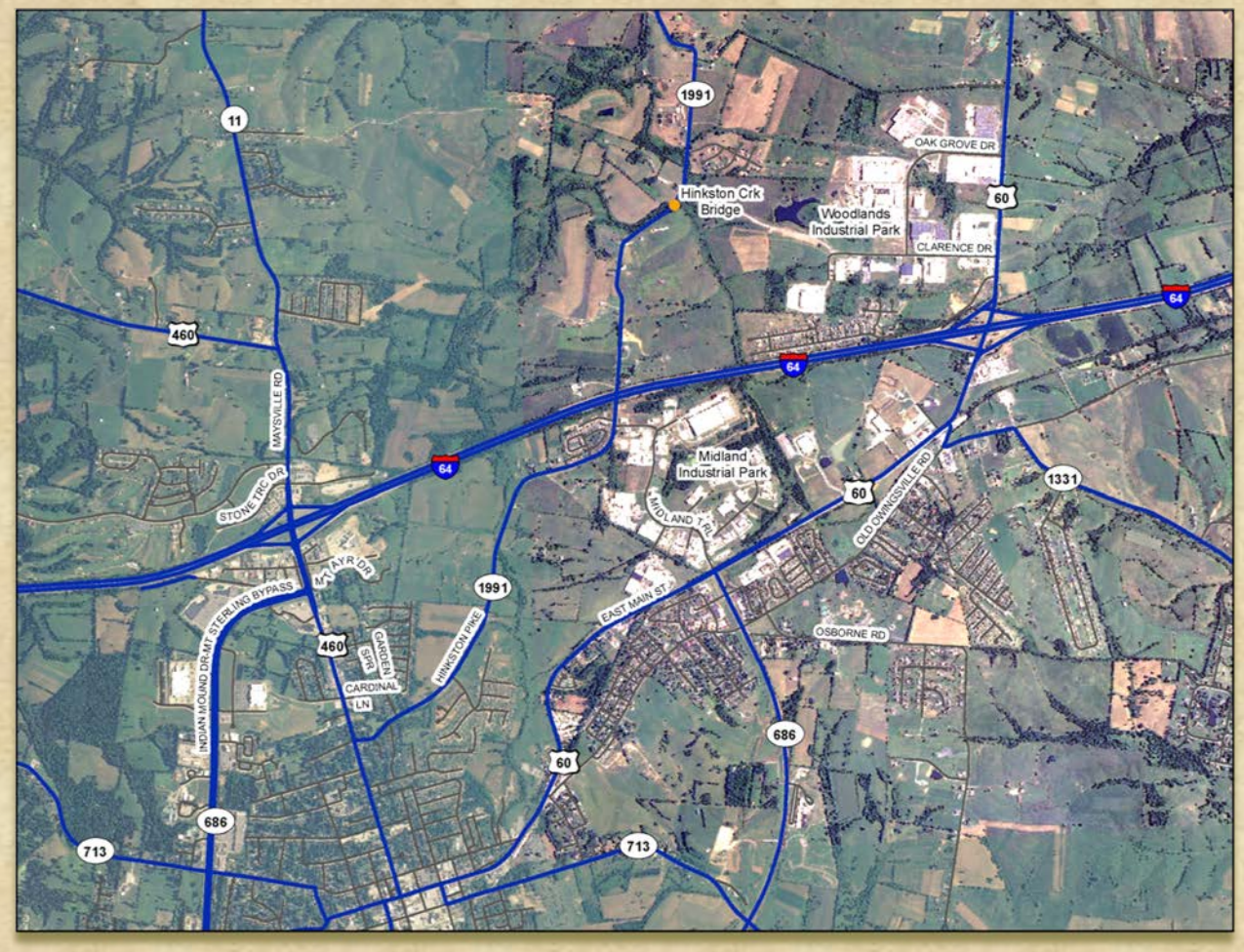
FINAL REPORT

MT. STERLING SUB-AREA PLANNING STUDY

EXECUTIVE SUMMARY



PREPARED FOR:

KENTUCKY TRANSPORTATION CABINET

PREPARED BY:

QK4

Architecture Engineering Planning

Groundbreaking by Design.

