

Growing with Grain Valley

Main Street Interchange Improvements



What's the problem?

The current interchange at Main Street/Buckner Tarsney does not have the traffic capacity to meet the current vehicle demands leading to unsafe conditions for the traveling public. This restriction has limited economic development within Grain Valley. The daily traffic back-ups and delays have become a burden for residents, existing businesses and visitors.

What is the severity of the problem?

Constructed in 1963 the existing interchange does not meet current department of transportation standards. With the current layout, US 40 Highway intersects Main Street/Buckner Tarsney less than 60 feet from the eastbound off ramp of I-70. The bridge overpass is well below the desired clearance.

Safety is compromised due to the close proximity of all the north and south outer roads which requires drivers to process significant amounts of information at one time to navigate safely.

Also, accommodations for pedestrians or other forms of transportation are non-existent with the current configuration.

With these deficiencies, and a rapidly growing population, the interchange operates mostly over capacity during peak commuter times.

What is the need we are addressing?

This project will not only address vehicular congestion at the interchange and the ramps to I-70 but also promote alternative forms of transportation such as pedestrian connectivity and cycling in the safest way possible. A newly configured interchange will also open up economic development possibilities to better serve the public and create a more aesthetically pleasing downtown with a positive sense of community.

Who thinks it's a problem?

Delays, congestions, and back-ups are becoming common place for those living, working and traveling to Grain Valley due to rapid growth within the City.

Elected officials along with citizens and local businesses recognized the need to identify the cause of the problems and find solutions that benefit the entire community.

Who helped us identify it as a need?

The City has selected the engineering consultant TranSystems to help identify the current problems and determine the best solution through proper engineering design. The City, along with TranSystems is also working very closely with the Missouri Department of Transportation to finalize the best solutions and guide the project through all the multijurisdictional permits and studies.

What are the current conditions?

The current interchange does not have the traffic capacity to meet the current demand, creating unsafe conditions, restricting regional traffic flow, and limiting economic development within the City. US 40 Highway intersects Main Street / Buckner Tarsney less than 60 feet from the eastbound off ramp of I-70, which has been the configuration since I-70 was constructed in 1963. The existing bridge that carries I-70 over Main Street / Buckner Tarsney was originally placed into service with a fifteen foot three inch clearance. Since that time, changes to the pavement under the bridge have reduced this to fourteen foot eight inch clearance, well below today's minimum clearance standards. The current north and south outer roads do not meet the current separation standards from the interchange traffic signals.

What is the solution?

To provide better traffic operations through and around the I-70 interchange with Main Street / Buckner Tarsney the following improvements are proposed:

- Relocating the US 40 and Main Street / Buckner Tarsney intersection approximately 400 feet south of the current location to increase the separation from the traffic signal at the I-70 southern ramp terminals.
- A modification of Main Street / Buckner Tarsney south of US 40 Highway to two through lanes and a center protected turn lane.
- Improvements to promote alternative forms of transportation, such as pedestrian connectivity and cycling in the safest way possible.
- Improving the existing interchange with lanes added behind the columns of the existing bridge and additional turn lanes to the I-70 off-ramps to reduce backups and increase intersection capacity.
- Relocating the north outer roads approximately 600 feet north of the current location to increase the separation from the traffic signal at the I-70 northern ramp terminals
- Adding additional circulation by connecting James Rollo Drive and San-Karr Road.

Why is it the best solution?

Past traffic studies by the Missouri Department of Transportation (MoDOT) have shown the need to make improvements to this interchange. Along with MoDOT, the City's engineering consultant TranSystems produced a traffic study outlining the vehicular flows and safety enhancements after all improvements are in place. The City, TranSystems, and MoDOT have worked together to determine the best locations of ramps, lanes, drives, and horizontal and vertical layouts of roads to best serve the public and business in Grain Valley.

How will it be implemented?

The interchange project will be constructed in phases with some phases overlapping others. During construction temporary lanes will be placed to allow the flow of traffic while creating work zones for areas under construction. For any given phase, the contractor will complete as much work as possible before causing disruptions to existing traffic and the public. Alternative routes and project progress will be available from the City's website, MoDOT, and local cable channel 7. Information will also be shared with the local newspaper.

What is the impact to traffic?

Although not all phases of the project will begin at the same time, construction for utilities, drainage, and grading may occur in multiple locations at once. As with all projects of this magnitude some delays and congestion is expected with temporary road closures for equipment and material deliveries. Areas under

construction may also produce dust and debris that may inconvenience the public and nearby businesses. Although inconveniences are expected the City and MoDOT will work diligently to minimize these events as much as possible and appreciates the public's patience while work is being completed.

Will we or have we bought right-of-way?

This project will require some right-of-way along with temporary construction and utility easements. Due to the nature of this project, MoDOT will obtain any and all required easements or right-of-ways to complete this project.

When will it be completed?

The first phase of the interchange project is scheduled to begin early to mid 2011 and construction is expected to last approximately two years.