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Pre-Design Scoping Study

Extension of KY 1008 Bypass from KY 100 to US 31W in Franklin

Simpson County

Item No. 03-106.00

Prepared for:

The Kentucky Transportation Cabinet

Department of Highways

Division of Planning

Prepared by:

Wilbur Smith Associates

February 2004

EXECUTIVE SUMMARY

PRE-DESIGN SCOPING STUDY
Extension of KY 1008 Bypass from KY 100 to US 31W in Franklin, Kentucky
Simpson County
ITEM #3-106.00

The proposed bypass (extension of KY 1008) is located in the northwest portion of Franklin, Kentucky between KY 100 and US 31W. Franklin is in Simpson County which is located in the southwestern portion of the state.

This project is identified in the Kentucky Transportation Cabinet's (KYTC) FY 2003-2008 Six Year Highway Plan as Item No. 3-106.00. The project is defined as a Franklin Northwest Bypass or the extension of KY 1008 from KY 100 on the west side of town to US 31W.

Project Goals

Through this Pre-Design Scoping Study, a number of goals were established for this project:

- Reduce traffic congestion along major roads such as US 31W and KY 100 in downtown Franklin;
- Provide a corridor that would reduce truck traffic in downtown Franklin and along residential streets; and
- Improve safety for study area routes.

Traffic Considerations

Consideration of future traffic in the study area included historical growth rate forecasts and testing of various scenarios in the Simpson County Travel Demand Model. The results of these future traffic studies indicate the following:

- Without any future transportation improvements in the study area, US 31W is expected to operate at unacceptable conditions by the design Year 2025.
- Construction of a Franklin Northwest Bypass is expected to reduce traffic in Year 2025 along existing routes through Franklin: 1) Volumes along US 31W will decrease by 15-20% and 2) Volumes along KY 100 will decrease by 20%.
- Connection of the Franklin Northwest Bypass to the existing sections of KY 1008 is expected to attract the most users of the new route, about 6,700 vehicles per day (vpd) in Year 2025.
- Disjunction of the bypass route at either end of the existing KY 1008 is expected to reduce use of the bypass between 10% and 30% in Year 2025.

Environmental Overview

Environmental concerns and issues identified within the project area include:

- Public and private water sources;
- Potential water quality issues;
- Wetland areas;
- Karst groundwater basins/development;
- Potential endangered, threatened or special concern species;
- Sensitive community resources;
- Potential environmental justice issues related to minority and low-income populations;
- Historic structures;
- Cropland and farming operations; and
- Sites monitored by the Environmental Protection Agency (EPA).

Public Involvement

Throughout the course of this study, local citizens, public officials and interest groups were given the opportunity to provide input. Comments and discussions from the local involvement meetings indicate that there is mixed support for the bypass extension project.

Some participants suggested that the bypass could be moved further west on KY 100 and further north on US 31W to avoid homes and serve the industrial park. Others suggested that it should connect at the existing 1008 intersections, indicating that it would be inconvenient to have disjunctions along the bypass. Other comments received included the following:

- The proposed bypass would relieve congestion and truck traffic in Franklin;
- It would also improve access to areas north and west of town;
- Negative impacts to homeowners and farmland should be considered; and
- Landscaping and buffering to reduce visual and noise impacts on the adjacent neighborhoods should be considered.

Corridor Recommendations

As a result of the Pre-Design Scoping Study process, the following conclusions and recommendations were developed:

- The Franklin Northwest Bypass project should be moved forward to future phases of development.
- Additional funding will be required for the completion of construction activities for this project.
- Design corridors considered during future phase of this project should fall within the identified study area.
- Connection of the proposed route to the existing sections of KY 1008 is expected to attract the most users of the new route.
- Landscaping and buffering options should be considered along the proposed route to reduce impacts to residential areas.
- Provide a corridor that has minimal impacts to environmental issues in the study area.
- Involve local officials, interest groups, and the general public as much as possible throughout any future project phases.

Cost Estimates

As shown in the following table, the 2.7-mile corridor is expected to cost approximately $12.1 million. A total of $4.0 million is currently scheduled in the Six Year Highway Plan (FY 2003-FY 2008) for all future phases except construction of this project. Current scheduled funds are adequate, but additional funds are needed for the unscheduled construction phase of this project.

Phase	Anticipated Project Cost
Design	$400,000
Right-of-Way	$2,600,000
Utility Relocation	$1,000,000
Construction	$8,100,000
Total	$12,100,000

It is recommended that the scheduled project phases, with the addition of construction activities, remain as the schedule for the Franklin Northwest Bypass (KY 1008 extension).

Special Considerations

The following special considerations should be made in future phases of this project to address issues identified through this study.

- Environmental justice issues related to minority and low-income populations within close proximity to the project area should be closely monitored throughout further phases of this project.
- Threatened and endangered species should also be carefully monitored. The Gray Mytosis, Kentucky Creekshell, Spotted Darter, and Sedge Wren are known to exist within Simpson County.
- Consideration should be given to potential water quality issues related to the Barren River watershed, its tributaries and wetland areas.
- A more detailed study of karst topography and groundwater basins within the study area should be considered as the project develops.
- The presence of farms within and near the project area could present issues related to agricultural impacts.

Next Steps

- Upcoming project development activities should consist of environmental base studies and initial design activities for alternative alignments within the recommended corridor area.
- Future consideration should be given to long-term improvements such as completing a full western bypass which would utilize portions of the Franklin Northwest Bypass.

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I. INTRODUCTION

The purpose of this Pre-Design Scoping Study is to define and gather critical information relative to the project prior to the design phase. The study intends to help define the purpose of the project, establish an approximate location for future improvements and define potential project development issues.

Through this Pre-Design Scoping Study, the Kentucky Transportation Cabinet (KYTC) is able to insure that future project improvements effectively address the identified transportation needs and that the project development effort meets Federal requirements as defined in the National Environmental Policy Act (NEPA).

This project is identified in the Kentucky Transportation Cabinet's (KYTC) FY 2003-2008 Six Year Highway Plan as Item No. 3-106.00. The project is defined as a Franklin Northwest Bypass or the extension of KY 1008 from KY 100 on the west side of town to US 31W.

This report provides a general introduction and description of the project; presents a traffic and environmental overview of the proposed project area; summarizes the public and agency input received to-date on the project; and provides recommendations and next steps for project development.

Report Contents

- General Information
- Study Area Characteristics
- Public and Agency Input
- Preliminary Environmental Overview
- Future Traffic Considerations
- Draft Project Goals
- Recommendations and Conclusions
- Contact Information

A. Project Location

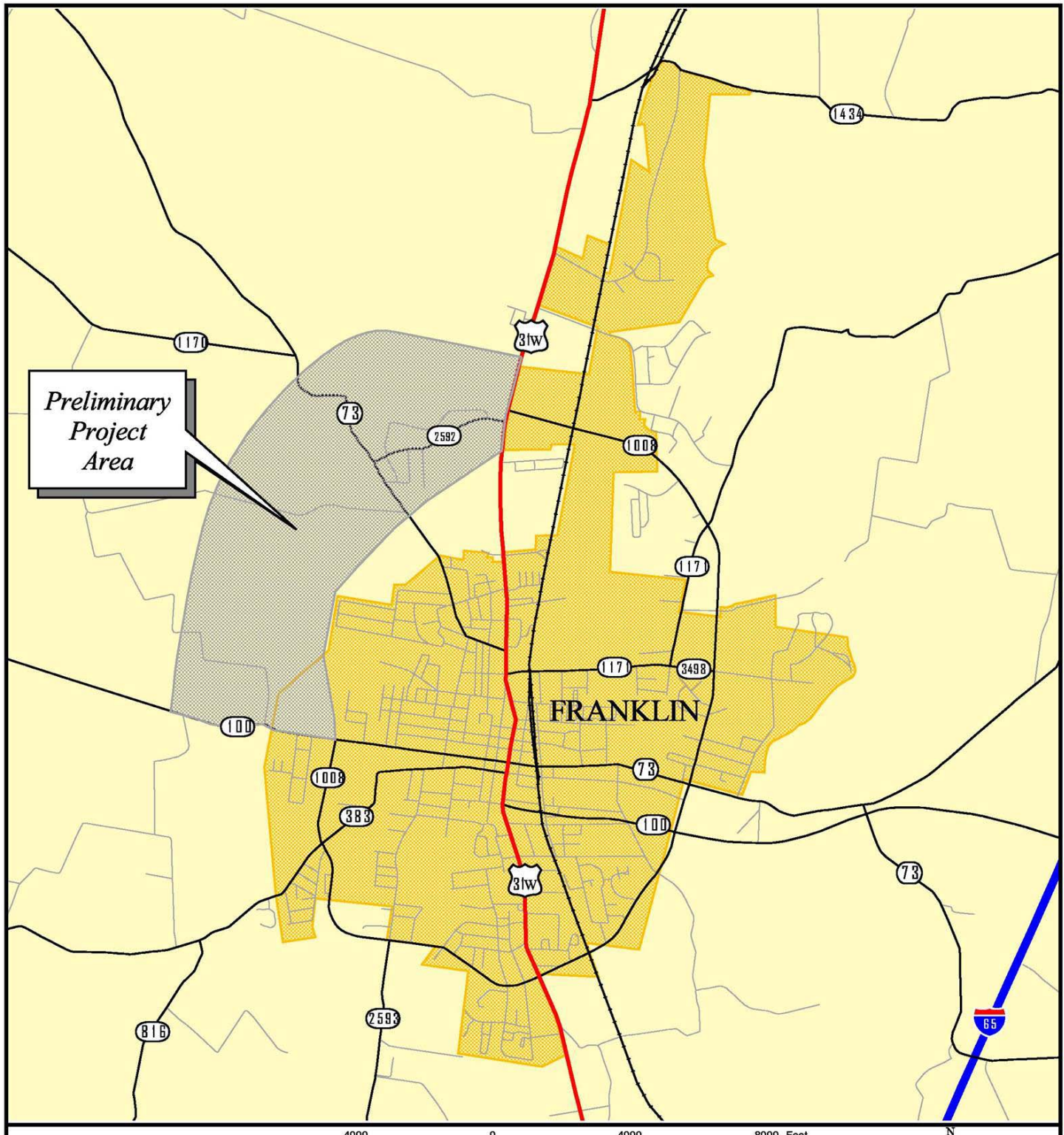
The proposed bypass (extension of KY 1008) is located in the northwest portion of Franklin, Kentucky between KY 100 and US 31W. Franklin is in Simpson County which is located in the southwestern portion of the state, as shown in **Figure 1**. A preliminary project area is included in this figure.

The existing segments of the Franklin Bypass (KY 1008) were built in separate stages. The intent of the original bypass segments was to divert truck traffic away from downtown Franklin. The most recent segment, from US 31W to North Street, was completed in the late 1980's. The construction of the proposed northwest bypass segment would complete a full circle bypass around the city.

B. Study Objectives and Tasks

The idea for the Northwest Franklin Bypass has been discussed for several years; however, public opposition stopped the project from moving past the design phase. As a result, previous design efforts will not be considered as part of this Pre-Design Scoping Study. This planning study serves as a clean slate for the Franklin Northwest Bypass project.

This study is intended to help better define the need for a Franklin Northwest Bypass, which would connect KY 100 and US 31W. The study is also intended to help expedite the project development process and identify potential environmental issues. In addition, the study process affords an opportunity for public and agency input so that



LEGEND

- Interstates
- US Highway
- State Roads
- Local Roads
- Railroad
- Towns
- Corporate Boundary

4000 0 4000 8000 Feet

N W E S

Location Map

EDUCATION PAYS

KENTUCKY TRANSPORTATION CABINET

ENGINEERS PLANNERS ECONOMISTS
Wilbur Smith Associates

Project Location

Figure 1
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31W

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project needs, improvement options, and issues and concerns can be clearly defined at the earliest stage of project development.

Specific tasks involved with this study include:

- Define project goals;
- Identify project termini;
- Consider existing conditions and future needs;
- Identify preliminary environmental and other concerns;
- Initiate contact with public officials and agencies;
- Listen to and share information with the public; and
- Provide recommendations.

C. Programming and Schedule

The project description listed in the KYTC's Six Year Highway Plan identifies this project as involving a 2.8-mile extension of KY 1008 from KY 100 on the west side of Franklin to US 31W. According to the Pre-construction Status Report (December 2003), funding has been scheduled for this project through the Utility Relocation Phase, which includes $100,000 for the Planning phase. Subsequent phases of project development include Design ($400,000 in FY 2006), Right-of-Way Acquisition ($2.6 million in FY 2007), and Utility Relocation ($1.0 million in FY 2007), as shown below:

Phase	Timeline	Funding
Design	FY 2006	$0.4 million
Right-of-Way Acquisition	FY 2007	$2.6 million
Utility Relocation	FY 2007	$1.0 million
Construction	----	----

Since the Construction phase is not scheduled in the current Six Year Highway Plan, it is anticipated that additional project funds will be required to complete the Franklin Northwest Bypass project.

II. EXISTING CONDITIONS

Characteristics of the major highways in the study area are identified in the following sections. Included are transportation systems, geometric data, bridges, traffic conditions, crash history, and planned highway improvements. Features of the highways in the study area are summarized from the KYTC Highway Information System (HIS) database. It should be noted that maps and table summaries located throughout this report may also include roadway segments that fall outside of the preliminary project area. Photographs of some features in the study area are contained in **Appendix A** and throughout this chapter.

Much of the following discussion is based on the existing sections of KY 1008 in Franklin. KY 1008 currently rings the city of Franklin on three sides. The southwest portion of KY 1008, between US 31W and KY 100, was converted from existing city streets and is the oldest section of the bypass. The southeast and northeast sections are the newer portions of the bypass, with geometric standards improving from south to north.

A. Highway Systems

The various highway systems represented by study area roadways are summarized in **Table 1**. These include the State System, the National Truck Network (NN), and the National Highway System (NHS). Functional classification and truck weight class are also listed for the study area routes. The highway systems information is summarized as follows:

- State-maintained roads in Kentucky are classified into one (1) of six (6) categories under the State System, ranging from Supplemental Road to State Primary. In the study area, existing KY 1008 is classified as a State Secondary route.
- The National Truck Network (NN) includes roads that have been specifically designated for use by commercial trucks with increased dimensions (102 inches wide; 13 feet, six (6) inches high; semi-trailers up to 53 feet long; trailers up to 28 feet long – not to exceed two (2) trailers per truck). KY 1008 in southeast and northeast Franklin (MP 2.276 to MP 6.526) is included in the NN system. Also, a portion of US 31W (MP 4.500 to MP 5.273 and MP8.477 to MP 9.053) is designated as an NN corridor.
- The National Highway System (NHS) was established by the Intermodal Surface Transportation Efficiency Act (ISTEA). It includes the Interstate Highway System and other significant principal arterial roads important to the nation's economy, defense, and mobility. In the study area, there are no NHS routes.
- One (1) of 12 functional classification categories is assigned to each state-maintained road in Kentucky. In the study area, KY 1008 is classified as an Urban Collector Street.
- Kentucky Revised Statutes require weight limits on the state-maintained highway system. With the exception of permits for over-dimensional or over-gross-vehicle-weight-classification-limit vehicles issued by the KYTC, Division of Motor Carriers, there are three weight classification limits: 1) AAA – 80,000 lbs. gross vehicle weight; 2) AA – 62,000 lbs. gross vehicle weight; and 3) A – 44,000 lbs. gross vehicle weight. In southwest Franklin (MP 0.000 to MP 2.276), KY 1008 has a weight classification limit of AA. The weight classification limit on KY 1008 is AAA in southeast and northeast Franklin (MP 2.276 to MP 6.526).

Table 1. Highway Systems

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	Begin Route	End MP	End Route	State System	National Truck Network (NN)	National Highway System (NHS)	Functional Classification	Truck Weight Class
KY 1008 MP 0.000 - MP 6.526								
0.000	KY 100	0.590	KY 383	State Secondary	No	No	Urban Collector Street	AA
0.590	KY 383	2.276	US 31W in south Franklin	State Secondary	No	No	Urban Collector Street	AA
2.276	US 31W in south Franklin	4.350	North Street	State Secondary	Yes	No	Urban Collector Street	AAA
4.350	North Street	6.526	US 31W in north Franklin	State Secondary	Yes	No	Urban Collector Street	AAA
US 31W MP 4.500 - MP 9.053								
4.500		4.905	Southern Urban Limits of Franklin	State Secondary	Yes	No	Rural Minor Arterial	AAA
4.905	Southern Urban Limits of Franklin	5.273	KY 1008	State Secondary	Yes	No	Urban Minor Arterial	AAA
5.273	KY 1008	6.070	KY 100	State Secondary	No	No	Urban Minor Arterial	AAA
6.070	KY 100	6.170	Washington Street	State Secondary	No	No	Urban Minor Arterial	AAA
6.170	Washington Street	6.995	KY 1171	State Secondary	No	No	Urban Minor Arterial	AAA
6.995	KY 1171	7.120	KY 73	State Secondary	No	No	Urban Minor Arterial	AAA
7.120	KY 73	7.400	Akin Street	State Secondary	No	No	Urban Minor Arterial	AAA
7.400	Akin Street	7.950	Patton Road	State Secondary	No	No	Urban Minor Arterial	AAA
7.950	Patton Road	8.477		State Secondary	No	No	Urban Minor Arterial	AAA
8.477		9.053	Broadway	State Secondary	Yes	No	Urban Minor Arterial	AAA
KY 73 MP 7.690 - MP 16.310								
7.690	Filter Plant Road	7.943	NA	State Secondary	No	No	Rural Minor Collector	A
7.943	NA	8.870	Water Street	State Secondary	No	No	Urban Collector Street	A
8.870	Water Street	9.234	US 31W	State Secondary	No	No	Urban Collector Street	A
9.234	US 31W	9.390	Parkway Drive	State Secondary	No	No	Urban Minor Arterial	A
9.390	Parkway Drive	10.228	Robey Bethel Drive	State Secondary	No	No	Urban Minor Arterial	A
10.228	Robey Bethel Drive	10.554		State Secondary	No	No	Urban Minor Arterial	A
10.554		16.310	Logan County Line	State Secondary	No	No	Rural Major Collector	A
KY 100 MP 6.302 - MP 11.000								
6.302	Harris School Road	8.284	Allen Road	State Secondary	No	No	Rural Major Collector	AAA
8.284	Allen Road	8.308		State Secondary	No	No	Rural Major Collector	AAA
8.308		8.551	KY 1008	State Secondary	No	No	Urban Minor Arterial	AAA
8.551	KY 1008	8.719		State Secondary	No	No	Urban Minor Arterial	AAA
8.719		9.111	High Street	Rural Secondary	No	No	Urban Minor Arterial	AAA
9.111	High Street	9.647	US 31W	Rural Secondary	No	No	Urban Minor Arterial	AAA
9.647	US 31W	9.675		Rural Secondary	No	No	Urban Minor Arterial	AAA
9.675		10.315	Macedonia Road	State Secondary	No	No	Urban Minor Arterial	AAA
10.315	Macedonia Road	10.648		State Secondary	No	No	Urban Minor Arterial	AAA
10.648		11.000		State Secondary	No	No	Rural Minor Arterial	AAA
KY 383 MP 7.500 - MP 9.513								
7.500		7.893	Southern Urban Limits of Franklin	State Secondary	No	No	Rural Major Collector	AAA
7.893	Southern Urban Limits of Franklin	8.279	KY 1008	State Secondary	No	No	Urban Minor Arterial	AAA
8.279	KY 1008	8.560	Briggs Avenue	Rural Secondary	No	No	Urban Minor Arterial	AAA
8.560	Briggs Avenue	9.001	KY 2151	Rural Secondary	No	No	Urban Minor Arterial	AAA
9.001	KY 2151	9.513	US 31W	Rural Secondary	No	No	Urban Minor Arterial	AAA
KY 1170 MP 4.656 - MP 7.156								
4.656	Feehon Road	7.156	KY 73	Rural Secondary	No	No	Rural Minor Collector	A
KY 1171 MP 0.000 - MP 2.090								
0.000	US 31W	0.907	KY 3498	Rural Secondary	No	No	Urban Minor Arterial	A
0.907	KY 3498	2.078	Northern Urban Limits of Franklin	Rural Secondary	No	No	Urban Minor Arterial	A
2.078	Northern Urban Limits of Franklin	2.090		Rural Secondary	No	No	Rural Minor Collector	A
KY 2592 MP 0.000 - MP 0.774								
0.000	KY 73	0.774	US 31W	Rural Secondary	No	No	Urban Local Street	A
KY 2593 MP 4.000 - MP 4.874								
4.000		4.724		Rural Secondary	No	No	Rural Local	A
4.724	Southern Urban Limits of Franklin	4.874	KY 1008	Rural Secondary	No	No	Urban Collector Street	
KY 3498 MP 0.000 - MP 0.246								
0.000	KY 1171	0.246	KY 1008	Rural Secondary	No	No	Urban Collector Street	A

Source: KYTC's *Highway Information System (HIS)* database

B. Geometric Characteristics

Geometric characteristics for major routes in the study area, listed in **Table 2**, include items such as the number of lanes, lane widths, shoulder widths, roadway type, local terrain, and route speed limits. The percent passing sight distance information was not available in the HIS database for most of the study area routes. In the study area, KY 1008 has the following characteristics:

Southwest KY 1008

- Southwest KY 1008 – KY 100 to US 31W (MP 0.000 to MP 2.276)
  - Two (2) lanes;
  - Nine-foot (MP 0.000 to MP 1.320) and ten-foot (MP 1.320 to 2.276) lanes;
  - Four-foot stabilized shoulders;
  - An undivided highway cross-section;
  - Flat terrain; and
  - Posted speed limits of 45 mph.
- Southeast KY 1008 – US 31W to KY 3498 (MP 2.276 to MP 4.333)
  - Two (2) lanes;
  - 11-foot (MP 2.276 and MP 3.688) and 10-foot (MP 3.688 and 4.333) lanes;
  - Four-foot stabilized shoulders;
  - An undivided highway cross-section;
  - Flat terrain (MP 2.276 to 3.176) and rolling terrain (MP 3.176 to MP 4.333); and
  - Posted speed limits of 45 mph (MP 2.276 to MP 3.500) and 35 mph (MP 3.500 to MP 4.333).

Northeast KY 1008

- Northeast KY 1008 – KY 3498 to US 31W (MP 4.333 to MP 6.526)
  - Two (2) twelve-foot lanes;
  - Ten-foot shoulders paved with bituminous material;
  - An undivided highway cross-section;
  - Rolling terrain; and
  - Posted speed limits of 45 mph (MP 4.333 to MP 4.485) and 55 mph (MP 4.485 to MP 6.526).

C. Bridges

Bridge data for the routes considered in this study are listed in **Table 3**. According to the KYTC Bridge Division, a bridge structure is eligible for Federal rehabilitation funds when it meets two criteria: 1) the bridge has a sufficiency rating below 50.0 and 2) the bridge is considered either structurally deficient or functionally obsolete. Structurally deficient bridges cannot carry the weight they were originally designed to carry. Bridges are considered functionally obsolete if they do not meet today's design standards.

The most recent sufficiency ratings indicate that one (1) study area bridge is eligible for Federal Rehabilitation funds. This bridge, also considered to be functionally obsolete, is located along KY 73 at MP 11.267 and is scheduled for replacement in FY 2003. In addition, one study area bridge along KY 100 at MP 9.751 is considered to be functionally obsolete.

Table 2. Geometric Characteristics

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	Begin Route	End MP	End Route	Length (miles)	# of Lanes	Lane Width (feet)	Shoulder Width (feet)	% Passing Sight Distance	Speed Limit (mph)	Roadway Type	Terrain Type	Pavement Type
KY 1008 MP 0.000 - MP 6.526												
0.000	KY 100	0.590	KY 383	0.590	2	9	4	NA	45	Undivided	Flat	Mixed Bituminous
0.590	KY 383	1.320	KY 2593 (Witt Road)	0.730	2	9	4	NA	45	Undivided	Flat	Mixed Bituminous
1.320	KY 2593 (Witt Road)	2.276	US 31W (Main Street)	0.956	2	10	4	NA	45	Undivided	Flat	Mixed Bituminous
2.276	US 31W (Main Street)	3.176	Macdonia Road	0.900	2	11	4	NA	45	Undivided	Flat	High Flexible
3.176	Macdonia Road	3.500	-	0.324	2	11	4	NA	45	Undivided	Rolling	High Flexible
3.500	-	3.688	KY 73	0.188	2	11	4	NA	35	Undivided	Rolling	High Flexible
3.688	KY 73	4.333	KY 3498 (North Street)	0.645	2	10	4	NA	35	Undivided	Rolling	High Flexible
4.333	KY 3498 (North Street)	4.485		0.152	2	12	10	NA	45	Undivided	Rolling	High Flexible
4.485		4.550		0.065	2	12	10	NA	55	Undivided	Rolling	High Flexible
4.550	-	6.526	US 31W	1.976	2	12	10	NA	55	Undivided	Rolling	High Flexible
US 31W MP 4.500 - MP 9.053												
4.500	-	4.905	Memorial Lane	0.405	2	11	10	59	55	Undivided	Rolling	High Flexible
4.905	Memorial Lane	5.178	-	0.273	2	11	10	NA	55	Undivided	Flat	High Flexible
5.178	-	5.207	-	0.029	2	11	10	NA	45	Undivided	Flat	High Flexible
5.207	-	5.424	Commerce Street	0.217	2	11	4	NA	45	Undivided	Flat	High Flexible
5.424	Commerce Street	5.720	Industrial Drive	0.296	2	11	4	NA	35	Undivided	Flat	High Flexible
5.720	Industrial Drive	6.070	Iris Drive	0.350	3	12	Curbed	NA	35	Undivided	Flat	High Flexible
6.070	Iris Drive	6.396	KY 383	0.326	3	12	Curbed	NA	35	Undivided	Flat	High Flexible
6.396	KY 383	6.610	Washington Street	0.214	3	12	Curbed	NA	25	Undivided	Flat	High Flexible
6.610	Washington Street	6.670	McGoodwin Street	0.060	3	11	Curbed	NA	25	Undivided	Rolling	High Flexible
6.670	McGoodwin Street	7.410	Akin Avenue	0.740	3	11	Curbed	NA	35	Undivided	Rolling	High Flexible
7.410	Akin Avenue	7.550	-	0.140	3	11	6	NA	35	Undivided	Rolling	High Flexible
7.550	-	8.069	-	0.519	2	11	6	NA	45	Undivided	Rolling	High Flexible
8.069	-	8.250	-	0.181	2	11	6	NA	55	Undivided	Rolling	High Flexible
8.250	-	8.275	-	0.025	2	11	6	NA	55	Divided	Rolling	High Flexible
8.275	-	8.665	JL Farmer Road	0.390	2	11	10	NA	55	Divided	Rolling	High Flexible
8.665	JL Farmer Road	9.053	Broadway	0.388	2	11	6	67	55	Undivided	Rolling	High Flexible
KY 73 MP 7.690 - MP 16.310												
7.690	Crestview Road	8.417	-	0.727	2	10	4	NA	45	Undivided	Flat	High Flexible
8.417	-	8.490	-	0.073	2	10	4	NA	35	Undivided	Flat	High Flexible
8.490	-	8.652	Macedonia Road	0.162	2	10	4	NA	35	Undivided	Flat	High Flexible
8.652	Macedonia Road	9.040	Railroad Street East	0.388	2	11	1	NA	35	Undivided	Flat	High Flexible
9.040	Railroad Street East	9.234	US 31W	0.194	2	11	1	NA	25	Undivided	Flat	High Flexible
9.234	US 31W	9.660	Lynnwood Drive	0.426	2	9	4	NA	35	Undivided	Flat	Mixed Bituminous
9.660	Lynnwood Drive	10.250	Robey-Bethel Grove	0.590	2	9	4	NA	45	Undivided	Flat	Mixed Bituminous
10.250	Robey-Bethel Grove	10.554	KY 2592	0.304	2	8	4	NA	55	Undivided	Flat	Mixed Bituminous
10.554	KY 2592	16.310	KY 621	5.756	2	8	4	35	55	Undivided	Flat	Mixed Bituminous
KY 100 MP 6.302 - MP 11.000												
6.302	Harris School Road	6.508	Dinwiddie Road	0.206	2	9	4	34	55	Undivided	Flat	High Flexible
6.508	Dinwiddie Road	8.308	Allen Road	1.800	2	9	4	63	55	Undivided	Flat	High Flexible
8.308	Allen Road	8.364	-	0.056	2	9	4	NA	55	Undivided	Flat	High Flexible
8.364	-	8.534	-	0.170	2	9	4	NA	45	Undivided	Flat	High Flexible
8.534	-	8.572	Fairview Avenue	0.038	2	9	4	NA	35	Undivided	Flat	High Flexible
8.572	Fairview Avenue	8.900	D & H Street	0.328	2	10	1	NA	35	Undivided	Flat	High Flexible
8.900	D & H Street	9.536	-	0.636	2	12	1	NA	35	Undivided	Flat	High Flexible

Source: KYTC's *Highway Information System (HIS)* database

Table 2. Geometric Characteristics (continued)

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP		End MP		Length (miles)	# of Lanes	Lane Width (feet)	Shoulder Width (feet)	% Passing Sight Distance	Speed Limit (mph)	Roadway Type	Terrain Type	Pavement Type
KY 100 MP 6.302 - MP 11.000												
9.536	-	9.647	US 31W	0.111	4	12	2	29	55	Divided	Rolling	High Rigid
9.647	US 31W	9.750	-	0.103	4	12	2	NA	55	Divided	Rolling	High Rigid
9.750	-	9.954	-	0.204	2	12	6	NA	55	Divided	Rolling	High Flexible
9.954	-	10.137	Russell Street	0.183	2	12	6	29	55	Divided	Rolling	High Flexible
10.137	Russell Street	10.315	Railroad Street West	0.178	2	12	6	60	55	Divided	Rolling	High Flexible
10.315	Railroad Street West	10.502	Montague Avenue	0.187	2	12	6	60	55	Divided	Rolling	High Flexible
10.502	Montague Avenue	10.524	-	0.022	2	12	10	60	55	Divided	Rolling	High Flexible
10.524	-	10.648	KY 1008 (Franklin Bypass)	0.124	2	12	10	Curbed	55	Divided	Rolling	High Flexible
10.648	KY 1008 (Franklin Bypass)	10.700	-	0.052	2	12	10	100	55	Divided	Rolling	High Flexible
10.700	-	10.854	-	0.154	2	12	10	100	55	Undivided	Rolling	High Flexible
10.854	-	11.000	Crestview Road	0.146	2	12	10	44	55	Undivided	Rolling	High Flexible
KY 383 MP 7.500 - MP 9.513												
7.500	-	7.650	-	0.150	2	9	4	0	55	Undivided	Rolling	High Flexible
7.650	-	7.949	Western Avenue	0.299	2	9	4	0	45	Undivided	Rolling	High Flexible
7.949	Western Avenue	8.279	KY 1008 (Franklin Bypass)	0.330	2	9	4	NA	45	Undivided	Rolling	High Flexible
8.279	KY 1008 (Franklin Bypass)	8.580	-	0.301	2	9	4	NA	45	Undivided	Rolling	High Flexible
8.580	-	9.230	Liberty Street	0.650	2	9	4	NA	35	Undivided	Rolling	High Flexible
9.230	Liberty Street	9.513	US 31W (Main Street)	0.283	2	9	2	NA	35	Undivided	Rolling	High Flexible
KY 1170 MP 4.656 - MP 7.156												
4.656	Stanley Lane	7.156	KY 73	2.500	2	8	4	NA	55	Undivided	Rolling	Mixed Bituminous
KY 1171 MP 0.000 - MP 2.090												
0.000	US 31W	0.907	KY 3498 (Woodland Drive)	0.907	2	10	4	NA	35	Undivided	Rolling	Mixed Bituminous
0.907	KY 3498 (Woodland Drive)	1.630	-	0.723	2	10	4	NA	45	Undivided	Rolling	Mixed Bituminous
1.630	-	1.800	KY 1008 (Franklin Bypass)	0.170	2	11	4	NA	45	Undivided	Rolling	Mixed Bituminous
1.800	KY 1008 (Franklin Bypass)	2.090	Broadway	0.290	2	9	4	NA	45	Undivided	Rolling	Mixed Bituminous
KY 2592 MP 0.000 - MP 0.774												
0.000	KY 73	0.774	US 31W	0.774	2	10	4	NA	35	Undivided	Rolling	Mixed Bituminous
KY 2593 MP 4.000 - MP 4.874												
4.000	-	4.874	KY 1008 (Franklin Bypass)	0.874	2	8	4	NA	55	Undivided	Rolling	Mixed Bituminous
KY 3498 MP 0.000 - 0.246												
0.000	KY 1171 & Woodland Drive	0.170	-	0.170	2	11	5	NA	35	Undivided	Flat	High Flexible
0.170	-	0.246	KY 1008 (Franklin Bypass)	0.076	2	11	6	NA	35	Undivided	Flat	High Flexible

Source: KYTC's *Highway Information System (HIS)* database

Table 3. Bridge Data

Simpson County, Item No. 3-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Route	Bridge MP	Bridge No.	Bridge Length	Bridge Width	Horizontal Clearance	Sufficiency Rating	Structural[1] Function	Feature Intersected
KY 1008	0.137	B00027	25	0.0	30.0	92.8		Unnamed stream
KY 1008	2.581	B00028	150	35.0	34.0	96.2		CSX RR
KY 73	9.400	B00037	29	0.0	21.0	96.0		Unnamed stream
KY 73	11.267	B00011	33	23.0	22.0	39.0	F	Sinking Creek
KY 100	9.751	B00035	173	79.3	76.0	95.0	F	CSX RR & Railroad St.

1) S-Indicates Structurally Deficient, F-Indicates Functionally Obsolete

Source: KYTC's *Highway Information System (HIS)* database

D. Existing Traffic and Level of Service

The study area's existing traffic and operational conditions, for each major route, are listed in **Table 4**. For this project, existing (Year 2002) traffic volumes and level of service (LOS) have been identified and are discussed further in the following subsections.

1. Existing Traffic Volumes and Level of Service (Year 2002)

Existing traffic volumes (Year 2002) for segments of the study area routes were primarily summarized based on information provided in the HIS database. Existing truck percentages were determined for the study area routes using the HIS data and KYTC default values based on the functional classification of the segment.

The existing average daily traffic (ADT) volumes are shown in **Figure 2**. Those volumes and the corresponding truck percentages are located in **Table 4**. The existing traffic volumes along KY 1008 range between 2,520 vehicles per day (vpd) in southwest Franklin (MP 0.000 to MP 0.590) and 6,920 vpd in southeast Franklin (MP 3.770 to MP 3.968). Existing truck percentages are approximately 7.9% of the total traffic along KY 1008.

A northwest bypass of Franklin would potentially serve some of the traffic currently using KY 100 west and US 31W north. Currently, traffic volumes along US 31W in Franklin range from 10,600 vpd to 24,700 vpd. KY 100 in the study area has traffic volumes that range from 2,510 vpd to 5,930 vpd. Truck percentages from US 31W and KY 100 are approximately 7.5% and 11.1%, respectively. The highest truck percentages (11.1%) are currently found along KY 100 through town.

2. Level of Service

Level of Service (LOS) is a qualitative measure defined in the *2000 Highway Capacity Manual*, published by the Transportation Research Board (TRB), and used to describe traffic conditions. Individual levels of service characterize these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six (6) levels of service are defined and are given letter designations from A to F, with LOS A representing free flow conditions and LOS F representing severe congestion. Typically, a minimum of LOS D is acceptable in urban areas and LOS C in rural areas. Chapters 15, 20 and 21 of the 2000 Highway Capacity Manual provide guidelines on the analytical procedures for estimating LOS for streets and highways.

Level of Service

- LOS is used to describe traffic conditions, where LOS A is the best and LOS F is the worst.
- KY 1008 operates at LOS D or better in the study area.
- US 31W operates at LOS D and LOS E in the study area.

Figure 2 and **Table 4** also show existing LOS calculated for segments of each route in the study area. KY 1008 currently operates at or above LOS C except from MP 3.176 to MP 3.968, where it falls to LOS D. KY 100 operates at LOS C and above in the study area. US 31W, on the other hand, operates at LOS D and LOS E within the study area. The most congested portion of US 31W falls between North Street/Roosevelt Avenue and KY 73 in Franklin (MP 6.995 to MP 7.120).

Table 4. Existing Traffic Characteristics

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	End MP	Length (miles)	% Trucks	2002 ADT	2002 LOS	HCS Module[3]	Free Flow Speed	% No Passing	Access Pts / Mile
KY 1008 MP 0.000 - MP 6.526									
0.000	0.590	0.590	7.9 [1]	2,520	B	II	50	100	10
0.590	2.280	1.690	7.9 [1]	6,030	C	II	50	100	10
2.280	3.176	0.896	7.9 [1]	5,630	C	II	50	100	10
3.176	3.500	0.324	7.9 [1]	6,800	D	II	50	100	10
3.500	3.770	0.270	7.9 [1]	6,800	D	II	45	100	10
3.770	3.968	0.198	7.9 [1]	6,920	D	II	45	80	8
3.968	4.350	0.382	7.9 [1]	5,010	C	II	45	80	8
4.350	4.550	0.200	7.9 [1]	4,620	C	II	45	80	8
4.550	6.526	1.976	7.9 [1]	4,620	C	II	60	80	2
US 31W MP 4.500 - MP 9.053									
4.500	5.178	0.678	7.5	14,500	D	II	60	41	8
5.178	5.273	0.095	7.5	14,500	D	II	50	41	10
5.273	5.424	0.151	7.5 [2]	13,300	D	II	50	41	20
5.424	5.720	0.296	7.5 [2]	13,300	D	II	45	41	20
5.720	6.070	0.350	7.5 [2]	12,900	D	II	45	41	20
6.070	6.170	0.100	7.5 [2]	12,400	D	II	45	41	20
6.170	6.396	0.226	7.5 [2]	14,900	D	II	45	41	20
6.396	6.670	0.274	7.5 [2]	14,900	D	II	45	41	20
6.670	6.995	0.325	7.5 [2]	14,900	D	II	45	41	20
6.995	7.120	0.125	7.5 [2]	24,700	E	II	45	41	20
7.120	7.400	0.280	7.5 [2]	11,600	D	II	45	41	20
7.400	7.550	0.150	7.5 [2]	10,600	D	II	45	41	20
7.550	7.950	0.400	7.5 [2]	10,600	D	II	50	41	10
7.950	8.069	0.119	7.5 [2]	12,500	D	II	50	41	10
8.069	9.053	0.984	7.5 [2]	12,500	D	II	60	41	10
KY 73 MP 7.690 - MP 16.310									
7.690	8.417	0.727	7.9 [1]	3,820	C	II	50	100	15
8.417	8.490	0.073	7.9 [1]	3,820	C	II	45	100	15
8.490	8.870	0.380	7.9 [1]	4,070	C	II	45	100	15
8.870	9.040	0.170	7.9 [1]	3,740	C	II	45	100	15
9.040	9.234	0.194	7.9 [1]	3,740	C	II	45	100	15
9.234	9.390	0.156	7.9 [1]	4,620	C	II	45	65	8
9.390	9.660	0.270	7.9 [1]	4,120	C	II	45	65	8
9.660	10.228	0.568	7.9 [1]	4,120	C	II	50	65	8
10.228	10.250	0.022	7.9 [1]	1,440	A	II	50	65	8
10.250	16.310	6.060	7.9 [1]	1,440	A	II	60	65	8
KY 100 MP 6.302 - MP 11.000									
6.302	6.508	0.206	11.1 [2]	2,510	B	II	60	66	10
6.508	8.284	1.776	11.1 [2]	2,510	B	II	60	37	10
8.284	8.308	0.024	11.1 [2]	4,190	B	II	60	37	10
8.308	8.364	0.056	11.1 [2]	4,190	B	II	60	50	20
8.364	8.534	0.170	11.1 [2]	4,190	B	II	50	50	20
8.534	8.551	0.017	11.1 [2]	4,190	B	II	45	50	20
8.551	9.111	0.560	11.1 [2]	4,090	B	II	45	50	20
9.111	9.536	0.425	11.1 [2]	5,150	C	II	45	50	20
9.536	9.647	0.111	11.1 [2]	5,150	A	M	60	50	20
9.647	9.654	0.007	11.1	3,080	A	M	60	71	20
9.654	9.750	0.096	11.1	3,080	A	M	60	71	20
9.750	9.954	0.204	11.1	3,080	B	II	60	71	20
9.954	10.137	0.183	11.1	3,080	C	II	60	71	20
10.137	10.315	0.178	11.1	3,080	B	II	60	40	20
10.315	10.524	0.209	11.1	3,110	B	II	60	40	20
10.524	10.613	0.089	11.1	3,110	C	II	60	100	20
10.613	10.648	0.035	11.1	5,930	C	II	60	100	20
10.648	10.854	0.206	11.1	5,930	B	II	60	0	10
10.854	11.000	0.146	11.1	5,930	C	II	60	56	10

Table 4. Existing Traffic Characteristics (continued)

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

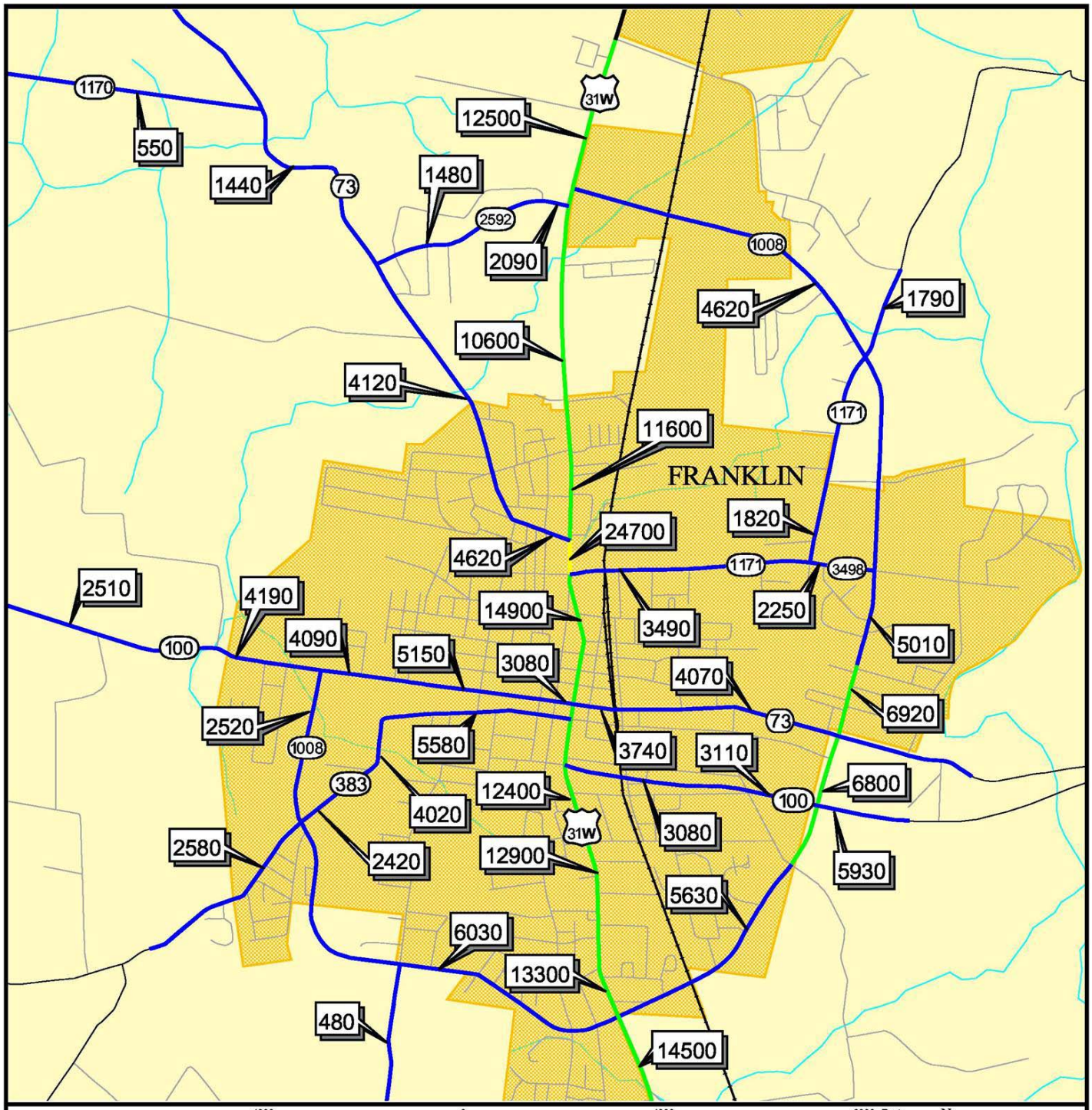
Begin MP	End MP	Length (miles)	% Trucks	2002 ADT	2002 LOS	HCS Module[3]	Free Flow Speed	% No Passing	Access Pts / Mile
KY 383 MP 7.500 - MP 9.513									
7.500	7.650	0.150	5.6 [1]	2,580	B	II	55	100	10
7.650	8.279	0.629	5.6 [1]	2,580	B	II	45	100	10
8.279	8.560	0.281	5.6 [1]	2,420	B	II	45	100	10
8.560	8.58	0.020	5.6 [1]	4,020	C	II	45	100	10
8.580	9.001	0.421	5.6 [1]	4,020	C	II	35	100	10
9.001	9.513	0.512	5.6 [1]	5,580	C	II	35	100	10
KY 1170 MP 4.656 - MP 7.156									
4.656	7.156	2.500	5.6 [1]	550	A	II	55	80	10
KY 1171 MP 0.000 - MP 2.090									
0.000	0.907	0.907	2.1	3490	C	II	35	80	10
0.907	1.110	0.203	2.1	1820	B	II	45	80	10
1.110	2.090	0.980	2.1	1790	B	II	45	80	10
KY 2592 MP 0.000 - MP 0.774									
0.000	0.078	0.078	7.9 [1]	1,170	A	II	35	80	10
0.078	0.685	0.607	7.9 [1]	1,480	B	II	35	80	10
0.685	0.774	0.089	7.9 [1]	2,090	B	II	35	80	10
KY 2593 MP 4.000 - MP 4.874									
4.000	4.874	0.874	7.9 [1]	480	A	II	55	80	8
KY 3498 MP 0.000 - 0.246									
0.000	0.246	0.246	7.9 [1]	2,250	B	II	35	80	8

1) Value Taken From 2002 Traffic Forecasting Report, KYTC Division of Multimodal Programs, Table 4F, pg. 20

2) Estimated based on other segments along route included in Highway Information System (HIS) database

3) F=Freeway; M=Multilane Highway; I=Two Lane - Class 1; II=Two Lane - Class II

Sources: KYTC's Highway Information System (HIS) database, Transportation Research Board's 2000 Highway Capacity Manual, 2000 Highway Capacity Software



4000 0 4000 8000 Feet

N
W E
S

LEGEND

9360	Estimated 2002 ADT
	C or Better
	D
	E
	F

Location Map

EDUCATION PAYS

KENTUCKY TRANSPORTATION CABINET

ENGINEERS PLANNERS ECONOMISTS
Wilbur Smith Associates

Year 2002 Traffic and Level of Service

Figure 2
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 10/28/03

E. Crash Analysis

Crash data for the major routes in the study area were considered for a four-year period from January 1, 1998, to December 31, 2001. The location of crashes with valid milepoint designations, recorded in the HIS database, are shown by corridor segment in **Table 5** and by spot (0.1 miles in length) in **Table 6** to determine possible high crash locations. A spot location or segment of roadway is considered to have a high crash rate when the total crash rate is higher than the critical crash rate for similar roads in the area.

Crash Analysis

- Segments of US 31W and KY 100 have higher crash rates than similar highways.
- There are three (3) high crash spots along KY 1008 in the study area.
- There are several high crash spots along US 31W, KY 73, KY 100, and KY 383.

When a spot location or segment has a critical rate factor greater than one (1.00), it indicates that crashes at this location may not be occurring randomly. The critical rate factors are calculated on the methodology presented in the Kentucky Transportation Center's Analysis of Traffic Accident Data in Kentucky (1997-2001)[1].

As part of this process, each crash was classified into one (1) of three (3) categories based on the degree of severity: fatal, injury, or property-damage-only. During the period studied, there were no fatal, twenty-eight (28) injury, and fifty-four (54) property-damage-only crashes along KY 1008 in the study area.

Figure 3 displays the crash data by severity and location, along with the identified high crash segments and spots. As shown highlighted in red, portions of US 31W and KY 100 have historical crash rates which are higher than those for similar highway segments.

High crash spot locations are identified along most of the routes considered. There are three (3) high crash spots along KY 1008 in the study area: 1) at the western intersection with KY 100; 2) just east of US 31W; and 3) just northwest of the KY 1171 intersection. In addition, there are several high crash spots along US 31W, KY 73, KY 100, and KY 383.

[1] Agent and Pigman. *Analysis of Traffic Accident Data in Kentucky (1997-2001)*. Kentucky Transportation Center. August 2002.

Table 5. Crash Segment Analysis (1998-2001)

Simpson County, Item No. 03-106.00

Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	End MP	Length (miles)	ADT	Number of Lanes	Divided / Undivided	Rural / Urban	Avg. Acc. Rate	Critical Acc. Rate	Crashes				HMVM	Rates per HMVM				Critical Rate Factor
									Fatal	Injury	PDO	Total		Fatal	Injury	PDO	Total	
KY 1008 MP 0.000 - MP 6.526																		
0.000	0.590	0.590	2,520	2	Undivided	Urban	308	637.878	0	6	6	12	0.02	0.00	276.40	276.40	552.81	0.87
0.590	2.280	1.690	6,030	2	Undivided	Urban	308	428.565	0	8	22	30	0.15	0.00	53.77	147.87	201.63	0.47
2.280	3.176	0.896	5,630	2	Undivided	Urban	308	481.374	0	3	3	6	0.07	0.00	40.73	40.73	81.47	0.17
3.176	3.770	0.594	6,800	2	Undivided	Urban	308	502.643	0	8	5	13	0.06	0.00	135.66	84.79	220.44	0.44
3.770	3.968	0.198	6,920	2	Undivided	Urban	308	652.633	0	0	1	1	0.02	0.00	0.00	49.99	49.99	0.08
3.968	4.350	0.382	5,010	2	Undivided	Urban	308	596.349	0	0	3	3	0.03	0.00	0.00	107.37	107.37	0.18
4.350	6.526	2.176	4,620	2	Undivided	Urban	308	429.410	0	3	14	17	0.15	0.00	20.44	95.38	115.82	0.27
US 31W MP 4.500 - MP 9.053																		
4.500	4.905	0.405	14,500	2	Undivided	Rural	252	397.487	0	2	12	14	0.09	0.00	23.33	139.96	163.29	0.41
4.905	5.273	0.368	14,500	2	Undivided	Urban	308	476.389	0	14	31	45	0.08	0.00	179.70	397.92	577.62	1.21
5.273	5.720	0.447	13,300	2	Undivided	Urban	308	467.210	0	5	11	16	0.09	0.00	57.60	126.73	184.34	0.39
5.720	6.070	0.350	12,900	2	Undivided	Urban	308	491.667	0	7	14	21	0.07	0.00	106.19	212.38	318.57	0.65
6.070	6.170	0.100	12,400	2	Undivided	Urban	308	671.614	0	2	7	9	0.02	0.00	110.47	386.65	497.13	0.74
6.170	6.995	0.825	14,900	2	Undivided	Urban	308	417.501	0	25	117	142	0.18	0.00	139.30	651.92	791.22	1.90
6.995	7.120	0.125	24,700	2	Undivided	Urban	308	532.024	0	10	29	39	0.05	0.00	221.84	643.34	865.18	1.63
7.120	7.400	0.280	11,600	2	Undivided	Urban	308	526.148	0	2	32	34	0.05	0.00	42.18	674.81	716.98	1.36
7.400	7.950	0.550	10,600	2	Undivided	Urban	308	468.831	0	4	4	8	0.09	0.00	46.99	46.99	93.99	0.20
7.950	8.250	0.300	10,600	2	Undivided	Urban	308	528.582	0	3	3	6	0.05	0.00	64.62	64.62	129.23	0.24
8.250	8.665	0.415	10,600	2	Divided	Urban	308	494.174	0	5	6	11	0.06	0.00	77.85	93.42	171.27	0.35
8.665	9.053	0.388	12,500	2	Undivided	Urban	308	484.954	0	2	6	8	0.07	0.00	28.24	84.73	112.98	0.23
KY 73 MP 7.690 - MP 16.310																		
7.690	7.943	0.253	3820	2	Undivided	Rural	252	631.688	0	0	0	0	0.01	0.00	0.00	0.00	0.00	0.00
7.943	8.490	0.547	3820	2	Undivided	Urban	308	583.222	0	0	2	2	0.03	0.00	0.00	65.56	65.56	0.11
8.490	8.870	0.380	4070	2	Undivided	Urban	308	630.997	0	1	3	4	0.02	0.00	44.29	132.86	177.15	0.28
8.870	9.234	0.364	3740	2	Undivided	Urban	308	653.826	0	0	9	9	0.02	0.00	0.00	452.81	452.81	0.69
9.234	9.390	0.156	4620	2	Undivided	Urban	308	796.236	0	0	3	3	0.01	0.00	0.00	285.10	285.10	0.36
9.390	10.228	0.838	4120	2	Undivided	Urban	308	519.280	0	0	10	10	0.05	0.00	0.00	198.38	198.38	0.38
10.228	16.310	6.082	1440	2	Undivided	Rural	252	370.268	0	8	17	25	0.13	0.00	62.56	132.95	195.51	0.53
KY 100 MP 6.302 - MP 11.000																		
6.302	8.284	1.982	2,510	2	Undivided	Rural	252	410.617	1	5	17	23	0.07	13.77	68.84	234.06	316.66	0.77
8.284	8.551	0.267	4,190	2	Undivided	Urban	308	692.350	0	2	1	3	0.02	0.00	122.45	61.22	183.67	0.27
8.551	9.111	0.560	4,090	2	Undivided	Urban	308	570.175	0	3	10	13	0.03	0.00	89.71	299.04	388.76	0.68
9.111	9.536	0.425	5,150	2	Undivided	Urban	308	576.545	0	3	23	26	0.03	0.00	93.88	719.75	813.63	1.41
9.536	9.750	0.214	5,150	4	Undivided	Urban	500	985.166	0	1	4	5	0.02	0.00	62.15	248.59	310.74	0.32
9.750	10.315	0.565	3,080	2	Divided	Urban	308	611.305	0	1	1	2	0.03	0.00	39.36	39.36	78.72	0.13

Table 5. Crash Segment Analysis (1998-2001) (continued)

Simpson County, Item No. 03-106.00

Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	End MP	Length (miles)	ADT	Number of Lanes	Divided / Undivided	Rural / Urban	Avg. Acc. Rate	Critical Acc. Rate	Crashes				HMVM	Rates per HMVM				Critical Rate Factor
									Fatal	Injury	PDO	Total		Fatal	Injury	PDO	Total	
KY 100 MP 6.302 - MP 11.000																		
10.315	10.613	0.298	3,110	2	Divided	Urban	308	733.600	0	0	0	0	0.01	0.00	0.00	0.00	0.00	0.00
10.613	10.648	0.035	5,930	2	Divided	Urban	308	1294.269	0	2	2	4	0.00	0.00	660.02	660.02	1320.03	1.02
10.648	11.000	0.352	5,930	2	Undivided	Rural	252	502.652	0	4	2	6	0.03	0.00	131.25	65.63	196.88	0.39
KY 383 MP 7.500 - MP 9.513																		
7.500	7.893	0.393	2,580	2	Undivided	Rural	252	621.872	0	1	0	1	0.01	0.00	67.55	0.00	67.55	0.11
7.893	8.279	0.386	2,580	2	Undivided	Urban	308	717.311	0	2	5	7	0.01	0.00	137.55	343.88	481.44	0.67
8.279	8.560	0.281	2,420	2	Undivided	Urban	308	812.077	0	2	5	7	0.01	0.00	201.44	503.61	705.06	0.87
8.560	9.001	0.441	4,020	2	Undivided	Urban	308	608.322	0	4	4	8	0.03	0.00	154.54	154.54	309.08	0.51
9.001	9.513	0.512	5,580	2	Undivided	Urban	308	541.344	0	3	13	16	0.04	0.00	71.92	311.66	383.59	0.71
KY 1170 MP 4.656 - MP 7.156																		
4.656	7.156	2.500	545	2	Undivided	Urban	308	653.671	0	0	3	3	0.02	0.00	0.00	150.81	150.81	0.23
KY 1171 MP 0.000 - MP 2.090																		
0.000	0.907	0.907	3,490	2	Undivided	Urban	308	529.114	0	2	4	6	0.05	0.00	43.28	86.55	129.83	0.25
0.907	1.110	0.203	1,820	2	Undivided	Urban	308	1016.240	0	0	2	2	0.01	0.00	0.00	370.77	370.77	0.36
1.110	2.078	0.968	1,790	2	Undivided	Urban	308	612.002	0	1	5	6	0.03	0.00	39.53	197.65	237.18	0.39
2.078	2.090	0.012	1,790	2	Undivided	Rural	252	4155.499	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
KY 2592 MP 0.000 - MP 0.774																		
0.000	0.078	0.078	1,170	2	Undivided	Urban	308	1921.788	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
0.078	0.685	0.607	1,480	2	Undivided	Urban	308	740.869	0	0	0	0	0.01	0.00	0.00	0.00	0.00	0.00
0.685	0.774	0.089	2,090	2	Undivided	Urban	308	1359.626	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
KY 2593 MP 4.000 - MP 4.800																		
4.000	4.874	0.874	476	2	Undivided	Rural	252	859.018	0	0	1	1	0.01	0.00	0.00	164.64	164.64	0.19
KY 3498 MP 0.000 - 0.246																		
0.000	0.246	0.246	2,250	2	Undivided	Urban	308	872.778	0	0	0	0	0.01	0.00	0.00	0.00	0.00	0.00

Sources: KYTC's *Highway Information System (HIS)* database, Kentucky Transportation Center's *Analysis of Traffic Accident Data in Kentucky (1997-2001)*

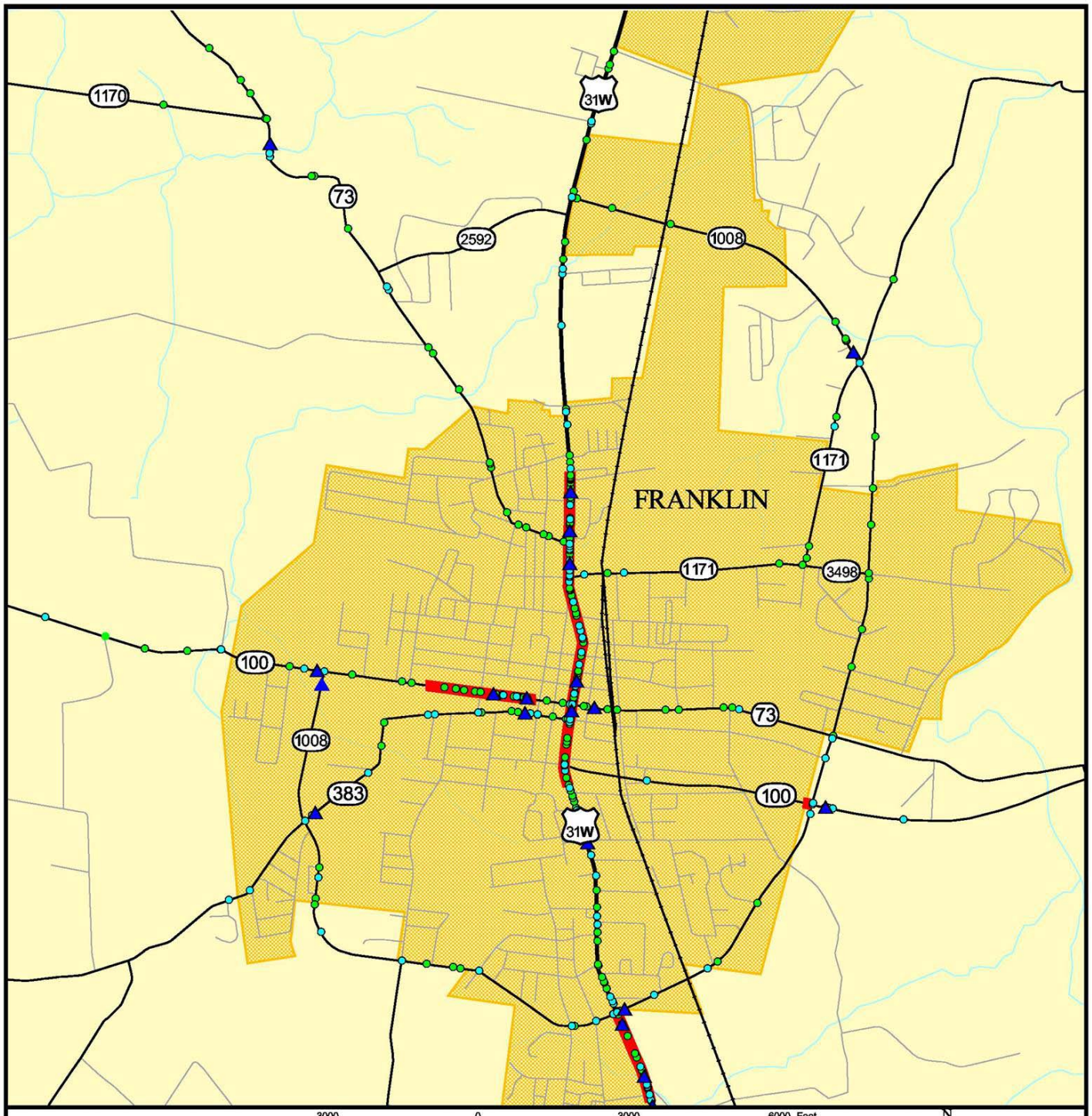
Table 6. Crash Spot Analysis (1998-2001)

Simpson County, Item No. 03-106.00

Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	End MP	Length (miles)	ADT	Number of Lanes	Divided / Undivided	Rural / Urban	Avg. Acc.	Critical Acc.	Accidents				MVM	Rates per MVM				Critical Rate
									Fatal	Injury	PDO	Total		Fatal	Injury	PDO	Total	
KY 1008 MP 0.000 - MP 0.590																		
0.000	0.100	0.100	2,520	2	Undivided	Urban	0.29	1.149	0	5	3	8	3.68	0.00	1.36	0.82	2.17	1.89
2.257	2.357	0.100	5,830	2	Undivided	Urban	0.29	0.824	0	2	10	12	8.51	0.00	0.23	1.17	1.41	1.71
5.164	5.264	0.100	4,620	2	Undivided	Urban	0.29	0.898	0	3	4	7	6.75	0.00	0.44	0.59	1.04	1.16
US 31W MP 6.070 - MP 9.053																		
4.838	4.938	0.100	14,500	2	Undivided	Urban	0.29	0.615	0	3	10	13	21.17	0.00	0.14	0.47	0.61	1.00
4.957	5.057	0.100	14,500	2	Undivided	Urban	0.29	0.615	0	4	9	13	21.17	0.00	0.19	0.43	0.61	1.00
5.173	5.273	0.100	14,500	2	Undivided	Urban	0.29	0.615	0	8	17	25	21.17	0.00	0.38	0.80	1.18	1.92
5.890	5.990	0.100	12,900	2	Undivided	Urban	0.29	0.636	0	4	8	12	18.83	0.00	0.21	0.42	0.64	1.00
6.415	6.515	0.100	14,900	2	Undivided	Urban	0.29	0.610	0	9	41	50	21.75	0.00	0.41	1.88	2.30	3.77
6.530	6.630	0.100	14,900	2	Undivided	Urban	0.29	0.610	0	4	26	30	21.75	0.00	0.18	1.20	1.38	2.26
6.995	7.095	0.100	24,700	2	Undivided	Urban	0.29	0.535	0	7	23	30	36.06	0.00	0.19	0.64	0.83	1.56
7.120	7.220	0.100	11,600	2	Undivided	Urban	0.29	0.657	0	3	33	36	16.94	0.00	0.18	1.95	2.13	3.24
7.270	7.370	0.100	11,600	2	Undivided	Urban	0.29	0.657	0	1	12	13	16.94	0.00	0.06	0.71	0.77	1.17
KY 73 MP 8.490 - MP 16.310																		
9.100	9.200	0.100	3,740	2	Undivided	Urban	0.29	0.975	0	0	7	7	5.46	0.00	0.00	1.28	1.28	1.31
11.267	11.367	0.100	1,440	2	Undivided	Rural	0.25	1.376	0	3	3	6	2.10	0.00	1.43	1.43	2.85	2.07
KY 100 MP 6.302 - MP 10.315																		
6.425	6.525	0.100	2,510	2	Undivided	Rural	0.25	1.059	1	4	5	10	3.66	0.27	1.09	1.36	2.73	2.58
8.640	8.740	0.100	4,090	2	Undivided	Urban	0.29	0.941	0	3	4	7	5.97	0.00	0.50	0.67	1.17	1.25
9.320	9.420	0.100	5,150	2	Undivided	Urban	0.29	0.862	0	1	8	9	7.52	0.00	0.13	1.06	1.20	1.39
9.449	9.549	0.100	5,150	2	Undivided	Urban	0.29	0.862	0	2	8	10	7.52	0.00	0.27	1.06	1.33	1.54
10.648	10.748	0.100	5,930	2	Undivided	Rural	0.25	0.745	0	5	3	8	8.66	0.00	0.58	0.35	0.92	1.24
KY 383 MP 8.279 - MP 9.513																		
8.279	8.379	0.100	2,420	2	Undivided	Urban	0.29	1.170	0	2	5	7	3.53	0.00	0.57	1.42	1.98	1.69
9.288	9.388	0.100	5,580	2	Undivided	Urban	0.29	0.837	0	2	8	10	8.15	0.00	0.25	0.98	1.23	1.47

Sources: KYTC's *Highway Information System (HIS)* database, Kentucky Transportation Center's *Analysis of Traffic Accident Data in Kentucky (1997-2001)*



LEGEND

- Fatal
- Injury
- Property Damage Only
- High Vehicle Crash Spot-0.1 Mile
- Potential High Vehicle Crash Segment Critical Rate (0.9 - 0.99)
- High Vehicle Crash Segment Critical Rate (> = 1.0)

Location Map

EDUCATION PAYS

KENTUCKY TRANSPORTATION CABINET

ENGINEERS PLANNERS ECONOMISTS
Wilbur Smith Associates

Vehicle Crash Information by Severity

Figure 3
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 10/28/03

F. Programmed Highway Improvements

In addition to the KY 1008 Pre-Design Scoping Study, there are several other projects which are planned and programmed for study area routes in the KYTC's Six Year Highway Plan, as outlined in **Table 7**. There is one major project in the study area which involves the widening of US 31W from the Tennessee State Line to KY 1008 on the south side of Franklin. Right-of-way, utility, and construction funding for this project has been scheduled for FY 2005, FY 2006, and FY 2007, respectively.

Table 7. Six-Year Highway Plan Improvements

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Route	Item Number	Begin MP	End MP	Length (miles)	Project Description	Scope of Work	Stage of Project Development	Fiscal Year Scheduled	Phase Cost
KY 1008	03-106.00	N / A	N / A	2.800	Franklin-Northwest Bypass; Extend KY 1008 From US 31W to KY 100 West	New Route	Planning	2003	$100,000
							Design	2004	$400,000
							Right of Way	2006	$2,600,000
							Utility Relocation	2006	$1,000,000
							Total:		$4,100,000
US 31W	03-8.00	0.000	5.273	5.273	Major Widening from Tennessee State Line to KY 1008 at Franklin (includes I-65 Interchange Reconstruction)	Major Widening	Right of Way	2005	$5,000,000
							Utility Relocation	2006	$4,500,000
							Construction	2007	$25,000,000
							Total:		$34,500,000
I-65	03-15.00	4.000	4.100	0.100	Add Restrooom Facility to I-65 Weigh Station in Simpson County	Weigh Station Rehab	Construction	2003	$457,000
KY 73	03-1052.00	11.217	11.317	0.100	Franklin-South Union; Bridge and Approaches at Sinking Creek 2.0 miles NW of US 31W	Bridge Replacement	Construction	2003	$900,000

Source: FY 2003 - 2008 Six Year Highway Plan

III. CABINET, PUBLIC AND AGENCY INPUT

Throughout the course of this Pre-Design Scoping Study of the Franklin Northwest Bypass, the local citizens, public officials and representatives of government resource agencies were given the opportunity to provide input. This chapter describes the public and agency involvement that occurred throughout the study process and describes the comments and input received as a result of these efforts. In addition to the information presented in this chapter, material related to the public involvement process is included in the *February 25, 2003 Public Information Meeting Notebook*, a separate report documenting public meeting events.

Public and Agency Involvement

- Project Team Meetings
- Local Officials Meeting
- Stakeholders/Media Meeting
- Property Owners Meeting
- Public Involvement Meeting
- Public Comment Surveys

A. Project Team Meeting

A project team meeting was conducted on Friday, December 6, 2002, via conference call. The purposes of the meeting were to discuss the purpose, goals and objectives of the proposed project; review preliminary existing conditions data for the study corridor; and identify future study needs. A copy of the meeting minutes is included in **Appendix B**. Items discussed by those present at the meeting included:

- As a result of the past opposition by the public, it was decided that this Pre-Design Scoping Study would be a clean slate for the Franklin Northwest Bypass. The District 3 staff noted that the city of Franklin is aware of this current project and is willing to start again.
- With respect to project area, it was noted that the project location may extend farther west along KY 100 than the existing intersection of KY 100 (west) and KY 1008. Although not part of this study, it is possible that a new western bypass could be an option for Franklin since existing KY 1008 southwest of Franklin fails to meet desired geometric criteria. It was agreed by meeting participants that a 'band' would best represent the project area. The band would stretch along KY 100 in the west to KY 1008 in the north. In addition, the band would range approximately 1500' on either side of KY 1008 along US 31W north of Franklin.
- The strong downtown presence and related traffic volumes in Franklin were also noted in the discussion. Attempts should be made to ensure that a future bypass would not remove patronage of the downtown stores.
- With respect to growth, there is concern about growth and development along US 31W to the south of Franklin as a result of the new Wal-Mart recently built within the area. It was originally believed that growth would occur along KY 100 to the west as the result of a proposed industrial park in the study area. However, this industrial park was built along KY 100, east of I-65, reducing the potential for growth west of Franklin.
- It was noted that minority populations within Franklin will need to be considered in this project in accordance with environmental justice. A cluster of mobile homes was also noted south of KY 100 and west of KY 1008.
- Without detailed analysis, it was estimated that approximately 5,000-6,000 vehicles per day would utilize the new bypass in the future year. Based on this traffic volume, it was believed that a two-lane cross-section would be adequate for the Franklin

Northwest Bypass. A traffic model could provide additional information related to the new bypass route.

- With respect to bikeways, pedways, or ITS in the study area, it was mentioned that since this was an urban study, such issues would be considered. However, such facilities may not be necessary since there are not any destinations such as parks or trails in the study area.

B. Local Officials and Groups Meetings

As part of the public involvement portion of this study, meetings were held with local officials, potential stakeholders, and the media in Franklin on January 9, 2003. The purpose of these meetings was to inform these groups about the project and gain input about the issues and concerns of the community. Copies of the meeting minutes are included in **Appendix B**.

A total of eight (8) persons attended the local officials meeting to discuss the planning study of the Franklin Northwest Bypass. Topics discussed during the meeting included:

- Since the storm water from the western half of the city of Franklin drains into this area, water flow in the streams in the project area can be tremendous in heavy rainfalls.
- Cave systems are known to exist in the study area.
- More local traffic would use a northwest bypass if the road were built without obstructions. This could be accomplished by limiting the access along the new route similar to that of the newest section of KY 1008 near US 31W.
- A meeting between project team members and the landowners that may be affected by the project was recommended in order to determine their opinions on the project before a public meeting.
- Noise issues resulting from a new route are not anticipated with this project; however, residents may not want to see the new road from their dwellings. To improve the visual appearance, landscaping and buffering could be considered as part of this project.
- Citizens south of Patton Place (KY 2592) were noted as potential allies of this project. These citizens often complain of high speeds and high traffic volumes along Patton Place as a result of many drivers using it as a cut-through. A meeting participant noted that the traffic volumes would increase as a result of new houses currently under construction.
- Emergency services and public school transportation would benefit from the new bypass.
- The Franklin Northwest Bypass project has been mentioned as a high priority, even in non-transportation meetings.

Thirty-four (34) persons attended the stakeholders/media meeting. Issues discussed during the meeting included:

- Relieve future traffic congestion along US 31W;

- High crash segments should be addressed along US 31W and KY 100;
- Landscaping and buffering should be considered along the proposed route;
- Access control should be similar to that of US 68, which has 1200-foot spacing between access points in addition to fencing. Access control should be coordinated with the Franklin-Simpson Planning and Zoning Commision;
- Increased truck traffic expected from the west as a result of US Tobacco expanding might use a new Northwest Bypass to bypass Franklin;
- Patton Place (KY 2592) was mentioned as a cut-through for many vehicles as a result of no other path in that part of Franklin; and
- Addition of the final piece of the bypass would make sense from a connectivity standpoint, alleviating the current confusion among truck drivers who get lost in the area in search of a north to west connection.

C. Property Owners Meeting

A property owners meeting was conducted on Friday, January 31, 2003, in Franklin. The purpose of the meeting was to discuss the potential Franklin Northwest Bypass with local property owners on the northern end of the study area. A copy of the meeting minutes is included in **Appendix B**. A summary of the key comments and discussion items for this meeting is provided below.

