



ITEM NO. 5-371.00

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OCTOBER 2005

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## KY 22 SCOPING STUDY

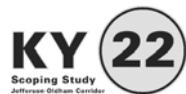
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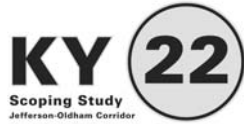
**Jefferson and Oldham  
Counties, Kentucky**

PREPARED FOR  
**Kentucky Transportation Cabinet**  
District 5  
977 Phillips Lane  
Louisville, KY 40209  
Phone: (502) 367-6411  
Contact: Chuck Berger

PREPARED BY  
**HNTB Corporation**  
One Riverfront Plaza  
401 West Main Street, Suite 601  
Louisville, KY 40202  
Phone: (502) 581-0985  
Fax: (502) 581-0987

Contact: Karen L. Mohammadi





KY 22 Scoping Study  
Jefferson and Oldham Counties, Kentucky

Kentucky Transportation Cabinet  
Six Year Highway Plan  
Item No 5-371.00

Prepared for:

Kentucky Transportation Cabinet  
District 5  
Louisville, Kentucky

Prepared by:



HNTB Corporation  
Engineers Architects Planners  
Louisville, Kentucky

In association with  
QK4  
Doe Anderson

October 2005

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## EXECUTIVE SUMMARY

KY 22 from Herr Lane (Jefferson County) to KY 329B in Oldham County is a scenic corridor traversing commercial, retail and residential areas. This complex 9.3 mile corridor is both urban and rural in nature. Frequent access points and narrow shoulders are common within the project study area.

Growth in the east end of Jefferson County and in Oldham County blossomed in the late 1990s. The population continued to grow at a very high rate well into the twenty-first century. The diversity of the KY 22 corridor in terms of land use is a direct affect of this growth. Interest in the KY 22 roadway, particularly from where it begins in east Jefferson County to the City of Crestwood in Oldham County, resulted in the *KY 22 Scoping Study*.

The Kentucky Transportation Cabinet (KYTC) contracted with HNTB Corporation to study the KY 22 corridor from Herr Lane (Jefferson County) to KY 329B in Oldham County and offer recommendations for improvements. These recommendations are based on areas of traffic concerns, environmental concerns and problems identified by the public.

The scoping study divided KY 22 into three sections: Herr Lane to Hurstbourne Lane, KY 1694 to Haunz Lane and Haunz Lane to KY 329B. The area from Hurstbourne Lane to KY 1694 contains several ongoing widening projects and was not included in the alternatives analysis. The recommendations for each section included concept alternatives and short- and mid-term improvements. The short- and mid-term improvements were developed as temporary traffic improvements to improve areas of high-concern en route to completion of the full-build alternative which addresses all of the project goals. This full-build alternative is discussed at the end of this section and in Chapter 5, **Section 5.4 - Ultimate Rebuild**.

## OTHER AREA PROJECTS

Directly affecting the KY 22 Scoping Study are several other on-going and planned projects. These include various road widening projects, road realignment projects, a resurfacing project, a traffic signal project and an intersection study. A map of the project study area and these related projects is included as **Figure ES.1**.

## STAKEHOLDER INVOLVEMENT

In order to maximize stakeholder input, a Public Involvement Plan (PIP) was created. The PIP identified KYTC representatives, residents, business owners, real estate developers, local elected officials, emergency service providers, school officials, church officials and environmental groups as potential stakeholders. The outcome of this plan was a Citizen's Advisory Council, a local elected officials group and two public meetings.

- The Citizen's Advisory Council (CAC) was composed of forty-seven (47) citizens from different neighborhoods, civic organizations, business interests and service providers who met five (5) times during the study process. They received information about the project, offered input, and discussed the issues and concerns within the project study area. To further focus their discussions the CAC was segmented into the three sections previously identified.
- The Local Elected Officials (LEO) group was comprised of over a dozen local government persons. Officials were updated at four (4) milestones throughout the study.

- Two public meetings were held, one at the beginning and one at the conclusion. The first meeting was effective at garnering information from the public to use to develop and refine alternatives. Final draft recommendations were shared at the concluding public meeting.

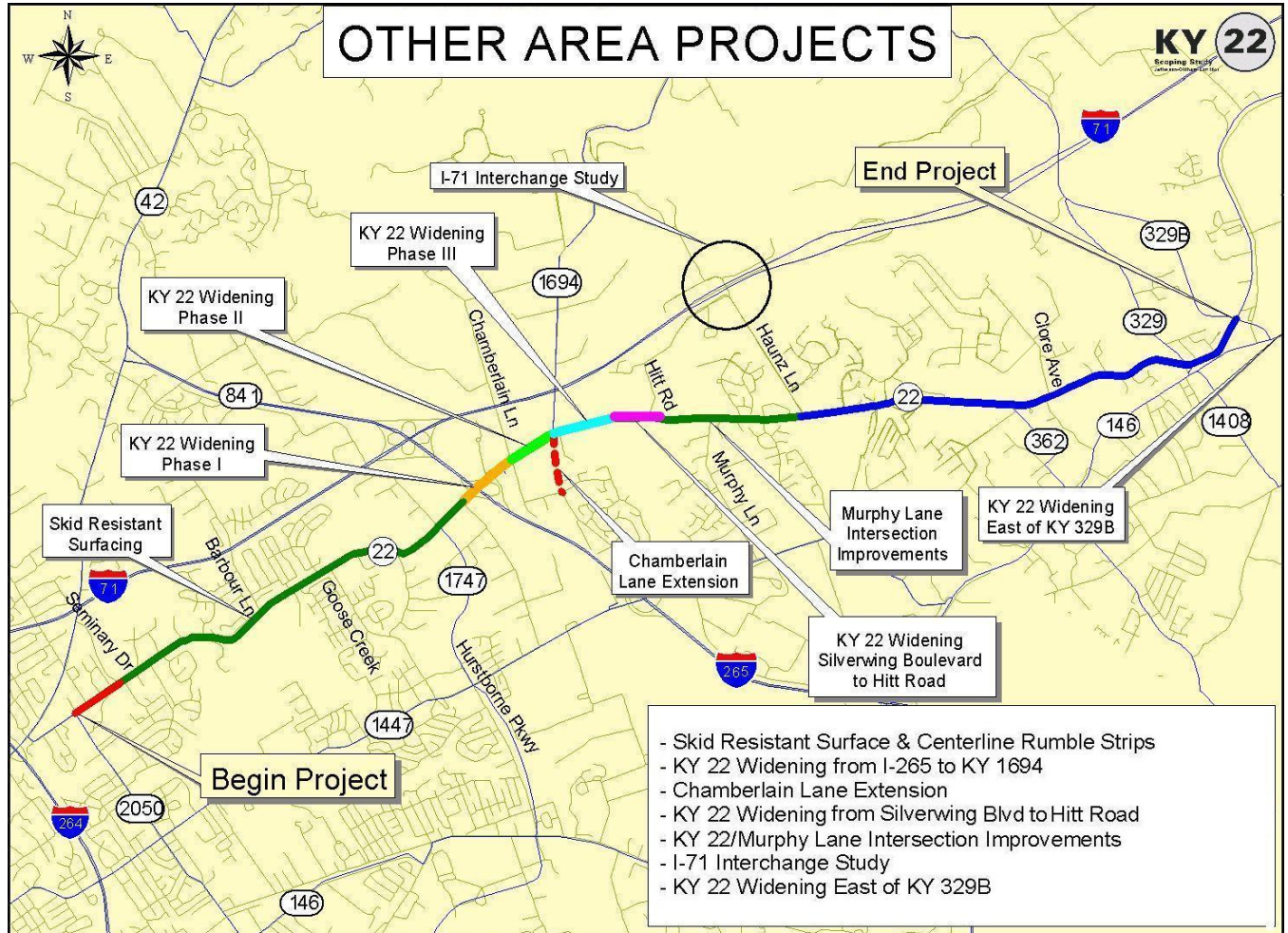


Figure ES.1 - Other Area Projects

## ENVIRONMENTAL OVERVIEW

An *Environmental Overview* of the project study corridor was prepared in accordance with the National Environmental Policy Act (NEPA), a federal law. NEPA mandates that an environmental assessment must be developed to account for potential adverse impacts to socio-economic and environmental factors. The Environmental Overview was a preliminary inventory of resources that have the potential to be impacted and an indicator of what should be studied in greater detail during subsequent NEPA proceedings.

Ten (10) streams, three (3) floodplains and one (1) wetland, Lake Louisville, were found. A habitat for three threatened and endangered species, the Indiana Bat, Gray Bat and Running Buffalo Clover, was found to be possible.

Sixty-three (63) potential environmentally sensitive sites, found along the project study corridor, were considered when planning roadway improvements. Three of these sites are on the National Register of Historical Places (NRHP) and twenty-seven appeared to be eligible. No prehistoric or historic archaeological sites were found along the project study area, but no excavation occurred.

Between the 1990 and 2000 census, Jefferson County’s population grew 4.3% and Oldham County’s population grew 38.6%. Four (4) possible minority or low-income populations were found: Fincastle, Worthington Hills, Coldstream and Lake Louisville. Five (5) communities were identified as having significant history and character: Worthington, Lake Louisville, Rollington (Hamilton), Peewee Valley and Crestwood. Three areas in the project study corridor had scenic viewsheds: Goose Creek area, Little Goose Creek area and Hite Creek area.

Contamination sites were also identified to avoid land, air and/or water pollution. Seven (7) existing underground storage tank (UST) sites, twelve (12) former UST sites, five (5) waste stockpiling sites, four (4) business sites using chemicals and eight (8) auto repair operations were found.

Any future construction projects along the project study corridor must adhere to federal and state laws that protect the environmental resources. Some of these include NEPA; Clean Air Act; Clean Water Act; Endangered Species Act; Section 106, National Historic Preservation Act; Section 4(f), Department of Transportation Act; Environmental Justice (E.O. 12898) and Resource Conservation and Recovery Act

## RECOMMENDATIONS

Draft recommendations at the end of the Scoping Study were presented to the CAC and LEO groups at a combined meeting and to the general public at the second public meeting. They were presented in the form of short- and mid-term improvements, and ultimately in the full-build alternative, termed the Ultimate Rebuild. The short-term improvements were presented with the possibility of being implemented in less than ten (10) years, the mid-term improvements in ten (10) to twenty (20) years.

The draft recommendations were updated after the joint meeting of the CAC and LEO groups and the second Public Meeting to reflect the feedback received from these meetings. Final Recommendations were grouped into near-term (maintenance), short-term, mid-term and long-term (Ultimate Rebuild) Improvements. These recommendations are discussed below.

### NEAR-TERM (MAINTENANCE) IMPROVEMENTS

- |   |                |
|---|----------------|
| 1. Trim or remove vegetation on inside of curves throughout the corridor.   | Cost: \$50,000 |
| 2. Lower the speed limits from 55 mph in Oldham County.                     | Cost: \$0      |
| 3. Add advance warning sign of school bus stop in the Lake Louisville area. | Cost: \$1000   |

- |   |           |
|---|-----------|
| 4. Investigate potentially slick pavement condition at milepost 2.4, west of Hughes Avenue. | Cost: \$0 |
|---|-----------|

## SHORT-TERM IMPROVEMENTS

The following lists of short-term projects are included in order of priority and by county.

### Jefferson County

- |   |                   |
|---|-------------------|
| 1. Add westbound left turn lane on KY 22 at Ten Broeck Way  | Cost: \$755,700   |
| 2. Add eastbound left turn lane on KY 22 at Springcrest Drive   | Cost: \$755,700   |
| 3. Add westbound left turn lane on KY 22 at Goose Creek Road.   | Cost: \$710,700   |
| 4. Widen Barbour Lane at intersection with KY 22 to help school traffic turn; Add a protected left turn signal; Add westbound left turn lane and eastbound right turn lane on KY 22 onto Standard Club Lane | Cost: \$1,623,250 |
| 5. Add turn lanes in both directions on KY 22 at Avenue of the Woods and Chattlesworth Lane.  | Cost: \$1,286,700 |
| 6. Add eastbound right turn lane and westbound left turn lane on KY 22 at Ballard High School.  | Cost: \$1,315,600 |
| 7. Add both southbound and northbound right turn lanes on Herr Lane at KY 22. (May be implemented with future development in the area.)   | Cost: \$402,900   |

### Oldham County

- |   |                   |
|---|-------------------|
| 1. At KY 329 add signal and realign intersection.   | Cost: \$1,957,000 |
| 2. Add a northbound right turn lane at KY 362 (Central Avenue) and add a westbound left turn lane and eastbound right turn lane at Oak Valley Drive.  | Cost: \$1,819,500 |
| 3. Add eastbound left turn lane onto Clore Lane and add a westbound left turn lane onto Wooldridge Avenue and include a signal. Also add a left turn lane on Clore Lane and realign Wooldridge Avenue and add a left turn lane on Wooldridge. (May be implemented with future development in the area.) | Cost: \$1,389,000 |

## MID-TERM IMPROVEMENTS

### Jefferson County

- |   |                   |
|---|-------------------|
| 1. Widen the section of KY 22 from Cliffwynde Trace to Pinehurst Lane to straighten horizontal curves, improve vertical curves and fix sight distance obstructions due to trees east of Brownhurst Cove Road. The new section will be three lanes. Trees that are removed may be replaced with other lower-growing landscaping. | Cost: \$6,805,700 |
| 2. Widen road to three lanes from Kitty's Farm/Nursery to Hurstbourne Parkway   | Cost: \$9,092,250 |



(KY 1747), including horizontal and vertical improvements.

3. Construct a three-lane section just west of Windy Willow Drive and ending at East Orchard Grass Boulevard. Include an eastbound left turn lane, a westbound right turn lane and consider signaling intersection at Windy Willow. Add a westbound right turn lane and increase southbound right turning radius at Haunz Lane, and consider signaling intersection. Cost: \$6,624,550
4. Construct a three-lane section between KY 329 and the KY 329 Bypass in Crestwood and implement access management. Cost: \$3,604,900
5. Construct a three-lane section in Lake Louisville to straighten horizontal curves, improve vertical curves, improve drainage and fix sight distance obstructions between East Orchard Grass Boulevard and Briar Hill Parkway. Cost: \$5,477,200

## ULTIMATE REBUILD

The final goal of the KY 22 Scoping Study is realized in the Ultimate Rebuild alternative. It consists of widening KY 22 to three lanes from Herr Lane to Hurstbourne Parkway (two travel lanes and a shared middle left-turn lane), five lanes from KY 1694 (Brownsboro Road) to Quarry Drive (four travel lanes and a shared middle left-turn lane) and three lanes from Quarry Drive to KY 329B (two travel lanes and a shared middle left-turn lane). Incorporated into the widening of KY 22 are turning lanes, curbs and gutters, bike lanes and sidewalks.


Right-of-way acquisition, utility relocation, design and construction of the Ultimate Rebuild alternative could take over twenty (20) years to complete. The cost estimate for the Ultimate Rebuild is shown in **Table ES.1**; more detail is included in Chapter 5, **Section 5.4**.

**Table ES.1 - Cost Estimate for Ultimate Rebuild\***

Phase	Jefferson County	Oldham County	Total
Design	\$1,089,000	\$1,400,000	\$2,489,000
Right of Way	\$16,929,000	\$11,813,500	\$28,742,500
Utilities	\$11,310,000	\$3,365,000	\$14,675,000
Construction	\$10,890,000	\$12,600,000	\$23,490,000
<b>Total</b>	<b>\$40,218,000</b>	<b>\$29,178,500</b>	<b>\$69,396,500</b>

\* These costs do not reflect construction of short-term or mid-term improvements.

**CRITICAL ACCIDENT RATE FACTORS**

-  1.0 - 1.99
-  2.0 - 2.99
-  3.0+

The Critical Accident Rate Factor (CARF) is the actual accident rate divided by the roadway design accident rate. CARF values greater than 1.0 indicate a higher frequency of accidents.



**HORIZONTAL DEFICIENCIES**

-  Less than Desirable
-  Less than Adequate



**VERTICAL DEFICIENCIES**

-  Less than Desirable
-  Less than Adequate



**KY 22 SCOPING STUDY**  
Herr Lane to KY 1694



Figure 1.4 - Critical Rate Factors and Horizontal and Vertical Deficiencies

**CRITICAL ACCIDENT RATE FACTORS**

-  1.0 - 1.99
-  2.0 - 2.99
-  3.0+

The Critical Accident Rate Factor (CARF) is the ratio of the accident rate for a particular roadway segment to the rate of the reference segment for that same class of roadway.



**HORIZONTAL DEFICIENCIES**

-  Less than Desirable
-  Less than Adequate



**VERTICAL DEFICIENCIES**

-  Less than Desirable
-  Less than Adequate

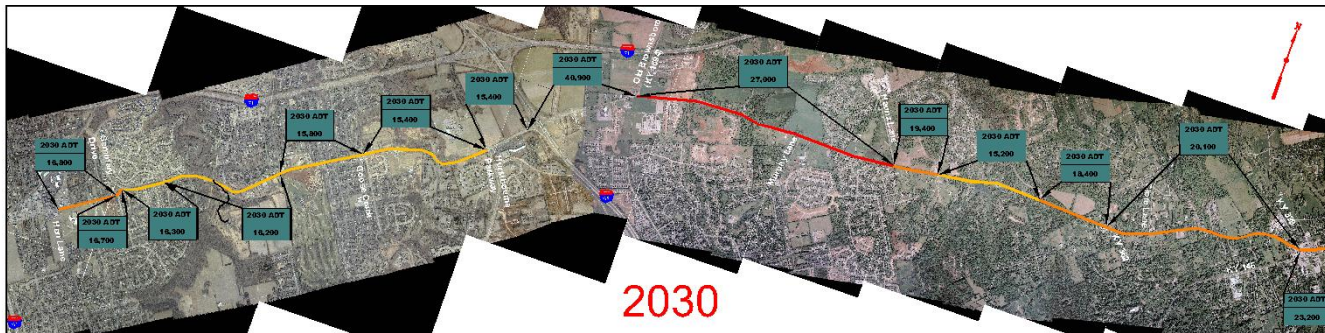
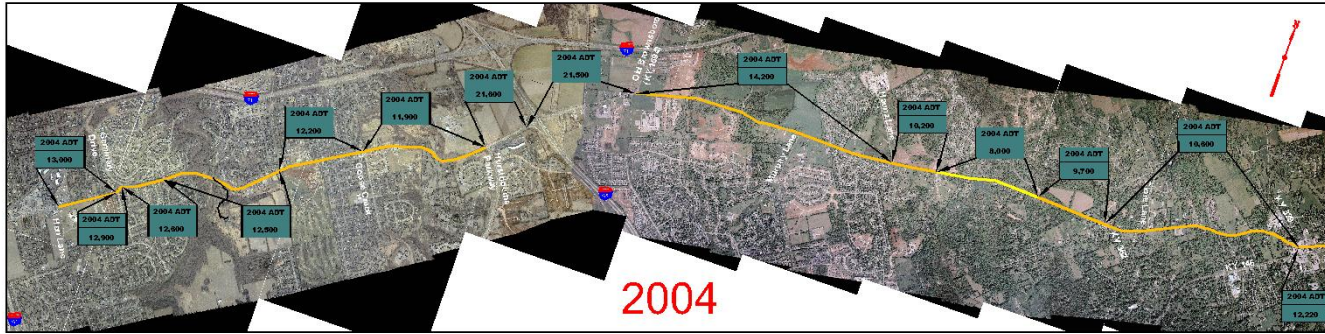


**KY 22 SCOPING STUDY**  
**KY 1694 to Crestwood**



Figure 1.5 - Critical Rate Factors and Horizontal and Vertical Deficiencies (cont.)

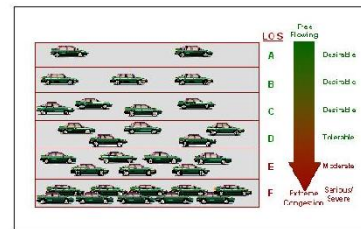
# AVERAGE DAILY TRAFFIC & LEVEL OF SERVICE



ADT = Average Daily Traffic (in Vehicles per Day)

**LEVEL OF SERVICE**

	<b>A</b>		<b>D</b>
	<b>B</b>		<b>E</b>
	<b>C</b>		<b>F</b>



**KY 22 SCOPING STUDY**  
Herr Lane to Crestwood

Figure 1.6 - Average Daily Traffic (ADT) and Level of Service (LOS)

## 1.0 PROJECT BACKGROUND

KY 22 is a unique road that travels through beautiful areas of northeast Jefferson County and southwest Oldham County. The road traverses through both rural and urban areas containing many driveways, without shoulders or sidewalks, and surrounded by vegetation. The rural areas are characterized by rolling hills and increasing development. Growing interest in the future of the KY 22 corridor, a State Primary Road, from Herr Lane in Jefferson County to Crestwood in Oldham County, over the past decade resulted in this *Scoping Study*. The purpose of the *Scoping Study* was to define the areas of concern, develop conceptual solutions and identify environmental constraints within the study area.

### 1.1 PROJECT HISTORY

In late 1999, the Kentucky Transportation Cabinet (KYTC) contracted with HNTB to determine potential highway improvements on the 9.3 mile section of KY 22 from Herr Lane to the City of Crestwood. A public involvement program and environmental overview were also included in this *Scoping Study*. The recommendations include near-term (zero to two years) short-term (ten years or less), mid-term (ten to twenty years), and long-term (twenty to thirty years) projects.

A comprehensive study which included public support was considered very important in order to implement highway improvement projects in this corridor. A non-traditional approach to highway design which included the context of neighboring projects and the existing environs was agreed upon near the onset of the *Scoping Study*.

Numerous projects were under development in the study area including new subdivisions, a new corridor study and several improvement projects around the I-265 area. The study area and initial schedule were extended due to these ongoing projects and the need for supplemental data that would result from those projects which would impact the analyses of this KY 22 corridor. **Figure 1.1** depicts the general project environs and related studies in the vicinity of the KY 22 *Scoping Study*. To preserve existing budgets, the majority of the supplemental data was gathered through these related projects. As a result significant revisions to the schedule were incurred. **Figure 1.2** outlines the general progress of this *Scoping Study*.

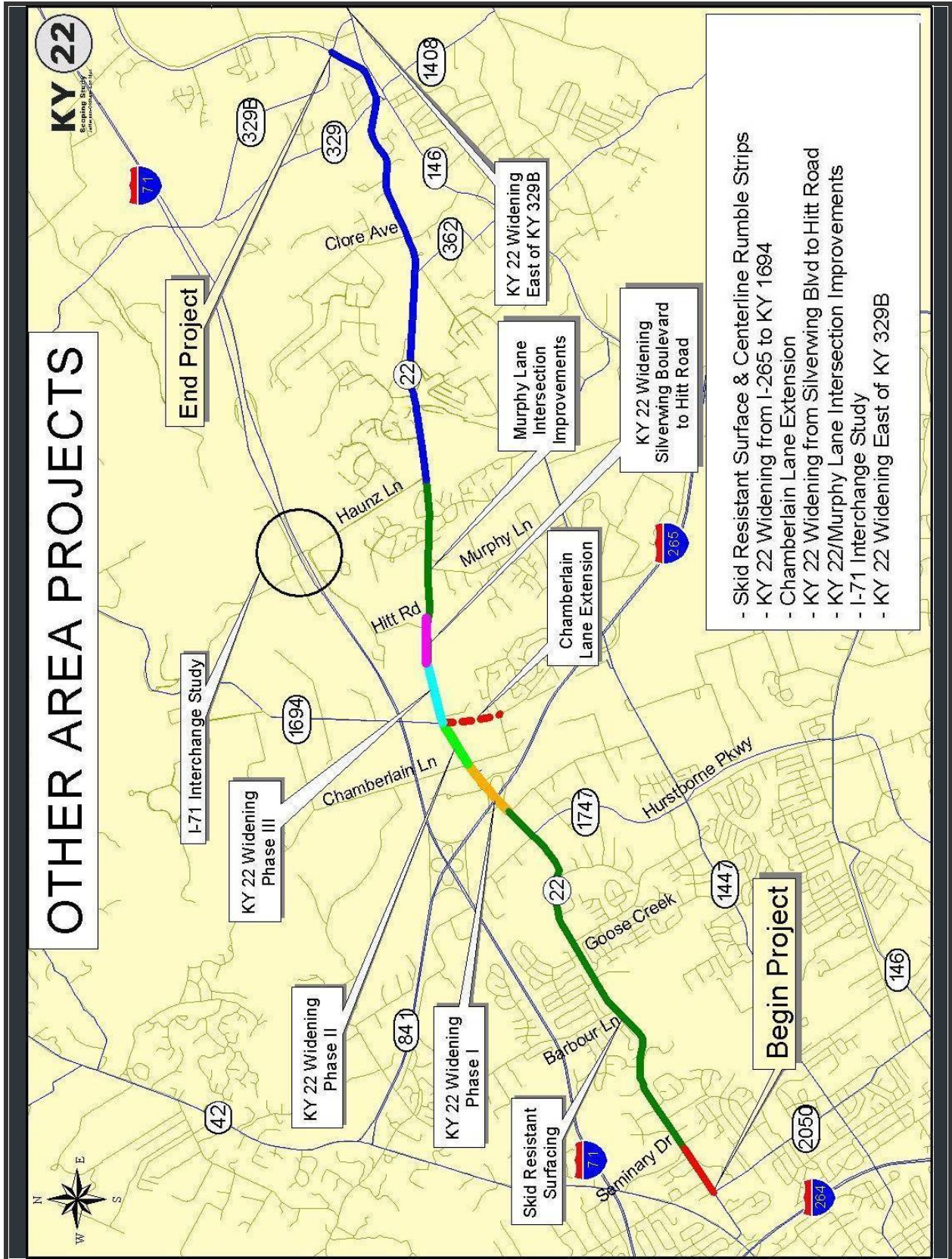


Figure 1.1 - Related Projects

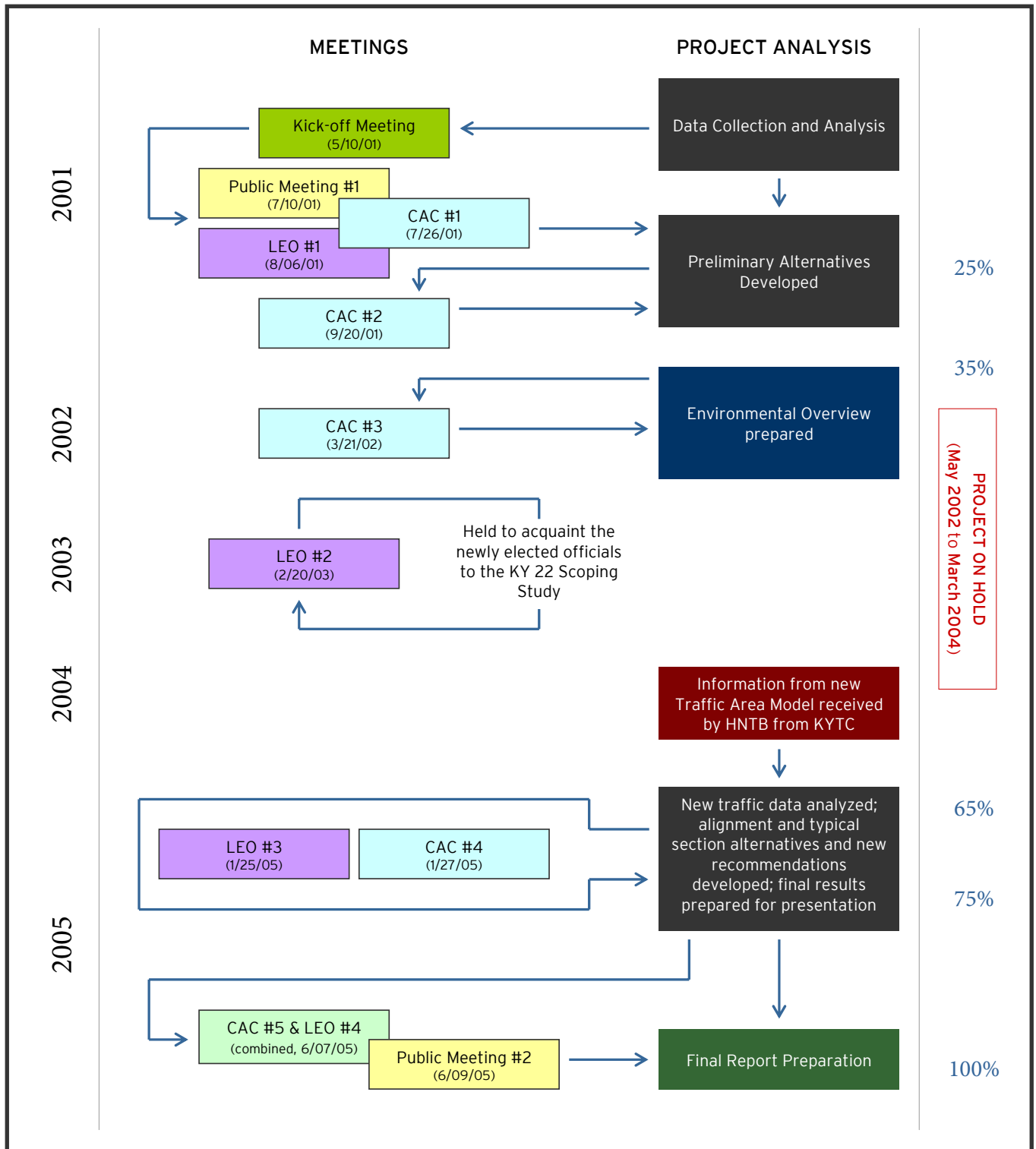


Figure 1.2 - Project Timeline

## 1.2 EXISTING CONDITIONS

KY 22 in Jefferson and Oldham counties varies in terms of its characteristics and functional classification. This variation with a 9.3 mile segment underscored the project need to develop solutions within the context of the community environs.

### 1.2.1 Roadway Characteristics

**Table 1.1** outlines the characteristics of four (4) distinct areas of KY 22: Herr Lane to KY 1747 (Hurstbourne Parkway), KY 1747 to KY 1694 (Brownsboro Road), KY 1694 to the Oldham County Line and the Oldham County Line to KY 329B (Crestwood Bypass). These corridors are shown in **Figure 1.3**.



#### Herr Lane to KY 1747

This section of KY 22 is the western-most portion of the project study corridor and is characterized as mainly residential. Both a high school and an elementary school are located in this portion of the project study corridor. It is also one of the most scenic areas of the project study corridor with tree canopies throughout. It is classified as an Urban Minor Arterial Street with rolling terrain and carries the second-highest daily traffic in the project study corridor.

#### KY 1747 to KY 1694

This area, from Hurstbourne Parkway to Brownsboro Road, carries the most daily traffic and is the most developed area of the corridor, and therefore is classified as an Urban Principal Arterial. The I-265 (Gene Snyder Freeway) interchange with KY 22 is located between these two roads and is the source of much of the traffic, along with the high-density commercial and retail development. This area was not included in the alternatives analysis.

#### KY 1694 to the Oldham County Line

This section of the KY 22 corridor leads away from the development into a more rural and residential area. It has typical rural-road deficiencies of limited sight distance and small shoulder width. Numerous subdivisions have been developed or proposed in this area contributing to its growing congestion. Classified as an Urban Minor Arterial Street, this section along with the portion of KY 22 studied in Oldham County has the lowest daily traffic.



### Functional Classifications

**Urban Principal Arterial** – Serves the majority of travel to a metropolitan center and provides connections with the majority of rural arterials entering the urban area.

**Urban Minor Arterial** – Interconnects with the principal urban arterial system and provides congestion relief to the higher system.

**Rural** – Provides lower levels of mobility, but maximizes local access to residential and commercial property.



### The Oldham County Line to KY 329B

This section of KY 22 in Oldham County is classified as an Urban Minor Arterial Street and as previously mentioned carries the lowest amount of daily traffic. The majority of this road is characteristic of a rural road until the City of Crestwood. Within the City of Crestwood the area is mostly commercial. The speed limit of this road varies from 35 MPH to 55 MPH.

**Table 1.1 - KY 22 Roadway Characteristics**

	HERR LANE TO KY 1747	KY 1747 TO KY 1694	KY 1694 TO OLDHAM COUNTY LINE	OLDHAM COUNTY LINE TO KY 329B
County	Jefferson	Jefferson	Jefferson	Oldham
Functional Classification	Urban Minor Arterial Street	Urban Principal Arterial	Urban Minor Arterial Street	Urban Minor Arterial Street
State System Class	State Primary	State Primary	State Primary	State Primary
Type Road	Undivided Highway	Undivided Highway	Undivided Highway	Undivided Highway
Scenic Byway System	No	No	No	No
National Highway System	No	No	No	No
National Truck Network	No	No	No	No
Defense Highway	No	No	No	No
Truck Weight Class	AAA	AAA	AAA	AAA
Extended Weight System	No	No	No	No
Average Right-of-Way Width (Feet)	63	150	70	60
Lane Width (Feet)	10.8	12	10	10
Driving Lanes	2	4	2	2
Shoulder Width (Feet)	2-8	9	2	3
Percent Passing Sight Distance	N/A	N/A	N/A	5
Number of Bridges	0	1	0	0
Type of Terrain	Rolling	Rolling	Rolling	Rolling
Traffic Volume (Vehicles per Day)	12,910 (Year 2003)	19,816 (Year 2004)	11,130 (Year 2002)	8,730 (Year 2002)
Speed Limit (Miles per Hour)	35	45	45	35 - 55
Surface Type	High Flexible, Composite, Flexible Over Rigid	High Flexible	High Flexible	High Flexible
Last Year Surfaced	1991	1991	1999	1997

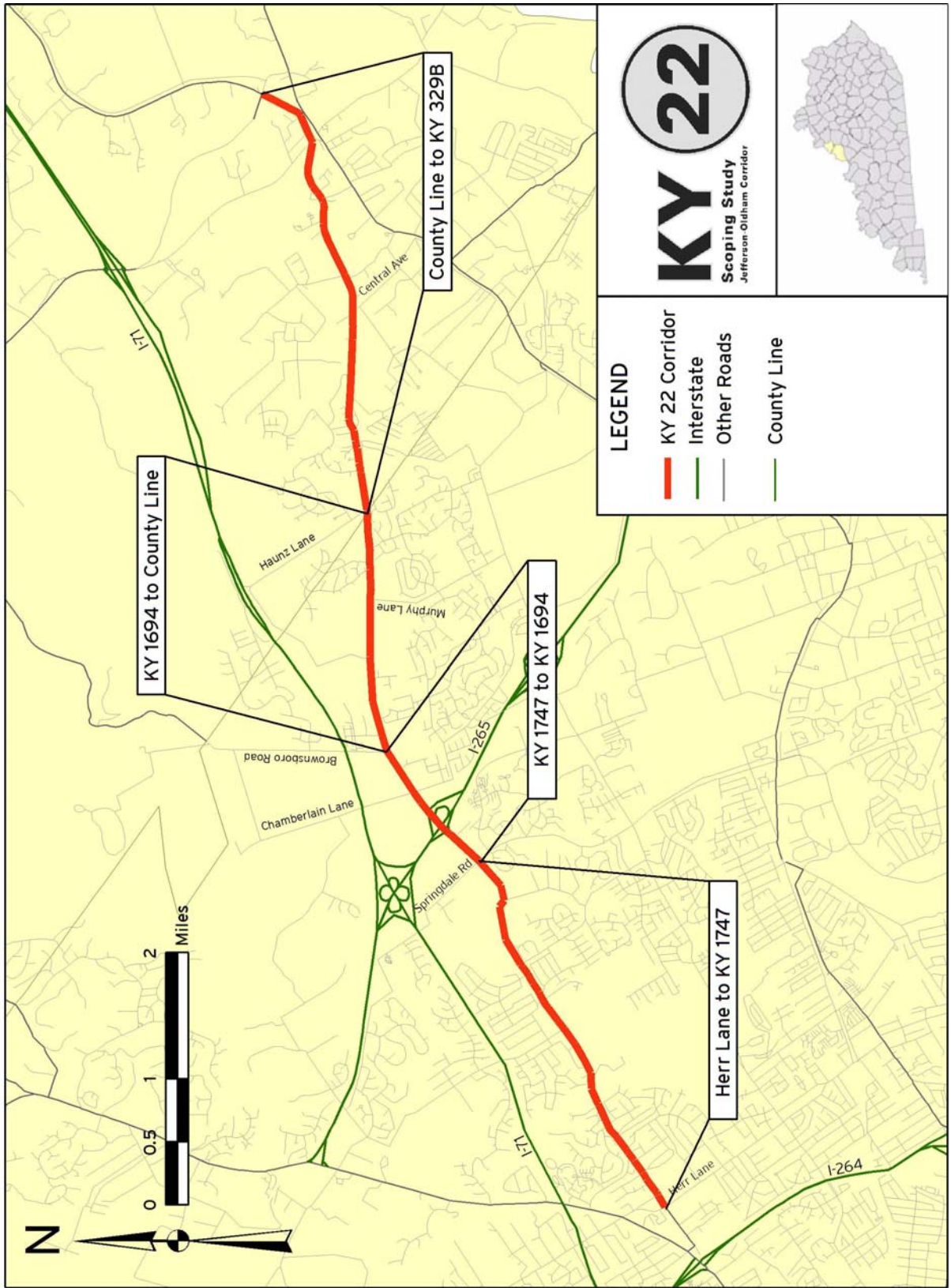


Figure 1.3 - KY 22 Scoping Study Areas

### 1.3 AREA PROJECTS

As listed in **Table 1.2** (and shown previously in **Figure 1.1**) there were numerous ongoing projects that directly affected the Study corridor. These are broken into four (4) areas below: Road Widening, Intersection Improvement, Studies and Resurfacing.

#### Road Widening

The first phase widening of KY 22 from the Gene Snyder Freeway to Chamberlain Lane is a major project that was awarded for construction in June 2004. It is planned to be completed by the fall of 2005 and includes six-lanes with curbs and gutters, bike lanes, a sidewalk on the north side of KY 22 and a raised grass median twenty (20) feet in width. This project utilizes both private and state funds.

**Table 1.2 - Projects Affecting the KY 22 Corridor**

Item No.	Description
5-320.10	Phase I - KY 22 widening from Gene Snyder Freeway (I-265) to Chamberlain Lane and widening of Chamberlain Lane
5-320.20	Phase II - KY 22 widening from Chamberlain Lane to KY 1694, widening of KY 1694, and relocation/extension of Chamberlain to line up across from KY 1694
N/A	Phase III - KY 22 widening from Silverwing Boulevard to Hitt Lane
5-141.00	Intersection improvement at KY 22 and Murphy Lane
N/A	KY 22 Resurfacing
5-68.00	I-71 Interchange Study
5-304.01	KY 22 Widening East of KY 329B
5-367.00	KY 22 / Old Henry Road - Crestwood Connector Subarea Model
N/A	Oldham County Major Thoroughfare Plan

Just east of the first project, the second phase of widening of KY 22 will continue from Chamberlain Lane to KY 1694. KY 1694 will also be widened north of KY 22 to I-71. Chamberlain Lane will be extended from south of KY 22 to align with KY 1694 at the KY 22 intersection creating New Chamberlain Lane. The design will also be six-lanes with curbs and gutters and raised grass median twenty (20) feet wide. Between Chamberlain Lane and KY 1694 there will be sidewalks and bike lanes on both sides of the road. Final design is expected to be completed in 2005. This project utilizes both private and state funds.

Upon completion of Phases I and II, KY 22 will have six travel lanes from the Gene Snyder Freeway to KY 1694. The road will also allow for bicycle travel and will have five foot sidewalks. New interconnected traffic signals will be installed at the off-ramp from I-265 Eastbound to KY 22, at Chamberlain Lane, at KY 1694/New Chamberlain Lane and possibly at Brownsboro Glen Road.

The third phase of widening of KY 22 will be from Silverwing Boulevard to Hitt Lane. This area will include a design for a three-lane rural section (two through lanes and one two-way left turn lane) with shoulders on both sides and no sidewalks. The final design is ongoing.

### Intersection Improvement

The intersection of Murphy Lane at KY 22 was listed as the highest priority by the public in terms of safety improvement early in the study development. At that time the KYTC had already initiated an improvement project for the area. The improvements to this intersection will include lowering the existing hill to enhance the vertical sight distance so that drivers can see approaching vehicles. The project also involves installing left-turn lanes and a traffic signal. Construction is expected to begin in the summer of 2005.

### Studies

An Interchange Study of I-71 was set forth to review possible locations for a new I-71 interchange, and a corridor that could connect the new interchange to KY 22. The project is being led by Metro Louisville Public Works along with the KYTC and Oldham County. If a new interchange is selected it will greatly affect the current traffic use on KY 22.

Also, an ongoing project is studying the Crestwood Bypass (Old Henry Road - Crestwood Connector) which is being supervised by the KYTC.

### Resurfacing

A resurfacing project along KY 22 from Seminary Drive to Hurstbourne Parkway was completed in the spring of 2005. The project included adding rumble strips on both sides of the road as well as in the centerline. Rumble strips were added in the centerline of the road due to drivers crossing the centerline when making the sharp turns that are characteristic of this portion of the KY 22 corridor. These would alert the drivers when their vehicles cross the centerline; enabling them to adjust their vehicle accordingly.

## 1.4 CRASH ANALYSES

One of the primary goals of any roadway improvement process is to provide a safe and efficient roadway. Safety along a particular roadway section may be measured in a number of different ways. KYTC uses a comparison of the crash rates (based on type, severity, and number). The road under review is compared to similar roads across the Commonwealth. This comparison yields what is known as the Critical Rate Factor (CRF), which is greater than 1.0 if the roadway has a higher than normal crash rate. Currently, there are approximately forty-nine (49) locations within the limits of the study that exceed the CRF of 1.0. Most of these locations are at intersections.

A summary of the crash history along KY 22, broken down by segment, is shown in **Table 1.3**. Because the data indicates a higher number of intersection crashes, each intersection along the project route was investigated to determine if geometric or signage improvements were required. Intersections are identified in **Table 1.4**.

**Table 1.3 - Annual Crash Rates by Roadway Segment**

KY 22 Segment	Rate (per 100 MVM)	Statewide Rate*	Percent Difference
Herr Lane - KY 1747	4.71	2.72	+ 73%
KY 1747 - KY 1694	3.12	2.72	+ 15%
KY 1694 - County Line **	2.04	2.72	- 25%
County Line - KY 329B **	3.53	2.72	+ 30%

\* Statewide rate (per 100 Million Vehicle Miles or MVM) is for two lane roads.

\*\* These rates are for all of KY 22 in Jefferson and Oldham counties, not just the study area.

**Table 1.4 - Intersections Having the Ten (10) Highest Crash Rates**

Segment	Intersection	Crash Rate
KY 22 - Herr Lane to KY 1747	Lime Kiln Lane / Herr Lane	7.2
	Ballantrae Circle	3.5
	Brownhurst Cove Road	3.8
	Standard Club Lane	4.7
	Ten Broeck Way	9.9
KY 22 - KY 1747 to KY 1694	Simcoe Lane	3.3
	I-265 S. Off-ramp / I-265 S. On-ramp	4.4
	Brownsboro Road	3.6
KY 22 - KY 1694 to KY 329B **	Murphy Lane	3.5
	KY 329	3.8

\*\* These rates are for all of KY 22 in Jefferson and Oldham counties, not just the study area.

Figure 1.4 and 1.5 indicate the crash rates throughout the entire corridor.

## 1.5 VERTICAL AND HORIZONTAL DEFICIENCIES

In the initial phases of the study a comparison was made between the existing geometric features of the road and current design standards. As expected, much of the road reflects older design criteria.

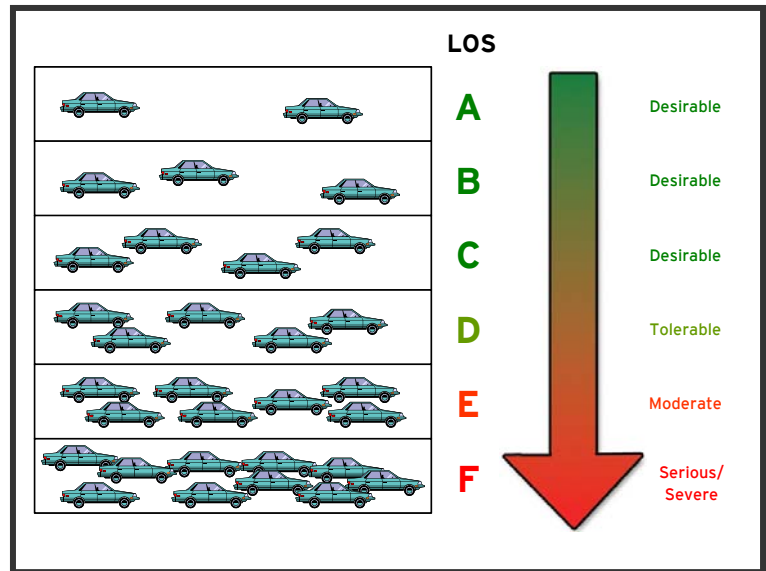
Today, there are more than thirty-five (35) segments with geometric features that may be considered less than adequate, given the traffic volume and operating speeds on the route and more than 40 segments with geometric features that may be considered undesirable. This is displayed in Figure 1.4 and 1.5.

## 1.6 TRAFFIC VOLUMES AND LEVEL OF SERVICE

Existing and future traffic volumes were obtained as a result of the supplemental data requests. Traffic volumes were obtained from the traffic forecasting on the Old Henry Sub Area Model, Figures 1.6 show the

existing and projected traffic volume on the corridor. Traffic volumes on an individual roadway are typically qualified in terms of the level of service (LOS) the roadway provides, by balancing its characteristics with the existing or future peak hour traffic volumes. Roadway LOS range from A to F.

Ranges A through C represent free flowing conditions and are considered desirable LOS. Under LOS D, congestion is occurring but considered tolerable. Congestion and delay increases under LOS E to a level that is considered at capacity. LOS F ranks as the least functional level of traffic movement, and is considered serious congestion.



Traffic counts and design-year (2030) forecasts provided by KYTC Division of Planning indicated that as of 2004 approximately one third of the corridor was performing at LOS E or F. Based on available traffic projections, by the Design Year 2030 about 90% of the corridor will be functioning at Level of Service E or F (see **Figure 1.6**).

## 2.0 STAKEHOLDER INVOLVEMENT

One of the primary goals of the scoping study was to engage project area stakeholders in developing solutions to the transportation challenges along KY 22 in Jefferson and Oldham counties. Therefore a Public Involvement Plan (PIP) was developed and implemented to assist in determining the local needs and concerns of diverse neighborhoods along the corridor, identify potential impacts which are not easily quantifiable, and ultimately build consensus for a recommended solution.

In addition to representatives of KYTC, the PIP identified residents, business owners, real estate developers, local elected officials, emergency services providers, school officials, church officials, and environmental groups as concerned stakeholders.

A three-tiered approach to public involvement was used to engage these stakeholders. The process included these elements:

**Citizens Advisory Council (CAC)** - A diverse group of 40 to 50 citizens was formed to receive information on the project, discuss issues and concerns, and comment on potential solutions to the transportation needs along KY 22. The council members included representatives of neighborhood groups, civic organizations, business interests and public service providers. The council was divided into three geographically based subcommittees:

- West - representatives from Herr Lane to Hurstbourne Parkway
- Central - representatives from Hurstbourne Lane to Haunz Lane
- East - representatives from Haunz Lane to Crestwood

These subgroups identified local community concerns and preferred solutions; the full council worked collectively to develop consensus solutions that account for these community concerns.

**Local Elected Officials (LEO)** - More than a dozen local elected officials received informational briefings at key junctures in the scoping process.

**Public** - Open meetings held near the beginning and conclusion the project to provide information about the project and to gain citizen feedback.

### 2.1 RESULTS OF PIP

In summary, ten meetings were held from May of 2001 to March of 2005 and are listed individually in **Table 2.1**. Minutes and/or summaries for all meetings can be viewed in **Appendix A**.

**Table 2.1 - KY 22 Scoping Study Meetings**

Meeting	Date
Public Meeting #1	July 10, 2001
Citizen’s Advisory Council (CAC) Meeting #1	July 26, 2001
Local Elected Officials (LEO) Meeting #1	August 6, 2001
CAC Meeting #2	September 20, 2001
CAC Meeting #3	March 21, 2002
LEO Meeting #2	February 20, 2003
LEO Meeting #3	January 25, 2005
CAC Meeting #4	January 27, 2005
LEO #4 & CAC #5 Combined Meeting	June 7, 2005
Public Meeting #2	June 9, 2005

## 2.2 PUBLIC MEETINGS

The two public meetings were advertised in advance. Each meeting was held within the study corridor. Attendees were offered the opportunity to submit comments verbally and/or in writing. Members of the KYTC and the KY 22 project team were in attendance. Attendance by the CAC and LEO members was encouraged.

### 2.2.1 Public Meeting 1

An Action Plan for the first public meeting was developed in order to effectively and efficiently disseminate information to the general public, as well as solicit valuable feedback. The target audience was determined to be area residents, area businesses, real estate developers, local elected officials, emergency service providers, school officials, church officials, environmental groups and news media. Three objectives were established:

1. Determine local needs and concerns of diverse neighborhoods along the road.
2. Identify potential impacts of possible alternatives.
3. Build consensus for a recommended solution.

Northeast Christian Church was selected as the meeting place due to its familiar location and ability to accommodate a large group. A letter was distributed to local elected officials informing them of the public meeting and the CAC group that was to form subsequently. Informative fliers about the meeting were posted at businesses along the project study corridor, a meeting notice was faxed to calendar of events contacts, and notices were distributed in the Courier-Journal (Jefferson County) and the Oldham Era (Oldham County). Follow-up calls were made after each task was performed to communicate the importance of the public meeting.



Citizens in attendance voiced many concerns and suggestions for the project study corridor. Forty-seven (47) comment forms were collected which represented approximately one-third of the total attendees. Safety was the number one concern expressed by the attendees; suggested solutions included additional stoplights, additional lanes and enforcing the existing speed limit. Preserving the existing character of the road was the other main concern of the public.

Specific intersections were mentioned as safety hazards that needed stoplights. Murphy Lane was mentioned the most, followed by (in no particular order) Chamberlain Lane, Haunz Lane, KY 1694, Barbour Lane and Springcrest Drive. Total comments about stoplights numbered 35. A few of the comments suggested that safety measures be implemented that do not take away from the road's "rustic feel." Six (6) people commented that the road should not be widened, more specifically between Herr Lane and Hurstbourne Parkway. However, more people said the road should be widened, the majority saying east of I-265. Other suggestions in the comments included adding a median and sidewalks, improving lighting along the road and planning for traffic increases due to local developments (such as The Summit and Norton Commons).

### 2.2.2 Public Meeting 2

There was a second public meeting held on June 9, 2005, at Kentucky Country Day School. It was an open-house format with sign-in sheets and comment forms located near the entrance. In the room there were two sets of display boards arranged from west to east showing the project study corridor with the full-build alternative, short- and mid-term improvements, LOS 2004, LOS 2030 and the Critical Rate Factors (CRFs).

Valuable feedback from the general public was obtained at this meeting; as well as publicity from three major television stations. A total of fifty-six (56) comments were received after the public meeting through the comment form and the email address given to the public at the meeting.



Safety, cost, environmental and road characteristic concerns and suggestions were submitted by the public during and after the second Public Meeting. Support for the recommended improvements as methods for enhancing safety and efficiency, and further suggestions on how to improve the safety of KY 22 were the majority of the responses. Yet, apprehension over the loss of the scenic beauty of KY 22 was also expressed by the public; as well as the high costs associated with some of the recommended improvements. A comprehensive list of these comments and a copy of the Public Meeting 2 handout is included in **Appendix A**.

### 2.3 CITIZENS ADVISORY COUNCIL MEETINGS

A full list of the Citizens Advisory Council (CAC) members can be viewed in **Appendix B**.

### 2.3.1 Citizen's Advisory Council Meeting 1

The first CAC meeting confirmed the concerns of the general public as the CAC members emphasized the necessity of safety and improved mobility along the project study corridor. They gave many different suggestions for methods of improvement with regards to safety along the project study corridor. These suggestions are included in the list below.

1. **Murphy Lane:** The intersection of Murphy Lane at KY 22 is the most important safety issue to the members of the CAC. Proposed solutions for this intersection came from all four groups at the first CAC meeting. A traffic light was recommended to replace the existing flashing light at the intersection, as well as adding flashing lights at bus stops. An interchange was proposed at I-71 to provide direct access from Murphy Lane. This would preserve the temperament of the road as a scenic corridor by potentially relieving it of commercial traffic. Additional travel lanes for Murphy Lane were also recommended. Above all, the groups stressed that the Murphy Lane intersection needs attention immediately. (Construction started on this project July '05.)
2. **Haunz Lane:** The CAC members also suggested direct access to I-71 from Haunz Lane, as well as additional lanes on KY 22 near the intersection in the form of turning lanes. One group noted that this intersection carries extensive heavy-truck traffic from the surrounding quarries and cement plants. In general, sight distance is also a problem.
3. **Barbour Lane:** A wider turning lane and a traffic light was suggested for Barbour Lane, along with direct access to I-71. (Signal has been installed.)
4. **KY 1694:** The CAC members wanted access to Interstate 71 (I-71) from KY 1694. They also mentioned adding dual left turning lanes and a traffic light at KY 22. (Signal in place 5-15-05.)
5. **Neighborhoods and Small Cities:** There are safety problems that exist at entrances to local neighborhoods and small cities along the project study corridor. There were three specific suggestions to improve local access – adding a stoplight and turn lane at Goose Creek Road, replacing the existing anti-skid surfacing between Goose Creek Road and Hurstbourne Parkway and adding flashing lights at the intersection of Ten Broeck Way and KY 22. There are similar areas of interest along the project study corridor which were given by the CAC members including Lake Louisville, Spring Valley, Woods of St. Thomas, and the City of Old Brownsboro Place.
6. **I-265:** The direct traffic impact that I-265 has on KY 22 was noted by all the groups. Recommendations included redesigning the I-265/KY 22 intersection and installing a traffic light at the end of the exit ramp off I-265 NB onto KY 22 due to left turns being difficult to perform from the northbound ramp. (Under construction 2004-05.)
7. **Other:** The usage of buried utilities was a concern as was the existing speed limit. The CAC members requested an evaluation of the speed limit along the project study corridor and increasing police patrols. There is a dangerous bend in KY 22 near Brownhurst Cove, and drainage problems exist around the area at Brownhurst Cove and Kitty's Nursery.

While not as important as safety, the scenic character of the project study corridor was mentioned by members of the CAC. Considerations for improvement included adding sidewalks and/or bike paths; and constructing a new bypass to alleviate KY 22 traffic, allowing it to remain intact. Improving the lighting at areas along KY 22 and removing the utility islands at I-265 and Seminary Drive were also mentioned. The CAC members listed specific scenic areas which were the Woods of St. Thomas to Ten Broeck Way, Hite Creek to Murphy Lane, west of Orchard Grass Hills to east of Crestwood, and Herr Lane to Hurstbourne Parkway.

The CAC members noted that there were several environmental areas and historic properties that should not be disturbed. Hite Creek, Goose Creek, Little Goose Creek and mature trees were some environmental features mentioned. Historic properties/areas included Porter Estate, Spring and springhouse near Springcrest Drive, cemeteries around Murphy Lane and Chamberlain Lane, stone bridges and eight historic houses.

CAC members were concerned with the impact that improvements along KY 22 would have on property owners, specifically noise pollution, underground utilities and the proximity of homes and businesses to the road. A moratorium on all development along the project study corridor was suggested as a way to weigh these types of concerns.

### 2.3.2 Citizen's Advisory Council Meeting 2

The second CAC meeting was held on September 20, 2001, at South Oldham High School. During this meeting solutions were proposed to the problems acknowledged at the last CAC meeting. Afterwards questions from the CAC members were addressed.

The Kentucky Transportation Cabinet (KYTC) was considering five alternatives to improve Murphy Lane at that time, all of which include left-turn lanes to improve safety and mobility. Four of the alternatives widened KY 22 and lowered the grade to improve sight distance, while the other one relocated Murphy Lane to the west and left the KY 22 grade unchanged. The benefit to the latter alternative was that it had the possibility of having a hastier completion time. Traffic signals to Murphy Lane were not promised, but were still an option and would be considered further after KYTC conducted a new traffic analysis.

Planned changes around I-265 and KY 1694 were announced as developers worked with KYTC on improvements to the KY 22/I-265 interchange. A computer program that analyzed current and future traffic impacts to establish alternative effectiveness was displayed for the CAC members. A slide presentation was used as a medium to present options for improvements to the project study corridor and to facilitate discussion. Eight scenarios were given as potential improvement options. These can be viewed in the meeting minutes for the CAC Meeting #2 in **Appendix A**.

At the previous CAC meeting an additional interchange at I-71 was requested for several different cross-streets of KY 22. It was stated that the study did not include an in-depth analysis of the purpose and need for additional interchanges along I-71. The federal guidelines of Interstate interchange spacing and existing transportation connectivity were also mentioned as a possible deterrent to having more than one additional I-71 interchange between I-265 and the rest areas. After the presentation questions and comments were addressed, a summary of these can be viewed in **Appendix A**.

### 2.3.3 Citizen's Advisory Council Meeting 3

At their third meeting, CAC Members were updated on the current progress of other projects in the KY 22 area and how they would affect the study. The findings of the Environmental Overview for the study were presented to the CAC members.

CAC Members were informed that the Environmental Overview was prepared in accordance with the National Environmental Policy Act (NEPA), to outline the social, economic and environmental impacts the study would have on the region. In addition to NEPA, other Environmental Laws to which the study must adhere were listed

for the CAC members. These included the Clean Air Act; Clean Water Act; Endangered Species Act; Section 106, National Historic Preservation Act; Section 4(f), Department of Transportation Act; Environmental Justice (E.O. 12898 and Resource Conservation and Recovery Act.) (Refer to **Section 3** for more about the Environmental Overview).

After the Environmental Overview was presented, the CAC members identified areas that were not mentioned but warranted further environmental analysis. In the western area of the project study corridor CAC members indicated the scenic area following Goose Creek, a “trace” near Goose Creek that was an early road for settlers, a scenic route 1,000 feet east and west of Goose Creek, a scenic route 1,400 feet east and west of Little Goose Creek, and a possible wetland alongside Little Goose Creek that nests Mallard ducks and sometimes Blue and/or Gray Herons. Mentioned in the central area were a scenic route from Hite Creek to Louisville Memorial Gardens, a potential historic house in the southwest quadrant of the Murphy Lane and KY 22 intersection and the possible existence of a Native American site in the vicinity of the Old Brownsboro Crossing development. In the eastern area two environmental concerns were mentioned - a scenic route east of Lake Louisville to just east of Crestwood and possibly a stone bridge over a stream in Rollington in proximity to KY 22.

#### 2.3.4 Citizen’s Advisory Council Meeting 4

The CAC members were informed of the updated traffic model developed by the KYTC, and of the new compiled updated traffic data. It was explained that the new data contained increased crash rates and traffic congestion and allowed for a more appropriate long-term plan to be developed. Other projects in the area along KY 22 and how they would affect the *Scoping Study* were discussed next. These projects included KY 22 widening from I-265 to Chamberlain Lane, from Chamberlain Lane to KY 1694 and from Silverwing Boulevard to Hitt Lane; intersection improvement at KY 22 and Murphy Lane; KY 22 resurfacing from Seminary Drive to Hurstbourne Parkway and a new I-71 interchange study.

The crash data was presented more in-depth since the new traffic data showed an increase in crashes. The project study corridor was reviewed for the safety for all potential users including motorists, pedestrians and cyclists. The new traffic data (2004 statistics) was compared to the old data (2001 statistics) and it was found that there was a 54% increase in crashes and a 25% increase in injury crashes. Much of this increase in crashes is likely due to improved reporting procedures. Current conditions that add to unsafe driving potentially causing crashes included:

- » Two-lane segments with narrow shoulders and steep embankments,
- » Plant overgrowth near the edge of the road,
- » Poor road geometric conditions,
- » Retail growth near the I-265 interchange causing heavy traffic movement,
- » Two-lane segments in business districts with access management problems.

The draft Ultimate Rebuild Alternative was then presented as the final solution to the current problems of KY 22 which consists of widening KY 22 to three lanes from Herr Lane to Hurstbourne Parkway, five lanes from KY 1694 to Quarry Drive and three lanes from Quarry Drive to KY 329 B. A conceptual map was shown with the possible “footprint” of the proposed Ultimate Rebuild.

It was noted that the draft Ultimate Rebuild would have some adverse environmental affects and that further environmental study was needed. The next steps in the project were addressed and the meeting closed with

questions and comments from the CAC members. A full summary of this meeting along with the questions and comments can be viewed in **Appendix A**.

## 2.4 LOCAL ELECTED OFFICIALS MEETING

A full list of the Local Elected Officials (LEO) members can be viewed in **Appendix B**.

### 2.4.1 Local Elected Officials Meeting 1

The first meeting with the LEO group was held on August 6, 2001. Present were State Legislators, Jefferson County officials, Oldham County officials and KYTC officials, as well as the KY 22 project team. A progress report was given at the beginning of the meeting detailing project steps so far and summarizing the public involvement process. It was explained to the LEO group that based on the previous CAC meeting (CAC Meeting 1) and public meeting (Public Meeting 1) that the main concern expressed was the safety of KY 22 along the project study corridor. The most cited concern being the intersection of KY 22 at Murphy Lane.

A video tour of the project study corridor was presented highlighting the locations of concerns raised by citizens and problem areas determined via data analyses. Questions, comments and further concerns were addressed after the video. A full summary of the first LEO Meeting can be found in **Appendix A**.

### 2.4.2 Local Elected Officials Meeting 2

A meeting with the LEO group was held on February 20, 2003. This was the second meeting with the LEO group. They were updated on the status of the project and the remaining schedule that was anticipated for the Study. They were informed that the project had been on temporary hold until the completion of a regional traffic model that was being reanalyzed with more current data; and that the alternatives for improving KY 22 would be finalized and presented to the Citizens Advisory Council. The details of creating the different improvement alternatives were explained.

Using a slide show, the existing conditions of the project study corridor were presented to the LEO members, along with the conditions that the project study corridor will exhibit if no change is initiated now. The roles that the Level of Service (LOS), crash rates and roadway geometry have in analyzing problems within the project study corridor were explained, and possible solutions to these problems were then presented (see **Appendix A**).

Eight general improvement options were presented:

1. Three-lane residential with curbs and gutters
2. Three-lane residential with grass shoulders
3. Three-lane commercial with curbs and gutters
4. Four-lane residential with curbs and gutters
5. Four-lane residential with grass shoulders
6. Four-lane residential with curb and median
7. Four-lane residential with curb and wider median
8. Five-lane residential with curb and two-way left-turn lane

The findings of the Environmental Overview were then presented, as well as the environmentally-related laws that govern transportation projects. Following this presentation the meeting was opened to questions and discussion. A full summary of these can be viewed in **Appendix A**.

### 2.4.3 Local Elected Officials Meeting 3

The presentation to the LEO members at the third meeting on January 25, 2005 was the same as the presentation given to the CAC members on January 27, 2005. The summary of the CAC meeting is in **Section 2.3.4**. The full summary of the third LEO Meeting along with the comments and questions can be viewed in **Appendix A**.

## 2.5 COMBINED LEO AND CAC MEETING

A combined meeting with the Local Elected Officials and the Citizen's Advisory Council was held on June 7, 2005 at Kentucky Country Day School two days before the second Public Meeting. First, past, on-going and future construction projects that affect the project study corridor were presented to the LEO and CAC members. These included KY 22 resurfacing; KY 22 widening from I-265 to Chamberlain Lane, Chamberlain Lane to KY 1694 and Silverwing Boulevard to Hitt Lane; intersection improvement at KY 22 and Murphy Lane and the I-71 interchange study.

The results of the safety and functionality review of the project study corridor for motorists, pedestrians and bicyclists were explained to the attendees. Results of traffic and crash analyses performed with the updated traffic data (see **Figure 1.2**) were also presented. Next the short-term, mid-term and ultimate rebuild recommendations and how they were derived from the aforementioned analyses were explained. Afterwards, questions were entertained from the attendees and the next steps in the project process were revealed. A full summary of the combined meeting of the CAC and LEO groups - along with the questions and answers - can be found in **Appendix A**.

## 3.0 ENVIRONMENTAL OVERVIEW SUMMARY

An Environmental Overview was prepared and submitted to the Kentucky Transportation Cabinet (KYTC) on May 1, 2002. This section summarizes the Environmental Overview.

### 3.1 INTRODUCTION

The National Environmental Policy Act (NEPA) mandates that potential environmental impacts from a project be analyzed when federal funds are utilized. The Environmental Overview for the KY 22 Scoping Study identified known environmental resources within the project study corridor and was used to develop potential alternatives. Once alternatives have been selected, a full assessment will be completed to comply with NEPA and KYTC policies and procedures prior to construction. The Environmental Overview adds to the value of the project by assessing the community's needs and finding ways to mitigate adverse affects; ensuring that regional land and history are preserved for future generations.

The report evaluated the highway with respect to potential improvements within the specified limits: KY 22 from Herr Lane in Jefferson County to KY 329B (Crestwood Bypass) in the City of Crestwood.

### 3.2 ENVIRONMENTAL ELEMENTS

The following environmental elements were analyzed in the Environmental Overview for the project study corridor in accordance with the KYTC Division of Environmental Analysis (DEA) Environmental Assessment (EA) Guidance and Accountability Form.

#### 3.2.1 Air Quality

The Jefferson County Air Pollution Control Board (APCB) affirmed that the metropolitan area was currently meeting the minimum requirements for all pollutants. The APCB supervises the Louisville Metropolitan Area which includes Oldham County. However, they did note that it was probable that the U.S. Environmental Protection Agency (EPA) was likely to declare the area not in compliance for airborne particles.

The foremost source of airborne pollutants is from motor vehicle combustion of fuel, mainly carbon monoxide (CO). The KYTC's Air Quality Guidance states that federally funded highway projects be modeled for existing and future CO levels for all the alternatives being considered, including the no-build alternative. If any of the improvements recommended in the KY 22 Scoping Study are selected for implementation, a micro-scale analysis for CO levels must be performed comparing existing and proposed conditions.

#### 3.2.2 Aquatic

Water resources are an extremely important part of the environmental analysis. Not only with respect to human consumption but as well as flora and fauna that inhabit the area. The Environmental Overview studied the affects that potential improvements would potentially have on the local water resources; floodplains, wetlands and wild and scenic rivers; and the permit process.

### Water Quality

There are ten surface streams in the area that have the potential to be impacted: Goose Creek, an unnamed tributary of Goose Creek, Little Goose Creek, an unnamed tributary of Little Goose Creek, Hite Creek, an unnamed tributary of Hite Creek and four unnamed tributaries of the South Fork of Harrods Creek. The primary impact that potential improvements would have on these streams would be from sediment run-off. To curb these adverse affects the United States Department of the Interior Fish and Wildlife Service (USFWS) recommended that all perennial streams be bridged as opposed to culverted, and that silt barriers be installed when construction is being performed adjacent to named streams. The USFWS also suggested that stream crossings be carried out during periods of low flow, and that stream banks be immediately reseeded with native vegetation after construction in the area is complete. Adherence to KYTC's *Specification for Road and Bridge Construction* and the Federal Highway Administration's (FHWA) *Best Management Practices for Erosion and Sediment Control* is highly recommended.



### Floodplain

Existing floodplain maps for the project study corridor were prepared by the Federal Emergency Management Agency (FEMA). There are three floodplains in Jefferson County (FEMA maps *21111C0040 D*, *21111C0085 D* and *21111C0020 D*) and no floodplains in Oldham County (FEMA map *210185 0150 B*). The three in Jefferson are Goose Creek, Little Goose Creek and Hite Creek. If potential improvements call for the crossing of these streams, a no-rise certification would be required from the Kentucky Division of Water (KDOW) before construction.

### Wetlands

To be considered a jurisdictional wetland resource, an area must exhibit hydrophytic vegetation, hydric soils and wetland hydrology, according to the 1987 United States Army Corps of Engineers (USACE) *Wetland Delineation Manual* (the legally accepted system for identifying wetlands). One potential wetland (five acres) was identified in the drained lakebed of Lake Louisville and another (negligible area) near a small pond.

### Wild and Scenic Rivers

There are no wild and/or scenic rivers located within or near the project study corridor.

### Permits

For any recommended improvement that involves impacts to wetlands or streams, permits may be required by the KDOW and the USACE Louisville Regulatory District. The USACE Louisville Regulatory District requires an Individual Permit (IP) for linear transportation crossings with areas greater than one-half (0.5) acres. In concurrence with General Condition 13, the District Engineer is to be contacted if one-tenth (0.1) of an acre of water is lost. General Conditions 9 and 21 set the minimal requirements for adverse affects to a stream. Under certain circumstances a reconstruction project may be permitted under *Nationwide Permit 14, Linear Transportation Crossings* instead of an IP.



In accordance with the KDOW, construction sites greater than five (5) acres require a Notice of Intent (to be covered under the Kentucky Pollutant Discharge Elimination System (KPDES) General Stormwater Permit) to be filed. This permit also requires an Erosion Control Plan. If a floodplain is to be filled a Floodplain Construction Permit will be required from the Water Resources Branch. A Floodplain Construction Permit and a Water Quality Certification is required for improvement options in any way affecting streams. Also any work in streams or any stream alterations are subject to Nationwide Permit 14 (NWP 14) conditions and require both a Floodplain Construction Permit and a Water Quality Certification. The District Engineer must be provided with an Individual Water Quality Certification and/or a copy of the completed permit application package.

### 3.2.3 Terrestrial

The project study corridor is comprised of approximately 1,133 acres, and the distribution of aquatic and terrestrial communities is listed in **Table 3.1**.

**Table 3.1 - Approximate Land Use Acres and Percentages**

Land Use Category	Approximate Acres	Percentage of Corridor
Residential/Commercial	490	43.2
Open Land	380	33.5
Forested areas	252	22.2
Wetland	5	0.4
Streams	3	0.3
Ponds	3	0.3
<b>Approximate Totals</b>	<b>1,133</b>	<b>100</b>

#### Threatened and Endangered Species

The Kentucky State Nature Preserves Commission (KSNPC) noted that there were three federally-protected endangered species, five state-protected endangered species, five state-protected threatened species, ten state species of special concern and one exemplary natural community within or near the project study corridor. In addition, the United States Fish and Wildlife Service (USFWS) confirmed that the occurrence of three (3) federally-protected endangered species occurs within the project area county.

The Kentucky Department of Fish and Wildlife Resources (KFWS), however, reported that no federally-protected threatened or endangered species had been reported in the project study corridor. The species identified by the KSNPC and USFWS are listed below.

- » Federally-protected endangered species
  - Running buffalo clover (*Trifolium stoloniferum*)
  - Indiana bat (*Myotis sodalis*)
  - Gray bat (*Myotis grisescens*)
- » State-protected endangered species
  - Louisville crayfish (*Oroconectes jeffersoni*)
  - Bachman's sparrow (*Aimophila aestivalis*)
  - Blue-winged teal (*Anas discors*)
  - Pied-bill grebe (*Podilymbus podiceps*)
  - King ails (*Rallus elegans*)

- » State-protected threatened species
  - Least bittern (*Ixobrychus exilis*)
  - Hooded merganser (*Lophodytes cucullatus*)
  - Yellow-crowned night-heron (*Nyctanassa violacea*)
  - Allegheny chinkapin (*Castanea pumila*)
  - Wood bunchflower (*Melanthium woodii*)
- » State special concern species
  - Eel-grass (*Vallisneria Americana*)
  - Northern fox grape (*Vitis labrusca*)
  - Black buffalo (*Ictiobus niger*)
  - Trout-perch (*Percopsis omiscomaycus*)
  - Sharp-shinned hawk (*Accipiter striatus*)
  - Bewick's wren (*Thryomanes bewickii*)
  - Barn owl (*Tyto alba*)
  - Henslow's sparrow (*Ammodramus henslowii*)
  - Sedge wren (*Cistothorus platensis*)
  - Savannah sparrow (*Passerculus sandwichensis*)
- » Exemplary natural community
  - Calcareous mesophytic forest

Running buffalo clover is a plant found in lightly to moderately disturbed habitats such as stream banks, gravel/sand/silt bars, terraces, footpaths, dirt roads and moderately grazed bottoms. It is not usually found in dense forests. Since records show this plant is located near the proposed road corridor, it is recommended that a qualified biologist conduct a thorough survey during the months of May and June. The optimal time to search is May, during the flowering period.

Because the Indiana bat and gray bat have been found near the project corridor, it is possible that potential impact could occur as a result of the project. Summer foraging habitats for Indiana bats and gray bats include upland forest, bottomland forests, and riparian corridors. Female Indiana bats also locate summer maternity colonies in these areas. To avoid impacts to bats, upland forests, bottomland forests, and riparian corridors should be avoided, if possible. Gray bats use caves both as hibernacula and maternity sites, but may also be found roosting in man-made structures such as bridges and storm sewers. No caves are known to exist in the project corridor. If potential habitats cannot be avoided, a qualified biologist should conduct a thorough survey. The survey should include a search for potential roost trees and mist netting within the proposed corridor during late spring or early summer.

#### **Natural Areas (Wildlife or Water Fowl Refuge)**

There were no natural areas in the project study corridor.

#### **Topography and Geology**

The elevation in the project study corridor ranges from 550 to 780 feet above sea level and is located in the Outer Bluegrass section of the Interior Low Plateau Physiographic Province. The majority of the exposed rock is limestone or calcareous shale of Silurian age.

### 3.2.4 Cultural Resources

The Environmental Overview listed 63 properties that are on or eligible for inclusion on the National Register of Historical Places (NRHP). Of these, three are on the NRHP, 27 sites appear to be eligible for the NRHP, and 33 others need additional analysis to determine their eligibility status. One archaeological site has been recorded within the project corridor: 15Jf284. This site is an open habitation without mounds. A final NRHP determination for this site cannot be made until excavation actually takes place, and will be evaluated if the area is impacted by the proposed project.



#### Records Research

The survey files for Jefferson and Oldham Counties at the Kentucky Heritage Council were used to find properties that were listed on the NRHP. There were three (3) recorded individually listed National Register sites and one (1) historic district, all four in Oldham County. There were fifteen (15) previously surveyed sites in Jefferson County and nineteen (19) in Oldham County. Survey and National Register forms for the previously documented sites are included in a separate document submitted to KYTC entitled *Cultural Resource Overview for KY 22*.

#### Windshield Survey

A windshield survey of the project study corridor conducted in September 2001 found sixty-nine (69) previously surveyed buildings and several other structures that may be eligible for the NRHP. Sites are considered for the NRHP based on four criteria, of which a site can be classified as having met more than one of the criteria. Criterion A states that the site is associated with events that have made a significant contribution to the broad patterns of history; criterion B states that the site is associated with the lives of persons significant in the past; criterion C states that the site embodies the distinctive characteristics of a type, period or method of construction, or that it represents the work of a master, or that it possesses high artistic values, or that it represents a significant and distinguishable entity whose components may lack individual distinction, and criterion D states that the site has yielded or may be likely to yield information in prehistory or history.

Most of the sites in the windshield survey were listed under criterion C, however, no site was inspected in detail. Additional examination may be needed, as well as consultation with the Historic Preservation Officer of Jefferson County and the State Historic Preservation Officer (SHPO) at the Kentucky Heritage Council, to determine individual eligibility.

### 3.3 SOCIOECONOMIC FACTORS

This section provides an overview and comparison of select socioeconomic data from both the 2000 Census and the 1990 Census. The data include population, age, race, and income data are included as **Table 3.2 and 3.3**.

### 3.3.1 Population Data

Demographic information was obtained for each block group that is traversed or bordered the project study corridor. To generate trends for the same areas, each of the blocks from the 2000 Census that make up a block group from the 1990 Census were identified and the data aggregated so that the 2000 data addresses the same area of land as the 1990 data.

Following is a comparative table of population totals for the 1990 block group areas. Overall, the population in the project corridor grew approximately 40% percent between 1990 and 2000. The age data indicates that the project corridor has characteristics similar to those of the encompassing counties, with no pockets of elderly or youths.

**Table 3.2 - Total Population by County\***

County	1990 Population	2000 Population	Percent Change	2010 Population Forecast	2020 Population Forecast
Jefferson	664,937	693,604	4.3%	693,292	683,390
Oldham	33,263	46,178	38.8%	52,192	57,166

\* The forecasts were originally made by the Kentucky State Data Center in 1999 and then adjusted by Qk4 by replacing the projected 2000 data with the Census 2000 data and continuing to use the projected changes in percent through 2020.

**Table 3.3 - 1990 Age Demographics by County**

County	Ages 0-17		Ages 18-64		Ages 65+	
	Pop.	Percent	Pop.	Percent	Pop.	Percent
Jefferson	162,910	24.4%	412,926	62.1%	89,101	13.5%
Oldham	9,529	28.6%	21,488	64.6%	2,246	6.8%

### 3.3.2 Environmental Justice

The purpose of *Executive Order 12898* is to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority or low-income populations.

The data for the project corridor, when compared to the data for the counties illustrates that the project study corridor, as a whole contains a much lower percent of minorities and low-income individuals than the encompassing counties. Within the project corridor, however, two block groups in Jefferson County—10305.4 and 10305.2—have a higher percentage of both minorities and low-income individuals than that of the county as a whole. Block Group 10305.2 contains the sixth-class cities of Cold Stream and Worthington Hills. Block Group 10305.4 contains the sixth-class city of Fincastle. Both block groups are located south of KY 22. Therefore, proposed improvements within or adjacent to the existing KY 22 corridor should have no disproportionate adverse effect on these communities.

### 3.3.3 Communities

The project study corridor includes five identified communities: Worthington, Lake Louisville, Rollington (Hamilton), Peewee Valley and Crestwood. More information about the history of these communities can be acquired in the *Environmental Overview*.

### 3.3.4 Land Use

The KY 22 corridor is part of the fast growing region of the Louisville Metropolitan Area. As a result its land use has experienced significant change in recent history. In the past, farmland dominated the region, but now land use includes residential, commercial, agricultural, municipal, institutional, cemetery and open space. There are no large-scale industrial areas in the project study corridor, however major commercial development has occurred between Hurstbourne Parkway and Hitt Road.

### 3.3.5 Prime Farmland

Through correspondence with the U.S. Department of Agriculture, Natural Resources Conservation Service, it was determined that there are no areas in the project study corridor that would be considered prime farmland.

### 3.3.6 Sections 4(f) and 6(f) Involvement

Section 4(f) of the *Department of Transportation Act* states that projects using federal funding shall not use publicly owned parks, recreation area, wildlife/waterfowl refuge, or land of a historic site of national, state, or local significance, unless there is no prudent and feasible alternative. Since there is a high likelihood that historic properties classified as Section 4(f) sites would be impacted by any of the build-alternatives, Section 4(f) documentation may be required, however, alternatives that avoid these sites will be studied.

No required Section 6(f) documentation is anticipated for any of the build or no-build alternatives as the project study corridor does not contain any publicly owned parks, recreation areas or wildlife/waterfowl refuge sites as established from grants-in-aid from the *Land and Water Conservation Fund Act (LWCF)*.

### 3.3.7 Planning Documents

Two major planning documents were developed during the course of the Scoping Study - the *Oldham County Comprehensive Plan* and the *Jefferson County Comprehensive Plan, Cornerstone 2020*. The two plans were adopted February 27, 2002, and June 15, 2000, respectively. The *Cornerstone 2020* comprehensive plan was supplemented in its preparation by three important background studies entitled *Bike and Pedestrian Circulation Plan*, *Multi-Objective Stream Corridor/Greenway Plan* and *Parks and Open Space Mater Plan*.

Other planning documents that directly affect and are affected by the Scoping Study include the *Gene Snyder Corridor Plan*, the *Hurstbourne Parkway Corridor Plan* and the *Land Use Planning and Design Guidelines* (created for the programmed Old Henry Connector Corridor in Oldham County). The previously listed plans should be monitored for updates and adherence to local objectives once environmental documentation and preliminary design begins. More information about the plans can be viewed in the *Environmental Overview*.

### 3.3.8 Bicycle and Pedestrian Facilities and Plans

There is strong support for pedestrian and bicycle facilities from both counties' planning commissions for future road projects. The Greenways Facility Plan developed by Louisville Metro identifies Goose Creek Road as a future part of a countywide trail system, and the Metro Planning and Design staff was interested in the future design of KY 22 incorporating this plan.

Selected areas for pedestrian access were Ballard High School, Norton Elementary School, Kentucky Country Day School, the Summit development and Hurstbourne Parkway. Any future road projects in the City of Crestwood should make pedestrian accommodations. There are currently no sidewalks along KY 22.

### 3.3.9 UST / HAZMAT

Potential underground storage tanks (UST) and Hazardous Materials (HAZMAT) locations were obtained from site observations, conversations with local parties and review of three databases from the Kentucky Department of Natural Resources (DNR) UST Branch, Resource Conservation and Recovery Act (RCRA) and Comprehensive Response, Compensation and Liability Act (CERCLA).

Site observations performed for various UST and HAZMAT locations are listed below.

1. Pole-mounted electrical transformers were found to be in the project study corridor. Older models are believed to contain polychlorinated biphenyl's (PCBs), however currently there is no evidence of leaking.
2. There are seven gas stations in the project study corridor that sale petroleum products and possess USTs. Other existing and former sites with USTs are mapped on Exhibit 1 included in the *Environmental Overview*.
3. Three private-property sites observed from a distance, J & J Farms and Lake Louisville were suspected of waste stockpiling.
4. Pesticides and herbicides were found likely to occur within agricultural land use, but since farmland is minimal in the project study corridor this is not anticipated to be a concern. Also Kitty's Nursery and Stan Humphries Garden Center may use these types of chemicals.
5. There is a large LG&E site that services vehicles and equipment. It is suspected that the site may contain various HAZMAT and USTs.
6. There are several aboveground storage tanks (AST) in the project study corridor. There was no evidence of these ASTs contaminating the surrounding area.
7. In the project study corridor were several forested areas that were not investigated due to private-property restrictions and/or dense vegetation. These areas are sometimes used for illegal dumping and as a result may contain HAZMAT.
8. Auto repair services were found throughout the project study corridor and are mapped on Exhibit 1 in the *Environmental Overview*. These auto repair locations have the potential to contain HAZMAT and USTs.

For more information on UST and HAZMAT locations, reference Section 2.6.9, Table 6 and Exhibit 1 in the *Environmental Overview*.

### 3.3.10 Aesthetics

As urban development sprawls to the outer reaches of a city, aesthetics become an important part of road design. The design method known as context sensitive seeks to maintain the scenic character of an area after construction is complete. The scenic character of a road is determined by the view from the road (also called view shed) and the view of the road. Three areas were noted as having unique and scenic view sheds.

1. The area at Goose Creek along both side of KY 22, approximately 600 feet west and 1,500 feet east.
2. Both sides of the KY 22 at Little Goose Creek, approximately 1,400 feet west and 1,600 feet east.
3. The south side of KY 22 at Hite Creek to approximately 5,000 feet east.

As far as the view of the road, the public have recommended that future road improvements be designed specifically for the community in which it is located. Even though safety standards will take precedence over context sensitive design aspects, visual enhancements can be incorporated into the design to provide an overall enjoyable driving experience. Such as,

- » Designing the roadway to match the area's natural contours,
- » Landscape architecture involvement using native species,
- » Using natural materials to enrich essential structures like guardrail and bridges,
- » Continued communication with the Citizen's Advisory Committee and
- » Creating a Scenic Corridor Master Plan or other similar guideline to ensure context sensitive design compliance.

## 4.0 CONCEPTUAL ALTERNATIVES

Conceptual solutions were developed to address the concerns through technical analyses and as expressed by the stakeholders directly (and indirectly). Potential solutions range from minor improvements such as signing or adding traffic signals to more extensive improvements such as adding turn lanes or widening KY 22 itself.

Potential solutions are presented in this chapter individually in terms of intersections and corridor improvement alternatives. The conceptual corridor alternatives are big-picture solutions and are developed to address one specific problem but several different concerns dependent and independent of each other at once.

With respect to these corridor solutions, particular attention was given to improving safety and reducing congestion while preserving the unique and diverse characteristics of the area. The concerns of people who live and work along the corridor and who drive on KY 22 regularly were strongly considered in the development of alternatives.

### 4.1 CORRIDOR REBUILD ALTERNATIVES

This section addresses the need for improved capacity throughout the entire corridor in order to meet the demands of projected traffic in 2030. To meet the projected capacity demands the KY 22 corridor would need to be widened. Site specific or intersection alternatives to address areas of safety or concentrated congestion problems are discussed in **Section 4.2**.

#### Number of Lanes

The analysis completed in **Chapter 1.0 - Project Background** indicates that by 2030 most of the corridor will be experiencing a Level of Service (LOS) of E or F. In order to alleviate this congestion, additional lanes are needed throughout the project area. Furthermore much of the current and projected congestion is a result of the numerous entrances on the road. The congestion resulting from turning movements can be eased by placing numerous turning bays throughout the corridor or by utilizing a two-way left turn lane (TWLTL).

The entire corridor can benefit from adding a lane in each direction as well as a TWLTL. This alternative was presented to the CAC and LEO. However, these advisory groups expressed a desire to minimize construction impacts between Herr Lane and Hurstbourne Parkway in order to protect the scenic nature of the road. As a result the concept was modified to a three-lane section for this scenic segment. Traffic on this 3-lane segment would result in a LOS of D or E by 2030.

The five lane section proposed for the portion of the corridor between KY 1694 and Crestwood was considered acceptable by both the CAC and LEO. However within Crestwood a five lane section would result in the removal of businesses on one or both sides of the road. The LEO recommended that a three-lane section be utilized instead in conjunction with intersection and other improvements in the area.

Based on feedback from the public meetings, the public also generally supported a three lane section from Herr Lane to Hurstbourne, a five lane section from KY 1694 to Crestwood and a three lane section in Crestwood. See **Section 4.4** for more discussion on public support for the alternatives.



### Cross Sections

The following sections discuss how the cross sections were developed. In order to determine the appropriate cross sections for the corridor, design speeds were first determined. A recommended design speed was established for the western portion of the project from Herr Lane to the Gene Snyder Freeway at 45 mph, and for the balance of the project at 55 mph. Two-lane sections with left turn bays, three-lane sections with a continuous left turn lane and five-lane sections with a continuous left turn lane were each examined. Each would be an urban typical section with curbs and gutters, sidewalks and bike lanes.

A two-lane section with left turn lanes was explored at the end of the study based upon public comments. Some residents expressed an interest in minimizing the impacts to the surrounding landscape between Herr Lane and Hurstbourne Lane by reducing the width of the proposed improvement where possible. In this case the two lane road would include turn lanes at all intersections with other roads along the corridor.

Figure 4.1 shows what a typical section would look like. The section would include three-foot bike lanes and five-foot sidewalks. A two-lane section of roadway would not address congestion between intersections and by 2030 much of the segment would operate at an LOS of E or F.

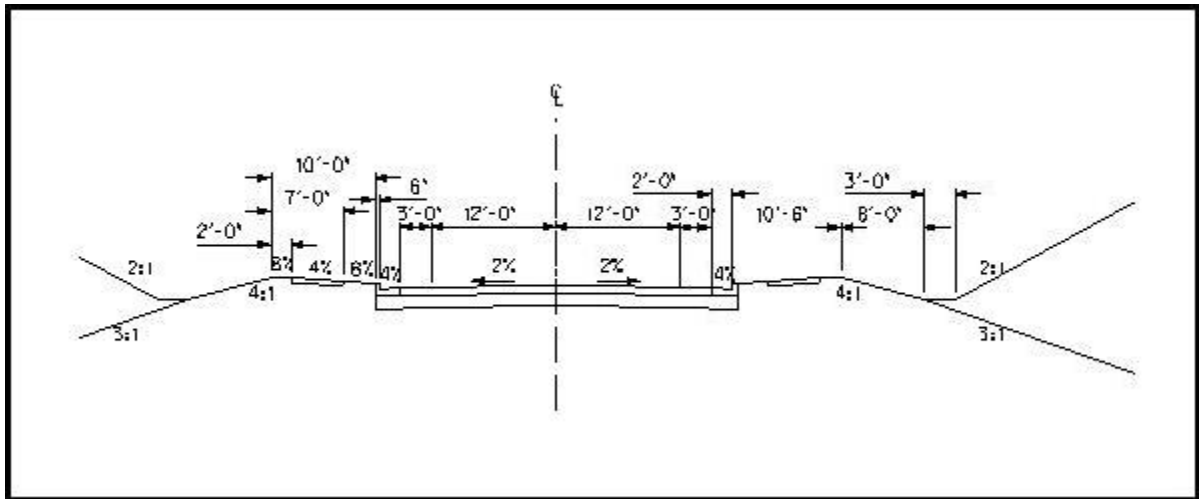


Figure 4.1 - Typical Section: Two-lane Curb and Gutter

The three lane section in Figure 4.2 also includes bike lanes and sidewalks. It would add slightly more capacity and increase safety, but by 2030 most of the segment would continue to operate at LOS E or F. This cross-section provides a compromise to improve safety and minimize impacts but only slightly improves capacity.

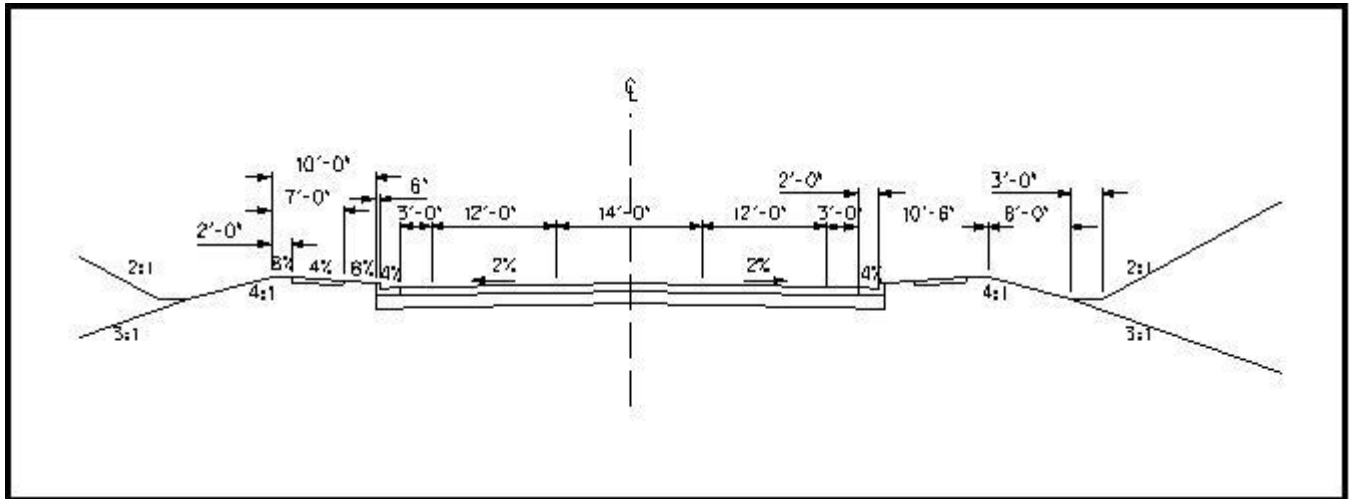


Figure 4.2 - Typical Section: Three-lane Curb and Gutter

Figure 4.3 provides the congestion and safety improvement needed for the corridor. This section also provides sidewalks and bicycle lanes.

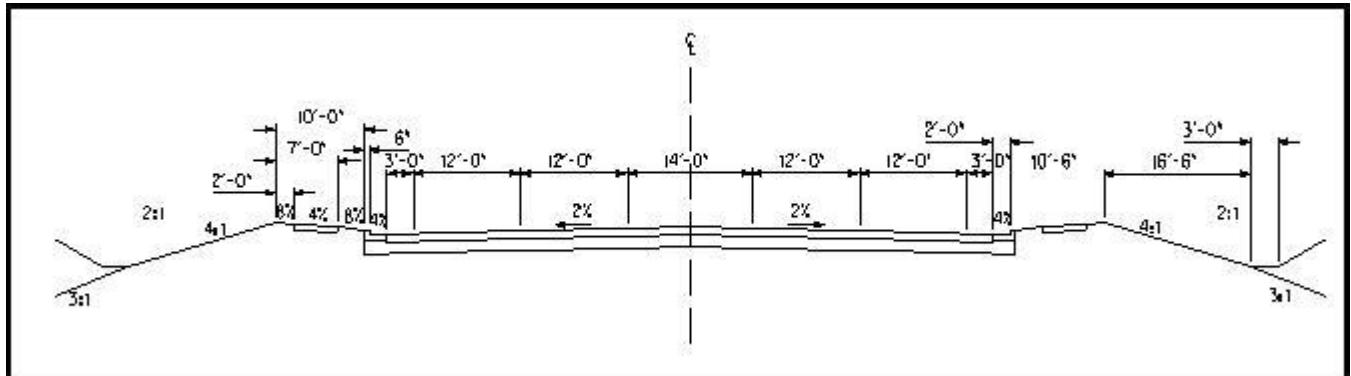


Figure 4.3 - Typical Section: Five-lane Curb and Gutter

The proposed Ultimate Rebuild of the project study corridor includes the following:

- » Three lanes on KY 22 from Herr Lane to Hurstbourne Parkway, with a two-way left-turn lane and a roundabout at KY 22 and Seminary Drive.
- » Five lanes on KY 22 from KY 1694 (Brownsboro Road) to KY 329 Quarry Drive, with a two-way left-turn lane.
- » Three lanes from Quarry Drive to KY 329 B, with a two-way left-turn lane.

The costs associated with the Ultimate Rebuild are shown in **Table 4.1**.

**Table 4.1 - Ultimate Rebuild Alternative Cost Estimate**

Phase	Jefferson County	Oldham County	Total
Design	\$1,089,000	\$1,400,000	\$2,489,000
Right of Way	\$16,929,000	\$11,813,500	\$28,742,500
Utilities	\$11,310,000	\$3,365,000	\$14,675,000
Construction	\$10,890,000	\$12,600,000	\$23,490,000
<b>Total</b>	<b>\$40,218,000</b>	<b>\$29,178,500</b>	<b>\$69,396,500</b>

**Context Sensitive Design**

The number of lanes recommended in each section reflects the community’s desire to protect the scenic views in the area. In order to preserve the scenic nature of the road, a Landscape Preservation Program to prepare edge trees that will remain after widening projects for survival is recommended prior to construction. This would involve identifying a right of way line and creating a path between the proposed and existing right of way lines. Additionally the plants that would remain would have their roots saw cut a little each season prior to construction to promote viable plants. This should commence during the design phase of subsequent project phases to allow ample time for the trees to adapt before construction.

**4.2 INTERSECTION IMPROVEMENTS**

Improvements aimed at improving the design-year LOS for select unsignalized intersections in the study area were reviewed. The goal was to recommend improvements for these intersections to improve the traffic to no worse than LOS of D on any approach. In some cases, that could be achieved while allowing for individual turning movements with LOS of E. The overall intersection LOS for the selected intersections is shown in **Table 4.2**. Each intersection and its recommended improvements are discussed in the following sections.

**Hayward Road** - This cross street is currently experiencing a LOS of E with a projected LOS of F by 2030. A three lane section along KY 22 could improve the current LOS to a D. Signalization of the intersection should be considered when traffic volumes increase and worsen the LOS. It is anticipated that this improvement project may not be needed for ten years.

**Seminary Drive** - Realignment should be considered for the intersection of Seminary Drive and KY 22 since the existing intersection does not provide for continuous flow along KY 22. Instead, Seminary Drive eastbound turns into KY 22, and KY 22 makes up the northbound approach of the T-intersection, resulting in a LOS of F for the approach. By signaling the intersection and making no other improvements, the intersection LOS will improve from F to D. Another option would be to develop a roundabout at this location. The roundabout would further improve the LOS while allowing free flowing movement in all directions.

**Table 4.2  
Intersection Levels of Service**

Intersection Cross Street	Existing (2004)		Projected 2030		
	Mainline	Cross Street	Mainline	Cross Street	
				without Improvements	with Improvements
Hayward	A	E	B	F	D
Seminary	A	F	B	F	D
Greenlawn Road	A	B	B	D	C
Avenue of the Woods	A	F	B	F	C
Springcrest Drive	A	D	A	F	C
Brownsboro Vista Drive	A	D	B	F	C
Ten Broeck Way	A	C	B	E	D
Orchard Grass Blvd	A	E	B	F	D
Briar Hill Parkway	A	B	A	C	B

**Greenlawn Road** - This cross street is currently experiencing a LOS of B with a projected LOS of D by 2030. A three lane section along KY 22 should improve the LOS to a C, therefore, no improvements are recommended at this location to address intersection LOS.

**Chattsworth Lane** - This cross street is currently experiencing a LOS of B with a projected LOS of F by 2030. A three lane section along KY 22 could improve the LOS to a C. If the road is not widened the intersection should meet the warrants for signalization. This should be considered when traffic volumes increase and worsen the LOS. It is anticipated that this improvement project may not be needed for ten years.

**Springcrest Drive** - This cross street is currently experiencing a LOS of D with a projected LOS of F by 2030. A three lane section along KY 22 will improve the LOS to a C. The intersection should meet the warrants for signalization. Signalization should be considered when traffic volumes increase and worsen the LOS. It is anticipated that this improvement project may not be needed for ten years.

**Brownsboro Vista Drive** - This cross street is currently experiencing a LOS of D with a projected LOS of F by 2030. A three lane section along KY 22 will improve the LOS to a C. The intersection should meet the warrants for signalization. Signalization should be considered when traffic volumes increase and worsen the LOS. It is anticipated that this improvement project may not be needed for ten years.

**Ten Broeck Way** - This cross street is currently experiencing a LOS of C with a projected LOS of E by 2030. A three lane section along KY 22 will improve the LOS to a D or better. The intersection should meet the warrants for signalization. Signalization should be considered when traffic volumes increase and worsen the LOS. It is anticipated that this improvement project may not be needed for ten years.

**Orchard Grass Boulevard** - This cross street is currently experiencing a LOS of E with a projected LOS of F by 2030. Signalization should be considered when traffic volumes increase and worsen the LOS. It is anticipated that this improvement project may not be needed for ten years.

**Briar Hill Parkway** - This cross street is currently experiencing a LOS of B with a projected LOS of C by 2030. A three lane section along KY 22 will improve the LOS to a B or better, therefore, no improvements are recommended at this location to address intersection LOS.

### 4.3 OTHER ALTERNATIVES

The previous alternatives addressed existing and future capacity needs of the corridor but require considerable resources and time to accomplish. In the interim, until funding can be identified for the Ultimate Rebuild Alternative, it was determined that less expensive alternatives should be considered to improve safety and relieve some congestion.

The initial step in this process was to identify locations that should be considered for improvement projects. All areas with a Crash Critical Rate Factor (CRF) greater than 1.0 were deemed eligible. Particular attention was given to those areas with a CRF greater than 3.0. Field visits were conducted at all high crash locations.

The following list of locations versus improvement options was developed. These improvements are being presented from west to east starting at Herr Lane and ending in Crestwood.

After the alternatives were developed, cost estimates including probable design, right-of-way, utility and construction costs were prepared. (See Table 4.3.) Three of the projects in this list had costs and impacts that were considerably higher than the other projects. These projects would also take longer to design and construct. Therefore it was determined that these three projects would be considered mid-term alternatives with a proposed completion schedule of 10 to 20 years.

On the opposite extreme of the mid-term alternatives were projects that were considered maintenance related and would not involve design, right-of-way purchases, or utility relocations. These projects could be completed within a couple of years and were considered the near term or maintenance alternatives.

The remaining projects were deemed short-term projects. These projects can be completed within 10 years but require some design, right-of-way, utility relocation and construction investment. The majority of projects developed were considered to be short-term projects.

**Table 4.3  
Improvement Options**

Location	Description	Construction/ Maintenance	Design	ROW	Utilities	Total
Entire Corridor <sup>N</sup>	Trim or remove vegetation on inside of curves.	\$50,000	N/A	N/A	N/A	\$50,000
Herr Lane <sup>S</sup>	Add southbound & northbound right turn lanes.	\$69,000	\$6,900	\$144,000	\$183,000	\$402,900
Thornhill Road <sup>S</sup>	Add eastbound right turn lane & westbound left turn lane into Ballard High School.	\$377,500	\$37,500	\$645,600	\$255,000	\$1,315,600
Chattsworth Lane/ Avenue of the Woods <sup>S</sup>	Add right and left turn lanes on KY 22	\$377,500	\$37,500	\$441,700	\$430,000	\$1,286,700
Cliffwynde Terrace <sup>M</sup>	Construct a 3-lane section just west of Cliffwynde Terrace to Pinehurst Lane.	\$1,809,000	\$180,900	\$2,220,800	\$2,595,000	\$6,805,700
Springcrest Drive <sup>S</sup>	Add eastbound left turn lane	\$187,000	\$18,700	\$230,000	\$320,000	\$755,700
Barbour Lane <sup>S</sup>	Widen intersection and add a protected left turn phase to the existing signal.	\$47,000	\$4,700	\$320,700	\$190,000	\$562,400
Standard Club Lane <sup>S</sup>	Add eastbound right turn lane and westbound left turn lane on KY 22	\$377,500	\$37,500	\$325,850	\$320,000	\$1,060,850
Goose Creek Road <sup>S</sup>	Add westbound left turn lane	\$187,000	\$18,700	\$230,000	\$275,000	\$710,700
Hurstbourne Parkway <sup>M</sup>	Construct 3-lane section from Kitty's Farm to Hurstbourne Parkway.	\$2,190,900	\$219,100	\$1,447,250	\$5,235,000	\$9,092,250
Ten Broeck Way <sup>S</sup>	Add westbound left turn lane	\$187,000	\$18,700	\$230,000	\$275,000	\$755,700
Windy Willow Drive <sup>M</sup>	Construct 3-lane section from just west of Windy Willow Dr. to east of Haunz Ln.	\$2,309,000	\$230,900	\$2,839,650	\$1,245,000	\$6,624,550
Oldham County <sup>N</sup>	Lower the speed limits from 55 MPH	\$0	\$0	\$0	\$0	\$0
Lake Louisville Area <sup>M</sup>	Construct a 3-lane section between East Orchard Grass Blvd and Briar Hill Pkwy.	\$3,182,000	\$318,200	\$1,227,000	\$750,000	\$5,477,200
Lake Louisville Area <sup>N</sup>	Add advance warning sign of school bus stop.	\$1,000	N/A	N/A	N/A	\$1,000
Clore Lane <sup>S</sup>	Add left turn lanes all directions & align Wooldridge Ave.	\$500,000	\$50,000	\$574,000	\$265,000	\$1,389,000
Central Avenue <sup>S</sup>	Add a northbound right turn lane at KY 362 (Central Avenue) and add westbound left turn lane & eastbound left turn lane.	\$454,500	\$45,500	\$1,234,500	\$85,000	\$1,819,500
Hughes Avenue <sup>N</sup>	Investigate potentially slick pavement condition at MP 2.4, west of Hughes Ave.	N/A	N/A	N/A	N/A	N/A
KY 329 <sup>S</sup>	Realign intersection and add signal.	\$454,500	\$45,500	\$957,000	\$500,000	\$1,957,000
KY 329 <sup>M</sup>	Construct 3-lane section between KY 329 and KY 329 Bypass and implement access management.	\$909,000	\$90,900	\$2,290,000	\$315,000	\$3,604,900

N = Near Term, S = Short Term, M = Mid-Term

#### 4.4 PUBLIC SUPPORT FOR ALTERNATIVES

A total of 60 comment forms or letters were received from the public. In general, of those people who completed a comment form nearly 88% were supportive of short term improvements, 79% were supportive of mid-term improvements and 75% were supportive of long-term (rebuild) improvements. The remaining comments received were generally positive (62%). Several people emailed, faxed or sent via postal mail neutral comments (11%) and the remaining comments asked that no improvements be made to the corridor (27%).

## 5.0 RECOMMENDATIONS

Over the course of this study, the project team worked extensively with the community, the Citizen’s Advisory Committee and with elected officials to garner information such as: what safety issues were of the highest priority, what features of the corridor should be maintained and what environmental resources should be protected. This information was taken into consideration when the recommendations were developed. Some of the earlier suggested projects have already advanced to either construction or design.

The following sections reflect the priorities established for the development of the alternatives in Chapter 4.0. Priorities are based upon safety concerns, public opinions and the need for congestion relief.

### 5.1 NEAR-TERM (MAINTENANCE) IMPROVEMENTS

- |   |                |
|---|----------------|
| 1. Trim or remove vegetation on inside of curves throughout the Corridor.             | Cost: \$50,000 |
| 2. Lower the speed limit from 55 mph in Oldham County.                                | Cost: \$0      |
| 3. Add an advance warning sign for the school bus stop in the Lake Louisville Area.   | Cost: \$1000   |
| 4. Investigate potentially slick pavement conditions at MP 2.4 west of Hughes Avenue. | Cost: \$0      |

### 5.2 SHORT-TERM IMPROVEMENTS

The following lists of short-term projects are included in order of priority and by county.

#### Jefferson County

- |  |                   |
|--|-------------------|
| 1. Add a westbound left turn lane on KY 22 at Ten Broeck Way   | Cost: \$755,700   |
| 2. Add an eastbound left turn lane on KY 22 at Springcrest Drive   | Cost: \$755,700   |
| 3. Add a westbound left turn lane on KY 22 at Goose Creek Road.  | Cost: \$710,700   |
| 4. Widen Barbour Lane at the intersection with KY 22 to help school traffic turn and add a protected left turn signal. Also, add a westbound left turn lane and eastbound right turn lane on KY 22 onto Standard Club Lane | Cost: \$1,623,250 |
| 5. Add turn lanes in both directions on KY 22 at Avenue of the Woods and Chatterworth Lane.  | Cost: \$1,286,700 |
| 6. Add 2 southbound turn lanes on KY 22 into Ballard High School.  | Cost: \$1,315,600 |
| 7. Add northbound and southbound right turn lanes on Herr Lane at KY 22. (May be implemented with future development in the area.)   | Cost: \$402,900   |



### Oldham County

- |    |  |                   |
|----|--|-------------------|
| 1. | At KY 329 add a signal and realign intersection.   | Cost: \$1,957,000 |
| 2. | Add a northbound right turn lane at KY 362 (Central Avenue) and add a westbound left turn lane and eastbound left turn lane at Oak Valley.   | Cost: \$1,819,500 |
| 3. | Add eastbound left turn lane onto Clore Lane and add a westbound left turn lane onto Wooldridge Avenue and include a signal. Also add a left turn lane on Clore Lane and realign Wooldridge Avenue and add a left turn lane on Wooldridge. (May be implemented with future development in the area.) | Cost: \$1,389,000 |

## 5.3 MID-TERM IMPROVEMENTS

### Jefferson County

- |    |   |                   |
|----|---|-------------------|
| 1. | Widen the section of KY 22 from Cliffwynde Trace to Pinehurst Lane to straighten horizontal curves, improve vertical curves and fix sight distance obstructions due to trees east of Brownhurst Cove Road. The new section will be three lanes. Trees that are removed may be replaced with other lower-growing landscaping.                                      | Cost: \$6,805,700 |
| 2. | Widen the road to three lanes from Kitty's Farm/Nursery to Hurstbourne Parkway (KY 1747), including horizontal and vertical improvements.   | Cost: \$9,092,250 |
| 3. | Construct a three-lane section just west of Windy Willow Drive and ending at East Orchard Grass Boulevard. Include an eastbound left turn lane, a westbound right turn lane and consider signaling intersection at Windy Willow. Add a westbound right turn lane and increase southbound right turning radius at Haunz Lane, and consider signaling intersection. | Cost: \$6,624,550 |

### Oldham County

- |    |   |                   |
|----|---|-------------------|
| 1. | Construct a three-lane section between KY 329 and the KY 329 Bypass in Crestwood and implement access management.   | Cost: \$3,604,900 |
| 2. | Construct a three-lane section in Lake Louisville to straighten horizontal curves, improve vertical curves, improve drainage and fix sight distance obstructions between East Orchard Grass Boulevard and Briar Hill Parkway. | Cost: \$5,477,200 |

## 5.4 ULTIMATE REBUILD (LONG-TERM IMPROVEMENTS)

It is proposed that the roadway have an urban typical section with curbs and gutters and sidewalks, as well as consideration for bike lanes. Turning lanes will be added throughout the corridor on an as-needed basis as determined by the Phase I design team. Concepts include:

- » Three lanes on KY 22 from Herr Lane to Hurstbourne Pkwy., with a two-way left-turn lane and a roundabout at KY 22 and Seminary Drive.

- » Five lanes on KY 22 from KY 1694 (Brownsboro Road) to Quarry Drive, with a two-way left-turn lane.
- » Three lanes from Quarry Drive to KY 329 B, with a two-way left-turn lane.

Ultimate concepts could take over 20 years to construct. **Figure 5.1 and 5.2** indicate the cross-sections associated with each of these proposed improvements. The estimated costs (2005 dollars) for the ultimate concept are shown in **Table 5.1**. The Ultimate Rebuild Alternative is shown in **Figure 5.3**.

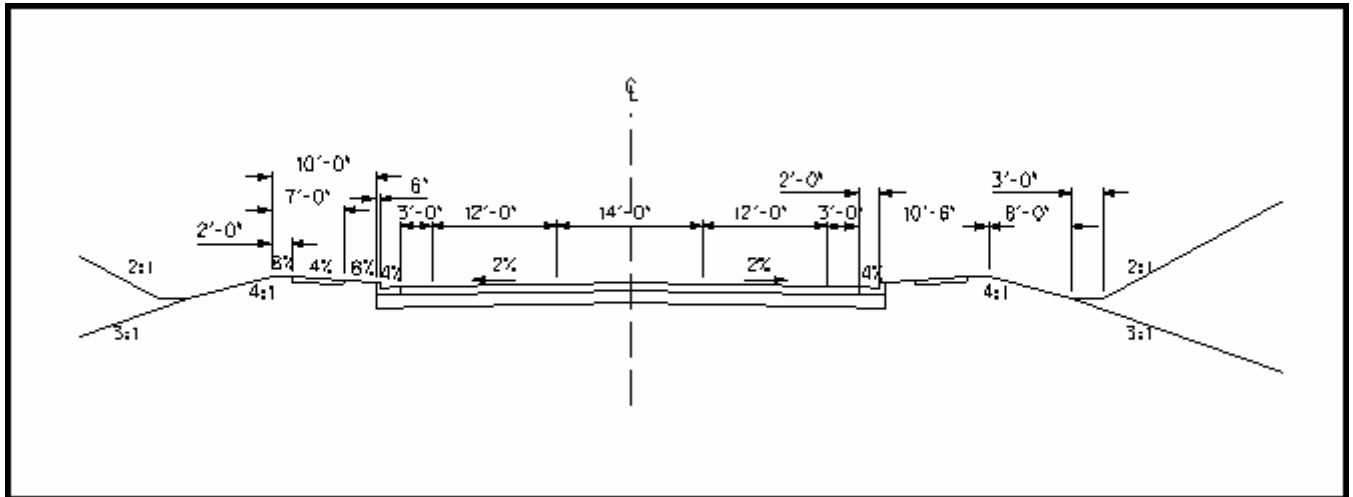


Figure 5.1 - Urban Three-Lane Curb and Gutter

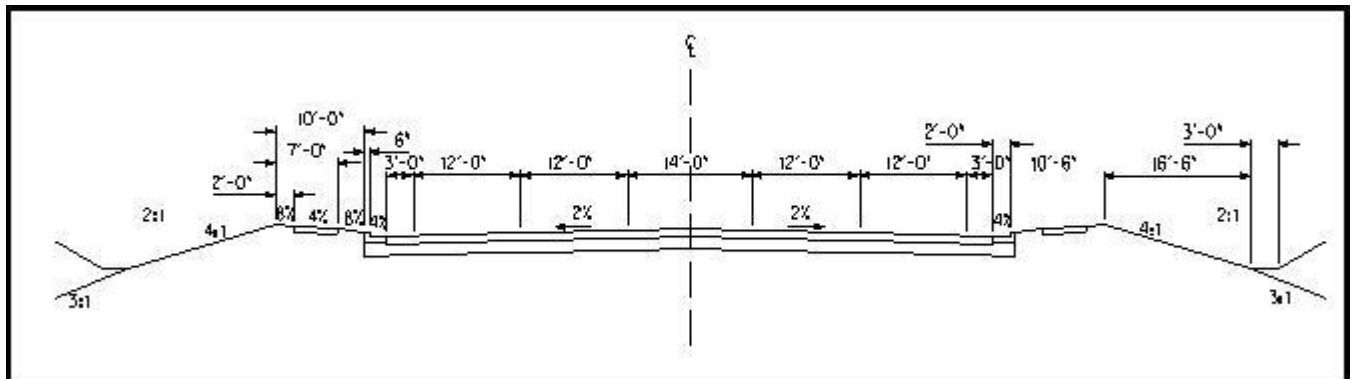


Figure 5.2 - Urban Five-Lane Curb and Gutter

Table 5.1 - Ultimate Rebuild Alternative Cost Estimate

Phase	Jefferson County	Oldham County	Total
Design	\$1,089,000	\$1,400,000	\$2,489,000
Right of Way	\$16,929,000	\$11,813,500	\$28,742,500
Utilities	\$11,310,000	\$3,365,000	\$14,675,000
Construction	\$10,890,000	\$12,600,000	\$23,490,000
<b>Total</b>	<b>\$40,218,000</b>	<b>\$29,178,500</b>	<b>\$69,396,500</b>

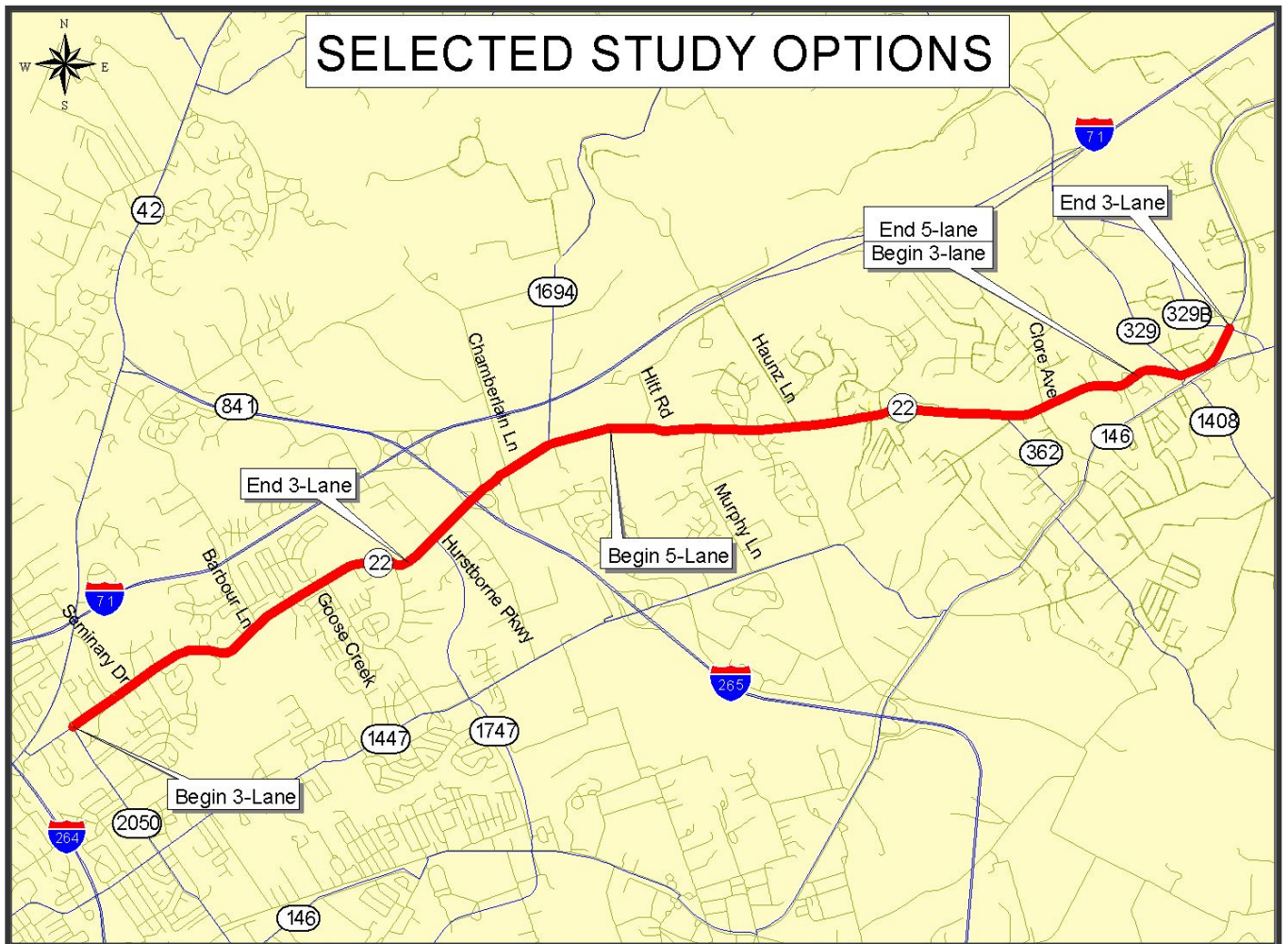
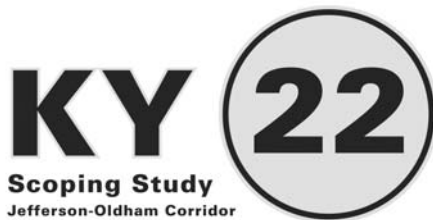


Figure 5.3 - Ultimate Rebuild Option

APPENDIX A  
KY 22 Scoping Study Meeting Minutes

## MEETINGS

Date	Meeting
07/10/2001	Public Meeting #1
07/26/2001	Citizens Advisory Committee (CAC) Meeting #1
08/06/2001	Local Elected Officials (LEO) Meeting #1
09/20/2001	CAC Meeting #2
03/21/2002	CAC Meeting #3
02/20/2003	LEO Meeting #2
01/25/2005	LEO Meeting #3
01/27/2005	CAC Meeting #4
06/07/2005	CAC #5 and LEO #4 Combined Meeting
06/09/2005	Public Meeting #2



## July 10, 2001 Public Meeting Written Comment Summary

Citizens who attended the Kentucky 22 public meeting shared many concerns and suggestions for Kentucky 22. Almost one-third of attendees turned in comment forms, totaling 47. The most common concerns were:

- Safety, including additional stoplights, additional lanes and more speed limit enforcement
- Preservation of scenic beauty

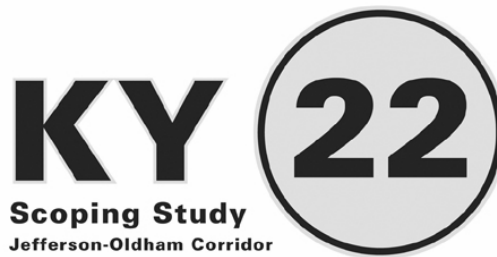
Comments about adding stoplights numbered 35, with stakeholders mentioning almost a dozen specific intersections along Kentucky 22 they believe need traffic lights to improve safety. By far, the intersection that concerns most people is Murphy Lane. In addition, several attendees mentioned these intersections:

- Chamberlain Lane
- Haunz Lane
- Highway 1694
- Barbour Lane
- Springcrest Drive

Another common concern was preserving the natural beauty of Kentucky 22. Several citizens said they would like safety improvements that don't eliminate the road's "rustic feel." Six people said the road should not be widened, mentioning the area between Herr Lane and Hurstbourne Parkway specifically. About twice as many people said that more lanes should be added, with most suggesting widening east of I-265. Other design suggestions included adding a median and sidewalks and improving lighting along the corridor.

Citizens also commented on the traffic impacts from development in the area. Several people mentioned Norton Commons and The Summit, and they suggested that planning and road improvements be done now to address expected traffic increases.





## **Project Overview**

The Kentucky Transportation Cabinet is working to develop solutions to existing and future transportation needs along a 10-mile stretch of Kentucky 22 from Herr Lane in Jefferson County to Crestwood in Oldham County.

The consulting team of HNTB Corporation and Presnell Associates is conducting a scoping study, which will identify a range of transportation options and make recommendations to the Cabinet about future highway improvements.

As part of the study, the team will gather and analyze information on accident rates, traffic volumes, travel patterns, environmental features, historic properties and other aspects of KY 22. The team also will seek advice and input from area residents, business owners, government agencies and others about ways to improve the highway.

## **Public involvement**

The views and ideas of the people who live, work and travel along KY 22 are essential to developing a comprehensive study of transportation needs and solutions.

The study's public involvement process includes a Citizens Advisory Council, a group of people representing cities, neighborhoods, businesses, interest groups, government agencies and service providers such as police and fire departments. The council will share ideas, discuss concerns, and comment on potential transportation alternatives developed with the study.

Two public meetings are planned – one at the beginning of the study and another later in the process to review the consultants' recommendations. At the meetings, citizens can talk with consultants and Transportation Cabinet officials, ask questions and make comments. Comments from the public and from the Citizens Advisory Council will be critical elements in the success of the scoping study.

## **Contact us**

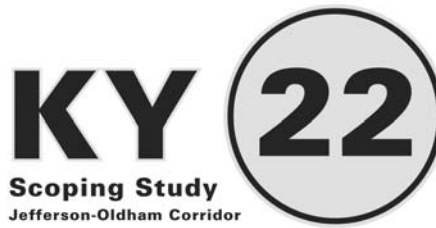
We welcome comments and questions regarding this project. Here's how you can reach us:

**Mail:**  
KY 22 Scoping Study  
ATTN: Larry Chaney, Project Manager  
HNTB Corporation  
310 W. Liberty St., Suite 701  
Louisville, KY 40202

**Fax:** (502) 581-0987

**E-mail:** [KY22@hntb.com](mailto:KY22@hntb.com)

**Phone:** (502) 581-0985



## PUBLIC COMMENT FORM

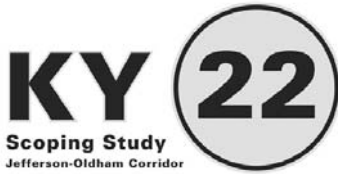
<b>Name</b>
<b>Street Address</b>
<b>City/State/ZIP</b>
<b>Daytime Phone</b>
<b>E-mail</b>
<b>Neighborhood</b> (i.e. Barbourmeade, Cliff Wood)
<b>Comments</b> (Continue on back if necessary.)

**Please turn form in at the registration table or mail / fax to our office:**

KY 22 Scoping Study  
 ATTN: Larry Chaney, Project Manager  
 HNTB Corporation  
 310 W. Liberty St., Suite 701  
 Louisville, KY 40202  
 FAX (502) 581-0987

You can also send comments by e-mail: [KY22@hntb.com](mailto:KY22@hntb.com)





## **Citizens Advisory Council Comment Summary July 26, 2001**

Comments from the Citizens Advisory Council meeting on July 26 echoed those at the July 10 public meeting, emphasizing the importance of safety and improved mobility along the route.

### **Safety**

#### Murphy Lane

The Murphy Lane intersection concerns citizens more than any other safety issue. All four groups listed concerns and/or suggestions for this intersection. They included:

- A traffic light to replace the flashing light
- An interchange to provide direct access to and from I-71
- Additional lanes
- Flashing lights at bus stops

Some said that adding access to I-71 would preserve the scenic character of the corridor by relieving the road of extensive commercial traffic. Groups A/B and E/F emphasized that the Murphy Lane intersection needs attention immediately.

#### Haunz Lane, Barbour Lane and KY 1694

Other areas of concern are Haunz Lane, Barbour Lane and KY1694. Group E/F commented that the Haunz Lane intersection sees a lot of heavy truck traffic from nearby quarries and cement plants. Sight distance is also a problem.

Suggestions for the Haunz Lane intersection included:

- Access to I-71
- Additional lanes on KY 22
- A turn lane

Suggestions for KY 1694 included:

- Dual left hand turn lanes
- A traffic light at KY 22
- Additional access to I-265

Suggestions for Barbour Lane included:

- A wider turn lane at KY22
- A traffic light at KY22
- Direct access to I-71.

### Neighborhoods and Small Cities

Most groups at the meeting also mentioned safety concerns at entrances to local neighborhoods and small cities along corridor. Specific suggestions included:

- Adding a turn lane and a stoplight at the Goose Creek neighborhood entrance
- Replacing anti-skid material between Goose Creek and Hurstbourne Parkway
- Adding flashing lights at the Ten Broeck intersection

Other neighborhood and small city entrances mentioned were:

- Lake Louisville
- Spring Valley
- Woods of St. Thomas
- City of Old Brownsboro Place

### I-265

All the groups mentioned I-265 and its impact on KY 22 traffic. Improvements recommended:

- Reconfiguring the intersection of I-265 and KY 22
- Adding a stoplight at the end of the exit ramp onto KY 22 (left turns are especially difficult from the northbound ramp)

### Other safety issues

Some other concerns listed:

- Drainage problems at the area at Brownhurst Cove and Kitty's Nursery
- A dangerous bend in the road near Brownhurst Cove
- Usage of buried utilities
- Evaluating the speed limit and increasing police patrols in the area

### **Scenic Character**

Citizens Advisory Council members listed only a few comments about the scenic character of the road. The suggestions included:

- Adding sidewalks or bike paths along the route
- Considering a new bypass road to allow KY22 to remain intact
- Improving lighting
- Eliminating the utility islands at I-265 and Seminary Drive

Specific scenic areas noted on maps included:

- Woods of St. Thomas to Ten Broeck
- Hite Creek to Murphy Lane
- West of Orchard Grass Hills to just east of Crestwood
- Herr Lane to Hurstbourne Parkway

## **Historic Properties and Environmental Features**

Citizens from almost all the groups mentioned different aspects of the corridor that should be protected. Particular properties and features mentioned were

- Spring house and spring near Springcrest Drive
- Porter Estate
- Hite Creek
- Goose Creek
- Little Goose Creek

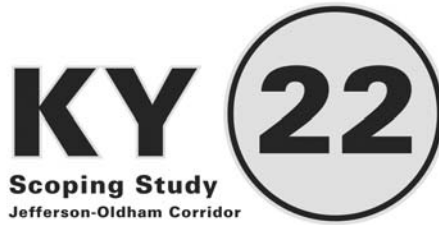
Other features included:

- Cemeteries near Murphy Lane and Chamberlain Lane
- Stone bridges
- Historic houses (8 marked on maps)
- Mature trees

## **Impacts on Property Owners**

Council members listed these concerns and ideas:

- Noise pollution
- Proximity of homes and businesses to the road
- A moratorium on development
- Underground utilities



## QUESTIONNAIRE

<b>Name</b>
<b>Street Address</b>
<b>City/State/ZIP</b>
<b>Daytime Phone</b>
<b>E-mail</b>
<b>Neighborhood</b> (i.e. Barbourmeade, Cliff Wood)

*Please complete the following statements:*

**My greatest concern about KY 22 is** \_\_\_\_\_

---

---

---

**The most needed area of improvement on KY 22 is** \_\_\_\_\_

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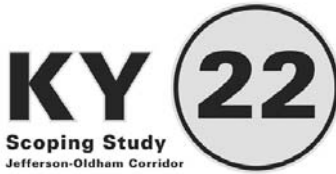
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**Please add any other comments on the back and return the completed form to the registration table. You also can mail or fax this form to our office:**

KY 22 Scoping Study  
ATTN: Larry Chaney, Project Manager  
HNTB Corporation  
310 W. Liberty St., Suite 701  
Louisville, KY 40202  
FAX (502) 581-0987

You also can send comments by e-mail: [KY22@hntb.com](mailto:KY22@hntb.com)



## Kentucky 22 Scoping Study Summary of Local Elected Officials Meeting August 6, 2001

### Present

**Legislators:** State Senator Julie Rose Denton, State Senator Ernie Harris, State Representative Bob DeWeese and State Representative Tim Feeley

**Jefferson County officials:** Kathy Matheny, Jefferson County Judge-Executive's Office; Jim Adkins, Director, Jefferson County Public Works; Mark Adams, County Engineer, Jefferson County Public Works

**Oldham County officials:** Magistrate Rick Rash, Magistrate Robert Diebel Jr. and Magistrate Duane Murner

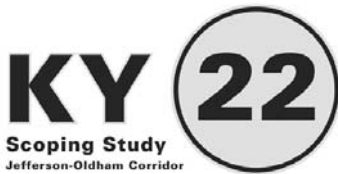
**Kentucky Transportation Cabinet:** Greg Groves, Pre-construction Branch Manager; and Chuck Berger, Project Manager

**KY 22 Project Team:** Larry Chaney, Project Manager, HNTB Corp.; David Smith, Presnell Associates; and Chad Carlton, Doe Anderson, Inc.

### Meeting summary

- Larry Chaney gave a progress report on the project and the public involvement process. About 150 people attended the July 10 public meeting at Northeast Christian Church, and 44 members of the Citizens Advisory Council attended that group's first meeting on July 26. The leading concern voiced at both meetings was the need to address safety concerns. The Murphy Lane intersection was most often cited as needing safety improvements.
- Greg Groves announced that a public meeting on Murphy Lane improvement options is scheduled for 6 p.m., Sept. 11, at Northeast Christian Church. Rep. Bob DeWeese urged the Cabinet to make improvements at Murphy Lane before the beginning of the 2002-2003 school year, when the new elementary school is slated to open.
- Chad Carlton distributed copies of the folders given to Citizens Advisory Council members. The folders included maps, a project overview, a council membership list, a comment form and summaries of the public meeting comments. Comment summaries from the Council meeting will be mailed to elected officials.

- Larry Chaney showed a video tour of the KY 22 route, pointing out areas of concern raised by citizens and identified by traffic and accident data. Several officials asked questions and raised issues. Among them:
  - Underground utilities – They are an option, but are expensive, and utility companies are often reluctant to take on the task.
  - Widening in the western section (Herr Lane to Hurstbourne Lane) – Safety is a greater issue than capacity, Chaney said. Turn lanes and widened shoulders are an option.
  - Recent increases in traffic volumes demand quick solutions – Study will recommend a mix of short-term and long-term solutions. Adding turn lanes to improve traffic flow and cutting vegetation to improve sight distance are two examples of short-term solutions.
  - Traffic signal at access road to Republic Bank – Chaney noted that it would be problematic because of nearby signals.
  - Traffic signal east of Gene Snyder Freeway interchange (northbound off-ramp)
  - Redesigning the interchange at Gene Snyder Freeway
  - Relocating Haunz Lane intersection
  - Adding a third lane (two-way turn lane) in Crestwood near KY 329 intersection
  - Adding an I-71 interchange – Chaney noted that additional I-71 interchanges are outside the scope of the study.
  
- Several officials asked about the status of the KY 22-Crestwood Bypass project. Greg Groves noted that construction of the project is slated for 2005 in the State's Six-Year Plan. The Waldeck Farm issue has not been resolved. FHWA officials have said that going around the farm is a "prudent and feasible" option. Therefore, that option will be one of the alternatives carried forward in the study.
  
- The next Citizens Advisory Council meeting is scheduled for Sept. 20, 2001 at South Oldham High School from 6 p.m. to 8 p.m.



## **Citizens Advisory Council Comment Summary**

Sept. 20, 2001  
South Oldham High School

### **Welcome**

- Thanks for attending.
- Comments received at the first council meeting were very helpful.

### **Murphy Lane intersection**

- Transportation Cabinet is considering five alternatives.
- All alternatives include left-turn lanes to improve safety and mobility.
- Four alternatives widen KY 22 and lower the grade (or road elevation) on KY 22 to improve sight distance.
- One alternative (Alt. 4) would relocate Murphy Lane to the west and would not change the KY 22 grade. This could possibly be completed more quickly than other alternatives.
- Traffic signals may be added later after Cabinet conducts counts of new traffic patterns/levels.
- Cabinet has scheduled Oct. 16 public meeting on the alternatives.
- Construction could begin next year.

### **Changes planned at I-265 and KY 1694 area**

- Developers are working with the Cabinet on improvements to KY 22 near the I-265 interchange.
- Chaney demonstrated a computerized traffic program that's being used in the scoping study to determine current and future traffic impacts and to evaluate the effectiveness of various alternatives.

### **Existing conditions and possible solutions**

- Chaney used a slide presentation (see attached) to discuss the different conditions along KY 22 and examples of options for improving the road. The examples shown were from other roadways in Jefferson County.
- Eight improvement options were detailed:
  - Three-lane residential with curbs and gutters
  - Three-lane residential with grass shoulders
  - Three-lane commercial with curbs and gutters
  - Four-lane residential with curbs and gutters
  - Four-lane residential with grass shoulders
  - Four-lane residential with curb and median
  - Four-lane residential with curb and wider median
  - Five-lane residential with curb and two-way left-turn lane
- Over the next couple of months, the consulting team will consider which options might be best for various sections of KY 22.
- At the next Council meeting, we plan to have draft recommendations for the Council's review and comment.

### **I-71 interchange options**

- The KY 22 Scoping Study does not include a detailed examination of the possibility of additional interchanges on I-71. However, the study may include suggestions from both the consultant and citizens.
- Federal guidelines require new interstate interchanges to be at least one mile apart and have logical connections to the existing transportation system.
- It might be possible, if spacing were the only consideration, to locate an additional I-71 interchange between I-265 and the rest areas.

### **Questions and comments**

**Bike lanes are needed along KY 22 near Springhurst.**

**A traffic signal should be added at the Murphy Lane intersection. That would solve most of the problems.**

*Response from Greg Groves of Transportation Cabinet, District 5:* We may add a signal later. Need to evaluate effects of intersection improvements before adding signal.

**The design speed and speed limit should not be raised.**

*Response from Groves:* There are no plans to increase speed limit.

**Developers will do whatever they want to do because they are paying for the improvements to the road. We have no input.**

*Responses from Groves and Larry Chaney:* We are working with developers to ensure that roads can accommodate added traffic.

**Working within the system has proved to be very successful. As a result of discussions with Norton Commons developers, several issues and potential problems were addressed.**



**Could you add a traffic signal at the I-265 northbound off-ramp to KY 22 so people can turn left more easily? When The Summit opens, it's going to cause backups on that ramp.**

*Response:* Groves promised to talk with District 5 traffic officials and report back. As a result, the Cabinet is now conducting a traffic count to see whether a signal should be added.

**Are you planning road improvements to handle all the developments?**

*Response from Chaney:* Projections for additional development in the area are factored into the traffic model we are using and the Horizon 2020 plan.

**From Ballard High School to Hurstbourne Parkway, you've controlled traffic as much as you can. I would leave it like it is. More improvements will just increase traffic.**

**Improvements should have been made years ago.**

**What is the decision-making process for making improvements on KY 22?**

*Response from Chaney:* We are in the process of gathering information on traffic, environmental features, etc. We will take that data, along with comments from the public, and come back with some preliminary alternatives for improvements probably later this year. We will seek comments from the Council and citizens, and we will use those to refine the scoping study. The study will be presented to the Cabinet for their consideration. The Cabinet can use the report to help decide which improvements should be funding priorities in the State's Six-Year Highway Plan. Ultimately, state legislators and the governor will decide.

**The area from Hurstbourne Parkway to Seminary Drive needs safety improvements. We should focus on solutions that improve safety.**

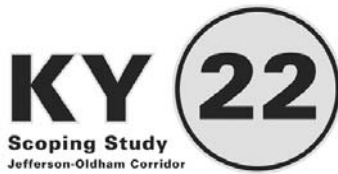
*Response from Chaney:* Safety is the Cabinet's top priority.

**How long will it take before the improvements recommended in the scoping study can be made?**

*Response from Chaney:* Some improvements could come quickly, such as cutting trees and brush at curves to improve sight distance, adding delineator posts between lanes and adding warning signs. The time frame for long-term solutions is 20-25 years.

**We should make the improvements now. If I had a bulldozer, I would do it.**

**We just went through a similar process on the Old Henry Road study. We've been at it for 18 months, and it might be another year or 18 months before it's finished. We have to be patient. There's limited funding. If you want improvements quicker, call your state representative and senator and tell them to raise your taxes. We're not all going to like everything recommended in the scoping study, but this is a chance for our input.**



## **Citizens Advisory Council Meeting Summary**

March 21, 2002

Worthington Fire Department

### **Project Timeline**

By Larry Chaney, P.E., HNTB Corporation

- Preliminary alternatives are expected to be ready for the Council's review in June.
- After getting feedback from the Council, the alternatives will be presented at a public meeting this summer.
- The completed study will be presented to the Kentucky Transportation Cabinet by the end of this year.

### **Plans for on-going projects on KY 22**

By John Callihan, P.E., Kentucky Transportation Cabinet

There are three (3) transportation improvement projects and one (1) transportation study in progress along the KY 22 corridor. Construction has not yet begun on any of these projects. Listed below is the status of each of these projects.

#### **From I-265 to KY 1694**

This project is a partnership between the Kentucky Transportation Cabinet (KYTC) and Jefferson County Public Works (JCPW), with additional funding from Norton Commons and possibly Old Brownsboro Crossings and other developers. Upon completion of this project, KY 22 will have six lanes of traffic, separated by a raised grassy median. The road will feature additional space for bikes, curbs, and 5-foot wide sidewalks. New traffic signals will be added at the off-ramp from I-265 Eastbound to KY 22, Chamberlain Lane, KY 1694/New Chamberlain Lane and possibly at Brownsboro Glen Road. All signals will be interconnected. The weave on I-265 between KY 22 and I-71 will also be examined.

### **From Silver Creek to Hitt Lane**

KY 22 will be widened to three 11-foot wide lanes. The expanded area also will feature shoulder improvements. KYTC and JCPW are partnering on this project, with potential for additional funds from Ball Homes.

### **Murphy Lane**

Listed as one of the highest priorities by Council members, the improved Murphy Lane intersection will have improved sight distance and a left-turn lane on KY 22. A traffic signal will also be added as part of the project. An estimated schedule calls for right of way and utility work to be completed by the end of 2002 and construction to be completed in 2004.

### **I-71 Interchange Study**

The interchange study is a joint project between KYTC, Oldham County and Jefferson County Public Works, with JCPW leading the project. The goal of the project is to review possible sites for a new I-71 interchange and to identify a corridor connecting that interchange to KY 22. The outcome may be a new connector near the Oldham-Jefferson county line.

## **Findings of the Environmental Overview**

By Tom Springer, AICP, Qk4

The KY 22 Scoping Study has developed an Environmental Overview of the corridor. The National Environmental Policy Act (NEPA), a federal law, requires that whenever federal funds are used on a project, an environmental assessment must be prepared to outline the potential social, economic and environmental impacts of changes. The assessment of potential impact helps us to be good stewards of the land and our history, and to create a design that best fits a community. An Environmental Overview is a preliminary inventory of resources that might be impacted, and it indicates what should be studied in greater detail during the subsequent National Environmental Policy Act process. The following are some of the preliminary findings of the Overview:

### **Environmental Findings**

The review found:

- 10 streams
- 3 floodplains
- 1 wetland: Lake Louisville

Potential habitat for three threatened and endangered species may be found in the project area:

- Indiana Bat
- Gray Bat
- Running Buffalo Clover

## **Historic Findings**

The Overview noted 63 sites along the corridor that should be taken into consideration when planning improvements to the road. Three of these sites are on the National Register of Historic Places, and 27 sites appear to be eligible. Thirty-three other sites were identified as needing further study before determining their eligibility for the National Register. There are no known prehistoric or historic archaeological sites located along the corridor. A final determination, however, cannot be made until excavation actually takes place.

## **Socioeconomic Findings**

The Overview found population changes in the communities connected by KY 22. The Jefferson County population grew 4.3% between the 1990 and 2000 census, and Oldham County grew 38.6%.

Federal law also protects against disproportionate impacts to minorities or low-income populations. The study identified four potential areas:

- Fincastle
- Worthington Hills
- Coldstream
- Lake Louisville

Communities identified as having significant history and character:

- Worthington
- Lake Louisville
- Rollington (Hamilton)
- Peewee Valley
- Crestwood

## **Aesthetic, Visual Qualities:**

Three areas were noted as having scenic viewsheds from the road:

- Goose Creek
- Little Goose Creek
- Hite Creek

Concerning views of the road, citizens requested a road design that fits in the context of the existing communities

## **Contamination Sites**

It is important to identify contamination sites before construction begins in order to avoid potential land, air or water pollution. The following were identified:

- 7 existing Underground Storage Tank (UST) sites
- 12 former UST sites
- 5 waste stockpiling sites
- 4 business sites using chemicals
- 8 auto repair operations

## **Key Environmental Laws That Protect Environmental Resources**

Many federal and state laws protect the resources identified along KY 22. The following are some laws that must be adhered to throughout this process:

- National Environmental Policy Act
- Clean Air Act
- Clean Water Act
- Endangered Species Act
- Section 106, National Historic Preservation Act
- Section 4(f), Department of Transportation Act
- Environmental Justice (E.O. 12898)
- Resource Conservation and Recovery Act

## **Resources Highlighted by Council Members**

Following the Environmental Overview presentation, Council members were asked to identify or highlight resources that may have been overlooked. Here are the features that members marked on environmental maps of the corridor:

### **Western**

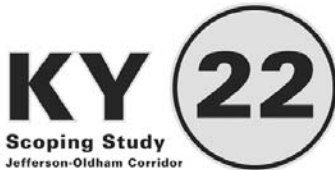
- Scenic area along Goose Creek
- There used to be a “trace” around Goose Creek that was the early road for settlers
- Scenic area beginning about 1,000 feet east of Goose Creek and ending 1,000 feet west of Goose Creek along both sides of the road
- Scenic area beginning approximately 1,400 feet west of Little Goose Creek to approximately 1,600 feet east of Little Goose Creek along both sides of the road
- Possible wetland along Little Goose Creek, nesting site for Mallard ducks and Blue or Gray Herons sometimes visit
- Is Historic Site 5 “Springhouse?” (Note: According to the Kentucky Heritage Council database and records from the project’s historic consultant, the name Springhouse is not associated with this property.)

### **Central**

- Scenic area from Hite Creek to Louisville Memorial Gardens along both sides of the road
- House in SW quadrant of Murphy Lane and KY 22 is possibly historic
- Possible Native American site in area of Old Brownsboro Crossing development near Historic Site 18 (Von Allmen Dairy Farm)

### **Eastern**

- Scenic area from Lake Louisville east to just east of Crestwood along both sides of the road
- Possible stone bridge over a blueline stream in Rollington next to KY 22



## Kentucky 22 Scoping Study Summary of Local Elected Officials Meeting February 20, 2003

### Present

**Metro Louisville:** Debbie Carroll, Legislative Assistant to Metro Council Member Kelly Downard, District 16; Glen Stuckel, Metro Council Member, District 17

**Oldham County:** Dennis Deibel, Mayor of Crestwood; Robert Deibel Jr., Magistrate of Oldham County Fiscal Court and Rick Rash, Magistrate of Oldham County Fiscal Court

**Kentucky Transportation Cabinet:** Chuck Berger, Project Manager; Andrea Clifford, Public Information Officer; Greg Groves, Pre-construction Branch Manager and Bill Monhollon, Chief District Engineer

**KY 22 Project Team:** Larry Chaney, Project Manager, HNTB Corp.; Kristen Jordan, Doe Anderson, Inc.; Mark Nouri, HNTB Corp.; David Smith, Qk4; Tom Springer, Qk4 and Kay Stewart, Doe Anderson, Inc.

### KY 22 Scoping Study Update

- Larry Chaney updated the group on the status of the project and the anticipated schedule. Work on the KY 22 project began two years ago and is now expected to be completed this summer. The project has been on hold for nine months pending completion of an updated regional traffic model. With the updated traffic data, alternatives for improving KY 22 will be finalized and subsequently presented this spring to the project's Citizens Advisory Council for their review. The Advisory Council is comprised of representatives of organizations, neighborhoods, businesses and other groups within the KY 22 corridor.

After the alternatives are developed and reviewed, recommendations will be made to the Kentucky Transportation Cabinet (KYTC) for their consideration. The findings of the Study Team will be announced at a public meeting this summer, and will include a variety of solutions ranging from minor improvements such as signing or adding traffic signals to more extensive improvements such as adding turn lanes or widening KY 22 itself. Also included will be recommendations on how to improve the overall corridor, with particular attention given to improving safety and reducing congestion while preserving the unique and diverse characteristics of the area. The concerns of people who live and work along the corridor and who drive on KY 22 regularly will be strongly considered in the development of recommendations.

### Area Project Update

- Murphy Lane: Planned improvements include a traffic signal, improved sight distance, and left-turn lanes on Murphy Lane and KY 22. KYTC is currently involved in right of way acquisition for the project. Due to the new elementary school located on Murphy Lane, construction will not begin until May 2004 – the end of the school year.

- KY 22 Widening between I-265 and KY 1694: This joint project with area developers, Metro Louisville government and KYTC involves widening KY 22 and relocating and/or extending portions of Chamberlain Lane. KY 22 will be six lanes wide from I-265 to KY 1694, with turning lanes at the major intersections.
- KY 22 Widening between KY 1694 and Hitt Road: There are developments in place on either side of Hite Creek that have constructed left-turn lanes serving the sites. In order to connect these two sections and to develop a continuous three-lane roadway through the area, the KYTC has already extended the culvert at the creek. Another potential development at Hitt Road would provide additional widening and sight distance improvements as part of their project.
- KY 22 Widening between Crestwood and KY 393: KYTC is conducting this KY 22 expansion project, with Qk4 as its consultant. It is progressing, but there are concerns about numerous historic properties in the area and additional studies are being conducted.
- I-71 Interchange Study: This is a joint project between Jefferson and Oldham counties to evaluate the need for and location of a new interchange on I-71 between the Snyder Freeway and KY 329. A new interchange on I-71 could greatly influence future traffic patterns on KY 22, since many motorists use I-71 and I-265 in order to access KY 22.
- Crestwood Bypass (Old Henry Road-Crestwood Connector): KYTC is overseeing this study, conducted by American Engineering, which is currently in the Preliminary Design and Environmental Assessment phase. Due to historic properties and environmental features in the area, the study has been expanded.
- Oldham County Major Thoroughfare Plan: This study of major routes in Oldham County just began, and is scheduled for completion this summer.

## **Corridor Characteristics**

### Level of Service

- Based on currently available traffic projections, by the Design Year 2030 about 90% of the corridor will be functioning at Level of Service E or F. Set up on a scale from A to F, Level of Service F ranks as the least functional level of traffic movement, and is considered serious congestion. As of 1999, approximately one third of the corridor was already performing at Level of Service E or F.

### Accident Rates & Roadway Geometry

- Safety along a particular roadway section may be measured in a number of different ways. Comparisons of the crash rate (based on type, severity, and number) on a road to that on similar roads across the Commonwealth is one of those measures. This comparison yields what is known as the Critical Rate Factor, which is greater than 1.0 if the roadway has a higher than normal crash rate. Currently, there are approximately 20 locations within the limits of the study that exceed the CRF of 1.0.
- A characteristic of a roadway that may increase the probability of a crash is its geometry, or the manner in which it curves horizontally or moves up and down grade. Today, there are more than 35 segments with horizontal or vertical curvature that may be considered less than adequate, given the traffic volume and operating speeds on the route.

### Existing conditions and possible solutions

- Mr. Chaney used a slide presentation to discuss the different conditions along KY 22, which include rural areas with lots of vegetation, urban areas with many driveways and residential areas without shoulders or sidewalks. Mr. Chaney also showed examples of options for improving the road.
- Eight possible improvement options were detailed:
  - Three-lane residential with curbs and gutters
  - Three-lane residential with grass shoulders

- Three-lane commercial with curbs and gutters
- Four-lane residential with curbs and gutters
- Four-lane residential with grass shoulders
- Four-lane residential with curb and median
- Four-lane residential with curb and wider median
- Five-lane residential with curb and two-way left-turn lane

### **Environmental Overview**

- Tom Springer provided a summary of the report's findings and the organizations and laws that regulate transportation studies and projects. A detailed summary is in the folder provided at the meeting.

### **Discussion and Q&A**

#### **Is the Chamberlain Lane project and KY 22 expansion at I-265 tied to the Brownsboro Crossings development? Is construction at Brownsboro Crossings dependent on the roadwork being complete?**

Yes, the roadwork is a binding element of the approval for construction of that project. The project involves an agreement between Metro Louisville, KYTC, the developers and the consulting engineer, with funding for design provided by the developer. The Brownsboro Crossings project is currently in litigation.

#### **The owners of Worthington Cemetery are concerned because LG&E wants to put an easement on their property. LG&E has said that they would take the property through condemnation.**

LG&E is also interested in some of Northeast Christian Church's property. They've considered putting lines on the other side of the street, but it is not economically feasible, because they would have to relocate if that property is purchased for right of way to widen KY 22.

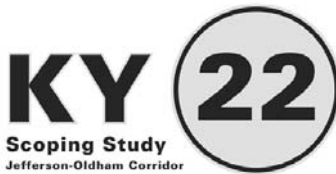
- **Is the cemetery historic?**

Possibly, but it is generally very difficult to acquire cemetery property and relocate gravesites. However, it may be that the only change to the cemetery property is installation of power lines hanging above the property.

#### **Is the KY 22 Scoping Study in the Six Year Highway Plan?**

The Scoping Study was in the previous 6YP, and the improvements at Murphy Lane and between I-265 and KY 1694 are listed in the current plan. No other projects within the limits of the Scoping Study are currently identified for funding.





## **Elected Officials Meeting Summary**

Tuesday, January 25, 2005

Republic Bank

### **Welcome**

After an introduction of project team members, Larry Chaney, Project Manager, explained that since the last officials meeting, the Kentucky Transportation Cabinet (KYTC) has developed a new traffic model and compiled updated traffic data. The new data reflects increases in accident rates and traffic congestion and will allow the team to develop a more appropriate long-term plan.

### **Other Area Projects along KY 22**

- KY 22 Widening from I-265 to Chamberlain Lane
  - Let to construction on June 25, 2004, should be completed by Fall 2005
  - Completed project will include six lane curb and gutter and sidewalks
  - Utilizing both private and state funds to develop and coordinate project
  
- KY 22 widening from Chamberlain Lane to KY 1694
  - Final design is underway and Metro Louisville is working on development of right of way plans
  - Completed project will include six lane curb and gutter and sidewalks will be added
  - Utilizing both private and state funds to develop and coordinate project
  
- KY 22 widening from Silverwing Boulevard to Hitt Lane
  - Next major step is completing design and starting right of way acquisition
  - Completed project will include three-lane rural section with shoulders (no sidewalks will be added)
  - Project is 100% state funded
  
- Intersection Improvement at KY 22 and Murphy Lane
  - Sight distance correction project
  - Completed project will include left turn lanes at all intersection approaches and a traffic signal
  - Tentatively assigned a January 2005 letting date, pending right of way, utility relocation progress and funding.

- KY 22 Corridor Scoping Study from Herr Lane to Crestwood in Oldham County
  - Study should be complete by summer 2005 and in time to make individual project recommendations for the 2006 Six-Year Plan
  - Instituted Citizen Advisory Committee and a Local Elected Official Committee to help guide the project
  - 80% federal and 20% state funded
  
- KY 22 Resurfacing
  - Completed project will include resurfacing on KY22 from Seminary Drive to Hurstbourne Parkway with a skid resistance asphalt surface and the addition of centerline rumble strips.
  - The District is hoping to complete this project this year, but scheduling is based on funding
  
- New I-71 Interchange
  - Agreements to fund the Interchange Justification Study have not been 100 percent committed

### **Corridor Conditions and Updated Traffic Data**

The corridor was reviewed for the safety and functionality for all potential users, including motorists, pedestrians and bicyclists. The project team reviewed the updated traffic data comparing 2001 to 2004 statistics. The new data indicates a 54% increase in accidents in the study area and a 25% increase in injuries.

### **Typical Conditions**

Currently the corridor has some features that contribute to unsafe driving conditions. Some of the characteristics along the corridor include:

- Two-lane portions in residential areas with narrow shoulders and steep drop offs
- Lush foliage and plant growth close to the road's edge
- Sharp curves and hills that contribute to vertical and horizontal sight distance problems
- Retail portions with extensive traffic movement near I-265 interchange
- Two-lane portions in business district with driveways that are very close to the road's edge

### **Ultimate Concepts**

It is proposed that each new roadway will include a curb and gutter as well as a bike lane. Turning lanes will be added throughout the corridor. Concepts include:

- Three lanes on KY 22 from Herr Lane to Hurstbourne Pkwy., with a two-way left-turn lane
- Five lanes on KY 22 from KY 1694 to KY1408, with a two-way left-turn lane

- Three lanes from KY1408 to KY 329 B, with a two-way left-turn lane

### **Conceptual Plan Development**

- Map display explanation- during the slide presentation the map display showed where curb and gutter, sidewalks, bike lanes and the expanded lanes would be.

### **Environmental Overview**

The project will affect several environmental areas. The streetscape will lose some trees while the road is widened, but beautification can be considered at the completion of the project. There is potential habitat for protected animals and plants in this region and further study must be executed to determine potential impacts.

### Historic Findings

The Overview noted 63 sites along the corridor that should be taken into consideration when planning improvements to the road. Three of these sites are on the National Register of Historic Places, and 27 sites appear to be eligible. 33 other sites were identified as needing further study before determining their eligibility for the National Register.

### Socioeconomic Findings

The Overview found population changes in the communities connected by KY 22. The Jefferson County population grew 4.3% between the 1990 and 2000 census, and Oldham County grew 38.6%.

### Aquatic Findings

- 10 streams
- 3 floodplains
- 1 wetland: Lake Louisville

### Potential Habitat for Threatened and Endangered Species Identified

- Indiana Bat
- Gray Bat
- Running Buffalo Clover

### Potentially Contaminated Sites Identified

Among the 36 potential sites identified, the following were noted:

- Underground Storage Tank (UST) sites
- Waste Stockpiling Sites
- Business Sites using Chemicals
- Auto Repair Operations

### **Next Steps**

- Development of Projects

- Short-range projects could include:
  - Trimming back foliage to improve sight distance
  - Pavement widening to enhance safety or reduce congestion
- Public Meeting
- Completion and submittal of study
- KYTC District 5 makes recommendations to C.O.
- Funding identified
- Projects developed with:
  - Detailed, context-sensitive design
  - Public Involvement

## **Discussion**

**Q. How much money is needed to finish phase II of KY22 widening?**

A. About \$9 million.

**Q. When is the skid surface to be done?**

A. It should be completed this spring.

**Q. How will Murphy closure affect Worthington Fire Department?**

A. We'll notify the fire department in advance. We met with them a year ago to discuss the work and how it would affect their routes.

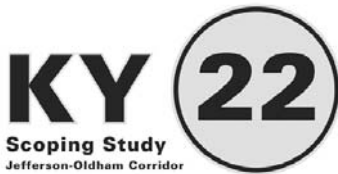
**C. I would suggest that you don't say "worst case scenario" at the Council meeting and I would explain that this is a long-term plan.**

A. We agree.

**Q. When you do the 3-lane section, do you have to do the bike lane at the same time?**

A. Yes, you should do the bike lane at the same time to save money and time.

**C. For the public, you should emphasize the increase in accident rates. They need to understand the statistics.**



## **Citizens Advisory Council Meeting Summary**

Thursday, January 27, 2005

Republic Bank

### **Welcome**

After an introduction of project team members and council members, Larry Chaney, Project Manager, explained that since the last council meeting, the Kentucky Transportation Cabinet (KYTC) has developed a new traffic model and compiled updated traffic data. The new data reflects increases in accident rates and traffic congestion and will allow the team to develop a more appropriate long-term plan.

### **Other Area Projects along KY 22**

- KY 22 Widening from I-265 to Chamberlain Lane
  - Let to construction on June 25, 2004, should be completed by Fall 2005
  - Completed project will include six lane curb and gutter and sidewalks
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  - Project is 100% state funded
  
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  - Sight distance correction project
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  - Tentatively assigned a January 2005 letting date, pending right of way, utility relocation progress and funding.

- KY 22 Corridor Scoping Study from Herr Lane to Crestwood in Oldham County
  - Study should be complete by summer 2005 and in time to make individual project recommendations for the 2006 Six-Year Plan
  - Instituted Citizen Advisory Committee and a Local Elected Official Committee to help guide the project
  - 80% federal and 20% state funded
  
- KY 22 Resurfacing
  - Completed project will include resurfacing on KY22 from Seminary Drive to Hurstbourne Parkway with a skid resistance asphalt surface and the addition of centerline rumble strips.
  - The District is hoping to complete this project this year, but scheduling is based on funding
  
- New I-71 Interchange
  - Agreements to fund the Interchange Justification Study have not been 100 percent committed

### **Corridor Conditions and Updated Traffic Data**

The corridor was reviewed for the safety and functionality for all potential users, including motorists, pedestrians and bicyclists. The project team reviewed the updated traffic data comparing 2001 to 2004 statistics. The new data indicates a 54% increase in accidents in the study area and a 25% increase in injuries.

### **Typical Conditions**

Currently the corridor has some features that contribute to unsafe driving conditions. Some of the characteristics along the corridor include:

- Two-lane portions in residential areas with narrow shoulders and steep drop offs
- Lush foliage and plant growth close to the road's edge
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### **Ultimate Concepts**

It is proposed that each new roadway will include a curb and gutter as well as a bike lane. Turning lanes will be added throughout the corridor. Concepts include:

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### **Conceptual Plan Development**

- Map display explanation- during the slide presentation the map display showed where curb and gutter, sidewalks, bike lanes and the expanded lanes would be.

### **Environmental Overview**

The project will affect several environmental areas. The streetscape will lose some trees while the road is widened, but beautification can be considered at the completion of the project. There is potential habitat for protected animals and plants in this region and further study must be executed to determine potential impacts.

### Historic Findings

The Overview noted 63 sites along the corridor that should be taken into consideration when planning improvements to the road. Three of these sites are on the National Register of Historic Places, and 27 sites appear to be eligible. 33 other sites were identified as needing further study before determining their eligibility for the National Register.

### Socioeconomic Findings

The Overview found population changes in the communities connected by KY 22. The Jefferson County population grew 4.3% between the 1990 and 2000 census, and Oldham County grew 38.6%.

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- 10 streams
- 3 floodplains
- 1 wetland: Lake Louisville

### Potential Habitat for Threatened and Endangered Species Identified

- Indiana Bat
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- Running Buffalo Clover

### Potentially Contaminated Sites Identified

Among the 36 potential sites identified, the following were noted:

- Underground Storage Tank (UST) sites
- Waste Stockpiling Sites
- Business Sites using Chemicals
- Auto Repair Operations

### **Next Steps**

- Development of Projects
- Short-range projects could include:
  - Trimming back foliage to improve sight distance
  - Pavement widening to enhance safety or reduce congestion
- Public Meeting
- Completion and submittal of study
- KYTC District 5 makes recommendations to C.O.
- Funding identified
- Projects developed with:
  - Detailed, context-sensitive design
  - Public Involvement

## **Discussion**

### **KY 22 Q & A**

**Q. Why was the 1/3 of a mile on the 42 end not getting redone?**

A. That roadway has already been improved, but we can look at including that portion in the project.

**Q. Why are you putting a roundabout in by Ballard high school?**

A. It's a good location for one, it gives equal opportunity to pass and it will add balance for the traffic flow in that location. That is just a concept; it has not been confirmed.

**Q. Please clarify what will happen with Hitt Lane. What are the accident rates for that road? Can you at least put a stoplight in at that intersection?**

A. At Hitt Lane there will be a total of five lanes for added safety. I don't have any of the accident rates available, but I can get those to you later. A stoplight may be considered when we allow a turning lane.

**Q. Will there be a possibility of putting turn lanes at Spring Valley, and Goose Creek?**

A. Any project along this corridor will incorporate a design that fits in the five-year plan.

**Q. Are area developers giving to the building funds?**

A. Yes. They have contributed a lot of money in the past and there is about \$2 million left in the account.

**Q. Please explain the I-71 interchange. Will it be coming in on Murphy Lane?**

A. That project was a preliminary study, and the environmental document has not been begun yet. The feasibility study showed that Haunz Lane would be the best



place for an intersection. There will be an opportunity for additional public comment before a decision is made.

**Q. Is there a correlation between the short-range construction projects and accidents?**

A. Yes, short range-planning is partially based on the areas with the most safety concerns.

**Q. One of my concerns is maintaining the environmental landscape along the corridor. With all the construction we will end up losing the tree canopy over KY 22 won't we? We need to look at context-sensitive solutions now rather than later.**

A. There is still time to look at detailed landscaping ideas, but we are not to that stage of the project yet. We can make suggestions about landscaping, but the KYTC district office will make that decision in the end. Safety is our first goal and we must address that.

**Q. What about the streetscape? Can you promise that KY 22 will have a beautification project as well?**

A. There can be no promises on anything. This is just a study and there are limitations on what we can promise. We can't make commitments but you can give suggestions. That is what your comment sheets are for, to help us understand what you are looking for.

**Q. What was the main focus of this project?**

A. Safety is a premium. We looked at congestion and location.

**Q. Is there a priority or why are you seeming to have an urgency by Norton Elementary?**

A. Look at the accident records and location of the school and you'll see that it's important to start near there.

**Q. Are we able to do the entire 10 mile stretch at one time?**

A. No. It would cost between \$35 and \$40 million just for construction. It's out of the question to think we could do it all at once.

**Q. Will our taxes go toward new roads?**

A. No.

**Q. I challenge you to show me that safety was the priority when the work near I-265 was completed. The area between Goosecreek Road and Hurstbourne Lane has much worse safety issues.**

A. That particular project was funded by the developer who was building in that area. Sometimes projects move forward more quickly if there is an established funding source. We can't control what part of the road on which developers choose to fund improvements.

**C. I think you're saying that safety is the premium, but that's not what is dictating the project schedule.**

**Q. How much money would be needed to complete work on all 10 miles of the project corridor?**

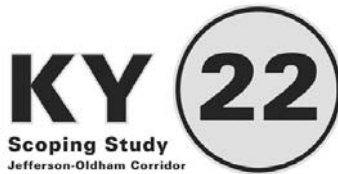
A. We would need \$35-40 million for construction, plus funds for right-of-way acquisition and design.

**Q. Do property taxes in new developments go toward road improvements?**

A. No, unless a deal is made with the developer.

**Q. Did you say that there was not a traffic problem between Seminary Lane and Goose Creek?**

A. No, I said there was not a traffic volume problem. There is a traffic problem there due to a lack of turn lanes.



**Joint Citizens Advisory Council and Elected Official Meeting Summary**  
Tuesday, June 7, 2005  
Kentucky Country Day School

**Welcome**

After an introduction of project team members and council members, Karen Mohammadi, Project Manager, thanked the council for their participation on the project. She then reviewed the project corridor and study limits.

**Other Area Projects along KY 22**

- KY 22 Resurfacing
  - Completed June 2005
  - Project included resurfacing on KY22 from Seminary Drive to Hurstbourne Parkway with a skid resistance asphalt surface and the addition of centerline rumble strips.
  
- KY 22 Widening from I-265 to Chamberlain Lane
  - Let to construction on June 25, 2004, should be completed by Fall 2005
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  - Sight distance correction project
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- Tentatively assigned a January 2005 letting date, pending right of way, utility relocation progress and funding.
- KY 22 Corridor Scoping Study from Herr Lane to Crestwood in Oldham County
    - Study should be complete by summer 2005 and in time to make individual project recommendations for the 2006 Six-Year Plan
    - Instituted Citizen Advisory Committee and a Local Elected Official Committee to help guide the project
    - 80% federal and 20% state funded
  - New I-71 Interchange
    - Agreements to fund the Interchange Justification Study have not been 100 percent committed

### **Corridor Conditions and Updated Traffic Data**

The corridor was reviewed for the safety and functionality for all potential users, including motorists, pedestrians and bicyclists. A review of the corridor shows numerous horizontal and vertical deficiencies, areas of the road with sharp curves and hills that contribute to limited sight distance.

Traffic studies show that the level of service throughout the corridor will drop over the next 25 years. It is projected that by 2030 without any changes to the road, large segments of the corridor will be experiencing traffic congestion that could be characterized as “stop-and-go.”

After reviewing critical accident rates, the project team found that more crashes are occurring along the corridor than on similar two-lane roads in Kentucky. From 2000 to 2003, there were 652 accidents, 330 injuries and 3 fatalities. The short- and mid-term recommendations below are based on the level of service information and the critical accident rates.

### **Proposed Short- and Mid-term Changes**

These are changes that could occur within the next 10 to 20 years, pending approval from the Kentucky Transportation Cabinet and funding acquisition.

#### Short-Term

- |  |                 |
|--|-----------------|
| 1. Add Skid Resistant Pavements and Clear the Sides Of the Road of Trees and Shrubbery that May Lessen Sight Distance in Areas with High Rates of Single Vehicle and Wet Pavement Crashes. | Cost: \$626,000 |
| 2. Trim or Remove Vegetation on Inside of Curves throughout the Corridor.  | Cost: \$131,000 |
| 3. Lower the Speed Limits from 55 mph in Oldham  | Cost: \$0       |

County.

4. Add Turn Lanes in both directions on KY 22 at Avenue of the Woods and Chatworth. Cost: \$1,285,000
5. Add 2 Right Turn Lanes on Herr Lane at KY 22. Cost: \$403,000
6. Add 2 Turn Lanes on KY 22 at High School. Cost: \$1,311,000
7. Connect Bike/Walking Trail to High School. Cost: TBD
8. Widen Barbour Lane at Intersection with KY 22 to Help School Traffic Turn and Add a Protected Left Turn Signal. Cost: \$563,000
9. Add Westbound Left Turn Lane and Eastbound Right Turn Lane on KY 22 onto Standard Club Lane. Cost: \$1,056,000
10. Add Westbound Left Turn Lane on KY 22 at Goose Creek Road. Cost: \$710,000
11. Add a Northbound Right Turn Lane at KY 362 (Central) and add a Westbound Left Turn Lane and Eastbound Right Turn Lane at Oak Valley. Cost: \$1,820,000
12. At Old KY 329 Add Signal and Implement Access Management in the Area. Cost: \$5,563,000
13. Investigate Potentially Slick Pavement Condition at MP 2.4 West of Hughes. Cost: \$0
14. Add Eastbound Left Turn Lane onto Clore Lane and Add a Westbound Left Turn Lane onto Wooldridge Avenue and Include a Signal. Also Add Left Turn Lane on Clore Lane. Also Add a Left Turn Lane on Clore Lane and Realign Wooldridge Avenue and Add a Left Turn Lane on Wooldridge. Cost: \$1,389,000

Mid-Term

1. Widen the section of KY 22 from Cliffwynde Trace to Pinehurst to straighten horizontal curves, improve vertical curves and fix sight distance obstructions due to trees east of Brownhurst. The new section will be three lanes. Trees that are removed may be replaced with other lower-growing landscaping. Cost: \$7,004,800
2. Widen road to three lanes from Kitty's Farm/Nursery to Hurstbourne Lane, including horizontal and vertical improvements. Cost: \$9,333,250
3. Construct a three-lane section just west of Windy Willow Drive and ending at Haunz Lane. Include an eastbound left turn lane, a westbound right turn lane Cost: \$7,275,000

and consider signalizing intersection at Windy Willow.  
Add a westbound right turn lane and increase  
southbound right turning radius at Haunz Lane.

## **Ultimate Concepts**

The Ultimate Concepts, or long-term changes, include changes that address capacity and could take over 20 years to build.

It is proposed that each new roadway will include a curb and gutter as well as a bike lane. Turning lanes will be added throughout the corridor. Concepts include:

- Three lanes on KY 22 from Herr Lane to Hurstbourne Pkwy., with a two-way left-turn lane
- Five lanes on KY 22 from KY 1694 to KY1408, with a two-way left-turn lane
- Three lanes from KY1408 to KY 329 B, with a two-way left-turn lane

## **Conceptual Plan Development**

- Map display explanation - During the slide presentation, the map display showed where curb and gutter, sidewalks, bike lanes and the expanded lanes would be.

## **Next Steps**

- Public Meeting on June 9 from 5:00-8:00 p.m.
- Study to be completed August 1 and submitted to the District 5 office of the Kentucky Transportation Cabinet.
- District 5 personnel will review the report and make recommendations to the Central Office.

## **Discussion**

### **KY 22 Q & A**

#### **Q. What is the length of each turn lane?**

A. The lane length is dependent on the amount of turning traffic for that area. For example, a turn lane for entrance into a school will be longer than a turn lane for a subdivision.

#### **Q. Please define mid-term, short-term and ultimate.**

A. Short-term indicates plans that could take 1-10 years to complete, mid-term indicates plans that could take 10-20 years to complete and the ultimate plan could take 20 years or more.

#### **Q. When you expand the road into three lanes will you keep the center of the lane where it is now?**

A. The center will be close to where it is now.

**Q. Why has there been no priority in the adding turn lanes by Spring Valley and Ten Broeck?**

A. Our accident information leads us to believe that there isn't an urgent need to place a turning lane at those places, but we will take into consideration your concerns.

**Q. Has there been anything mentioned about the traffic circle by Seminary?**

A. No.

**Q. Is there any truth to the rumor that there have been discussions going on about adding a ramp directly onto KY 22 from the expressway?**

A. There are only discussions going on. That idea was brought up several years ago, and the question as to if it will work has just re-surfaced. It's only being talked about. Nothing concrete has been determined.

**Q. Does it make sense to think about raising the medians you'll be putting in on the 3 lane roads?**

A. That is something that could be considered. Aesthetic treatments including median styles and landscaping have not been determined yet, but should be discussed as a part of the planning process in the future.

**Q. Which of these items already have funding?**

A. None of the projects have funding yet.

**Q. How will the bicyclists be safe from cars?**

A. The roads will be widened to add a safe bike lane for cyclists.

**Q. Is it mandatory to have sidewalks, bike lanes and curb and gutters?**

A. It's not mandatory but more urban places do have them. The idea of "complete streets," which includes bike lanes, is something that Metro Louisville is pursuing. We are widening the road to plan for these items but no decisions have been made. We would rather plan for them and not have them, than not plan for them, build the road and then find out we need to add bike lanes, sidewalks, curb and gutters. It would be a lot more expensive not to plan for that.

**Adjournment**

## PUBLIC COMMENTS

As a result of the LEO/CAC Meeting on June 7, 2005, and the Public Meeting on June 9, 2005, 56 comments were received from interested parties. The summary below describes the comments received. Numbers in parentheses indicate the number of responders who shared that comment. Comments without numbers in parentheses indicate that only one person shared that comment. The first section addresses comments that were received on the comment form. These were turned in at the meetings, faxed or mailed. The remaining comments were received via email (mostly), fax or postal mail after the June 9, 2005 meeting.

### Comment Form Questions & Responses

1. Do you feel the short-term changes presented this evening address the need for safety and efficiency improvements?
  - Somewhat
  - Not in the least
  - Yes, particularly 3 & 12
  - Yes, but overlooked maintaining the beauty of the tree lined road by recommending removal of trees
  - Yes, part of the changes may be okay but too costly
  - Yes, appears to be fair, thorough and comprehensive
  - Will destroy scenic nature of road
  - Yes, sidewalks are being constructed or will be soon near the Summit
  - Suggestions destroy the scenic beauty of the road. Use funds for police patrolling. Roundabout is cool idea.
  - The residential portion between Seminary Drive and Hurstbourne probably doesn't warrant a third/middle lane, perhaps discrete left/right turn lanes would be preferable and safer since many drivers don't know how (or won't) use the middle lane correctly. Alternatively hump the middle lane except at left turn sections to encourage safer use.
  - Could help
  - A left turn lane at Standard Club Lane would be a definite safety plus. Thanks for improving our safety.
  - Very much so for safety
  - Yes, they will certainly improve the situation in the short term, especially turn lanes at Barbour lane and Standard Country Club. The roundabout is a creative idea.
  - I'd like to see wider lanes on the curvy hills from Barbour Lane west and from Goose Creek east to Hurstbourne. We have too many teenage drivers heading to Ballard High School. They drive fast and reckless and go around those curves over the lanes.
  - I am excited to see the changes along the intersection of Barbour Lane and 22. Please take a good look at improving the turn lane at Spring Valley.
  - Yes, stop the wrecks from Herr to Hurstbourne.
  - Need more turn lanes to get traffic flowing.
  - No, I believe more turn lanes and safety changes are needed on Highway 22.
  - Numbers 5 & 6 - consider Ballard foot traffic regarding 2 turn lanes.
  - A more immediate need (and relatively low cost) is a short left turn lane at Springcrest Drive. Principally a safety issue.
  - Yes, at least 90%. Am concerned about "changes" at Springdale Subdivision (bottom of hill). This should be of immediate concern (3 lanes).
  - No, need to improve traffic flow at KY 392 at Dairy Queen. Traffic backs up at least a mile of stop and go traffic in morning and evening and traditionally traffic on KY 22 flows toward the Gene Snyder and future projects that traffic



will change directions and will tolerate the back up in Crestwood to reach I-71 rather than fight even more congestion at Gene Snyder and 22.

- Anything would be an improvement. Basically adding a single lane would be good but widening to 4 lanes would be better.
  - Adding turn lanes will help some but there is still a problem of having way too much traffic for the amount of road.
2. Do you feel the mid-term changes presented this evening address the need for safety and efficiency improvements?
- Some
  - No
  - Maybe
  - Yes, but save the trees
  - Too costly
  - Yes, but not across from Kitty's as it would destroy beautiful land
  - What good would widening do since widened areas have same crash rates?
  - Yes (3)
  - Not good. Destroys all the good things in this area.
  - Avoiding a middle lane would save money (road not as wide) and enable a more "pastoral/country" parkway look. The area in consideration is mostly to accommodate 'locals' and should not be engineered to become a boulevard for passers through. US 42, Westport Road, the Interstates and LaGrange Road can serve this purpose.
  - Taking out the blind curves would be the greatest thing that could be done for safety.
  - Very informative for the years ahead.
  - Yes, especially the straightening and other improvements between Cliffwynde and Pinehurst.
  - At this point it seems to.
  - Yes, raise the center medium.
  - #1 - Don't straighten curves too much. You ruin the unique character of the road.
  - Yes, sooner would be better. The horizontal and vertical "tampering" along the curbs, bike lanes, etc. will unfortunately ruin the charm of portions of KY 22 (western section) and lead to increased speeds resulting from reductions in perceived "danger factor."
  - Yes it will help but more needs to be done. Thankful for any improvements.
  - There has been strong opposition in the past to any widening of KY 22 but the fact is that so much development has been allowed and the road cannot handle the traffic so something needs to be done.
3. Do you feel the long-term changes presented this evening address the need for safety and efficiency improvements?
- No
  - Not really
  - Yes, if implemented soon
  - Yes, it will have to be done eventually, so why not get to it?
  - To a degree
  - Too costly
  - Possibly but do not agree with widening to 3 lanes due to beautiful land
  - Yes (4)
  - Completely ruins KY 22
  - Any widening or adding turn lanes would be a blessing for residents of this area.
  - Yes, however I think that unless the I-71 interchange @ Murphy's Lane is added to the Plan the traffic congestion will continue to be unacceptable.

- At this point it seems to.
- Yes, I like the sidewalks and bike lanes.
- Probably so. Drivers for 60 years have shown a distressing inability to stay on the straight stretch of Brownsboro Road (US 42) from Mockingbird Valley Road to Bevar Avenue.
- Sounds good but will I see it in my lifetime.
- Concerned about the proposed three-lane road because of personal experience with safety in the section between Herr Lane and US 42. However, something must be done or there will be gridlock.

## Other Comments

### Specific Recommendations

- Consider caution lights at top of hills between Herr and Hurstbourne.
- Fix the curve near Ten Broeck.
- Provide a strip wide enough for cyclists and pedestrians. (3)
- Keep the speed moderate/lower speeds/enforce speeds (8)
- Plan does not include a vision for the thoughtful consideration of the corridor as a scenic, historic route traversing multiple communities, some very old and beautiful, some new and a few needing major improvements (Lake Louisville) (2)
- Essential items such as consistent signage, lighting, landscaping and fencing are not addressed. (2)
- From Lake Louisville to Crestwood only two lanes are needed. (2)
- Against 5 lanes to Crestwood, 3 lanes are plenty from Haunz Lane into Crestwood
- Lake Louisville should be modified with an overflow dam to hold back rapid runoff water during heavy rain storms.
- No development should be allowed at Clore Lane until this intersection is improved.
- Include provisions for mass transit and bike paths.
- Do not include a roundabout at Seminary - too dangerous. (3)
- Access to I-265/I-71 more important problem to address
- Widen I-71 instead (1)
- The bridge/curve between Centerfield and Crestwood should be straightened
- Fixing Herr to Hurstbourne would cause congestion to the east
- Widening should extend to KY 393
- Extend spot improvement from Haunz Lane to Lake Louisville.
- Wants 5 lane section from Herr to Hurstbourne.
- Consider traffic lights at Haunz Lane, Orchard Grass Boulevard, Briarhill Parkway and Clore Lane
- Consider DANGEROUS WHEN WET signs between Seminary and Hurstbourne.
- Add guardrail on steep hills instead of widening.
- Wants a bypass
- Consider an access road along I-265 between KY 22 and Tinseltown.
- Don't put rumble strips on shoulders - not proven, weakens shoulders, not bicyclist friendly
- Skid resistant pavement dangerous for cyclists.
- KY 22 going east off of US 42 should not allow left turns into BB&T and AAA. One lane going east is blocked as "left turners" wait to cross on coming westbound lanes. The middle lane starts after the curve and would be the best way to avoid frustrating the intended road design/usage. The openings from BB&T and AAA into this portion should be designated for right turn exit only. There are better ways to enter BB&T and AAA. I

heartedly approve of roundabouts at Seminary and by the dairy queen/Hilderbrand Development. The latter would make the BB&T/AAA issue a moot point.

- Channel KY 22 traffic from east of I-265 onto I-71 at Haunz Lane
- Consider roundabout at Clore Lane.
- Consider repaving alternative access roads such as Barbour Lane from KY 22 to KY 42 for better use during construction.
- Don't widen to 5 lanes.
- Thank for you bicycle and pedestrian considerations.

#### Safety Concerns

- Widening the road will increase accidents. (3)
- Question the safety of bike lanes and walkways. (3)
- Widening results in more traffic and larger problems. (2)
- High accidents at Shadowwood Lane and Quarry Drive in Crestwood
- Don't believe high cost of improvements will address safety needs.

#### Concerns on Impacts

- Improvements to the road would decrease its scenic beauty. (6)
- Maintain the green look
- Widening the road invites commercial activity.
- Please take into consideration the impacts (if any) on the playground area at Norton Elementary.
- Don't disturb cemetery.
- Replace trees and shrubs with same type.

#### General Comments

- Widening is long overdue. (5)
- Supports long term improvements (4)
- Short and mid term projects aren't enough
- Short and mid term projects are dangerous
- Value human life more than foliage (2)
- There are other major roads to handle excess traffic. (2)
- Concerns about impact to personal property/don't want to lose property (3)
- More benefits for Jefferson County than Oldham County
- New paving and rumble strips have improved safety/expressed gratitude over improvements (3)
- Planning & Zoning need to control growth/stop allowing so much development/make developers fund improvements. (4)
- Move more quickly on safety changes.
- Educate public and elected officials on issues involved in land development and road planning.

#### Comments on Presentation

- Conceptual design well researched and presented (2)
- Maps are well done. All persons officiating answered questions in friendly and intelligent manner.
- Good presentation (2)

Welcome to our final Public Information Meeting!

The Kentucky Transportation Cabinet (KYTC) is holding this meeting so the community can review draft recommended highway improvements for the 9.3 mile section of KY 22 from Herr Lane in Jefferson County to the City of Crestwood in Oldham County. Your input will be used to finalize these recommendations in a study report. Available at this meeting are traffic level of service maps, crash history maps, and maps of short, mid- and long term (or ultimate) improvements.

The traffic level of service (LOS) maps were developed based upon the capacity of the KY 22 corridor to handle existing traffic (2004) or projected traffic (2030). Anything worse than an LOS of D, would indicate an area where additional capacity is needed. Similarly, crash rates were developed along the corridor using crash history from 2001 to 2003. Areas experiencing a high crash rate and areas experiencing a trend in crash types were studied for potential improvements.

Over the course of this study, the project team has worked extensively with the community, the Citizens Advisory Committee and with elected officials in the area to garner information such as: what safety issues were of the highest priority to those living and working in the area, what features of the corridor should be maintained and what environmental resources should be protected. This information was taken into consideration when the recommendations for the corridor were developed. In fact, some of the suggested projects have already advanced to either construction or design.

This handout includes:

- List of the short- and mid-term projects with their associated costs
- Proposed cross sections and costs of the ultimate improvement
- A discussion of environmental impacts
- A map of projects being completed by the KYTC or other agencies.

**Short-Term and Mid-Term Concepts**

These concepts include maintenance or spot improvements that may improve traffic flow and safety in the corridor until the full widening of KY 22 may occur. Short-term improvements could occur within the next ten years whereas mid-term improvements would likely take 10 to 20 years to complete. Each project is listed below with its estimated cost, which includes construction, design, right of way acquisition and utility relocation.

Short Term

- |  |                   |
|--|-------------------|
| 1. Add Skid Resistant Pavements and Clear the Sides Of the Road of Trees and Shrubbery that May Lessen Sight Distance in Areas with High Rates of Single Vehicle and Wet Pavement Crashes. | Cost: \$626,000   |
| 2. Trim or Remove Vegetation on Inside of Curves throughout the Corridor.  | Cost: \$131,000   |
| 3. Lower the Speed Limits from 55 mph in Oldham County.  | Cost: \$0         |
| 4. Add Turn Lanes in both directions on KY 22 at Avenue of the Woods and Chatworth.  | Cost: \$1,285,000 |

- |   |                   |
|---|-------------------|
| 5. Add 2 Right Turn Lanes on Herr Lane at KY 22.  | Cost: \$403,000   |
| 6. Add 2 Turn Lanes on KY 22 at High School.  | Cost: \$1,311,000 |
| 7. Connect Bike/Walking Trail to High School.   | Cost: TBD         |
| 8. Widen Barbour Lane at Intersection with KY 22 to Help School Traffic Turn and Add a Protected Left Turn Signal.  | Cost: \$563,000   |
| 9. Add Westbound Left Turn Lane and Eastbound Right Turn Lane on KY 22 onto Standard Club Lane.   | Cost: \$1,056,000 |
| 10. Add Westbound Left Turn Lane on KY 22 at Goose Creek Road.  | Cost: \$710,000   |
| 11. Add a Northbound Right Turn Lane at KY 362 (Central) and add a Westbound Left Turn Lane and and Eastbound Right Turn Lane at Oak Valley.  | Cost: \$1,820,000 |
| 12. At Old KY 329 Add Signal and Implement Access Management in the Area.   | Cost: \$5,563,000 |
| 13. Investigate Potentially Slick Pavement Condition at MP 2.4 West of Hughes.  | Cost: \$0         |
| 14. Add Eastbound Left Turn Lane onto Clore Lane and Add a Westbound Left Turn Lane onto Wooldridge Avenue and Include a Signal. Also Add Left Turn Lane on Clore Lane. Also Add a Left Turn Lane on Clore Lane and Realign Wooldridge Avenue and Add a Left Turn Lane on Wooldridge. | Cost: \$1,389,000 |
| 15. Add Left Turn Lane on KY 22 at Springcrest Drive  | Cost: TBD         |
| 16. Add Left Turn Lane on KY 22 at Ten Broeck Way   | Cost: TBD         |
| 17. Convert KY 22/Seminary Intersection to a Roundabout   | Cost: TBD         |

Mid-Term

- |  |                   |
|--|-------------------|
| 1. Widen the section of KY 22 from Cliffwynde Trace to Pinehurst to straighten horizontal curves, improve vertical curves and fix sight distance obstructions due to trees east of Brownhurst. The new section will be three lanes. Trees that are removed may be replaced with other lower-growing landscaping. | Cost: \$7,004,800 |
| 2. Widen road to three lanes from Kitty's Farm/Nursery to Hurstbourne Lane, including horizontal and vertical improvements.  | Cost: \$9,333,250 |
| 3. Construct a three-lane section just west of Windy Willow Drive and ending at Haunz Lane. Include an eastbound left turn lane, a westbound right turn lane and consider signaling intersection at Windy Willow. Add a westbound right turn lane and increase southbound right turning radius at Haunz Lane.    | Cost: \$7,275,000 |

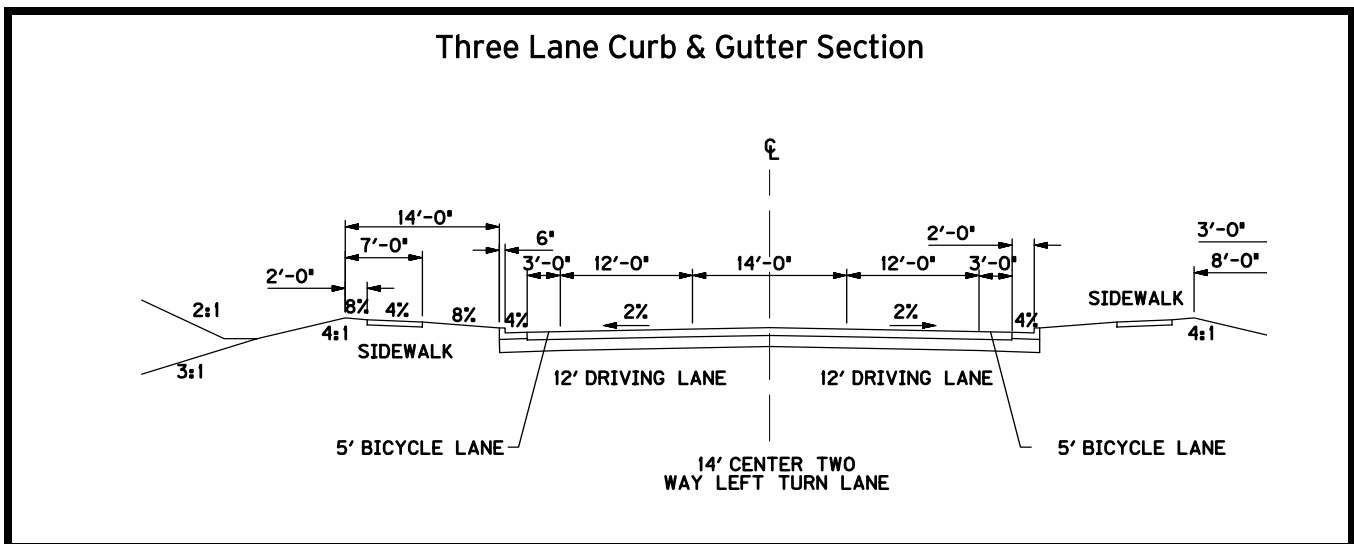
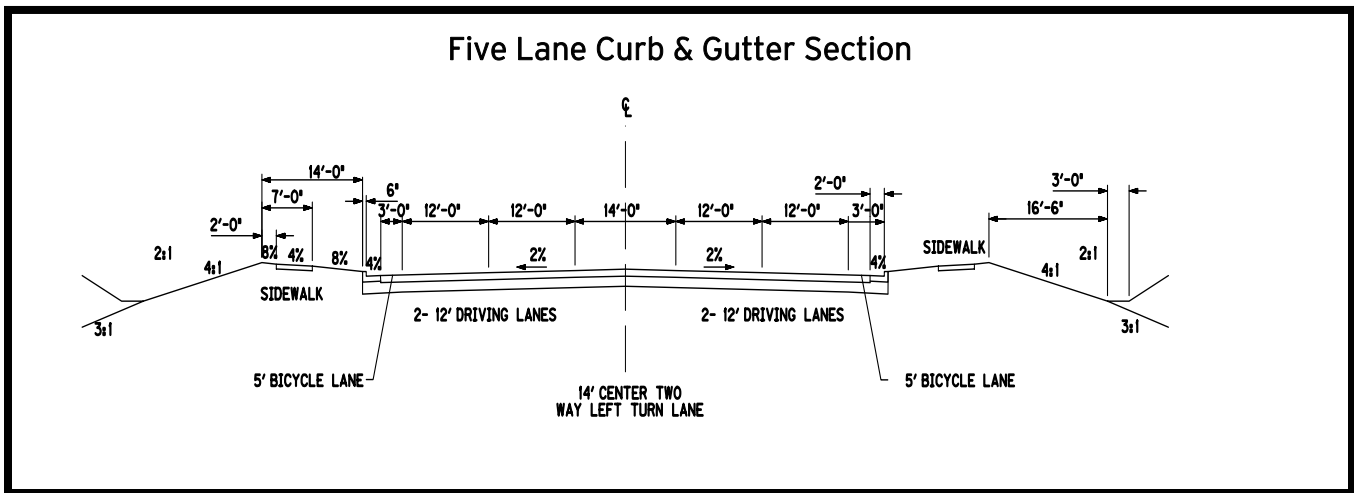
**Ultimate Concepts or Long Term Concepts**

It is proposed that each the roadway feature curbs and gutters as well as bike lanes. Turning lanes will be added throughout the corridor. Concepts include:

- Three lanes on KY 22 from Herr Lane to Hurstbourne Pkwy., with a two-way left-turn lane
- Five lanes on KY 22 from KY 1694 (Brownsboro Road) to KY 1408, with a two-way left-turn lane
- Three lanes from KY 1408 to KY 329 B, with a two-way left-turn lane

Ultimate concepts could take over 20 years to construct. The attached figures indicate the cross-sections associated with each of these proposed improvements. The estimated costs for the ultimate concept are shown in the following table:

Phase	Jefferson County	Oldham County	Total
Design	\$1,089,000	\$1,400,000	\$2,489,000
Right of Way	\$16,929,000	\$11,813,500	\$28,742,500
Utilities	\$11,310,000	\$3,365,000	\$14,675,000
Construction	\$10,890,000	\$12,600,000	\$23,490,000
<b>Total</b>	<b>\$40,218,000</b>	<b>\$29,178,500</b>	<b>\$69,396,500</b>



## Environmental Overview

The project could impact some environmental features along the corridor. The streetscape may lose some trees while the road is widened, but beautification (landscaping and other efforts) can be considered during the design of the project. There is potential habitat for protected animals and plants in this region and further study must be executed to determine potential impacts. Three potential habitats for threatened and endangered species that were identified include the Indiana Bat, Gray Bat and Running Buffalo Clover. In addition, 10 streams, 3 floodplains and 1 wetland (Lake Louisville) could be potentially impacted.

The Overview noted 63 historic sites along the corridor that should be taken into consideration when planning improvements to the road. Three of these sites are on the National Register of Historic Places, and 27 sites appear to be eligible. Thirty-three (33) other sites were identified as needing further study before determining their eligibility for the National Register. Thirty-six (36) potentially contaminated sites were identified, including underground storage tank (UST) sites, waste stockpiling sites, business sites using chemicals and auto repair operations.

## Other Projects in the Study Area

A significant number of other projects are being completed in the study area which have directly impacted the outcome of this particular study. These are listed in the attached figure.

## Next Steps

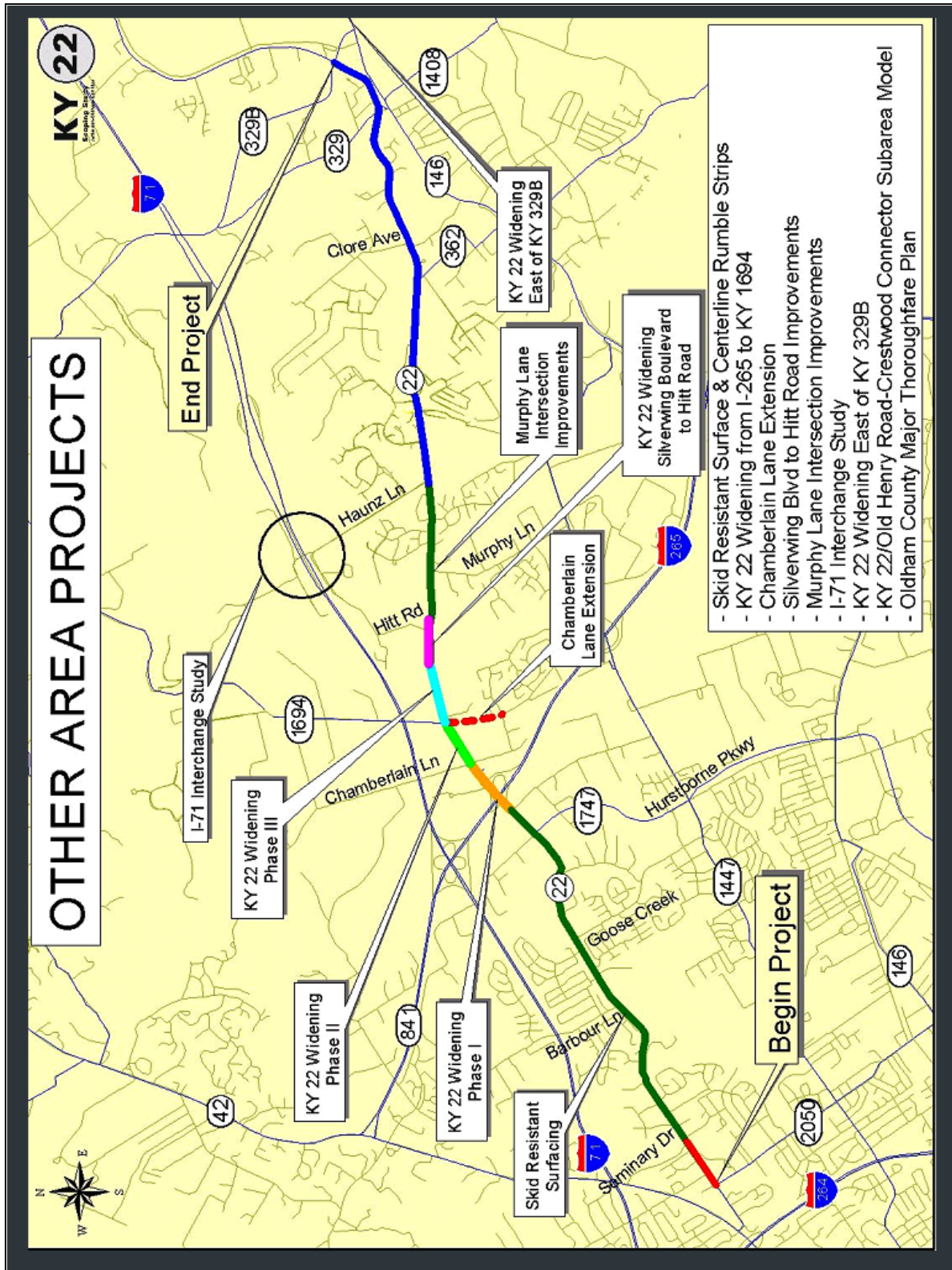
- The recommendation will be refined based on public comments (June 2005).
- The study report will be completed and submitted to the KYTC (July 2005).
- KYTC District 5 will make recommendations to their Central Office (July 2005).
- Funding will need to be identified for the short- and mid-term concepts as well as the ultimate improvement concept (Ongoing).

## Contact

Please submit any request for more information or comments about this study to [ky22@hntb.com](mailto:ky22@hntb.com) or to either of the following people:

Mr. Chuck Berger, PE  
KYTC  
PO Box 37090  
Louisville, KY 40233

Ms. Karen Mohammadi, PE, AICP  
HNTB Corporation  
401 West Main Street, Suite 601  
Louisville, KY 40202





APPENDIX B  
Citizen Advisory Council and Local  
Elected Officials Member Lists

## Local Elected Officials Members

Name	Affiliation	Location
Mayor Kimberly Reinhardt	City of Bancroft	Louisville, KY
Mayor Al Tomassetti	City of Barbourmeade	Louisville, KY
Mayor Leonard Wiseman	City of Broeck Pointe	Louisville, KY
Mayor Eric Cerro	City of Brownsboro Farm	Louisville, KY
Mayor Dennis Deibel	City of Crestwood	Crestwood, KY
Mayor Raymond Elms	City of Fincastle	Louisville, KY
Mayor Don Zitnik	City of Goose Creek	Louisville, KY
Mayor Maurice Wagner	City of Old Brownsboro Place	Louisville, KY
Mayor Jim Burke	City of Orchard Grass Hills	Crestwood, KY
Mayor J. Patrick Long	City of Spring Valley	Louisville, KY
Mayor Robert Roos	City of Ten Broeck	Louisville, KY
Mayor Patricia Lay	City of Thornhill	Louisville, KY
Mayor Beth Kreakie	City of Worthington Hills	Louisville, KY
Representative Bob Deweese	Kentucky State House of Representatives	Louisville, KY
Representative Tim Feeley	Kentucky State House of Representatives	Crestwood, KY
Senator Julie Denton	Kentucky State Senate	Louisville, KY
Senator Ernie Harris	Kentucky State Senate	Crestwood, KY
Councilman Kelly Downard	Louisville Metro Council - District 16	Louisville, KY
Councilman Glen Stuckel	Louisville Metro Council - District 17	Louisville, KY
The Honorable Jerry Abramson	Louisville Metro Government	Louisville, KY
Magistrate Robert Deibel	Oldham County Fiscal Court	Crestwood, KY
Judge Mary Ellen Kinser	Oldham County Fiscal Court	LaGrange, KY
Magistrate Duane Murner	Oldham County Fiscal Court	Crestwood, KY
Magistrate Rick Rash	Oldham County Fiscal Court	Crestwood, KY

## Citizens Advisory Council Members

Name	Title	Organization	Location
Mr. Rocco Pigneri		Ball Homes	Louisville, KY
Ms. Theresa Stanley	Chairman	Brownsboro Road Area Defense (BRAD), Inc.	Louisville, KY
Mr. Dale Hettinger		Church of Jesus Christ of Latter-Day Saints Louisville Temple	PeeWee Valley, KY
Mayor Al Tomassetti	Mayor	City of Barbourmeade	Louisville, KY
Mayor Eric Cerro	Mayor	City of Brownsboro Farm	Louisville, KY
Mayor Don Zitnik	Mayor	City of Goose Creek	Louisville, KY
Ms. Sharon Berger		City of Northfield	Louisville, KY
Mayor Maurice Wagner	Mayor	City of Old Brownsboro Place	Louisville, KY
Mayor Jim Burke	Mayor	City of Orchard Grass Hills	Crestwood, KY
Mayor J. Patrick Long	Mayor	City of Spring Valley	Louisville, KY
Mayor Robert Roos	Mayor	City of Ten Broeck	Louisville, KY
Mayor Patricia Lay	Mayor	City of Thornhill	Louisville, KY
Mayor Beth Kreakie	Mayor	City of Worthington Hills	Louisville, KY
Mr. Dennis Shephard	Commissioner of Roads	City of Worthington Hills	Louisville, KY
Reverend Ron Towles	Pastor	Hillcrest Baptist Church	Louisville, KY
Mr. Chad Gardner		Hitt Road Neighborhood	Louisville, KY
Ms. Melissa Barman		Jefferson County Public Schools	Louisville, KY
Mr. Brad Lyman	Head of School	Kentucky Country Day School	Louisville, KY
Mr. Scott Snyder		Lake Louisville Neighborhood	Crestwood, KY
Mr. John Liter		Liter's Quarry	Louisville, KY
Mr. Kevin McCurren		Louisville Bicycle Club	Louisville, KY
Mr. Jay Stottman		Louisville Historical League	Louisville, KY
Ms. Aida Copic		Louisville Metro Department of Planning & Services	Louisville, KY
Mr. Charles Cash	Director	Louisville Metro Planning & Design Services	Louisville, KY
Mr. Mark Adams	County Engineer	Louisville Metro Public Works Department	Louisville, KY
Mr. Phil Robertson		Moser Farms Neighborhood	Prospect, KY
Mr. Cary Frame		Northeast Christian Church	Louisville, KY

Mr. Joseph Sauer	President	Oakhurst Homeowners Association	Louisville, KY
Mr. Ken Payne		Old Brownsboro Crossing	Louisville, KY
Ms. Suzanne Schimpeler	Board Member	Oldham Ahead	Peewee Valley, KY
Mr. Blake Haselton	Superintendent	Oldham County Board of Education	Buckner, KY
Mr. Joe Schoenbaechler	President and CEO	Oldham County Chamber of Commerce	LaGrange, KY
Mr. James Roark		Oldham County Economic Development Authority	Crestwood, KY
Mr. Richard Bell		Oldham County Neighborhood	Crestwood, KY
Mr. Aaron Stump	Director	Oldham County Parks and Recreation Department	LaGrange, KY
Ms. Louise Allen	Administrator	Oldham County Planning and Zoning Commission	LaGrange, KY
Mr. Steve Rutledge	President	Professional Land Management/Spaulding Property	Crestwood, KY
Ms. Debbie Foley	Owner	Silver Brook Stables	Louisville, KY
Chief Eddie Turner		So. Oldham County Fire Department	Crestwood, KY
Ms. Lee Ann Ellingsworth		St. Andrews/Standard Country Club Neighborhood	Louisville, KY
Reverend Erich Shumake	Pastor	Taylorstown A.M.E. Zion Church	Louisville, KY
Ms. Becky Norton		The Summit at Louisville	Louisville, KY
Ms. Janene Grantz		Transit Authority of River City (TARC)	Louisville, KY
Mr. David Tomes		Triad Development	Louisville, KY
Mr. Don Petty		Woods of St. Thomas Neighborhood	Louisville, KY
Mr. Larry Webb		Worthington Church of Christ	Louisville, KY
Mr. Harry Cooke	Assistant Chief	Worthington Fire Department	Louisville, KY

ITEM NO. 5-371.00

