# EXECUTIVE SUMMARY

This study evaluates the feasibility of providing a new interchange on I-264 (Watterson Expressway) at Manslick Road (KY 1931), and examines four possible alternatives for the interchange configuration based on design constraints, traffic operations, stakeholder interest, and community and environmental constraints. A project study team approach was used, consisting of representatives from the KYTC Central Office, KYTC District 5, the Kentuckiana Regional Planning and Development Agency (KIPDA), Louisville Metro, and Qk4. Public involvement activities included resource agency coordination and stakeholder coordination.

The project area is in south Louisville, west of I-65, adjacent to the City of Shivley in Jefferson County, Kentucky. The Watterson Expressway (I-264) is the major east-west route through the project area. A partial interchange with Manslick Road (allowing traffic to and from the east on the Watterson Expressway was first proposed more than thirty years ago, but has thus far not been constructed.)

Manslick Road is one of several primary north-south routes through the project area—Taylor Boulevard (KY 1865) and Dixie Highway (US 31W) are located to the east and west, respectively. Both of the latter roads have interchanges with the Watterson Expressway. South of the Watterson Expressway, Manslick Road narrows from a four-lane to a two-lane facility. While improvements are included in KIPDA's list of projects for future funding, that project is not in the KYTC's current (2007-2012) Six-Year Highway Plan.


**Figure ES-1 – Project Location**

### Project Goals

The project goals were identified through discussions with KYTC staff, local officials and other project stakeholders. Congestion and safety issues are paramount, especially bottlenecks at the existing Dixie Highway and Taylor Boulevard interchanges with I-264.

Therefore, **the purpose of the project is to provide a safe roadway to alleviate traffic congestion in the project area, and to improve connectivity to the interstate network**.

The project study team developed the following project goals:

- Improve traffic operations and safety within the study area, including Taylor Boulevard and Dixie Highway and their respective interchanges with I-264
- Reduce congestion and congestion-induced crashes
- Improve connectivity with the Watterson Expressway
- Improve access to stakeholders that are heavily dependent on traffic circulation and interstate connectivity, including:
    - Sts. Mary and Elizabeth Hospital and their ambulance service response times
    - Jacob Elementary School and the Jefferson County Public Schools' Nicholas Bus Compound, the latter of which generates over 1,000 bus-trips per day during the school year using neighboring streets to access the Watterson Expressway
    - Louisville Metro Fire Station Engine #12, located on Manslick Road south of the Watterson Expressway, and their response times
    - Park Hill Industrial area located north of the study area that has no direct interstate access
    - Residential areas including Hazelwood, Cloverleaf, and Iroquois neighborhood

**Alternatives**

Six alternative solutions were evaluated:

- Do Nothing
- Traffic System Management (TSM) improvements
- Alternative 1 – Construct a full interchange with Manslick Road, with traffic coming from Manslick Road going west only able to access Dixie Highway, not the Watterson Expressway westbound.
- Alternative 2 – Construct a full interchange with Manslick Road, with traffic coming from Manslick Road going west able to access Dixie Highway and the Watterson Expressway westbound.
- Alternative 3 – Construct a partial interchange with Manslick Road, with traffic allowed only to and from the east on the Watterson Expressway
- Alternative 4 – Construct a full interchange with Manslick Road, with traffic coming from Manslick Road going west only able to access the Watterson Expressway westbound, but not Dixie Highway.

**Table ES-1 Comparative Matrix of Alternatives**

| Alternative | Meets Project Goals | Total Costs (Millions) | Residential Relocations | Impacts to Mill Creek (Linear Feet) |
|---|---|---|---|---|
| Do Nothing | ○ | $0 | 0 | 0 |
| TSM improvements | ○ | $0.5 | 0 | 0 |
| Alternative 1 | ◒ | $32.5 | 15 | 500 |
| Alternative 2 | ◒ | $40.3 | 17 | 600 |
| Alternative 3 | ◒ | $4.6 | 1 | 0 |
| Alternative 4 | ◒ | $32.5 | 15 | 500 |

○ = does not meet project goals ◒ = partially meets project goals

## Conclusion

After a careful review and consideration of the existing conditions, the cost and benefits, and constraints of constructing either a full or partial interchange, the Project Team recognizes that none of the alternatives fulfill the project goals. The Project Team recommends that Alternative 3, a partial interchange, that would allow access to and from the east be advanced only after widening Manslick Road (KY1931) to the south. At this time, the Do Nothing alternative is prudent. The reasons to advance alternative 3 at a later date are as follows:

- Between 70 and 80 percent of existing and future traffic travels to/from the east on I-264 from the Dixie, Taylor Boulevard, and the proposed Manslick interchanges
- The cost of constructing a full interchange are 7 to 9 times more than the partial interchange ($32.5 and $40.3, verses $4.6 million)
- The partial interchange would have only one right-of-way relocation and no anticipated environmental impacts
- The full interchange options, as compared to the partial interchange option, would have no appreciable benefit to traffic operations on the interstate and surface streets. The partial interchange would provide congestion relief to the same level as the full interchange options.
- A partial interchange has long been recognized and included in plans prepared by the City of Louisville
- A partial interchange concept, although not encouraged in FHWA policy guidance, meets the FHWA eight policy points for an Interchange Justification Study (IJS), but all partial interchanges require a policy exception and FHWA approval.

Should Alternative 3 be advanced it will require further detailed design and analysis, including a full IJS and National Environmental Policy Act (NEPA) analysis and documentation, in addition to detailed engineering and design and coordination and approval by FHWA.