

# Programming Study

KY 76

Adair & Russell Counties

Item No. 8-8302.00



**FINAL REPORT**

Prepared by the  
Kentucky Transportation Cabinet  
Division of Planning  
February 2009



# EXECUTIVE SUMMARY

## Programming Study

*Adair & Russell Counties*

**KY 76** from US 127 to KY 206

*Item No. 8-8302.00*

**November 2007**

The purpose of this planning study is to gather information necessary to develop and evaluate alternatives that would improve safety and traffic flow along the KY 76 corridor from US 127 to KY 206.

### Draft Project Goals

The preliminary goals established for this project include:

1. Improve Safety by:
  - a) Correcting horizontal and vertical deficiencies,
  - b) Increasing lane and shoulder widths to meet current guidelines and,
  - c) Providing improved safety measures such as flashing beacons, signage and guardrail where needed in certain locations.
2. Improve connectivity between US 127 and KY 206. KY 76 is a rural minor collector to the Green River Lake area, US 68 and KY 55.

### Project Funding

This project was scheduled in the Enacted Six-Year Highway Plan (FY 2007-2012) with committed funds of \$100,000 for the planning phase. There are no future phases scheduled for this project at this time.

### Existing Roadway Conditions

The current roadway alignment has narrow lanes and shoulders. Issues with the existing route are the curves and grades that do not meet current guidelines or provide adequate sight distance for on-coming vehicles along the corridor and vehicles pulling into traffic from the intersection at US 127 and KY 206.

### Environmental Issues

Kentucky Transportation Cabinet personnel in District 8 prepared an Environmental Overview Report for this project. A few concerns were identified and need to be addressed as subsequent phases develop. These include: special use water designations, forested wetlands in the area and possible concerns of species that have been identified in the proximity.

### Public Involvement

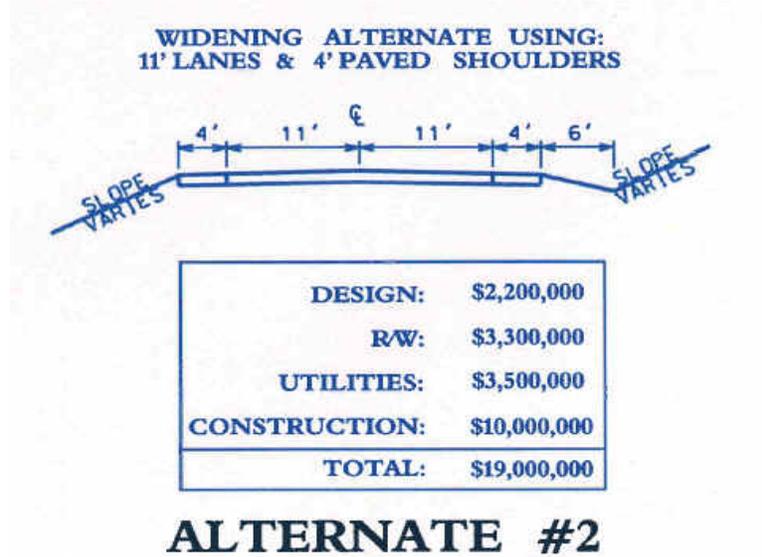
Local officials and stakeholders were given the opportunity to provide input. In addition, input was solicited from many local, state and federal agencies. Some local concerns were identified through this process:

- Narrow lanes and little to no shoulders, sharp drop-offs with no guardrail and difficult roadway geometrics,
- Used as a connector or “cut through” for commercial trucks (logging, concrete and carpet) along with recreational vehicles hauling boats to lakes in the surrounding area and those who commute,
- Sight distance issues upon entering or exiting KY 76 onto US 127 and vice versa and,
- Turning radii for trucks that encroach in the other lane at the intersection of KY 76/KY 206.

### Recommendations

Only three alternates were considered due to the natural constraints of the corridor. Two of the three were chosen based on the project goals, corridor issues, technical analysis, environmental impacts and public/agency input. Primary and secondary recommendations are as follows:

1) **Alternate No. 2** was chosen to be the primary recommendation. This alternate includes the spot improvements that were identified along the existing route and the widening/upgrading of the KY 76 route with 11' lanes and 4' shoulders. The estimated cost for this rebuild is **\$19,000,000**.



2) **Alternate No. 1** (Spot Improvements) - If funding does not become immediately available for the primary recommendation, Alternate No. 1 has consideration as an interim recommended choice. This would provide the opportunity for lower-cost improvements to be programmed if only those lesser funding amounts became available. These smaller projects could be constructed to follow the primary recommendation.

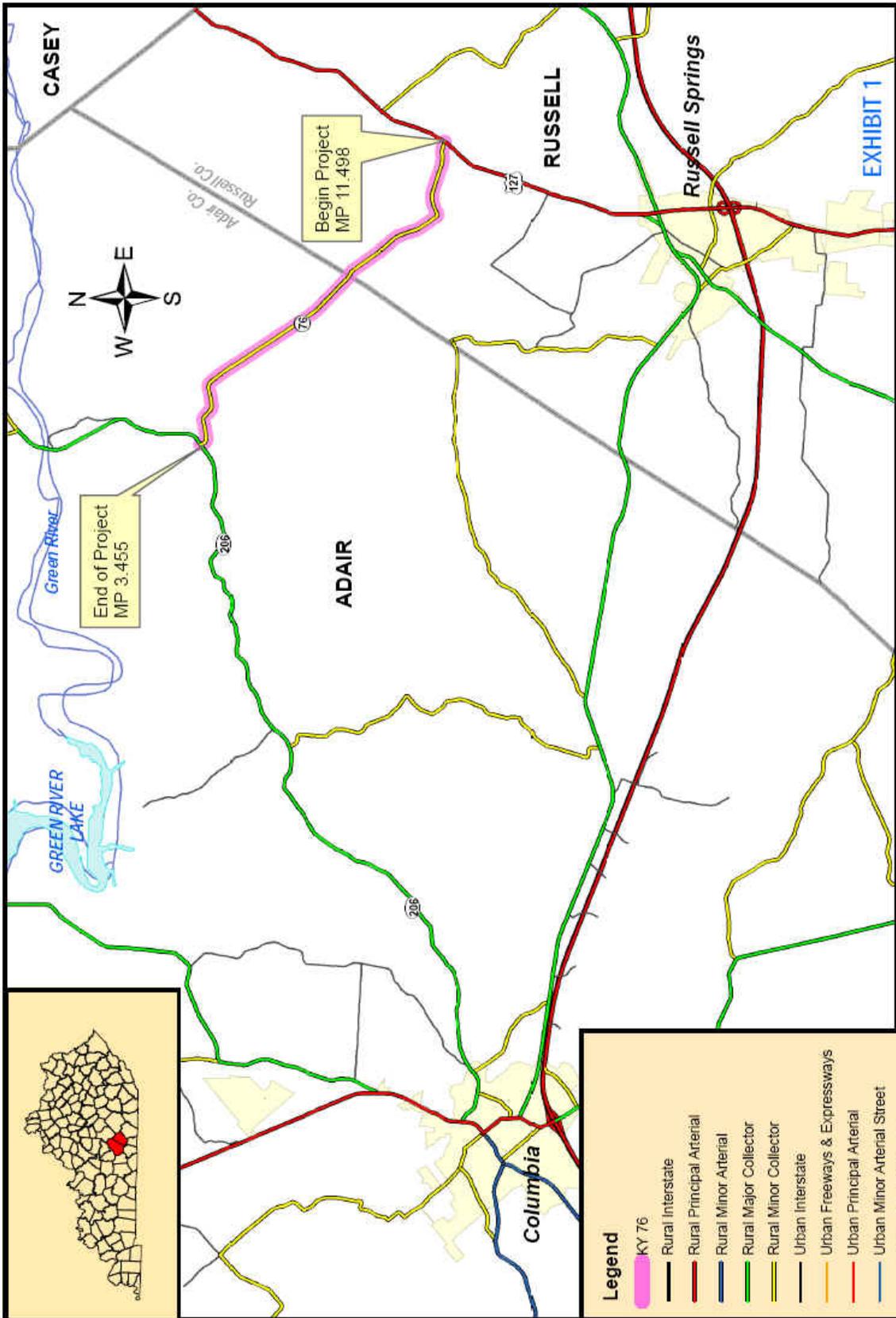
**Ranking for Spot Improvements**

Rank	Spot #	County	BMP	EMP	Length	Total Cost
1	4	Russell	11.498	11.498	Russell	\$ 775,000.00
2	2	Russell/ Adair	14.135	0.000	Russell/ Adair	\$ 1,975,000.00
3	1	Adair	2.391	3.455	Adair	\$ 4,750,000.00
4	3	Russell	12.381	12.473	Russell	\$ 2,100,000.00
						<b>\$ 9,600,000.00</b>

**Additional Information**

Comments and/or requests for information regarding this KY 76 Programming Study should be sent to the address listed below:

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Last map revision: FEBRUARY 2007  
 Road centerlines collected using GPS technology  
 Kentucky State Plane Coordinate System (NAD83)  
[www.transportation.ky.gov/planning](http://www.transportation.ky.gov/planning)

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## 1.0 INTRODUCTION

### 1.1 Purpose of the Study

The purpose of this Programming Study is to develop and evaluate alternatives for corridor improvements along KY 76 from US 127 to KY 206 in both Russell and Adair Counties. Those improvements consider safety and traffic flow issues. Subsequently, this study is intended to provide data to be used when and if the project enters the design phase and for determining future needs for funding, and can be utilized for federal requirements regarding consideration of environmental issues as defined in the National Environmental Policy Act (NEPA). Items involved with this study include:

- Define project goals;
- Identify potential project locations and design concepts;
- Discuss project needs and issues with public officials and government agencies;
- Develop and evaluate potential roadway improvements;
- Provide input for the Statewide Transportation Plan;
- Prioritize projects for future programming documents; and
- Identify known environmental concerns.

The first step in the process was the collection of technical and resource agency input concerning this project. This was accomplished by:

- Establishing a project team to provide direction and review for the study. This team included representation from the various phases of project development from the Kentucky Transportation Cabinet's (KYTC) Highway District office as well as the Central Office Division of Planning and the Lake Cumberland Area Development District (LCADD).
- Initiating early coordination with resource agencies, local officials and stakeholders.
- Compiling information from existing data and reports.

The second step in the process was the evaluation of the collected input to accomplish the following:

- Address the geometrics, capacity, crashes, and other issues that are influencing the project.
- Document known environmental concerns.
- Develop and identify the project goals based on input of all who participated ; and
- Make recommendations.

### 1.2 Programming and Schedule

This study was funded in the *Six-Year Highway Plan (FY2007-2012)* as "Scoping Study for Safety Improvements to KY 76 from US 127 to KY 206" with Item Number 8-8302.00. No future project phases for KY 76 from US 127 to KY 206 are defined or scheduled at this time.

## 2.0 EXISTING CONDITIONS

### 2.1 Project Location

The project is in the south central part of Kentucky in both Russell and Adair counties. The project starts at the intersection of US 127 north of Russell Springs in Russell County, milepoint 11.498 and proceeds northwest on KY 76, crossing into Adair County, to ending milepoint 3.455 which is the intersection of KY 76 and KY 206. The route is narrow, winding through a typical rural Kentucky agricultural and residential area with a scatter of small service-oriented commercial businesses. The project location is shown in Exhibit 1 of Appendix A.

### 2.2 Roadway Characteristics

Data for existing roadway characteristics along KY 76 were taken from the Division of Planning's Highway Information System (HIS) database. This two-lane undivided highway has nine-foot wide lanes and three and four-foot wide combination shoulders throughout the study area. The posted speed limit is 55 mph, but the advisory speed limit is posted at 35 mph at various locations due to the roadway geometry. KYTC re-surfaced a portion of this project in 2006 for Adair County. Currently, re-surfacing is scheduled for the rest of the route in Russell County. Table 1 lists the General Information describing this project.

TABLE 1

#### General Information

<b>Counties:</b>	Russell and Adair		
<b>Route:</b>	KY 76	Beg MP:	11.498
		End MP:	3.455
<b>Item No:</b>	8-8302.00	<b>Length:</b>	6.092 miles
<b>Description:</b>	Scoping study for KY 76 intersection of US 127 to intersection of KY 206.		
<b>Area Development District</b>	Lake Cumberland Area Development District		
<b>Average Right of Way:</b>	Russell - 40 Feet		
	Adair - 60 Feet		
<b>Lane Width:</b>	9 Feet		
<b>Shoulder Width:</b>	Varies 3-4 Feet		
<b>Speed Limits:</b>	55 mph		
<b>Traffic Volumes:</b>	Varies from 1260-1600 ADT (2007)		
<b>% Trucks:</b>	6.70%		
<b>Bike Route:</b>	No		
<b>Coal Haul Route:</b>	No		
<b>Defense Highway</b>	No		
<b>District:</b>	8		
<b>Extended Weight:</b>	No		
<b>Functional Classification:</b>	Rural Minor Collector		
<b>National Truck Network:</b>	No		
<b>National Highway System</b>	No		
<b>Number of Bridges:</b>	0		
<b>Pavement type:</b>	Mixed Bituminous		
<b>Scenic Byway:</b>	No		
<b>State System:</b>	Rural Secondary		
<b>Truck Weight Class:</b>	A (40,000 lb. Gross Load Limit)		
<b>Type Road:</b>	Undivided Highway		
<b>Type of Terrain:</b>	Rolling		



A windshield survey of KY 76 between US 127 and KY 206 reveals it as a narrow two lane, undivided roadway. Some areas are flat and others are rolling, both natural to the terrain. The majority of shoulders were little to none with steep drop-offs.

### 2.3 Traffic & Level of Service

The average daily traffic volume (ADT) in the year 2007 varied from 1,260 to 1,600 vehicles per day (vpd) along the project. The projected ADT for 2030 nearly doubles the maximum value to 3,100 vpd. (See Table 2 for details.)

Level of Service (LOS) is used to describe traffic conditions and includes consideration of speeds, travel time, freedom to maneuver, traffic interruptions, comfort and convenience. There are six (6) levels of service to describe a roadway with given letter designations of A to F. Similar to school grades, LOS A is the best condition whereas LOS F is the worst condition.

*Level of Service (LOS) is a qualitative measure of highway traffic conditions described in the **2000 Highway Capacity Manual.***

Collected input data and the use of HCS+ software calculated the LOS for 2-lane conditions. Three scenarios were analyzed: current conditions, projected 2030 conditions without improvements and 2030 conditions with improvements. Those improvements are described in last two columns of Table 2 having a 4-lane improvement and a 2-12' lanes with 8' shoulders improvement. Currently, KY 76 has a LOS "A" rating as seen in Table 2. The LOS remains at LOS "A" with the projected 2030 ADT if no improvements occur. Therefore, the LOS with improvements remains at "A" in 2030. See Exhibit 2 in Appendix A for a visual representation.

TABLE 2

Level of Service Calculations											
Begin Milepoint	End Milepoint	2007 Average Daily Traffic	Annual Growth Rate	2030 Average Daily Traffic	Percent Trucks	Lane Width (Feet)	Shoulder Width (Feet)	2007 Level of Service (LOS)	2030 LOS No Improv.	2030 LOS with Improvements	
										4-Lane	Improved 2-lane
11.498	14.135	1,600	2.4%	3100	6.7%	9	3	A	A	A	A
0.000	3.455	1,260	2.4%	2400	6.7%	9	4	A	A	A	A

\*MP = milepoint

#### MP Description of KY 76:

MP 11.498 - @ the intersection of US 127

MP 14.135 – Russell/Adair County Line

MP 3.455 - @ the intersection of KY 206

Appendix B contains the output files from the HCS+ analysis.

## 2.4 Crash Analysis

Crash Data from the *Collision Reports Analysis for Safer Highways* (CRASH) database maintained by the Kentucky State Police were used to find the Critical Rate Factors (CRF) for tenth-mile spots as well as for longer segments along the corridor. High crash locations are shown in Tables 3 and 4. Between March 1, 2003 and January 31, 2007, the segment of KY 76 in Adair County had a CRF of 0.935 which indicates a potential high-crash location. In addition through the CRF calculation another spot was identified. This spot is a tenth of a mile span located in Adair County between milepoints 1.000 – 1.100. This spot had three (3) total crashes. Two (2) crashes involved were single vehicles that ran off the road.

*Critical Rate Factor (CRF) is a measurement that indicates whether a spot or a segment is statistically more apt to having crash issues. If scored greater than 1.00, then crashes may not be occurring randomly.*

See Exhibit 3 in Appendix A for visual representations.

TABLE 3

Crash Analysis (Segment)										
Seg. #	County	Begin MP	End MP	Length (Miles)	Avg. Daily Traffic (ADT)	Crashes				Critical Rate Factor *(CRF)
						Fatal	Injury	Property Damage Only	Total	
January 1, 2003 to December 31, 2006 HIS Data										
1	Russell	11.498	14.135	2.637	4460	0	1	2	3	0.125
2	Adair	0.000	3.455	3.455	3270	0	7	16	23	0.935

\*CRF highlighted in **YELLOW** indicate Critical Rate Factor close to 1.00

TABLE 4

Crash Analysis (Spot @ Tenth-Mile Points)										
Pt. #	County	Begin MP	End MP	Length (Miles)	Avg. Daily Traffic (ADT)	Crashes				Critical Rate Factor *(CRF)
						Fatal	Injury	Property Damage Only	Total	
January 1, 2003 to December 31, 2006 HIS Data										
1	Adair	1.0	1.1	0.100	1260	0	1	2	3	1.15

\*CRF highlighted in **RED** indicate Critical Rate Factor > 1.00

## 2.5 Environmental & Socioeconomic Overview

The Environmental Overview was conducted by Kentucky Transportation personnel in the District 8 Office of Somerset, Kentucky. The overview consisted of a file and

database review along with windshield surveys along the project route. See Appendix C for complete documentation.

Highlighted issues of possible concerns include:

- Threatened and Endangered Species
  - Adair County – gray bat, Indiana bat, and fanshell mussel
  - Russell County – Indiana bat, Cumberland bean pearlymussel, Cumberlandian combshell, fanshell mussel, fluted kidneyshell mussel, orangefoot pimpleback mussel, oyster mussel, pink mucket mussel, ring pink mussel and rough pinktoe mussel, sundew meadow
  - Habitat assessments will need to be conducted once an alignment is selected.
- Streams and Wetlands
  - An unnamed tributary of Green River is designated as an Outstanding Resource Water due to its high water quality.
  - Approximately five blueline streams are affected by this corridor.
  - Several small wetlands are scattered along the project. Only one is labeled as a palustrine forested wetland and is already bisected by the current roadway.
- Cultural-Historic
  - Review of the Kentucky Heritage Council and the National Register did not indicate any sites in the project area, although several structures appear to be over 50 years old and could be eligible for the National Register.
  - Note: if this project becomes federally funded then the alignment must be evaluated for 4(f) impacts and Section 106 impacts.
- Archaeology
  - According to KYTC's Division of Environmental Analysis personnel, no known archaeology sites have been documented along the KY 76 corridor, but it is believed there are potential archaeological sites in the area.
  - An archaeological survey is recommended prior to improvements to the project.
- Noise and Air Quality
  - Neither noise nor air will have substantial increases.
  - Both Adair and Russell counties are located in nonattainment areas.
- Hazardous Materials
  - Four sites had potential hazardous material/waste areas.
- Socioeconomic Issues
  - Little impact to the surrounding community and its traffic is anticipated.



Sundew Meadow

## **2.6 Environmental Justice and Community Impacts**

The Lake Cumberland Area Development District (LCADD) prepared the Environmental Justice Review.

Environmental Justice is an Executive Order (12898) that was signed on February 11, 1994 that states "...each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations..." The Environmental Justice Review included in this report was based on the US Census Bureau 2000 Census data, field observations, local officials meetings and interviews. The focus is on portions of the community that could be considered minority, low-income, and elderly populated areas. This information is important to understand in making decisions about transportation facilities and services. Services such as transit, pedestrian and bicycle facilities may help those groups of people that have been traditionally underserved, cannot afford to drive or do not have the physical capability to drive.

No significant impacts or disproportionate effects on minorities, low-income groups and the elderly are anticipated in the study area, but it was recommended that proactive measures would be undertaken to insure these groups would not be disproportionately and adversely affected by the project. Furthermore, the LCADD staff will report any changes and/or developments that may occur in the future that could alter the findings of their report. The review document, in its entirety, can be seen in Appendix D.

## **2.7 Geotechnical Overview**

The University of Kentucky, KY Geological Survey reported that this study area is not an anticipated problem area with regard to karst features, landslide hazards, resource conflicts and faults. In addition, the probable peak ground acceleration due to earthquake ground motion is 0.09g which is minimal potential to liquefaction or slope failure. This report is in Appendix F, Resource Agency Responses.

## **3.0 CABINET & AGENCY INPUT**

### **3.1 Initial Project Team Meeting (March 16, 2007)**

The initial Project Team Meeting was conducted on Friday, March 16, 2007 in Somerset, Kentucky at the Kentucky Transportation Cabinet (KYTC) District 8 Office. The purpose of this meeting was to discuss the history, purpose, scope of work, issues, public involvement needs and related activities for this project. Several handouts of maps, preliminary data collected and exhibits were presented to the attendees. Those participating were the staff from the KYTC District 8 Office and from the KYTC Central Office. A few of the topics discussed are described below. Details of all the items discussed by the participants are included in the Meeting Minutes in Appendix E.

- ❖ This planning phase scheduled in the Kentucky Six-year Highway Plan (FY 2007-2012) was described as a "Scoping Study", but it was decided by the Project Team that the study would be categorized as a "Programming Study" due to its nature to assist local leaders in determining future needs for funding. Senator Vernie MaGaha and Representative Jeff Hoover represent the constituents of this area.

- ❖ KY 76 has several issues concerning its geometric function such as narrow driving lanes, shoulders that do not meet current standards, several consecutive curves, sight distance issues and increased commercial truck/recreational use. Collectively, these issues contribute to safety concerns.
- ❖ It was agreed upon by the group that a Public Meeting will not be held since there are no future funds available at the time of this study. But, the team agreed to have a Local Officials Meeting to gain input on KY 76.

### 3.2 Initial Local Officials Meeting (May 7, 2007)

Part of the public involvement process is having a Local Officials Meeting to encourage and engage those that have an interest in the study at the local level. This meeting took place at the Lake Cumberland Area Development District in Russell Springs, Kentucky on Monday, May 7, 2007. The purpose was to discuss the history, purpose, scope of work, issues, and related activities for this project. The participants were: a Kentucky Senator, County Judges, Magistrates, Ambulance Service/EMT/Fire Department personnel, and a County School Board representative. Detailed Meeting Minutes are in Appendix E.

Some of the major local issues identified were as follows:

- ❖ It was noted from an Emergency Medical Service representative that KY 76 is frequently used by the ambulance service.
- ❖ The Adair-Russell County Line was mentioned several times as being dangerous and was described as having steep side slopes with little or no shoulders in the area around the culvert. This provides little room to install guardrail. This segment is characterized by sharp winding horizontal curves with a corresponding vertical alignment that may pose hazards during wet or icy conditions.
- ❖ This county line area also is a concern for the school bus drivers from both Adair and Russell Counties. Both Adair and Russell county buses turn around on Joe Grider Road, which is a narrow side road.
- ❖ Many trucks and recreational vehicles were reported to be using this route as a “cut through” to get to their destination. Specific hauling uses were: logging/sawmill, carpet materials, concrete, gravel and boats with trailers. Again, the main concern is that the road is very narrow with less than desirable shoulders, has many drop offs, and no white striping on the edges.
- ❖ Many claimed that incidents have occurred at the intersection of KY 76 and US 127. Several years ago US 127 was rebuilt and lowered to its current grade.

Possible suggestions for safety improvement solutions were as follows:

- ❖ Potential Spot improvements such as additional signing, rumble strips, installing flashing beacons, installing guardrail where needed and cutting berms or foliage for better sight distance along the route.
- ❖ Widening and Reconstruction: Minor widening with 11’ driving lanes and 3’ to 6’ shoulders or reconstruction to current design standards of 12’ lanes and 8’ shoulders.

A general consensus from the local officials meeting was in favor of the spot improvements and the possibility for the minor widening of KY 76.

It was agreed by the Project Team Members after this meeting that a formal 2<sup>nd</sup> Project Team Meeting was not needed due to the information collected and the small number of optional solutions developed. The district personnel were charged to obtain construction costs at the planning level to introduce at the next Local Officials Meeting.

### 3.3 2<sup>nd</sup> Local Officials Meeting (October 29, 2007)

This meeting was held at the LCADD office in Russell Springs, Kentucky on Monday, October 29, 2007. Participants that were invited were those that attended the last Local Officials meeting. At this time, KYTC introduced possible alternates that were developed from the study process and included cost estimates. Input from this group was solicited for final recommendations and prioritization of spot improvements for the project. Detailed Meeting Minutes are in Appendix E.

The three alternates are described as below.

#### Alternate No. 1 ~ Spot Improvements

- *Spot Improvement No. 1* ~ Improve horizontal alignment and widen the intersection of KY 76 and KY 206 for trucks to have proper turning radii. (Adair MP 2.391 to 3.455)
- *Spot Improvement No. 2* ~ Widen the route by extending the culvert. This location is at the county line. (Russell MP 14.135/Adair MP 0.000)
- *Spot Improvement No. 3* ~ Realign the 90 degree curve to make it smoother. (Russell MP 12.381 to 12.473)
- *Spot Improvement No. 4* ~ Improve the intersection of KY 76/ US 127 by adding turning lanes on US 127, cutting back slopes for sight distance, traffic safety devices and modifying the vertical alignment. (Russell MP 11.498)

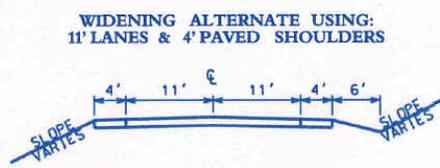
Table 5 shows the current phasing cost associated with each Spot. (See Exhibit 4 in Appendix A for the overall layout.)

TABLE 5

#### Cost Estimates for Spot Improvements

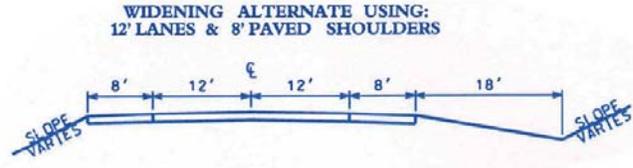
Spot #	Design	Right of Way	Utilities	Construction	Total
1	\$ 450,000.00	\$ 1,300,000.00	\$ 700,000.00	\$ 2,300,000.00	\$ 4,750,000.00
2	\$ 175,000.00	\$ 300,000.00	\$ 300,000.00	\$ 1,200,000.00	\$ 1,975,000.00
3	\$ 200,000.00	\$ 600,000.00	\$ 300,000.00	\$ 1,000,000.00	\$ 2,100,000.00
4	\$ 125,000.00	\$ 200,000.00	\$ 200,000.00	\$ 250,000.00	\$ 775,000.00
<b>Total</b>	<b>\$ 950,000.00</b>	<b>\$ 2,400,000.00</b>	<b>\$ 1,500,000.00</b>	<b>\$ 4,750,000.00</b>	<b>\$ 9,600,000.00</b>

**Typical Sections and Cost Estimates for:**



DESIGN:	\$2,200,000
RW:	\$3,300,000
UTILITIES:	\$3,500,000
CONSTRUCTION:	\$10,000,000
<b>TOTAL:</b>	<b>\$19,000,000</b>

**ALTERNATE #2**



DESIGN:	\$2,200,000
RW:	\$3,500,000
UTILITIES:	\$3,500,000
CONSTRUCTION:	\$20,800,000
<b>TOTAL:</b>	<b>\$30,000,000</b>

**ALTERNATE #3**

Alternate #2 was chosen as the primary alternate by the group. Since funding was deemed to be very expensive it was made clear that there be a second choice if funding was not attainable. Alternate #1 was chosen as the next alternate when funds were available. This alternate was more feasible financially.

At the time of this study KYTC’s maintenance crews had reported the current repaving along this route in addition to work being done in various spots to cut back slopes for sight distance issues.

**3.4 Final Project Team Meeting (October 29, 2007)**

This meeting was held directly after the 2<sup>nd</sup> Local Officials Meeting. The group concurred that the recommendations made in the previous Local Officials Meeting had merit and those recommendations would be in the final report. Therefore, the final process of the study is to write the report in a timeline that was discussed for having it complete prior to the next General Assembly. Minutes to this meeting can be found in Appendix E.

**3.5 Resource Agency Coordination**

Appropriate state and federal resource agencies along with local officials were identified and contacted to solicit their input and concerns associated with the study area and KY 76 improvements. The Division of Planning sent letters to 79 agencies and organizations requesting their input and comments for this Programming Study in order to address their concerns early in the project development process. The 29 agencies responding to the request for input and comments are listed below, along with a brief summary of their comments. Their complete responses are included in Appendix F.

It is noted that the Environmental and Public Protection Cabinet serves as the state clearinghouse for reviewing environmental documents. Some agencies provide comments both directly and through the clearinghouse. Therefore, some of the comments may be redundant in the Appendix.

**Federal Aviation Administration, Memphis Airports District Office, June 5, 2007**

No issues or concerns for this project.

**Federal Emergency Management Agency, Region IV, June 4, 2007**

No comment for this project.

**U.S. Army Corps of Engineer, Ray Hedrick, Nashville, Tennessee District Office, May 31, 2007**

Called KYTC to inform this office that the project is not in their area and he will forward the letter to the Louisville, Kentucky District Office.

**U.S. Army Corps of Engineer, Jane Archer, Louisville, Kentucky District Office, May 30, 2007**

Some streams in the area could be impacted and are subject to the regulatory authority under section 404 of the Clean Water Act (33 USC 1344). Named streams include Sulphur Creek, Hawk Branch and other unnamed tributaries. If any of these streams would be impacted proper applications for permits would have to be submitted.

**U.S. Coast Guard, Bridge Branch, May 31, 2007**

The project is not a project over which the Coast Guard exercises jurisdiction for bridge administration purposes.

**U.S. Department of Agriculture, Forest Service, Daniel Boone National Forest, June 1, 2007**

The project is outside the proclamation boundary of the Daniel Boone National Forest. Activities to improve KY 76 are not likely to cause impacts to resources or programs on National Forest System lands.

**U.S. Department of Agriculture, Natural Resources Conservation Services, June 1, 2007**

The agency has concerns with prime farmland conversion for this area. If the project uses federal dollars to convert important farmlands from agriculture to non-agriculture uses, Forms AD-1006 or NRCS-CPA-106 must be submitted to this office for review.

**U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, June 11, 2007**

The Agency has no specific comments at the time. They do recommend the following topics to be considered if and when necessary for the NEPA process: Air Quality, Water Quality/Quantity, Wetlands and Flood Plains, Hazardous Materials/Wastes, Non-Hazardous Solid Waste/Materials, Noise, Occupational Health and Safety, Land Use and Housing and Environmental Justice.

**Justice and Public Safety Cabinet, Kentucky Vehicle Enforcement, June 4, 2007**

Concerned of having a less than standard Typical Section if an upgrade occurs but not opposed to any widening for safety issues.

**Kentucky Cabinet for Health and Family Services, Facilities Management Division, June 13, 2007**

No specific issues or concerns with regard to this proposed project.

**Kentucky Commerce Cabinet, Department of Parks, June 19, 2007**

No preference for this proposed project.

**Kentucky Commerce Cabinet, Kentucky Heritage Council, June 19, 2007**

No known historical, cultural or archaeological sites are directly located in the project area, but nearby there are a couple prehistoric sites. There is a potential impact for sites that could possibly qualify for the National Register of Historic Places and it is recommended that the entire corridor be surveyed by a professional archaeologist prior to the design phase.

**Kentucky Commission on Human Rights, June 13, 2007**

No concerns for this project unless accessibility issues for people with disabilities should arise.

**Kentucky Department of Agriculture, May 30, 2007**

No specific concerns other than the proposed project may benefit movement of agricultural vehicles and commodities.

**Kentucky Department for Environmental Protection, Division for Air Quality, May 29, 2007**

401KAR 63:010 Fugitive Emissions – Prevent particulate matter from becoming airborne.

401 KAR 63:005 – Open burning prohibited.

Meet conformity requirements of the Clean Air Act and provisions of Title 23 and Title 49 of the US Code.

**Kentucky Department for Environmental Protection, Division of Forestry, July 20, 2007**

There are no state forests or champion trees in the project area. It was noted that special care to existing trees after construction should be taken. “Selecting Trees and Planting” publication was attached.

**Kentucky Department for Environmental Protection, Division of Water, July 20, 2007**

A Special Water exists in the Adair County portion of this project for a segment of an unnamed tributary to Green River. This segment is a part of the KDOW Reference Reach Stream Program. Also, improvements along the KY 76 corridor are considered to have minimal groundwater effects. As always, measures should be taken to protect the area’s groundwater during construction.

**Kentucky Department for Environmental Protection, Division of Waste Management, July 20, 2007**

Solid waste generated by this project must be disposed at a permitted facility. Any underground storage tanks, asbestos, lead paints and other contaminants encountered during this project should be addressed properly.

**Kentucky Department of Fish and Wildlife Resources, June 27, 2007**

Federally endangered gray bats and Indiana bats could occur in close proximity of the propose project area. There may also be a potential for impact of wetlands in the area. Direction and contacts were given to take appropriate measures for any disturbances for the future of this project.

**Kentucky Department of Military Affairs, Office of the Adjutant General, June 5, 2007**

There are no issues or concerns that impact this agency.

**Kentucky Department of Parks, May 31, 2007**

The project will not impact directly any facilities.

**Kentucky Department of Natural Resources, Division of Mine Reclamation and Enforcement, May 24, 2007**

The area does not indicate any presence of active or abandoned mining activities.

**Kentucky Department of Natural Resources, Division of Oil and Gas Conservation, June 15, 2007**

This area is known for oil and gas exploration activity.

**Kentucky Department of State Police, June 7, 2007**

Agency is in favor of improvements. Major concern is improving safety.

**Kentucky Environmental and Public Protection Cabinet, Division of Conservation, May 29, 2007**

Two concerns were expressed: 1) loss of prime farmland and farmland in general and 2) use of "Best Management Practices" (BMP's) for prevention of non-point source water pollution, erosion and sedimentation control. Both concerns would need to be addressed in the preliminary phases of design.

There are no agricultural districts in this project area.

**Kentucky Nature Preserves Commission, June 4, 2007**

There is a site of interest north of the KY 76 corridor which has a rare/endangered plant referred to "Sundew Meadow" in this area. Also, Gray bats may have a potential impact in the area that would need to be considered. No caves are known, but suitable caves should be searched during planning stages.

**Kentucky Transportation Cabinet, Office of Special Programs, June 4, 2007**

Recommendation of having a minimum 4' paved shoulder throughout KY 76 to accommodate cyclists who may use this route to access other local Scenic Byways (US 127, US 80 and US 55) and a KTYC designated Bike Route (Central Heartland Tour).

**Kentucky Transportation Cabinet, Permits Branch, June 18, 2007**

Notify this office should any portion of this project is designed as partial control access or proposed roadway is placed on the National Highway System.

**University of Kentucky, KY Geological Survey, June 1, 2007**

A summary of geologic characteristics and concerns for the study area concludes that it is not anticipated to have karst features, landslide hazards, resource conflicts and faults. Probable peak ground acceleration due to earthquake ground motion is 0.09g which is minimal potential to liquefaction or slope failure.

**Vernie McGaha, Kentucky State Senator, 15<sup>th</sup> Legislative District, June 5, 2007**

The Senator has played an active role in this project and is one of the initiators. Several concerns were stated about the hazards along the KY 76 corridor:

1. Narrow lanes and little to no shoulders, sharp drop offs with no guardrail and difficult roadway geometrics,
2. Used as a connector or "cut through" for commercial trucks (logging, concrete and carpet) along with the use of recreational vehicles hauling boats to the lakes in the surrounding area, and those who commute and,
3. Issues with the approach and sight distance upon entering or exiting KY 76 to US 127 and vice versa.

#### **4.0 STATEMENT OF PROJECT GOALS**

As a result of the planning process and public involvement, project goals were identified based on input from all groups who participated: Local government agencies, highway officials, interest groups and the project team. These goals reflect the future project development for safety and connectivity improvements. These goals will assist local leaders in determining future needs for funding along this corridor. The project goals are as follows:

1. Improve Safety by:
  - a) Correcting horizontal and vertical deficiencies,
  - b) Increasing lane and shoulder widths to meet current guidelines and,
  - c) Providing improved safety measures such as flashing beacons, signage and guardrail where needed in certain locations.

2. Improve connectivity between US 127 and KY 206. KY 76 is a rural minor collector to the Green River Lake area, US 68 and KY 55.

## 5.0 RECOMMENDATIONS / IMPROVEMENT OPTIONS

### 5.1 Geometric Design Features

Throughout the study process the points below were established as the ground rules for making recommendations.

- Functional classification of KY 76 in Adair and Russell counties is rural minor collector. The project team does not expect this classification to change as a result of any improvements.
- The design year for this study is 2030 and the average daily traffic ranges from 2400-3100 vpd during this time frame.
- The expected design speed will be 55 mph along the corridor with suggested lower limits in areas where geometrics are a concern.
- The preferred typical section for a rural collector with ADT of 2000 or greater is 12' lanes and 8' shoulders. This is the basis of a cost estimate to compare with the preferred solution.

### 5.2 Build Alternatives

Based on the input of the local officials and technical analysis, the Project Team agreed that the primary recommendation for this project is Alternate No. 2. This alternate meets the project goals. It improves safety by widening the existing route to 11' lanes and 4' shoulders, corrects the areas where horizontal and vertical issues affect drivers and includes all spot improvements. Consequently, KY 76 will provide better connectivity between US 127 and KY 206. The cost estimate for this alternate is \$19,000,000.

### 5.3 Spot Improvements

It was also decided that Alternate No. 1, Spot Improvements, would have consideration as an interim recommended choice if funding does not become immediately available for the primary recommendation. This would provide the opportunity for lower-cost improvements to be programmed if only those lesser funding amounts became available. The purpose of each of these proposed projects is to improve safety and mobility along the existing route. All the spots were prioritized and listed in Table 6. For phased cost estimates see Table 5 in Chapter 3. The final aerial photo/map of these recommendations is in the following inserts.

Table 6

#### Rankings for Spot Improvements

Rank	Spot #	Total Cost
1	4	\$ 775,000.00
2	2	\$ 1,975,000.00
3	1	\$ 4,750,000.00
4	3	\$ 2,100,000.00
		<b>\$ 9,600,000.00</b>

## 6.0 ACKNOWLEDGEMENTS & CONTACTS

Several individuals contributed to the completion of this Programming Study. It is with much gratitude and appreciation for the time, effort, and knowledge shared by the following participants:

- ❖ Thanks to Jimmy C. Wilson, P.E. for his experience, guidance, and patience throughout the whole process.
- ❖ Many kudos to the District 8 personnel, namely Tom Clouse, P.E., who has fine tuned my writing skills.
- ❖ And, finally, Larry Wilson, Transportation Planner with the Lake Cumberland ADD, who was instrumental in coordinating the local events required for this project to proceed.

Additional information regarding the KY 76 Programming Study can be obtained from the following KYTC Division of Planning staff members:

### Address written comments to:

Mr. Keith R. Damron, P.E.  
Director, Division of Planning  
200 Mero Street, 5<sup>th</sup> Floor  
Station: W5-05-01  
Kentucky Transportation Cabinet  
Frankfort, KY 40622

### Or you may contact by phone or e-mail:

Ms. Boday Borres, P.E.  
Project Manager  
Division of Planning  
Kentucky Transportation Cabinet  
(502) 564-7183 ext. 3275  
[boday.borres@ky.gov](mailto:boday.borres@ky.gov)

Mr. David Martin, P.E.  
SPAC Team Leader  
Division of Planning  
Kentucky Transportation Cabinet  
(502) 564-7183 ext. 3274  
[charles.martin@ky.gov](mailto:charles.martin@ky.gov)

# RECOMMENDATIONS

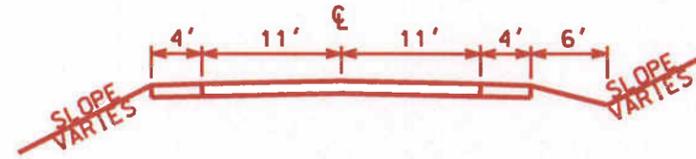


## SPOT IMPROVEMENTS (#'s 1, 2, 3 & 4)

DESIGN:	\$950,000
R/W:	\$2,400,000
UTILITIES:	\$1,500,000
CONSTRUCTION:	\$4,750,000
<b>TOTAL:</b>	<b>\$9,600,000</b>

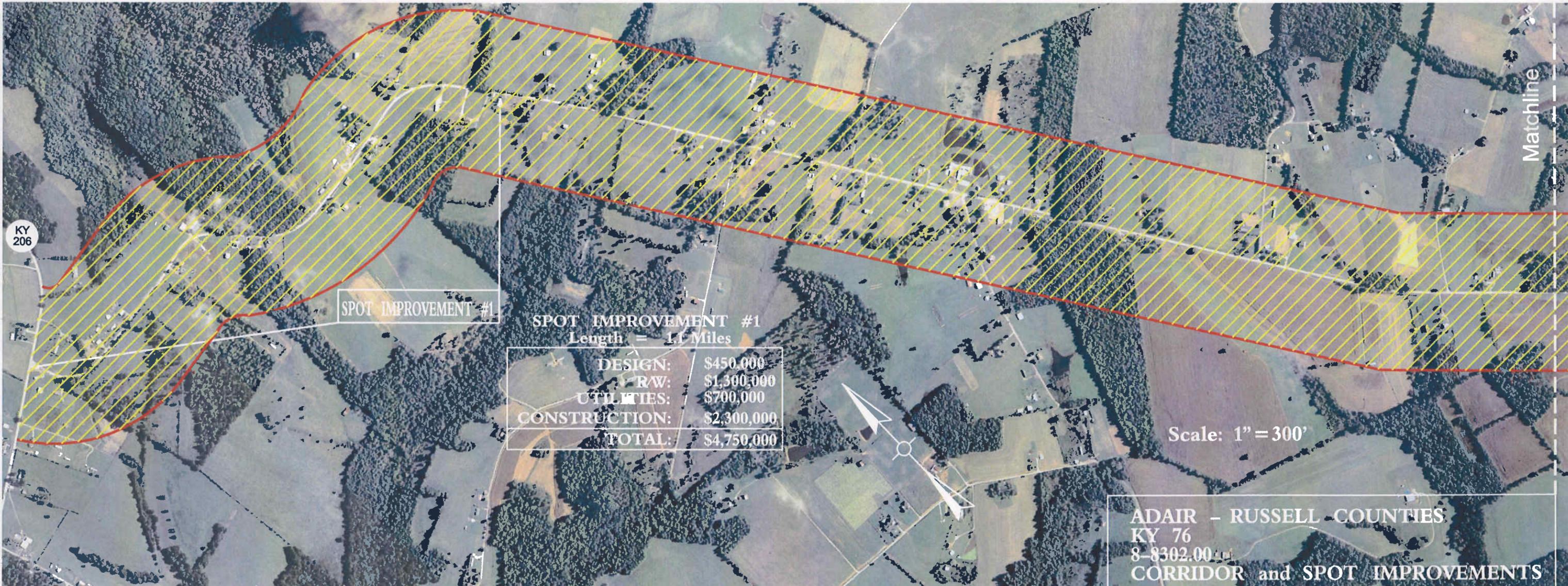
## ALTERNATE #1

## WIDENING ALTERNATE USING: 11' LANES & 4' PAVED SHOULDERS



DESIGN:	\$2,200,000
R/W:	\$3,300,000
UTILITIES:	\$3,500,000
CONSTRUCTION:	\$10,000,000
<b>TOTAL:</b>	<b>\$19,000,000</b>

## ALTERNATE #2



SPOT IMPROVEMENT #1

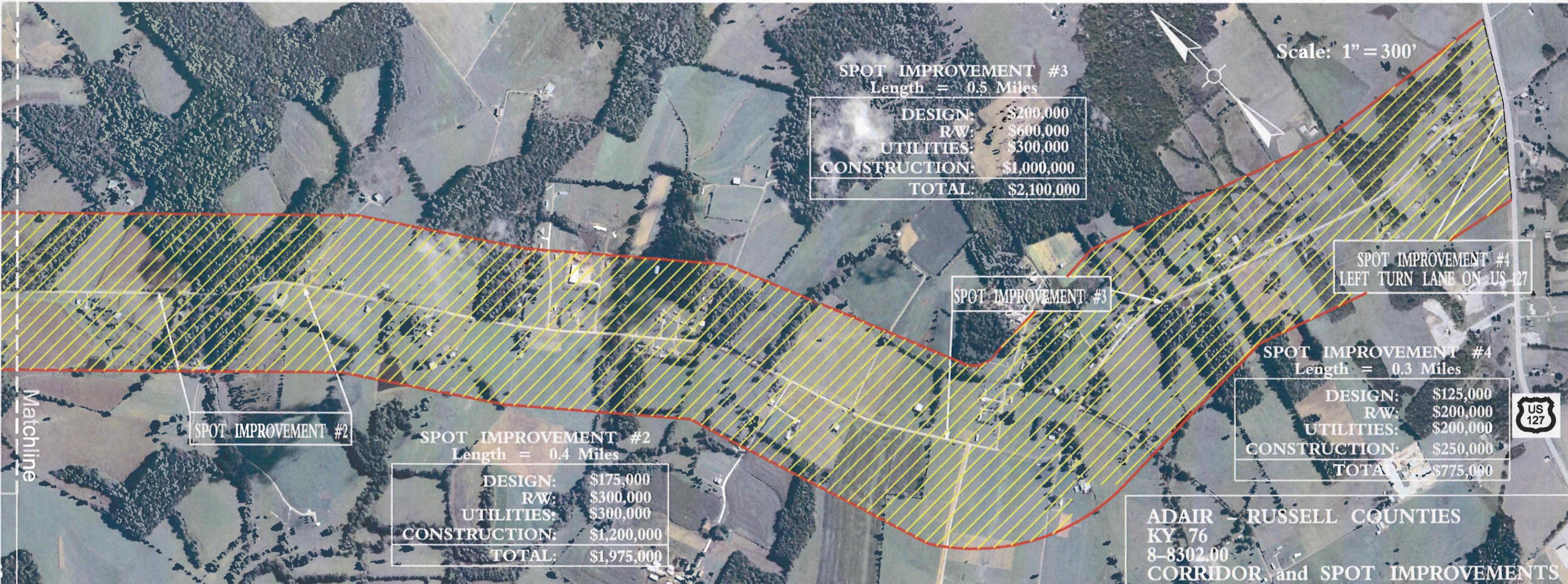
SPOT IMPROVEMENT #1  
Length = 1.1 Miles