Previous meetings related to this project led the property owners to believe that any new bypass route would be located much farther to the north, near Franklin Express. The minutes of the last project meeting in 1999 indicate that a new plan would need to be developed with input from the community about their issues and concerns with the project. No definite direction was decided upon at the 1999 meeting. The property owners made several suggestions relating to this project, including:

- Improvements should be considered along other routes in the area, rather than a new northwest bypass corridor, including widening of the existing US 31W corridor and widening of Patton Road (KY 2592).
- The section of KY 1008 east of US 31W should be moved north. If this section were moved, a new extension would be located farther from homes and residential areas west of US 31W.
- Commercial development along a potential bypass corridor should be limited by planning and zoning.

Issues and concerns expressed by the property owners at the meeting included:

- There is a large cavern under Mr. Mortensen's property;
- Results of the bypass route may include depreciation of property values, noise, visual impacts and danger to children due to cut-through traffic in surrounding neighborhoods;
- A visual buffer would not be adequate if a new northwest bypass were located within the gray-shaded area on the project location map. The tree line along the southern edge of Mrs. Patton's property would not be an adequate buffer; and
- Subdivisions on the northern end of the project area offer upward mobility for people moving out of starter homes. The proposed project would prevent people from wanting to move into this neighborhood, and could possibly be detrimental to economic vitality of the entire community.

In summary, the preferences expressed by the property owners included the following:

- The money for this project should go toward the improvement of US 31W through town rather than the construction of the northwest bypass.
- If the bypass is absolutely necessary, it should be located as far to the north as possible.
- The property owners would like to continue to have input if this project moves into future phases.

D. Public Information Meeting

On Tuesday, February 25, 2003, a Public Involvement Open House was held at the Goodnight Memorial Library in Franklin, Kentucky, from 4:00 p.m. to 7:00 p.m. The purpose of the open house was to seek input from the community and present information to the general public on the overall project development process, project purpose, existing conditions information, identified issues, and potential improvements. A total of 89 persons registered their attendance at this three-hour public session, including nine (9) KYTC, ADD, and consultant staff. Minutes for this meeting are included in **Appendix B**.

The public involvement open house was organized as a walk-through tour of project information. The room was set up with an arrangement of project exhibits, with public opinion boards and refreshments at the end of the tour.

Attendees received a handout packet which included the following items:

- Post-it Note Exercise

  This exercise consisted of two questions, with three post-it notes included for answers to each question. The first question was “What are the traffic issues within the study area?” The second question was “What transportation improvements could address these issues and concerns?”
- Public Comment Survey

  Attendees were asked to complete the survey prior to leaving the meeting, or return it to the KYTC at a later date in the postage-paid envelope provided.
- Project Brochure Identifying the Study Purpose, Issues and Project Goals
- Project Location Map

The room was set up with a semi-circular arrangement of project exhibits where attendees had the opportunity to ask questions and make comments to KYTC and consultant staff. The following are the titles of the project boards displayed at the meeting:

- What Is The Project Study Area? This exhibit showed a shaded band to approximate the project study area.
- What Roads Do You Use The Most? Meeting attendees were asked to indicate usage of state and county roadways to help in the traffic modeling process.
- How Many Cars Are Out There Today? This exhibit showed Year 2002 traffic volumes and levels of service.
- How Many Cars Are Expected In The Future? Estimated Year 2025 traffic volumes and levels of service were displayed on this map.

- Where Do People Work In Franklin? Preliminary traffic model information relating to employment centers was shown for public comment and/or correction.
- Where Do People Work In Simpson County? Similar to the Franklin employment map, this exhibit showed employment densities for Simpson County.
- Where Are The Most Crashes Occurring? This exhibit showed four years of traffic crash data for Franklin, including high accident spots and segments of roadway.
- What Are The Environmental Issues? Preliminary environmental issues were shown overlayed on an aerial photograph in this exhibit.
- What Are The Environmental Issues? The same environmental information was shown on this map, but was overlayed on a topographic map.
- MINUTES – Stakeholders/Media Meeting. A meeting summary from the stakeholders/media meeting held on January 9, 2003 was provided for review by the public.
- MINUTES – Property Owners Meeting. Discussions on January 31, 2003 with three of the major property owners on the northern end of the corridor were also summarized on this exhibit.
- What Should The KY 1008 Bypass Look Like? This exhibit provided explanations and samples of landscaping and buffering techniques for similar highway projects.

At the end of the tour, attendees were asked to complete the post-it note exercise and place their responses on the public opinion boards posted on the wall. Tables, chairs, refreshments, and kids' activities were provided so that attendees could comfortably complete the post-it note activity and public comment survey provided in the handout packet.

1. Post-it Note Exercise Responses

Many responses to the questions "What are the traffic issues within the study area?" and "What transportation improvements could address these issues and concerns?" were received at the meeting. Following is a brief summary of comments and suggestions made and additional detail is included in the minutes in Appendix B:

- Landscaping and buffering must be included with any new roadway;
- Move the proposed bypass further away from town, residential areas, and farms;
- The proposed bypass is necessary to reduce congestion, reduce speed, and reduce truck traffic in downtown Franklin and along Patton Road;
- US 31W should be widened rather than construction of a new bypass; and
- Flooding concerns should be considered with any new roadway.

2. Flip Chart Comments

Several public comments were recorded on flip charts at the public meeting. Following is a summary of issues identified as a result of discussions at the meeting:

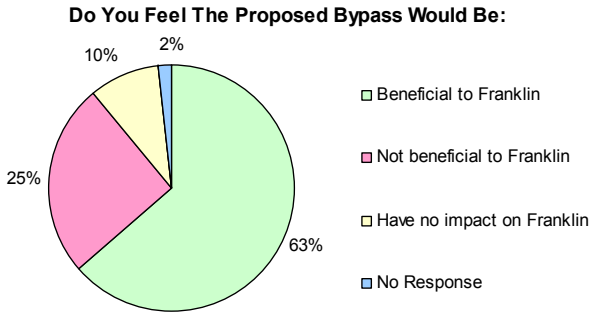
- The bypass would relieve traffic on Patton Road and US 31W;
- Downtown businesses will continue to bring traffic downtown, regardless of a new bypass;
- The bypass should be moved further north on US 31W closer to the industrial area to avoid homes; and
- Water/drainage problems north of KY 2592/Patton Road and on KY 100 near Allen Road should be considered.

3. Public Comment Survey Responses

As part of the public handout at the meeting, the KYTC supplied a survey form so that citizens could provide input on this project. Sixty-three surveys were submitted to the KYTC both during and after the meeting.

Responses to the six (6) questions on the public comment survey are tabulated in **Table 8** and summarized above.

- The majority (40 of 63) of the survey respondents felt the proposed bypass would be beneficial to Franklin;
- Thirty-two (32) respondents identified the existing KY 1008 intersection as the location along KY 100 where the bypass should intersect. Sixteen (16) respondents preferred the bypass to intersect west of the existing KY 1008 intersection.



- Thirty-two (32) persons responded that the bypass should intersect north of the existing KY 1008 intersection along US 31W. Twenty-three (23) respondents preferred the bypass to intersect at the existing KY 1008 intersection.
- The majority (50) of respondents indicated that they would drive on the proposed bypass if it existed today. Fifteen (15) respondents indicated that they would drive the proposed bypass everyday, while seven (7) persons indicated they would never drive the proposed route.
- Thirty-seven (37) respondents identified improved travel time between West Franklin and North Franklin and improved access, efficiency and safety for emergency services, such as ambulances and police as important benefits of the proposed highway.
- Personal properties or homes were identified by the majority (44) of respondents as areas that should be considered during the proposed extension of KY 1008. Eighteen (18) respondents identified natural areas or habitats and sixteen (16) noted historic or cultural sites as areas to consider.

The public survey form also provided space for respondents to make additional general comments about the project. Responses were received both supporting and opposing the bypass.

Supporters indicated that the proposed bypass would:

- Relieve truck traffic from downtown and on Patton Road;
- Improve safety and accommodate growth in Franklin and Simpson; and
- Improve access to areas north and south of town.

Comments made by those opposing the bypass included:

- The money should be used to improve existing roads;
- The amount of farmland that will be destroyed is not justified;

Table 8. Public Survey Response Summary

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

1. Do you feel the proposed bypass would be:

Beneficial to Franklin	*Not beneficial to Franklin*	*Have no impact on Franklin*	*No opinion*	No Response
40	16	6	0	1
63%	25%	10%	0%	2%

2. Where along KY 100, west of town, should the proposed bypass intersect?

At the existing KY 1008 intersection	*West of the existing KY 1008 intersection*	*No opinion*	*Other*
32	16	8	7
51%	25%	13%	11%

3. Where along US 31W, north of town, should the proposed bypass intersect?

At the existing KY 1008 intersection	*North of the existing KY 1008 intersection*	*No opinion*	*Other*
23	32	4	4
37%	51%	6%	6%

4. If this new highway existed today, how often would you drive it?

Everyday	*Once per week*	*Once per month*	*Rarely*	*Never*	*Other*	*No Response*
15	17	3	15	7	3	3
24%	27%	5%	24%	11%	5%	5%

5. What do you think the most important benefits of this proposed highway would be?
(Multiple benefits were selected by several respondents)

Provide improved access to jobs in and out of the area	*Provide better opportunities for new jobs in the area*	*Improve travel time between West Franklin and North Franklin*	*Improve access, efficiency and safety for emergency services, such as ambulances and police*	*Reduce number of trucks in downtown Franklin*	*Provide improved safety in the study area*	*Other*
22	15	37	37	33	22	10
35%	24%	59%	59%	52%	35%	16%

6. With respect to the human and natural environment, what are the areas that should be considered during the proposed extension of KY 1008?
(Multiple areas were selected by several respondents)

Personal properties or homes	*Natural areas or habitats*	*Recreational areas*	*Historic or cultural sites*	*Scenic areas or viewsheds*	*Other*
44	18	4	16	10	8
70%	29%	6%	25%	16%	13%

- Termination of the new bypass route at the existing KY 1008 intersections should be reconsidered. On US 31W, the KY 1008 intersection is in an unfortunate location. On KY 100, the KY 1008 intersection would not provide a true bypass around town.
- The negative impacts to homeowners and farmland should be considered.

Suggestions made related to the construction of the proposed route include:

- Some survey responses indicated that the bypass could be moved further west on KY 100 and further north on US 31W to avoid homes and serve the industrial park;
- Others indicated that it should connect at the existing 1008 locations. It would be inconvenient for traffic to have to stop and turn then turn again at a disjunction in the bypass route; and
- Landscaping and buffering should be considered.

E. Resource Agency Coordination

Many local, state and federal resource agencies, with diverse areas of public responsibility, were included in this planning process. Input was solicited through written requests. Each agency was sent a copy of the project brochure, project location, existing traffic, future traffic, and an environmental footprint map. This section describes the input received from these organizations. The remainder of recipients did not provide a response. Actual response letters from various resource agencies are located in **Appendix C**.

Resource Agencies

- City Agencies
- Local Interest Groups
- KYTC Division Offices
- Other State Agencies
- Federal Agencies

The following 13 agencies responded by offering these comments or concerns regarding the project.

Comments provided by local agencies included:

- Simpson County Sheriff's Office – The Sheriff expressed support for the bypass, indicating that the project would benefit emergency response times. Other comments included: industrial development will continue on the north side of town and along US 31W; a connection with KY 100 in the west could be pushed west away from town; the new route should provide a feasible location for extension of the route in the future; and the route should avoid historic sites.

State agencies provided the following comments:

- Kentucky Geological Survey – The project would encounter sinkholes and caves. One abandoned gas well is located near the project area. Exposed limestone would be too weathered for use in road construction. There is low potential in the study area for landslides, faults, or earthquakes.
- Kentucky State Police – This project would alleviate part of the traffic congestion along US 31W; improve emergency response times; improve truck traffic; and provide improved access to KY 100 and KY 73. There may be opposition to this project from citizens who live in residential areas on or near Patton Place.
- Kentucky Transportation Cabinet, Division of Environmental Analysis - Although no sites are identified within a 2 km radius, few archaeological investigations have been done in the area. Be aware of possible noise issues, minimize impacts to air quality, and avoid channel changes.

- Kentucky Transportation Cabinet, Division of Environmental Analysis, Archaeology – No archaeological sites have been identified within a 2-km radius of the project; however, very few archaeological studies have been undertaken within this area. A full phase I archaeological survey will be required for the final alternate or alternates since the project will require Federal involvement.
- Kentucky Transportation Cabinet, Division of Materials – The project area is located upon the Formation of the Ste. Genevieve Limestone and St. Louis Limestone. Sinkholes are common in both formations and should be avoided if possible. A more detailed study of the sinkholes, caves, underground streams, etc. may be needed as the project develops. The Branch prefers a line that would be located upon the Ste. Genevieve Limestone to avoid as many sinkholes or caves as possible. Cut and fill slopes in soil should be stable on 2:1 slopes.
- Kentucky Transportation Cabinet, Division of Multimodal Programs – Simpson County will likely be designated non-attainment for air quality in April 2004 (i.e., new projects must demonstrate no adverse impacts to air quality). The project should include coordination and connectivity of existing bicycle and pedestrian projects, including 10-12' paved shoulders along the bypass route and sidewalks along urban sections. Two designated bicycle routes travel through Franklin: Southern Lakes Route travels east-west and Mammoth Cave Route travels north-south. Franklin is a bicycle route crossroad and bicycle travel should be accommodated.
- Kentucky Transportation Cabinet, Permits Branch – This project should provide for a partially or fully controlled access facility, with access control fencing and all possible access points set on the plans in accordance with 603 KAR 5:120. The design speed should be the same as the anticipated posted speed when the project is completed. The Permits Branch should be notified if the proposed route is to be placed on the National Highway System.

Comments provided by federal agencies included:

- Federal Aviation Administration (FAA) – As long as construction activities do not exceed 200 feet in height above ground level, there will be no impacts on FAA programs and no Notice of Proposed Construction will be required.
- U.S. Army Corps of Engineers, Louisville District – A review of the preliminary project area revealed the presence of two unnamed tributary streams that are within the regulatory authority of the Corps of Engineers. Preliminary data suggests that authorization under Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act may be required. Additional design and construction detail is necessary to determine whether a permit is required for this project.
- U.S. Army Corps of Engineers, Nashville District – This project is within the regulatory jurisdiction of the Louisville District Corps of Engineers office. The request for review received has been forwarded to that office for consideration.
- U.S. Coast Guard, Bridge Branch - A Coast Guard bridge permit is not required for this project, as it does not cross waterways over which the Coast Guard exercises jurisdiction for bridge administration purposes.
- U.S. Fish and Wildlife Service – There is concern that highway projects frequently accelerate erosion and sedimentation in streams, resulting in adverse effects on the aquatic environment. The information provided is insufficient to determine if the proposed project will require U.S. Army Corps of Engineers' permits. The Service would likely have no objection to the issuance of permits if any necessary stream channel work is held to a minimum and Best Management Practices are utilized and

enforced, effectively controlling erosion, sedimentation, and other potential hazards. The federally endangered Indiana bat (Myotis sodalist) and gray bat (Myotis grisescens) are known to occur in the vicinity of the project area. Disturbance to the project area should be done in accordance with the recommendations provided by the United States Fish and Wildlife Service.

IV. ENVIRONMENTAL OVERVIEW

An environmental footprint was developed for the proposed Franklin Northwest Bypass project area. This preliminary environmental analysis identified potential issues and concerns within and surrounding the defined project area.

A local area Geographic Information System (GIS) was assembled for this project using environmental resource information data collected from numerous sources that include: federal, state, and local databases; agency contacts; field investigations; and existing in-house data. Project contacts and web site locations for each source (as available), are included in **Appendix D**. The compiled data was geo-referenced as needed using the GIS developed for the project.

Windshield surveys of the project area included consideration of known and unknown environmental issues within the project area. In some instances, the development of graphics was assisted by the use of a Global Positioning System (GPS) unit for field data collection and application in the GIS database.

Issues Considered

- Natural and Manmade Features
- Biotic Communities
- Social, Economic and Environmental Justice Concerns
- Historic/Archaeological Sites
- Prime and Unique Farmland
- Monitored Sites
- Noise
- Air Quality

This study identifies environmental issues that are likely to require consideration during any environmental assessment for the proposed bypass. **Figure 4** shows environmental features identified within the project area. The same environmental information is overlaid on a digital orthophotograph on **Figure 5**. The environmental issues considered as part of the overview analysis include: Natural and Manmade Features; Biotic Communities; Social, Economic, and Environmental Justice Concerns; Historic and Archaeological Sites; UST/HazMat, Oil and Gas Concerns; and other additional issues.

Where quantities of issues are cited (such as acres of wetlands), the quantities represent the totals accounted for within the identified study area boundary; however, it should be noted that the potential roadway will only utilize a narrow swath through the study area and will have fewer actual impacts. It should also be noted that the features displayed on the map may be deceiving in that one symbol representing a feature can often represent more than one of that particular feature. For instance, a symbol indicating one individual well, may actually represent multiple water wells. The following text addresses such occurrences where possible.

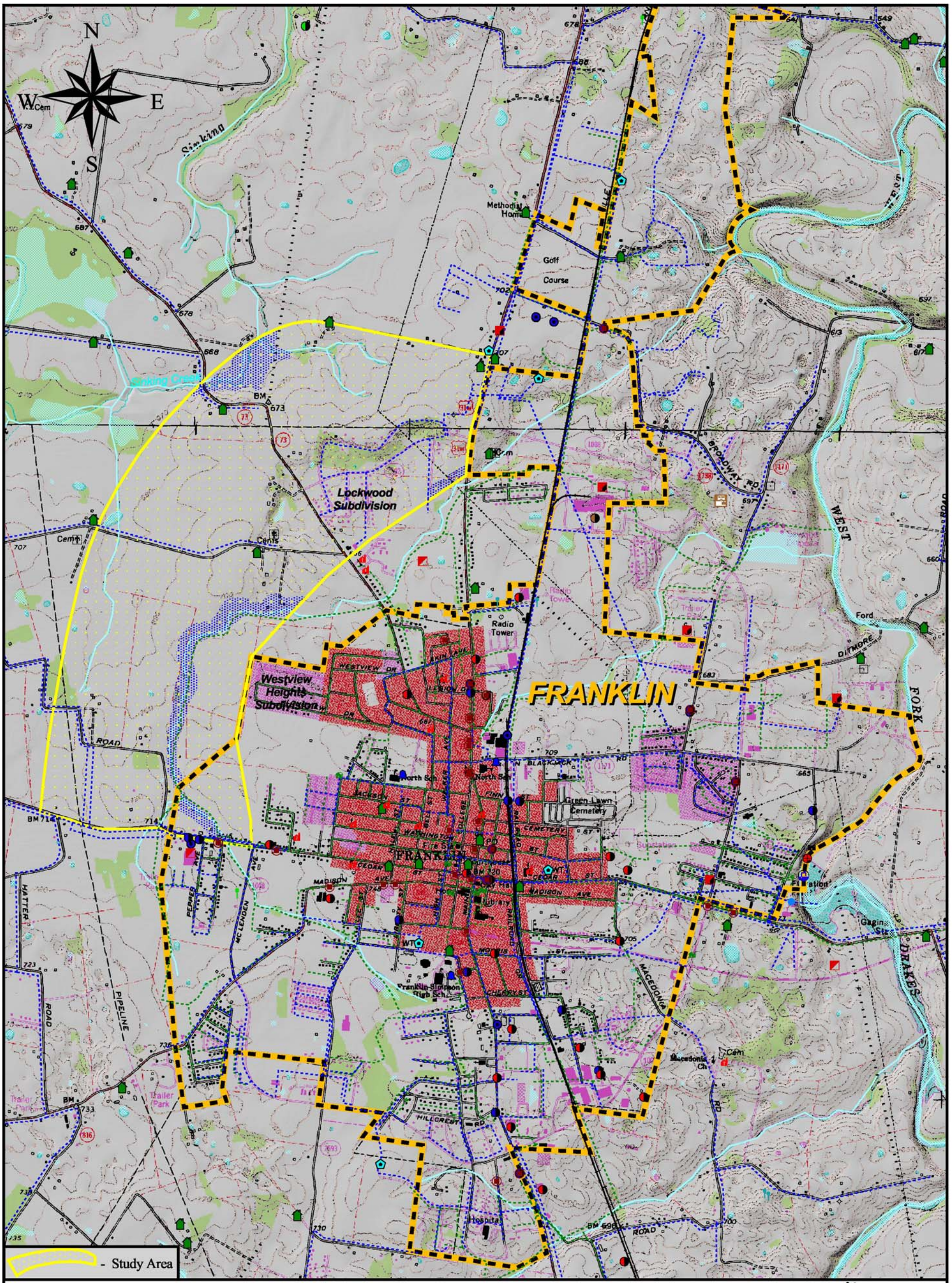
A. Natural and Manmade Water Features

Natural and manmade features considered as part of this analysis are divided into six (6) categories: water resources, karst groundwater basins, surface water, lakes/ponds, wetlands, and floodplains. These items are discussed in the following sections.

1. Water Resources

Several manmade water resources are located within the project area:

- There are 5.9 miles of water lines within the study corridor which are managed by the Simpson County Water District;
- There are 1.9 miles of sewer lines found in the southwestern portion of the study area; and
- There are no water tanks, water wells, or water gauges located within the study corridor. But it should be noted that a 1 million gallon capacity water tank owned by Franklin Water Works is closely adjacent to the most northeastern corner of the study corridor at the J.L. Farmer Road/US31W intersection.



Location Map

U.S.G.S Topographic Environmental Footprint

Figure 4
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

NOTE: Archaeological sites and locations of threatened / endangered species are not shown due to the sensitive nature of the data

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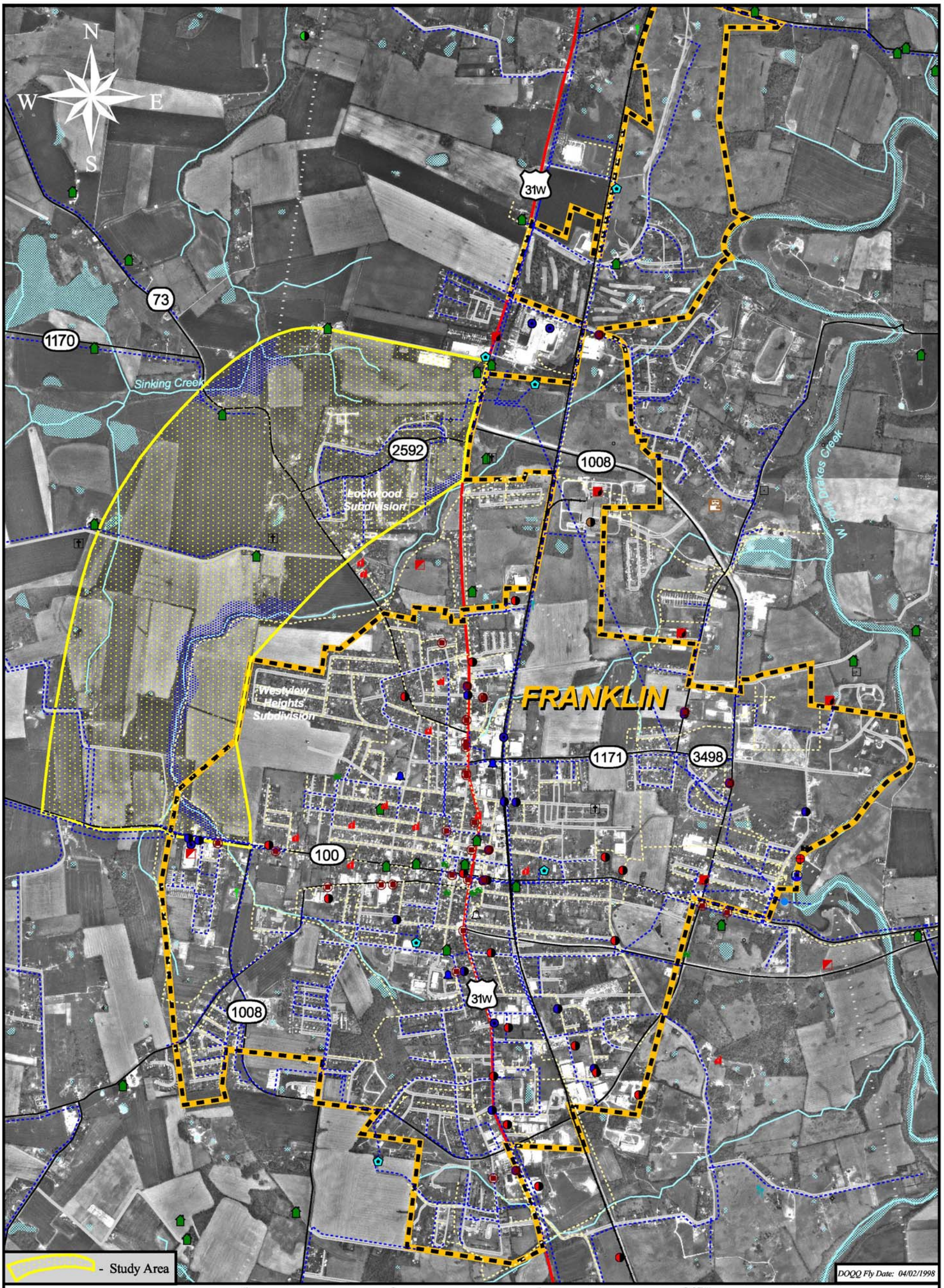

Digital Orthophotograph Environmental Footprint

Figure 5
Simpson County
Item No. 3-106.00
KY 1008 from
KY 100 to US 31 W

NOTE: Archaeological sites and locations of threatened / endangered species are not shown due to the sensitive nature of the data

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2. Karst Groundwater Basins

The study area landscape is characterized by karst topography. The term "karst" refers to the type of topography formed on limestone, dolomite, gypsum, and other rocks, primarily by dissolution. Dissolution is described as the process by which underlying soluble rocks are sculpted and eroded by surface or ground water. Characteristics of this phenomenon include sinkholes, caves, and underground drainage systems.

The Kentucky Geologic Survey (KGS) has determined that over 55 percent of the state of Kentucky has landscape characterized by karst. Kentucky is one of the world's most famous karst areas. The KGS notes that about 38 percent of the state has sinkholes that are recognizable on topographic maps and another 25 percent has well-developed karst features. Within the project area, karst development in this area can be recognized by visible pothole pond formations and irregular ground geomorphology.

Example of a Karst Cave (Mammoth Cave) (www.np.gov/maca/index.htm)

Two adjoining karst groundwater basins are present within the project area. Along the western half of the area, a 630 acre segment of the Sinking Creek basin is present. The remaining 835 acres belong to an unnamed groundwater basin. Groundwater flow from these basins has been mapped using 'dye-trace' experiments. These experiments involve placing environmentally safe dye into a spring or sinking stream (a small stream that disappears underground). The dye trail is followed to determine the direction in which the groundwater flows. These experiments can also identify the location, size, and shape of watersheds draining to specific springs. Groundwater flow, or perennial groundwater flow as it is sometimes referenced, has been found to originate on both sides of US 31W within the city of Franklin.

The same karst landscape, while offering economic and recreational opportunities, can pose geologic hazards. As bedrock is affected by dissolution, certain hazardous geologic conditions can occur. The most serious of these conditions which potentially could occur within the Franklin study area include:

- Sudden cover collapse – This sinkhole hazard occurs in soil or other loose material overlying soluble bedrock, where development generally forms in two ways:
  - The first condition involves sinkhole formation in much more common and much less dramatic fashion. The sinkhole begins to form when a fracture in the limestone bedrock is enlarged by water dissolving the limestone (or other soluble bedrock). As the bedrock is dissolved and carried away underground, the soil gently slumps or erodes into the developing sinkhole. Once the underlying conduits become large enough, insoluble soil and rock particles are carried away.
  - The second condition occurs when the bedrock roof of a cave becomes too thin to support the weight of the bedrock and the soil material above it. The cave roof then collapses, forming a bedrock-collapse sinkhole. Although it is commonly assumed to be the way all sinkholes form, bedrock collapse is rare and the least likely way a sinkhole can form.
- Sinkhole flooding – This hazard occurs within a previously created sinkhole. When a sinkhole is formed, water within the hole is drained to the subsurface through soil and cracks inside the bedrock. When these outlets become clogged, the water table rises, causing potential flooding of the surrounding area.

- Damage to Infrastructure – Buildings and transportation, communication and utility networks are vulnerable to damage from a variety of geologic hazards, but karst geohazards are stealthy. Karst geohazards usually will affect a segment of a utility line, or one home, or one short length of highway, but is very costly. Infrastructure damage is so common in karst areas that it is typically dealt with by local authorities as a routine matter. Seldom are collapses reported to any central agency.

According to a local citizen of Franklin, a local cave system exists underneath the study area. This cave system has not been recognized by the Kentucky Geologic Survey (KGS), but has been verified and mapped through numerous expeditions by members of the Boy Scouts of America. The cave system is shown oriented in a north/south manner, stretching for almost 0.25 mile in length. Located underneath and near the KY 73 / KY 1107 intersection, this cave system further indicates the presence of karst in this area.

3. Surface Water

The project area is located in the Barren River watershed basin. It should be noted that one (1) acre at the far southwestern portion of the project area falls within the Cumberland watershed basin, but has no effect upon the study corridor due to its location and runoff tendencies.

Natural and Manmade Water Features

- Water and sewer lines
- Karst groundwater basins
- One major watershed
- Tributaries of West Fork Drakes Creek and Sinking Creek
- Eleven wetland areas
- "Zone A" floodplains

Stream tributaries within the project area flow in a north/northeast direction collectively emptying into the Barren River in Warren County.

A total of five (5) individual streams compose a total of 3.8 miles of streams in the project area. Of the 3.8 miles, 1.7 miles are tributaries of West Fork Drakes Creek. The remaining 2.1 miles are tributaries of Sinking Creek.

Streams are classified by a hierarchy system called *stream order*. In this system, streams are classified by the number of stream tributaries merging into that particular stream. When a stream has just one (1) merging tributary it is designated an Order 1, while the largest stream with eight (8) or more merging tributaries is designated an Order 8. The Ohio River is an example of an Order 8 stream. As stream segments continue to merge, the Order number increases. Order designations in the study area include:

- There is one Order 3 stream within the project area corridor. This particular segment is a tributary of Sinking Creek and is 0.4 miles in length;
- There are 1.5 miles of Order 2 streams; and
- There are 1.9 miles of Order 1 streams.

Correspondence with the Water Quality Branch of the Natural Resources and Environmental Protection Cabinet (NREPC) indicates there are no Outstanding Resource Waters or Wild Rivers within the proposed corridor.

4. Lakes/Ponds

A field review within the study corridor produced no physical sightings of lakes or ponds within the study corridor. Aerial photography and Kentucky topographic maps confirm that a limited number of ponds are present within and surrounding the project area. Since this area is prone to karst topography, "pothole" ponds would be expected in the project area. Pothole ponds are small, circular bodies of water that are formed when a

sinkhole develops from the underlying bedrock. When the water table rises or drainage outlets are clogged, water fills the depression.

5. Wetlands

According to the National Wetlands Inventory (NWI) mapping for Franklin, small wetlands exist within the study area. Eleven (11) wetlands were found within the study area totaling 4.5 acres. Because of their small size, it may be difficult to locate these wetlands within the provided mapping. NWI database information lists all eleven (11) wetland areas as *Palustrine* wetland systems. These wetland systems commonly include all non-tidal wetlands dominated by trees, shrubs, emergents, mosses and lichens while possessing salinity values of less than 0.5 parts per thousand (ppt). Such wetland areas are generally less than 20 acres in size, exhibit a shoreline that is not wave-formed or bedrock laden, and a low water depth of less than 2 meters (6.6 feet) at its deepest point.

Within the eleven (11) wetlands areas, five (5) wetlands have different attributes associated with them. These attributes include the following wetland information:

- North of the KY 73/KY 2592 intersection, a wetland area 0.2 acre in size has a wetland coding of PUBF. This describes the wetland as Palustrine (P) with an unconsolidated bottom (UB) and is semi-permanently flooded (F);
- Northwest of KY 73 and found between the northern study area boundary and Sinking Creek, two more wetland areas 0.1 and 0.2 acres in size are located with a NWI classification of PUBHx. This coding describes the wetland as Palustrine (P) with an unconsolidated bottom (UB) that is seasonally flooded (H) and excavated (x) by man;
- Directly southwest of the KY 73/KY 2592 intersection another wetland area 1.2 acres in size has a wetland coding PEM1C. This particular classification describes the wetland as Palustrine (P) with emergent vegetation (EM) that is persistent year round, and is seasonally flooded (C);
- A wetland area 0.1 acres in size located 0.5 miles north of the KY 73/Allen Road intersection has been given a PUBFx designation. This coding describes the wetland as Palustrine (P) with an unconsolidated bottom (UB) that is semi-permanently flooded (F) and excavated (x) by man;
- Located directly west of the previous wetland area, two separate wetlands are located at the eastern extent of the study area. Both wetland areas are classified as PEM1C and are 0.2 and .1 acres in size;
- The largest wetland area within the study area is located just north of Robey-Bethel Grove Road. This wetland is 1.7 acres in size, with a PUBHx classification and located along the middle eastern boundary of the study area;
- Directly south of the previous wetland, two wetland areas of the same size (0.2 acres) have PUBHx classifications and are located along the eastern boundary of the study area; and
- The last wetland area in this study is located directly adjacent to Allen Road and 0.25 miles from the KY 73/Allen Road intersection. This wetland is 0.1 acres in size and has been given a PUBHx classification.

A field inspection of each of these areas will be necessary to determine their jurisdictional status (i.e., they may or may not require a nationwide or individual permit from the US Army Corps of Engineers). Furthermore, a more in depth inspection would be beneficial for mitigation assessment purposes, if needed.

6. Floodplains

The available Q-3 digital Federal Emergency Management Agency (FEMA) data for floodplains are digital datasets that are available on a county-by-county basis. The Simpson County coverage that FEMA has available shows that there are floodplains within the project area. Floodplains are defined by a "Zone" letter which identifies the extremity of flooding events.

It should be noted that "Zone A" flood areas have been graphically represented on **Figures 4 and 5** due to their potential to flood more frequently.

- The majority of the study area is designated "Zone X." "Zone X" indicates flood areas that are outside the 100 and 500 year floodplains;
- One hundred forty-four (144) acres of "Zone X" floodplain is located along the southeastern edge of the study area and the western edge of Franklin's corporate boundary;
- An additional 853 acres have been designated "Zone X" by FEMA which includes areas ranging from north of KY 100 to the edge of the study area located near US 31W;
- There are two (2) individual "Zone A" floodplain areas found within the study corridor. "Zone A" indicates that this is an area inundated by 100-year flooding in which Base Flood Elevations (BFEs) have not been determined. They include:
  - A 60 acre section located at the confluence of two tributaries belonging to Sinking Creek, just west of KY 73 in the northern part of the study area; and
  - Two separate floodplain sections totaling 58 acres and with the same NWI classification (Zone A) are located in close proximity to an "unnamed" stream corridor as it meanders northeast through the study corridor.

B. Biotic Communities

Biotic communities considered as part of this analysis are divided into floral and faunal categories as discussed in the following sections. The Kentucky State Nature Preserves Commission (KSNPC) monitors a number of endangered, threatened, or special concern plants or animals within the KY 1008 project area. The KSNPC data is updated on a regular basis and may be verified as needed in future phases of this project. Data from the Kentucky Department of Fish and Wildlife Resources was also analyzed and determined to contain only federal listed species from the United States Fish and Wildlife Services (USFWS), which is also documented by the KSNPC. Due to the sensitive nature of the data, potential habitat locations are not shown in **Figures 4** and **5**.

Gray Mytosis (Bat)
(www.enature.com/fieldguide/showSpeciesRECNUM.asp)

1. Floral Communities

The KSNPC determined that no occurrences of monitored vascular plants are found within the project area.

2. Faunal Communities

Based upon the KSNPC's most current information, four (4) occurrences of monitored species are found within the study area including: one (1) mammal, one (1) bird, one (1) bi-valve, and one (1) fish.

- One (1) species has been determined to be endangered: the Gray Mytosis, a mammal (bat). This species is associated with sensitive cave ecosystems in which water quality is vital. A thorough survey for this species should be conducted before any potential construction within this habitat is performed. Special steps should be taken to avoid water contaminants within these areas;
- Two (2) species have been given a threatened status: Kentucky Creekshell (bi-valve) and the Spotted Darter (fish); and
- One (1) species is considered to be special concern fauna: the Sedge Wren (bird).

C. Social, Economic and Environmental Justice Concerns

Socioeconomic concerns considered as part of this analysis include social and economic locations, and environmental justice. These items are discussed in the following sections.

1. Social and Economic Locations

One (1) cemetery was identified in the study area and is located 0.25 miles west of the KY 73/Robey-Bethel Grove Road intersection.

Two (2) churches were also located just outside the study corridor. These include:

- The Seventh-Day Adventist Church located adjacent to KY 73 (Morgantown Road) and south of the study corridor; and
- The Kingdom Hall of Jehovah's Church located adjacent to The Seventh-Day Adventist Church.

Cemetery marker northwest of Franklin

Two (2) separate residential areas are located within or along the edge of the study corridor, including:

- The Lockwood Subdivision, located in the northwestern portion of the study area between KY 73 and US 31W; and
- The Westview Heights Subdivision, located inside Franklin's corporate limits along the southeastern edge of the study corridor, adjacent to Bloomfield Avenue.

2. Environmental Justice

An important consideration for highway reconstruction or new development is environmental justice. For this study, an Environmental Justice and Community Impact Report was completed by the Barren River Area Development District (BRADD), included in **Appendix E**.

Based on the report prepared by BRADD, environmental justice issues related to minority and low-income populations should be closely monitored throughout further phases of this project due to higher percentages of these populations in parts of the project area than those for Simpson County and/or Kentucky.

Community impacts of the proposed project cited in the *Environmental Justice and Community Impact Report* include:

- Relieve congestion along KY 2592 and US 31W;
- Improve safety of US 31W between KY 73 and KY 100; and
- Improve emergency response time to the northwest portion of Simpson County.

D. Historic and Archaeological Sites

A review of historic and archaeological sites was conducted within the study corridor.

1. Historic Sites

There are four (4) historic structures found within the project area. They include the following:

Historic/Archaeological Features

- Four (4) historic structures
- No sites listed on the National Register of Historic Places
- Potential for unrecorded historic or prehistoric archaeology sites

- A 20th century house is located adjacent to Robey-Bethel Grove Road, northwest of Franklin. This structure is a 1½ story home that was constructed in the 1900-1924 era. This is a listed "Inventory Site" and has not qualified for National Register status to date. An inventory site is the basic entry classification given to newly found historical structures. National Registered structures are sites that have fulfilled the requirements set by the National Register of Historic Places (NHRP);
- An historic structure found north of the study corridor and adjacent to KY 73 (Morgantown Road) has been listed as an "Inventory Site." This house has no site name but is described as a 2-story dwelling built within the 1875-1899 era. This structure is not on the NRHP;
- The Neely House is adjacent to the US 31W/J. L. Farmer Road intersection, located just outside the northeastern corner of the study area. This site is listed as a "Survey Site," which has been examined to determine its potential for historic status. The site is a two-story dwelling built within the 1850-1874 era. This structure is not on the NRHP; and
- Directly across US 31W, another historic site (house) is listed. Listed as an "Inventory Site," this two-story dwelling was constructed within the 1900-1924 era. Currently, this site is not on the NRHP.

The data acquired from the *Kentucky Heritage Council (KHC)* related to these four (4) structures does not include property boundary information. Property boundaries are typically identified when sites are added to the NRHP or when sites are of special interest. If any of these structures are determined to be eligible for the NRHP in the future, property boundaries should be identified. According to the KHC regulations, survey forms for previously recorded historic sites should be updated if they are five (5) years or older.

Several structures in the project area have the potential to be added to the State Historic Preservation Office's list of historic structures. A field inspection of each of these structures will be necessary to determine their historical status. As part of future phases of this project, a survey of historic structures should be undertaken to determine if there are any structures in the project area that are eligible for listing on the *National Register of Historic Places*.

2. Archaeological Sites

There are no archaeology sites officially recorded within the project area, according to the Office of State Archaeology (OSA). According to the OSA, the project area has a high potential for containing unrecorded prehistoric or historic archaeological sites.

E. Prime and Unique Farmland Concerns

According to the most recently updated Soil Survey Geographic (SSURGO) database, Simpson County digital soil data sets are not completed at this time. The soil data obtained from SSURGO is the most detailed and accurate soil information available. The SSURGO database is updated and maintained by the United States Department of Agriculture (USDA) and is expected to be released by June of this calendar year (2003). Without this data, it is not possible to classify the farmland within the project area as either "prime" or "unique."

Farmland adjacent to KY 73 (Morgantown Road)

However, The Kentucky Department of Agriculture has estimated that 76% of the study corridor is covered in harvested cropland. Soybeans are the top planted agricultural crop, with over 32,000 acres sown. Corn is a close second and actually yields almost 3 times more bushels per acre than soybeans, while wheat for grain is the third leading agriculture crop in this area. The state's leading cash crop, tobacco, is also planted on over 1100 acres of land in Simpson County.

Agriculture is a very important facet in Simpson County and within the study corridor. New construction within these agricultural areas could potentially impact cropland. As discussed earlier in this report, much of Kentucky's prime farmland is underlain by karst. One main concern regarding future construction involves potential runoff of pesticides or herbicides into underground karst basins. Since this area is prone to karst development, the potential for contamination should be recognized and addressed appropriately.

F. Monitored Sites and Wells

A review of the databases and data source information covering the project area, and areas closely adjacent, revealed the existence of the following:

- One (1) oil and gas well is located within the study area. This well is listed as a "dry and abandoned" site and is located northwest of the US 31W/KY 2592 intersection.
- There are no Underground Storage Tanks (UST's) in the study area. However, there are fourteen (14) that have been located south of KY 100 and west of the KY 1008 intersection. They include the following sites:
  - Thirteen (13) separate UST sites are collectively located at the A. L. Johnson Gulf Oil Products. It should be noted that only one digital graphic is used for all thirteen locations.
  - One (1) UST is located at the I-65 BP Service (Gulf) station located next to the above mentioned A. L. Johnson Gulf Oil Products site.
- One (1) Facility Identification Initiative System (FINDS) site was found at Global Business Furniture on 1013 W Cedar Street, just south of KY 1008. The FINDS system uses an extensive database relative to all monitored environmental sites by the EPA, which are subject to environmental regulations or of environmental interest.
- One (1) Toxics Release Inventory System (TRIS) site was also located at Global Business Furniture on 1013 W Cedar Street. TRIS site information lists facilities which have released chemicals directly into the air, water, land, or that are transported off-site.

It should be noted that no other facilities exist within or were observed in the field which might represent an environmental concern inside the study area.

G. Additional Concerns

Other items identified within the project area include:

- An estimated 196 total structures are located in the project area which is based upon a review of the aerial photography used for this project (dated 04/02/1998);
- Over 70 acres of forested deciduous trees are located within the project area (per digitized 1998 digital orthophotograph data);
- Additional UST/HazMat concerns are likely to be associated with farming operations in the project area;
- Noise issues were not identified as an existing concern within the study area; however, noise impacts should be considered if the Franklin Northwest Bypass is constructed; and
- Simpson County recently was determined to be in compliance with the Environmental Protection Agency's Air Quality standards.

H. Summary of Environmental Issues

A number of potential environmental concerns for the project area have been identified through this preliminary analysis. Environmental issues that are likely to require consideration during future phases of this project include:

- Public and private water sources, such as water and sewer lines locations within the study corridor;
- Potential water quality issues related to the Barren River watershed and its tributaries, wetland areas, and karst groundwater basins/development, all within the study corridor;
- Potential endangered, threatened or special concern species, including the Gray Mytosis, Kentucky Creekshell, Spotted Darter and Sedge Wren.
- Sensitive community resources including one (1) cemetery inside of the project area and two (2) churches just outside the project area;
- Potential environmental justice issues related to high percentages of low-income and minority populations in the project area census tract;
- Four (4) historic structures, but none listed on the National Register of Historic Places;
- Extensive cropland and farming operations throughout the study corridor;
- Geologic, water quality, and drainage considerations related to the karst landscape; and
- One (1) FINDS and one (1) TRIS site location inside the project area and fourteen (14) underground storage tanks (UST's) just outside of the project area.

V. FUTURE TRAFFIC CONSIDERATIONS

This chapter provides an analysis of future traffic growth scenarios for the KY 1008 project area in Simpson County. Historic travel data for a region typically provides a baseline forecast for future traffic growth. In addition, potential improvements such as the completion of the Franklin Northwest Bypass can also influence traffic growth. The following sections provide an analysis of these future scenarios:

- Year 2025 traffic forecasts without any transportation improvements based on historic traffic growth rates for Simpson County; and
- Year 2025 traffic forecasts with and without the Franklin Northwest Bypass, based on the Simpson County Travel Demand Model.

A. Future Traffic without Franklin Northwest Bypass (Historic Growth)

This section provides a discussion of the expected Year 2025 traffic conditions without any transportation improvements in the study area. The future traffic volumes, based on historical growth rates, are shown in **Figure 6** and **Table 9**. Year 2002 traffic volumes and levels of service are also shown in the table for comparison purposes.

Future Traffic without Bypass (based on Historic Growth)

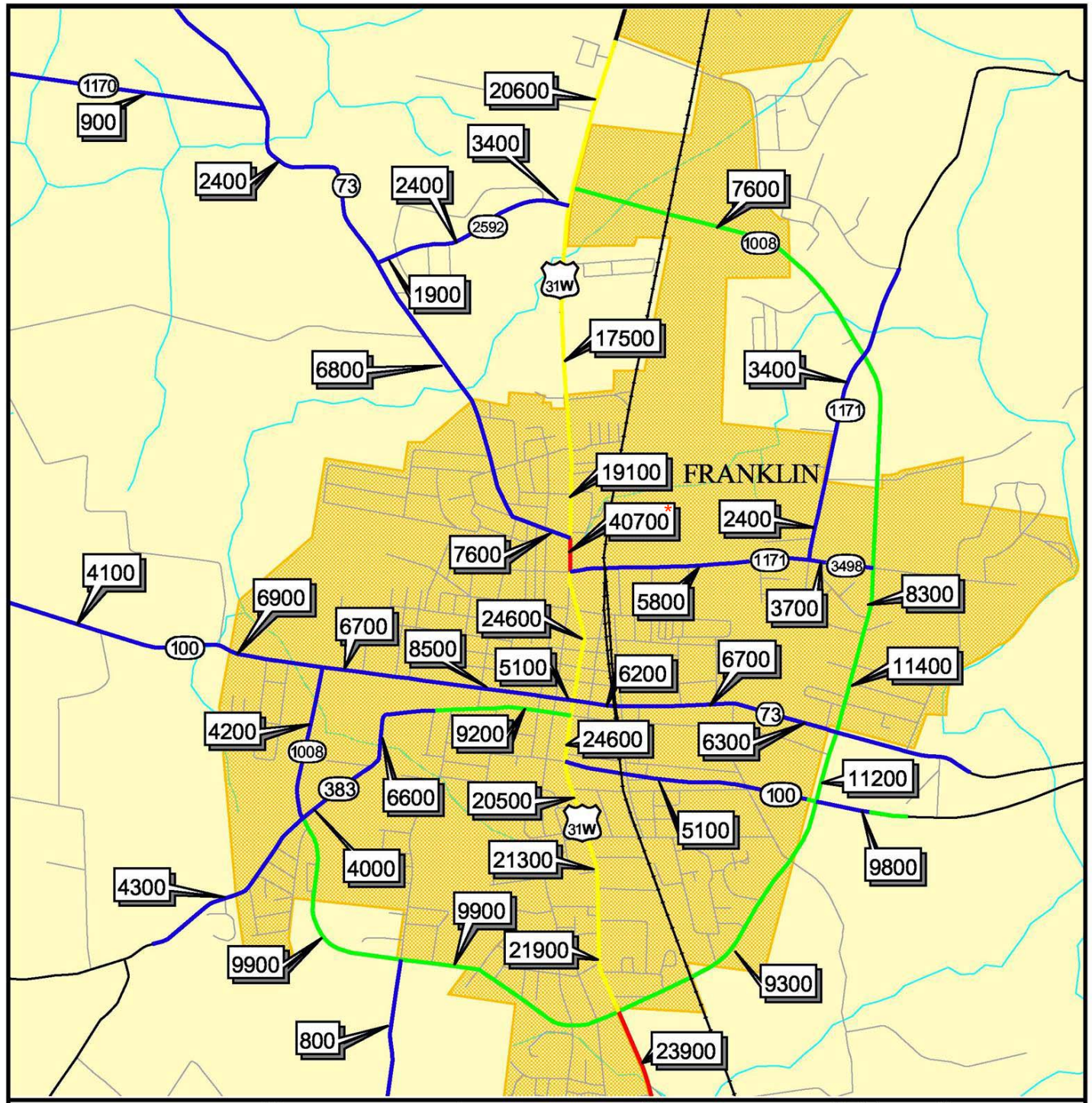
- Existing KY 1008 operates at LOS D, with peak volumes of 11,400 vpd in southeast Franklin.
- US 31W operates at LOS E and LOS F in the study area, with peak volumes constrained to about 30,000 vpd.
- KY 100 is expected to operate at LOS D or better, with average traffic volumes of about 7,000 vpd.

The historical traffic growth rate for the KY 1008 project area was based on 17 years of travel data for Simpson County which was verified by the Kentucky Transportation Cabinet's forecasts of statewide Vehicle Miles of Travel (VMT). Based on these factors, a compounded annual growth rate of 2.2 percent was assumed through Year 2025, resulting in a cumulative increase in vehicle travel of 65 percent from 2002 to 2025.

In calculating levels of service, it was assumed that the existing truck percentage values would remain constant through Year 2025. However, it is possible that some truck percentages could increase or decrease as highway improvements are completed in the project area.

As shown in **Figure 6**, future traffic volumes along KY 1008 are expected to range between 4,200 vehicles per day (vpd) in southwest Franklin (MP 0.000 to MP 0.590) and 11,400 vpd in southeast Franklin (MP 3.770 to MP 3.968). With respect to Level of Service (LOS), the majority of KY 1008 will operate at LOS D. The exception is expected to occur along the section closest to KY 100 where it will operate at LOS C.

Along US 31W north of Franklin, traffic volumes are expected to reach 17,500 vehicles per day (vpd) in Year 2025. In Franklin, volumes increase to between 19,100 vpd and 24,600 vpd. Between KY 1171 and KY 73, historical growth rates indicate that traffic demand along US 31W may reach about 40,000 vpd. Due to the capacity constraints of a three-lane cross section, future volumes are more likely to peak around 30,000 vpd. Above this point, congestion in this section may encourage drivers to seek other routes. Traffic volumes along KY 100 in Franklin are expected to range from 6,700 vpd to 8,500 vpd.



Year 2025 Traffic and Level of Service

Figure 6
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

*Traffic demand is expected to reach about 40,000 vehicles per day (vpd); however, capacity constraints on this 3-lane section may limit future traffic volumes to about 30,000 vpd.

Printed: 07/01/03

Table 9. Future Traffic Characteristics

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	End MP	Length (miles)	2002 ADT	Annual Growth Rate[1]	2025 ADT	2025 LOS
KY 1008 MP 0.000 - MP 6.526						
0.000	0.590	0.590	2,520	2.2%	4,200	C
0.590	2.280	1.690	6,030	2.2%	9,900	D
2.280	3.176	0.896	5,630	2.2%	9,300	D
3.176	3.500	0.324	6,800	2.2%	11,200	D
3.500	3.770	0.270	6,800	2.2%	11,200	D
3.770	3.968	0.198	6,920	2.2%	11,400	D
3.968	4.350	0.382	5,010	2.2%	8,300	D
4.350	4.550	0.200	4,620	2.2%	7,600	D
4.550	6.526	1.976	4,620	2.2%	7,600	D
US 31W MP 4.500 - MP 9.053						
4.500	5.178	0.678	14,500	2.2%	23,900	F
5.178	5.273	0.095	14,500	2.2%	23,900	F
5.273	5.424	0.151	13,300	2.2%	21,900	E
5.424	5.720	0.296	13,300	2.2%	21,900	E
5.720	6.070	0.350	12,900	2.2%	21,300	E
6.070	6.170	0.100	12,400	2.2%	20,500	E
6.170	6.396	0.226	14,900	2.2%	24,600	E
6.396	6.670	0.274	14,900	2.2%	24,600	E
6.670	6.995	0.325	14,900	2.2%	24,600	E
6.995	7.120	0.125	24,700	2.2%	40,700*	F
7.120	7.400	0.280	11,600	2.2%	19,100	E
7.400	7.550	0.150	10,600	2.2%	17,500	E
7.550	7.950	0.400	10,600	2.2%	17,500	E
7.950	8.069	0.119	12,500	2.2%	20,600	E
8.069	9.053	0.984	12,500	2.2%	20,600	E
KY 73 MP 7.690 - MP 16.310						
7.690	8.417	0.727	3,820	2.2%	6,300	C
8.417	8.490	0.073	3,820	2.2%	6,300	C
8.490	8.870	0.380	4,070	2.2%	6,700	C
8.870	9.040	0.170	3,740	2.2%	6,200	C
9.040	9.234	0.194	3,740	2.2%	6,200	C
9.234	9.390	0.156	4,620	2.2%	7,600	C
9.390	9.660	0.270	4,120	2.2%	6,800	C
9.660	10.228	0.568	4,120	2.2%	6,800	C
10.228	10.250	0.022	1,440	2.2%	2,400	B
10.250	16.310	6.060	1,440	2.2%	2,400	B
KY 100 MP 6.302 - MP 11.000						
6.302	6.508	0.206	2,510	2.2%	4,100	C
6.508	8.284	1.776	2,510	2.2%	4,100	B
8.284	8.308	0.024	4,190	2.2%	6,900	C
8.308	8.364	0.056	4,190	2.2%	6,900	C
8.364	8.534	0.170	4,190	2.2%	6,900	C
8.534	8.551	0.017	4,190	2.2%	6,900	C
8.551	9.111	0.560	4,090	2.2%	6,700	C
9.111	9.536	0.425	5,150	2.2%	8,500	C
9.536	9.647	0.111	5,150	2.2%	8,500	A
9.647	9.654	0.007	3,080	2.2%	5,100	A
9.654	9.750	0.096	3,080	2.2%	5,100	A
9.750	9.954	0.204	3,080	2.2%	5,100	C
9.954	10.137	0.183	3,080	2.2%	5,100	C
10.137	10.315	0.178	3,080	2.2%	5,100	C
10.315	10.524	0.209	3,110	2.2%	5,100	C
10.524	10.613	0.089	3,110	2.2%	5,100	C
10.613	10.648	0.035	5,930	2.2%	9,800	D
10.648	10.854	0.206	5,930	2.2%	9,800	C
10.854	11.000	0.146	5,930	2.2%	9,800	D

1) Based on historical growth rates as derived from the KYTC Counts Program

*Traffic demand is expected to reach about 40,000 vehicles per day (vpd); however, capacity constraints of this 3-lane section may limit future traffic volumes to about 30,000 vpd

Table 9. Future Traffic Characteristics (continued)

Simpson County, Item No. 03-106.00
Pre-Design Scoping Study, KY 1008 from KY 100 to US 31W

Begin MP	End MP	Length (miles)	2002 ADT	Annual Growth Rate[1]	2025 ADT	2025 LOS
KY 383 MP 7.500 - MP 9.513						
7.500	7.650	0.150	2,580	2.2%	4,300	C
7.650	8.279	0.629	2,580	2.2%	4,300	C
8.279	8.560	0.281	2,420	2.2%	4,000	C
8.560	8.58	0.020	4,020	2.2%	6,600	C
8.580	9.001	0.421	4,020	2.2%	6,600	C
9.001	9.513	0.512	5,580	2.2%	9,200	D
KY 1170 MP 4.656 - MP 7.156						
4.656	7.156	2.500	545	2.2%	900	A
KY 1171 MP 0.000 - MP 2.090						
0.000	0.907	0.907	3490	2.2%	5,800	C
0.907	1.110	0.203	1820	2.2%	3,000	C
1.110	2.090	0.980	1790	2.2%	3,000	C
KY 2592 MP 0.000 - MP 0.774						
0.000	0.078	0.078	1,170	2.2%	1,900	B
0.078	0.685	0.607	1,480	2.2%	2,400	B
0.685	0.774	0.089	2,090	2.2%	3,400	C
KY 2593 MP 4.000 - MP 4.874						
4.000	4.874	0.874	476	2.2%	800	A
KY 3498 MP 0.000 - 0.246						
0.000	0.246	0.246	2,250	2.2%	3,700	C

With respect to LOS, US 31W will operate at LOS E and LOS F which are considered unacceptable. On the other hand, KY 100 will operate at LOS D or higher, which is acceptable for an urban area.

B. Future Traffic Based on Traffic Model Results

This section provides a discussion of the expected Year 2025 traffic conditions using the Simpson County Travel Demand Model. The goal of a travel demand model is to simulate existing travel characteristics, forecast future traffic volumes, and allow for system-wide analysis of alternative transportation improvements. In addition, travel demand models can provide decision-makers with a tool whereby alternative transportation concepts can be tested and evaluated against a predetermined set of criteria (goals and objectives). Relative to this project, the development of a travel demand model would assist in the analysis of the proposed Franklin Northwest Bypass. More importantly, the model would be used to predict the volume of traffic expected to use the bypass if built.

The Simpson County Travel Demand Model was developed using the TransCAD software package for a base year (2002) and a future year (2025). Specific technical information related to this model can be found in the *Simpson County Travel Demand Model Technical Memorandum*[2] submitted to the KYTC Division of Multimodal Programs.

As part of a future year model, committed highway improvements are coded into the model network. These improvements include projects listed in the KYTC Six Year Highway Plan. As discussed earlier in this report, three committed projects are listed for Simpson County, including:

- US 31W widening from the Tennessee state line to KY 1008 (south of Franklin);
- Bridge replacement along KY 73 northwest of Franklin; and
- KY 1008 – Franklin Northwest Bypass.

Since the purpose of using the model in this project was to determine the impact of the proposed Northwest Bypass on the future roadway network, the following five (5) future model scenarios were developed:

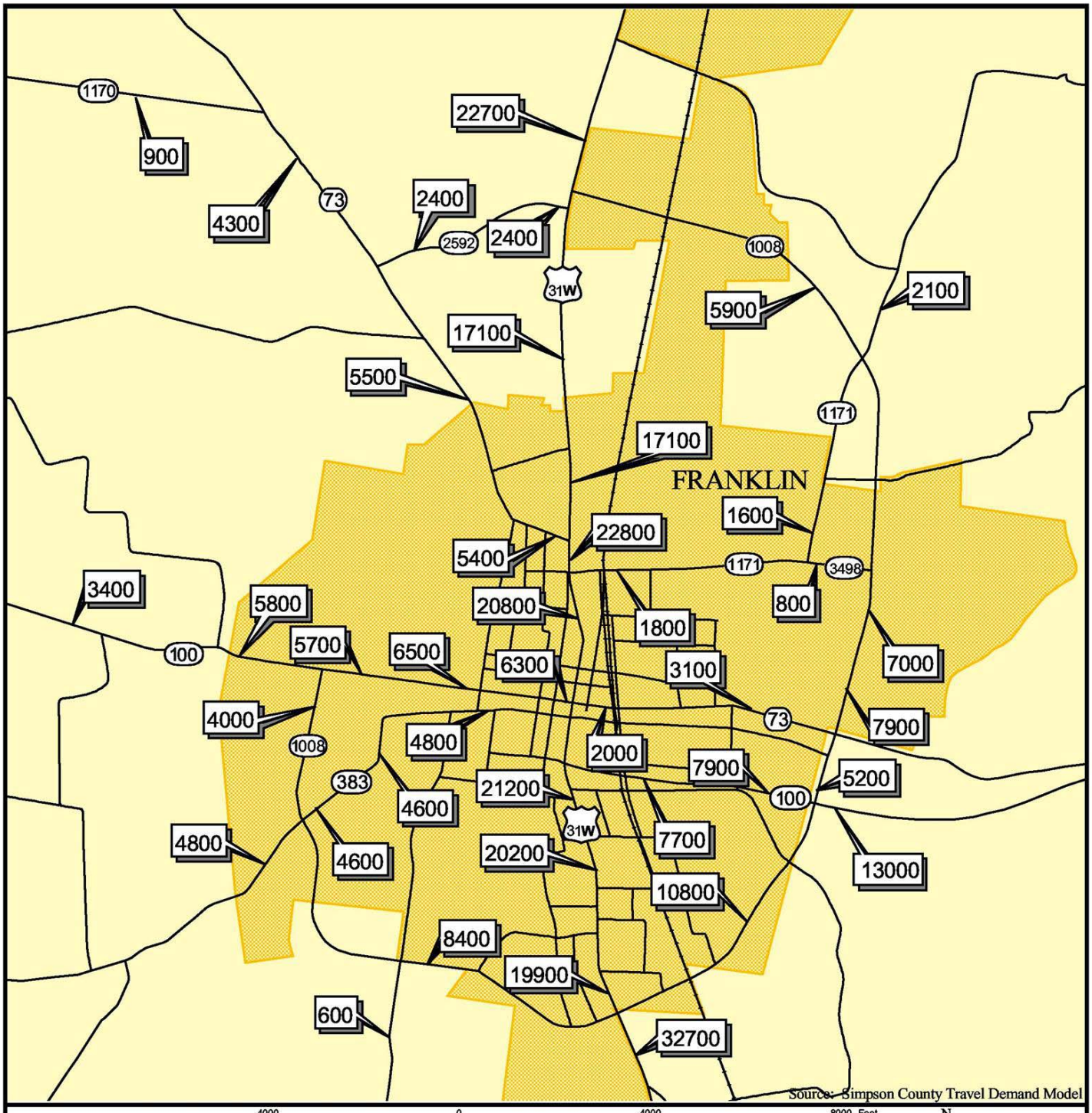
- Future traffic excluding KY 1008 Northwest Bypass;
- Future traffic including KY 1008 Northwest Bypass (no disjunctions);
- Future traffic including KY 1008 Northwest Bypass (northern disjunction);
- Future traffic including KY 1008 Northwest Bypass (western disjunction); and
- Future traffic including KY 1008 Northwest Bypass (northern and western disjunctions).

The five (5) model scenarios were then tested in the model. The following discussion summarizes the results of these tests.

1. Scenario 1: Future Traffic Excluding KY 1008 Northwest Bypass

This scenario is similar to Section A of this chapter and is presented for the purposes of comparison with the other scenarios. The traffic volumes for this analysis have been generalized into three segments in the study area (US 31W north of Franklin, US 31W in Franklin, and KY 100 in Franklin) to allow for comparison with the other alternative scenarios.

[2] *Simpson County Travel Demand Model Technical Memorandum*; Wilbur Smith Associates; September 2003



LEGEND

9300 Estimated Model 2025 ADT

Model Route

Location Map

EDUCATION PAYS

KENTUCKY TRANSPORTATION CABINET

ENGINEERS PLANNERS ECONOMISTS
Wilbur Smith Associates

Year 2025 Traffic without Northwest Bypass

Figure 7
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 10/28/03

As shown in **Figure 7**, Year 2025 traffic volumes without the Franklin Northwest Bypass are expected as follows:

- Approximately 17,000 vpd along US 31W north of Franklin;
- Approximately 22,800 vpd along US 31W in Franklin; and
- Approximately 6,300 vpd along KY 100 in Franklin.

Future Traffic with Bypass (based on Traffic Model)

- Volumes along US 31W are expected to decrease by 15-20% with the bypass.
- Volumes along KY 100 are expected to decrease by 20% with the bypass.
- The new bypass route is expected to attract about 6,700 vpd.
- Disjunction of the bypass route at either end of the existing KY 1008 is expected to reduce use of the bypass between 10% and 30%.
- Disjunction of the bypass route at both ends of the existing KY 1008 is expected to reduce use of the bypass between 19% and 32%

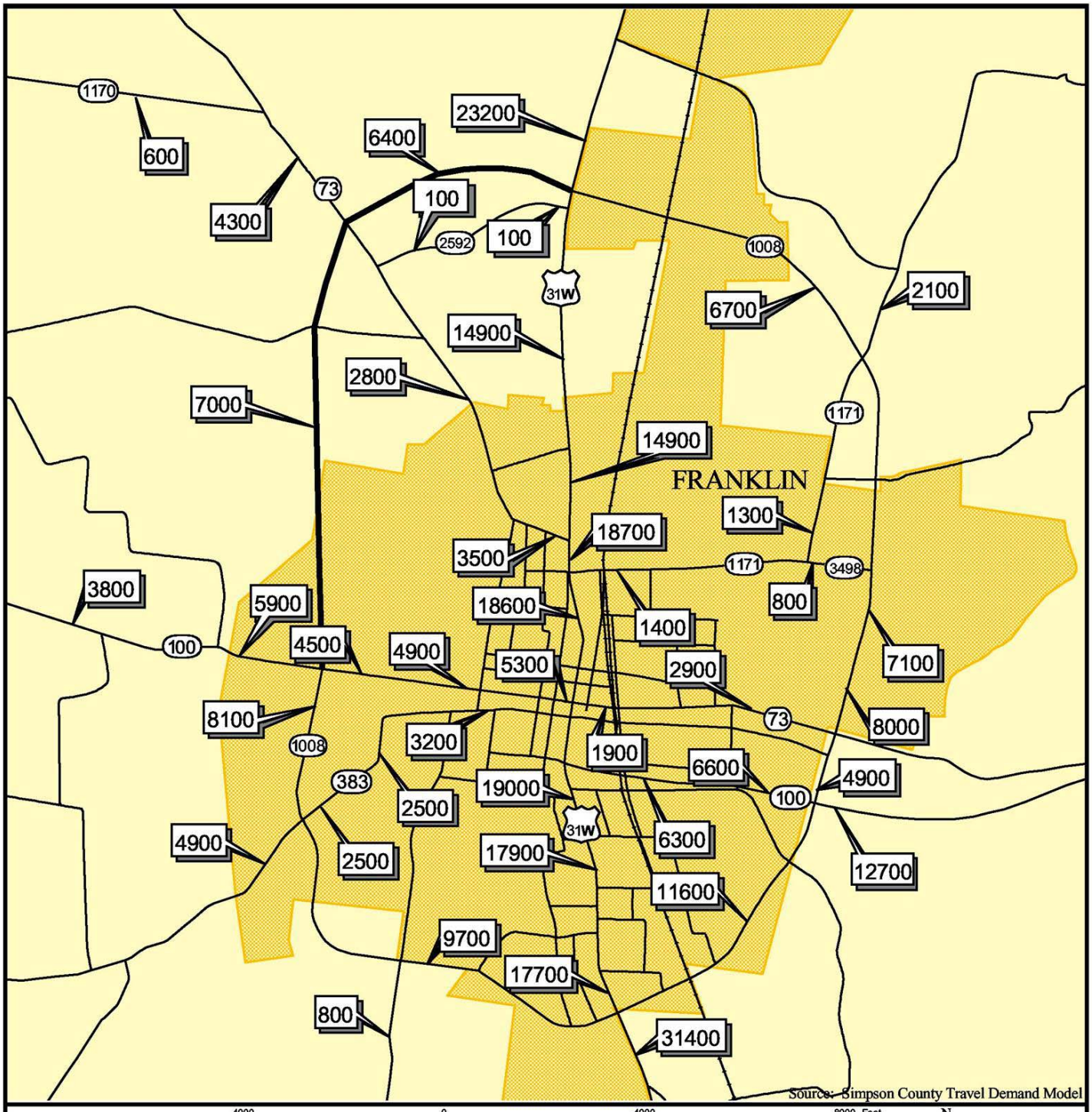
2. **Scenario 2: Future Traffic Including KY 1008 Northwest Bypass (No Disjunctions)**

This scenario considers the effect of adding the Franklin Northwest Bypass to the study area. As shown in **Figure 8**, Year 2025 traffic volumes for this scenario are expected to be as follows:

- An average of 6,700 vpd along the bypass;
- Approximately 14,900 vpd along US 31W north of Franklin;
- Approximately 18,700 vpd along US 31W in Franklin; and
- Approximately 5,300 vpd along KY 100 in Franklin.

As shown through this analysis, there is a 15% - 20% reduction in Year 2025 traffic along US 31W in the study area with the addition of a northwest bypass link. Year 2025 Level of Service (LOS) improves from LOS F to LOS E and LOS E to LOS D along some segments of US 31W with the northwest bypass. In addition, there is a 20% reduction in Year 2025 traffic along KY 100 and an improvement from LOS C to LOS B along some sections.

In order to identify which vehicles would be attracted to the proposed bypass, a select link analysis was conducted. A select link analysis is a travel demand modeling procedure that analyzes one specific section of roadway during the modeling process. By 'selecting' one link, the origins and destinations of the vehicles using that specific roadway section can be determined. Also, the number of vehicles that use adjacent routes to get to the selected roadway section are determined. For this project, a one-mile link of the Franklin Northwest Bypass just north of KY 100 was selected for further analysis. **Figure 9** displays the results from the select link analysis. Each volume in this figure represents the total volume on other routes that is going to or coming from the selected section of the bypass. As shown, much of the traffic that utilizes the Franklin Northwest Bypass accesses the route from US 31W, KY 73, and KY 100.



LEGEND

9300 — Estimated Model 2025 ADT

Model Route

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Year 2025 Traffic with Northwest Bypass

Figure 8
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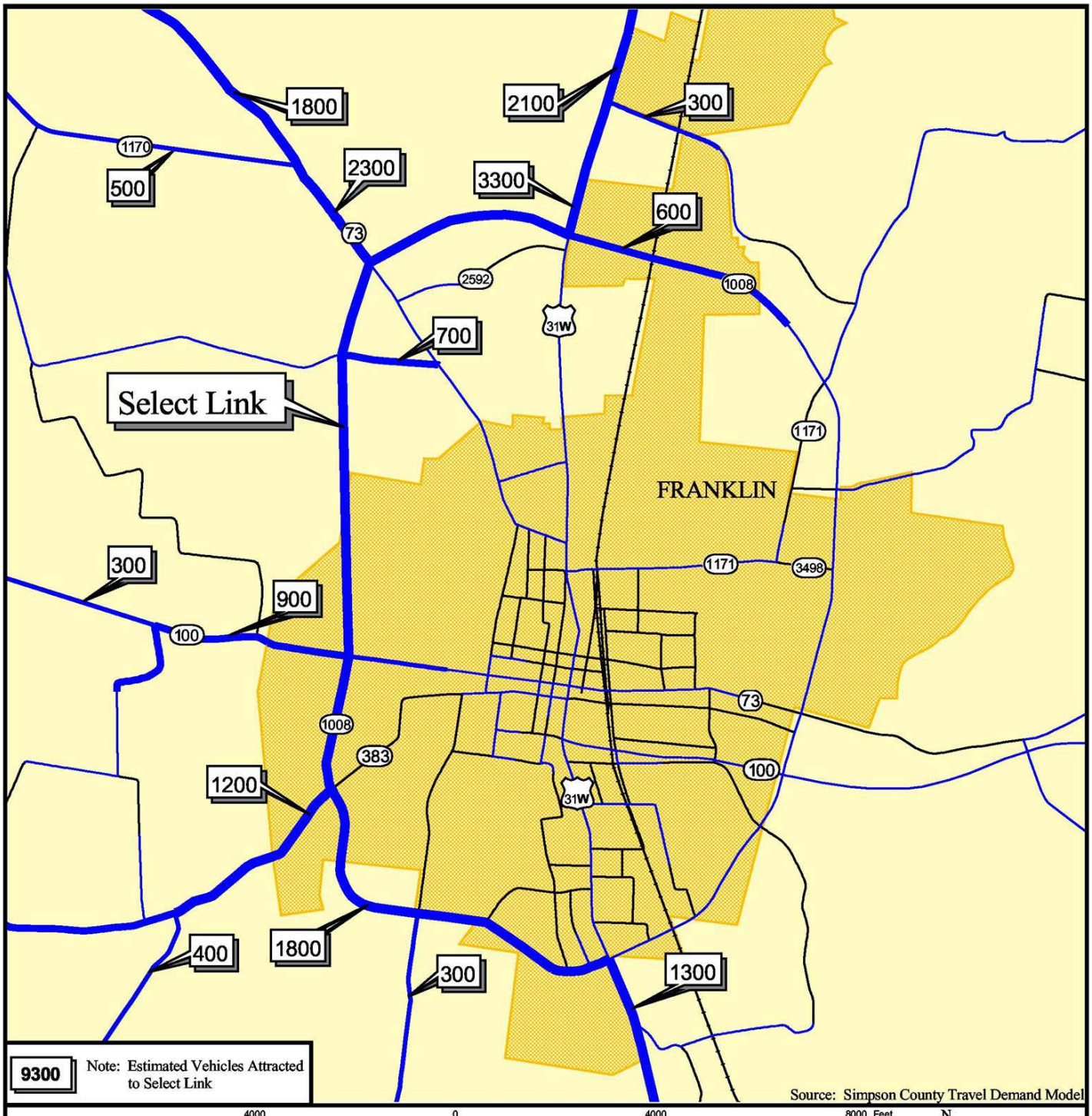
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 07/01/03



4000 0 4000 8000 Feet

N W E S

LEGEND

- 1 - 250
- 250 - 500
- 500 - 1000
- 1000 - 6645

Location Map

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Year 2025 Select Link Analysis

Figure 9
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 10/28/03

3. **Scenario 3: Future Traffic Including KY 1008 Northwest Bypass (Northern Disjunction)**

   Another key test using the Simpson County Travel Demand Model included an analysis of the location where the proposed bypass should intersect with US 31W. Scenario 3 provides for construction of the Franklin Northwest Bypass with a disjunction north of the existing US 31W/KY 1008 intersection approximately ¼ miles. This can be seen in **Figure 10**.

   Year 2025 traffic volumes for this scenario are expected to be as follows:

   - An average of 6,200 vpd along the bypass;
   - Approximately 14,900 vpd along US 31W north of Franklin;
   - Approximately 19,200 vpd along US 31W in Franklin; and
   - Approximately 5,300 vpd along KY 100 in Franklin.

   As shown, approximately 10% fewer vehicles utilize the new section of the bypass as a result of the disjunction. In addition, fewer vehicles are removed from US 31W in Franklin.

4. **Scenario 4: Future Traffic Including KY 1008 Northwest Bypass (Western Disjunction)**

   Scenario 4 is similar to Scenario 3 except that the disjunction is along KY 100. **Figure 11** displays the results.

   Year 2025 traffic volumes for this scenario are forecast as follows:

   - An average of 5,400 vpd along the bypass;
   - Approximately 15,100 vpd along US 31W north of Franklin;
   - Approximately 20,100 vpd along US 31W in Franklin; and
   - Approximately 5,200 vpd along KY 100 in Franklin.

   As shown, approximately 30% less traffic uses the bypass than described in Scenario 2. In addition, traffic volumes along US 31W are higher with the western disjunction.

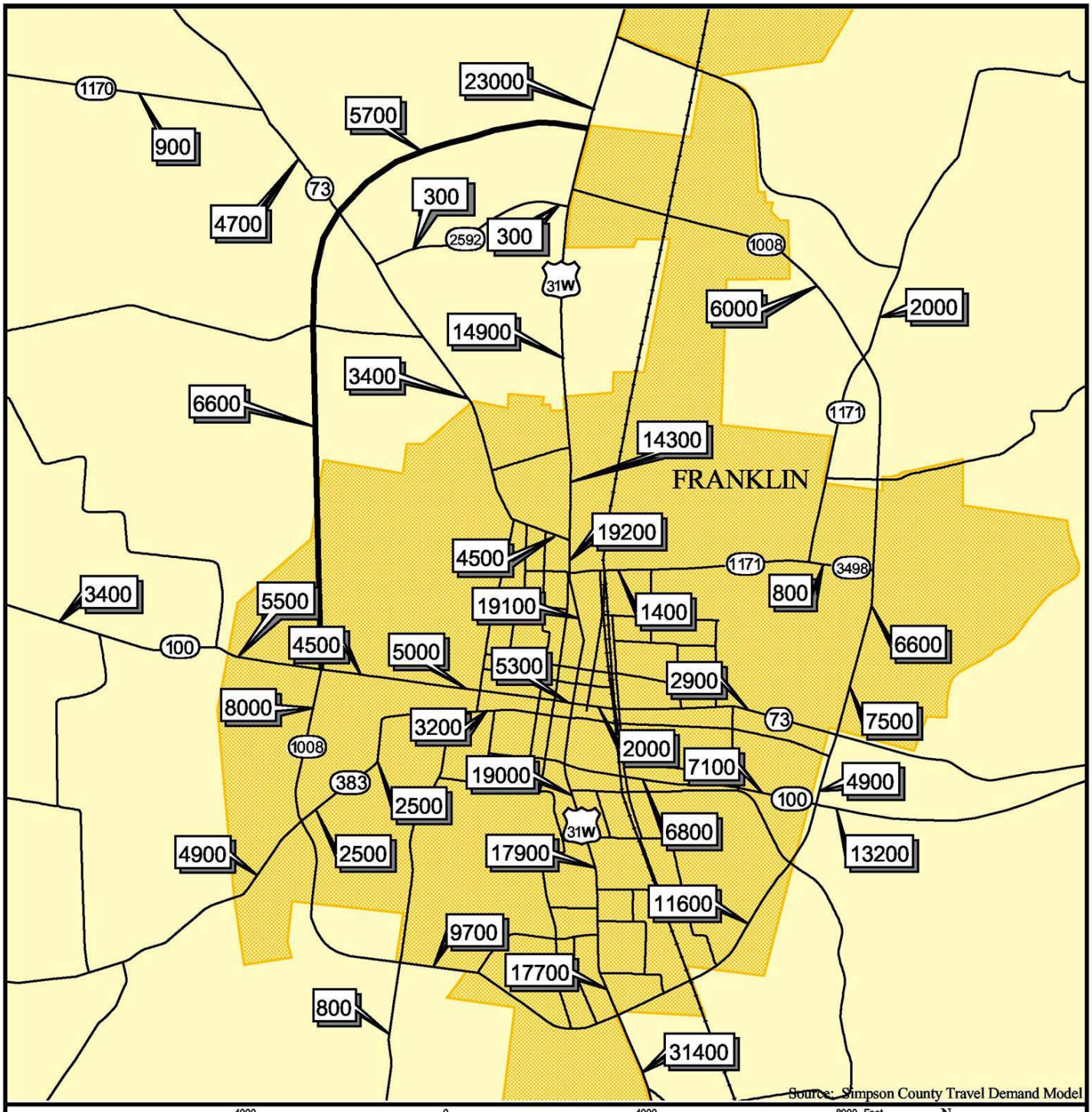
5. **Scenario 5: Future Traffic Including KY 1008 Northwest Bypass (Northern and Western Disjunction)**

   Scenario 5 is a combination of Scenario 3 and Scenario 4, having disjunctions both north of the existing US 31W/KY 1008 intersection and west of the existing KY 100/KY 1008 intersection. **Figure 12** displays the results.

   Year 2025 traffic volumes for this scenario are forecast as follows:

   - An average of 5,000 vpd along the bypass;
   - Approximately 15,100 vpd along US 31W north of Franklin;
   - Approximately 20,600 vpd along US 31W in Franklin; and
   - Approximately 5,300 vpd along KY 100 in Franklin.

   As shown, approximately 35% less traffic uses the bypass than described in Scenario 2.



LEGEND

9300 — Estimated Model 2025 ADT

Model Route

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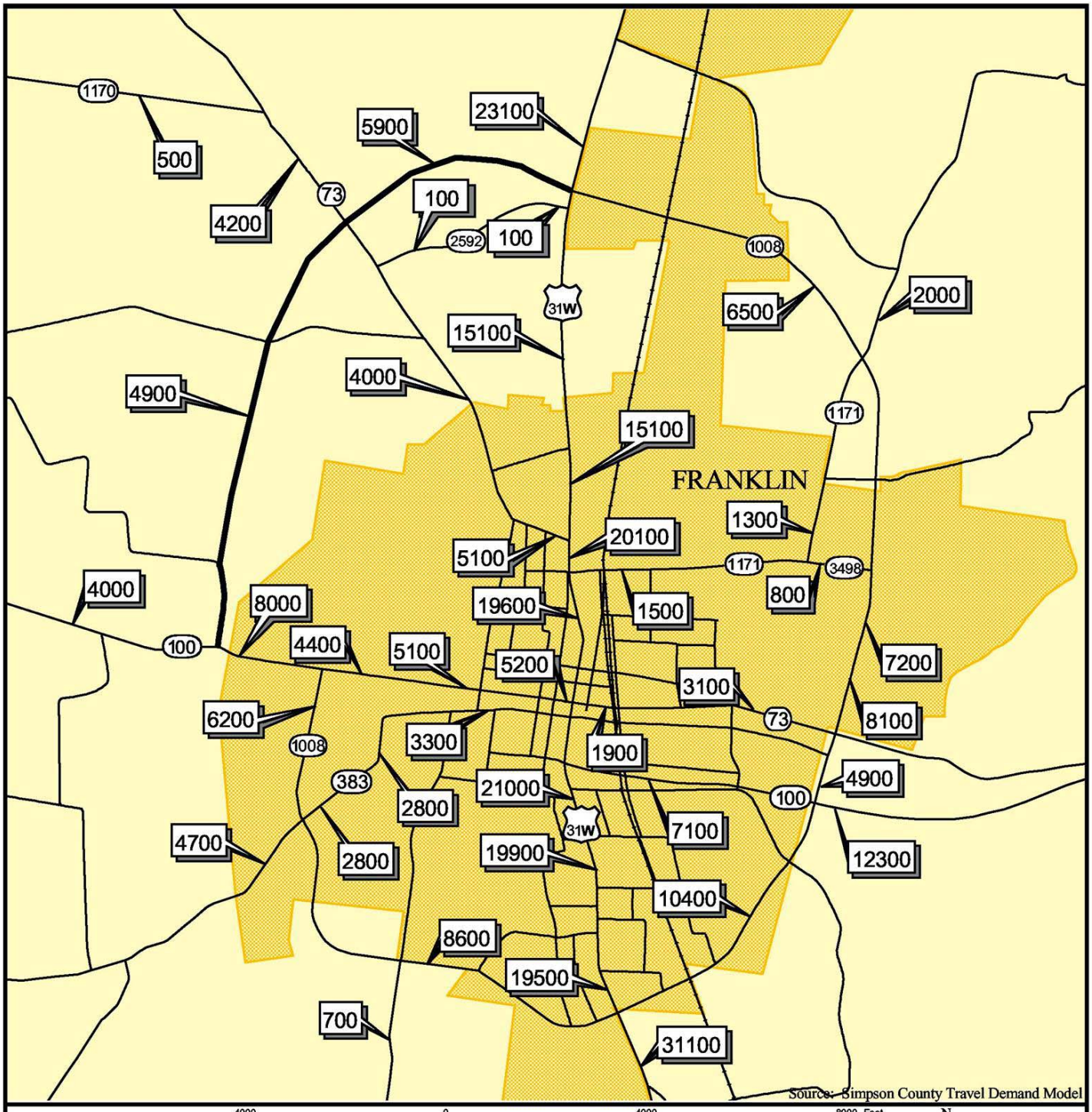
Year 2025 Traffic With Northern Disjunction

Figure 10
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 10/28/03



LEGEND

9300 — Estimated Model 2025 ADT

Model Route

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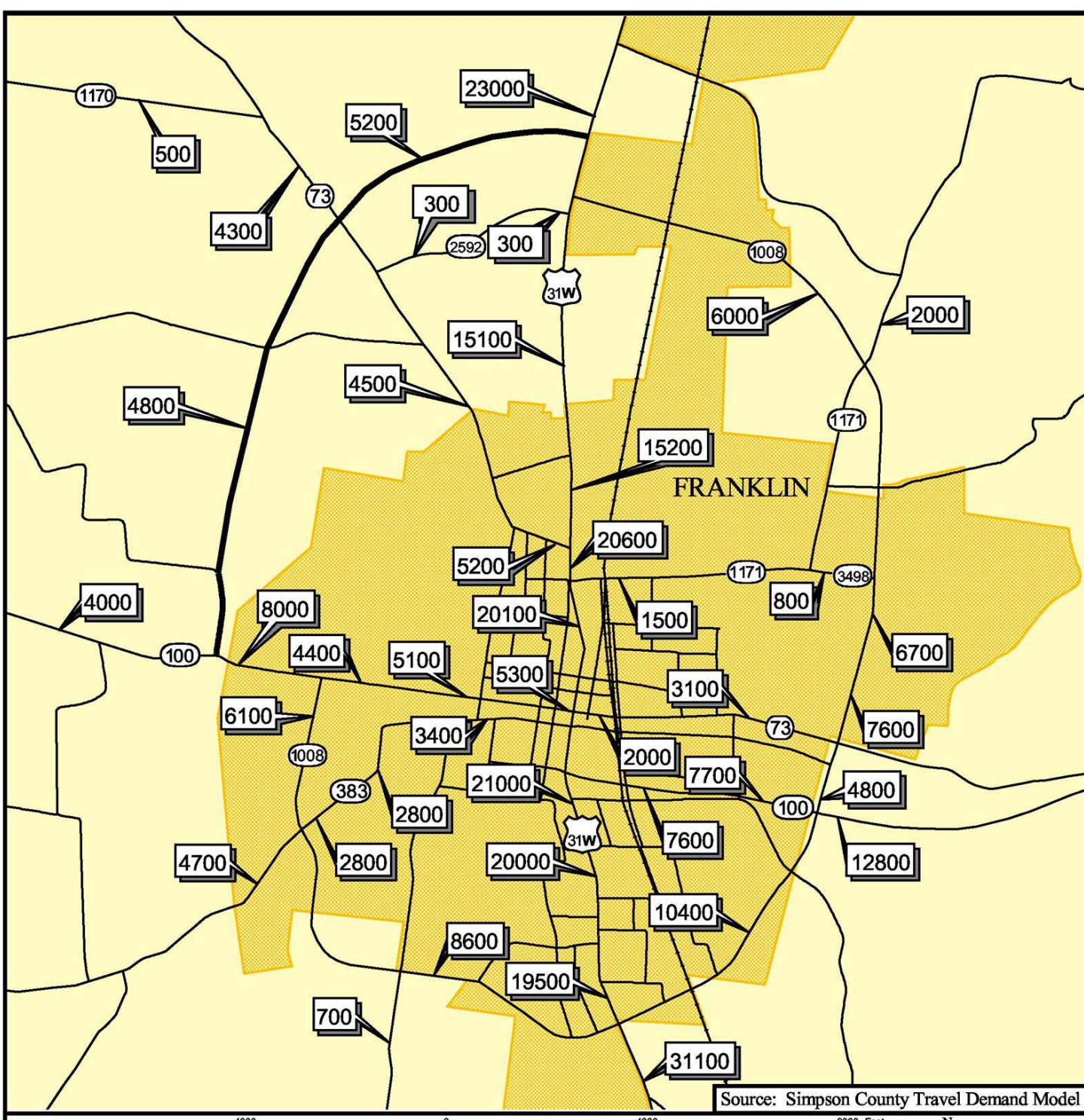
Wilbur Smith Associates

Year 2025 Traffic With Western Disjunction

Figure 11
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 10/28/03



4000 0 4000 8000 Feet

N W E S

LEGEND

9300 Estimated Model 2025 ADT

Model Route

Location Map

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Year 2025 Traffic Northern and Western Disjunction

Figure 12
Simpson County
Item No. 3-106.00

KY 1008 from
KY 100 to US 31 W

Printed: 12/23/0

C. Summary of Future Traffic Considerations

Consideration of future traffic in the study area included historical growth rate forecasts and testing of various scenarios in the Simpson County Travel Demand Model. The results of these future traffic studies indicate the following:

- Without any future transportation improvements in the study area, US 31W is expected to operate at unacceptable conditions by the Year 2025.
- Construction of a Franklin Northwest Bypass is expected to reduce traffic along existing routes through Franklin: 1) Volumes along US 31W will decrease by 15-20% and 2) Volumes along KY 100 will decrease by 20%.
- Connection of the Franklin Northwest Bypass to the existing sections of KY 1008 is expected to attract the most users of the new route, about 6,700 vpd. Disjunction of the bypass route at either end of the existing KY 1008 is expected to reduce use of the bypass between 10% and 30%, while disjunction at both ends is expected to reduce use by 35%.

VI. DRAFT PROJECT GOALS

Draft project goals have been identified for the Franklin Northwest Bypass (KY 1008 extension) project. These project goals were identified through the study process and are expected to continue to evolve throughout future phases of this project.

Project Goals

- Reduce Traffic Congestion in Franklin
- Reduce Truck Traffic in Franklin
- Improve Safety for Existing Roadways

These goals aim to address the operational, safety, and environmental issues identified by the KYTC; Federal, State and local government agencies; interest groups; and the general public. As the Franklin Northwest Bypass project continues to move through the project development process, these goals may be used as a baseline for development of the project and for preparation of the purpose and need statement for the project.

For the Franklin Northwest Bypass project, the following draft project goals have been identified:

- **Reduce traffic congestion along major roads such as US 31W and KY 100 in downtown Franklin.**

  In the study area, US 31W currently operates at LOS D and E and is expected to worsen in the future. The current congestion and expected future growth along this corridor have become primary concerns of local officials and the public. The Franklin Northwest Bypass will serve to relieve current traffic along US 31W and accommodate increased future traffic levels. Traffic model results indicate that with construction of the Franklin Northwest Bypass, traffic along US 31W will be reduced by 15-20%. Similarly, volumes along KY 100, which also runs through downtown Franklin, will be decreased by about 20% with the proposed bypass.

- **Provide a corridor that would reduce truck traffic in downtown Franklin and along residential streets.**

  Local officials and members of the public have expressed their concern about the large number of trucks in downtown Franklin. The proposed bypass is expected to relieve the number of trucks in downtown, by providing an alternate path through Franklin. There is also concern about the many large trucks using Patton Road as a cut-through. The proposed bypass will eliminate the need for this cut-through, removing trucks and other vehicles from this residential neighborhood.

- **Improve safety for study area routes.**

  Four (4) high accident segments are located along US 31W between the southern urban limits and Patton Road. One (1) high accident segment is located along KY 100 between KY 1008 and US 31W. The proposed bypass is expected to improve the safety along these routes by reducing the number of vehicles per day in this area.

  State police officers and local officials have indicated that the proposed bypass will improve emergency response times throughout Franklin.

  The trucks and other vehicles using Patton Road as a cut-through are perceived as a threat to pedestrians and animals residing near Patton Place. Safety concerns relating to this road have been raised by officials, the public, and project team members.

VII. RECOMMENDATIONS

This chapter includes conclusions to the Franklin Northwest Bypass Pre-Design Scoping Study and recommendations for future project activities. The following sections discuss the findings of the final project team meeting, project development costs, anticipated design criteria, and special considerations for future project phases and public involvement.

A. Final Project Team Meeting

A final project team meeting was held on June 3, 2003, to identify issues and develop a set of recommendations for the Franklin Northwest Bypass project. Attendees at this meeting included representatives of the Barren River Area Development District, the Kentucky Transportation Cabinet, and Wilbur Smith Associates. The project team extensively reviewed input heard from the public, the results of the travel demand model, the environmental justice report, and input from resource agencies. Minutes from this meeting are included in **Appendix B**.

Key Findings

- Move project to future phases of development as future finances allow.
- Seek funding for completion of future project phases.
- Consider future design corridors within the identified study area.
- Connect the proposed route to existing sections of KY 1008.
- Consider landscaping and buffering options in residential areas.

A consensus was made to extend the Franklin Northwest Bypass study area to the north, without changing the anticipated terminus points at the existing KY 1008 intersections. The project team decided to make this adjustment to the study area to provide options for the bypass corridors to go as far north as possible, minimizing disturbance to residential areas.

One key issue that was discussed was the potential of considering disjunctions (i.e., not tying into the existing KY 1008 intersections). It was noted that common disjunction problems included spacing of intersections, weaving, additional traffic signals and additional conflict points.

Two (2) model runs were coded into the modeling software during the meeting in order to demonstrate the impact of disjunctions. Results indicated that fewer vehicles would use a bypass with disjunctions. As discussed in **Chapter V**, the addition of a northwest bypass with no disjunctions would result in reductions of 15% to 20% in Year 2025 traffic along US 31W and KY 100. In addition, it is estimated that between 10% and 30% fewer vehicles would utilize the northwest bypass as a result of a disjunction either north of the existing US 31W/KY 1008 intersection or west of the existing KY 100/KY 1008 intersection. Disjunction of the bypass route at both ends of the existing KY 1008 is expected to reduce use by 35%.

Based on the model output, usage of the Franklin Northwest Bypass would decrease if disjunctions were included as part of the design of the route. In addition, safety concerns associated with disjunctions support the proposed terminus points at the existing KY 1008 intersections. For these reasons, the disjunction scenarios (Scenarios 3, 4, and 5) are not recommended for future consideration.

After discussion of all the issues identified and input received, a list of final recommendations was developed. These recommendations include:

- The Franklin Northwest Bypass project should be moved forward to future phases of development. The proposed route is expected to reduce traffic along existing routes through Franklin, such as US 31W and KY 100.
- Additional funding will be required for the completion of construction activities for this project.
- Design corridors considered during future phase of this project should fall within the identified study area.
- Connection of the proposed route to the existing sections of KY 1008 is expected to attract the most users of the new route. A disjunction at either end of the proposed bypass would 1) reduce the number of vehicles expected to use the new bypass route and 2) introduce intersection difficulties that would result in potential safety problems such as an increase in the number of crashes.
- Landscaping and buffering options should be considered along the proposed route to reduce impacts to residential areas. The future reality of such options would be contingent upon available funding and maintenance considerations.

In addition to these recommendations that resulted from the project team meeting, the following recommendations have been identified:

- The Franklin Northwest Bypass should minimize environmental impacts in the study area. A number of potential environmental concerns for the project area have been identified through this scoping study and should be considered throughout future phases of this project. Environmental issues that are likely to require consideration include: public and private water sources; potential water quality issues; wetland areas; karst groundwater basins/development; potential endangered, threatened or special concern species; sensitive community resources; potential environmental justice issues related to high percentages of low-income and minority populations; historic structures; cropland and farming operations; and sites monitored by the Environmental Protection Agency (EPA).
- Local officials, interest groups, and the general public should be involved as much as possible throughout any future project phases. Public involvement and coordination is critical for a project such as this, particularly in a strong community such as Franklin. This project has received mixed support, making public involvement and coordination even more important in building community consensus. It is community consensus that greatly assists in getting projects funded. As such, community involvement should be facilitated for on-going participation of the general public throughout all phases of this project.

B. Project Corridor Development Costs

A review of project phases and costs identified for the Franklin Northwest Bypass project in the *Six Year Highway Plan (FY 2003-FY 2008)* was conducted. It was assumed for estimating purposes that the project consists of a two-lane rural roadway, approximately 2.7 miles in length. Cost estimates were calculated using past costs for similar highway projects in the project area and an evaluation of the terrain and other characteristics in the corridor. Cost components for design, right-of-way, utilities and construction were calculated based on these factors.

As shown in the following table, the 2.7-mile corridor is expected to cost approximately $12.1 million. A total of $4.0 million is currently scheduled in the *Six Year Highway Plan*

(FY 2003-FY 2008) for all future phases except construction of this project. Additional funding will be required for the completion of construction activities for this project.

Phase	Current Project Estimate
Design	$400,000
Right-of-Way	$2,600,000
Utility Relocation	$1,000,000
Construction	$8,100,000
Total	$12,100,000

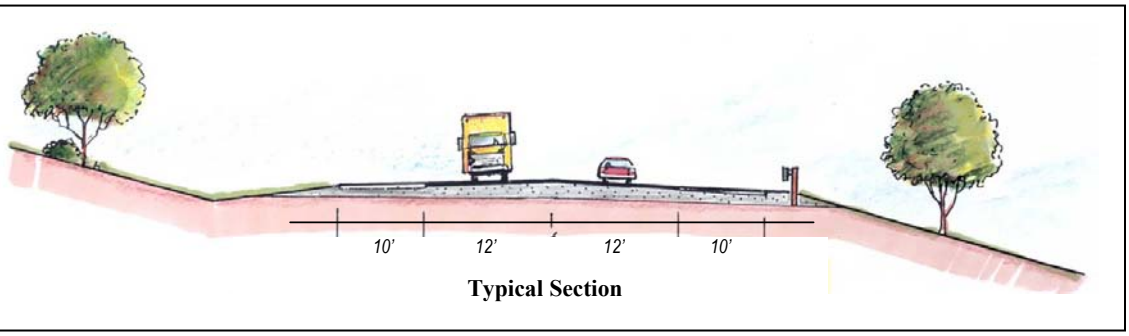
According to the *Six Year Highway Plan (FY 2003-FY 2008)*, the design phase of this project is scheduled to begin in FY 2004, followed by right-of-way acquisition (FY 2006), and utility relocation (FY 2006). It is recommended that the scheduled project phases, with the addition of construction activities, remain as the schedule for the Franklin Northwest Bypass (KY 1008 extension).

C. Geometric Design Criteria

The geometric design criteria recommended for the proposed Franklin Northwest Bypass (KY 1008 extension) should provide consistency with the newest section of the KY 1008 Bypass near US 31W which has two (2) 12-foot travel lanes with 10-foot shoulders. Based on this, the cross section for the proposed route should include:

- Two (2) 12-foot travel lanes;
- 10-foot paved shoulders;
- Partial control of access;
- Intersections at KY 100, KY 73, and US 31W;
- Turn lanes at major intersections; and
- Consideration of bicycle facilities or designation of shoulder area for bicycle travel.

The following illustration represents the typical section recommended for the new bypass section:



Typical Section

D. Special Considerations

Below are some key corridor findings and other special items of interest that should be considered as part of future project development activities.

- Environmental justice issues related to minority and low-income populations should be closely monitored throughout further phases of this project due to higher percentages of these populations within close proximity of the project area compared with the percentages for Simpson County and/or Kentucky.
- Threatened and endangered species should also be carefully monitored. The Gray Mytosis, Kentucky Creekshell, Spotted Darter, and Sedge Wren are known to exist within Simpson County. Given that the environment of the project area is similar to that for the rest of Simpson County, it is possible that these species may occur within the project area.
- Consideration should be given to potential water quality issues related to the Barren River watershed and its tributaries, wetland areas, and karst groundwater basins/development, all within the study corridor;
- The project area is located upon the Formation of the Ste. Genevieve Limestone and St. Louis Limestone. A more detailed study of karst topography within the study area should be considered as the project develops.
- The presence of farms within and near the project area could present issues related to agricultural impacts.
- Upcoming project development activities should consist of environmental base studies and initial design activities for alternative alignments within the vicinity of the recommended corridor area.
- Based upon anticipated cost estimates, the programming of additional funds will be required in order to complete the project development activities.
- Landscaping and buffering would be contingent upon available funding and a maintenance agreement. The agreement would include an assurance of long-term maintenance.
- Consideration should be given to long-term improvements such as completing a full western bypass which would utilize portions of the Franklin Northwest Bypass.

E. Suggested Public Involvement Activities

Public involvement efforts will continue to be important aspects of future project development activities. Based upon comments at the public information meeting and the responses from the public survey, it appears that there is mixed public support for this project. It is important to continue the public involvement effort throughout subsequent phases of this project. Activities that are recommended include:

- Create a Public Involvement Plan to ensure that the public is kept informed of any decisions that are made. Special interest groups could include residents of neighborhoods within the project area.
- Hold public information meetings to provide information to the public as well as seek input from the public regarding further engineering or environmental issues. These meetings should be held at the major milestones of the project.
- Continue coordination efforts with local media regarding project information, public involvement opportunities, and decisions that are made relating to the project.

- As the project continues to develop, the database of contacts developed by the KYTC Division of Planning can be expanded to include other identified stakeholders and interested parties.

IX. ACKNOWLEDGEMENTS AND CONTACTS

A great deal of thanks goes to Jeff Moore, Keirsten Jaggers, Kenneth Cox, Greg Meredith and the remainder of the staff from District 3. Their assistance with setting up the initial team meeting, setting up the public information meetings, and assisting with the Simpson County Travel Demand Model was invaluable.

Thanks also go to John Matheney, Michael Briggs and the Barren River Area Development District for their assistance in setting up meetings with local officials and interest groups. Their work on the environmental justice and community impact issues was also very helpful.

If additional information is needed regarding the KY 1008 Pre-Design Scoping Study or the Franklin Northwest Bypass project, the following individuals may be contacted:

- Annette Coffey, P.E. — Director, Division of Planning
- Daryl Greer, P.E. — Branch Manager, Division of Planning
- Jeff Moore, AICP — Branch Manager, District 3 Planning

The following address and phone numbers can be used to reach these individuals.

Kentucky Transportation Cabinet
Division of Planning
125 Holmes Street
Frankfort, KY 40622
Phone: (502) 564-7183
FAX: (502) 564-2865

Kentucky Transportation Cabinet, District 3
900 Morgantown Road
P.O. Box 599
Bowling Green, KY 42101
Phone: (270) 746-7898
FAX: (270) 746-7643

Additional information for this project can also be found on the Division of Planning's website: http://www.transportation.ky.gov/planning/index2.asp.

APPENDIX A.

PHOTOGRAPHS OF PROJECT AREA

Southwest KY 1008 looking south from KY 100 intersection

Land across from existing intersection of southwest KY 1008 and KY 100

KY 100 west of southwest KY 1008 (looking west)

Intersection of KY 100 and southwest KY 1008 (looking east)

Warehouse facility along KY 100 west of KY 1008

Residential community (Westview Heights Subdivision) on northwest side of town

Potential Historic Site on Robey-Bethel Grove Road

Potential Historic Site on Robey-Bethel Grove Road

Residential development north of Patton Place

US 31W north of northeast KY 1008 (looking north)

Farmland in northwest quadrant of town along Robey-

Northeast KY 1008 east of US 31W (looking east)

APPENDIX B.

MEETING MINUTES

1. December 6, 2002. Project Team Meeting
2. January 9, 2003. Local Officials Meeting
3. January 9, 2003. Stakeholders/Media Meeting
4. January 31, 2003. Property Owners Meeting
5. February 25, 2003 Public Involvement Meeting
6. June 3, 2003 Final Team Meeting

MINUTES

Project Team Meeting
Pre-Design Scoping Study
Simpson County, Item No. 03-106.00
Franklin Northwest Bypass (KY 1008) from KY 100 to US 31W

December 6, 2002
2:00 p.m.
Conference Call

A project team meeting for the KY 1008 Pre-Design Scoping Study in Simpson County (Item No. 03-106) was conducted on Friday, December 6, 2002 via conference call. The purpose of the meeting was to discuss the project history and purpose; scope of work and related activities; and public involvement needs and ideas. Participants at the meeting included representatives from KYTC District 3, KYTC Central Office, and consultant staff from Wilbur Smith Associates (WSA). Individual attendees at the meeting included the following:

Ken Cox	KYTC District 3, Pre-Construction
Keirsten Jaggers	KYTC District 3, Public Affairs
Jeff Moore	KYTC District 3, Planning
Daryl Greer	KYTC Central Office, Planning
Scott Walker	Wilbur Smith Associates
Marc D. Williams	Wilbur Smith Associates
Samantha J. Wright	Wilbur Smith Associates

A summary of the key comments and discussion items for this meeting is provided below in the order of the meeting agenda. A copy of the agenda for the meeting is attached to this document.

1) Introduction and Purpose

Daryl Greer began the meeting by stating that the conference call replaced the meeting that had been planned on December 5, 2002 but was cancelled as a result of unfavorable weather conditions. Daryl announced that the purpose of this project was to study the completion of a segment of KY 1008 around the city of Franklin. He added that some segments of the Franklin Bypass were already in place while other segments were not up to current standards.

The history of this project spans over many years. In the late 1980's, WMB Engineers had the contract to do the original design plans and the final plans were completed in March 1988. However, right-of-way was never purchased as a result of strong public opposition to the project. Despite being pulled from further development, this project has remained a high priority project on the Unscheduled Needs List for Simpson County.

In 1999, the KYTC met with local interests to discuss the project. Included in this group was Mrs. Margaret Patton, a key property owner in the study area near Patton Place (KY 2592). After discussions related to the project, the primary reasons for public

opposition included:

- A project location too close to new subdivisions;
- Potential noise increases from the new highway; and,
- A fear of commercial development.

As a result of the past opposition by the public, it was decided that this Pre-Design Scoping Study would be a clean slate for the Franklin Northwest Bypass. The District 3 staff noted that the city of Franklin is aware of this current project and is willing to start again. It is also believed that Mrs. Patton may be willing to help in the upcoming planning process.

2) Project Goals and Objectives

A packet of existing conditions information had been supplied to District 3 by WSA in anticipation of the conference call. Changes to the project materials recommended during the meeting included:

- The KYTC asked that the 'Begin Project' and 'End Project' labels be removed from the Project Location figure since termini points will not be specified at this point of the study.
- Also, with respect to project area, it was noted that the project location may extend father west along KY 100 than the existing intersection of KY 100 (west) and KY 1008. In fact, it is possible that a new western bypass could be an option for Franklin since existing KY 1008 southwest of Franklin fails to meet desired geometric criteria.
- It was agreed by meeting participants that a 'band' would best represent the project area. The band would stretch along KY 100 (west) from an unidentified county road (Hatter Road) in the west to KY 1008 in the north. In addition, the band would range approximately 1500' on either side of KY 1008 along US 31W north of Franklin. It was also mentioned that all of Patton Place should be included in the band.

WSA stated that an updated project location map would be included in the submittal of minutes for this meeting.

Samantha Wright then discussed the traffic and operational issues in the project area. The meeting discussion included:

- The KYTC indicated that a northwest bypass would likely carry fairly low volumes of traffic if built.
- Marc stated that a traffic model could provide forecast information for both Franklin and Simpson County. Such information could include traffic that may be diverted onto a new route such as the Franklin Northwest Bypass in addition to applications in future land use scenarios.
- The strong downtown presence and related traffic volumes in Franklin were also noted in the discussion. Attempts should be made to ensure that a future bypass would not remove patronage of the downtown stores.
- With respect to growth, there is concern about growth and development along US

31W to the south of Franklin as a result of the new Wal-Mart recently built within the area.

- Also, it was originally believed that growth would occur along KY 100 to the west as the result of a proposed industrial park in the study area. However, this industrial park was built along KY 100, east of I-65, reducing the potential for growth west of Franklin.

Samantha then discussed the crash severity figure with the participants. Items discussed with respect to crash figure included:

- Jeff Moore noted that there may be more accidents occurring at KY 100 (east) at KY 1008 than shown on the map. There is currently an HES project in progress that may eliminate the accident problems at KY 100 (east) at KY 1008.
- In addition, he thought that the accidents occurring at the intersection of KY 100 (west) and KY 1008 may be too high. WSA stated that they would review the accident information.

In a review of the remaining tables in the handout, Samantha discussed the following issues:

- It was noted that the cross-sections of KY 1008 to the north varied greatly from KY 1008 to the south at KY 100.
- The KYTC attendees asked WSA to verify the NHS designation along US 31W.
- Finally, Samantha addressed the environmental justice data for the project area. It was noted that minority populations within Franklin will need to be considered in this project.

The KYTC representatives stated that the public would need to make decisions on the priorities of projects that have been proposed in Franklin and Simpson County. The proposed projects include:

- Construction of a Franklin Northwest Bypass;
- Reconstruction of KY 100 from I-65 eastward to KY 622 (this project would affect the new industrial park and has been given a high priority by the local and regional transportation committees)
- Widening of I-65 to 6 (six) lanes.

It was noted obtaining the support for these projects would be an integral part of the public involvement process for this project.

3) Define Environmental Footprint Area

The environmental footprints were also discussed during the conference call. Items identified for further consideration included:

- The location of an EPA Pollutant Discharge Site North of KY 100 (west) should be verified. WSA stated that they would investigate whether the site existed or was an error in the environmental database.
- A cluster of mobile homes was also noted south of KY 100 and west of KY 1008.

- Finally, it was requested that the date of the aerial coverage be included on the environmental map.

4) Discuss Probable Design Criteria

The participants agreed that if built, the Franklin Northwest Bypass should have design criteria similar to that of the newer KY 1008 near US 31W. Daryl mentioned that he would get microfilm of this new section of KY 1008 for review by WSA. Items related to the probably design criteria included:

- Without detailed analysis, Marc estimated that approximately 5,000-6,000 vehicles per day would utilize the new bypass in the future year. Based on this traffic volume, it was believed that a two-lane cross-section would be adequate for the Franklin Northwest Bypass.
- It was also noted that the new segment should have as limited access as possible.
- With respect to bikeways, pedways, or ITS in the study area, it was mentioned that since this was an urban study, such issues would be considered. However, such facilities may not be necessary since there are not any destinations such as parks or trails in the study area.

5) Discuss Possible Alternatives and Corridors

As discussed earlier in the conference call, defining alternatives is not a project goal at this point in the study process. The goal of this project will be to establish a defined project area in which design efforts can take place.

6) Discuss Agency Coordination Needs

Daryl mentioned that 'normal' agency coordination efforts will be implemented for this project. Specifically, two groups that will be targeted for participation will include the Simpson County Planning and Zoning office and the Patton Road Neighborhood Association.

7) Discuss Public Involvement Needs

Keirsten Jaggers stated that January 9th and 10th would be potential dates for meetings with local officials, stakeholders, and the media. WSA agreed that they would be available at that time for the meetings.

The KYTC noted that this project would be the first time that Simpson County will be introduced to the 'new' planning process. One of the primary objectives of this study will be to determine the public's interest in the Northwest Franklin Bypass project. In order to accomplish this, the KYTC thought that normal public involvement techniques would be appropriate for this project. This would include either an evening meeting (4:00 p.m. – 7:00 p.m.) or an all-day open house. After some discussion, it was decided that the end of February would be ideal for a public involvement meeting. This would allow the resource agencies to prepare their information in an adequate amount of time.

8) Discuss Documentation/Reports

With respect to the project brochure provided by WSA, there were several comments that were intended to make the brochure easier to read from the public perspective:

- The KYTC requested that title of 'Pre-Design Scoping Study' could simply be written as 'Planning Study'.
- Jeff asked if WSA could add a paragraph on the front that defined the purpose of a planning study and the steps associated with completing it.
- It was requested that the 'Next Steps' discussion be moved to the first page.
- Drakes Creek and the railroad should be added to the brochure map to familiarize viewers of nearby surroundings.
- It was noted that 'US 31' should be changed to 'US 31W'.
- Finally, it was asked if the wording in the brochure be simplified for understanding at a lower reading level.

9) Field Review of Project Area (as needed)

Since the meeting was held by conference call, a field review of the project area was not conducted. However, it was noted that members of the KYTC had visited the project area earlier in the day. In addition, it was noted that Scott Walker of WSA had visited the project area a few weeks prior. It was also mentioned that other members of WSA will visit the project area in the near future.

With no further comments, the conference call was completed at approximately 3:45 p.m.

AGENDA
Planning Study--Initial Meeting
Simpson County, Item No. 3-106.00
9:00 a.m. CST, December 5, 2002
District 3 Construction Conference Room

1) Introduction and Purpose

2) Project Goals and Objectives
   a) Identify general project area
   b) Discuss available data and reports
   c) Discuss problems with existing roadway or network
   d) Discuss benefits of proposed project
   e) Identify additional information needed to document problems
      i) Traffic data
      ii) Accident data
      iii) Existing roadway geometry
      iv) Other
   f) Identify logical termini
   g) Develop project goals and objectives

3) Define Environmental Footprint Area

4) Discuss Probable Design Criteria
   a) Functional class
   b) ADT/DHV
   c) Design speed
   d) Typical section
   e) Other criteria (i.e., bikeways, pedways)

5) Discuss Possible Alternatives and Corridors

6) Discuss Agency Coordination Needs
   a) General agency coordination
   b) Other local or interested agencies or groups

7) Discuss Public Involvement Needs
   a) Discuss meetings with local officials and stakeholders
   b) Discuss need for and number of public information meetings
   c) Discuss information to provide at meetings
   d) Discuss meeting logistics (location, date, time, coordination)
   e) Discuss media involvement

8) Discuss Documentation/Reports
   a) Previously developed information
   b) Information to include in report
   c) Level of detail in corridor/alternate development
   d) Other

9) Field Review of Project Area (as needed)

MINUTES

Local Officials Meeting
Pre-Design Scoping Study
Simpson County, Item No. 03-106.00
Franklin Northwest Bypass (KY 1008) from KY 100 to US 31W

January 9, 2003
10:00 a.m. (Central Time)
Blewitt/Bradley Building

A local officials meeting for the KY 1008 Pre-Design Scoping Study in Simpson County (Item No. 03-106) was conducted on Thursday, January 9, 2003 at the Blewitt/Bradley Building in downtown Franklin, Kentucky. The purpose of the meeting was to introduce local officials to the planning study of the Franklin Northwest Bypass. Participants at the meeting included representatives from Simpson County, Barren River Area Development District (BRADD), Kentucky Transportation Cabinet (KYTC) District 3, and consultant staff from Wilbur Smith Associates (WSA). Individual attendees at the meeting included the following:

Jim Henderson	Judge/Executive, Simpson County
Michael Briggs	BRADD
John B. Matheny	BRADD
Keirsten Jaggers	KYTC District 3, Public Affairs
Greg Meredith	KYTC District 3, Construction
Jeff Moore	KYTC District 3, Planning
Scott Walker	Wilbur Smith Associates
Samantha J. Wright	Wilbur Smith Associates

Handouts for the meeting included a project brochure, project location map, environmental maps (USGS Topologic and Digital Orthophotograph), and traffic/level of service maps (Year 2002 and Year 2025). Exhibit boards were also used for discussion purposes, including environmental maps (USGS Topologic and Digital Orthophotograph), traffic and level of service maps (Year 2002 and Year 2025), and a crash severity map. A summary of the key comments and discussion items for this meeting is provided below.

1) Introduction and Purpose

Jeff Moore began the meeting with a quick introduction of the project. Keeping the public informed throughout the course of this project will be a key component of this study. Keirsten Jaggers noted that handouts provided at the meeting would be sent to those individuals who were invited to the meeting but were unable to attend.

The new planning process was briefly described since the process had not been introduced to Simpson

County. As part of this new planning process, this study would be a 'clean slate' to the Franklin Northwest Bypass project. The project will include a no-build alternative in addition to potential routes throughout the shaded project area shown on the project location map.

Political and public input were noted as important influences to this project. It was also noted that there may be mixed opinions of developing land if the bypass were built. For example, landowners that may be directly impacted by the new route may be interested in developing the land. On the other hand, other residents will oppose the commercialization of the land.

Jeff noted that the timetable for obtaining final recommendations on the planning portion of the project would be around July 31, 2003. Beyond that, funding for the design phase is scheduled for fiscal year (FY) 2004. Funding for Right-of-way and utility relocations is scheduled for FY 2006. Currently, there are no construction funds scheduled for this project.

2) Existing Conditions

Samantha Wright began a review of existing conditions in the study area by discussing the environmental issues in the project area based upon data collected from state and federal databases. She noted that the data would later be field-verified for accuracy. Other issues noted during the meeting include:

- A cemetery in the project area not shown on the project boards was noted;
- Two locations designated as historic structures should be further analyzed;
- Since the storm water from the western half of the city of Franklin drains into this area, water flow in the streams in the project area can be tremendous in heavy rainfalls;
- Flood plains were requested for the environmental map;
- Low elevations in areas near Patton Place were noted as having standing water;
- Sewer lines should be shown on the map; and,
- Cave systems are known to exist in the study area.

Samantha then described traffic conditions in the project area. Discussions included:

- The highest traffic volumes currently occur along US 31W near downtown Franklin in which 25,000 vehicles per day were noted, a high volume for a two-lane road;
- Historical traffic counts indicate that traffic has greatly increased over the past few years;
- Much of the traffic along US 31W in town is local traffic;

- Future traffic volumes along US 31W may reach 40,000 vehicles per day based on historic traffic trends; and,
- The addition of a northwest bypass may reduce some of the traffic congestion.
- The latest Census Data indicates that the highest growth is occurring in the northern part of Simpson County.

Samantha then discussed crashes in the study area. High crash segments were noted along US 31W and KY 100 in Franklin. Attendees indicated that many of these crashes were minor as a result of the slow speeds along US 31W.

Jeff then described the 3 types of typical sections along the existing KY 1008. It was recommended that a new route, if built, should have controlled access. As a result of the few number of property owners in the project area, access limitation shouldn't be a problem for this project. It was mentioned that typical access spacing for limited access facilities in rural areas is 1200'.

3) Other Comments

Other comments made by attendees during the meeting include:

- More local traffic would use a northwest bypass if the road were built without obstructions;
- The potential re-alignment of existing KY 1008 near US 31W was discussed; however, due to the sinkholes to the north, such a reconstruction would be difficult;
- A meeting between project team members and the landowners that may be affected by the project, such as Myrl Mortenson and Jeff Perkins, was recommended in order to determine their opinions on the project before a public meeting;
- Noise issues resulting from a new route are not anticipated with this project; however, residents may not want to see the new road from their dwellings. To improve the visual appearance, landscaping and buffering could be included as part of this project;
- Citizens south of Patton Place (KY 2592) were noted as potential allies of this project. These citizens often complain of high speeds and high traffic volumes along Patton Place as a result of many drivers using it as a cut-through. It was also noted that the traffic volumes would increase as a result of new houses currently under construction;
- Emergency services and the school board would benefit from the new bypass segment;
- The Franklin Northwest Bypass project has been mentioned as a high priority, even in non-transportation meetings;

With no further comments, the meeting was adjourned at approximately 11:30 a.m.

MINUTES

Stakeholders/Media Meeting
Pre-Design Scoping Study
Simpson County, Item No. 03-106.00
Franklin Northwest Bypass (KY 1008) from KY 100 to US 31W

January 9, 2003
1:00 p.m. (Central Time)
Blewitt/Bradley Building

A stakeholders meeting for the KY 1008 Pre-Design Scoping Study in Simpson County (Item No. 03-106) was conducted on Thursday, January 9, 2003 at the Blewitt/Bradley Building in downtown Franklin, Kentucky. The local media was also invited to the meeting. The purpose of the meeting was to introduce the attendees to the planning study of the Franklin Northwest Bypass. Participants at the meeting included local officials, community leaders, other stakeholders, Barren River Area Development District (BRADD), Kentucky Transportation Cabinet (KYTC) District 3, and consultant staff from Wilbur Smith Associates (WSA). Individual attendees at the meeting included the following:

Jim Brown	Mayor – City of Franklin
Scott Crabtree	City Attorney – City of Franklin
Tom Gordon	City Manager – City of Franklin
Henry D. Stone	City Commissioner – City of Franklin
Bill Austin	City Commissioner – City of Franklin
Jim Henderson	Judge/Executive, Simpson County
Kelly Banton	Magistrate
Charles McCutchen	Magistrate
Larry Randolph	Magistrate
John Arney	Franklin/Simpson Chamber of Commerce - President
Karen Eaton	Franklin/Simpson Chamber of Commerce
Jamie Powell	City of Franklin Police Department – Chief
Gene Starks	Sheriff, Simpson County
James Lee	Planning and Zoning
Wanda J. Banett	EMS Manager
Sam Starks	Simpson County Schools Transportation
James Huff	Solid Waste Co.
Lisa Deavers	Franklin-Simpson Parks and Recreation
Alison Cummings	Deputy PVA
Pam Womack	PVA
Robyn Minor	Bowling Green Daily News
Shelley Jent	WFKN - Radio
Charlie Hill	Agri Realty
Roy Reasonover	Franklin Express
Carl Goolsby	Flying J
Margaret Peart-Patton	Owner of Peart Farm

Jim Clark	Citizen
Michael Briggs	BRADD
John B. Matheny	BRADD
Keirsten Jaggers	KYTC District 3, Public Affairs
Greg Meredith	KYTC District 3, Construction
Jeff Moore	KYTC District 3, Planning
Scott Walker	Wilbur Smith Associates
Samantha J. Wright	Wilbur Smith Associates

Handouts for the meeting included a project brochure and project location map. Exhibit boards were also used for discussion purposes, including environmental maps (USGS Topologic and Digital Orthophotograph), traffic and level of service maps (Year 2002 and Year 2025), and a crash severity map. A summary of the key comments and discussion items for this meeting is provided below.

1) Introduction and Purpose

Jeff Moore began the meeting by introducing the KYTC and consultant staff to the attendees of the meeting. He then introduced the current project as a planning study intended to analyze the completion of the KY 1008 circle around Franklin. This project would use the planning process that has already been used for other projects in KYTC District 3. Jeff also gave a brief review of the project history and noted that the route may have been completed if a planning study had been performed in the late 1980's. He mentioned that the current planning study would be completed by the end of July with recommendations included in the final report. As part of the planning process, Jeff noted that conversation was the key to as successful project and encouraged political, technical, and public input throughout the project.

2) Existing Conditions

Samantha Wright began the review of existing conditions by introducing the project brochure and project location map to the attendees. She then continued by discussing the environmental issues displayed on the project boards. She noted that the data would later be field-verified for accuracy. The traffic and crash boards were also discussed, including:

- The highest traffic volumes currently occur along US 31W near downtown Franklin in which 25,000 vehicles per day were noted, a high volume for a two-lane road;
- Future traffic volumes along US 31W may reach 40,000 vehicles per day based on historic traffic trends; and,
- High crash segments were noted along US 31W and KY 100 in Franklin.

3) Other Comments

Following the review of the project boards, Jeff mentioned that a public meeting would be held sometime at the end of February or the beginning of March. Details of the public meeting can be found later in these minutes.

The meeting then transitioned into an open discussion among those in attendance. It was noted by one attendee that he felt that the new route might alleviate truck traffic through downtown Franklin.

Ms. Patton, a key landowner in the project area, attended the meeting. She displayed a set of design plans that she obtained in the late 1980's. She stated that her main concern with the project is that the bypass may split her farm if the road was pushed further north than the tree-line at the southern portion of her property. She wants to keep the integrity of Patton farm. Ms. Patton also stated that she agreed with the need for the new route.

As mentioned, the old design plans were present at the meeting. Judge Henderson, Ms. Patton, and others briefly discussed them. When an attendee asked about using the existing plans, Jeff mentioned that the old plans could no longer be used because standards have changed since the plans were designed fifteen years ago. While the plans could be used to obtain helpful information, the new study would eliminate any previous efforts.

It was also noted that large trees would provide a natural buffer and since the road would be down a slight hill, noise might be reduced;

Other comments included:

- The corridor could help create an area available for commercial use, though it should be buffered;
- With respect to access control along the proposed route, it was noted that the new section of KY 1008 would be similar to that of US 68 which has 1200-foot spacing between access points in addition to fencing. Access control would be coordinated with the Franklin-Simpson Planning and Zoning;
- It is anticipated that a large number of trucks might travel through Franklin as a result of US Tobacco expanding. This would impact KY 100 as the trucks travel from the west in Hopkinsville. Many of these trucks might use a new Franklin Northwest Bypass to bypass Franklin;
- Since it was noted that the planning process would not involve drawing alignments on a map, a question was asked about the options that were available for this project. The reply was that there were many options, including deciding to build or not to build the new route;
- Jeff mentioned that a traffic model for the entire city and county would be developed that would coincide with the Franklin Northwest Bypass project;

- Patton Place (KY 2592) was mentioned as a cut-through for many vehicles as a result of no other path in that part of Franklin;
- With respect to buffering, Samantha briefly discussed a project in Woodford County that WSA had worked on that involved buffering and landscaping;
- It was noted that as part of the planning study, the landowners who may be impacted by the new route would be included in the study. The comfort zone of these citizens would be explored to determine what would be acceptable to them;
- One individual noted that adding the final piece of the bypass would make sense from a connectivity standpoint. This connection could alleviate the current confusion among truck drivers who get lost in the area in search of a north to west connection ;
- When asked about curb and gutter along the new road, it was mentioned that this probably wouldn't occur since it would be a rural segment;
- With respect to wetlands in the northern portion of the study area, it was noted that potential impacts to these areas would be investigated further during the design phase;

The final topic of conversation involved the discussion of the public meeting for this study. When asked about future meetings, the attendees noted that Monday and Wednesday were days that would not be convenient as a result of local government meetings. Next, effective methods of involving the public were discussed. Hangers on doors of homes in the project area, newspaper, and radio announcements were mentioned. Also, an attendee mentioned that local meetings were aired continuously on local television.

With no further comments, the meeting was adjourned at approximately 2:30 p.m.

MINUTES

Property Owners Meeting
Pre-Design Scoping Study
Simpson County, Item No. 03-106.00
Franklin Northwest Bypass (KY 1008) from KY 100 to US 31W

January 31, 2003
10:00 a.m. (Central Time)
Franklin Chamber of Commerce

A meeting with three project area property owners was conducted on Friday, January 31, 2003 at the Chamber of Commerce in downtown Franklin, Kentucky. The purpose of the meeting was to discuss the potential Franklin Northwest Bypass with local property owners on the northern end of the study area. Participants at the meeting included representatives from Simpson County, Barren River Area Development District (BRADD), Kentucky Transportation Cabinet (KYTC) District 3, and consultant staff from Wilbur Smith Associates (WSA). Individual attendees at the meeting included the following:

Tim Crocker	Attorney for Mr. Mortensen
Myrl Mortensen	Resident of Widener Circle
Pat Patton	Owner of property along Patton Place
Jeff Perkins	Resident of Wilson Way
Greg Meredith	KYTC District 3, Chief District Engineer (CDE)
Keirsten Jaggers	KYTC District 3, Public Affairs
Jeff Moore	KYTC District 3, Planning
Carolyn Utley	KYTC District 3, Secretary to CDE
Samantha J. Wright	Wilbur Smith Associates

Handouts for the meeting included a project brochure, project location map, environmental maps (USGS Topologic and Digital Orthophotograph), and traffic/level of service maps (Year 2002 and Year 2025).

Jeff Moore began the meeting with introductions and an overview of the potential project. The new planning process was briefly described since the process had not been introduced to Simpson County. He discussed the history of the northwest bypass in Franklin and the fresh direction of the current pre-design scoping study. The project will include a no-build alternative in addition to potential routes throughout the shaded project area shown on the project location map.

Political and public input were noted as important influences to this project. The concerns of local landowners will be taken into consideration as the current study moves forward. Jeff noted that the timetable for obtaining final recommendations on the planning portion of the project would be around the end of July, 2003.

If it is determined that the Franklin Northwest Bypass project should move forward, funding for the design phase is scheduled for fiscal year (FY) 2004. Funding for Right-

of-way and utility relocations is scheduled for FY 2006. Currently, there are no construction funds scheduled for this project.

A summary of the key comments and discussion items for this meeting is provided below.

- One property owner suggested that a minimal amount of traffic would use a northwest bypass corridor. The project team indicated that traffic modeling efforts as part of this project would help to estimate the number of people who would use such a route.
- The property owners suggested improvements along other routes in the area, rather than a new northwest bypass corridor. These included widening of the existing US 31W corridor and widening of Patton Road (KY 2592). The project team indicated that other stakeholders in the project area have voiced concerns about existing cut-through traffic on Patton Road (KY 2592). Improvements along the existing US 31W may impact adjacent land uses and could bottleneck at the town square where the widening potential is minimal.
- Another option suggested by the property owners would be to move the section of KY 1008 on the east side of US 31W. If this section were moved north, the extension of the route toward the west would be located farther from homes and residential areas. The project team indicated that there are a number of sinkholes in this area that the existing KY 1008 section spans. The railroad bridge along KY 1008 has also just been reconstructed. Both of these factors create a narrow opportunity for shifting the alignment of KY 1008 on the east side of US 31W.
- The property owners indicated that there is a large cavern running under Mr. Mortensen's property. The entrance to the cave is on Gene Gentry's property along Patton Place.
- Concerns voiced by the property owners include depreciation of property values, noise, visual impacts and danger to children due to cut-through traffic in surrounding neighborhoods. The project team indicated that a northwest bypass route would likely intersect with major routes and not with subdivision roads.
- The property owners indicated that a visual buffer would not be adequate if a new northwest bypass were located within the gray-shaded area on the project location map. The tree line along the southern edge of Mrs. Patton's property would not be an adequate buffer. The project team discussed various ways to buffer a highway project, including plantings and earth berms. One property owner expressed skepticism that the KYTC would pay for such amenities.
- Previous meetings related to this project led the property owners to believe that any new bypass route would be located much farther to the north, near Franklin Express. Jeff Moore read from the minutes of the last project meeting in 1999, indicating that a new plan would need to be developed with input from the community about their issues and concerns with the project, but that no definite direction was decided upon at the 1999 meeting. It was also stated by Moore and Nancy Stone, Director for the Chamber at that time, that if the community chose not to pursue the second attempt for the development of this project, it would be extremely difficult to bring it back a

third time for consideration by the KYTC.

- One property owner suggested that commercial development along a potential bypass corridor could be limited by planning and zoning. The project team indicated that this would have to be a local decision, but the planning study could recommend that local officials consider this. The project team also commented that limiting the access along this corridor would be considered in the development of this project.
- One property owner views this project as a want, not a need for the community. The project team indicated that project needs are generally defined as a balance of community input and technical analysis. Samantha Wright offered an example of a technical issue that could establish need for the project. Existing sections of KY 100 and US 31W are classified as high accident locations, indicating potential safety risks.
- One property owner indicated that Franklin needs more executives in the community and high-end homes to accommodate them. This property owner feels that the subdivisions on the northern end of the project area offer upward mobility for people moving out of starter homes. The proposed project would prevent people from wanting to move into this neighborhood, and could possibly be detrimental to economic vitality of the entire community.
- The potential US Tobacco expansion may increase the number of trucks traveling from KY 100 to US 31W. The property owners indicated that the existing truck routing around Franklin works as it is and does not need to be changed.
- In discussions with other members of the community, the property owners stated that they have not talked with anyone locally who is in support of the potential northwest bypass project. The project team indicated that some of the attendees at the recent stakeholders meeting voiced support for the project.

In summary, the preferences expressed by the property owners included the following:

- The money for this project should go toward the improvement of US 31W through town rather than the construction of the northwest bypass.
- If the bypass is absolutely necessary, it should be located as far to the north as possible.
- The property owners would like to continue to have input if this project moves into future phases.

With no further comments, the meeting was adjourned at approximately 11:45 a.m.

PUBLIC INVOLVEMENT MEETING

Pre-Design Scoping Study, KY 1008
Item No. 3-106.00
Goodnight Memorial Library
Franklin, Kentucky
4:00 p.m. to 7:00 p.m. (CST), February 25, 2003

A public involvement open house was held on Tuesday, February 25 from 4:00 p.m. to 7:00 p.m. at the Goodnight Memorial Library in Franklin, Kentucky. The following KYTC District 3, KYTC Central Office, Area Development District, and consultant staff were in attendance:

John B. Matheney	Barren River Area Development District (BRADD)
Daryl J. Greer	KYTC Central Office, Division of Planning
Keirsten Jaggers	KYTC District 3, Public Affairs
Greg Meredith	KYTC District 3, Chief District Engineer
Jeff Moore	KYTC District 3, Planning
Carolyn Utley	KYTC District 3, Secretary to CDE
Amanda D. Ratliff	Wilbur Smith Associates
Scott Walker	Wilbur Smith Associates
Samantha J. Wright	Wilbur Smith Associates

The public involvement open house was organized as a walk-through tour of project information. The room was set up with an arrangement of project exhibits, with public opinion boards and refreshments at the end of the tour. As attendees entered the room, they were led through the following steps:

- Sign-in: Attendees were greeted at the door and asked to sign the attendance list. Kentucky maps and KYTC information pamphlets were available for interested parties. Attendees were also given a handout packet at this station which included the following items:
  - Project Brochure Identifying the Study Purpose, Issues and Project Goals
  - Project Location Map
  - Public Comment Survey

    Attendees were asked to complete the survey prior to leaving the meeting, or return it to the KYTC at a later date in the postage-paid envelope provided.
  - Post-it Note Exercise

This exercise consisted of two questions, with three post-it notes included for answers to each question. The first question was "What are the traffic issues within the study area?" The second question was "What transportation improvements could address these issues and concerns?"

- Exhibit Boards: This section of the room was set up with a semi-circular arrangement of project exhibits. KYTC and consultant staff were available to explain project exhibits and answer questions related to the proposed improvements. The exhibit boards included the following titles:
  - What Is The Project Study Area? This exhibit showed a shaded band to approximate the project study area.
  - What Roads Do You Use The Most? Meeting attendees were asked to indicate usage of state and county roadways to help in the traffic modeling process.
  - How Many Cars Are Out There Today? This exhibit showed Year 2002 traffic volumes and levels of service.
  - How Many Cars Are Expected In The Future? Estimated Year 2025 traffic volumes and levels of service were displayed on this map.
  - Where Do People Work In Franklin? Preliminary traffic model information relating to employment centers was shown for public comment and/or correction.
  - Where Do People Work In Simpson? Similar to the Franklin employment map, this exhibit showed employment densities for Simpson County.
  - Where Are The Most Crashes Occurring? This exhibit showed four years of traffic crash data for Franklin, including high accident spots and segments of roadway.
  - What Are The Environmental Issues? Preliminary environmental issues were shown overlayed on an aerial photograph in this exhibit.
  - What Are The Environmental Issues? The same environmental information was shown on this map, but was overlayed on a topographic map.
  - MINUTES – Stakeholders/Media Meeting. A meeting summary from the stakeholders/media meeting held on January 9, 2003 was provided for review by the public.
  - MINUTES – Property Owners Meeting. Discussions on January 31, 2003 with three of the major property owners on the northern end of the corridor were also summarized on this exhibit.
  - What Should The KY 1008 Bypass Look Like? This exhibit provided explanations and samples of landscaping and buffering techniques for similar highway projects.

- Public Opinion Boards: At the end of the tour, attendees were asked to complete the post-it note exercise and place their responses on the public opinion boards posted on the wall. Tables, chairs, refreshments, and kids' activities were provided so that attendees could comfortably complete the post-it notes and public comment survey provided in the handout packet.

A total of 81 persons registered their attendance at the 3-hour public session (this number does not include the above 9 staff members). A few people completed the public comment survey at the meeting, some made oral comments to staff members who then recorded these comments on flip charts, and more recorded answers to the post-it note exercise on the public opinion boards.

Public comments recorded on the flip charts during the meeting included the following:

- A bypass would remove traffic from Patton Road.
- Subdivisions and residences to the north and west should be avoided.
- A bypass would take traffic off of US 31W north of town.
- Downtown businesses will continue to bring traffic downtown. A bypass will not help to remove traffic from the downtown area.
- The eastern side of the KY 1008 bypass does not work; therefore, a new bypass section will probably not work either.
- Trucks coming from Russellville often miss the turn onto KY 1008 on the west side of town and then back up.
- A bypass should be located further to the north on US 31W, closer to the industrial area.
- There are water and drainage problems north of KY 2592 (Patton Rd.) A new road could worsen problem or potentially make it better, depending on the design.
- There is also a drainage problem on KY 100 near Allen Road.

The actual responses from the post-it note exercise are listed below and summarized by category of response:

- Noise, Landscaping, and Buffering
  - Need landscaping or other sound barriers if road is close to subdivisions.
  - Add landscape buffer south of loop, north of Patton Rd. Provide noise buffer.
  - Noise
  - I would hope this road would not be built – but if it happens there surely better be buffering and landscaping as I will propose be right next to the road on my property.
  - I live in the area and am concerned about how close the road would be located to the subdivision. Also the noise levels from the traffic. Would there be a buffer wall between residential area and the highway?
  - Have you considered noise control?

- Landscaped walls can stop or reduce noise of traffic. If I had a house there I believe it can be built for their noise level to be not so bad. The rest of us need the connection of this road.
- Landscaping and Buffering must be done.

- Move Proposed Bypass
  - The proposed by-pass is too close to town. Ten years from now half of 1008 will be in town and will cause traffic problems. It needs to be moved further out.
  - I think the bypass should be moved away from residential areas and family farms. It should be moved further north.
  - Move the bypass further north away from the family farm and residential areas.
  - The current 1008 is in residential areas in the park area. 1008 needs to be moved further north and run from Wilkey Industrial Park to I-65 Exit #6. It needs to be a true 4-lane by-pass.
  - I believe a bypass should be further out for now and the future. The proposed needs to be moved out - this would eliminate congestion and also provide a better road.
  - Existing 1008 in places needs improvements - Robey St. and Blue Grass Road around the Hunt Ford area* - also it goes thru congested areas - so moving the bypass further out would help this (*Very congested).
  - -$450,000+ homes in Lockewood Subdivision - Please No truck traffic in our subdivision - move it north 1 mile to industrial park -Wildlife in fence line and farm land adjacent to Lockewood Subdivision. Please do not destroy natural habitat. This is the reason our area is so beautiful. -Move trucks north on 31W - Noise would ruin tranquility of Lockewood Subdivision
  - We don't oppose the bypass - we oppose its location - move it north to Industrial Park - Trucks are welcome there -Save the fenceline. It serves as a noise barrier to traffic - current and projected traffic
  -

- Congestion and Speed
  - West by-pass would be a great improvement for traffic flow. We need it today!!
  - Traffic Count on 100 West is too low to justify a bypass.
  - From your traffic projections, use in the future is estimated at 4700 cars a day. That does not really make sense to spend this amount of money on this project. The money should be spent on the I-65 interchanges and 31-W south.

- The traffic flow on 100 west does not justify the proposed section of 1008 (even with the 2025 projections).
- Traffic in downtown Franklin is going to downtown – the major issue is picking up kids at schools or churches, all located Downtown. They won't go around.
- Traffic counts do not support the completion of the west side.
- Traffic on 31W has not been lessened by the current 1008. This road is not even proposed to go by any major areas of town that will relieve any more traffic. Widening of 31W would be a more beneficial solution to be considering. Take the money set aside for this project and invest it in the school system where it's really needed.
- Need bypass for WNW traffic.
- The amount of traffic and the speed traveled by cars and trucks on Patton Rd.
- Need to better enforce speed limits on Patton Rd.
- The difficulty of getting to 100W from N Simpson without traveling through residential and school area. 1008 extension would reduce traffic in Harristown.
- Without this added bypass, traffic routes through other residential areas and by Lincoln Elementary school.
- Easier access to north & west sections of town.
- Ease congestion on 31W.
- It would take a lot of thru traffic out of the city.

- Truck Traffic
  - Completion of 1008 would help large trucks from using Blackjack Rd, Patton Rd., downtown area. It is a safety hazard because these drivers expect 1008 to keep going, these roads are used for turn arounds.
  - Patton has traffic that is not related to people living in the area. Trucks use this residential road as a cut through and cause congestion along with fast speeds. Parents have concerns about their children being around the road.
  - Help keep trucks out of town. Help all farmers in West Simpson and Logan County with better access to KY Stone.
  - Large truck cut through traffic on Patton Road.
  - Patton Rd. - Too much traffic, Big trucks, Farm Machinery, 18 wheelers.
  - Tractor Trailer traffic through town.
- Widening
  - Just widen 31-W from Franklin to Bowling Green.
  - I have always been told that the bypass was to help emergency vehicles but every time they travel straight through town 31W. I think money should be spent on widening 31W.

- No need for a bypass
  - Don't need the bypass. It takes up so much good land. Can improve what roads we have.
  - A bypass is not needed in the present location.
  - We don't need the by-pass, improve what we have.
  - I'm opposed to this road being done.
  - Franklin is a beautiful town – Why build a bypass around it and create a ghost town?
- Flooding Concerns
  - The field west of Bloomfield Drive floods often in heavy rain. The road could cause flooding of the subdivision if water is dammed in.
  - If this road is build between Patton Rd. and Joe Farmer Rd., the water will flood my home, the noise level will be bad at my house. I live in a low area on the Joe Farmer Place.

- Other Comments/Concerns
  - To extend the existing 1008 would seem most logical – Try to avoid developed area in northern most area west of 31-W North.
  - No offsets. We do not need extra interchanges.
  - Loop north of Patton SID, tie into KY 100.
  - Improve the existing 1008 to make it a real bypass or start a new section west to 100 near Wilkey North Industrial Park.
  - Remove stop signs on College Street and 1008 so thru trucks won't have to try to stop on ice, oil, snow, etc.
  - Very expensive project for a road that will not be used often.
  - Will there be any remediation of the very unfortunate location of the Western terminus of the NE section of HWY 1008??
  - I totally support the proposed bypass extension.
  - Will the new section of 1008 be constructed to accommodate the F-S P + Z Comprehensive Plan?
  - Decreased Property Value.
  - How many tourists will use the new road? Will it affect the merchants in the downtown area?
  - If the road is being considered for emergency personnel, the existing bypass is not being used for this purpose, so why would an extension to the bypass?
  - Complete Hwy. 1008 ASAP.

- Complete Hwy. 1008 ASAP.
- Complete Hwy. 1008 ASAP.
- This proposed NW bypass of Franklin would greatly facilitate N to W, or vice versa, traffic. There is no need to tie into 1008 at either end since the primary user will be N to W, or W to N traffic. Also by keeping it in the lanes I described it would interfere with existing residential areas.

Public comment surveys were distributed at the meeting to gather input on a variety of issues regarding the project. Sixty-three surveys were received by the KYTC at the meeting or by mail. These comments and identified issues will be included in the final report.

The meeting closed at 7:00 p.m.

MINUTES

Final Team Meeting
Pre-Design Scoping Study
Simpson County, Item No. 03-106.00
Franklin Northwest Bypass (KY 1008) from KY 100 to US 31W

June 3, 2003
9:30 a.m. (Central Time)
KYTC District 3 Main Conference Room

A meeting for the KY 1008 Pre-Design Scoping Study in Simpson County (Item No. 03-106) was conducted on Tuesday, June 3, 2003 in the main conference room of the Kentucky Transportation Cabinet (KYTC) District 3 in Bowling Green, Kentucky. The purpose of the meeting was to discuss results from public involvement activities, the Simpson County Traffic Model, the environmental justice report, and resource agencies in order develop recommendations for the Franklin Northwest Bypass. Participants at the meeting included representatives from Barren River Area Development District (BRADD), Kentucky Transportation Cabinet (KYTC) District 3, and consultant staff from Wilbur Smith Associates (WSA). Individual attendees at the meeting included the following:

Michael Briggs	BRADD
John B. Matheny	BRADD
Keirsten Jaggers	KYTC District 3, Public Affairs
Greg Meredith	KYTC District 3, Chief District Engineer
Jeff Moore	KYTC District 3, Planning
Renee Slaughter	KYTC District 3, Environmental
Kenneth W. Cox	KYTC District 3, Construction
Lancie Meredith	KYTC District 3, Traffic
Scott Walker	Wilbur Smith Associates
Samantha J. Wright	Wilbur Smith Associates

Handouts for the meeting included an agenda, public meeting public survey response summary, minutes from the public involvement meeting, public meeting post-it note exercise and flip chart comments, Simpson County traffic model statistics, maps representing base year traffic volumes (Year 2002) and traffic model forecasts with a completed northwest bypass (Year 2025), a select link analysis from the traffic model, and two figures from the BRADD Environmental Justice Report. Exhibit boards were also used for discussion purposes, including a project location map, environmental maps (USGS Topologic and Digital Orthophotograph), traffic model maps (Year 2025) with and without the proposed bypass, and a crash severity map. A summary of the key comments and discussion items for this meeting is provided below.

1) Introduction and Purpose

Jeff Moore began the meeting with a brief review of the project to date. It was explained that the majority of components needed to make recommendations on the project were

available and had been reviewed except for the results provided by the Simpson County Travel Demand Model.

2) Public Meeting Results

Samantha Wright began a review of results from the public meeting. It was noted that the public meeting surveys were included in the public meeting notebooks that had been submitted to the KYTC. Key points in this discussion included:

- A majority of 63% of the respondents felt the bypass would be beneficial to the city of Franklin;
- Approximately 51% thought that a new route should intersect with the existing KY 1008 along KY 100 to the west of Franklin;
- Approximately 51% thought that a new route should intersect US 31W north of the existing KY 1008 intersection north of Franklin;
- Nearly 50% of the respondents indicated they would use the new route at least once per week;
- Improved travel time, improved access for emergency vehicles, and the reduction of truck traffic in Franklin were perceived as the greatest potential benefits of a northwest bypass; and
- When asked about the human and natural environment, 70% of the respondents indicated that impacts to personal properties and homes should be considered.

Samantha then discussed comments made at the public meeting conducted on February 25, 2003. Key points mentioned by the public that were recorded on flip charts at the meeting included:

- Conflicting thoughts on whether the bypass would remove traffic in Franklin;
- Subdivisions should be avoided; and
- Drainage issues exist within the study area.

A review of the post-it note exercise was also discussed. Key comments included:

- Landscaping and buffering should be considered if the route is built;
- The proposed route should be moved further from Franklin;
- Existing KY 1008 needs improvements;
- The traffic volumes on the new route are too low to justify its construction;
- Patton Road (KY 2592) is used as a cut through for truck traffic;
- US 31W should be widened;
- There is not a need for the bypass; and
- There are flooding concerns.

3) Simpson County Traffic Model Development

The next topic of discussion revolved around the development of a travel demand

model for Simpson County. Scott Walker led this discussion which included:

- A review of the model network and traffic analysis zone coverage;
- An explanation of model statistics including overall Root Mean Square Error (RMSE) for the model. The RMSE for Simpson County is 25.15% which exceeded the goal of 30%. In addition, the statistics met strict guidelines for vehicle-miles of travel (VMT) and link volume groups; and
- The future year model run estimated that the northwest bypass would carry approximately 7,000 vehicles in the year 2025.

A couple of issues related to the future traffic model were raised by meeting attendees. These included:

- Traffic volumes through town looked low for US 31W in the future scenarios;
- There appeared to be instances where local roads were being used instead of KY 1008 (such as KY 1171 northeast of Franklin); and
- A question was raised concerning industrial development near the industrial park along KY 100 at I-65.

It was noted that these issues would be addressed in the model.

4) Environmental Justice Report Results

Samantha Wright then led a discussion of the environmental justice report prepared by the BRADD. Key points of this discussion included:

- The bypass project has been rated as a 'high' priority in 1998, 2001, and 2003 by:
  - The Simpson County Transportation Committee
  - BRADD Regional Transportation Council
  - District 3 KYTC
- The main concentration of minority population is the Harristown community, which is not in the study corridor. Therefore, construction of the KY 1008 northwest bypass is unlikely to disrupt the minority community; and
- Overall, three concentrations of low income residents were identified by the community. None of these concentrations are found within the project area. Therefore, construction of the KY 1008 northwest bypass is unlikely to disrupt the low income resident community.

5) Resource Agency Input

A review of resource agency input was then conducted, which included:

- The KYTC Permits Branch indicated that controlled access will be a key element to this project.
- The United States Coast Guard stated that the project area does not cross any waterways administered by the Coast Guard.

- The Federal Aviation Administration (FAA) noted that the construction should not exceed 200 feet above ground level.
- The Nashville District of the United States Army Corp of Engineers is forwarding the request to the Louisville District for comments.
- The Kentucky State Police noted that:
  - The bypass would relieve traffic on US 31W;
  - Would benefit emergency services, providing alternate access to KY 100 and KY 73; and
  - The bypass may be opposed by Patton Road residents.
- Division of Environmental Analysis (DEA) noted:
  - No archaeological sites were identified within a 2 km radius;
  - Few studies have been undertaken in this area;
  - A phase I survey would be required for a final alternate;
  - The project would have minimal air quality impacts;
  - There could be possible noise issues related to this project; and
  - Channel changes should be avoided.
- The United States Fish and Wildlife Service suggested the following:
  - Measures to reduce erosion, sedimentation, and adverse effects to the aquatic environment;
  - The existence of federal endangered species in the area including the Indiana bat and gray bat; and
  - Recommendations to avoid potential roosting, hibernation, and foraging areas.
- The KYTC Geotechnical Branch recommended an alignment that follows underlying limestone, avoiding sinkholes and caves. A map was provided.
- Comments from the Division of Multimodal Programs included:
  - Simpson County will likely be designated non-attainment for air quality in April 2004 (i.e., new projects must demonstrate no adverse impacts to air quality);
  - The project should include coordination and connectivity of existing bicycle and pedestrian projects such as:
    - 10-12' paved shoulders along the bypass route would provide a bicycle corridor
    - Urban sections should include sidewalks for pedestrians
  - A map of existing bikeways in Simpson County.
- The office of Sheriff R.E. "Gene" Starks indicated:
  - The project would benefit emergency response times;

- Industrial development will continue on the north side of town and along US 31W;
- A connection with KY 100 in the west could be pushed west away from town;
- The new route should provide a feasible location for extension of the route in the future; and
- The route should avoid historic sites.

- The Kentucky Geological Survey noted:
  - The project would encounter sinkholes and caves;
  - One abandoned gas well is located near the project area;
  - A concern about using any exposed limestone because it would be too weathered for construction; and
  - A low potential for landslides, faults, or earthquakes.

6) Model Testing / Recommendations

After the review of the public meetings materials, travel demand model, environmental justice report, and resource agency materials, attendees of the meeting focused on developing a set of recommendations for this project.

One key issue that was discussed was the potential of considering disjunctions (i.e., not tying into the existing KY 1008 intersections). It was noted that common disjunction problems included:

- Spacing of intersections;
- Weaving;
- Additional traffic signals; and
- Additional conflict points:

Two model runs were coded into the modeling software during the meeting in order to determine the impact of disjunctions. Preliminary results indicated that fewer vehicles would use a bypass with disjunctions.

After this discussion, a list of final recommendations was developed. These recommendations included:

- Disjunctions at both ends of the proposed bypass would cause problems with traffic safety and flow, and therefore should not be considered;
- Design corridors will fall within given study area;
- Buffering should be considered for residential areas but would be contingent upon funding and a maintenance agreement;
- The cross section should include:
  - A 2-lane roadway;
  - Paved shoulders for bicyclists;

- Partial controlled access; and
- Accommodations for turn lanes at KY 100, KY 73, and US 31W.

After the submittal of the final report for this study, the following outline was proposed for presenting the final results:

- Present the findings to the local officials
- Present the findings to the Simpson County Transportation Committee
- Prepare a press release (paper, radio, and WBKO news) to announce document
- Prepare an executive summary as a brochure
- Leave a copy of the report in the library, chamber of commerce, mayor's office, judge's office, and with the Planning & Zoning office.

7) Conference Call

At the end of the meeting, a conference call was conducted with meeting attendees and Daryl Greer with the Division of Planning in Frankfort, KY. The first topic of discussion concerned the extension of the study area. A consensus was made to extend the study area to the north but not to change the defined termini points.

The next topic of conversation was a summary of the recommendations developed for this project. There was a discussion related to improving the southwest quadrant of KY 1008. It was decided that a future piece of a western bypass would later be studied.

Finally, Daryl mentioned that future traffic generated by the traffic model through town was lower than what was discussed in earlier meetings. It was noted that investigations into the traffic model assignment would be addressed.

With no further comments, the meeting was adjourned at approximately 11:30 a.m.

APPENDIX C.

RESOURCE AGENCY COORDINATION

1. KYTC Letter Requesting Input
2. Simpson County Sheriff's Office
3. Kentucky Geological Survey
4. Kentucky State Police
5. KYTC Division of Environmental Analysis
6. KYTC Division of Environmental Analysis, Archaeology
7. KYTC Division of Materials
8. KYTC Division of Multimodal Programs
9. KYTC Permits Branch
10. Federal Aviation Administration
11. U.S. Army Corps of Engineers, Louisville District
12. U.S. Army Corps of Engineers, Nashville District
13. U.S. Coast Guard, Bridge Branch
14. U.S. Fish and Wildlife Service

Commonwealth of Kentucky
Transportation Cabinet
Department of Highways, District Three
900 Morgantown Road, P. O. Box 599
Bowling Green, Kentucky 42102
270/746-7898, (FAX) 270/746-7643
Greg Meredith, P.E.
Chief District Engineer

James C. Codell, III
Secretary of Transportation

Clifford C. Linkes, P.E.
Deputy Secretary

Paul E. Patton
Governor

March 11, 2003

«Mailing_Title» «First_Name» «Last_Name»«Suffix»
«Title»
«Organization»
«Address1»
«Address2»
«City», «State» «Zip»

SUBJECT: Planning Study
Simpson County
KY 1008, Construction of Northwest Bypass around Franklin
Item No. 3-106.00

Dear «Letter_Title» «Last_Name»:

We are requesting your agency's input and comments on a planning study to determine the need and potential impacts for a proposed highway project. The Kentucky Transportation Cabinet has assembled a study team to evaluate the proposed construction of a section of KY 1008 from US 31W to KY 100, which is referred to as the Northwest Bypass. This project would complete a bypass loop around the city of Franklin. The study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns of your agency that could affect the development of the project. This planning study will include a scoping process for the early identification of potential alternatives, environmental issues, and impacts related to the proposed project. We believe that early identification of issues or concerns can help us develop highway project alternatives to avoid or minimize negative impacts.

We respectfully ask that you provide us with your comments by May 1, 2003, to ensure timely progress in this planning effort.

EDUCATION PAYS

During the development of this planning study, comments will be solicited from Federal, state, and local agencies, as well as other interested persons and the general public, in accordance with principles set forth in the National Environmental Policy Act (NEPA) of 1969. The Federal Highway Administration is partnering with us in these efforts.

Other Transportation Cabinet offices or consultants working on behalf of the Transportation Cabinet may also contact you seeking more detailed data or information to assist them in completing their environmental studies for this phase of the project.

We have enclosed the following project information for your review and comment:

- A Project Brochure including a draft statement of Study Purpose and Project Goals
- Project Location Map
- Year 2002 Traffic and Level of Service
- Year 2025 Traffic and Level of Service
- Accident Information by Accident Severity
- Topographic Environmental Footprint
- Digital Orthograph Environmental Footprint

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to Jeff Moore of the Division of Planning at 270/746-7898 or at jeff.moore@mail.state.ky.us. Please address all written correspondence to Annette Coffey, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 125 Holmes Street, Frankfort, KY 40622.

Sincerely,

Annette Coffey, P.E.
Director
Division of Planning

AC:WJM

Enclosures

c:
Jose Sepulveda (w/a)
Bob Farley (w/a)
David Harmon
Jim Simpson
Samantha Wright- WSA
Greg Meredith
Kenneth Cox
Renee Slaughter
Keirsten Jaggers
Daryl Greer

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District Manager
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Lexington, KY 40506-0024

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Louisville, KY 40299

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State Geologist & Director
Kentucky Geological Survey, University of Kentucky
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Kentucky Industrial Development Council, Inc.
109 Consumer Lane, Ste. A
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Scenic Kentucky
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United States Senate
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Washington, DC 20510

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U. S. House of Representatives
2418 Rayburn House Office Building
Washington, DC 20515

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Franklin, KY 42135

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Natural Resources and Environmental Protection Cabinet
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Franklin, KY 42134

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Branch Manager
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Director, National Transportation Program
U. S. Dept. of Energy, Albuquerque Operations Office
P. O. Box 5400, SC-5
Albuquerque, NM87185-5400

Kenneth W. Holt, U.S. Dept. of Health & Human Serv., Center for Disease Control, Emergency And Environmental Health Services DivisionMail Stop F-16
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Franklin, KY42135

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Parks & Recreation Department
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Franklin, KY42135

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PVA
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Superintendent
Franklin-Simpson Schools
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Mayor
City of Franklin
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Franklin, KY 42135

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Building Inspector
Planning & Zoning
300 North Main Street
Franklin, KY42134

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County Road Supervisor
Simpson County
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Franklin, KY42135

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Executive Director
Franklin-Simpson Chamber of Commerce
P.O. Box 513
Franklin, KY 42135

Richie Sanders
District 9
901 Maple Leaf Drive
Franklin, KY 42134

Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622

James C. Codell, III
Secretary of Transportation

Paul E. Patton
Governor

Clifford C. Linkes, P.E.
Deputy Secretary

MEMORANDUM

TO: Annette Coffey, P.E.
Director
Division of Planning

FROM: Edward Sue Perkins, P.E.
Branch Manager
Permits Branch

DATE: March 17, 2003

RE: Simpson County
KY 1008, Northwest Bypass around Franklin
Item No. 3-106.00

The Permits Branch has reviewed the data provided for subject study site and wish to offer the following.

1. We urge the Cabinet to classify this project and all new projects as partially or fully controlled access facilities.

2. Assuming the project is partial control access, we encourage all possible access points be set on the plans in accordance with 603 KAR 5:120, even if they are not to be constructed at that time.

3. When buying R/W for this and all reconstruction routes, assuming the access control is partial control, new deed for all adjoining property owners need to be executed to identify the access control even if no new R/W is acquired,

4. In addition, we would like to make every effort possible to have the design speed to be the same as anticipated posted speed when the project is complete.

5. We would like to see access control fence installed with the project.

6. If the proposed roadway is to be on the N. H. S., early notification of the final line and grade is needed. This enables us to monitor outdoor advertising devices prior to road construction being completed.

7. Please notify this office if the proposed roadway is to be placed on the National Highway System. This information is needed to assist this office in regulating the installation of any outdoor advertising device.

Thank you for the opportunity to verbalize our concerns.

ESP/dpm

EDUCATION PAYS

SKi

DIV OF PLANNING

2003 APR 11 A 9:46

Commonwealth of Kentucky
Transportation Cabinet
Department of Highways, District Three
900 Morgantown Road, P. O. Box 599
Bowling Green, Kentucky 42102
270/746-7898, (FAX) 270/746-7643
Greg Meredith, P.E.
Chief District Engineer

James C. Codell, III
Secretary of Transportation

Clifford C. Linkes, P.E.
Deputy Secretary

Paul E. Patton
Governor

March 11, 2003

RECEIVED
MAR 17 2003
8th COAST GUARD DISTRICT
BRIDGE BRANCH

Mr. Roger Wiebusch
Bridge Administrator
United States Coast Guard, Bridge Branch
1222 Spruce Street
St. Louis, MO 63103

Pursuant to the Coast Guard Authorization Act of 1982, it has been determined this is not a waterway over which the Coast Guard exercises jurisdiction for bridge administration purposes. A Coast Guard bridge permit is not required.

4/2/03
ROGER K WIEBUSCH (Date)
Bridge Administrator
Eighth Coast Guard District (obr)

SUBJECT: Planning Study
Simpson County
KY 1008, Construction of Northwest Bypass around Franklin
Item No. 3-106.00

Dear Mr. Wiebusch:

We are requesting your agency's input and comments on a planning study to determine the need and potential impacts for a proposed highway project. The Kentucky Transportation Cabinet has assembled a study team to evaluate the proposed construction of a section of KY 1008 from US 31W to KY 100, which is referred to as the Northwest Bypass. This project would complete a bypass loop around the city of Franklin. The study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns of your agency that could affect the development of the project. This planning study will include a scoping process for the early identification of potential alternatives, environmental issues, and impacts related to the proposed project. We believe that early identification of issues or concerns can help us develop highway project alternatives to avoid or minimize negative impacts.

We respectfully ask that you provide us with your comments by May 1, 2003, to ensure timely progress in this planning effort.

During the development of this planning study, comments will be solicited from Federal, state, and local agencies, as well as other interested persons and the general public, in accordance

EDUCATION PAYS

with principles set forth in the National Environmental Policy Act (NEPA) of 1969. The Federal Highway Administration is partnering with us in these efforts.

Other Transportation Cabinet offices or consultants working on behalf of the Transportation Cabinet may also contact you seeking more detailed data or information to assist them in completing their environmental studies for this phase of the project.

We have enclosed the following project information for your review and comment:

- A Project Brochure including a draft statement of Study Purpose and Project Goals
- Project Location Map
- Year 2002 Traffic and Level of Service
- Year 2025 Traffic and Level of Service
- Accident Information by Accident Severity
- Topographic Environmental Footprint
- Digital Orthograph Environmental Footprint

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to Jeff Moore of the Division of Planning at 270/746-7898 or at jeff.moore@mail.state.ky.us. Please address all written correspondence to Annette Coffey, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 125 Holmes Street, Frankfort, KY 40622.

Sincerely,

Annette Coffey, P.E.
Director
Division of Planning

AC:WJM

Enclosures

c:
Jose Sepulveda (w/a)
Bob Farley (w/a)
David Harmon
Jim Simpson
Samantha Wright- WSA
Greg Meredith
Kenneth Cox
Renee Slaughter
Keirsten Jaggers
Daryl Greer

U.S. Department
of Transportation
**Federal Aviation
Administration**

Airports District Office, FAA
3385 Airways Blvd., Suite 302
Memphis, Tennessee 38116-3841
(901) 544-3495 FAX: (901) 544-4243
Email: 7-aso-mem-ado@faa.gov

March 26, 2003

Ms. Annette Coffey, P.E.
Director
Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

Dear Ms. Coffey:

Planning Study
Simpson County
KY 1008, Construction of Northwest Bypass around Franklin
Item No. 3-106.00

I am writing to comment on the subject project that was described in your letter dated March 11, 2003.

As long as construction activities do not exceed 200 feet in height above the ground level, there will be no impacts on FAA programs and no notice of proposed construction will be required.

Thank you for the opportunity to comment on the proposed project.

Sincerely,

Cynthia K. Wills

Cynthia K. Wills
Program Manager

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 Bell Road
NASHVILLE, TENNESSEE 37214

DIV OF PLANNING
2003 MAR 31 A 11:42

REPLY TO
ATTENTION OF:

March 27, 2003

Regulatory Branch

Ms. Annette Coffey, P.E.
Director, Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, Kentucky 40622

Dear Ms. Coffey:

The proposed KY 1008 Northwest Bypass project for the city of Franklin, Kentucky, identified in your March 11, 2003, letter is within the regulatory jurisdiction of the Louisville District Corps of Engineers office. By copy of this letter, I am forwarding your request for review to them for consideration.

Sincerely,

John I. Case, Jr.
Chief, Western Regulatory Section
Operations Division

Copy Furnished:

USAED, Louisville
ATTN: CELRL-OP-F
P.O. Box 59
Louisville, Kentucky 40201-0059

COMMONWEALTH OF KENTUCKY
KENTUCKY STATE POLICE
919 VERSAILLES ROAD
FRANKFORT 40601

PAUL E. PATTON
GOVERNOR

PATRICK N. SIMPSON
COMMISSIONER

April 1, 2003

Annette Coffey, P.E.
Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

Dear Ms. Coffey:

In response to your request, we at Kentucky State Police, Post Three have reviewed the information provided on the proposed KY 1008 Northwest By-Pass. We would like to comment on the following issues:

- Traffic Congestion on US 31-W:
  There is a high volume of traffic on US 31-W in Simpson County, particularly in the city limits of Franklin. We feel that the extension of the KY 1008 By-Pass would alleviate part of the traffic congestion. There are industrial areas north and south of Franklin and a by-pass would help with truck traffic.

- Emergency Vehicles in Response:
  A by-pass connecting US 31-W to KY 100 West would benefit emergency responders. The by-pass would allow emergency responders access to KY 100 west without going through the heavily congested downtown area. KY 100 is the major East-West corridor in Simpson County. A by-pass would also provide better access to KY 73.

- Public Opposition:
  We feel there may be opposition to the project from citizens who live in residential areas on or near Patton Road.

Thank you for the opportunity to provide our comments on this project. If I may be of any further assistance, please feel free to contact me at (270) 782-2010.

Lt. Bill Payton

Lieutenant Bill Payton, Unit 50
Kentucky State Police
3119 Nashville Road
Bowling Green, KY 42102-0068

BP:lc
CO0303005
cc: Major Dean Hayes

A-2

Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622

James C. Codell, III
Secretary of Transportation

Clifford C. Linkes, P.E.
Deputy Secretary

Paul E. Patton
Governor

MEMORANDUM

MEMO TO: Annette Coffey, P.E., Director
Division of Planning

VIA: Paul Rawlings, Culture Historic Branch Manager
Division of Environmental Analysis

FROM: Wayna L. Roach, Archaeologist
Division of Environmental Analysis

DATE: April 14, 2003

SUBJECT: KY 1008, Franklin Northwest Bypass
Simpson County, Kentucky
Item Number 3-106.00

The archaeological staff has reviewed the subject planning study. As a part of this review, the subject project received an overview based on the Kentucky Archaeological Database. To date, no archaeological sites have been identified within a 2-km radius; however, very few archaeological studies have been undertaken within this area. Please be advised that a full phase I archaeological survey will be required for the final alternate or alternates since the project will require Federal involvement. If you have any other questions, please advise.

c. Dave Harmon

DIV OF PLANNING
2003 APR 17 A 10:52

EDUCATION PAYS

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3761 GEORGETOWN ROAD
FRANKFORT, KY 40601

April 16, 2003

Ms. Annette Coffey
Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort , Kentucky 40622

Subject: FWS #03-2037; Planning Study, KY 1008 construction of northwest Franklin bypass, Simpson County, Kentucky
KTC Item No: 3-106.00

Dear Ms. Coffey:

Thank you for your correspondence of March 11, 2003, regarding the Kentucky Transportation Cabinet's (KTC) proposed construction of a northwest bypass around the city of Franklin, Kentucky. The KTC proposes to extend KY 1008 from US 31W to KY 100 in order to complete a full circle bypass around Franklin. Fish and Wildlife Service (Service) personnel have reviewed the information submitted and the following comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

The Service is concerned that highway projects frequently accelerate erosion and sedimentation in streams, resulting in adverse effects to the aquatic environment. The use of heavy equipment to move earth and existing vegetation disrupts natural drainage patterns and exposes large areas of disturbed soil to erosion. Excessive sedimentation can clog stream channels and contribute to increased flooding. It can also increase water temperatures and cause oxygen demands which can damage or destroy fish and invertebrate populations. Deposition of sediment on the channel bottom also degrades aquatic habitat by filling in substrate cavities, burying demersal eggs, and smothering bottom organisms. In addition, turbidity, as induced by accelerated erosion and sedimentation, results in further damage to aquatic systems. Increased particulate matter suspended in the water column may drive fish from the polluted area by irritating the gills, concealing forage, and/or destroying vegetation that may be essential for spawning and cover habitat for particular species. Turbidity also degrades water quality by reducing light penetration, pH and oxygen levels, and the buffering capacity of the water. Degraded water quality may continue far downstream from the point where the erosion occurs.

Prevention of excessive sedimentation can occur only through application of Best Management Practices during daily construction activities. Rigid application of your agency's construction erosion control standards can preclude most sedimentation problems; however, in some cases additional measures will need to be taken by on-site inspectors and construction representatives. Upon review of the proposed projects, we find that the information provided is insufficient to determine if the proposed actions will require U.S. Army Corps of Engineers' permits. Since permit applications could more thoroughly reveal the extent of construction activities affecting aquatic resources, we will provide additional comments during the 404 review process should the project necessitate Corps' permits. However, we would likely have no objection to the issuance of permits if any necessary stream channel work is held to a minimum and Best Management Practices are utilized and enforced, effectively controlling erosion, sedimentation, and other potential hazards. The following conditions are specifically recommended:

1. Erosion and sediment control measures, including but not limited to the following, should be implemented on all vegetatively denuded areas:

    a. Preventive planning: A well-developed erosion control plan which entails a preliminary investigation, detailed contract plans and specifications, and final erosion and sediment control contingency measures should be formulated and made a part of the contract.

    b. Diversion channels: Channels should be constructed around the construction site to keep the work site free of flow-through water.

    c. Silt barriers: Appropriate use should be made of silt fences, hay bale and brush barriers, and silt basins in areas susceptible to erosion.

    d. Temporary seeding and mulching: All cuts and fill slopes, including those in waste sites and borrow pits, should be seeded as soon as possible.

    e. Limitation of instream activities: Instream activities, including temporary fills and equipment crossings, should be limited to those absolutely necessary.

2. Channel excavations required for pier placement should be restricted to the minimum necessary for that purpose. Overflow channel excavations should be confined to one side of the channel, leaving the opposite bank and its riparian vegetation intact.

3. All fill should be stabilized immediately upon placement.

4. Streambanks should be stabilized with riprap or other accepted bioengineering technique(s).

5. Existing transportation corridors should be used in lieu of temporary crossings where possible.

6. Good water quality should be maintained during construction.

Efficient management practices can minimize adverse impacts associated with construction. It is important that these and other measures be monitored and stringently enforced. This will aid in preserving the quality of the natural environment.

According to our records, the federally endangered Indiana bat (*Myotis sodalis*) and gray bat (*Myotis grisescens*) are known to occur in the vicinity of the project area. Based on our knowledge of the habitats present in the vicinity of the proposed project, we believe that suitable summer habitat for these species may exist within the project's boundaries. The proposed project lies within the natural range of these species in an area that has not been well-surveyed.

The Indiana bat utilizes floodplain and riparian forests for both summer foraging and roosting habitat; however, other habitats are often used. Indiana bats typically roost under exfoliating bark, or in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Prior to hibernation, Indiana bats utilize the forest habitat around the cave, feeding and roosting until temperatures drop to a point that forces them into hibernation. This "swarming" period lasts, depending on weather conditions in a particular year, from about September 15 to about November 15. This is a critical time for the bats since they are stocking up additional fat reserves and mating prior to hibernation. Research has shown that the bats will range up to five miles from the cave during this time. For hibernation, the Indiana bat prefers limestone caves, sandstone rockshelters, and abandoned underground mines with stable temperatures of 39 to 46 degrees F and humidity above 74 percent but below saturation.

Gray bats roost, breed, rear young, and hibernate in caves year round. They migrate between summer and winter caves and will use transient or stopover caves along the way. For hibernation, the roost site must have an average temperature of 42 to 52 degrees F. Most of the caves used by gray bats for hibernation have deep vertical passages with large rooms that function as cold air traps. Summer caves must be warm, between 57 and 77 degrees, or have small rooms or domes that can trap the body heat of roosting bats. Summer caves are normally located close to rivers or lakes where the bats feed. Additional habitat and life history information on these species is available on the Service's national website at www.fws.gov.

We are concerned that the proposed activities may result in unauthorized take of the Indiana bat and/or gray bat if the bats are present. The potential for unauthorized take of the Indiana bat would exist if the species was present and construction activities that may directly harm the species or directly or indirectly impact the habitat of the species were implemented. Direct impacts would include removal of summer roosting trees that are being occupied by Indiana bats and physical or other disturbances to the species winter hibernacula. Indirect impacts would include any construction activities that would impact foraging or watering areas actively being

used by Indiana bats, impair the ability of female Indiana bats to raise, feed, and care for young, and/or result in harm or harassment of Indiana bats that causes an alteration of breeding habitat or disruption of normal behavior patterns.

Therefore, we have three primary recommendations that should be followed in order to avoid potential impacts to the Indiana bats and gray bats.

1. Removal of trees within the project site should only occur between October 15 and March 31 in order to avoid impacting summer roosting Indiana bats.

2. Removal of trees and other disturbances within riparian corridors and in close proximity to potential gray bat hibernacula/caves should be minimized to the maximum extent possible in order to avoid unnecessary disturbances to gray bat roosting and foraging habitat.

3. It is reasonable to assume that any caves, rockshelters, and/or abandoned underground mines/tunnels lying within the project area could be capable of providing winter habitat for Indiana bats and/or gray bats or summer habitat for gray bats. Therefore, we recommend that the applicant identify any potential hibernacula and summer roosting caves that exist on-site or immediately adjacent to the project area and avoid impacts to those areas pending an analysis by this office of their suitability as bat habitat.

We request your written acceptance of these recommendations. If these recommendations cannot be implemented, you will need to survey the project site to determine the presence or absence of the Indiana bat and gray bat on the project site. Such surveys must be undertaken by a qualified biologist, and the biologist's survey plan must be approved by this office. If any Indian bats and/or gray bats are identified, we request written notification of such occurrence(s) and further coordination and consultation on this project.

Thank you for the opportunity to comment on this proposed action. If you have any questions regarding the information which we have provided, please contact me at (502)/695-0468 (ext.221) or Mindi Brady at (502)/695-0468 (ext.229).

Sincerely,

Virgil Lee Andrews, Jr.
Field Supervisor

xc: Lee Barclay, FWS, Cookeville, TN

C-17 Geotech
Blevins

A-2

MEMORANDUM **P-3-03**

DIV OF PLANNING

2003 APR 24 A 9:54

TO: Annette Coffey, P.E.
Director
Division of Planning

FROM: William Broyles P.E.
Geotechnical Engineering
Branch Manager
Division of Materials

BY: Michael Blevins P.G. MB
Geotechnical Branch

DATE: April 23, 2003

SUBJECT: Simpson County
KY. 1008 Northwest Bypass at Franklin
Item 03-106.00
Mars # 7334201P

The project area is located upon the Formations of the Ste. Genevieve Limestone and St. Louis Limestone. The Ste. Genevieve Limestone is predominately an oolitic limestone, light gray to white in color, and generally thick bedded. Chert is most commonly found at the base of the formation and occurs as stringers and in blocks one feet thick. Limestone is suitable for highway construction and rock roadbed.

The St. Louis Limestone is light to dark gray in color, very fine to medium grained and thick bedded. Chert nodules and beds are common throughout the formation.

The rockline is usually highly variable in both formations and soil depths may range from 5' to 30 (+) feet.

Sinkholes are common in both formations but appear to be less in the Ste. Genevieve Limestone as shown on the attached Geologic Quadrangle Map. Sinkholes should be avoided if possible. It is preferred not to direct any surface runoff to any sinkhole. Sinkholes along with any underground streams that may exist would be the branches main concern. A more detailed study of the sinkholes, caves, underground streams etc. may be need as the project develops.

GEOTECHNICAL CONCERNS

1) The Branch prefers a line that would be located upon the Ste. Genevieve Limestone to avoid as many sinkholes or caves as possible. A dashed line is shown on the attached Geologic Map that could be considered as a possible line. The line should also eliminate the need for any structures at stream crossings.

2) There are no other problems anticipated at this time. Cut and fill slopes in soil should be stable on 2:1 slopes and no other specific recommendations should be required for any line in the study area.

If there are any questions, please advise.

GEOLOGY OF THE
WOODBURN QUADRANGLE
KENTUCKY
GQ-280

Preliminary Project Area

PREFERED LOCATION OF LINE

GEOLOGY OF THE
FRANKLIN QUADRANGLE
KENTUCKY—TENNESSEE
GQ-281

EXPLANATION

Qal	Alluvium	QUATERNARY
Msg	Ste. Genevieve Limestone	*Upper Mississippian* / MISSISSIPPIAN / CARBONIFEROUS
Msl	St. Louis Limestone	
Msw	Salem and Warsaw Limestones	

Contact
Dashed where approximately located; short dashed where inferred or indefinite; dotted where concealed

200
Structure contours
Drawn on top of Chattanooga Shale, which is not exposed; data were obtained from drill records. Dashed where control less accurate. Contour interval 20 feet Contours not shown where data insufficient

DRILL HOLES FROM WHICH SUBSURFACE STRUCTURAL DATA WERE OBTAINED

⊙117
Diamond-drill hole
Number indicates altitude of the top of the Chattanooga Shale

Dry hole

Oil well

Abandoned gas well

Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622

James C. Codell, III
Secretary of Transportation

Clifford C. Linkes, P.E.
Deputy Secretary

Paul E. Patton
Governor

MEMORANDUM

TO: Annette Coffey, Director
Division of Planning

FROM: Michael L. Hill, Director
Division of Multimodal Programs

DATE: April 28, 2003

SUBJECT: Simpson County
Franklin NW Bypass
Item No. 03-106.00

Thank you for the opportunity to comment on the proposed improvements to Franklin in Simpson County. Franklin, with a population of 7,996, is a Small Urban Area (SUA) in Kentucky. The last Transportation Study for Franklin was completed in 1970, and the most recently completed travel demand model was updated in 1991. The Division of Multimodal Programs is in the process of updating and expanding the travel demand model for Franklin to the Simpson County boundary. It is expected that the travel demand model will be completed within the calendar year.

In addition, current data indicates that Simpson County is likely to be designated in April, 2004, as nonattainment for the air quality 8-hour ozone standard. If Simpson County is designated as nonattainment, transportation conformity rules will apply. Any new project in the area must demonstrate "conformity", i.e., must be shown to not adversely impact air quality. Demonstrating conformity requires detailed analysis using the latest planning assumptions, including output from the travel demand model, and EPA's emissions model.

The coordination and connectivity of bicycle and pedestrian facilities is important in the early planning and design stages of projects. Design Guidance from the United States Department of Transportation released in February, 2000, states "bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist."

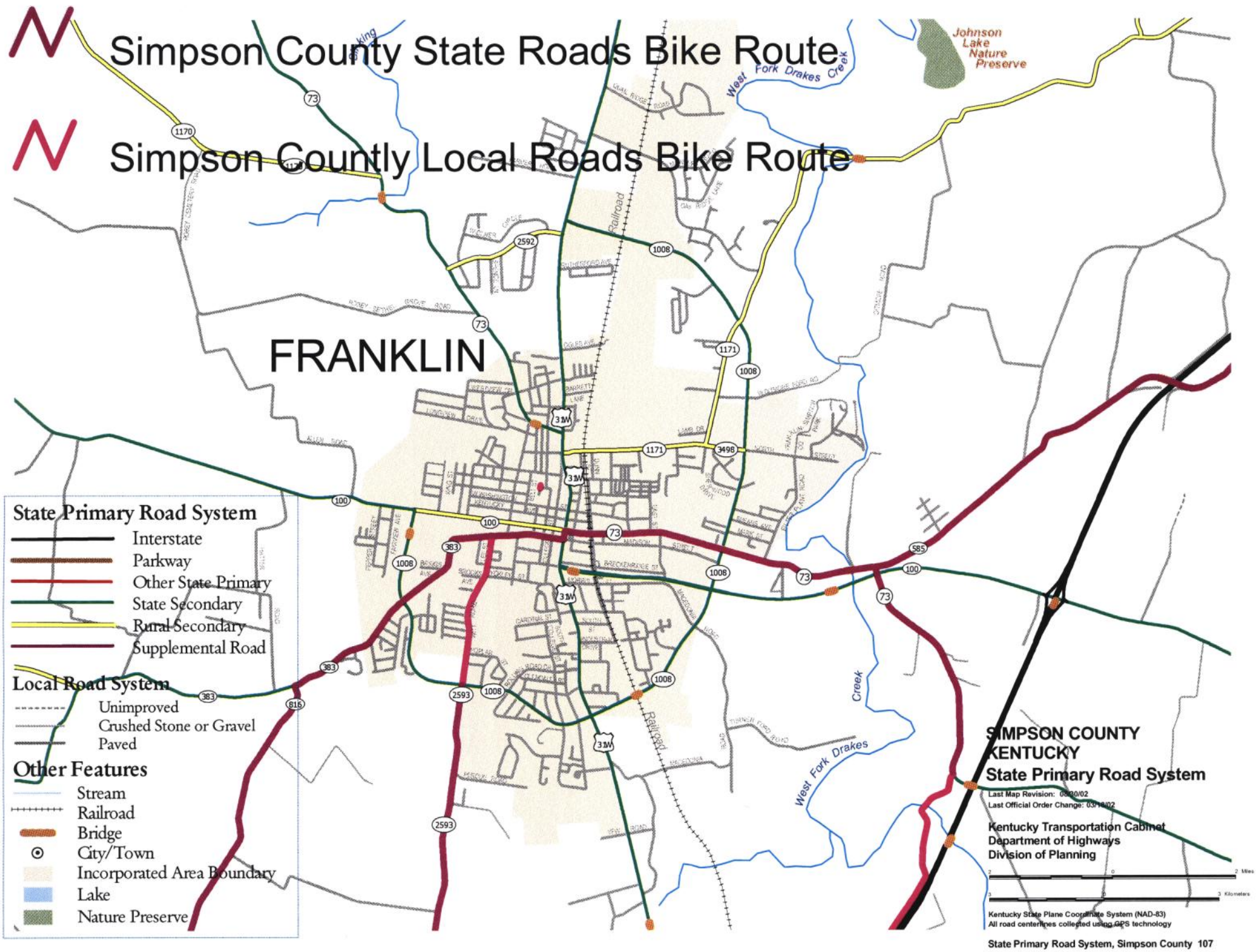
The proposed Northwest Bypass in Franklin is not currently a designated bicycle route. However, if this section were constructed with 10' to 12' paved shoulders, the Northwest Bypass would provide a shoulder bikeway corridor for bicyclists traveling on Franklin's designated bicycle routes. Two designated bicycle routes travel through Franklin: Southern Lakes Route travels east-west and Mammoth Cave Route travels north-south. Franklin is a bicycle route crossroad and bicycle travel should be accommodated.

One of the project issues includes "residential development north of Patton Place (KY 2592)." Non-motorized transportation can be accommodated with the inclusion of shoulder bikeways. Urban sections of this project should include sidewalks for pedestrian connectivity.

Attached is a map showing the designated bicycle routes which pass through Franklin. Please contact Paula Nye of this Division for any questions about bicycle and pedestrian concerns.

We look forward to working with your Division to facilitate your study efforts in our SUA and MPO areas, and by increasing awareness of bicycle and pedestrian issues.

MLH/LJS/JGM/PEN/AJT


Simpson County State Roads Bike Route
Simpson County Local Roads Bike Route
FRANKLIN
Johnson Lake Nature Preserve
West Fork Drakes Creek
Railroad
West Fork Drakes
Creek
State Primary Road System
Interstate
Parkway
Other State Primary
State Secondary
Rural Secondary
Supplemental Road
Local Road System
Unimproved
Crushed Stone or Gravel
Paved
Other Features
Stream
Railroad
Bridge
City/Town
Incorporated Area Boundary
Lake
Nature Preserve
SIMPSON COUNTY
KENTUCKY
State Primary Road System
Last Map Revision: 08/30/02
Last Official Order Change: 03/19/02
Kentucky Transportation Cabinet
Department of Highways
Division of Planning
Kentucky State Plane Coordinate System (NAD-83)
All road centerlines collected using GPS technology
State Primary Road System, Simpson County 107

CAPTAIN PAUL REELS
CHIEF DEPUTY

BETH KELLEY
OFFICE MANAGER

DIV OF PLANNING

2003 APR 30 A 10:55

Office of the Sheriff
R.E. "GENE" STARKS
SIMPSON COUNTY, KENTUCKY
203 EAST KENTUCKY AVENUE • P.O. BOX 434 • FRANKLIN, KENTUCKY 42135-0434
PHONE: (270) 586-7425 • FAX: (270) 586-9505

FROM: R. E. Starks

April 28, 2003

TO: Annette Coffey
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

SUBJECT: Northwest Bypass

This project is considered a "must" by all emergency response agencies. Traffic volume is a critical issue now, and, with minimum projected growth on the north side of Franklin volume will be overwhelming.

1. Franklin-Simpson's north-south corridor is parallel with a railway system, which will, and does, encourage industrial locations adjacent to U.S. 31 W.

2. Industrial employers on this corridor include heavy truck terminals as well as bulk manufacturing facilities, which require high volume of materials transport.

3. New manufacturing installations already planning on construction on the north side of Franklin will be Agricultural in nature and will require efficient raw materials/finished product transport.

4. Significant improvement are underway now to improve state Highway 73 North which will establish a direct connection to Highway 68-80 roughly 10 miles from the Franklin area. This will increase traffic from areas west of Franklin and Simpson County. Automobile traffic on Highway 73 North is already heavy at times and with increased transport traffic our problem will grow accordingly.

I will be quick to state that my expertise in this area is limited, but in my opinion it appears there will be a "dog leg" or offset in northwest – southwest connection at Highway 100 West. If this is factual, I would like to see this new section pushed to the western side of the project area. It may be practical in the future to extend the southwest section of KY 1008 further to the west to provide a more systematic, efficient bypass.

An additional benefit of pushing westbound in the project area would be allowing sufficient distance from historical sites and possibly lower construction costs if a bridge over waterway/stream could be avoided.

Sincerely,

R. E. (Gene) Starks
Simpson County Sheriff

Greer, Daryl (KYTC)

From: Coffey, Annette (KYTC)
Sent: Tuesday, April 29, 2003 12:20 PM
To: Greer, Daryl (KYTC)
Subject: FW: 3-106 Simpson

fyi

-----Original Message-----
From: Harmon, Dave (KYTC)
Sent: Tuesday, April 29, 2003 11:24 AM
To: Moore, Jeff (KYTC-D03)
Cc: Coffey, Annette (KYTC)
Subject: 3-106 Simpson

Jeff,

DEA has reviewed the 3-106 planning study and offers the following comments.

1) A minor comment, but I always like to have ADT and LOS explained/defined.

2) Minimal impacts to air quality.

3) Possible noise issues.

4) Although no are sites are identified within a 2 Km radius, few ARCH investigations have been done in the area.

5) Need to avoid channel changes.

If you have any questions, give me a call.
Dave.

UNIVERSITY OF KENTUCKY

Kentucky Geological Survey
Research and Graduate Studies
228 Mining and Mineral Resources Building
Lexington, KY 40506-0107
Phone: (859) 257-5500
Fax: (859) 257-1147
www.uky.edu/kgs

May 6, 2003

Annette Coffey, P.E.
Director
Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, Kentucky 40622

Dear Ms. Coffey:

This letter is to summerize any geologic concerns for the Planning Study:
Simpson County
KY 1008, Construction of Northwest Bypass around Franklin, Ky.
Item No. 3-106.00

Physiographic Region
This Planning Study is in the Mississippian Plateau (Pennyroyal or Pennyrile) Physiographic Region, which is underlain by limestone.

Karst Potential
This project would encounter karst features such as sinkholes and caves.

Landslide Potential
This project would not encounter any pre- or post- landslide hazard.

Unconsolidated Sediments
This project would not encounter any unconsolidated sediments.

Resource Conflicts
This project would not encounter any resource conflicts such as prior ownership of property for quarrying or mining. There is an abandoned gas well in or near this project area; location 36° 45′ 3.1″ north latitude and 086° 34′ 47.7″ west longitude, North American datum 1983.

KGS

Materials Suitability

The St. Louis Limestone underlies some of this project area. This limestone has been found to contain expansive aggregate in other parts of Simpson County that would not be suitable for road construction. The Ste. Genevieve Limestone also underlies some of the project area. Exposures of the Ste. Genevieve Limestone in proximity to the project area would be too weathered for any use as road construction.

Fault Potential

This project would not encounter any faulted areas.

Earthquake Ground Motions

Earthquake ground motions through the bedrock would have a minimal effect for this project area. Also, there would be a low potential for liquefaction or slope failure in the unconsolidated sediments at or near streams caused by earthquake bedrock ground motions.

Sincerely,

Richard A. Smath
Geologist

cc: Richard Wilson

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE, KENTUCKY 40201-0059
FAX: (502) 315-6677
http://www.lrl.usace.army.mil

June 18, 2003

2003 JUN 19 A 10:30
DIV OF PLANNING

Operations Division
Regulatory Branch (South)
ID No. 200300394-pjl

Ms. Annette Coffey
Commonwealth of Kentucky Transportation Cabinet
Division of Planning
125 Holmes Street
Frankfort, Kentucky 40622

Dear Ms. Coffey:

This is in response to your letter requesting comments pertaining to the proposed KY 1008 Northwest Bypass around the city of Franklin in Simpson County, Kentucky. A review of the preliminary project area revealed the presence of two unnamed tributary streams that are within the regulatory authority of the Corps of Engineers.

The Corps of Engineers exercises regulatory authority under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344). The data you furnished indicates an authorization under one or both of these sections of law may be required before you begin the work. However, the information given is insufficient for us to be certain of the need for a permit on this particular proposal. We will need additional detail on the project's design, scope, construction methods and purpose in order to determine whether a permit is required.

We have found it is usually in the applicant's best interest to submit that data in a formal permit application. Should an individual permit be required, we can then begin processing your request immediately.

Enclosed is a packet containing the information and forms needed to apply for a DA permit. Currently, the processing time for non-controversial applications requiring individual review takes approximately 90 to 120 days. Please allow sufficient time in your preconstruction schedule for the processing of a DA permit application.

If we can be of any further assistance, please contact us by writing to the above address, ATTN: CELRL-OP-FS, or by calling me at (502) 315-6693.

Sincerely,

Pam Loeffler
Regulatory Specialist
Regulatory Branch

Enclosure

APPENDIX D.

ENVIRONMENTAL SOURCES

Appendix D

Granting Agency		
Contact Information		**Data Obtained**
Department of Fish & wildlife Resources		
Web Address	*www.kfwis.state.ky.us*	*Wetlands Information - U.S. Department of Fish and Wildlife Quad Maps, 1983-1987*
Mailing Address	*#1 Game Farm Road Frankfort, KY 40601*	
Phone Number	*(800) 858-1549*	
Kentucky Division of Waste Management / Underground Storage Tank Division		
Web Address	*http://www.waste.ky.gov/programs/ust/usthome.htm*	*Underground Storage Tank Data*
Mailing Address	*14 Reilly Road Frankfort, KY 40601*	
Phone Number	*(502) 564-6717*	
Kentucky Natural Resources and Environmental Protection Cabinet		
Web Address	*www.nr.state.ky.us*	*Tire Dump Locations* *Sewage Treatment Plants* *Public Water Supply* *Lakes - based on National Wetlands Inventory, 1981* *Permitted Landfills, recorded 1965-1985* *Wildlife Management Areas* *State Parks - Kentucky Department of Parks, 1991 Facilities Guide* *State Forests*
Mailing Address	*Capital Plaza Tower*	
Phone Number	*(502) 564-3350*	
Kentucky Heritage Council		
Web Address	*www.state.ky.us/agencies/khc/khchome.htm*	*Archaeological Sites* *Historic Structures*
Mailing Address	*300 Washington Street Frankfort, KY 40601*	
Phone Number	*(502) 564-7005*	

Appendix D (continued)

Granting Agency		
Contact Information		**Data Obtained**
Kentucky Geological Survey		
Web Address	*www.uky.edu/KGS*	*Faults* *Blueline Streams* *Oil and Gas Wells* *Coal Exploration* *USGS Water Monitoring Sites* *Water Wells*
Mailing Address	*228 Mining and Mineral Resources Building* *University of Kentucky* *Lexington, KY 40506-0107*	
Phone Number	*(859) 257-5500*	
Kentucky State Nature Preserves Commission		
Web Address	*www.kynaturepreserves.org/*	*Threatened and Endangered Species*
Mailing Address	*801 Schenkel Lane* *Frankfort, KY 40601*	
Phone Number	*(502) 573-2886*	
Kentucky Department for Surface Mining Reclamation and Enforcement		
Web Address	*www.surfacemining.ky.gov/dsmrehome.htm*	*Graphic database for all mining activities since 1961*
Mailing Address	*2 Hudson Hollow* *Frankfort, KY 40601*	
Phone Number	*(502) 564-6940*	
U.S. Army Corps of Engineers		
Web Address	*www.usace.army.mil*	*Dams (National Inventory of Dams, 1998-1991)* *Locks* *Ports*
Mailing Address	*20 Massachusetts Ave, NW* *Washington, DC 20314*	
Phone Number	*(202) 761-0001*	

Granting Agency		
Contact Information		**Data Obtained**
Abandoned Mine Land Program		
Web Address	*www.osmre.gov*	*Abandoned Mine Lands Data*
Mailing Address	*2521 Lawrenceburg Road Frankfort, KY 40601*	
Phone Number	*(502) 564-2141*	
U.S. Geological Survey		
Web Address	*www.nps.gov*	*GNIS (Geographical Name Information Server)* *DRG (Digital Raster Graphic)*
Mailing Address	*12201 Sunrise Valley Drive Reston, VA 20192*	
Phone Number	*(703) 648-7411*	
National Park Service		
Web Address	*www.nps.gov*	*Dataset for 340 National Park System Unit Boundaries*
Mailing Address	*1848 C Street, NW Washington, DC 20240*	
Phone Number	*(202) 208-4621*	
National Forest Service		
Web Address	*www.fs.fed.us*	*Polygon Coverage Showing Surface Ownership / Jurisdictions of Lands*
Mailing Address	*1400 Independence Ave, SW Washington, DC 20250*	
Phone Number	*(202) 205-1760*	
Bureau of Transportation		
Web Address	*www.bts.gov*	*United States Military Installations Database*
Mailing Address	*400 Seventh Street, SW Washington, DC 20590*	
Phone Number	*(202) 366-1111*	

Appendix D (continued)

Granting Agency		
Contact Information		**Data Obtained**
Environmental Protection Agency		
Web Address	*www.epa.gov*	*AFS (AIRS Facility Subsystem)* *CERCL (Comprehensive Environmental Response, Compensation and Liability)* *ERNS (Emergency Response Notification System)* *FINDS (Facility Identification Initiative)* *PCS (Permit Compliance System)* *RCRIS (Resource Conservation and Recovery Information System)* *TRIS (Toxics Release Inventory System)*
Mailing Address	*W1200 W. Tower of Waterside Mall* *401 M Street, SW* *Washington, DC 20460*	
Phone Number	*(202) 260-4700*	

APPENDIX E.

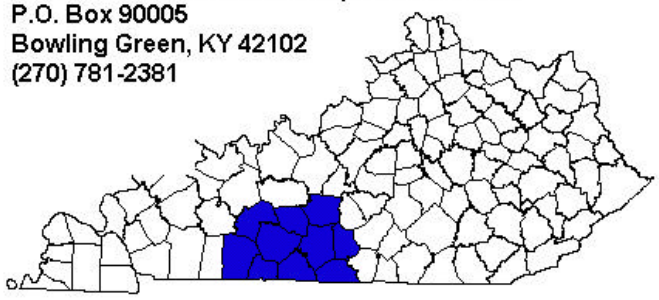
ENVIRONMENTAL JUSTICE AND COMMUNITY IMPACT REPORT

Environmental Justice and Community Impact Report

KY 1008 from US 31W North of Franklin to KY 100 West of Franklin in Simpson County

June 2003

Barren River Area Development District
P.O. Box 90005
Bowling Green, KY 42102
(270) 781-2381



Study Findings

This Environmental Justice and Community Impacts Report is to be used as a component of an Intermediate Planning Study for the completion of the KY 1008 loop around Franklin from US 31W north of Franklin to KY 100 west of Franklin in Simpson County. The project description contained in the Commonwealth of Kentucky's Six Year Highway Plan reads, "Franklin Northwest Bypass; Extend KY 1008 from US 31W to KY 100 West." Currently, funding for additional phases of the project are scheduled in the Six Year Highway Plan. Map 1 shows the study area for this project.

The study is intended to help define the location and purpose of the project and better meet federal requirements regarding consideration of environmental issues as defined in the National Environmental Policy Act (NEPA).

The Simpson County Transportation Committee, the Barren River Area Development District's Regional Transportation Council, and the District 3 Department of Highways have given this project a priority rating of High during the 1998, 2001, and 2003 prioritizations indicating a strong community desire for this project to be completed.

The 2000 Census identifies 4 census tracts in Simpson County. For the purposes of this project, Tract 9703 including Block Groups 002, 003, and 004 in Simpson County are considered to be the project study area and are illustrated on Map 2.

POPULATION BY RACE

Comparing the figures in Table 1A to those in Table 1B does indicate Tract 9703 as having a proportionately higher percentage of black population at 17.5 percent. This is significantly higher than all other political or census divisions except the City of Franklin, which is 16.8 percent black. To further investigate the distribution of this population, one can examine the block groups within Tract 9703. Block Group 003 is 23.8 percent black, which is significantly higher than national, state, county, and city levels.

By examining Map 2, one can see that the spatial composition of Block Group 003 is rather large. To pinpoint where these minority concentrations are located, various members of the community and county were contacted to aid in this matter (see Figure 1). Map 3 shows a minority concentration confirmed by local community members as the Harristown community. This community extends into Block Groups 001 and 002 but is actually located south of the project area within the Franklin city limits, which is confirmed by the 16.8 percent black minority concentration indicated by the Census figures. This community would not be directly impacted by the construction of a Franklin Northwest Bypass.

All other minority populations in Table 1B are similar to national, state, county, and city levels. Members of the community and county were also consulted to confirm this conclusion. No additional concentrations of minorities were located in the study area by those residents. It was also confirmed by local citizens and a windshield survey that much of the study area for KY 1008 is mainly rural, agricultural land with little significant residential and community

development except in the northern portions of the project area; therefore, it appears that this project would have little impact on minority communities in Simpson County.

POPULATION BY POVERTY LEVEL

Table 2B indicates one block group with a higher percentage of population below poverty level. Block Group 003 has 16.7 percent of its residents below poverty level in 1999. This is higher than the state percentage of 15.4 percent. When examining this information according to age groups, it is the adult and elderly age groups that make up the highest percentages of residents in the block group below poverty level, especially 65 and over with 7.0 percent. This percentage is higher than state and national comparisons shown in Table 2A; however, it is also believed that most of these residents are located southeast of the study area. Also, Table 3B shows that Block Group 003 has a significantly higher percentage of individuals age 65 and over (20.1 percent) that compose the block group.

When consulting local members of the community about this information, they pointed to the areas indicated on Map 4 as low-income concentrations. The area just south of the study area was considered to be a significant low-income concentration and not part of the project area examined with Census figures. The Harristown community is also considered to have pockets of low-income concentrations; however, not all residents in the community would be considered as low-income.

Community members felt that the concentration of those below poverty level was significant enough to denote in this area southeast of the study area. Since there are very few residences located within the general study area, it appears that there would be little impact on low-income concentrations in Simpson County.

POPULATION BY AGE GROUP

Age distribution in the county is similar to the state and national levels; however, examining Table 3B shows that the tract and block groups in the study area show a varying age distribution. The percentage of individuals 65 and older is higher in Block Group 003 at 20.1 percent than those divisions compared in Table 3A.

To further investigate this data, community members were also consulted. They felt that there was no significant concentration of individuals of a particular age group in the block group. Accordingly, varying age groups are located throughout the study area. Community members felt that many of the residents that live on the rural farm houses in this portion of the county have lived there most of their lives and was a legitimate reason for a higher percentage of older populations in Block Group 003. If the project remains in the general study area where few residences are located, then it appears that there would not be any significant concentrations of age groups impacted within the study area.

OTHER POPULATIONS

There are no other populations identified by community members, beyond the Census data obtained, that indicate significant impact from the Franklin Northwest Bypass project.

COMMUNITY IMPACTS

A circumferential highway has been proposed for the county seat of Simpson County for some time. Only three quarters of the roadway has been built, with the northwest portion of KY 1008 remaining a desire for residents.

The residential neighborhood around KY 2592 would benefit from the construction of a Northwest Bypass. This highway, although state maintained, is primarily residential, and traffic often uses this roadway as a shortcut from US 31W north of Franklin to KY 73 to the northwest. Additionally, US 31W runs through the heart of the city. Traffic congestion is prevalent during peak travel times along this federal highway. Without any further improvements to the transportation network around Franklin, the level of service of US 31W between KY 73 and KY 1171 is estimated as an "F" in 2025 with an estimated average daily traffic (ADT) of over 40,000 vehicles. Currently, this road segment performs at a level of service of an "E" with an ADT of 24,700.

Because of this congestion on US 31W, numerous vehicle crashes have occurred. None of these crashes have been fatal, but several of them have been injury-related. This portion of US 31W between KY 73 and KY 100 south of Franklin is considered to be a high vehicle crash segment for the amount of vehicles that travel the corridor compared with the number of crashes. A Northwest Bypass would alleviate this congestion near the city center and improve the safety of those traveling through Franklin.

Completing KY 1008 will also benefit emergency-service personnel that must access northern and western portions of the county. Currently, an emergency vehicle must pass through the center of town to reach individuals in the northwestern portion of the county. With traffic congestion around the city center, this can be a daunting task for emergency services. Not only would a Northwest Bypass of Franklin alleviate traffic congestion in downtown, but it would also likely shorten emergency response times to the northwest portion of Simpson County.

Although this project does have many positive benefits, there may be some adverse impacts upon the communities directly adjacent to and within the study area that should be minimized or mitigated. The increase in vehicular noise generated by the highway would impact the communities directly east of the study area, especially around Bloomfield Drive and Peebles Drive, and within the study area along the residential area serviced by KY 2592 or Patton Road (see Map 1). This project would also change the appearance and function of the landscape directly behind houses located along these streets. Engaging with these residents in the early stages of this project will be essential in ensuring that all voices in the community are recognized, that these residents are informed of the possible positive and negative effects of this project, and that appropriate measures are considered to minimize or mitigate impacts upon these residences.

Appendix

Figure 1:
Community Members Contact List

The following individuals were consulted to gather information about the study area and issues with existing KY 1008:

Judge/Executive Jim Henderson
P.O. Box 242
Franklin, KY 42135

Karen Eaton
Simpson County Chamber of Commerce
P.O. Box 513
Franklin, KY 42135

Wanda Barrett
Franklin-Simpson Co. Ambulance Service
P.O. Box 2928
Franklin, KY 42135

Table 1A - Comparison Table for 2000 Population by Race: Nation, State, County, & City													
Political/Census Division	**White**	**Percent of Population**	**Black**	**Percent of Population**	**American Indian**	**Percent of Population**	**Asian**	**Percent of Population**	**Hispanic***	**Percent of Population**	**Other**	**Percent of Population**	**Total Population**
United States	211,460,626	75.1	34,658,190	12.3	2,475,956	0.9	10,242,998	3.6	35,305,818	12.5	22,584,136	8.0	281,421,906
Kentucky	3,640,889	90.1	295,994	7.3	8,616	0.2	29,744	0.7	59,939	1.5	66,526	1.6	4,041,769
Simpson County	14,410	87.8	1,676	10.2	28	0.2	90	0.5	150	0.9	201	1.2	16,405
Franklin	6,476	81.0	1,340	16.8	17	0.2	61	0.8	65	0.8	102	1.3	7,996

Table 1B - 2000 Population by Race: Census Tracts and Block Groups within and near the Study Area													
Census Block Group	**White**	**Percent of Population**	**Black**	**Percent of Population**	**American Indian**	**Percent of Population**	**Asian**	**Percent of Population**	**Hispanic***	**Percent of Population**	**Other**	**Percent of Population**	**Total Population**
Tract 9703	3,813	81.4	818	17.5	4	0.1	19	0.4	41	0.9	31	0.7	4,685
Block Group 002	1,385	88.8	153	9.8	1	0.1	4	0.3	14	0.9	17	1.1	1,560
Block Group 003	806	75.1	255	23.8	0	0.0	8	0.7	2	0.2	4	0.4	1,073
Block Group 004	1,239	93.8	63	4.8	3	0.2	7	0.5	18	1.4	9	0.7	1,321
Tract 9704 (near)	5,192	87.3	583	9.8	11	0.2	56	0.9	60	1.0	104	1.7	5,946
Block Group 003	1,655	86.1	208	10.8	4	0.2	10	0.5	13	0.7	45	2.3	1,922

* Population of Hispanic Origin is included as White.
Source: 2000 U.S. Census

Table 2A - Comparison Table for 1999 Population by Poverty Level: Nation, State, County, & City								
Political/Census Division	**Population Below Poverty Level**	**% of Total Population**	**Age 0-17**	**% of Total Population**	**Age 18-64**	**% of Total Population**	**Age 65 +**	**% of Total Population**
United States	33,899,812	12.0	11,746,858	4.2	18,865,180	6.7	3,287,774	1.2
Kentucky	621,096	15.4	203,547	5.0	350,072	8.7	67,477	1.7
Simpson County	1,854	11.3	598	3.6	928	5.7	328	2.0
Franklin	1,038	13.0	297	3.7	508	6.4	233	2.9

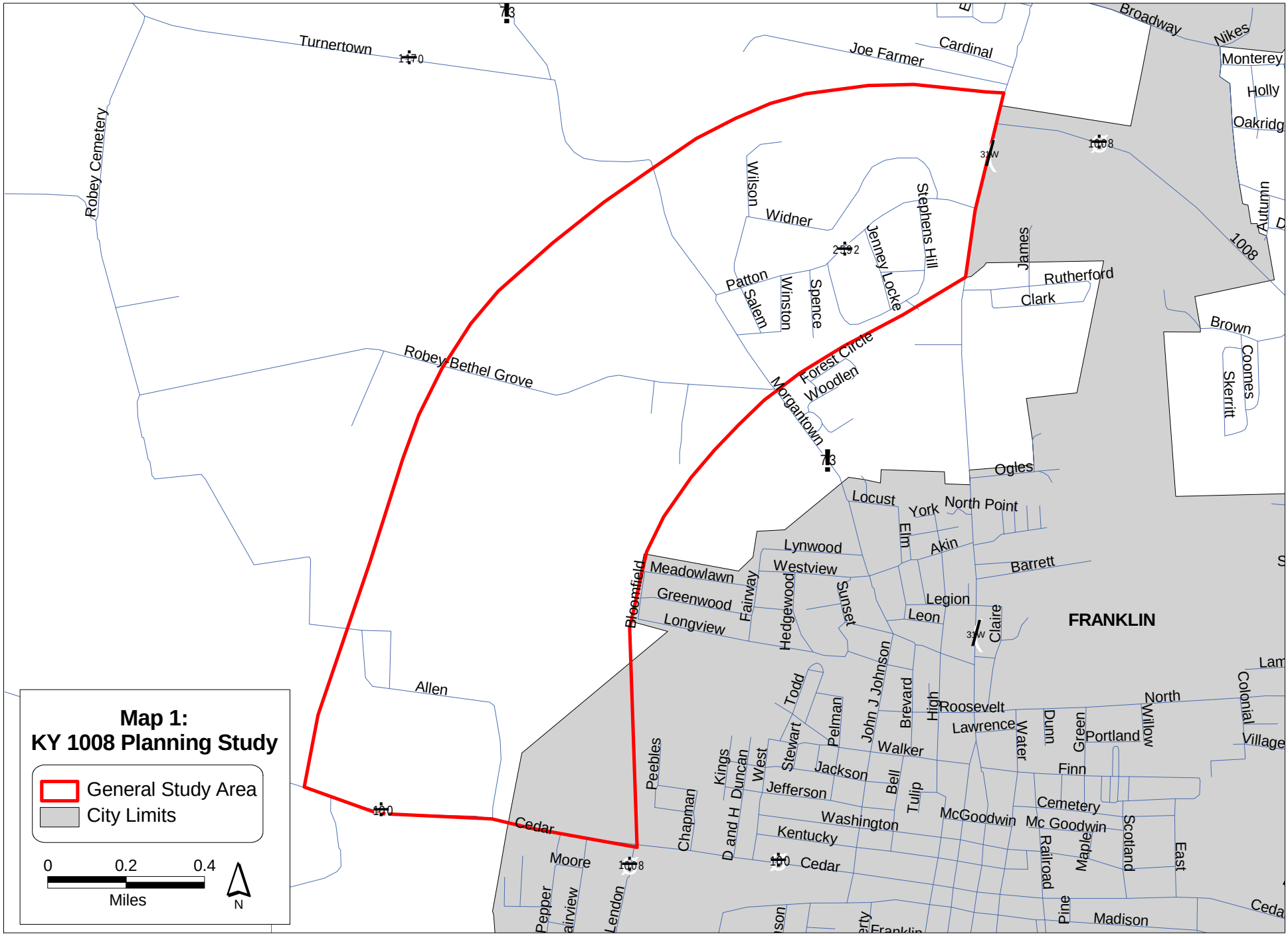
Table 2B - 1999 Population by Poverty Level: Census Tracts and Block Groups within and near the Study Area								
Census Block Group	**Population Below Poverty Level**	**% of Total Population**	**Age 0-17**	**% of Total Population**	**Age 18-64**	**% of Total Population**	**Age 65 +**	**% of Total Population**
Tract 9703	655	14.0	161	3.4	338	7.2	156	3.3
Block Group 002	214	13.7	32	2.1	124	7.9	58	3.7
Block Group 003	179	16.7	12	1.1	92	8.6	75	7.0
Block Group 004	148	11.2	78	5.9	64	4.8	6	0.5
Tract 9704 (near)	716	12.0	260	4.4	341	5.7	115	1.9
Block Group 003	212	11.0	63	3.3	80	4.2	69	3.6

Source: 2000 U.S. Census

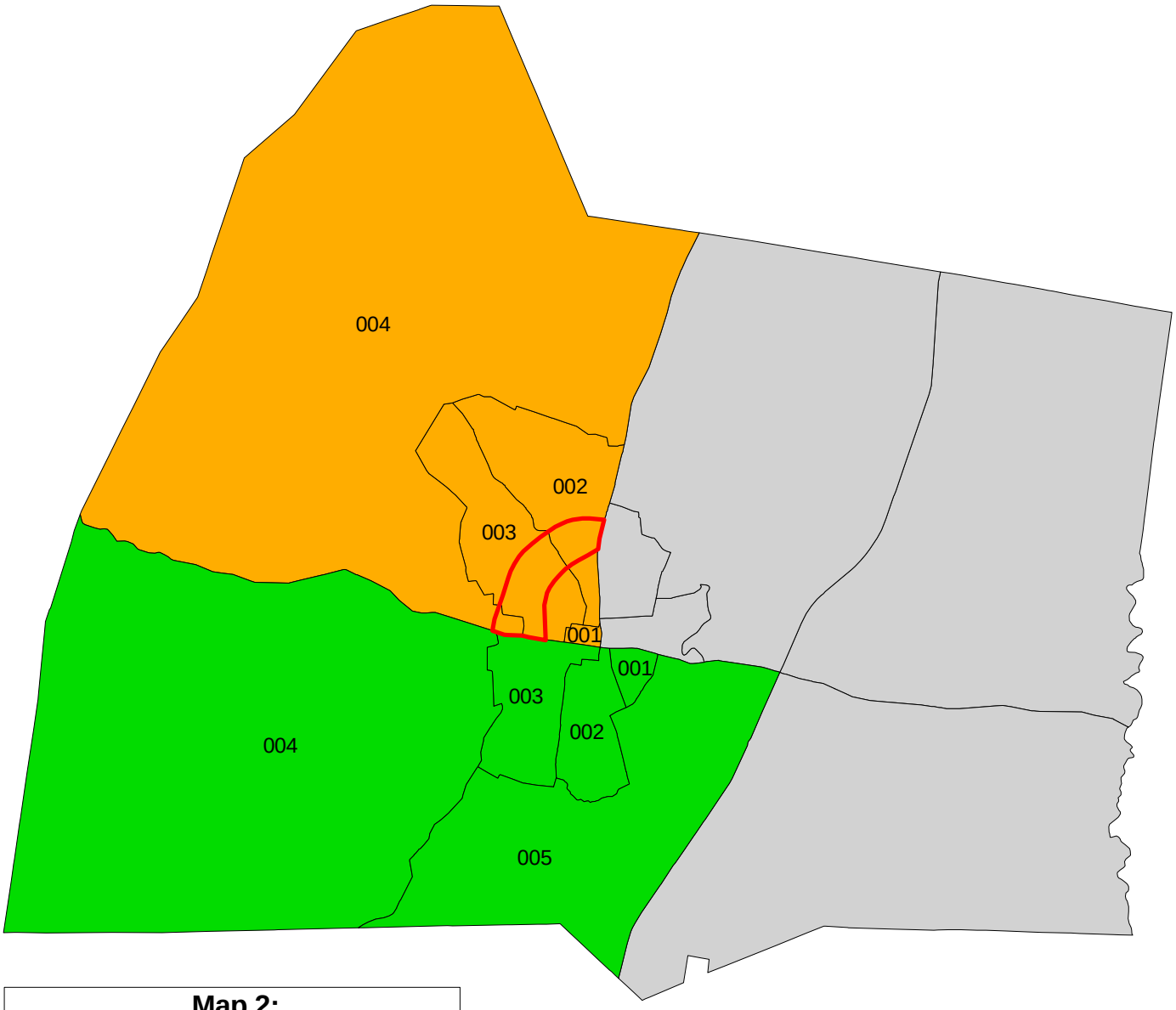
Table 3A - Comparison Table for 2000 Population by Age Group: Nation, State, County, & City							
Political/Census Division	**Age 0-17**	**Percent of Total**	**Age 18-64**	**Percent of Total**	**Age 65 +**	**Percent of Total**	**Total**
United States	72,293,812	25.7	174,136,341	61.9	34,991,753	12.4	281,421,906
Kentucky	993,841	24.6	2,544,260	62.9	503,668	12.5	4,041,769
Simpson County	4,302	26.2	9,929	60.5	2,174	13.3	16,405
Franklin	2,017	25.2	4,744	59.3	1,235	15.4	7,996

Table 3B - 2000 Population by Age Group: Census Tracts and Block Groups within and near the Study Area							
Census Block Group	**Age 0-17**	**Percent of Total**	**Age 18-64**	**Percent of Total**	**Age 65 +**	**Percent of Total**	**Total**
Tract 9703	1,139	24.3	2,827	60.3	719	15.3	4,685
Block Group 002	396	25.4	947	60.7	217	13.9	1,560
Block Group 003	226	21.1	631	58.8	216	20.1	1,073
Block Group 004	359	27.2	790	59.8	172	13.0	1,321
Tract 9704 (near)	1,591	26.8	3,593	60.4	762	12.8	5,946
Block Group 003	544	28.3	1,182	61.5	196	10.2	1,922

Source: 2000 U.S. Census



This map was created by the BRADD Transportation Department, May 2003.



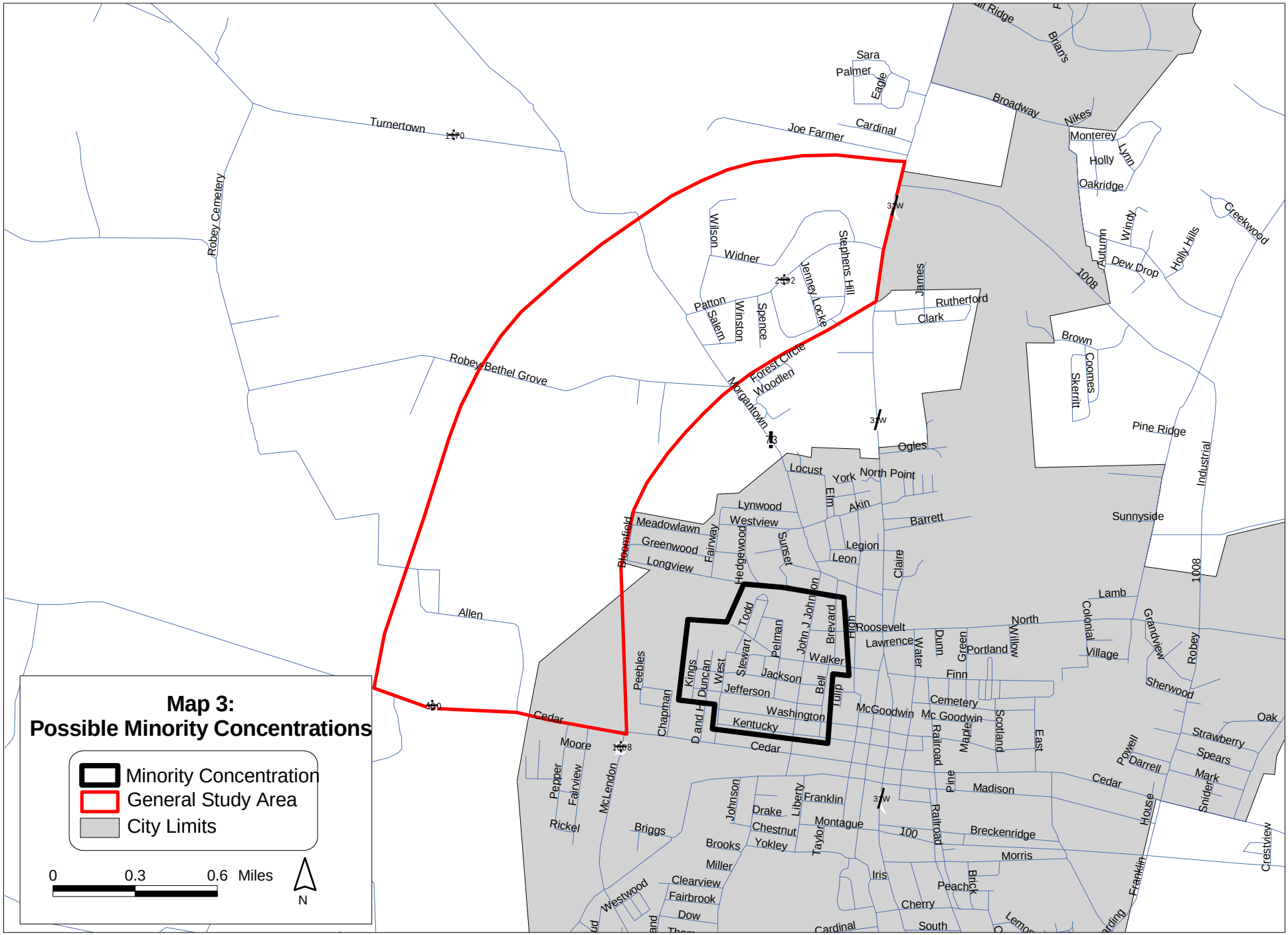
Map 2:
Census Tracts and Block Groups in Study Area

General Study Area
Census Tracts
9703
9704
001 Block Group

0 2 4
Miles

N

This map was created by the BRADD Transportation Department, May 2003.



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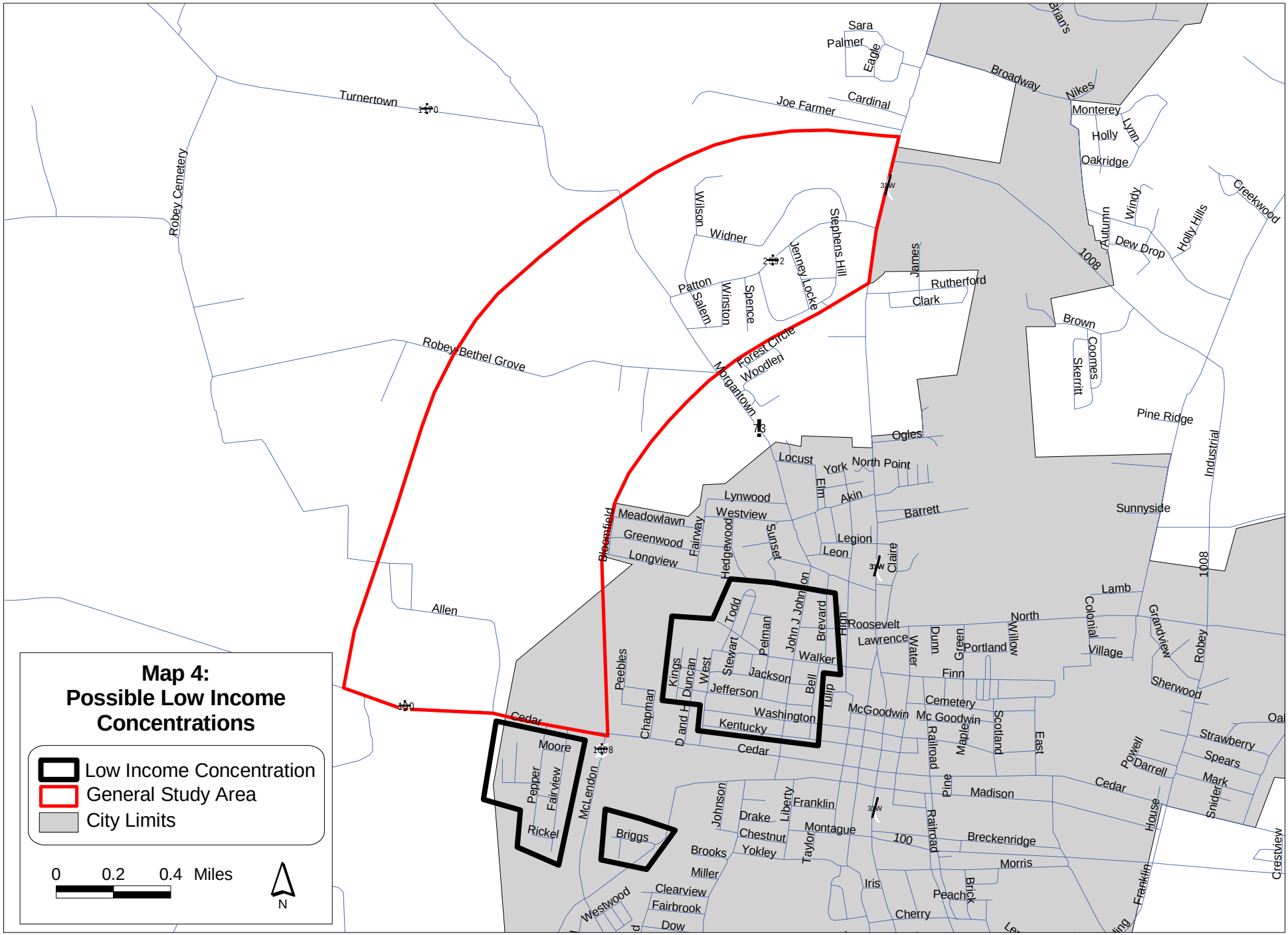

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