



EXECUTIVE SUMMARY

Directly west of Guthrie, Kentucky is a triangular area known as Tiny Town where US 41, US 79, KY 181, KY 294, and KY 2128 come together. This junction of roadways results in a less than efficient “knot” of intersections with multiple safety concerns. The study area’s location along two rail lines and two major US highways (US 41 and US 79), as well as its proximity to I-24, provides it with strong potential for growth. The major investment in the Hemlock Semiconductor Plant on US 79 (just to the south of the Tennessee state line) will have a potential employment of 5,000 employees and is anticipated to attract satellite industries which will utilize its products. Further residential and commercial development is likely to follow and the demand for travel through the Tiny Town junction is expected to increase.

The purpose of the Guthrie “Knot” Planning Study was to explore the scope of and justification for needed transportation improvements in the Tiny Town area. The study focused on investigating the current deficiencies in and around the junction and estimating the likely traffic impacts from future development.

Short term projects, focusing on existing safety and capacity issues, were investigated as well as longer term projects to meet the future transportation needs of the area. The purpose of these conceptual projects is to improve the safety and efficiency of travel through the intersections of KY 181 with US 79, KY 294, and US 41 and the intersections of US 79 with US 41 and with KY 2128 in the Guthrie area. Such projects will also provide better connections for travelers along this existing transportation network to the emerging industrial development.

The Guthrie “Knot” Planning Study resulted in the development of a number of conceptual improvements which were presented to stakeholders and the public. Ultimately, one short-term improvement and one long-term improvement were recommended. The study recommendations, shown in **Figure ES-1**, include access management changes at the US 41 intersection with US 79 and the realignment of KY 181. These improvements are summarized below.

- **Short-Term Improvement: Access management at US 79 and US 41 intersection.**
This is a very large, skewed intersection with four-way stop control and the convenience store located on the south side of the intersection has uncontrolled access along the south and east roadway approaches. The potential short-term improvement includes maintaining the intersection in its current location but constructing a curbed island along most of the convenience store’s frontage to define two access points – one on US 41 east of the intersection and one on US 79 south.
- **Long-Term Improvement: Realignment of KY 181.**
This concept provides a western connector around Tiny Town by redirecting existing KY 181 from north of the US 41 intersection to the west along a semicircular route to US 79 west of the existing KY 181 intersection. The realignment of KY 181 should intersect US 79 at a location to eliminate or at least minimize any right-of-way acquisition or construction within the state of Tennessee. Existing KY 181 would be removed from the existing KY 294 intersection north to the proposed realignment north of US 41. A minor widening of KY 294 west of the realigned KY 181 could be included with this option.