

Planning is Important

Transportation Planning requires review, updates and adjustments as conditions change. The original K-10 West Leg South Lawrence Trafficway Study was completed in 1990. The roadway from I-70 to Iowa Street/U.S. 59 is a mixed use facility consisting of a fully access controlled freeway and expressway. The original study did not anticipate the future level of development west of K-10, which was the basis for selection of a mixed use facility.

Since conditions have changed, the Kansas Department of Transportation has conducted a study to evaluate alternatives to upgrade K-10 to a four-lane fully access controlled freeway facility for the entire K-10 West Leg SLT corridor. The preferred access alternative improves safety, meets future traffic projections and can be built while having a minimum impact to the natural and built environment. The preferred access alternative details are inside, but it has these key elements:

- Adds two additional lanes and a wide median to complete the four-lane freeway section.
- Relocates Farmer's Turnpike access to a new interchange at Lecompton Road in order to improve safety and reduce the close proximity of a local access street with a system to system interchange.
- Provide an interchange at Clinton Parkway on new K-10 alignment. The mainline curve will be flattened to improve safety.
- K-10/Wakarusa Drive at-grade intersection will be replaced with an overpass or underpass.
- A new interchange at Wakarusa Access with connector road to Wakarusa Drive.
- Elimination of Kasold Drive Access.

Bike and Pedestrian Trails

Bicycle and pedestrian trails in this area are being incorporated into the proposed improvements to maintain access to existing trails. The proposed improvements will also make biking and walking in the area safer because the trail access/connectivity will be appropriate for the changing facility type. KDOT does not allow bicycle or pedestrian use on freeways, but by providing overpasses/underpasses, crossing K-10 will be safer for bicyclists and pedestrians since the conflicts with higher speed traffic will be eliminated.



Next Steps

- Document Preferred Access Alternative - Late 2015
- Begin Preliminary Design - January 2016
- NEPA/Environmental Process and Documentation - Continues through Preliminary Design
- Continued Public Involvement throughout the Design Process

Funding

Currently no funding for construction has been identified. KDOT is evaluating all options, including a new transportation program, transportation improvement districts, federal funding grants, user fees such as tolling or gas tax and other funding options to move construction forward as soon as feasible.

For more information:
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K-10 West Leg

South Lawrence Trafficway

Fall 2015
#K10SLT



The Kansas Department of Transportation has spent the past year developing a concept study to upgrade K-10 West Leg South Lawrence Trafficway to a four-lane access controlled freeway from I-70 to Iowa Street/U.S. 59 in Lawrence. The study evaluated existing and future traffic and safety needs on K-10 in order to determine the best locations for access and what impacts proposed improvements would have on the natural and built environment. The concept study will document the preferred alternate and these impacts.

In March 2015, KDOT shared several improvement options for the K-10 West Leg SLT at a public meeting. Throughout the study, KDOT shared improvement options at working meetings with its Technical Advisory Group (made up of local stakeholders) and at meetings with the Lawrence, Lecompton and Douglas County Council members as well as the Lawrence Metropolitan Planning Organization. KDOT also conducted two online surveys to gather input during the study. Based on traffic projections, traffic patterns, community input and engineering factors, KDOT developed two alternatives to evaluate in more detail before selecting a preferred alternative. The alternatives were divided into two sections, a northern section with options at I-70 and K-10 and a southern section of the corridor from 6th Street/ U.S. 40 to Iowa Street/U.S. 59. The two alternatives reviewed were:

Northern Section: I-70 and K-10

- **Alternative A:** A free-flow, two-level system to system interchange at I-70/K-10 with access to Farmer's Turnpike relocated to a new service interchange at Lecompton Road.
- **Alternative B:** Combines local access for Farmer's Turnpike via the existing service interchange with an I-70/K-10 system to system four-level interchange.

Southern Section: 6th Street to Iowa Street/U.S. 59

Both alternatives are essentially the same with no change at 6th Street and Bob Billings Parkway, a new interchange at Wakarusa Access Road to serve the Wakarusa/27th Street area, overpass/underpass at Wakarusa Drive and elimination of access at Kasold Drive. The main difference in the alternatives is:

- **Alternative 1:** Reconstruct Clinton Parkway interchange at the existing location on new K-10 alignment.
- **Alternative 2:** Replace Clinton Parkway Interchange with an underpass on new K-10 alignment.

