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# Executive Summary

## Joplin West Corridor Purpose and Need Study

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### Introduction

Joplin, Missouri is located in southwest Missouri in the "four-states" region encompassing Missouri, Oklahoma, Kansas, and Arkansas. Located at the edge of the Ozark Mountain region, Joplin has a current population of approximately 50,000. The daytime population is almost a quarter of a million people, making it one of Missouri's largest metropolitan areas. As part of their on-going efforts, Joplin is actively pursuing the continued vitality of the region.

As the largest metropolitan area in the four-state region, the Missouri Department of Transportation (MoDOT), the city of Joplin, and the Joplin Area Transportation Study Organization (JATSO) have cooperatively undertaken this purpose and need study to investigate the transportation needs of western Joplin.

### Why We Are Studying Western Joplin?

Joplin is actively engaged in transportation planning to create a system where access patterns support community goals. Among the region's goals are to:

- Provide for the development of an efficient and safe transportation system for the movement of people and goods.
- Provide a transportation system that enhances economic vitality in the Joplin area.
- Provide for a balanced transportation system that provides a choice of travel modes for different individuals and activities.
- Provide for a more vibrant, more pedestrian-friendly downtown.

In accordance with these goals, the Joplin Metropolitan Area Long Range Transportation Plan<sup>1</sup> (LRTP) includes a new corridor on the west side of Joplin. This western corridor is identified as a 16-mile limited access highway on new alignment between Route 171 and I-44. The West Joplin Purpose and Need Study investigates the transportation issues that affect western Joplin, evaluates the benefits of a new western corridor and identifies the evaluation criteria that will be important for determining how well alternatives will address the identified transportation issues.

### How We Are Studying Western Joplin?

A purpose and need study is considered a "Pre-NEPA" document. It is unique because it doesn't investigate specific solutions, but rather focuses on issues and how to properly consider those issues. In this case, the transportation issues associated with western Joplin will be considered within the context of a new western corridor. The major elements of the Joplin West Corridor Purpose and Need Study include:

- The investigation of community and economic development trends.
- The creation of a traffic model to predict changes in traffic volumes and pathways.
- The investigation of changes in level of service.
- The analysis of crash rates in western Joplin.
- The review of existing roadway

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<sup>1</sup> The LRTP serves as the "blueprint" for the Joplin metropolitan area's transportation system through the year 2025.

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- conditions and configurations.
  - The evaluation of multimodal connectivity.
  - The development/implementation of a public involvement plan to engage stakeholders.

## What are the Issues Facing Western Joplin?

The Joplin West Corridor Purpose and Need Study identified the following purpose and need elements:

- 1) A western corridor is critical to accommodating the economic development, population growth, and land use changes projected for Joplin.
- 2) The lack of a western corridor affects the safety and operation of the region's other north/south corridors.
- 3) A western corridor will benefit multi-modal connectivity in Joplin.

## Important Travel Trends in Western Joplin

The important travel trends uncovered by the traffic modeling efforts include:

- Without a western corridor, the total annual detour miles traveled by the through trips entering Joplin at Route 171 and exiting the region at I-44 and Route 66 could be as high as 700,000 miles annually. The economic impact due to lost productivity at just these locations could be as high as 17,000 hours per year, roughly 2,100 work days.
- Without an appropriate western pathway, eastern Joplin will continue to experience growth and this in turn will result in disproportionately higher traffic along the region's major eastern north/south corridors. *For example, without a western corridor, traffic volumes on portions of Main Street will increase 30 percent over existing conditions.*

- Without a new western corridor, truck traffic will increase on the local road system which will negatively impact economic development in Joplin due to increased congestion and travel times.
- A western corridor will foster additional economic development and improved mobility in the Joplin area. *For example, roughly 50 percent of the corridor-related trips on Route 66 are expected to be on non-casino trips.*
- Without a western corridor, traffic on the existing (local) roadways would increase substantially - more than doubling in some cases.

## Next Steps

One thing that a purpose and need study does not do is examine specific alternatives. With the transportation issues confronting the region well established, it is now appropriate for decision-makers to move forward with the development and evaluation of specific solutions (configurations/alternatives) to address these issues.

The technical data collected in the purpose and need study will form the basis to evaluate which solutions are superior. The typical progression is from conceptual alternatives (*typically broad and non-specific solutions*) to reasonable alternatives (*specific solutions that clearly satisfy the project's purpose and need*) to the preferred alternative (*the solution that best accomplishes the purpose and need while avoiding, minimizing, or mitigating impacts*). At each step, more detailed data is available to assist in the decision-making process. Within this process, public involvement and stakeholder involvement is vital. It allows MoDOT, and its partners, to better understand the needs, goals, and desires of those most closely affected by the project.