DESIGN:	\$450,000
R/W:	\$1,300,000
UTILITIES:	\$700,000
CONSTRUCTION:	\$2,300,000
<b>TOTAL:</b>	<b>\$4,750,000</b>

KY 206

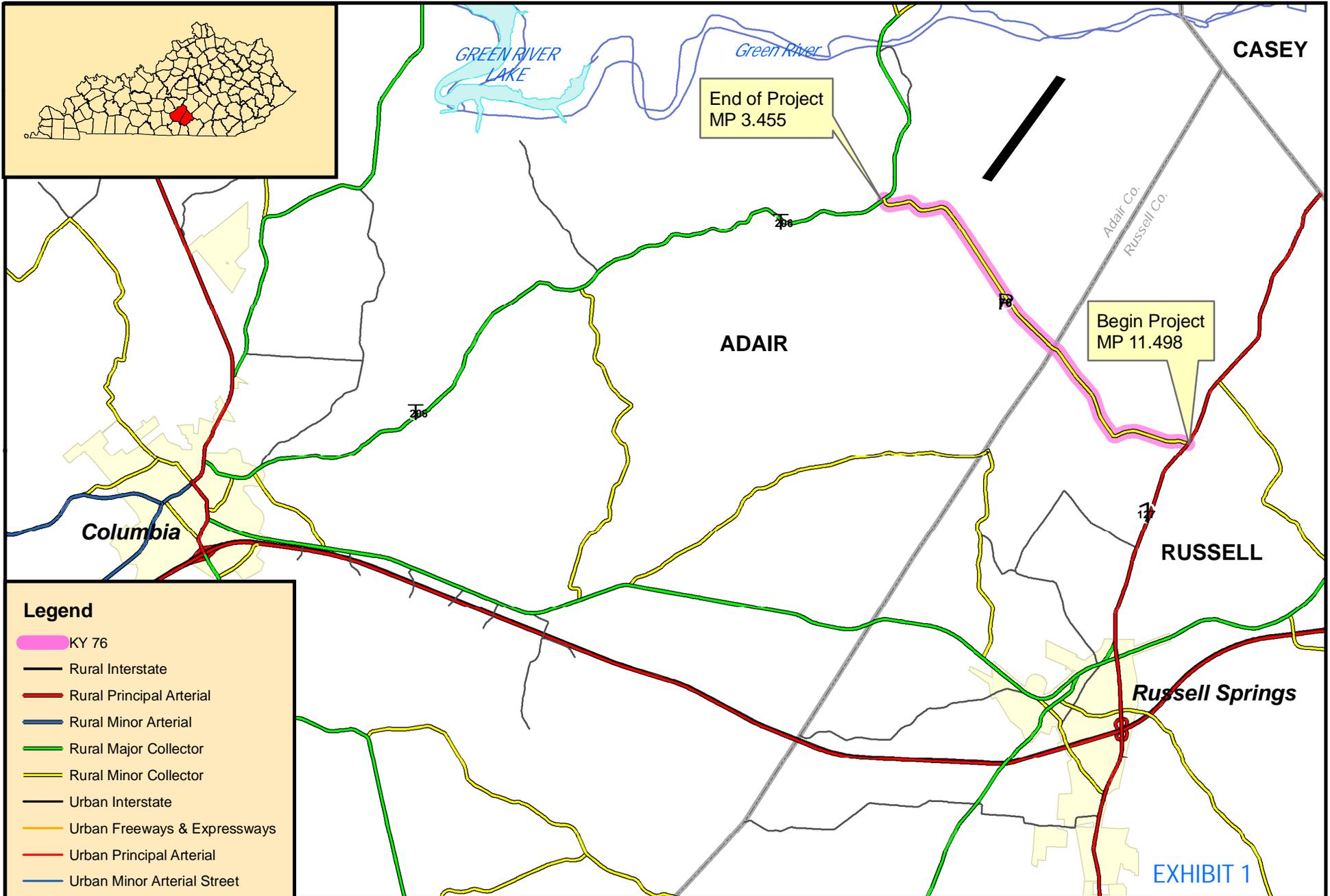


# RECOMMENDATIONS



# **Appendix A**

*Exhibits*



End of Project  
MP 3.455

Begin Project  
MP 11.498

**Legend**

- KY 76
- Rural Interstate
- Rural Principal Arterial
- Rural Minor Arterial
- Rural Major Collector
- Rural Minor Collector
- Urban Interstate
- Urban Freeways & Expressways
- Urban Principal Arterial
- Urban Minor Arterial Street
- Urban Collector Street
- Rural & Urban Local
- City Boundary Polygons
- Rivers
- county\_bnd\_arc

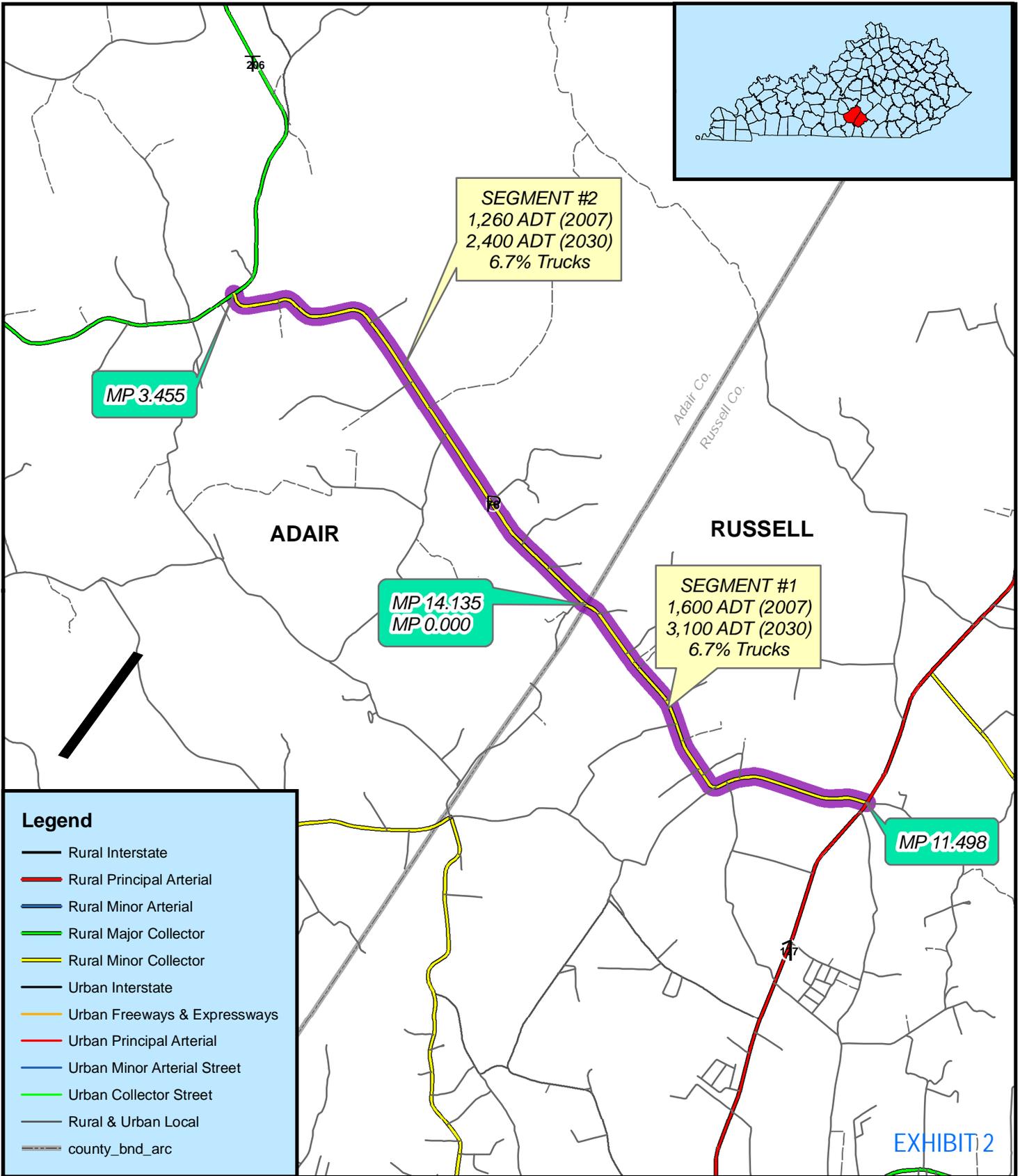


Last map revision: FEBRUARY 2007  
 Road centerlines collected using GPS technology  
 Kentucky State Plane Coordinate System (NAD83)  
[www.transportation.ky.gov/planning/](http://www.transportation.ky.gov/planning/)



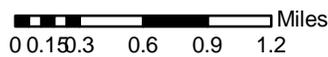
**PROJECT LOCATION**  
**KY 76**  
**Russell & Adair Counties**  
**ITEM NO. 8-8302.00**

EXHIBIT 1



**Level of Service**

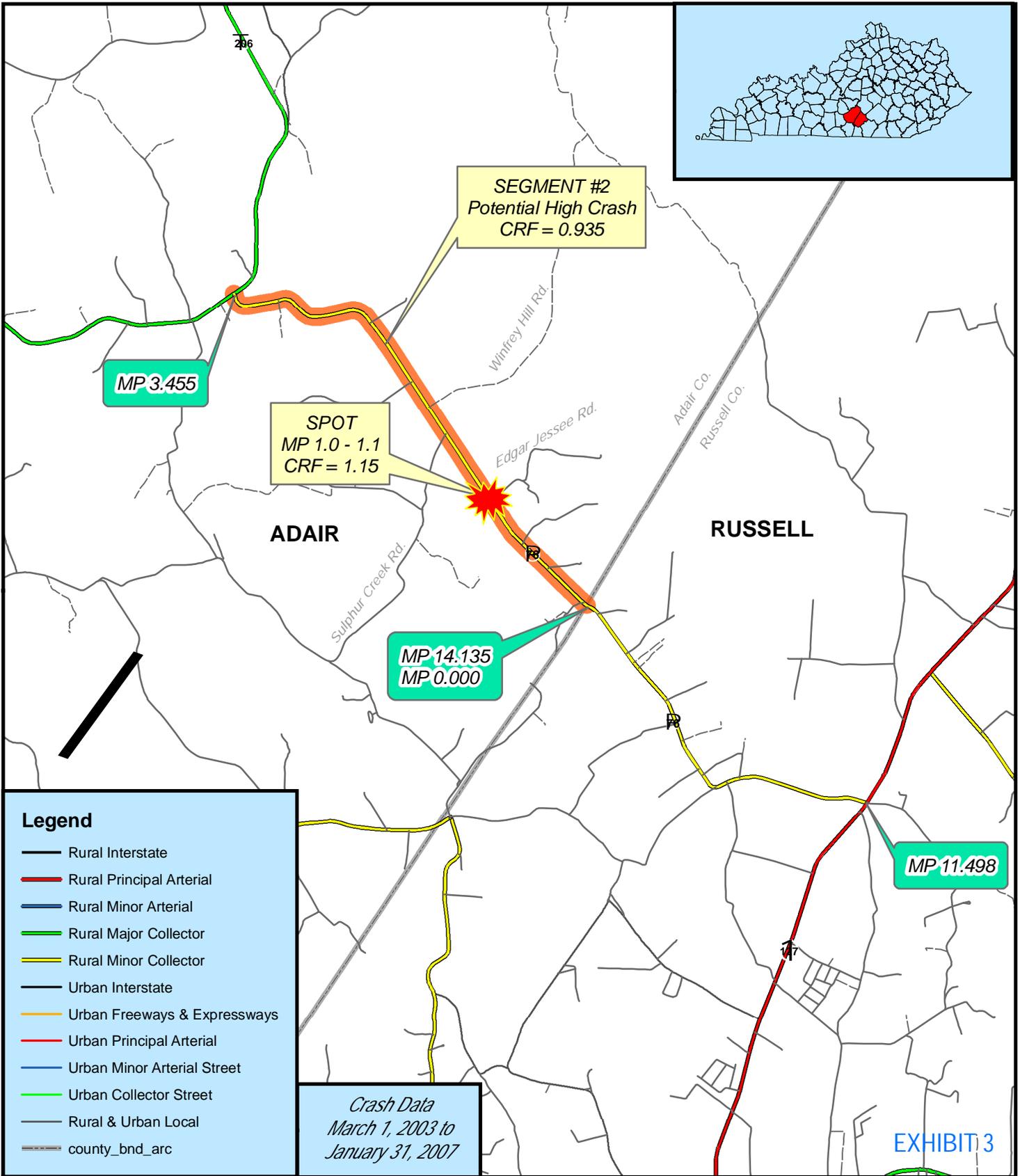
**LOS "A"**



Last map revision: FEBRUARY 2007  
Road centerlines collected using GPS technology  
Kentucky State Plane Coordinate System (NAD83)  
[www.transportation.ky.gov/planning/](http://www.transportation.ky.gov/planning/)



**LEVEL OF SERVICE**  
**2007 & 2030**  
**KY 76**  
**Russell & Adair Counties**  
**ITEM NO. 8-8302.00**



**Legend**

- Rural Interstate
- Rural Principal Arterial
- Rural Minor Arterial
- Rural Major Collector
- Rural Minor Collector
- Urban Interstate
- Urban Freeways & Expressways
- Urban Principal Arterial
- Urban Minor Arterial Street
- Urban Collector Street
- Rural & Urban Local
- county\_bnd\_arc

*Crash Data  
March 1, 2003 to  
January 31, 2007*

EXHIBIT 3

**High Crash**

- Spot
- Potential Segment



Last map revision: FEBRUARY 2007  
Road centerlines collected using GPS technology  
Kentucky State Plane Coordinate System (NAD83)  
[www.transportation.ky.gov/planning/](http://www.transportation.ky.gov/planning/)



**High Crash Spot  
& Segment**

**KY 76  
Russell & Adair Counties  
ITEM NO. 8-8302.00**

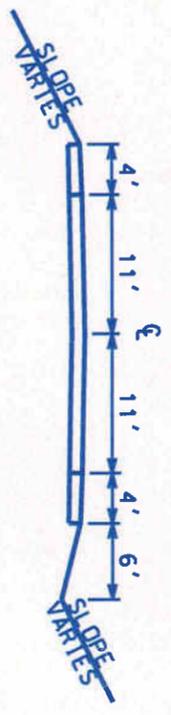


SPOT IMPROVEMENTS  
(#'s 1, 2, 3, 4 & 5)

DESIGN:	\$600,000
R/W:	\$1,850,000
UTILITIES:	\$850,000
CONSTRUCTION:	\$4,500,000
TOTAL:	\$7,800,000

ALTERNATE #1

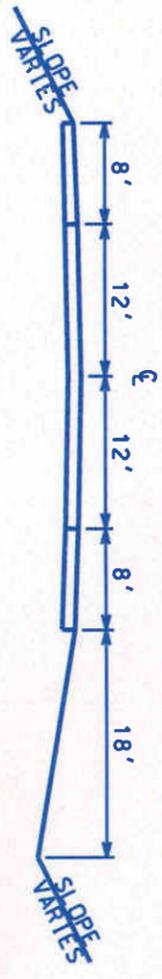
WIDENING ALTERNATE USING:  
11' LANES & 4' PAVED SHOULDERS



DESIGN:	\$2,200,000
R/W:	\$3,300,000
UTILITIES:	\$3,500,000
CONSTRUCTION:	\$10,000,000
TOTAL:	\$19,000,000

ALTERNATE #2

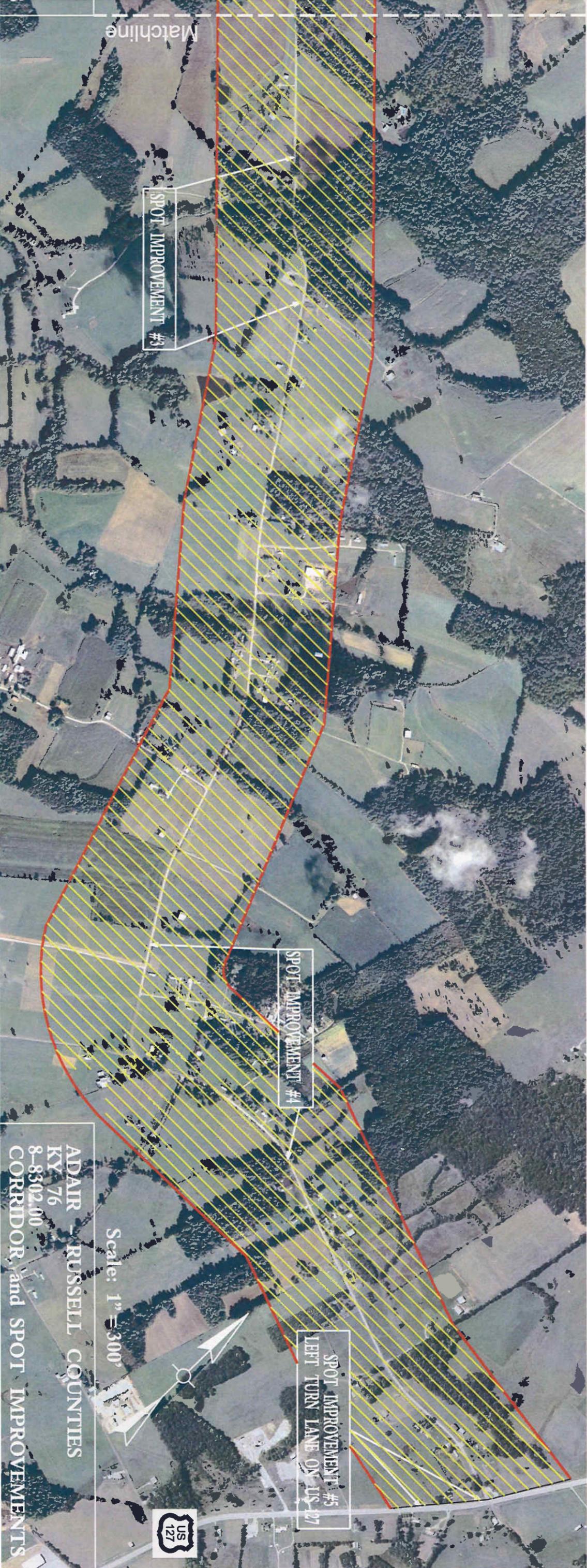
WIDENING ALTERNATE USING:  
12' LANES & 8' PAVED SHOULDERS



DESIGN:	\$2,200,000
R/W:	\$3,500,000
UTILITIES:	\$3,500,000
CONSTRUCTION:	\$20,800,000
TOTAL:	\$30,000,000

ALTERNATE #3





Matchline

SPOT IMPROVEMENT #3

SPOT IMPROVEMENT #4

SPOT IMPROVEMENT #5  
LEFT TURN LANE ON US 27

Scale: 1" = 300'

ADAIR - RUSSELL COUNTIES  
KY 76  
8-8302.00  
CORRIDOR and SPOT IMPROVEMENTS



# **Appendix B**

*HCS+ Data*

## HCS+: Two-Lane Highways Release 5.2

Boday Borres

KYTC- Division of Planning

200 Mero Street, 5th Floor

Frankfort, KY 40622

W5-05-01

Phone: (502) 564-7183

Fax: (502) 564-2865

E-Mail: boday.borres@ky.gov

---

Two-Way Two-Lane Highway Segment Analysis

---

Analyst           Boday  
Agency/Co.       KYTC  
Date Performed    2/7/2007  
Analysis Time Period 2007 - Current  
Highway           KY 76  
From/To           MP 11.498 to MP 14.135  
Jurisdiction       Russell Co.  
Analysis Year      2007  
Description       Scoping Study for KY 76

---

Input Data

---

Highway class    Class 2  
Shoulder width   3.0 ft   Peak-hour factor, PHF   0.90  
Lane width       9.0 ft   % Trucks and buses      7    %  
Segment length   2.6 mi   % Recreational vehicles  0    %  
Terrain type     Rolling   % No-passing zones      0    %  
Grade: Length    mi       Access points/mi        3    /mi  
          Up/down    %

Two-way hourly volume, V   160   veh/h  
Directional split    60 / 40 %

---

Average Travel Speed

---

Grade adjustment factor, fG           0.71  
PCE for trucks, ET                    2.5  
PCE for RVs, ER                        1.1

Heavy-vehicle adjustment factor,	0.905
Two-way flow rate,(note-1) vp	277 pc/h
Highest directional split proportion (note-2)	166 pc/h

## Free-Flow Speed from Field Measurement:

Field measured speed, SFM	- mi/h
Observed volume, Vf	- veh/h
Estimated Free-Flow Speed:	
Base free-flow speed, BFFS	55.0 mi/h
Adj. for lane and shoulder width, fLS	4.8 mi/h
Adj. for access points, fA	0.0* mi/h

Free-flow speed, FFS	50.2 mi/h
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Adjustment for no-passing zones, fnp	0.0 mi/h
Average travel speed, ATS	48.1 mi/h

---

 Percent Time-Spent-Following
 

---

Grade adjustment factor, fG	0.77
PCE for trucks, ET	1.8
PCE for RVs, ER	1.0
Heavy-vehicle adjustment factor, fHV	0.947
Two-way flow rate,(note-1) vp	244 pc/h
Highest directional split proportion (note-2)	146
Base percent time-spent-following, BPTSF	19.3 %
Adj.for directional distribution and no-passing zones, fd/np	1.4
Percent time-spent-following, PTSF	20.7 %

---

 Level of Service and Other Performance Measures
 

---

Level of service, LOS	A
Volume to capacity ratio, v/c	0.09
Peak 15-min vehicle-miles of travel, VMT15	116 veh-mi
Peak-hour vehicle-miles of travel, VMT60	416 veh-mi
Peak 15-min total travel time, TT15	2.4 veh-h

---

Notes:

1. If  $vp \geq 3200$  pc/h, terminate analysis-the LOS is F.
  2. If highest directional split  $vp \geq 1700$  pc/h, terminate analysis-the LOS is F.
- \* These items have been entered or edited to override calculated value

## HCS+: Two-Lane Highways Release 5.2

Boday Borres

KYTC- Division of Planning

200 Mero Street, 5th Floor

Frankfort, KY 40622

W5-05-01

Phone: (502) 564-7183

Fax: (502) 564-2865

E-Mail: boday.borres@ky.gov

---

Two-Way Two-Lane Highway Segment Analysis

---

Analyst           Boday  
Agency/Co.        KYTC  
Date Performed     2/7/2007  
Analysis Time Period 2030 / No Improvements  
Highway            KY 76  
From/To            MP 11.498 to MP 14.135  
Jurisdiction        Russell Co.  
Analysis Year       2007  
Description        Scoping Study for KY 76

---

Input Data

---

Highway class    Class 2  
Shoulder width    3.0   ft    Peak-hour factor, PHF    0.90  
Lane width        9.0   ft    % Trucks and buses       7    %  
Segment length    2.6   mi    % Recreational vehicles   0    %  
Terrain type       Rolling    % No-passing zones       0    %  
Grade: Length     mi        Access points/mi        3    /mi  
          Up/down        %

Two-way hourly volume, V   310   veh/h  
Directional split    60 / 40 %

---

Average Travel Speed

---

Grade adjustment factor, fG            0.71  
PCE for trucks, ET                       2.5  
PCE for RVs, ER                          1.1

Heavy-vehicle adjustment factor,	0.905
Two-way flow rate,(note-1) vp	536 pc/h
Highest directional split proportion (note-2)	322 pc/h

## Free-Flow Speed from Field Measurement:

Field measured speed, SFM	- mi/h
Observed volume, Vf	- veh/h
Estimated Free-Flow Speed:	
Base free-flow speed, BFFS	55.0 mi/h
Adj. for lane and shoulder width, fLS	4.8 mi/h
Adj. for access points, fA	0.0* mi/h

Free-flow speed, FFS	50.2 mi/h
----------------------	-----------

Adjustment for no-passing zones, fnp	0.0* mi/h
Average travel speed, ATS	46.0 mi/h

---

 Percent Time-Spent-Following
 

---

Grade adjustment factor, fG	0.77
PCE for trucks, ET	1.8
PCE for RVs, ER	1.0
Heavy-vehicle adjustment factor, fHV	0.947
Two-way flow rate,(note-1) vp	472 pc/h
Highest directional split proportion (note-2)	283
Base percent time-spent-following, BPTSF	34.0 %
Adj.for directional distribution and no-passing zones, fd/np	0.3
Percent time-spent-following, PTSF	34.3 %

---

 Level of Service and Other Performance Measures
 

---

Level of service, LOS	A
Volume to capacity ratio, v/c	0.17
Peak 15-min vehicle-miles of travel, VMT15	224 veh-mi
Peak-hour vehicle-miles of travel, VMT60	806 veh-mi
Peak 15-min total travel time, TT15	4.9 veh-h

---

Notes:

1. If  $vp \geq 3200$  pc/h, terminate analysis-the LOS is F.
  2. If highest directional split  $vp \geq 1700$  pc/h, terminate analysis-the LOS is F.
- \* These items have been entered or edited to override calculated value

## HCS+: Two-Lane Highways Release 5.2

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Two-Way Two-Lane Highway Segment Analysis