The evaluation process

In order to recommend a preferred access alternative, the study team developed a set of factors to guide the evaluation of the alternatives. The general factors included:

- Increase safety
- Minimize cost
- Increase capacity
- Minimize right of way
- Minimize impacts to floodway and flood plain
- Minimize environmental impacts
- Minimize impacts to parks
- Minimize major utility impacts
- Minimize overall construction time
- Minimize traffic impacts during construction

Preferred Access Alternative



I-70/K-10 and Farmer's Turnpike

The existing local access to Farmer's Turnpike requires a complex interchange system to provide free flow, direct connectivity between K-10 and I-70 and maintain access to Farmer's Turnpike. The preferred access alternative shown above improves safety by reducing the number of conflict points at the K-10/I-70/Farmer's Turnpike area and relocating the existing toll plazas to a single toll plaza on K-10 south of the interchange.

The benefits of the preferred access alternative include:

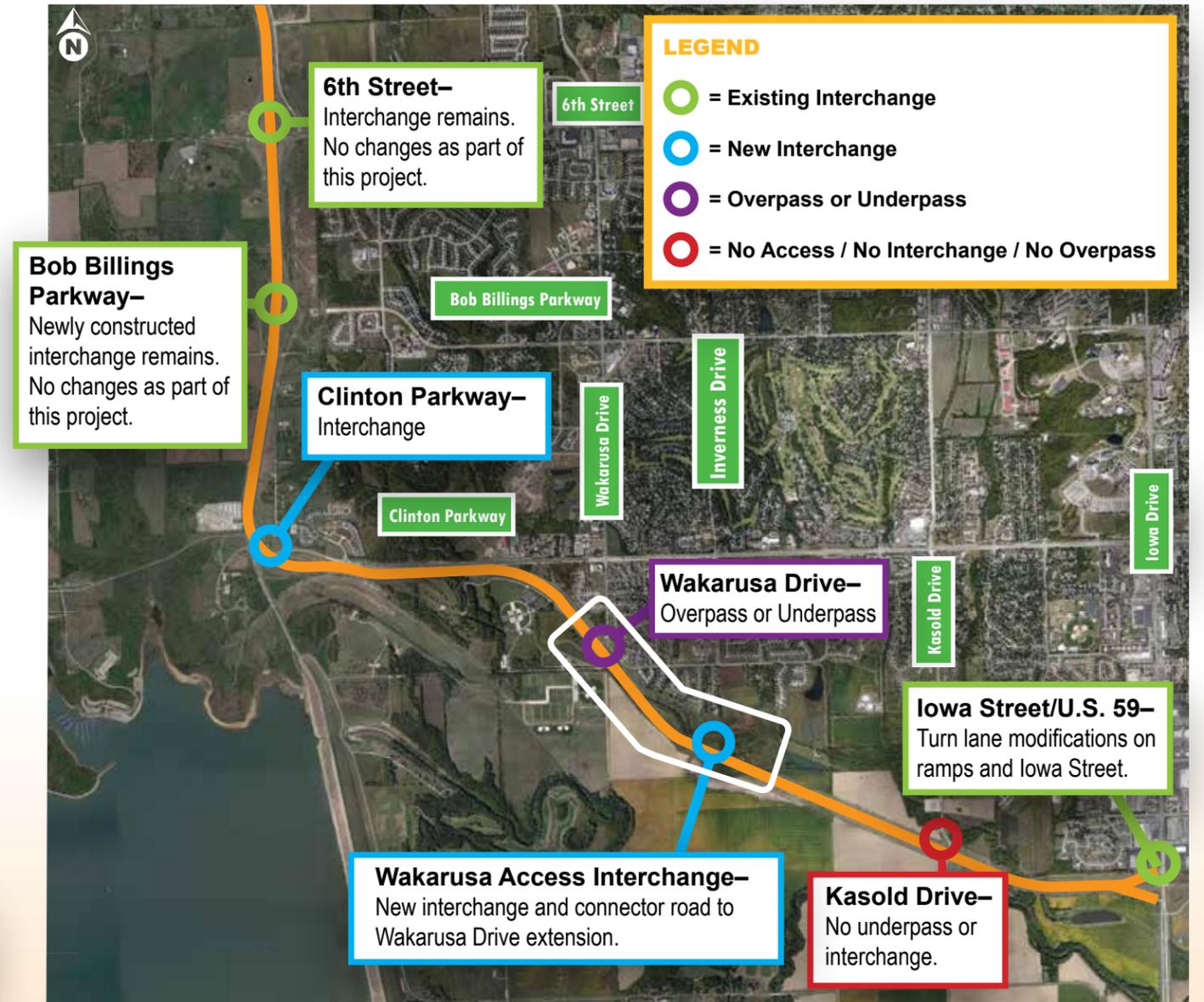
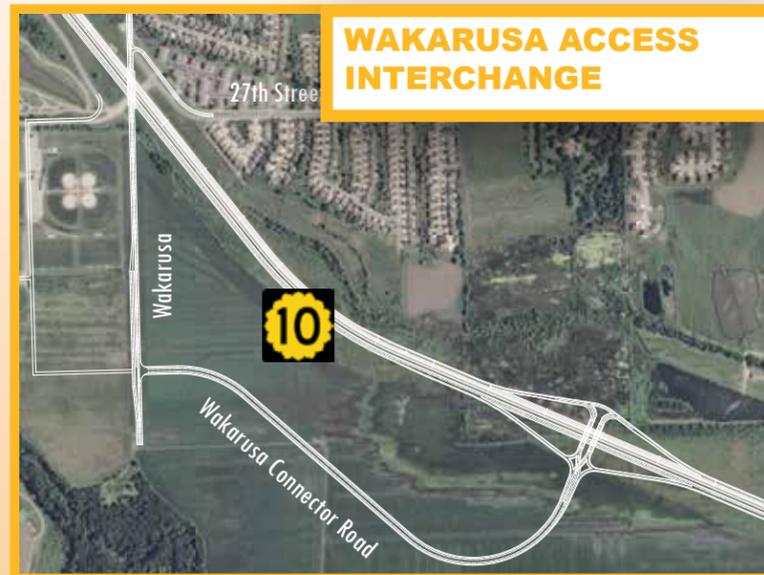
- Improves safety for travelers by reducing traffic conflicts and decision points within the K-10/I-70 Interchange.
- Provides free flow movement for increased traffic volumes between K-10 and I-70 with a simple, two-level interchange design.
- The city of Lecompton has a direct dedicated access point to I-70 at Lecompton Road.
- Lowest cost option.
- Less right of way is needed.
- More efficient toll operation with relocation of the toll plazas to outside of the interchange.

27th Street and Wakarusa Drive

The preferred alternative includes either an overpass or underpass at the Wakarusa/K-10 intersection with access via an expanded local street network to a new interchange (referred to as the Wakarusa Access Interchange) approximately one mile southeast of the existing 27th Street/Wakarusa Drive intersection. Insufficient space and potential impacts to residences and utilities did not allow an interchange to be provided that complied with engineering design criteria which could be expanded in the future. Local access to the Youth Sports Complex is maintained via an extension of Wakarusa Drive while regional traffic will have direct access to the Youth Sports Complex via the new Wakarusa Access Interchange.

Wakarusa Access Interchange

An interchange at this location minimizes impact to the Wakarusa Drive and 27th Street area, provides greater flexibility to accommodate traffic growth and provides direct access to the Youth Sports Complex. This interchange will not be connected to 27th Street, but a local street connection will be provided to Wakarusa Drive.



Kasold Drive

The Kasold Drive/K-10 intersection lies between the Yankee Tank Creek and Wakarusa River floodways. An interchange is not recommended because of the long bridges required to span the floodways. The remaining option is a K-10 overpass to maintain a crossing. An access point at Kasold Drive is not recommended due to the low predicted through traffic on Kasold Drive and high cost to provide an overpass.

Clinton Parkway

To improve safety and expand K-10 to four lanes, the existing curve on K-10 alignment needs to be flattened to meet current freeway design criteria. It is predicted that reconstructing the curve on K-10 at the Clinton Parkway interchange could lower the crash rate by 18%. The recommendation is to reconstruct Clinton Parkway Interchange on a new K-10 alignment which reduces potential increased traffic volumes on Wakarusa Drive and Bob Billings Parkway.