

15.0 RECOMMENDED PLAN

The final recommendation for improvements to US 51 through Bardwell is Alternative 3 which includes Alternatives 2A, 2B, 2C and 2D Curve and Hill. The Alternative 3 improvements are to be constructed in three phases with Phase 1 consisting of Alternatives 2A, 2B and 2C and reconstruction of US 51 through town. Phase 2 consists of Alternatives 2D Curve and Hill, and Phase 3 is improvements to US 51 south of town.

15.1 Recommended Alternatives

Alternative 2A was selected based on a recognized need for traffic flow improvements, access management, and increased turning radii for trucks at the intersection of US 51 and US 62. It also had considerable community support.

Alternative 2B was selected since the current signal is not warranted and the removal will eliminate unnecessary stops through town. Again, it had strong community support.

Alternative 2C was selected because the current corners of the intersection of US 51 and KY 123 are deficient with regard to truck turning movements. The proposed increases in radii will allow for greater turning safety and ease, and can be accomplished at a low cost. The installation of a signal in the future will address future traffic flow issues.

Alternative 2D, both the curve and the hill, was selected as a recommended alternative to improve the safety of the section of US 51 in the vicinity of the curve by the Methodist Church. This section of US 51 was identified as a problem area through the analysis of crash data on US 51. The analysis revealed a high crash location through Bardwell to East Court Street just past the church.

Finally, the recommendation includes the reconstruction of US 51 through town. This will improve safety and traffic flow generally in the area with wider lanes and other improvements. The reconstruction will also improve drainage through town through the installation of an improved stormwater sewer system. The installation of curb and gutter will improve safety by limiting access to US 51 from the development located through town. The construction of sidewalks will improve accessibility for pedestrians through town, and should improve the aesthetics of the roadway. South of town, improvements are to be made to the curves and hills to improve roadway safety.

15.2 Comparison of Recommendation to Project Goals

Alternative 3 (including the Alternative 2 improvements) was selected for implementation because overall, it best addresses the following key project goals.

➤ **Enhance vehicle and pedestrian safety on US 51 in the study area.**

The section of US 51 through town has been shown to be a high crash section, warranting safety improvements. The proposed Alternative 2 and 3 projects directly address these safety issues by upgrading key intersections and bringing the road up to current design standards. For example, Alternative 2A will improve safety at the US 51 / US 62 intersection, Alternative 2D will improve a deficient curve, and the lane widening and addition of curbs and sidewalks will make the highway safer for vehicles, pedestrians, and bicycles. Overall, improving the existing highway is a very solid and direct means of addressing this goal.

➤ **Mitigate the negative impacts of heavy truck traffic on US 51, while maintaining an efficient through route for trucks and other vehicles.**

Alternatives 2 and 3 mitigate the effect of the truck traffic without removing it from the highway. They also make the route more efficient for through truck traffic. In particular, the Alternative 2A spot improvement may significantly benefit truck movements between US 62 and US 51. The improvements to the hill and curve, the other radii improvements at KY 123, and even the removal of the signal at Jennings Street may all benefit truck traffic while enhancing safety.

➤ **Maintain appropriate traffic controls and traffic flow conditions.**

Alternatives 2 and 3 modify the existing highway to provide appropriate traffic controls and to provide adequate (LOS C or better) traffic flow conditions. Current traffic controls in at least two locations (2A and 2B) should be altered and this is accomplished with Alternatives 2 and 3.

➤ **Preserve downtown business and community character.**

Alternative 3 preserves downtown business by maintaining the existing infrastructure in support of existing businesses. It does not shift traffic away from the main corridor through town but maintains visibility for existing businesses. It may also have a positive impact on community character. A majority of the community appears to favor these alternatives as being in their best interests.

➤ **Improve highway geometry and drainage.**

Alternative 3 addresses this goal very well since it involves reconstructing US 51 to meet current design standards. Drainage could be improved at the same time through the addition of curb and gutter with storm sewers and detention facilities as necessary.

- **Avoid, minimize, and/or mitigate property takings on US 51 as well as other community and environmental impacts.**

This goal was put forward specifically by many local citizens and has been included even though it is understood to be part of the normal KYTC planning and design process. All alternatives were developed in accordance with this goal. However, compared to many of the other alternatives, Alternative 3 meets this goal very well since the proposed improvements require the least amount of new right-of-way and have the fewest expected environmental impacts. The area where this alternative may have more impacts is in potential impacts to homes or businesses.

- **Enhance the visual aspects of the community infrastructure and provide improved recreation (bicycle/pedestrian) facilities in keeping with the local economic development goals.**

Alternative 3 offers significant advantages for improving the visual nature of the town as well as upgrading bicycle and pedestrian facilities through the developed area where they are most likely to be used. The enhancements can be used by the local community to try and improve their economic development goals which local officials indicate are focused on recreation, senior citizens, and young families.