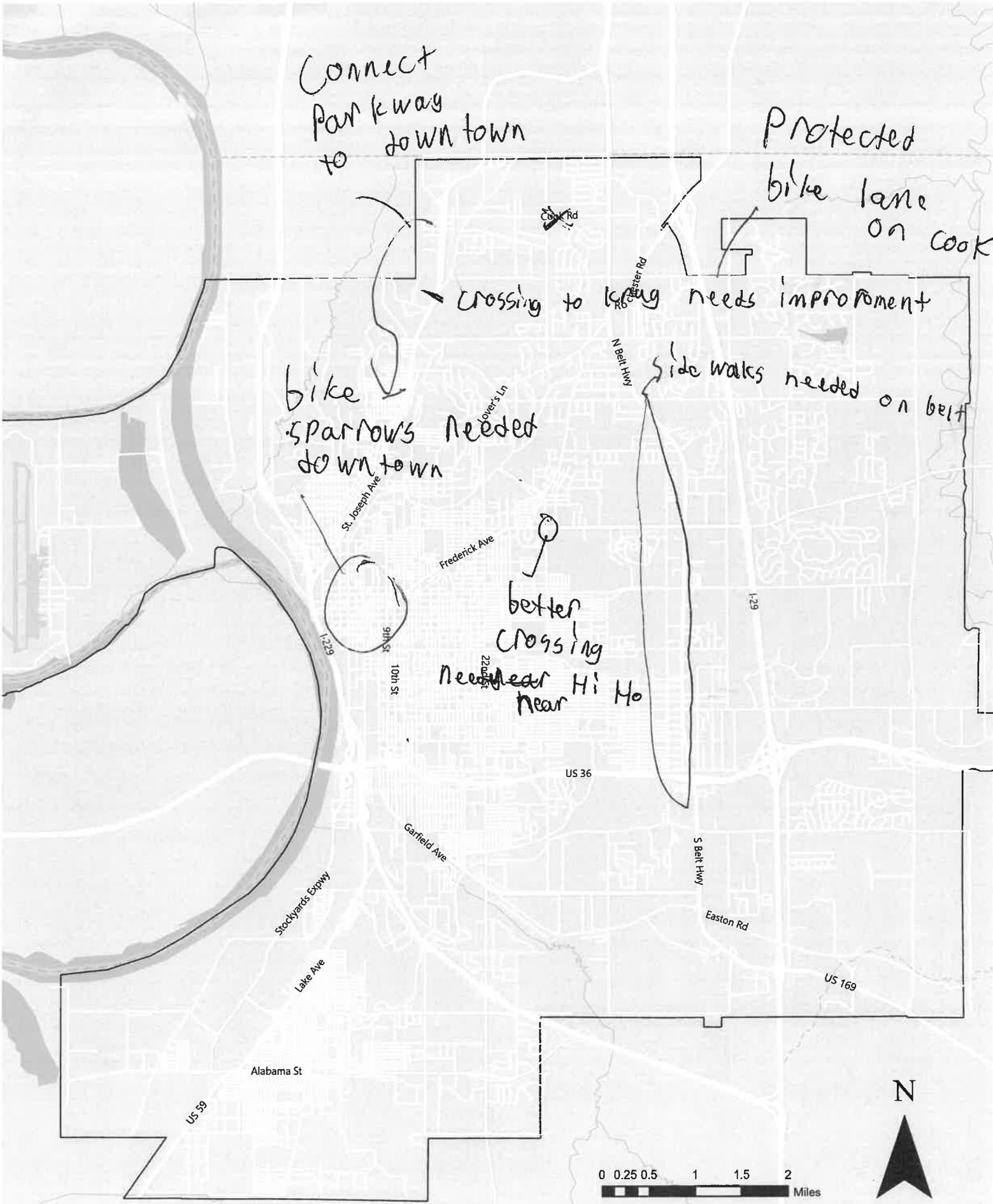
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Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS



Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS



Connect Parkway to downtown

Protected bike lane on Cook

Crossing to Long needs improvement

bike sparrow's needed downtown

side walks needed on belt

better crossing needed near Hi Ho

0 0.25 0.5 1 1.5 2 Miles



Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS