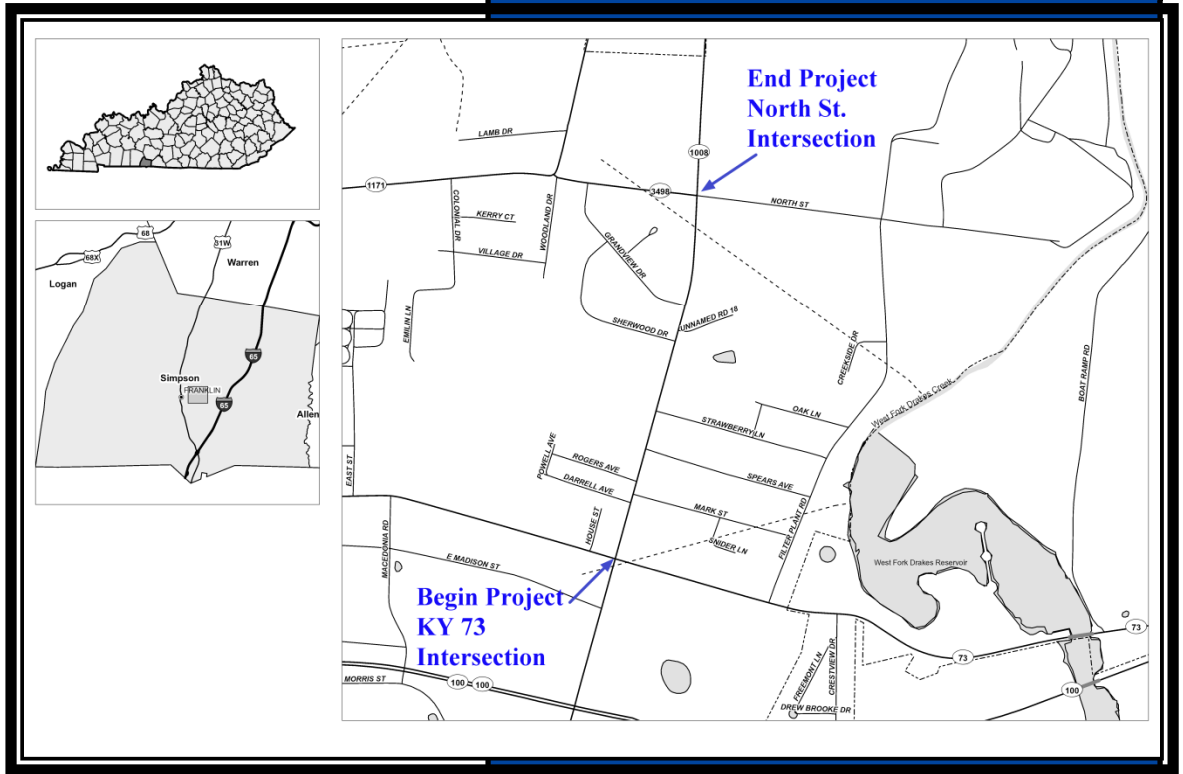


Data Needs Analysis



KY 1008, Simpson County
From KY 73 to North St
Item No. 3-8855.00

Prepared by the KYTC
Division of Planning and
KYTC District 3

April 2015



| | | | | | |
|--|--|---|--|---|--|
| 03-8855.00 | | Data Needs Analysis | | | KY 1008 |
| Simpson | | Scoping Study | | | Major Widening |
| I. PRELIMINARY PROJECT INFORMATION | | | | | |
| County: | Simpson | Item No.: | 03-8855.00 | | |
| Route Number(s):* | KY 1008 | Road Name: | Robey Street | | |
| Program No.: | 8963301D | UPN: | FD04 | 107 | 1008 003-005 |
| Federal Project No.: | | Type of Work: | Major Widening | | |
| 2015 | Highway Plan Project Description: | | | | |
| Major Widening to 3-lanes with urban section from KY 73 to North Street. | | | | | |
| Beginning MP: | 3.688 | Ending MP: | 4.333 | Project Length: | 0.645 |
| In TIP: | <input type="checkbox"/> Yes <input type="checkbox"/> No | Reconcile Project Information in Clearview | | | |
| State Class.: | <input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary | Route is on: | <input type="checkbox"/> NHS <input type="checkbox"/> NN <input type="checkbox"/> Ext Wt | | |
| Functional Class.: | <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural Arterial | Truck Class.: | AAA | % Trucks: | 12.70% |
| MPO Area: | Not Applicable | Terrain: | Rolling | | |
| ADT (current): | 7438 | 2013 | | | |
| Access Control: | <input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled | <input type="checkbox"/> Partial Spacing: | | | |
| Median Type: | <input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type): | | | | |
| Existing Bike Accommodations: | Shared Lane | Ped: | <input type="checkbox"/> Sidewalk | | |
| Posted Speed: | <input checked="" type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input type="checkbox"/> 55 mph | <input type="checkbox"/> Other (Specify): | | | |
| KYTC Guidelines Preliminarily Based on : | 35mph | MPH Proposed Design Speed | | | 35mph |
| Roadway Data: | EXISTING | COMMON GEOMETRIC PRACTICES** | | | |
| No. of Lanes | 2 | 2 (+TWLTL) | | Existing Rdwy. Plans available? | |
| Lane Width | 11' (field verified) | 11-12' | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Shoulder Width | 1' paved | urban | | Year of Plans: | |
| Max. Superelevation*** | varies | 4% | | <input type="checkbox"/> | Traffic Forecast Requested |
| Minimum Radius*** | | 371' | | Date Requested: | |
| Maximum Grade | | 8% | | <input checked="" type="checkbox"/> Mapping/Survey Requested | |
| Minimum Sight Dist. | unknown | 250' | | Date Requested: 3/23/2015 | |
| Sidewalk Width(urban) | n/a | 4' | | Type: Lidar | |
| Clear-zone [†] | varies | urban | | | |
| Project Notes/Design Exceptions? | | | | | |
| Bridge No.: [‡] | (Bridge #1) | (Bridge #2) | | | |
| Sufficiency Rating | | | | | |
| Total Length | | Existing Geotech Data Available? | | | |
| Width, curb to curb | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| Span Lengths | 10' | | | | |
| Year Built | | | | | |
| Posted Weight Limit | | Detour Length(s): 2.7 miles | | | |
| Structurally Deficient? | | | | | |
| Functionally Obsolete? | | | | | |
| Existing Bridge Type | 10'x7' RCBC | | | | |
| *If more than one road is included in the project, include additional sheets. | | | | | |
| **Based on proposed Design Speed | | | | | |
| ***AASHTO's A Policy on Geometric Design of Highways and Streets | | | | | |
| +AASHTO's Roadside Design Guide | | | | | |
| ‡If more than two bridges are located on the project, include additional sheets. | | | | | |

| | | | | | | | | |
|---|--|--|---------------------|----------------|--------------|-------------|---------------|----------------|
| 03-8855.00 | | | Data Needs Analysis | | | | | KY 1008 |
| Simpson | | | Scoping Study | | | | | Major Widening |
| II. PROJECT PURPOSE AND NEED | | | | | | | | |
| A. Legislation | | | | | | | | |
| The following funding was listed in the 2014 General Assembly's Enacted Highway Plan. The project was ranked #10 in the 2013 District Transportation Plan (DTP) and ranked #1 by the locals. | | | | <i>Funding</i> | <i>Phase</i> | <i>Year</i> | <i>Amount</i> | |
| | | | | SPP | D | 2015 | \$600,000 | |
| | | | | SPP | R | 2016 | \$1,700,000 | |
| | | | | SPP | U | 2017 | \$2,600,000 | |
| | | | | SPP | C | 2018 | \$2,500,000 | |
| B. Project Status | | | | | | | | |
| Design funds have been authorized on August 22, 2014. | | | | | | | | |
| C. System Linkage | | | | | | | | |
| KY 1008 is functionally classified as an Urban Minor Arterial and serves as the by-pass for the city of Franklin. This route includes access to several residential subdivisions, commercial businesses, industry, and sports facilities. This route also serves Franklin/Simpson Park. | | | | | | | | |
| D. Modal Interrelationships | | | | | | | | |
| Currently this is a rural roadway that has very low intermodal interaction. | | | | | | | | |
| E. Social Demands & Economic Development | | | | | | | | |
| KY 1008 which is posted with Truck Route signage provides access to existing industrial development in northeast Franklin and a direct connection between I-65 and US 31-W to industry north of Franklin. The route also serves as a by-pass route for truck traffic to avoid the courthouse square. The route also serves as a detour route for I-65 when incidents close the interstate between Exit 6 and Exit 20. | | | | | | | | |