January, 2012

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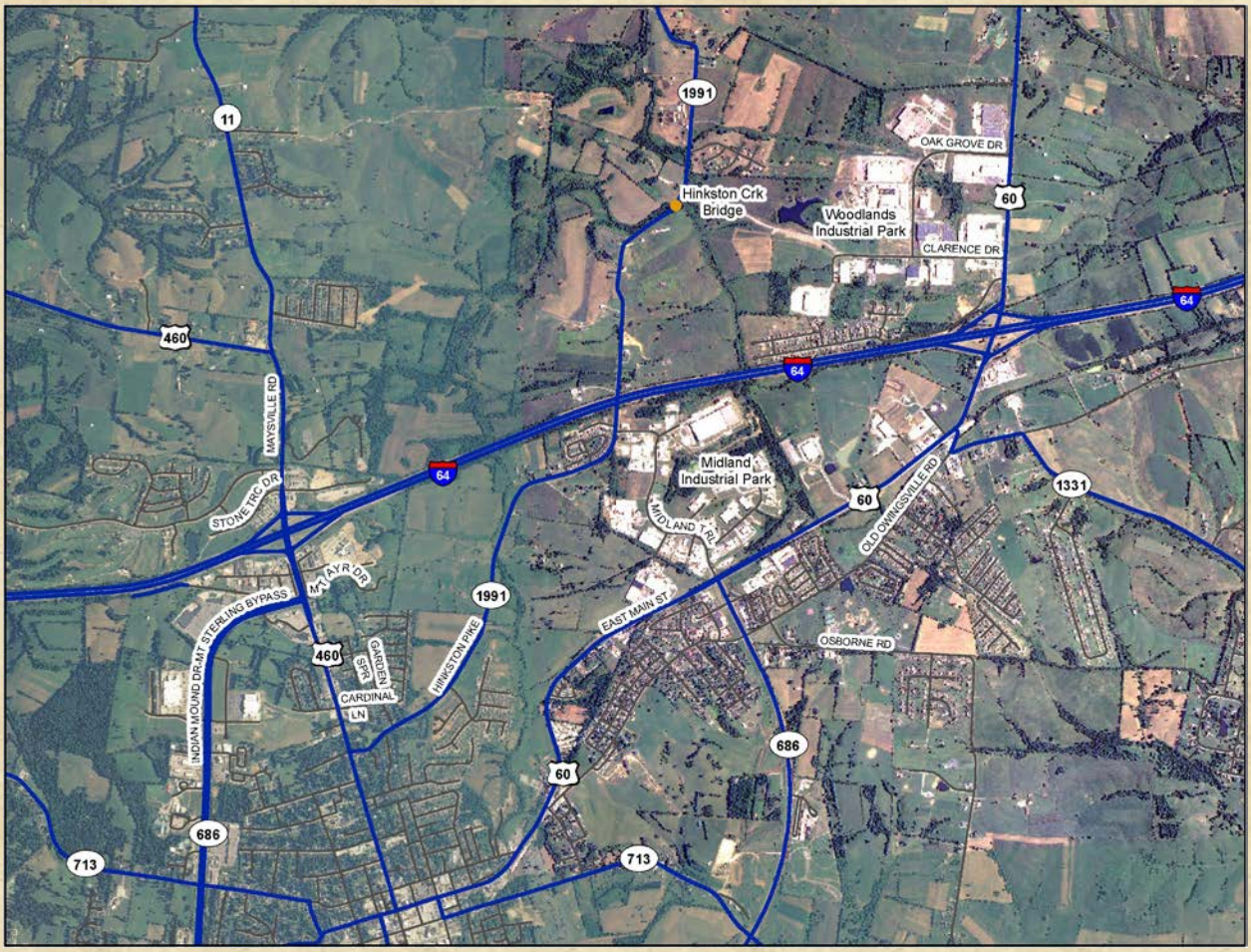

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Study Area

Mt. Sterling is the county seat of Montgomery County in the central Bluegrass Region of Kentucky. Over the past decade Mt. Sterling experienced a 17.3% increase in population and Montgomery County saw a similar (17.5%) increase. In comparison, Kentucky experienced an increase of 7.4%.