---

Analyst           Boday  
Agency/Co.        KYTC  
Date Performed     2/7/2007  
Analysis Time Period 2030 / With Improvements  
Highway            KY 76  
From/To            MP 11.498 to MP 14.135  
Jurisdiction        Russell Co.  
Analysis Year       2007  
Description        Scoping Study for KY 76

---

Input Data

---

Highway class    Class 2  
Shoulder width   8.0   ft   Peak-hour factor, PHF    0.90  
Lane width       12.0   ft   % Trucks and buses       7    %  
Segment length   2.6   mi   % Recreational vehicles  0    %  
Terrain type     Rolling   % No-passing zones       0    %  
Grade: Length    mi    Access points/mi        3    /mi  
          Up/down        %

Two-way hourly volume, V   310   veh/h  
Directional split    60 / 40 %

---

Average Travel Speed

---

Grade adjustment factor, fG            0.71  
PCE for trucks, ET                       2.5  
PCE for RVs, ER                          1.1

Heavy-vehicle adjustment factor,	0.905
Two-way flow rate,(note-1) vp	536 pc/h
Highest directional split proportion (note-2)	322 pc/h

## Free-Flow Speed from Field Measurement:

Field measured speed, SFM	- mi/h
Observed volume, Vf	- veh/h
Estimated Free-Flow Speed:	
Base free-flow speed, BFFS	55.0 mi/h
Adj. for lane and shoulder width, fLS	0.0 mi/h
Adj. for access points, fA	0.0* mi/h

Free-flow speed, FFS	55.0 mi/h
----------------------	-----------

Adjustment for no-passing zones, fnp	0.0* mi/h
Average travel speed, ATS	50.8 mi/h

---

 Percent Time-Spent-Following
 

---

Grade adjustment factor, fG	0.77
PCE for trucks, ET	1.8
PCE for RVs, ER	1.0
Heavy-vehicle adjustment factor, fHV	0.947
Two-way flow rate,(note-1) vp	472 pc/h
Highest directional split proportion (note-2)	283
Base percent time-spent-following, BPTSF	34.0 %
Adj.for directional distribution and no-passing zones, fd/np	0.3
Percent time-spent-following, PTSF	34.3 %

---

 Level of Service and Other Performance Measures
 

---

Level of service, LOS	A
Volume to capacity ratio, v/c	0.17
Peak 15-min vehicle-miles of travel, VMT15	224 veh-mi
Peak-hour vehicle-miles of travel, VMT60	806 veh-mi
Peak 15-min total travel time, TT15	4.4 veh-h

---

Notes:

1. If  $vp \geq 3200$  pc/h, terminate analysis-the LOS is F.
  2. If highest directional split  $vp \geq 1700$  pc/h, terminate analysis-the LOS is F.
- \* These items have been entered or edited to override calculated value

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---

Two-Way Two-Lane Highway Segment Analysis

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Analyst           Boday  
 Agency/Co.       KYTC  
 Date Performed   2/7/2007  
 Analysis Time Period 2007 - Current  
 Highway           KY 76  
 From/To           MP 0.00 to MP 3.455  
 Jurisdiction       Adair Co.  
 Analysis Year     2007  
 Description       Scoping Study for KY 76

---

Input Data

---

Highway class   Class 2  
 Shoulder width   4.0 ft   Peak-hour factor, PHF   0.90  
 Lane width       9.0 ft   % Trucks and buses     7    %  
 Segment length   3.5 mi   % Recreational vehicles 0    %  
 Terrain type      Rolling   % No-passing zones     0    %  
 Grade: Length    mi       Access points/mi       3    /mi  
           Up/down    %

Two-way hourly volume, V   126   veh/h  
 Directional split   60 / 40 %

---

Average Travel Speed

---

Grade adjustment factor, fG           0.71  
 PCE for trucks, ET                   2.5  
 PCE for RVs, ER                      1.1

Heavy-vehicle adjustment factor,	0.905
Two-way flow rate,(note-1) vp	218 pc/h
Highest directional split proportion (note-2)	131 pc/h

## Free-Flow Speed from Field Measurement:

Field measured speed, SFM	- mi/h
Observed volume, Vf	- veh/h
Estimated Free-Flow Speed:	
Base free-flow speed, BFFS	55.0 mi/h
Adj. for lane and shoulder width, fLS	3.5 mi/h
Adj. for access points, fA	0.0* mi/h

Free-flow speed, FFS	51.5 mi/h
----------------------	-----------

Adjustment for no-passing zones, fnp	0.0 mi/h
Average travel speed, ATS	49.8 mi/h

---

 Percent Time-Spent-Following
 

---

Grade adjustment factor, fG	0.77
PCE for trucks, ET	1.8
PCE for RVs, ER	1.0
Heavy-vehicle adjustment factor, fHV	0.947
Two-way flow rate,(note-1) vp	192 pc/h
Highest directional split proportion (note-2)	115
Base percent time-spent-following, BPTSF	15.5 %
Adj.for directional distribution and no-passing zones, fd/np	1.6
Percent time-spent-following, PTSF	17.2 %

---

 Level of Service and Other Performance Measures
 

---

Level of service, LOS	A
Volume to capacity ratio, v/c	0.07
Peak 15-min vehicle-miles of travel, VMT15	123 veh-mi
Peak-hour vehicle-miles of travel, VMT60	441 veh-mi
Peak 15-min total travel time, TT15	2.5 veh-h

---

Notes:

1. If  $vp \geq 3200$  pc/h, terminate analysis-the LOS is F.
  2. If highest directional split  $vp \geq 1700$  pc/h, terminate analysis-the LOS is F.
- \* These items have been entered or edited to override calculated value

## HCS+: Two-Lane Highways Release 5.2

Boday Borres

KYTC- Division of Planning

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Frankfort, KY 40622

W5-05-01

Phone: (502) 564-7183

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E-Mail: boday.borres@ky.gov

---

Two-Way Two-Lane Highway Segment Analysis

---

Analyst           Boday  
 Agency/Co.        KYTC  
 Date Performed    2/7/2007  
 Analysis Time Period 2030 / No Improvements  
 Highway            KY 76  
 From/To           MP 0.00 to MP 3.455  
 Jurisdiction       Adair Co.  
 Analysis Year      2007  
 Description        Scoping Study for KY 76

---

Input Data

---

Highway class    Class 2  
 Shoulder width   4.0 ft   Peak-hour factor, PHF   0.90  
 Lane width       9.0 ft   % Trucks and buses      7    %  
 Segment length   3.5 mi   % Recreational vehicles  0    %  
 Terrain type      Rolling   % No-passing zones      0    %  
 Grade: Length    mi    Access points/mi        3    /mi  
       Up/down        %

Two-way hourly volume, V   240   veh/h  
 Directional split    60 / 40 %

---

Average Travel Speed

---

Grade adjustment factor, fG           0.71  
 PCE for trucks, ET                    2.5  
 PCE for RVs, ER                        1.1

Heavy-vehicle adjustment factor,	0.905
Two-way flow rate,(note-1) vp	415 pc/h
Highest directional split proportion (note-2)	249 pc/h

## Free-Flow Speed from Field Measurement:

Field measured speed, SFM	- mi/h
Observed volume, Vf	- veh/h
Estimated Free-Flow Speed:	
Base free-flow speed, BFFS	55.0 mi/h
Adj. for lane and shoulder width, fLS	3.5 mi/h
Adj. for access points, fA	0.0* mi/h

Free-flow speed, FFS	51.5 mi/h
----------------------	-----------

Adjustment for no-passing zones, fnp	0.0 mi/h
Average travel speed, ATS	48.3 mi/h

---

 Percent Time-Spent-Following
 

---

Grade adjustment factor, fG	0.77
PCE for trucks, ET	1.8
PCE for RVs, ER	1.0
Heavy-vehicle adjustment factor, fHV	0.947
Two-way flow rate,(note-1) vp	366 pc/h
Highest directional split proportion (note-2)	220
Base percent time-spent-following, BPTSF	27.5 %
Adj.for directional distribution and no-passing zones, fd/np	0.7
Percent time-spent-following, PTSF	28.2 %

---

 Level of Service and Other Performance Measures
 

---

Level of service, LOS	A
Volume to capacity ratio, v/c	0.13
Peak 15-min vehicle-miles of travel, VMT15	233 veh-mi
Peak-hour vehicle-miles of travel, VMT60	840 veh-mi
Peak 15-min total travel time, TT15	4.8 veh-h

---

Notes:

1. If  $vp \geq 3200$  pc/h, terminate analysis-the LOS is F.
  2. If highest directional split  $vp \geq 1700$  pc/h, terminate analysis-the LOS is F.
- \* These items have been entered or edited to override calculated value

## HCS+: Two-Lane Highways Release 5.2

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Frankfort, KY 40622

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E-Mail: boday.borres@ky.gov

---

Two-Way Two-Lane Highway Segment Analysis

---

Analyst           Boday  
Agency/Co.        KYTC  
Date Performed     2/7/2007  
Analysis Time Period 2030 / With Improvements  
Highway            KY 76  
From/To            MP 0.00 to MP 3.455  
Jurisdiction        Adair Co.  
Analysis Year       2007  
Description        Scoping Study for KY 76

---

Input Data

---

Highway class    Class 2  
Shoulder width    8.0   ft   Peak-hour factor, PHF    0.90  
Lane width        12.0   ft   % Trucks and buses       7    %  
Segment length    3.5   mi   % Recreational vehicles  0    %  
Terrain type       Rolling    % No-passing zones       0    %  
Grade: Length     mi        Access points/mi        3    /mi  
          Up/down        %

Two-way hourly volume, V   240   veh/h  
Directional split    60 / 40 %

---

Average Travel Speed

---

Grade adjustment factor, fG            0.71  
PCE for trucks, ET                      2.5  
PCE for RVs, ER                         1.1

Heavy-vehicle adjustment factor,	0.905
Two-way flow rate,(note-1) vp	415 pc/h
Highest directional split proportion (note-2)	249 pc/h

## Free-Flow Speed from Field Measurement:

Field measured speed, SFM	- mi/h
Observed volume, Vf	- veh/h
Estimated Free-Flow Speed:	
Base free-flow speed, BFFS	55.0 mi/h
Adj. for lane and shoulder width, fLS	0.0 mi/h
Adj. for access points, fA	0.0* mi/h

Free-flow speed, FFS	55.0 mi/h
----------------------	-----------

Adjustment for no-passing zones, fnp	0.0 mi/h
Average travel speed, ATS	51.8 mi/h

---

 Percent Time-Spent-Following
 

---

Grade adjustment factor, fG	0.77
PCE for trucks, ET	1.8
PCE for RVs, ER	1.0
Heavy-vehicle adjustment factor, fHV	0.947
Two-way flow rate,(note-1) vp	366 pc/h
Highest directional split proportion (note-2)	220
Base percent time-spent-following, BPTSF	27.5 %
Adj.for directional distribution and no-passing zones, fd/np	0.7
Percent time-spent-following, PTSF	28.2 %

---

 Level of Service and Other Performance Measures
 

---

Level of service, LOS	A
Volume to capacity ratio, v/c	0.13
Peak 15-min vehicle-miles of travel, VMT15	233 veh-mi
Peak-hour vehicle-miles of travel, VMT60	840 veh-mi
Peak 15-min total travel time, TT15	4.5 veh-h

---

Notes:

1. If  $vp \geq 3200$  pc/h, terminate analysis-the LOS is F.
  2. If highest directional split  $vp \geq 1700$  pc/h, terminate analysis-the LOS is F.
- \* These items have been entered or edited to override calculated value

## HCS+: Multilane Highways Release 5.2

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Fax: (502) 5642865

E-mail: boday.borres@ky.gov

---

OPERATIONAL ANALYSIS

---

Analyst: Boday

Agency/Co: KYTC

Date: 2/7/2007

Analysis Period: 2030 / 4-Lane

Highway: KY 76

From/To: MP 11.498 to MP 14.135

Jurisdiction: Russell Co.

Analysis Year: 2007

Project ID: Scoping Study for KY 76

---

FREE-FLOW SPEED

---

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	3		3	
Median type	Undivided		Undivided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	1.6	mph	1.6	mph
Access points adjustment, FA	0.8	mph	0.8	mph
Free-flow speed	57.7	mph	57.7	mph

---

VOLUME

---

Direction	1	2		
Volume, V	186	vph	124	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	52		34	
Trucks and buses	7	%	7	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Rolling	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		2.5	
Recreational vehicles PCE, ER	2.0		2.0	
Heavy vehicle adjustment, fHV	0.905		0.905	
Flow rate, vp	114	pcphpl	76	pcphpl

---

RESULTS

---

Direction	1	2		
Flow rate, vp	114	pcphpl	76	pcphpl
Free-flow speed, FFS	57.7		mph	
Avg. passenger-car travel speed, S	57.7		mph	
Level of service, LOS	A		A	
Density, D	2.0	pc/mi/ln	1.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

## HCS+: Multilane Highways Release 5.2

Boday Borres

KYTC - Division of Planning

200 Mero Street, 5th Floor

Frankfort, KY 40622

W5-05-01

Phone: (502) 564-7183

Fax: (502) 5642865

E-mail: boday.borres@ky.gov

---

OPERATIONAL ANALYSIS

---

Analyst: Boday

Agency/Co: KYTC

Date: 2/7/2007

Analysis Period: 2030 / 4-Lane

Highway: KY 76

From/To: MP 0.000 to MP 3.422

Jurisdiction: Adair Co.

Analysis Year: 2007

Project ID: Scoping Study for KY 76

---

FREE-FLOW SPEED

---

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	3		3	
Median type	Undivided		Undivided	
Free-flow speed:	Base		Base	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	1.6	mph	1.6	mph
Access points adjustment, FA	0.8	mph	0.8	mph
Free-flow speed	57.7	mph	57.7	mph

---

VOLUME

---

Direction	1	2		
Volume, V	144	vph	96	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	40		27	
Trucks and buses	7	%	7	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Rolling	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		2.5	
Recreational vehicles PCE, ER	2.0		2.0	
Heavy vehicle adjustment, fHV	0.905		0.905	
Flow rate, vp	88	pcphpl	58	pcphpl

---

RESULTS

---

Direction	1	2		
Flow rate, vp	88	pcphpl	58	pcphpl
Free-flow speed, FFS	57.7		mph	
Avg. passenger-car travel speed, S	57.7		mph	
Level of service, LOS	A		A	
Density, D	1.5	pc/mi/ln	1.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

# **Appendix C**

## *Environmental Overview*



## TRANSPORTATION CABINET

Department of Highways District 8 Office  
1660 S. Highway 27  
P.O. Box 780  
Somerset, KY 42502  
(606) 677-4017

**Ernie Fletcher**  
Governor

**Bill Nighbert**  
Secretary

**Marc Williams**  
Commissioner of Highways

TO: Tom Clouse, P.E.  
TEBM – Planning  
District 8

FROM: Cathi Blair  
District Environmental Coordinator  
District 8

A handwritten signature in black ink that reads "Cathi Blair".

DATE: May 23, 2007

SUBJECT: Environmental Overview  
KY 76 proposed roadway improvement scoping study  
Russell and Adair Counties  
Item # 8-8302

As requested, I have conducted an environmental overview for the above referenced project. The overview consisted of file review, database reviews and windshield surveys of the project area. Based on the above reviews, I have noted the following:

### **Project Goals**

Safety improvement has been listed as the primary goal of this scoping study. Ky 76, a rural minor collector, is a narrow two-lane roadway with curves and grades that do not meet current guidelines or provide adequate sight distances for on-coming vehicles. Shoulder width along the route ranges from three feet to none along the route. The route is used as a "cut-thru" for traffic going to the areas of Green River Lake and Campbellsville or Columbia.

### **Threatened and Endangered Species**

Federally listed species for Russell and Adair Counties include:

#### Adair County

*Myotis grisescens* (gray bat)

*Myotis sodalis* (Indiana bat)

*Cyprogenia stegaria* (fanshell mussel)

Russell County

*Myotis sodalis* (Indiana bat)

*Villosa trabilis* (Cumberland bean pearly mussel)

*Epioblasma brevidens* (Cumberlandian combshell)

*Cyprogenia stegaria* (fanshell mussel)

*Ptychobranchus subtentum* (fluted kidneyshell mussel)

*Plethosbasus cooperianus* (orangefoot pimpleback mussel)

*Epioblasma capsaeiformis* (oyster mussel)

*Lampsilis abrupta* (pink mucket mussel)

*Obovaria retusa* (ring pink mussel)

*Pleurobema plenum* (rough pinktoe mussel)

Habitat for the Indiana bat is present along the project corridor. Once an alignment has been selected for this project, the habitat impacts will need to be reevaluated. If IB habitat is present in the selected alignment area, then the Cabinet will need to decide whether to 1) Conduct a Biological Assessment (BA); 2) Assume presence and accept tree cutting restrictions; or 3) pay funds into the Indiana Bat Conservation Fund at a rate of approximately \$440/acre of impacted habitat.

Foraging habitat is also present for the gray bat along the corridor. Foraging habitat includes streams or ponds/lakes that are bordered by forest or an intact riparian zone. Gray bats have been consistently captured during BAs in Adair County for the last several years. The Cabinet should probably assume presence of the gray bat and agree to mitigation measures which would include the use of good erosion control during construction and possibly a requirement of construction only during the day.

Habitat assessments will need to be conducted for the mussel species once an alignment has been selected. There are streams that cross the project area that will need to be evaluated. One particular area that will need special attention is near the northern terminus of the project just south of Ky 76's intersection with Ky 206. Ky 76 crosses the headwaters of an unnamed tributary to Green River in the Busby Hollow area (see map). This tributary has been designated as an Outstanding Resource Water (EXCEPTIONAL WATER and a REFERENCE REACH STREAM) due to its high water quality. Streams with this designation could be potential habitat for certain mussel species.

**Streams and Wetlands**

As mentioned above, an unnamed tributary to Green River near the northern terminus of the project has been designated as an Outstanding

Resource Water. Potential impacts to this resource need to be considered during the design process.

Approximately 5 blue-line streams were noted along the corridor. A field survey will be required to determine if there are any jurisdictional intermittent/ephemeral streams that will need to be considered during the permitting process.

Several small wetlands are scattered along the project corridor. There is one palustrine, forested wetland that is already bisected by the current Ky 76. Any improvements to this section of road will impact that wetland. (See map) The improvements could be designed in a way to miss the majority of the other designated wetlands.

### **Permits**

If any blue-line stream or wetland is impacted on this project, a 401 Water Quality certification from the Kentucky Division of Water and a 404 permit from the US Army Corps of Engineers will be required. A determination on the type of permits (individual vs. general) will be made during the design phase of the project.

### **Cultural-Historic**

A review of the current Kentucky Heritage Council listing of sites that have been reviewed by KHC for National Register determination did not indicate any structures or sites in the immediate project area. There are some eligible sites north and east of the project but they will not be impacted by this project. **Several** structures along the corridor appear to be 50 years or older and will need to be evaluated for NR eligibility once a preferred alignment has been selected.

Please note that if the project becomes a federally funded project, then the alignment must be evaluated for 4(f) impacts as well as Section 106 impacts. If the project remains a state-funded project, then the NR eligibility determinations will only need to comply with Section 106 which means that only structures within the Corps of Engineers jurisdictional area will be considered for mitigation.

### **Archaeology**

According to Mr. Carl Shield, DEA archaeologist, no known archaeological sites have been documented along this project corridor. Mr. Shields does believe that there is some potential for arch sites to be present in the more level areas along the corridor. Once the preferred improvements have been selected, an archaeological survey will need to be completed within the Corps jurisdictional areas.

### **Noise**

Because this project would only be a widening project, no increases in traffic or noise is expected to occur. A noise analysis will not be required.

### **Air Quality**

Neither county (Adair or Russell) is located in a nonattainment or maintenance area. If signalized intersections at either US 127 or Ky 206 are constructed, then the Division of Environmental Analysis would need to review and clear the project for Air Quality concerns.

### **Hazardous Materials**

The following potential hazardous materials/wastes sites were observed in the corridor:

- 1) Abrells Market – This is a former gas station/grocery store that is no longer operating. Five aboveground storage tanks (ASTs) were observed on the site. These tanks held diesel fuel (2), gasoline (2) and heating oil (1). I did not observe any vent pipes or fill spouts to indicate that underground storage tanks (USTs) were still located on-site.
- 2) Giles Market – This is an operational grocery store that also sells gasoline. Again I did not observe any vent pipes or fill spouts which would indicate the presence of USTs. Two ASTs were observed behind the building.
- 3) Small “junkyard” – This is located just east of the Ky 76/Ky 206 intersection. It appears to be more of a single family operation rather than a business but the potential for surface contamination from petroleum products does exist.
- 4) Home heating oil tanks – Although no tanks were observed, the possibility exists that some heating oil tanks will be impacted. Environmental impacts from home heating oil tanks are usually very minimal and often limited to surface contamination.

### **Socioeconomic Issues**

Although some relocations may be required in this project, it appears that the project can be constructed without any disproportionate impact to minorities or disadvantaged persons (environmental justice).

No publicly owned parks, recreation areas, or wildlife and wildfowl refuges were noted in the project corridor.

Community cohesion and travel patterns will not be permanently affected by this project. While the Ky 206 area of Adair County does have some

Mennonite communities, the local authorities and highway maintenance superintendents indicate that Ky 76 does not receive very much traffic from that community (horse/carts).

Three churches are located in the corridor area. In Russell County, the churches are the Faith General Baptist Church which is located just west of the Ky 76/US 127 intersection and the Good Tidings Baptist Church which also has a cemetery on its property. In the Millerfield area of Adair County, the Millerfield Brethern in Christ Church and cemetery is located on Ky 76.

It is also important to note that there is a Russell Springs water tower located adjacent to the Faith General Baptist Church.

CB

Cc: File  
Randall Thomas, DEA  
Amanda Abner, DEA  
Carl Shields, DEA  
Zack Couch, DEA  
Tom Koos, DEA



**U.S. Fish & Wildlife Service**  
Kentucky Ecological Services Field Office

U.S. Fish & Wildlife Service  
3761 Georgetown Rd.  
Frankfort, KY 40601  
Phone: 502-695-0468  
Fax: 502-695-1024

Endangered, Threatened, & Candidate  
Species in RUSSEL County, KY

Group	Species	Common name	Legal* Status	Known** Potential	Special Comments
Mammals	<i>Myotis sodalis</i>	Indiana bat	E	P	
Mussels	<i>Villosa trabilis</i>	Cumberland bean pearlymussel	E	K	
	<i>Epioblasma brevidens</i>	Cumberlandian combshell	E	K	
	<i>Cyrogenia stegaria</i>	fanshell	E	K	
	<i>Ptychobranchius subtentum</i>	fluted kidneyshell	C	K	
	<i>Plethobasus cooperianus</i>	orangefoot pimpleback	E	K	
	<i>Epioblasma capsaeiformis</i>	oyster mussel	E	K	
	<i>Lampsilis abrupta</i>	pink mucket	E	K	
	<i>Obovaria retusa</i>	ring pink	E	K	
	<i>Pleurobema plenum</i>	rough pigtoe	E	K	

**NOTES:**

\* Key to notations: E = Endangered, T = Threatened, C = Candidate, CH = Critical Habitat

\*\*Key to notations: K = Known occurrence record within the county, P = Potential for the species to occur within the county based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.



**U.S. Fish & Wildlife Service**  
Kentucky Ecological Services Field Office

**U.S. Fish & Wildlife Service**  
3761 Georgetown Rd.  
Frankfort, KY 40601  
Phone: 502-695-0468  
Fax: 502-695-1024

Endangered, Threatened, & Candidate  
Species in ADAI County, KY

Group	Species	Common name	Legal* Status	Known** Potential	Special Comments
Mammals	<i>Myotis grisescens</i>	gray bat	E	K	
	<i>Myotis sodalis</i>	Indiana bat	E	K	
Mussels	<i>Cyprogenia stegaria</i>	fanshell	E	P	

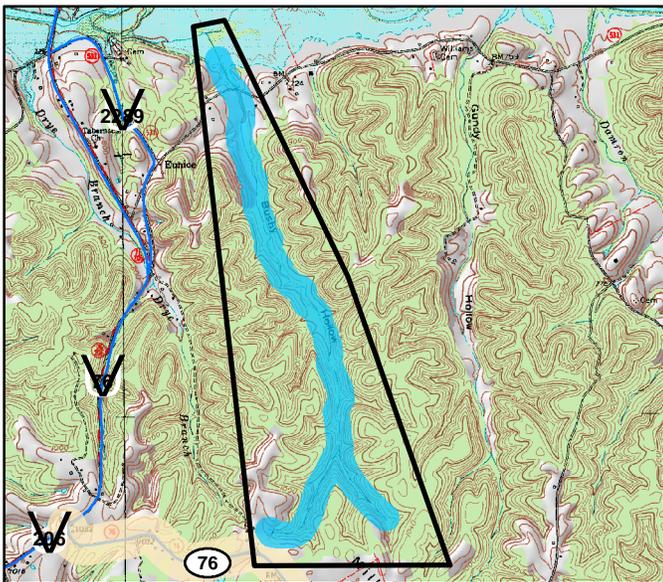
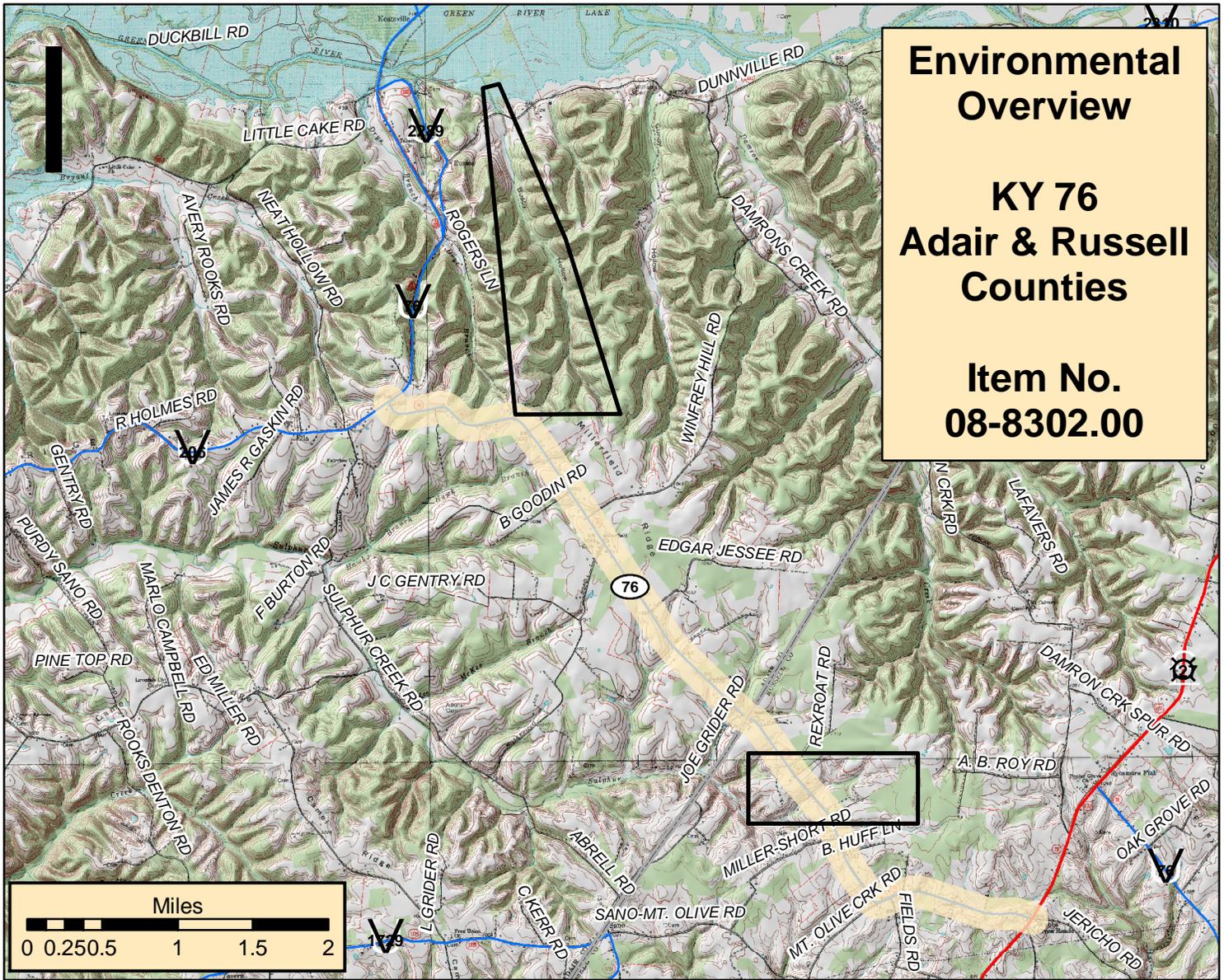
**NOTES:**

\* Key to notations: E = Endangered, T = Threatened, C = Candidate, CH = Critical Habitat

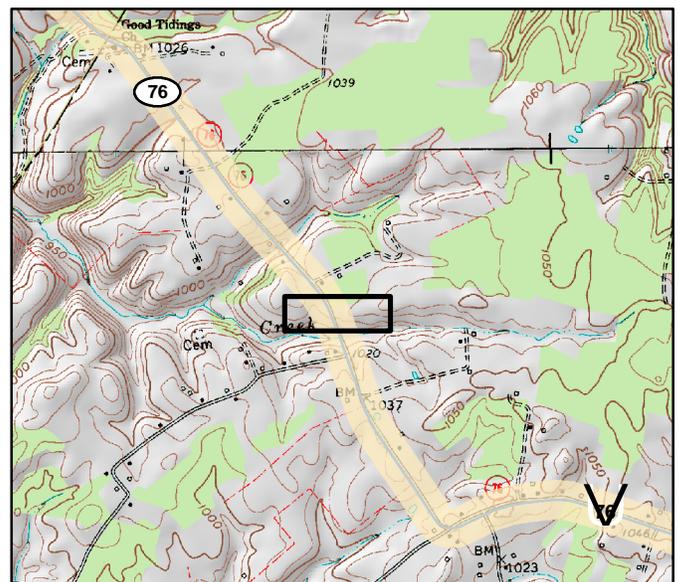
\*\*Key to notations: K = Known occurrence record within the county, P = Potential for the species to occur within the county based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.

**Abrell's Market  
Ky 76 Scoping Study  
Adair/Russell Counties  
Item # 8-8302.00**





**Special Use Water Designation  
(Busby Hollow)**



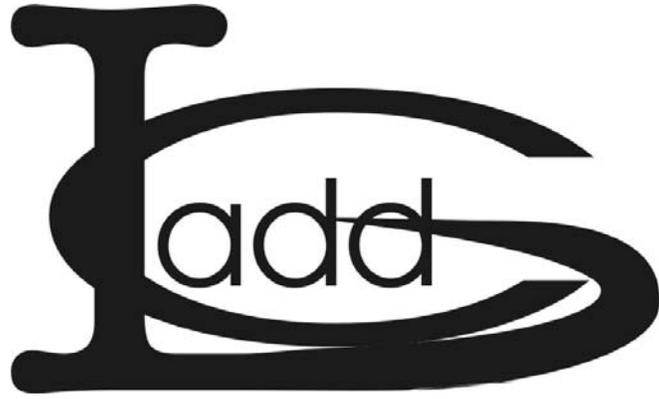
**Forested Wetland**



# **Appendix D**

*Environmental Justice Report*

# Lake Cumberland Area Development District



## **KY 76 CORRIDOR STUDY Environmental Justice Report Item No. 8-8302.00**



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## 1.0 INTRODUCTION

This document is an assessment of the community characteristics for the proposed improvements outlined in the KY 76 Corridor Study from US 127 & KY 76 intersection in Russell County to KY 76 to KY 206 intersection in Adair County, Kentucky (Appendix 3). The data used in this report has been compiled from a number of sources including the U.S. Census Bureau Census 2000, Kentucky Transportation Cabinet (KYTC), Division of Planning, local officials, and field observations of the project area. The information and results are intended to assist the Kentucky Transportation Cabinet in making informed and prudent transportation decisions in the project area, especially with regard to the requirements of Executive Order 12898<sup>1</sup>, to ensure equal environmental protection to all groups potentially impacted by this project.

The following report outlines Census 2000 statistics for the KY 76 Corridor Study in Russell County and Adair County using data tables and maps.

Census data was also compiled for Census divisions directly in and around the portion of the study area located in Russell County and Adair County. Statistics are provided for minority, low-income, and elderly populations for the project area, nation, state, region, census tracts, and block groups.

## 2.0 WHAT IS ENVIRONMENTAL JUSTICE?

The U.S. Environmental Protection Agency (EPA) Office of Environmental Justice (EJ) defines EJ as:

“The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including racial, ethnic, or socio-economic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies.”

A disproportionately high and adverse effect on a minority or low-income population means an adverse effect that:

1. Is predominately borne by a minority population and/or low-income population, or
2. Will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

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<sup>1</sup> Executive Order 12898 signed on February 11, 1994 states “...each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...”

## 2.1 Definitions

U.S. Department of Transportation (USDOT) Order 5610.2 on EJ, issued in the April 15, 1997 Federal Register defines what constitutes low income and minority populations.

- Low-Income is defined as a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines.
- Minority is defined as a person who is: (1) Black (a person having origins in any black racial groups of Africa); (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); (3) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (4) American Indian and Alaskan Native (a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).
- Low-Income Population is defined as any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant geographically dispersed/transient persons who will be similarly affected by a proposed USDOT program, policy or activity.
- Minority Population is defined as any readily identifiable group of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed USDOT program, policy or activity.

Executive Order (EO) 12898 and USDOT Order 5610.2 do not address consideration of the elderly population. However, the USDOT encourages the study of these populations in EJ discussions and in accordance with EJ, Title VI of the Civil Rights Act of 1964 and the Kentucky Transportation Cabinet's advocacy of inclusive public involvement and equal treatment of all persons this study includes statistics for persons age 65+ that are within the project and comparison areas.

## 3.0 METHODOLOGY

For this study, data was collected by using the method outlined by the KYTC document, "Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies".

The primary sources of data were the U.S. Census Bureau, Census 2000, local leaders, and field observations. Statistics were compiled to present a detailed analysis of the community conditions for the KY 76 Corridor Study.

#### **4.0 CENSUS DATA ANALYSIS**

The U.S. Census Bureau defines geographical units as:

- Census Tract (CT) – “A small, relatively permanent statistical subdivision of a county or statistically equivalent entity delineated for data presentation purposes by a local group of census data users or the geographic staff of a regional census center in accordance with Census Bureau guidelines. CTs generally contain between 1,000 and 8,000 people. CT boundaries are delineated with the intention of being stable over many decades, so they generally follow relatively permanent visible features. They may also follow governmental unit boundaries and other invisible features in some instances; the boundary of a state or county is always a census tract boundary.”
- Block Group (BG) - “A statistical subdivision of a CT. A BG consists of all tabulation blocks whose numbers begin with the same digit in a CT. BGs generally contain between 300 and 3,000 people, with an optimum size of 1,500 people.”
- Census Block (CB) – “An area bounded on all sides by visible and/or invisible features shown on a map prepared by the Census Bureau. A CB is the smallest geographic entity for which the Census Bureau tabulates decennial census data.”

The project and comparison area analysis include the percentages for minorities, low-income and elderly population levels for the census tract block group, Russell County, Adair County, the Commonwealth of Kentucky and the United States.

#### **5.0 STUDY FINDINGS**

This Environmental Justice and Community Impact Report is to be used as a component of a Planning Study for highway transportation improvements to KY 76 between US 127 & KY 76 intersection in Russell County and the KY 76 to KY 206 intersection in Adair County. This study is intended to help define the location and purpose of the project and better meet federal requirements regarding consideration of environmental issues as defined in the National Environmental Policy Act (NEPA).

The 2000 Census identifies two Census Tracts in this study area. These tracts are listed below by county and are illustrated in Appendices 4 and 5 along with the study area. Appendix 6 has the tabular data for comparison purposes in the report.

Russell County – Tract #9601  
Adair County – Tract #9703

## **6.0 STUDY FINDINGS / POPULATION BY RACE**

### **6.1 Russell County**

The defined study area in Russell County encompasses portions of the following Census Tract: 9601. Following the compilation of pertinent information, Lake Cumberland Area Development District (LCADD) Staff met with local officials and community members to review maps and Census data related to the study. The intent of these discussions was to confirm previous conclusions and solicit input into the process of developing this Environmental Justice Report.

The methodology used to determine minority concentrations was to compare the percentages for the Census Tracts and Block Groups in the study area to the state and national averages. If they were within 3% of the state and national averages, we considered it to be comparable.

The majority of Census Tracts and Block Groups in the study area contain minority populations that are considerably less than the national, state, and county averages; however, there are a few particular Block Groups in the study area that warrant further discussion.

Census Tract 9601 has a 0% percentage of black population in a county average of 0.44%. The Hispanic population is 1.26%, which is comparable to the county and state average of 0.80% and 1.48% respectively, but is considerably less than the national average of 12.52%. Reconstruction of the existing road would have no adverse affect.

Meetings with local officials and community members resulted in the conclusion that additional concentrations of minorities are not located in the study area; therefore, it is anticipated that the implementation of this project would not have a disproportionate effect on minorities residing in the proposed study area. LCADD Staff will continue to monitor racial composition in the study area and report any changes and/or developments that may occur in the future that could alter the findings of this report.

### **6.2 Adair County**

The defined study area within Adair County encompasses portions of Census Tract: 9703. Census Tract 9703 has percentage of black population of 0.85%, which is well below the average. Block Group 1 in Census Tract 9703 contains a percentage of black population of 2.85%, which is comparable to the county average of 2.99%, but is considerably less than the national and state average of 12.21% and 7.27% respectively. While the other Block Groups in Tract 9703 located in the study area have percentages well below the county average. The Hispanic or Latino percentage population for Adair County is 0.60%, which is comparable with Census Tract: 9703 having 0.41%. However Block Group 2 is higher with 1.03%, but is still comparable with county and state averages and well below the national average of 12.52%. Based on the census data, there appears to be no concentrations of minorities in this specific study area.

## **7.0 STUDY FINDINGS / POPULATION BY POVERTY LEVEL**

### **7.1 Russell County**

The percentage of the population below the poverty level for Russell County and Census Tract 9601 in the study area are significantly higher than national averages and state averages. A review of additional data shows that all Block Groups in the study area are at or exceed the state and national averages for the percentage of population below the poverty level, and these percentages range from a low of 20.94% to a high of 30.76%. The State average is 15.37 % and the national average is 12.05 %.

It is evident that a high percentage of population below the poverty level is a universal issue that occurs throughout the entire county, as well as the other counties in this study area, and that the chance of encountering significant concentrations of populations falling under this distinction is very likely. It should also be noted that these percentages are indeed comparable to many surrounding counties in this particular section of southeastern Kentucky. All of the counties within this study area are often identified as economically distressed due to high unemployment rates that can be attributed to the unavailability of quality employment opportunities.

The improvement of the KY 76 Corridor is viewed by many local officials and community members as a project that could potentially be beneficial for further economic growth and development; thereby improving conditions for the population of the county that currently fall below the poverty level. Following the selection of a preferred alternate for this proposed roadway, LCADD Staff recommends that a subsequent review of poverty data within affected Census divisions be undertaken to determine if particular concentrations of population below the poverty level exist in the project area; and if so, proactive measures be undertaken to insure that these groups are not disproportionately affected by the project.

### **7.2 Adair County**

The defined study area within Adair County encompasses portions of the following Census Tracts: 9703. Census Tract 9703 has a percentage of 29.42%, which is more than twice that of the national average. This is not totally unexpected considering the entire study area and the percentages of all the Block Groups.

Again, a further review of poverty data within the affected census tracts should be undertaken to determine if particular concentrations of population might be adversely affected.

## **8.0 STUDY FINDINGS / POPULATION BY AGE GROUP**

### **8.1 Russell County**

Aging characteristics in the overall population of Russell County are slightly higher percentage of persons age 65 and over than the state and national averages of 12%. Census Tract 9601 has a percentage of persons age 65 and over of 15.68%. Which is comparable with the county average. Based on the census data and other discussions, there seem to be no significant concentration of a specific age group in this study area.

### **8.2 Adair County**

The defined study area within Adair County and Census Tracts 9703 shows percentages for the aging population are consistent with those of the state, and the nation. The county average is 14.59% comparable to the state and nation of 12%. Based on the census data and other discussions, there seem to be no significant concentration of a specific age group in this study area.

Discussions with local officials and community members resulted in the conclusion that additional concentrations of persons age 65 and over are not located in the study area; therefore, it is anticipated that the implementation of this project would not have a disproportionate effect on the population of persons age 65 and over residing in the proposed study area.

## **9.0 CONCLUSION**

Based on data obtained from the U.S. Census Bureau for income, race and age, discussions with local officials, and field observations, LCADD Staff has concluded that a defined Environmental Justice community does not exist within the study area of Russell or Adair Counties.

Analysis of the minority population data showed several of the block groups as having an identified concentration of some sort. Some were significant, some were only minor. The more significant concentrations identified were noted in the narrative analysis of that county. All areas within this study should be given full consideration in the planning process to achieve the goals put forth by the U. S. Department of Transportation. The concentrations identified in both counties should not be affected by improvements to this route.

The elevated percentages in the populations below poverty level might be indicative of concentrations throughout the study area. However, based on the economic status of these rural depressed counties, these percentages are not uncommon for this area. Discussions with local officials and a field review came to the conclusion that no concentration of individuals below the poverty level will be disproportionately affected by this project.

There appear to be few small concentrations of populations by age in Russell and Adair counties. Age analysis indicates that the distribution of elderly residents in Adair County closely resembles the national and state average. Russell County has a slightly higher concentration of elderly, but the concentrations identified should not be affected by improvements to this route.

Efforts were made to identify any high concentrations of a specific population. Community citizens, other ADD planners, local officials, and statistical data were all used in this process.

LCADD Staff will continue to monitor the progress of this project and reevaluate the Environmental Justice Report to document any demographic and/or socioeconomic changes that may occur in and around the study area throughout the development of the project.

# APPENDIX 1

## PLANNING STUDY CONTACT LIST

Judge Ann Melton  
Adair Co. Judge Exec.  
424 Public Square, Suite1  
Columbia, KY 42728

Judge Mickey Garner  
Russell Co. Judge Exec.  
P.O. Box 397  
Jamestown, KY 42629

Jimmy R. McQueary  
Russell Co. Magistrate Dist. 4  
P.O. Box 397  
Jamestown, KY 42629

Rodger Stephens  
Adair Co. Magistrate  
424 Public Square, Suite1  
Columbia, KY 42728

Sheriff Larry Bennett  
Russell Co. Courthouse  
Jamestown, KY 42629

Tom Clouse  
DEPT. OF HIGHWAYS  
DISTRICT 8  
1660 S. Highway 27  
Somerset, KY 42501

## **APPENDIX 2**

### **Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies**

Updated: February 1, 2002

The demographics of the affected area should be defined using U.S. Census data (Census Tracts and Block Groups) and the percentages for minorities, low-income, elderly, or disabled populations should be compared to those for the following:

- Other nearby Census tracts and block groups,
- The county as a whole,
- The entire state, and
- The United States.

Information from Property Valuation Administration (PVA) offices, social service agencies, local health organizations, local public agencies, and community action agencies can be used to supplement the Census data. Specifically, we are interested in obtaining the following information:

- Identification of community leaders or other contacts who may be able to represent these population groups and through which coordination efforts can be made.
- Comparison of the Census Tracts and Block Groups encompassing the project area to other nearby Census Tracts and Block Groups, county, state, and United States percentages.
- Locations of specific or identified minority, low-income, elderly, or disabled population groups within or near the project area. This may require some field reviews and/or discussions with knowledgeable persons to identify locations of public housing, minority communities, ethnic communities, etc., to verify Census data or identify changes that may have occurred since the last Census. Examples would be changes due to new residential developments in the area or increases in Asian and/or Hispanic populations.
- Concentrations or communities that share a common religious, cultural, ethnic, or other background, e.g., Amish communities.
- Communities or neighborhoods that exhibit a high degree of community cohesion or interaction and the ability to mobilize community actions at the start of community involvement.
- Concentrations of common employment, religious centers, and/or educational institutions with members within walking distance of facilities.
- Potential effects, both positive and negative, of the project on the affected groups as compared to the non-target groups. This may include, but are not limited to:
  1. Access to services, employment or transportation.
  2. Displacement of persons, businesses, farms, or non-profit organizations.
  3. Disruption of community cohesion or vitality.
  4. Effects to human health and/or safety.

- Possible methods to minimize or avoid impacts on the target population groups.

Methodology for Assessing Potential Environmental Justice Concerns  
for KYTC Planning Studies

Page 2

If percentages of these populations are elevated within the project area, it should be brought to the attention of the Division of Planning immediately so that coordination with affected populations may be conducted to determine the affected population's concerns and comments on the project. Also, with this effort, representatives of minority, elderly, low-income, or disabled populations should be identified so that, together, we can build a partnership for the region that may be incorporated into other projects. Also, we hope to build a Commonwealth-wide database of contacts. We are available to participate in any meetings with these affected populations or with their community leaders or representatives.

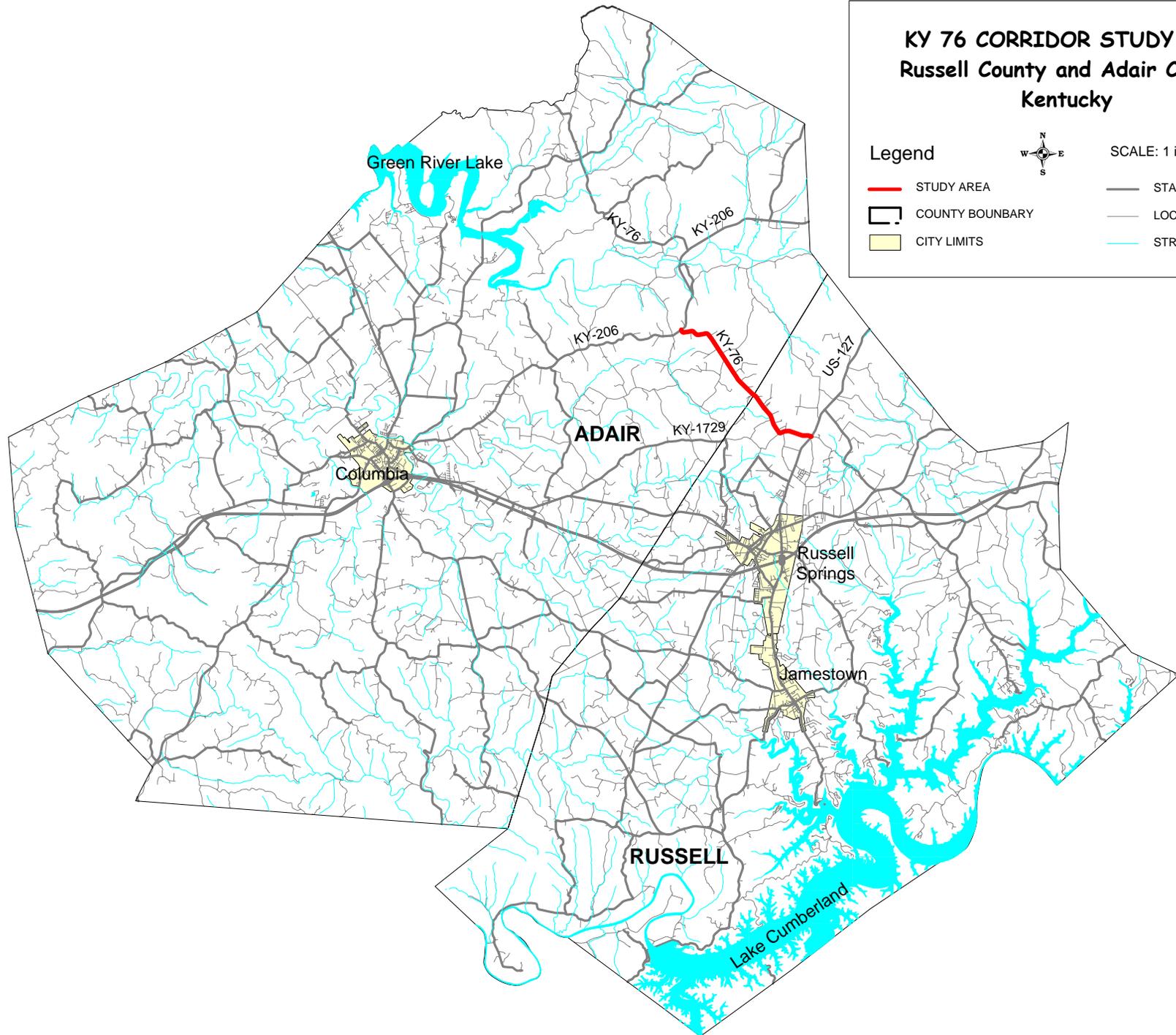
In identifying communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as not to artificially dilute or inflate the affected population. A target population also exists if there is (1) more than one minority or other group present and (2) the percentages, as calculated by aggregating all minority persons, exceed that of the general population or other appropriate unit of geographic analysis.

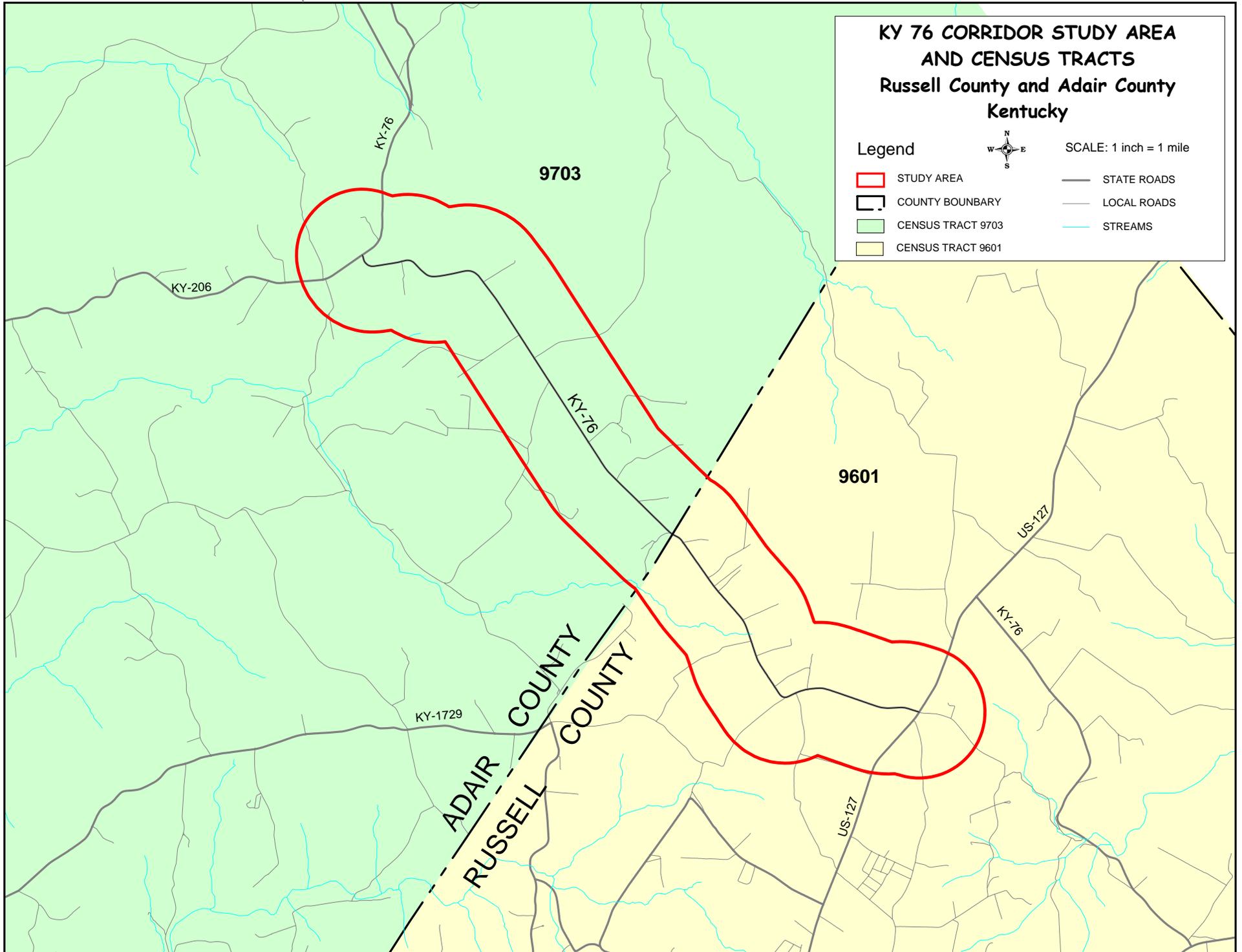
Maps should be included that show the Census Tracts and Block Groups included in the analysis as well as the relation of the project area to those Census Tracts and Block Groups.

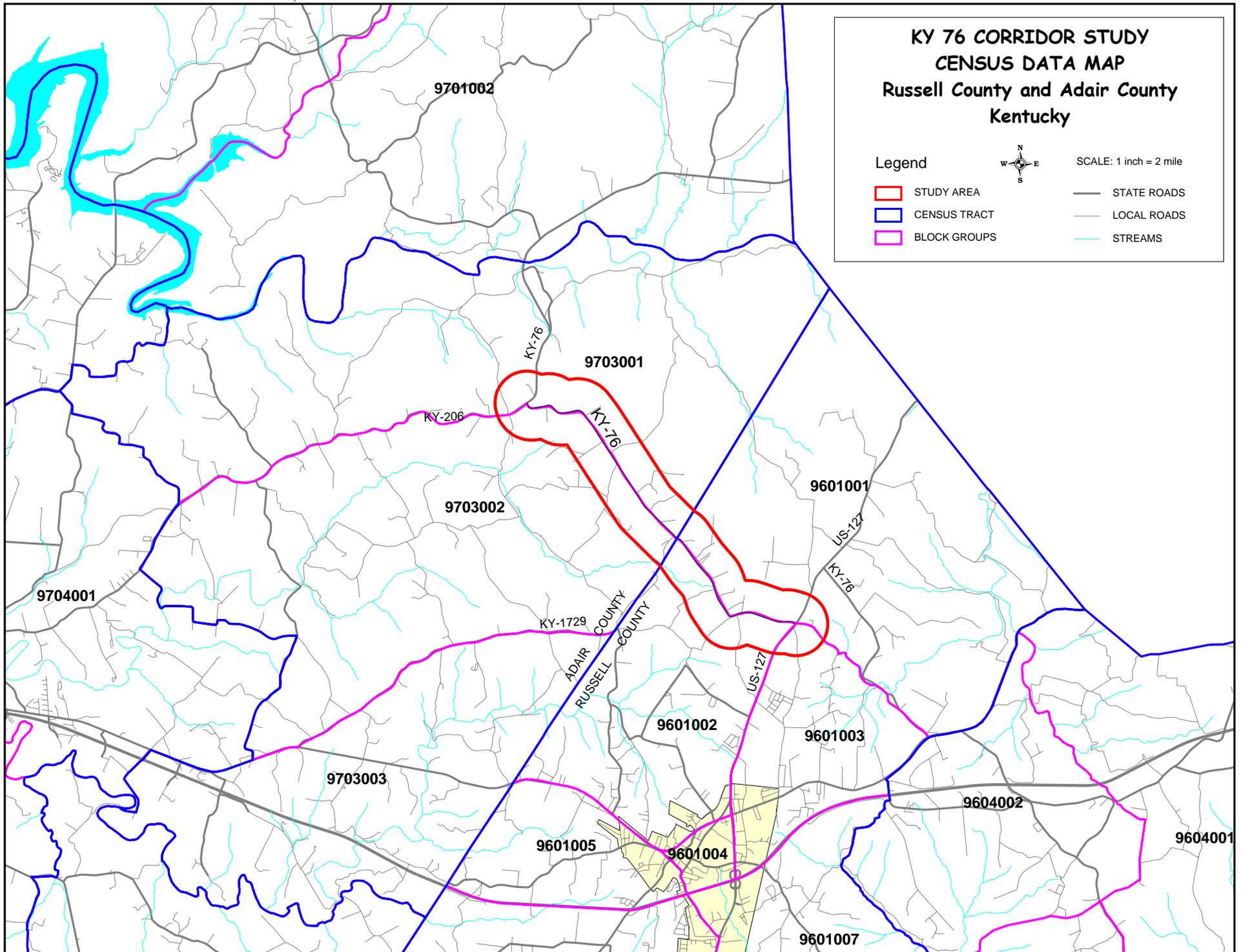
### KY 76 CORRIDOR STUDY MAP Russell County and Adair County Kentucky

Legend

-  STUDY AREA
-  COUNTY BOUNDARY
-  CITY LIMITS
-  SCALE: 1 inch = 4.5 miles
-  STATE ROADS
-  LOCAL ROADS
-  STREAMS







### APPENDIX 6: RUSSELL COUNTY AND ADAIR COUNTY CENSUS DATA

REGION	TOTAL POPULATION	WHITE ALONE	PERCENT WHITE ALONE	BLACK OR AFRICAN AMERICAN ALONE	PERCENT BLACK OR AFRICAN AMERICAN ALONE	AMERICAN INDIAN AND ALASKA NATIVE ALONE	PERCENT AMERICAN INDIAN AND ALASKA NATIVE ALONE	ASIAN ALONE	PERCENT ASIAN ALONE	NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER ALONE	PERCENT NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER ALONE
United States	281,421,906	211,353,725	75.10%	34,361,740	12.21%	2,447,989	0.87%	10,171,820	3.61%	378,782	0.13%
Kentucky	4,041,769	3,639,168	90.04%	293,915	7.27%	9,080	0.22%	28,994	0.72%	1,155	0.03%
Russell Co.	16,315	16,063	98.46%	72	0.44%	31	0.19%	57	0.35%	2	0.01%
Census Tract 9601	7,827	7,715	98.57%	0	0.00%	31	0.40%	53	0.68%	0	0.00%
Block Group 1	998	975	97.70%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Block Group 2	1,518	1,484	97.76%	0	0.00%	0	0.00%	29	1.91%	0	0.00%
Block Group 3	14,708	1,383	9.40%	0	0.00%	25	0.17%	0	0.00%	0	0.00%
Adair Co.	17,244	16,573	96.11%	515	2.99%	16	0.09%	27	0.16%	0	0.00%
Census Tract 9703	2,957	2,908	98.34%	25	0.85%	0	0.00%	0	0.00%	0	0.00%
Block Group 1	876	851	97.15%	25	2.85%	0	0.00%	0	0.00%	0	0.00%
Block Group 2	1,167	1,163	99.66%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Source: www.census.gov  
 Summary File 3 (SF3)  
 Detailed Tables: P.6-Race, P.8-Sex by Age, P.87-Poverty Status in 1999 by Age  
 Summary File 3 (SF3)  
 Hispanic or Latino Origin was found on Table: P7. Hispanic or Latino by Race

**APPENDIX 6: RUSSELL COUNTY AND ADAIR COUNTY CENSUS DATA (Continued)**

REGION	SOME OTHER RACE ALONE	PERCENT SOME OTHER RACE ALONE	TWO OR MORE RACES	PERCENT TWO OR MORE RACES	HISPANIC OR LATINO ORIGIN	PERCENT HISPANIC OR LATINO ORIGIN	PERSONS 65 AND OVER	PERCENT PERSONS 65 AND OVER	PERSONS BELOW POVERTY LEVEL	PERCENT PERSONS BELOW POVERTY LEVEL
United States	15,436,924	5.49%	7,270,926	2.58%	35,238,481	12.52%	34,978,972	12.43%	33,899,812	12.05%
Kentucky	22,116	0.55%	47,341	1.17%	59,939	1.48%	488,248	12.08%	621,096	15.37%
Russell Co.	7	0.04%	83	0.51%	130	0.80%	2,694	16.51%	3,921	24.03%
Census Tract 9601	0	0.00%	28	0.36%	99	1.26%	1227	15.68%	1,931	24.67%
Block Group 1	0	0.00%	23	2.30%	0	0.00%	130	13.03%	209	20.94%
Block Group 2	0	0.00%	5	0.33%	0	0.00%	279	18.38%	467	30.76%
Block Group 3	0	0.00%	0	0.00%	66	0.45%	182	1.24%	287	1.95%
Adair Co.	27	0.16%	86	0.50%	103	0.60%	2,516	14.59%	3,954	22.93%
Census Tract 9703	17	0.57%	7	0.24%	12	0.41%	444	15.02%	870	29.42%
Block Group 1	0	0.00%	0	0.00%	0	0.00%	128	14.61%	270	30.82%
Block Group 2	4	0.34%	0	0.00%	12	1.03%	87	7.46%	304	26.05%

Source: www.census.gov

Summary File 3 (SF3)

Detailed Tables: P.6-Race, P.8-Sex by Age, P.87-Poverty Status in 1999 by Age

Summary File 3 (SF3)

Hispanic or Latino Origin was found on Table: P7. Hispanic or Latino by Race

# **Appendix E**

*Meeting Minutes*

# Minutes

## *Scoping Study – Initial Team Meeting*

Russell & Adair Counties, Item No. 08-8302.00

KY 76 – from US 127 to KY 206

**Meeting Location:** KYTC – District 8 Office Conference Room (Basement)

**Meeting Date:** March 16, 2007

### 1. INTRODUCTION AND PURPOSE

The meeting began at approximately 10:00 a.m. local time.

Those present were:

Jeff Dick	KYTC – District 8 Maintenance
Brad Redmon	KYTC – District 8 Russell Co. Maintenance
Junior Brown	KYTC – District 8 Adair Co. Maintenance
Cathi Blair	KYTC – District 8 Environmental Coordinator
David Beattie	KTYC – District 8 Preconstruction Branch Manager
Tom Clouse	KYTC – District 8 Planning Branch Manager
Lewis (Tee) Phelps	KYTC – District 8 Executive Director
Randall Thomas	KYTC – Division of Environmental Analysis
Jimmy Wilson	KYTC – Division of Planning
Boday Borres	KYTC – Division of Planning

The following Handouts were distributed:

- Agenda
- General Information and Project Location
- Year 2007 and Year 2030 Traffic & Level of Service
- High Crash Spot & Segment
- Aerial View

The project was described as a scoping study for KY 76 from the intersection of US 127 to the intersection of KY 206 in Russell and Adair Counties. This planning phase was scheduled in the Kentucky Six-Year Highway Plan (FY 2007-2012). No other phases are currently scheduled.

Senator Vernie MaGaha and Representative Jeff Hoover have been in correspondence with the district office regarding the scoping study. Sen. MaGaha sent an e-mail describing his and his constituents' issues with KY 76. See attached e-mail.

### 2. PROJECT GOALS AND OBJECTIVES

#### a) General project area

- Defined as the corridor of KY 76 from US 127 to KY 206

#### b) Prior Reports - None

#### c) Roadway conditions

##### i) *Traffic Data and Level of Service*

- The two-lane facility with wider lanes and shoulders is expected to be adequate to handle future traffic volumes. Current (2007) traffic volumes range from 1260-1600 vehicles per day and are projected to be 2400-3100 vehicles per day by 2030. The level of service (LOS)

for both current (2007) and projected 2030 traffic volumes on the existing roadway are rated with an “A”.

*ii) Crash Data*

- Spot at KY 76 near Edgar Jesse Rd. is a high crash location
- Possible high crash segment from county line to KY 206

*iii) Existing Geometry*

- Narrow road with curves and grades. (9 foot lanes with 3 foot shoulders)  
*\*As per e-mails from the D8 Maintenance Engineer following this meeting, due to the most current repaving of KY 76 in Russell Co., the pavement width is between 21'-6" and 22'-0" including the pavement wedge.*
- Russell County has flat terrain and Adair County has more rolling terrain.

*iv) Other*

- Resurfacing of 1.4 miles was done last year in Russell County from the county line to the intersection of US 127.
- The rest of this route will be resurfaced this year.
- Cut bank down at a high crash location near Freeman Coomer Road.
- Amish community is 15 miles northeast of route, but there is no evidence they use this route.
- New development is projected on this route, such as subdivisions.
- Houses were estimated 200' away from the road, but a later field review indicated some less than the 200' stated.
- The district will do a classification count to determine truck usage on KY 76.

**d) Problems with existing roadway**

- KY 76 has narrow driving lanes and shoulders that do not meet current standards.
- *\*No striping on edge of road because transportation policy only allows roads with 20' width to have white striping and KY 76 is 18' wide.*
- It was noted that there is an increased truck usage for agricultural and logging purposes along this route. The logging trucks may be going to Tarter located on US 127 north.
- Crashes are believed to be occurring at the KY 76/US 127 intersection because vehicles are coming around the curve and hitting an immediate down grade just as they have to come to a stop at US 127.
- There is also a 90 degree curve in the road near mile point 12.4 in Russell County.
- It was stated that there have been several crashes occurring at the Adair/Russell county line due to the curves and grades of the narrow passage.
- There are several consecutive curves as the driver approaches the KY 206 intersection.
- There are no continuous lighting fixtures for night time driving on this roadway and it has some deep drop-offs from the current shoulders.

*i) Environmental Footprint* – Cathi Blair will prepare an environmental footprint covering approximately 1000 feet on each side of KY 76.

*ii) Environmental Justice* – Will ask the Lake Cumberland ADD to develop the EJ.

*iii) ITS* – No ITS issues.

*iv) Bikes/Pedestrians* – Not an issue on this route since Bull Run, near Campbellsville is used by cyclists.

*v) Access Management* – Rural area, therefore no significant access management issues.

*vi) Freight Issues* – None

**e) Logical Termini**

US 127 and KY 206

**f) Benefits of proposed project**

- Citizens who drive the road regularly know about the challenges the road presents, but people just passing through have difficulty with the current roadway alignment.
- Decrease crashes and increase safety for all travelers who use this road.

**g) Project Goals and Objectives**

The previously developed goals and their ranking were agreed upon:

1. Improve safety by:
  - a) Correcting horizontal and vertical deficiencies,
  - b) Increasing lane and shoulder widths to meet current guidelines,
  - c) Providing improved safety measures such as a flashing beacon, signage and guardrail where needed in certain locations.
  
2. Improve connectivity between US 127 and KY 206. KY 76 is a rural minor collector to the Green River Lake area, US 68 and KY 55.

**h) Other Issues**

- More commercial and tourist (hauling boats) traffic along this route is expected since Lake Cumberland usage may be reduced this summer and this road provides connectivity to Green River Lake.
- This route is a cut through for traffic to get from Russellville to Campbellsville.
- Future funding for design and construction is not scheduled at this time.

**i) Spots, Segments to Address**

- The county line spot needs to be looked at in more detail since crash data did not indicate a problem at this location.
- The intersection of KY 76/US 127 also needs to be addressed since there was not any crash data for this point. A crash check with the US 127 corridor at this location will be looked at for possible crash information being on this route instead of KY 76. The signage needs to be checked to make sure that it is adequate and flashing beacons may be considered.
- There is a turning radius problem for trucks at the intersection of KY 76 and KY 206.

**3. POSSIBLE DESIGN CRITERIA**

- Design parameters for estimating costs with a 55 mph design speed, 12 foot lanes and 8 foot shoulders.
- Also estimate costs for a 55 mph design speed, 11 foot lanes and 3 foot shoulders.
- Spot improvements at noted locations.

**4. AGENCY COORDINATION NEEDS**

- Need to mail to agency groups for input.

**5. PUBLIC INVOLVEMENT NEEDS**

- Will have a local officials meeting and hopefully meet with Sen. MaGaha and/or Rep. Hoover at that time or in a separate meeting.
- Not planning on having a Public meeting since there are no future funds available at this time.

## **6. DOCUMENTATION/ REPORTS**

- This will be a programming study to assist local leaders in determining future needs for funding along this corridor.
- Will produce a final report to document this study. Projected to be finalized before the next legislative session.

**Clouse, Tom (KYTC-D08)**

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**From:** McGaha, Vernie (State Sen.) (LRC) [vernie.mcgaha@lrc.ky.gov]  
**Sent:** Thursday, August 10, 2006 4:09 PM  
**To:** Clouse, Tom (KYTC-D08)  
**Subject:** RE: Russell Adair County Item No. 8-8302.00 Scoping Study for Safety Improvements to KY 76 from US 127 to KY 206

Tom:

Regarding project No. 8-8302.00, this is a heavily used road as a connector between Russell and Adair counties. The road is narrow. What I would like to know is the cost of adding width to the road-if that is possible or feasible to enhance the safety.

There are many trucks that travel the road. I have asked for white shoulder stripes to be painted but was informed it was too narrow for those.

Let me know if I can provide you with other info or if you have more questions.

Vernie

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**From:** Clouse, Tom (KYTC-D08) [mailto:Tom.Clouse@ky.gov]  
**Sent:** Tuesday, August 01, 2006 3:03 PM  
**To:** Hoover, Jeff (State Rep.) (LRC); McGaha, Vernie (State Sen.) (LRC)  
**Cc:** Clouse, Tom (KYTC-D08)  
**Subject:** Russell Adair County Item No. 8-8302.00 Scoping Study for Safety Improvements to KY 76 from US 127 to KY 206

Mr.'s Hoover and McGaha,  
My name is Tom Clouse, and I am the Branch Manager for Planning in the District 8 Highway office. I am trying to find out some background information on the above referenced project. Do either of you have any information that you care to share with me on the intended scope of this study? In order to make the most out of the money that was committed to the project, it would certainly be helpful to know the intent of the project as written in the Six Year Plan. Since the start date is FY 2007, we will need to begin working on this project soon. Any guidance either of you may have is appreciated. You can reach me by email at [tom.clouse@ky.gov](mailto:tom.clouse@ky.gov), or give me a call at 606-677-4017.

Thanks,

Tom Clouse, P.E.

**AGENDA**  
**INITIAL PROJECT TEAM MEETING**  
**SCOPING STUDY FOR SAFETY IMPROVEMENTS**

**KY 76**  
**FROM THE INTERSECTION OF US 127 TO THE INTERSECTION OF KY 206**  
**RUSSELL & ADAIR COUNTIES**

**Meeting Location:** KYTC – District 8 Conference Room  
US 27, P.O. Box 780  
Somerset, KY 42501

**Meeting Date:** March 16, 2007, Friday

**Meeting Time:** 10:00 A.M. – 12:00 P.M. (noon)

- 1) Introduction and Purpose
- 2) Project Goals and Objectives
  - a) Project area
  - b) Prior reports
  - c) Roadway Conditions
    - i) Traffic data
    - ii) Crash data
    - iii) Existing geometry
    - iv) Other
  - d) Identify additional information needed to document problems
    - i) Environmental Footprint
    - ii) Environmental Justice
    - iii) ITS
    - iv) Bikes/Peds
    - v) Access Management
    - vi) Freight Issues
    - vii) Other
  - e) Identify logical termini
  - f) Benefits of proposed project
  - g) Develop project goals and objectives
- 3) Probable Design Criteria
  - a) Functional class
  - b) ADT/DHV
  - c) Design speed
  - d) Typical section
  - e) Other criteria
- 4) Agency Coordination Needs
- 5) Public Involvement Needs
- 6) Documentation/Reports
  - a) Information to include/not include in report
  - b) Level of detail
  - c) Distribution
- 7) Q & A



**SCOPING STUDY  
Russell and Adair Counties  
KY 76  
From US 127 to KY 206  
Item No. 8-8302.00**

**STUDY PURPOSE**

The purpose of this Scoping Study is to evaluate the need for improvements to KY 76 between US 127 and KY 206 in Russell and Adair Counties

**DRAFT PROJECT GOALS**

- Improve Safety

Opportunities exist to improve safety. Vehicles and trucks using this two-lane 18 foot wide route face the increased likelihood of running off the road when on-coming vehicles approach. Crash data calculations show a Critical Rate Factor (CRF) = 0.935 for the segment starting at the Russell/Adair County line to the intersection of KY 206, approaching the threshold (CRF > 1.0) of which crashes may not be occurring randomly. Within that segment, there is a crash spot at MP 1.0-1.1 with the CRF = 1.15. At this spot, two (2) of the three (3) crashes have been described as vehicles running off the road.

**ISSUES**

KY 76 is a Rural Minor Collector. The existing route is a narrow two-lane roadway with curves and grades that do not meet current guidelines or provide adequate sight distances for on-coming vehicles. This route is used as a "cut thru" for traffic going to the areas of Green River Lake and Campbellsville or Columbia.

**PROJECT SCHEDULE**

Only the Planning phase is approved for funding at this time. Funding for other project phases will be considered during future legislative sessions.

**CONTACTS**

**Address written comments to:**

Mr. Daryl J. Greer, P.E.  
Director, Division of Planning  
200 Mero Street, 5<sup>th</sup> Floor  
Station: W5-05-01  
Kentucky Transportation Cabinet  
Frankfort, KY 40622

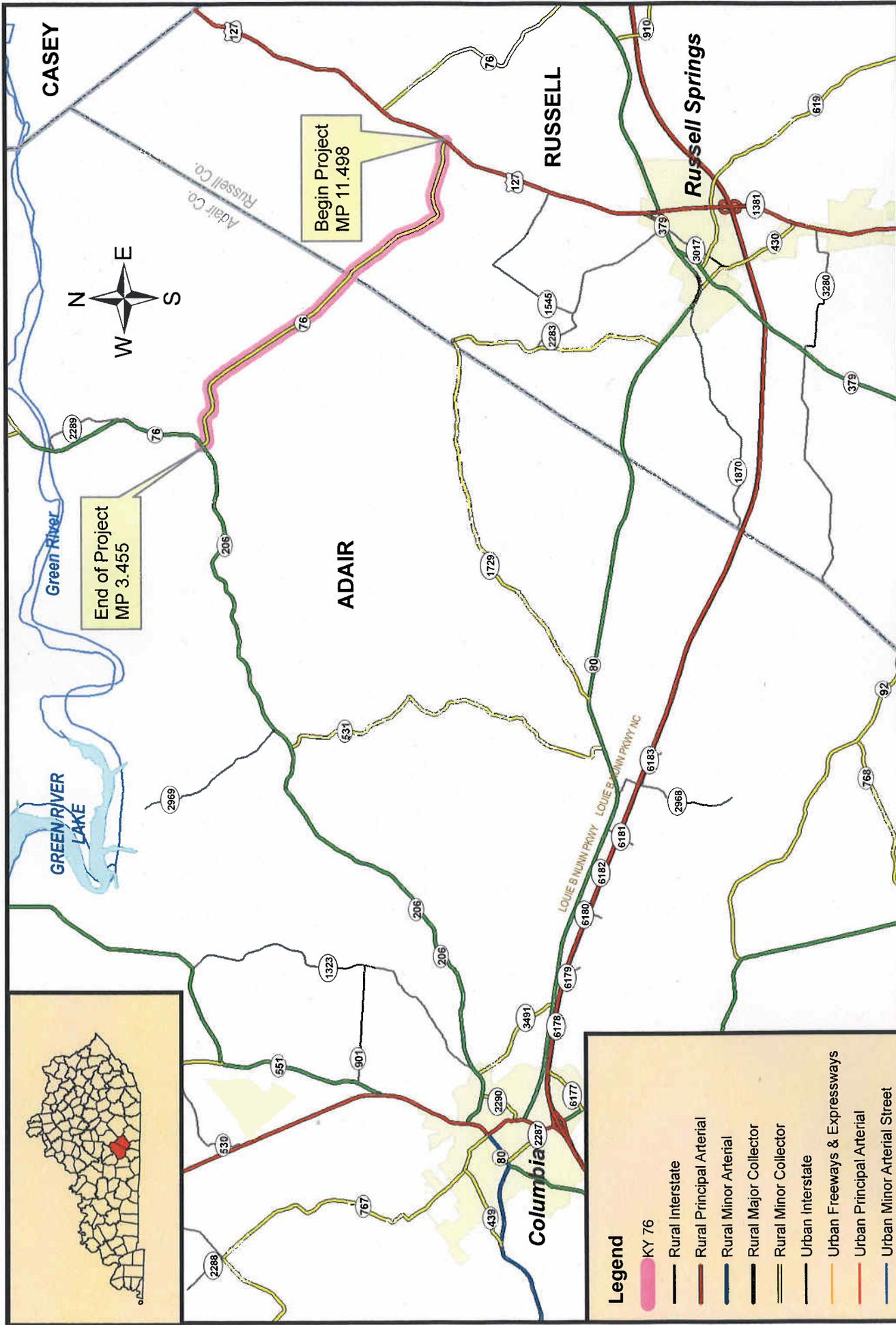
**Or you may contact by phone or e-mail:**

Mrs. Boday Borres, P.E.  
Project Manager, Division of Planning  
Kentucky Transportation Cabinet  
(502) 564-7183  
[Boday.borres@ky.gov](mailto:Boday.borres@ky.gov)

## General Information

<b>Counties:</b>	<u>Russell and Adair</u>		
<b>Route:</b>	<u>KY 76</u>	<b>Beg MP:</b>	<u>11.498</u>
		<b>End MP:</b>	<u>3.455</u>
<b>Item No:</b>	<u>8-8302.00</u>	<b>Length:</b>	<u>6.092 miles</u>
<b>Description:</b>	<u>Scoping study for KY 76 intersection of US 127 to intersection of KY 206.</u>		

<b>Area Development District (ADD):</b>	<u>Lake Cumberland Area Development District (LCADD)</u>
<b>Average Right of Way:</b>	<u>Russell - 40 Feet</u>
	<u>Adair - 60 Feet</u>
<b>Lane Width:</b>	<u>9 Feet</u>
<b>Shoulder Width:</b>	<u>Varies 3-4 Feet</u>
<b>Speed Limits:</b>	<u>55 mph</u>
<b>Traffic Volumes:</b>	<u>Varies from 1260-1600 ADT (2007)</u>
<b>% Trucks:</b>	<u>6.70%</u>
<b>Bike Route:</b>	<u>No</u>
<b>Coal Haul Route:</b>	<u>No</u>
<b>Defense Highway Network:</b>	<u>No</u>
<b>District:</b>	<u>8</u>
<b>Extended Weight:</b>	<u>No</u>
<b>Functional Classification:</b>	<u>Rural Minor Collector</u>
<b>National Truck Network:</b>	<u>No</u>
<b>National Highway System (NHS):</b>	<u>No</u>
<b>Number of Bridges:</b>	<u>0</u>
<b>Pavement type:</b>	<u>Mixed Bituminous</u>
<b>Scenic Byway:</b>	<u>No</u>
<b>State System:</b>	<u>Rural Secondary</u>
<b>Truck Weight Class:</b>	<u>A (40,000 lb. Gross Load Limit)</u>
<b>Type Road:</b>	<u>Undivided Highway</u>
<b>Type of Terrain:</b>	<u>Rolling</u>



**PROJECT LOCATION**  
 KY 76  
 Russell & Adair Counties  
 ITEM NO. 8-8302.00

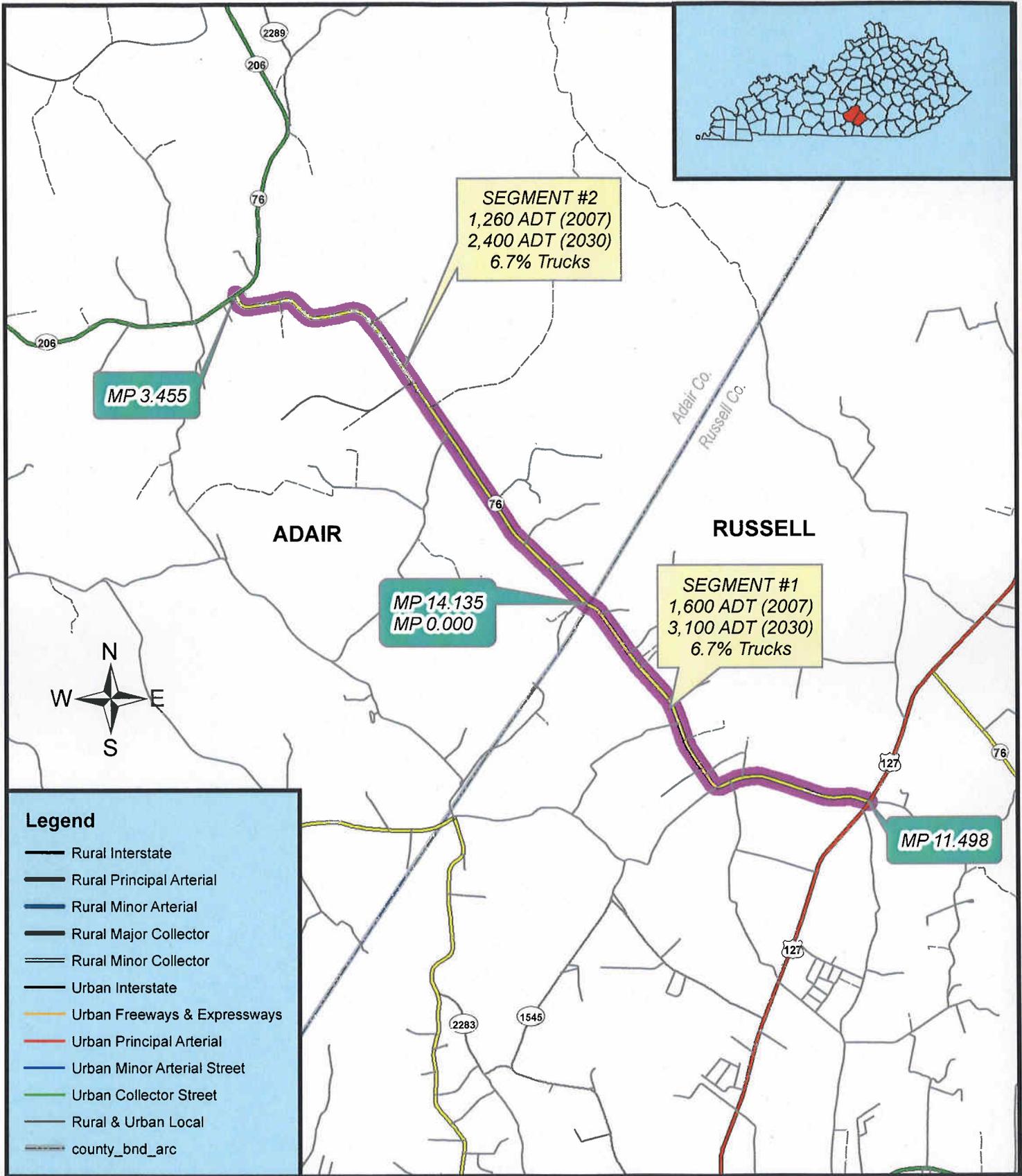


**Miles**  
 0 0.5 1 2 3 4

Last map revision: FEBRUARY 2007  
 Road centerlines collected using GPS technology  
 Kentucky State Plane Coordinate System (NAD83)  
[www.transportation.ky.gov/planning/](http://www.transportation.ky.gov/planning/)

**Legend**

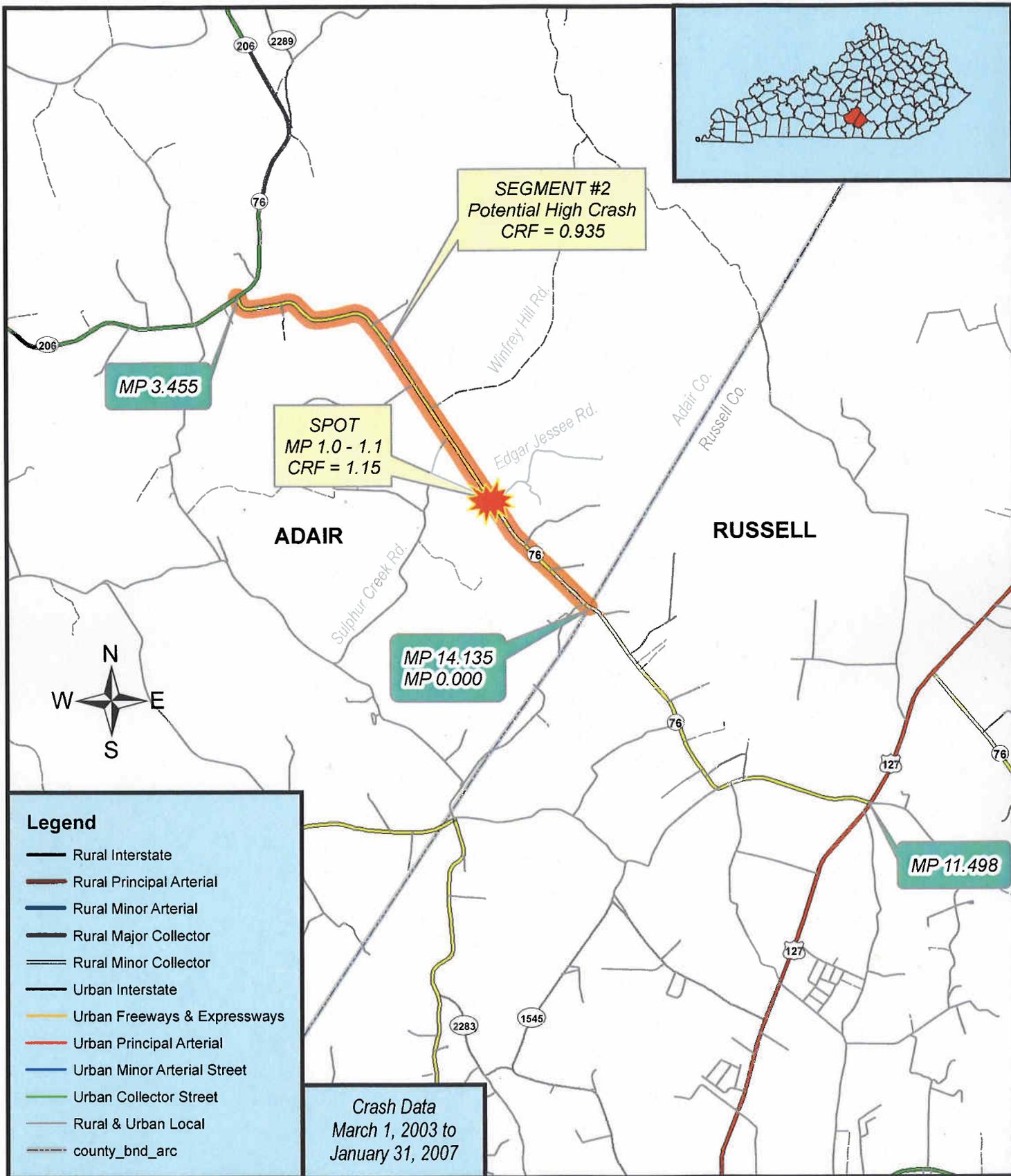
	KY 76
	Rural Interstate
	Rural Principal Arterial
	Rural Minor Arterial
	Rural Major Collector
	Rural Minor Collector
	Urban Interstate
	Urban Freeways & Expressways
	Urban Principal Arterial
	Urban Minor Arterial Street
	Urban Collector Street
	Rural & Urban Local
	City Boundary Polygons
	Rivers
	county_bnd_arc



**Level of Service**

**LOS "A"**





**High Crash**

Spot

Potential Segment



Last map revision: FEBRUARY 2007  
Road centerlines collected using GPS technology  
Kentucky State Plane Coordinate System (NAD83)  
[www.transportation.ky.gov/planning/](http://www.transportation.ky.gov/planning/)



**High Crash Spot  
& Segment**

**KY 76**  
**Russell & Adair Counties**  
**ITEM NO. 8-8302.00**

# Final Minutes

*Programming Study – Local Officials Meeting*  
Russell & Adair Counties, Item No. 08-8302.00  
KY 76 – from US 127 to KY 206

**Meeting Location:** Lake Cumberland ADD – Conference Room

**Meeting Date:** May 7, 2007

## 1. INTRODUCTION AND PURPOSE

The meeting began at approximately 9:00 a.m. local time.

Those present were:

Hon. Vernie McGaha	Kentucky Senator – District 15
Hon. Ann Melton	Adair County Judge Executive
Roger Stephens	Adair County Magistrate – District 1
Jimmy McQueary	Russell County Magistrate – District 4
Dennis Loy	Adair County Circuit Clerk/Fire Department
Terry Akin	Adair County Ambulance Service - EMT
Justin Bailey	Adair County 911 Center – Assistant Coordinator
Mark Coots	Russell County Ambulance Service - Director
Robert Leach	Russell County Board of Education – Transportation Director
Donna Diaz	LCADD – Executive Director
Neal Cundiff	LCADD – Planning Director
Larry Wilson	LCADD – Planning
David Rowland	LCADD – Highway Safety Coordinator
Clarissa Hart	LCADD
Tom Clouse	KYTC – District 8 Planning Branch Manager
Jimmy Wilson	KYTC – Division of Planning Team Leader
Boday Borres	KYTC – Division of Planning Project Manager

The following Handouts were distributed:

- Agenda
- General Information and Project Location
- Year 2007 and Year 2030 Traffic & Level of Service
- High Crash Spot & Segment
- Aerial View

This project was included in the Enacted Six-Year Highway Plan FY 2007-2012, and is described as follows:

<u>Item No.</u>	<u>Route</u>	<u>Length</u>	<u>Description</u>
8-8302.00	KY 76	6.000	Scoping Study for Safety Improvements to KY 76 From US-127 to KY-206.
.			

The planning phase was the only phase of this project scheduled at this time.

## 2. PROJECT GOALS AND OBJECTIVES

### a) General project area

- Defined as the KY 76 corridor from US 127 to KY 206

## **b) Roadway conditions**

### *i) Traffic Data and Level of Service*

- The two-lane facility with wider lanes and shoulders is expected to be adequate to handle future traffic volumes. Current (2007) traffic volumes range from 1260-1600 vehicles per day and are projected to be 2400-3100 vehicles per day by 2030. The levels of service (LOS) for both current (2007) and projected 2030 traffic volumes are "A". All projected volumes have been adjusted with the growth rate of 2.4%.

### *ii) Crash Data*

- A "Spot" at KY 76 near Edgar Jesse Rd. is a high crash location with a Critical Rate Factor (CRF) greater than 1.00 as calculated by the spot crash analysis, using a tenth of a mile spots.
- A possible high crash segment from the county line to KY 206 is identified by having a CRF of 0.935, therefore has the potential of crashes not occurring randomly.

### *iii) Existing Geometry*

- Narrow road with curves and grades. (9 foot lanes with 3 foot shoulders)
- Russell County has flat terrain and Adair County has more rolling terrain. Although, for design purposes, all terrain in District 8 is considered "rolling".

### *iv) Other*

- Resurfacing of 1.4 miles of KY 76 was completed last year in Adair County from the Adair-Russell County Line to the intersection of US 127.
- The rest of this route is scheduled to be resurfaced in 2007.
- A bank was cut down at a location near Freeman Coomer Road to provide better sight distance.
- An Amish community exists approximately 15 miles northeast of route, but there is no evidence they use this route.
- New developments, such as subdivisions, are projected on this route.
- Houses were estimated to be 200' away from the road, but a later field review indicated some were closer to the roadway than the stated 200'.
- The district will do a classification count to determine truck usage on KY 76.

## **3. COMMENTS AND SUGGESTIONS ABOUT THE PURPOSE AND PROJECT GOALS**

- Senator McGaha said he sponsored this project in the Six-Year Highway Plan.
- It was noted from an Emergency Medical Service representative that KY 76 is frequently used by the ambulance service.
- It was mentioned that there was a fatal crash at the county line 10 years ago which resulted in one death. Also, there may be many other minor crashes that occur throughout this segment that go unreported.
- The Adair-Russell County Line was mentioned several times as being dangerous and was described as having steep side slopes with little or no shoulders in the area around the culvert. This provides little room to install guardrail. This segment is characterized by sharp winding horizontal curves with a corresponding vertical alignment that may pose hazards during wet or icy conditions.
- This county line area also is a concern for the school bus drivers from both Adair and Russell Counties. Both Adair and Russell county buses turn around on Joe Grider Road, which is a narrow side road.

- Many trucks and recreational vehicles were reported to be using this route as a “cut thru” to get to their destination. Specific hauling uses were: logging/sawmill, carpet materials, concrete, gravel and boats with trailers. Again, the main concern is that the road is very narrow with less than desirable shoulders, has many drop offs, and no white striping on the edges.
- It was noted that a small section from the Russell County line, MP 0.000 to MP 1.460 was not resurfaced. It was researched that this segment is scheduled for resurfacing this year.
- Many claimed that incidents have occurred at the intersection of KY 76 and US 127. Several years ago US 127 was rebuilt and lowered to its current grade. Some current problems that were brought to light:
  - The realignment of US 127 caused the connection to KY 76 to have a steeper grade, which hinders sight distance when approaching US 127. The steepened grade also makes stopping distances longer. This is especially evident in wet or icy conditions.
  - A complaint was made about the visibility of the US 127 and KY 76 intersection. The visibility of this intersection was listed as a concern as it is approached from both US 127 and KY 76. Compounding the problem are the higher speeds of vehicles on US 127, and the lack of a left turn lane along US 127. It was stated that many vehicles use the wide shoulder on US 127 to go around vehicles stopped on US 127 waiting to make a left turn onto KY 76. Other factors mentioned that may affect the intersection visibility are a nearby brick house, existing roadway geometry, and a lack of intersection lighting.
  - Lastly, Jericho Road, which intersects US 127 and is opposite from the KY 76 junction was mentioned. It was told that a lady who lives on Jericho Road will avoid the intersection at US 127, and instead will make a longer detour around, because she believes the US 127/KY 76 intersection to be unsafe.
- Issues were raised about the intersection of KY 76 and KY 206. Trucks encroach on the other lane to make the turn.
- Questions were brought up asking about existing right-of-way widths along the corridor.

#### **4. OPEN DISCUSSION FOR POSSIBLE SOLUTIONS**

Improvements and possible solutions were discussed. Spot improvements, as immediate low cost fixes, were suggested as a realistic goal for this project. Furthermore, suggested comparisons for the cost of widening and/or for total reconstruction were recommended for the purpose of studying the needs of how to attain future funds through the legislative process.

##### **Potential Spot Improvements**

The following suggestions for safety improvements were brought up at the meeting:

- Additional signing on US 127 and KY 76
- Lighting at KY 76/ US 127 intersection
- Rumble strips to warn drivers they are approaching US 127 intersection
- Install flashing beacon and/or other signs that warn drivers on KY 76 that the intersection with US 127 is imminent
- Left turn lane on US 127 to enter KY 76
- Additional rumble strips on shoulder of US 127 to discourage passing on right on shoulder
- Guard rail were possible along KY 76 route
- Attach guard rail to the parapets on the culvert
- Cut berms down to give better sight distance

##### **Widening and Reconstruction**

- Minor widening (11' driving lanes with 3' to 6' shoulders) with the possible realignment of the worst curves and grade, and adding guardrail where needed
- Reconstruction to current design standards (12' lanes with 8' shoulders, see chart below from KYTC Highway Design Manual) – may have new alignment at some places – This option will also be used as a basis for cost comparison
- The minor widening option was seen as an acceptable solution by this group

EXHIBIT 700-02					
<b>COMMON GEOMETRIC PRACTICES RURAL COLLECTOR ROADS</b>					
		TRAFFIC VOLUME			
		TERRIAN	UNDER 400 A.D.T.	400-2000 A.D.T.	OVER 2000 A.D.T.
MINIMUM DESIGN SPEED (M.P.H.) ⑦	LEVEL	40	50	60	
	ROLLING	30	40	50	
	MOUNTAIN	20	30	40	
PAVEMENT WIDTH (FEET) ① ⑧	DESIGN SPEED	UNDER 400 A.D.T.	400-1500 A.D.T.	1500-2000 A.D.T.	OVER 2000 A.D.T.
	20 MPH	20 ⑨	20	22	24
	25 MPH				
	30 MPH				
	35 MPH				
	40 MPH	20	22	24	24
	45 MPH				
	50 MPH				
	55 MPH	22	22	24	24
60 MPH					
MINIMUM GRADED SHOULDER WIDTH (FEET) ⑥	ALL SPEEDS	2	5 ⑩	6	8

**AGENDA**  
**LOCAL OFFICIALS MEETING**  
**SCOPING STUDY FOR SAFETY IMPROVEMENTS**

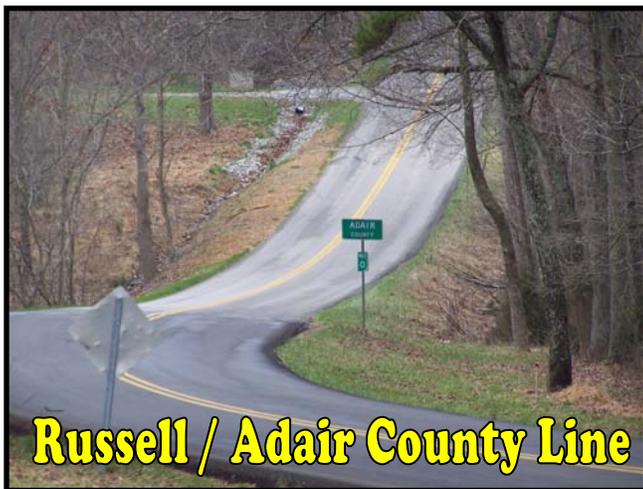
**KY 76**  
**FROM THE INTERSECTION OF US 127 TO THE INTERSECTION OF KY 206**  
**RUSSELL & ADAIR COUNTIES**

**Meeting Location:** Lake Cumberland ADD Conference Room  
P.O. Box 1570  
Russell Springs, KY 42642

**Meeting Date:** May 7, 2007, Monday

**Meeting Time:** 9:00 A.M. – 11:00 A.M. (CT)

- 1) Introduction and Purpose
- 2) Project Goals and Objectives
  - a) Project area
  - b) Roadway Conditions
    - i) Traffic data
    - ii) Crash data
    - iii) Existing geometry
    - iv) Other
- 3) Comments & Suggestions about the Purpose and Project Goals
- 4) Open Discussion for Possible Solutions



# Final Minutes

## *Programming Study – 2<sup>nd</sup> Local Officials Meeting*

Russell & Adair Counties, Item No. 08-8302.00

KY 76 – from US 127 to KY 206

**Meeting Location:** Lake Cumberland ADD – Conference Room

**Meeting Date:** October 29, 2007

### 1. Welcome and Introduction

Boday Borres began the meeting by welcoming the participants and asking the project team members to introduce themselves.

The meeting began at approximately 10:00 a.m. Central Time.

Those present were:

Hon. Vernie McGaha	Kentucky Senator – District 15
Hon. Ann Melton	Adair County Judge Executive
Hon. Mickey Gainer	Russell County Judge Executive
Gary D. Robertson	Russell County Magistrate
Larry Wilson	LCADD – Planning
Tom Clouse	KYTC – District 8 Planning Branch Manager
Jeff Dick	KYTC – District 8 Maintenance Engineer
Brad Redmon	KYTC – District 8 Russell Co. Maintenance
Junior Brown	KYTC – District 8 Adair Co. Maintenance
Jimmy Wilson	KYTC – Division of Planning Team Leader
Boday Borres	KYTC – Division of Planning Project Manager

The following Handouts were distributed:

- Agenda
- Aerial View of Corridor with Alternates/Spot Improvements

### 2. Purpose

Ms. Borres briefly outlined the purpose of the meeting: to review the possible alternates along with spot improvements, consider cost estimates, gather input from the members, make suggestions for prioritization and develop a recommendation.

### 3. Review of Alternatives

Descriptions of the proposed alternates were presented by Ms. Borres and Mr. Clouse. Alternate No. 2 was described as widening the existing alignment to a template consisting of 11' driving lanes with 4' shoulders, in addition to reconstructing the identified spot locations described below. Alternate No. 3 was described as constructing a “super 2” template consisting of 12' driving lanes with 8' shoulders. Alternate No. 3 consists of a complete reworking of the roadway, making both horizontal and vertical alignment improvements along with the widening. The project costs associated with both alternates 2 and 3 include all costs associated with the spot improvements listed below. The spot improvements were described as follows:

- Spot Improvement No. 1 ~ Improve the horizontal alignment and widen KY 76 at location number 1 and improve the intersection alignment and layout of KY 76 and KY 206 thereby providing for improved operation for large trucks.
- Spot Improvement No. 2 ~ Improve the horizontal alignment and widen KY 76 at this location.

- Spot Improvement No. 3 ~ Improve the horizontal alignment and widen the route by extending the box culvert at the Adair - Russell County Line.
- Spot Improvement No. 4 ~ Improve the horizontal alignment and widen KY 76 at this location.
- Spot Improvement No. 5 ~ Improve the US 127 – KY 76 intersection by constructing left turn lanes on US 127, revise the ditch back slopes on US 127 to improve sight distance at the intersection, consider adding intersection lighting and other traffic control devices to the intersection, and improve the vertical alignment of KY 76 as it approaches the US 127 intersection from the west.

Mr. Clouse suggested that Spots No's. 1 & 2 were close enough together to be considered as one Spot Improvement. It was agreed that Spot's 1 & 2 would be combined into Spot Improvement #1 for the final report.

Senator Vernie McGaha asked if Alternates 2 or 3 included the cost of the identified spot improvements, or if the spot improvement costs would have to be added to the costs identified for Alternates 2 or 3. Mr. Clouse clarified that if either Alternate No. 2 or 3 was chosen, the cost for each Alternate would include all costs associated with the spot improvements.

#### 4. Comments, Suggestions & Possible Recommendations

The group was asked if there were any other spot improvements to add or if anything was left out and needed to be included in the study. Senator McGaha said that the handout basically covered everything, but he also noted that there were still other areas along KY 76 which had deep drop offs and was concerned of about driver's safety. Jeff Dick confirmed that the whole route was recently repaved and that the roadway width is now approximately 21'-6" to 22'-0". Mr. Dick said that roadway banks are being cut back in Russell County near the Adair County line to improve sight distance. The removed material is being used to address pavement drop offs approaching the creek. He also suggested that KYTC Maintenance forces could assist in providing low-cost improvements such as cutting back brush, revising road slopes, and installing more signage.

Jericho Road opposite of KY 76 at US 127 was also mentioned as having a blind spot when entering US 127.

\*Spot Nos. 1 & 2 will be combined as one Spot Improvement. Mr. Clouse will also break out spot improvement costs by section, along with the length of each spot improvement segment. This information will then be sent to Ms. Borres and Senator McGaha. He will also re-enumerate the spots accordingly.

#### 5. Study Recommendations

The meeting concluded with Alternate No. 2 selected as the primary recommendation based on input from local officials and technical analysis. This alternate includes all spot improvements and widening the existing route to 11' lanes and 4' shoulders. The estimated cost for this rebuild is \$19,000,000.

The group decided that Alternate No. 1, Spot Improvements, should have consideration as an interim recommended choice if funding does not become immediately available for the primary recommendation. This would provide the opportunity for lower-cost improvements to be programmed if only those lesser funding amounts become available. The purpose of each of these proposed projects is to improve safety and mobility along the existing route. The spot improvements were prioritized as follows:

- 1) Spot Improvement No. 5
- 2) Spot Improvement No. 3

- 3) \*Spot Improvement Nos. 1 & 2
- 4) Spot Improvement No. 4

**7. Open Discussion**

Ms. Borres addressed the timeline for completion of this study. It is anticipated that the rough draft report could be reviewed by the end of November with a final report by the end of December.

**8. Adjourn**

The meeting adjourned at approximately 10:45 a.m.



**AGENDA**  
**2<sup>ND</sup> LOCAL OFFICIALS MEETING**  
**PROGRAMMING STUDY FOR SAFETY IMPROVEMENTS**

**KY 76**  
**FROM THE INTERSECTION OF US 127 TO THE INTERSECTION OF KY 206**  
**RUSSELL & ADAIR COUNTIES**

**Meeting Location:** Lake Cumberland ADD Conference Room  
P.O. Box 1570  
Russell Springs, KY 42642

**Meeting Date:** October 29, 2007, Monday

**Meeting Time:** 10:00 A.M. (CT)

- 1) Welcome and Introduction
- 2) Purpose of Meeting
- 3) Review Alternatives
- 4) Comments, Suggestions & Possible Recommendations
- 5) Open Discussion
- 6) Adjourn

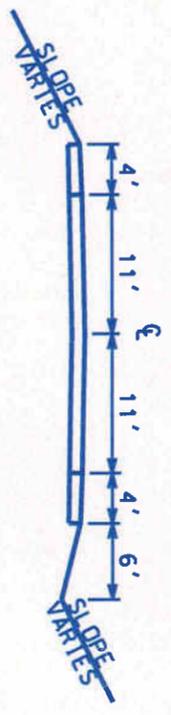


SPOT IMPROVEMENTS  
(#'s 1, 2, 3, 4 & 5)

DESIGN:	\$600,000
R/W:	\$1,850,000
UTILITIES:	\$850,000
CONSTRUCTION:	\$4,500,000
TOTAL:	\$7,800,000

ALTERNATE #1

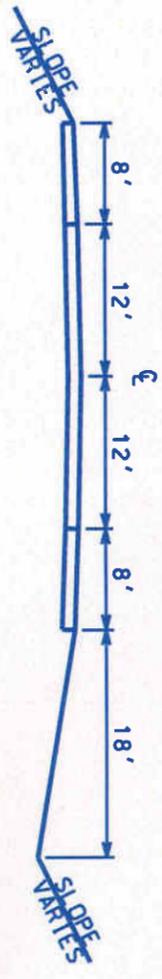
WIDENING ALTERNATE USING:  
11' LANES & 4' PAVED SHOULDERS



DESIGN:	\$2,200,000
R/W:	\$3,300,000
UTILITIES:	\$3,500,000
CONSTRUCTION:	\$10,000,000
TOTAL:	\$19,000,000

ALTERNATE #2

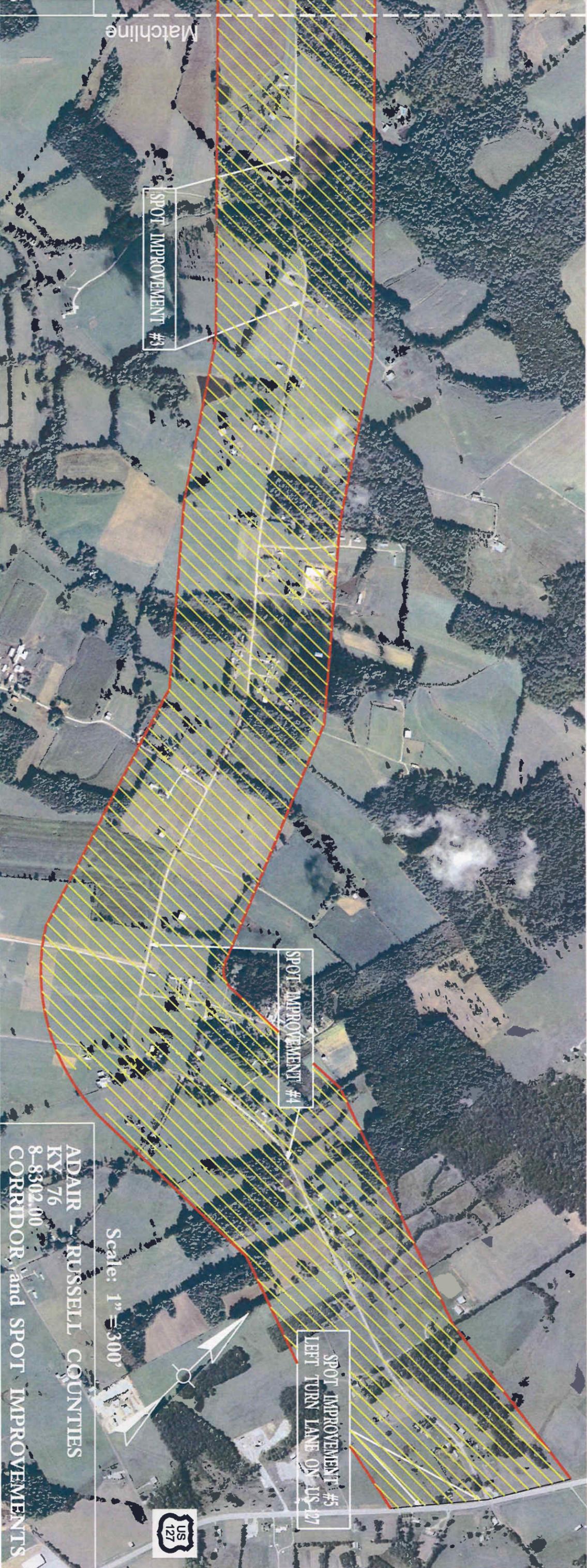
WIDENING ALTERNATE USING:  
12' LANES & 8' PAVED SHOULDERS



DESIGN:	\$2,200,000
R/W:	\$3,500,000
UTILITIES:	\$3,500,000
CONSTRUCTION:	\$20,800,000
TOTAL:	\$30,000,000

ALTERNATE #3





Matchline

SPOT IMPROVEMENT #3

SPOT IMPROVEMENT #4

SPOT IMPROVEMENT #5  
LEFT TURN LANE ON US 27

Scale: 1" = 300'

ADAIR - RUSSELL COUNTIES  
KY 76  
8-8302.00  
CORRIDOR and SPOT IMPROVEMENTS



## Final Minutes

### *Programming Study – Final Project Team Meeting*

Russell & Adair Counties, Item No. 08-8302.00

KY 76 – from US 127 to KY 206

**Meeting Location:** Lake Cumberland ADD – Conference Room

**Meeting Date:** October 29, 2007

An impromptu meeting began directly after the 2<sup>nd</sup> Local Officials Meeting, at approximately 11:00 a.m. Central Time.

Those present were:

Larry Wilson	LCADD – Planning
Tom Clouse	KYTC – District 8 Planning Branch Manager
Jeff Dick	KYTC – District 8 Maintenance Engineer
Jimmy Wilson	KYTC – Division of Planning Team Leader
Boday Borres	KYTC – Division of Planning Project Manager

The purpose of this meeting was to see if an official Project Team Meeting was warranted. Based upon discussions just completed at the Local Officials meeting, and due to the fact that there were no changes to present back to the full project team, it was decided unanimously that an additional Project Team Meeting was not needed to finalize the report.

Boday Borres briefly reviewed what was acknowledged at the Local Officials Meeting that Alternate No. 2 was the primary recommendation. Alternate No. 1 was a secondary recommendation based on short-term improvements while funding is secured for the larger projects. It was agreed that the prioritization of the spot improvements remain the same as previously discussed in the Local Officials Meeting.

Tom Clouse offered to revise the aerial photo/map that would include the merging of Spot Improvements Nos. 1 & 2 as Spot Improvement No. 1 and re-enumerate the rest of the spots accordingly. He also will update the cost estimates for the “New” Spot Improvement No. 1 and provide a breakdown of spot improvement costs by section along with lengths, and forward the updates to Ms. Borres and Senator McGaha.

The meeting adjourned at approximately 11:20 a.m.

# **Appendix F**

## *Resource Agency Responses*



## TRANSPORTATION CABINET

Frankfort, Kentucky 40622  
www.kentucky.gov

**Ernie Fletcher**  
Governor

**Bill Nighbert**  
Secretary

**Marc Williams**  
Commissioner of Highways

May 21, 2007

«Mailing\_Title» «First\_Name» «Last\_Name»«Suffix»  
«Title»  
«Organization»  
«Address1»  
«Address2»  
«City» «State» «Zip»

Dear «Letter\_Title» «Last\_Name»:

Subject: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

We are requesting your agency's input and comments on a planning study to determine the need and potential impacts for improvements on the KY 76 highway project in Russell and Adair Counties. The Kentucky Transportation Cabinet has assembled a study team to evaluate the safety issues and connectivity along this route. This study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns from your agency that would give insight for this study. The planning study will include a study purpose and project goals for identifying improvements and/or recommendations related to the concerns. We believe that early identification of issues can help us develop a highway project that would avoid or minimize negative impacts in the future.

We respectfully ask that you provide us with your comments by June 15, 2007, to ensure timely progress in this planning effort.

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

May 21, 2007

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

- Purpose, Issues, Schedule, & Project Goals
- Project Location
- General Information
- Level of Service 2007 & 2030
- High Crash Spot and Segment

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to Boday Borres, P.E., of the Division of Planning by phone at (502) 564-7183 or by email at [boday.borres@ky.gov](mailto:boday.borres@ky.gov). Please address all written correspondence to Daryl J. Greer, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 200 Mero Street, 5<sup>th</sup> Floor, Frankfort, KY 40622.

Sincerely,



Daryl J. Greer, P.E.  
Director  
Division of Planning

DJG/BRB/NH

Enclosures

c/enc: Jose Sepulveda  
John Ballantyne  
Mary Murray  
Anthony Goodman  
Donna Diaz  
Larry Wilson  
Lewis T. Phelps  
Tom Clouse  
David Beattie  
Joe Cox  
Cathi Blair  
David Waldner  
Ananias Calvin

Ms. LaVerne Reid  
District Manager  
Airports District Office, Federal Aviation Administration  
2862 Business Park Drive #G  
Memphis TN 38118-1555

American Association of Truckers  
P.O. Box 487  
Benton KY 42025

Mr. Donald C. Storm  
Adjutant General  
Department of Military Affairs  
Boone Nat'l Guard Ctr., 100 Minuteman Pky.  
Frankfort KY 40601

Mr. John Kington  
Deputy Commissioner  
Department of Parks  
10th Floor, Capital Plaza Tower  
500 Mero Street  
Frankfort KY 40601

Mr. George Crothers  
Director, Office of State Archaeology  
Dept. of Anthropology, University of Kentucky  
211 Lafferty Hall  
Lexington KY 40506-0024

Mr. William Straw, Ph.D.  
Regional Environmental Officer  
Federal Emergency Management Agency, Region IV  
3003 Chamblee-Tucker Road  
Atlanta GA 30341-4130

Mr. Jack Fish  
President  
Kentuckians for Better Transportation  
10332 Bluegrass Parkway  
Louisville KY 40299

Kentuckians for The Commonwealth  
105 Reams Street  
P.O. Box 1450  
London KY 40743

Mr. Mark Birdwhistell  
Secretary  
Cabinet for Health and Family Services  
275 East Main  
Frankfort KY 40601

Mr. John Houlihan  
Kentucky Airport Zoning Commission  
Transportation Office Building, W3-09-02  
200 Mero Street  
Frankfort KY 40622

Mr. Bob Arnold  
Executive Director  
Kentucky Association of Counties  
380 King's Daughters Drive  
Frankfort KY 40601

Mr. Dave Adkisson  
President  
Kentucky Chamber of Commerce Executives, Inc.  
464 Chenault Road  
Frankfort KY 40601

Mr. Richie Farmer  
Commissioner  
Kentucky Department of Agriculture  
32 Fountain Place  
Frankfort KY 40601

Ms. Cheryl A. Taylor  
Commissioner  
Kentucky Department for Environmental Protection  
300 Fair Oaks Lane  
Frankfort KY 40601

Dr. Jonathan Gasset  
Commissioner  
Kentucky Department of Fish and Wildlife Resources  
1 Sportsman's Lane  
Frankfort KY 40601

Ms. Susan Bush  
Commissioner  
Kentucky Department of Nat'l. Resources  
#2 Hudson Hollow  
Frankfort KY 40601

Mr. Stephen A. Coleman  
Director  
Kentucky Department of Nat'l. Resources, Division of  
Conservation  
#2 Hudson Hollow  
Frankfort KY 40601

Mr. John Adams  
Commissioner  
Kentucky Department of State Police  
919 Versailles Road  
Frankfort KY 40601

Mr. Paul Rothman  
Director  
Division of Mine Reclamation and Enforcement  
# 2 Hudson Hollow  
Frankfort KY 40601

Kentucky Disabilities Coalition  
P.O. Box 1589  
Frankfort KY 40602-1589

Mr. John Lyons  
Director  
Kentucky Division of Air Quality  
803 Schenkel Lane  
Frankfort KY 40601

Ms. Leah W. MacSwords  
Director  
Kentucky Division of Forestry  
627 Comanche Trail  
Frankfort KY 40601

Mr. Greg Howard  
Commissioner  
Kentucky Department of Vehicle Enforcement  
Transportation Office Building, Suite T-500  
200 Mero Street  
Frankfort KY 40622

Mr. R. Bruce Scott  
Director  
Kentucky Division of Waste Management  
14 Reilly Road  
Frankfort KY 40601

Mr. David Morgan  
Director  
Kentucky Division of Water  
14 Reilly Road  
Frankfort KY 40601

Mr. Gene Fuqua  
Acting Secretary  
Kentucky Cabinet for Economic Development  
Old Capitol Annex  
300 West Broadway  
Frankfort KY 40601

Mr. John Bird  
Executive Director  
Kentucky Forward  
464 Chenault Road  
Frankfort KY 40601

Mr. Jim Cobb  
State Geologist & Director  
Kentucky Geological Survey, University of Kentucky  
228 Mining and Mineral Resources Bldg.  
Lexington KY 40506

Mr. David L. Morgan  
Executive Director  
Kentucky Heritage Council  
300 Washington Street  
Frankfort KY 40601

Mr. Kent Whitworth  
Director  
Kentucky Historical Society  
100 W. Broadway  
Frankfort KY 40601

Kentucky Association of Economic Development  
2225 Lawrenceburg Road, Bldg. B., Suite 4  
Frankfort KY 40601-8489

Ms. Sylvia L. Lovely  
Executive Director  
Kentucky League of Cities, Inc.  
101 East Vine Street, Ste. 600  
Lexington KY 40507

Kentucky Motor Transport Association  
617 Shelby Street  
Frankfort KY 40601

Ms. Teresa J. Hill  
Secretary  
Kentucky Environmental and Public Protection Cabinet  
Capital Plaza Tower, 5th Floor  
Frankfort KY 40601

Mr. Donald S. Dott, Jr.  
Executive Director  
Kentucky Nature Preserves  
801 Schenkel Lane  
Frankfort KY 40601

Ms. Vickie Bourne  
Executive Director  
Kentucky Office of Transportation Delivery  
Transportation Office Building, W3-10-01  
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Mr. Beecher Hudson  
Executive Director  
Kentucky Public Transit Association  
c/o Louisville Red Cross  
P.O. Box 1675  
Louisville KY 40201

Ms. Marcheta Sparrow  
President  
Kentucky Tourism Council  
612B Shelby Street  
Frankfort KY 40601

Mr. George Ward  
Secretary  
Kentucky Commerce Cabinet  
Capital Plaza Tower, 24th Floor  
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Mr. Allan Frank  
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KYTC, Division of Structural Design  
Transportation Office Building, E3-16-01  
200 Mero Street  
Frankfort KY 40622

Ms. Greta Smith  
Director  
KYTC, Division of Construction  
Transportation Office Building, W3-06-01  
200 Mero Street  
Frankfort KY 40622

Mr. David Waldner  
Director  
KYTC, Division of Environmental Analysis  
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Branch Manager  
KYTC, Geotech Branch  
1227 Wilkinson Boulevard, C-5  
Frankfort KY 40622

Mr. Tom Napier  
Branch Manager  
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Secretary  
Education Cabinet  
Capital Plaza Tower, 2nd Floor  
Frankfort KY 40601

Ms. Keith P. Eiken  
Executive Director  
Scenic Kentucky  
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Louisville KY 40201

Mr. Heinz Mueller  
Attorney  
U. S. Environmental Protection Agency, Region 4  
Office  
Sam Nunn Atlanta Federal Center  
61 Forsyth St. SW  
Atlanta GA 30303

Mr. Kenneth W. Holt  
U.S. Dept. of Health & Human Serv., Center for  
Disease Control, