I. INTRODUCTION

The Kentucky Transportation Cabinet (KYTC) has undertaken this Transportation Study to consider improvements to a segment of KY 1426 in Pikeville, Kentucky in Pike County. The purpose of this study is twofold: (1) to identify catchment systems and/or reconstruction to mitigate recurring rockfall problems along KY 1426 between KY 1460 and Combs Avenue; and (2) to identify operational and/or minor reconstructive measures to improve traffic flow and safety at the intersections of KY 1426 with KY 1460 (Chloe Creek Road) and KY 1426 with Summit Drive/Huffman Avenue.

To accomplish these tasks, this study will:

- Identify known issues, concerns, and constraints, including safety, traffic, environmental, and geotechnical considerations;
- Develop a "purpose and need" statement and goals for the proposed project;
- Develop and evaluate project alternatives based on the project purpose and need, including elements to improve the study intersections and to address the rockfall hazard; and
- Make project recommendations.

Through this Transportation Study, the KYTC ensures that any future project improvements along KY 1426 effectively address identified transportation needs, and that project development decisions meet federal requirements as defined in the National Environmental Policy Act (NEPA).

A. Project Location

The study area, shown in **Figure 1.1**, for the KY 1426 Transportation Study includes three primary routes:

- KY 1426 from Summit Drive/Huffman Avenue to KY 1460 north and east of Combs Avenue;
- KY 1460 from KY 1426 to a point just east of Pikeville Elementary School at Bruce Elliot Drive; and
- Summit Drive from KY 1426 to the access road to Pikeville Elementary.

The project area lies on the eastern side of the city of Pikeville. KY 1426 provides an eastern bypass of the city. KY 1460, locally Chloe Creek Road, provides rural access to the east and connects to US 460/KY 80 to the southeast. Summit Drive serves one business and several residences on an adjacent ridge, tying into KY 1426 across from Huffman Avenue. **Appendix A** presents pictures from the project area.

A number of environmental features and community resources fall within the study area and may be impacted by any potential solutions. Aggressive terrain, hydrological concerns, existing businesses, a historical cemetery, and Pikeville Elementary School are in the immediate vicinity and will play significant roles in defining feasible transportation solutions.



Figure 1.1 – Study Area Map

B. Background

KY 1426 has a long history of rockfall problems. The KYTC Maintenance Department makes regular visits to the project site to clean up debris from the rock face. In 2007, debris from the adjacent embankment fell onto KY 1426, which resulted in its closure.

In 2007, the City of Pikeville received \$250,000, independent of this study, from the Commonwealth to study ways to mitigate the rockfall. Summit Engineering, the city's on-call consultant, is awaiting the completion of this study before proceeding with their project.

Adjacent to the rockfall section are the KY 1426 intersections with Chloe Creek Road and Huffman Avenue/Summit Drive. These two intersections are tightly spaced with limited opportunity for expansion given the surrounding landscape. Influencing traffic operations along KY 1426 is Pikeville Elementary School, which is located along Chloe Creek Road at the eastern edge of the study area. In recent years, an access road was built from the school to Summit Drive and serves as the drop-off and pick-up point for children not riding the bus system. Parent drop-off and pick-up is not permitted from Chloe Creek Road.

The existing conditions in the study area are presented in more detail in **Chapter II** of this report.