| | | | | | | | | |
|---|--|--|---------------------|--|--|--|--|----------------|
| 03-8855.00 | | | Data Needs Analysis | | | | | KY 1008 |
| Simpson | | | Scoping Study | | | | | Major Widening |
| | | | | | | | | |
| II. PROJECT PURPOSE AND NEED (cont.) | | | | | | | | |
| | | | | | | | | |
| F. Transportation Demand | | | | | | | | |
| <p>The last traffic count conducted in 2013 revealed an AADT of 7438 with 12.7 % truck traffic. With the number of residential and commercial access points this road would benefit from a Two-Way Left Turn Lane.</p> | | | | | | | | |
| | | | | | | | | |
| G. Capacity | | | | | | | | |
| <p>Congestion does not appear to be an issue along the existing route and the current traffic volumes do not warrant additional through lanes.</p> | | | | | | | | |
| | | | | | | | | |
| H. Safety | | | | | | | | |
| <p>This section does not have a high Critical Rate Factor (CRF greater than 1) yet there are still 18 accidents reported in the last five years. Most of the accidents reported were rear end, angle or side swipes. All angled collisions reported occurred at either of the two signalized intersections located on both ends of the project limits. Over half of the collisions were reported as rear end collisions. Many reported running into a stopped vehicle behind another vehicle making a turn.</p> | | | | | | | | |
| | | | | | | | | |
| I. Roadway Deficiencies | | | | | | | | |
| <p>Roadway geometrics largely meet design recommendations except for should width. Lack of access delineation may contribute to crashes.</p> | | | | | | | | |

| | | | | | |
|---|---|--|---------------------------------|--------|----------------|
| 03-8855.00 | | Data Needs Analysis | | | KY 1008 |
| Simpson | | Scoping Study | | | Major Widening |
| III. PRELIMINARY ENVIRONMENTAL OVERVIEW | | | | | |
| A. Air Quality | | | | | |
| Project is in: | <input checked="" type="checkbox"/> Attainment area | <input type="checkbox"/> Nonattainment or Maintenance Area | <input type="checkbox"/> PM 2.5 | County | |
| STIP Pg. #: | TIP Pg. #: | | | | |
| State funded projects are not listed in the STIP | | | | | |
| B. Archeology/Historic Resources | | | | | |
| <input type="checkbox"/> Known Archeological or Historic Resources are present | | | | | |
| Project has several houses 50+ years old making them potentially eligible for the National Register. I didn't see any outstanding examples of historic resources along this section of roadway. | | | | | |
| C. Threatened and Endangered Species | | | | | |
| Listed T & E Species for Simpson County: Gray Bat, Indiana Bat, Northern Long-eared Bat, Fanshell, Fluted Kidneyshell, Littlewing Pearlymussel, Sheepnose, and Slabside Pearlymussel. There will be a no effect for the mussel speices as this stream does not provide proper habatat for mussels. There are a few trees on the project area. The bat habitat is limited within this urban environment. | | | | | |
| D. Hazardous Materials | | | | | |
| <input checked="" type="checkbox"/> Potentially Contaminated Sites are present <input type="checkbox"/> Potential Bridge or Structure Demolition | | | | | |
| On the North West Corner of KY1008 and KY73 are fuel tanks. The tanks are very close to the existing ROW. Widening KY 1008 would impact these underground storage tanks. | | | | | |
| E. Permitting | | | | | |
| Check all that may apply: <input type="checkbox"/> Waters of the US <input type="checkbox"/> MS4 area <input checked="" type="checkbox"/> Floodplain Impacts <input type="checkbox"/> Navigable Waters of the US Impacts | | | | | |
| Are 401/404 Permits likely to be required? <input type="checkbox"/> Yes <input type="checkbox"/> No Impacts to: <input type="checkbox"/> Wetlands <input checked="" type="checkbox"/> Stream/Lake/Pond | | | | | |
| <input checked="" type="checkbox"/> ACE LON <input type="checkbox"/> ACE NW <input type="checkbox"/> ACE IP <input type="checkbox"/> DOW IWOC <input type="checkbox"/> Special Use Waters | | | | | |
| Stream impacts from extending the existing Box Culvert will most likely be under notification limits for US Army Corp. KYPDES Notice of Intent will be required for disturbances greater than one acre. | | | | | |
| F. Noise | | | | | |
| Are existing or planned noise sensitive receptors adjacent to the proposed project? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | | | | |
| Is this considered a "Type I Project" according to the KYTC Noise Analysis and Abatement Policy? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | | | | |
| Project has several homes and businesses. Project would make driving lanes close to homes and businesses. | | | | | |
| G. Socioeconomic | | | | | |
| Check all that may apply: <input checked="" type="checkbox"/> Low Income/Minority Populations <input type="checkbox"/> Relocations <input type="checkbox"/> Local Land Use Plan available | | | | | |
| Project area will have low income and minority populations. The goal will be no relocations. Maybe add benefits like sidewalks for residential area. | | | | | |
| H. Section 4(f) or 6(f) Resources | | | | | |
| The following are present on the project: <input type="checkbox"/> Section 4(f) Resources <input type="checkbox"/> Section 6(f) Resources | | | | | |
| No 4(f) or 6(f) resources located on this project | | | | | |
| Anticipated Environmental Document: | | | None (Completely State funded) | | |

| | | | | | | | |
|------------|--|---------------------|--|--|--|--|----------------|
| 03-8855.00 | | Data Needs Analysis | | | | | KY 1008 |
| Simpson | | Scoping Study | | | | | Major Widening |
| | | | | | | | |

IV. PROJECT SCOPING, NEEDS & PURPOSE

A. Scoping & Need:

KY 1008 (Robey St.) is an urban minor arterial street within the corporate limits of Franklin that serves as a by-pass for downtown. This route also provides acces to residential subdivisions, commercial businesses, industry, a city/county park and a sports complex. To improve traffic flow and provide better access to side streets, businesses, and residences, a Two-Way Left Turn Lane along with an urban template is recommended.

B. Draft Project Purpose:

The purpose of this project is to improve safety and mobility along KY 1008.

| | | | | | |
|------------|--|---------------------|--|--|----------------|
| 03-8855.00 | | Data Needs Analysis | | | KY 1008 |
| Simpson | | Scoping Study | | | Major Widening |

V. PROJECT ESTIMATE & METHODOLOGY

| | | | | | |
|---|--------------|-----------------|--|-------------------------|--|
| Estimate Methodology: | | | | Current Estimate | |
| Assume three lane urban typical section widened symmetrically along existing center of roadway. Project will begin south of KY 73 in order to construct NB turn lanes and appropriate taper from two-lane to three-lane. At KY 3498, roadway was widened in 1986 to provide turn lanes, so the project will end just south of intersection with KY 3498. No other archived plans exist for this roadway. Project includes existing box culvert just south of Sherwood Dr. (MP 4.0). | <u>Phase</u> | <u>Estimate</u> | | | |
| | Planning | | | | |
| | Design | \$600,000 | | | |
| | R/W | \$1,700,000 | | | |
| | Utilities | \$2,600,000 | | | |
| | Const | \$2,500,000 | | | |
| | Total | | | | |

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

| | | | | | | | |
|--|--|--|----------------|--|--|--|--|
| | | | | | | | |
| | | | Company Name - | Franklin Electric Plant Board | | | |
| | | | Contact - | John Law | | | |
| | | | Address - | 309 North High St. P.O. Box 349 Franklin, KY 42135 | | | |
| | | | Phone No. - | 270-586-4441 | | | |
| | | | Company Name - | Warren Rural Electric Cooperative Corporation | | | |
| | | | Contact - | Steve Gwin | | | |
| | | | Address - | 951 Fairview Ave P.O. Box 1118 Bowling Green, KY | | | |
| | | | Phone No. - | 270-842-6541 | | | |
| | | | Company Name - | Millennium Gas Pipeline | | | |
| | | | Contact - | Gary Dillard | | | |
| | | | Address - | 951 Fairview Ave P.O. Box 1118 Bowling Green, KY | | | |
| | | | Phone No. - | 270-842-6541 | | | |
| | | | Company Name - | Atmos Energy Corporation | | | |
| | | | Contact - | Bryan Oost | | | |
| | | | Address - | 2850 Russellville Rd Bowling Green KY, 42101 | | | |
| | | | Phone No. - | 270-901-1710 | | | |
| | | | Company Name - | ATT - KY | | | |
| | | | Contact - | Calvin Colburn | | | |
| | | | Address - | 1061 Lovers Ln Bowling Green, KY 42103 | | | |
| | | | Phone No. - | 270-782-4811 | | | |
| | | | Company Name - | Level 3 Communications, LLC | | | |
| | | | Contact - | Jeffrey Cannon | | | |
| | | | Address - | 2530 Permitter Place Drive Nashville, TN 37214 | | | |
| | | | Phone No. - | 615-419-6617 | | | |

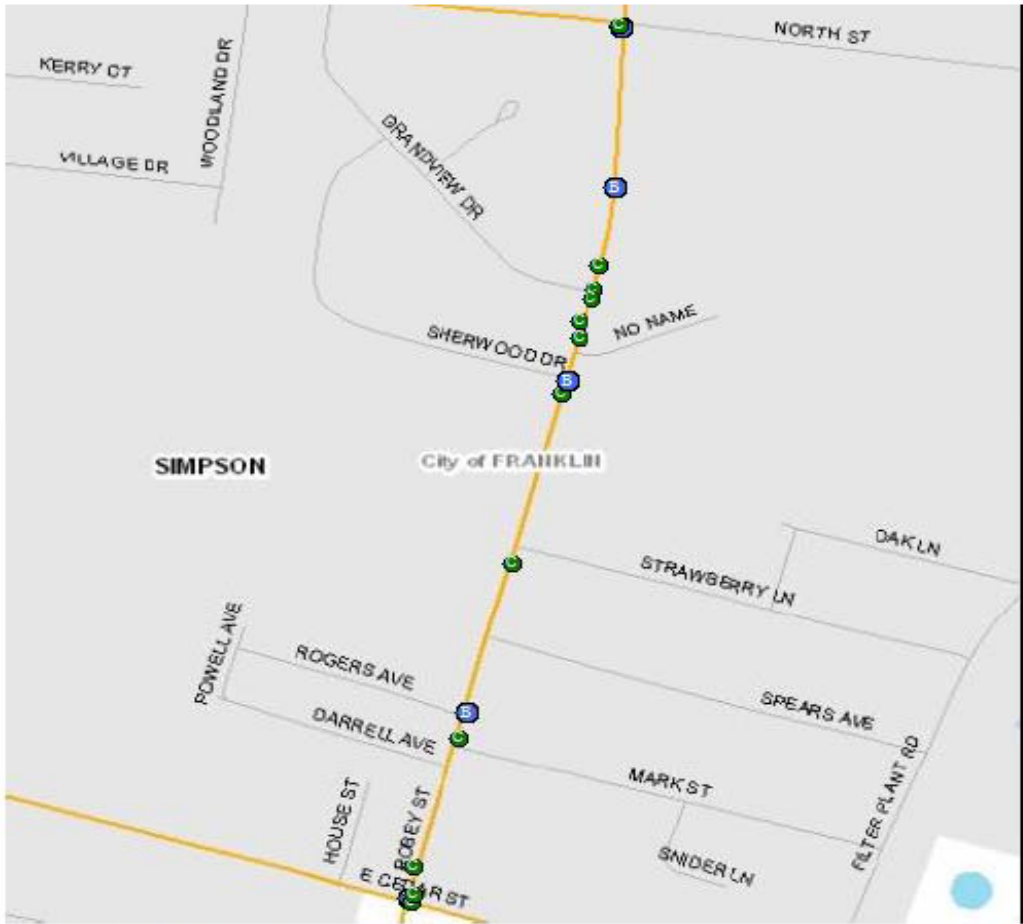
| | | | | | |
|------------|--|---------------------|--|--|----------------|
| 03-8855.00 | | Data Needs Analysis | | | KY 1008 |
| Simpson | | Scoping Study | | | Major Widening |

VII. TABLES AND EXHIBITS (cont.)



| | | | | | |
|---|--|---------------------|--|--|----------------|
| 03-8855.00 | | Data Needs Analysis | | | KY 1008 |
| Simpson | | Scoping Study | | | Major Widening |
| VII. TABLES AND EXHIBITS (cont.) | | | | | |

Criteria: County Name is one of: SIMPSON **And** Roadway Number is KY1008 **And** Milepoint Derived is between 3.688 and 4.333 **And** Collision Date is between 4/30/2010 and 4/30/2015



| | | |
|-------------------------|--|----|
| Collision w/Injury | | 5 |
| Collision w/Fatality | | 0 |
| Collision w/Prop Damage | | 15 |
| Total Mapped | | 20 |
| Total NOT Mapped | | 0 |

Scale: 1 inch = 697.8 Feet, 0.13 Miles