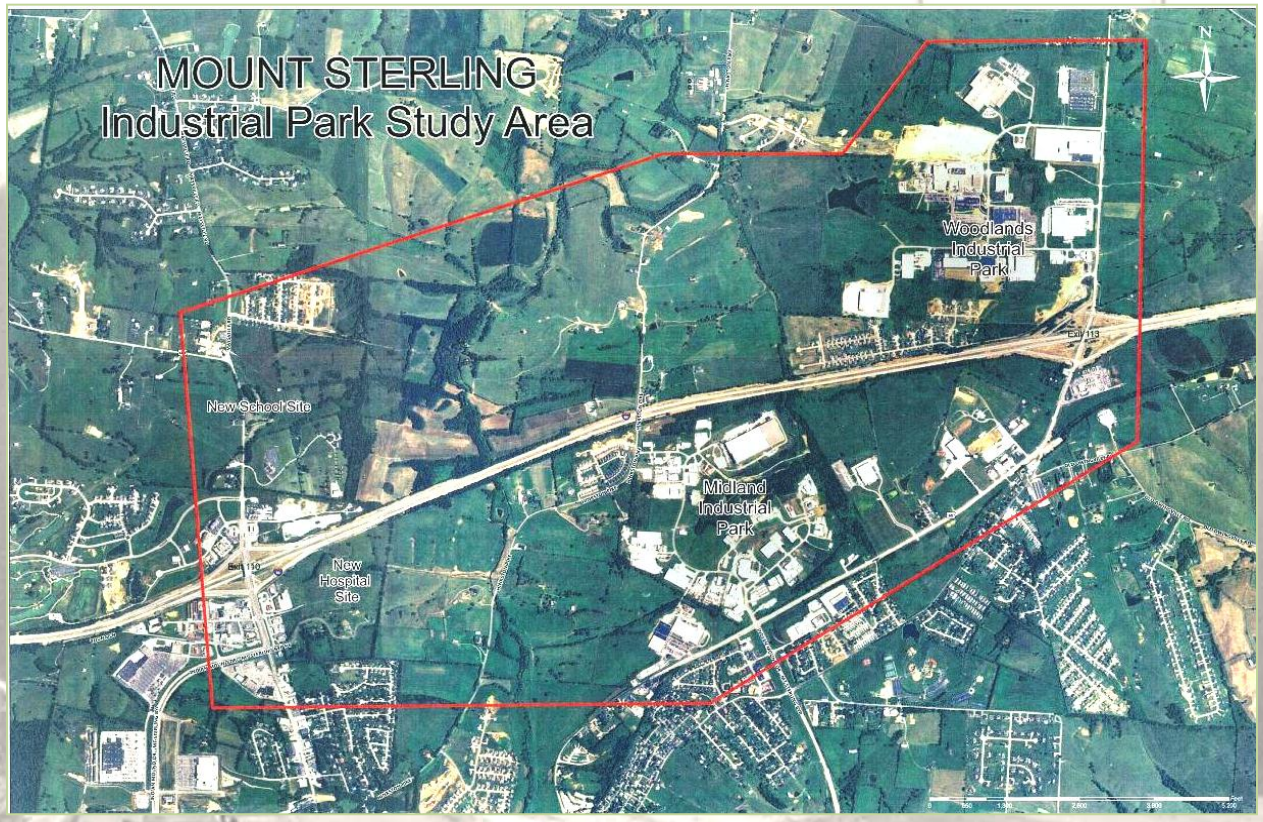


Figure ES-1: Project Study Area

Study Purpose and Issues

The Kentucky Transportation Cabinet (KYTC) initiated a study to identify needed improvements to the transportation system in and surrounding a portion of the Mt. Sterling area north and south of I-64 from the interchange with US 460/KY 11, Exit 110, eastward to the US 60 interchange, Exit 113 as shown in Figure ES-1.

The purpose of the transportation improvements identified in the Mt Sterling study area is to improve access in case of emergencies such as spills, explosions, or fires for the Woodlands Industrial Park, and to improve safety and reduce congestion on the transportation network. Currently all access into the park is from US 60. The need for safety and congestion improvements on various routes in the study area results from existing, and forecasted future, traffic volumes which produce deficient Levels-of-Service in the design year on several routes. A Crash Analysis has also identified several problem locations.

- As the study progressed, the following issues were considered as projects were developed:
- Improved or additional access to the Woodlands Industrial Park (WIP) in case of emergencies
- Potential expansion of employment in the Woodlands Industrial Park
- Relocation of St. Joseph's Hospital to a new facility near US 460 south of I-64 exit 110
- Construction of a new elementary school west of US 460 north of I-64 exit 110
- A desire within the community to add access to I-64 from Hinkston Pike
- A desire within the community to connect the east and west ends of the Mt. Sterling Bypass

Conditions Analysis

Currently, US 460/KY 11 in the vicinity of I-64 Exit 110 operates below LOS C, as does KY 686 at its western terminus with US 460/KY 11. All other major roadways within the study area operate at LOS C or greater.

Several roadway segments including US 60, I-64, KY 686, US 460 and KY 1991 (Hinkston Pike) in the study area showed Critical Crash Rate Factors (CCRF) greater than 1.0. Analyses showed a high percentage of nighttime crashes on US 60 just south of I-64 Exit 113. Streets and roads with relatively high traffic volumes—US 60, US 460, KY 686—typically have a low percentage of single-vehicle crashes. Conversely, a low volume road, such as KY 1991, has a higher percentage of such crashes. Adequacy ratings are a means of assessing a roadway's conditions based on three factors—safety, congestion, and pavement condition. The adequacy ratings for major area roadways indicate that 61% to 70% of Kentucky's similar roads are rated higher than US 460 in the study area. By comparison, the ratings for KY 686 indicate that only a fourth of the state's roads are rated higher than KY 686 at its junction with US 460. (See Section 2.4, Adequacy Rating, for further details.)

Project Development and Evaluation

Seventeen potential projects of varying size and type were looked at throughout the course of this study. These projects are shown in Figure ES-2.

The KYTC Project Team, using Stakeholders' input from two meetings, three project team meetings and presentation of data and analysis, narrowed the list of 17 projects to a list of six recommended short- and intermediate-term solutions estimated to cost a total of $7.78 million. The remaining projects were either referred to the Highway District 7 Office to be considered in the Planning Process through completion of a Project Identification Form or for operational improvements, considered to be outside the study purpose or area, or not critical to be included in an implementation plan. Recommended projects are shown in Table ES 1 and Figure ES-3.

Figure ES-2: All Projects Identified Throughout the Course of the Study

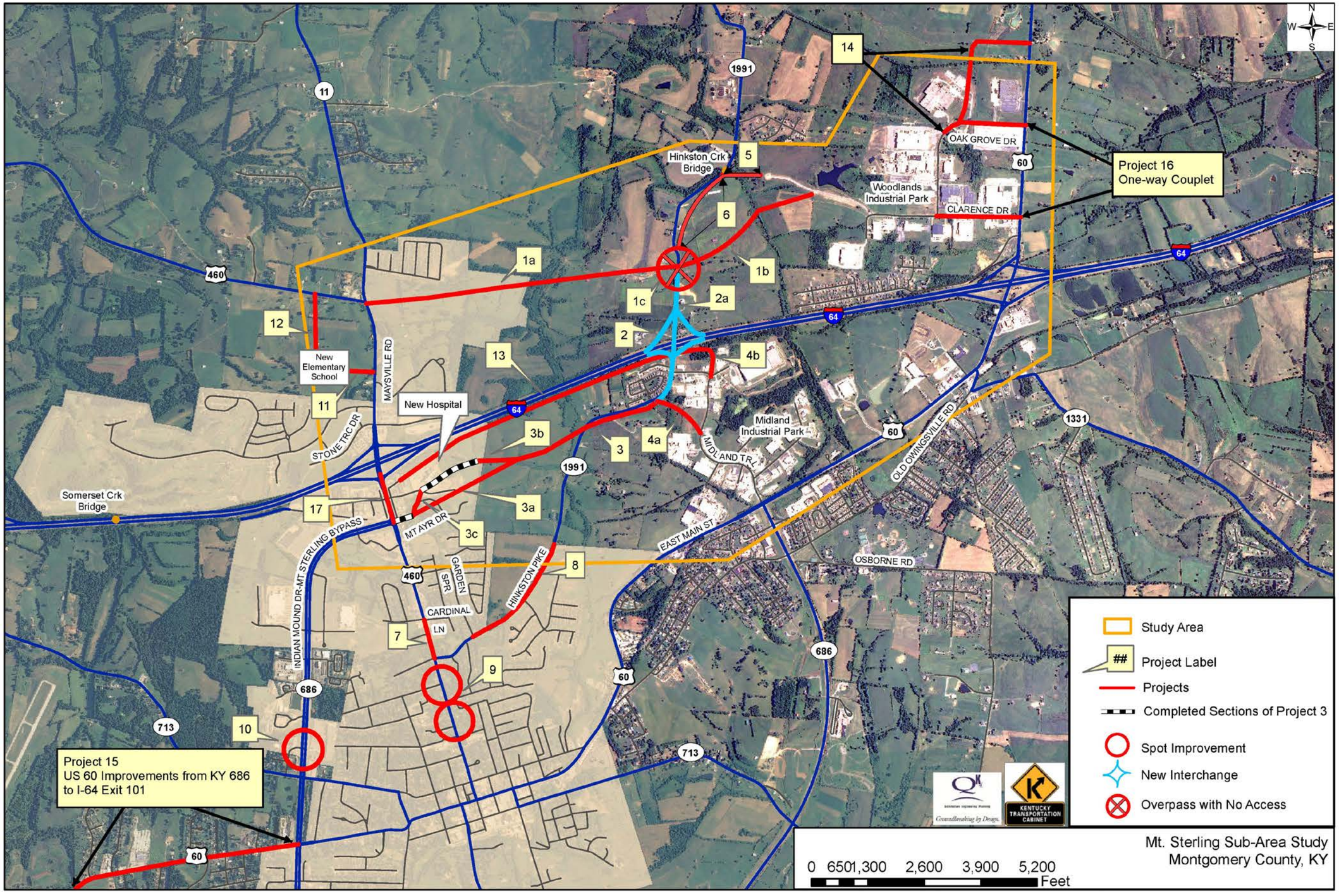
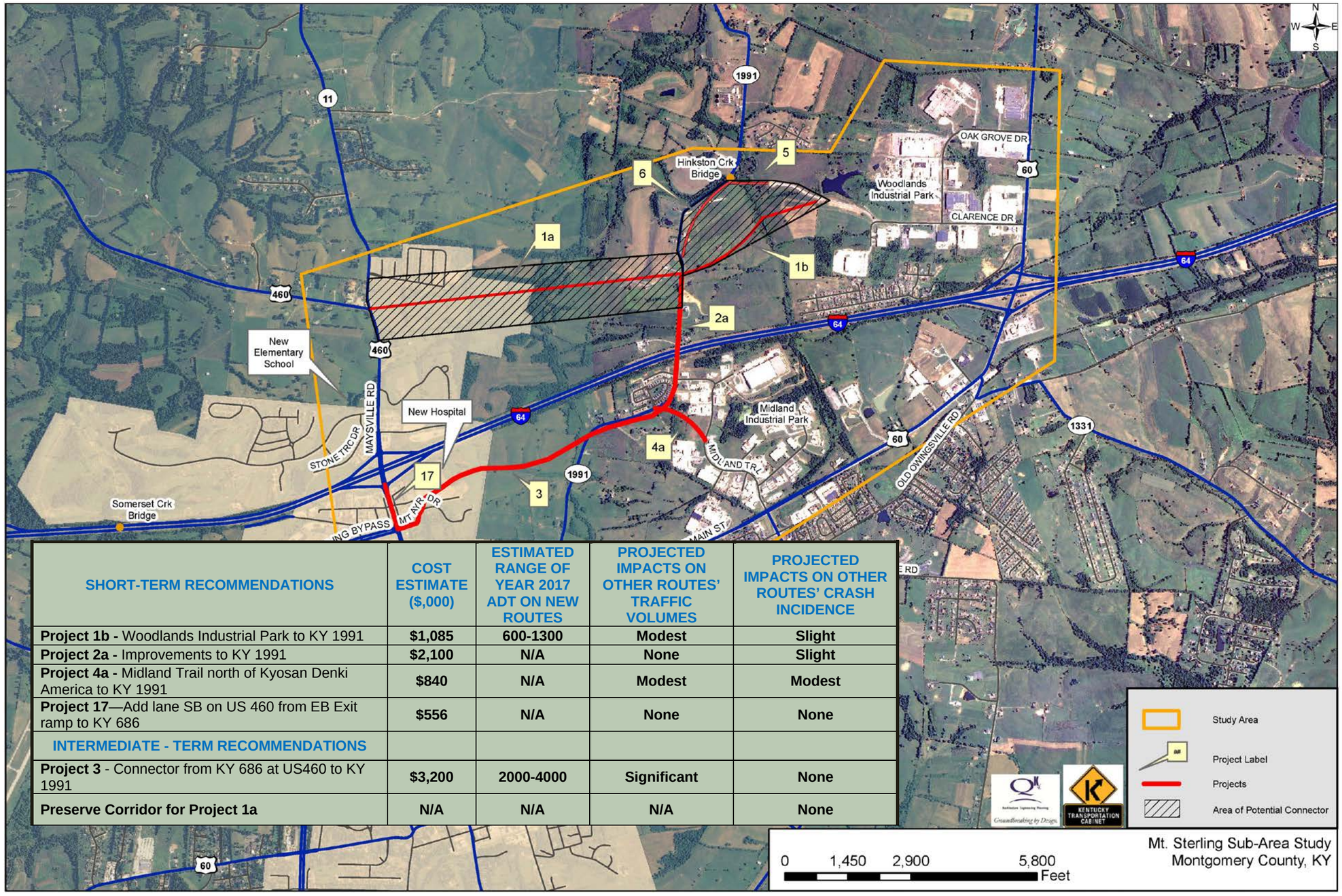


Figure ES-3: Recommended Projects



SHORT-TERM RECOMMENDATIONS	COST ESTIMATE ($,000)	ESTIMATED RANGE OF YEAR 2017 ADT ON NEW ROUTES	PROJECTED IMPACTS ON OTHER ROUTES' TRAFFIC VOLUMES	PROJECTED IMPACTS ON OTHER ROUTES' CRASH INCIDENCE
Project 1b - Woodlands Industrial Park to KY 1991	**$1,085**	**600-1300**	**Modest**	**Slight**
Project 2a - Improvements to KY 1991	**$2,100**	**N/A**	**None**	**Slight**
Project 4a - Midland Trail north of Kyosan Denki America to KY 1991	**$840**	**N/A**	**Modest**	**Modest**
Project 17—Add lane SB on US 460 from EB Exit ramp to KY 686	**$556**	**N/A**	**None**	**None**
INTERMEDIATE - TERM RECOMMENDATIONS				
Project 3 - Connector from KY 686 at US460 to KY 1991	**$3,200**	**2000-4000**	**Significant**	**None**
Preserve Corridor for Project 1a	**N/A**	**N/A**	**N/A**	**None**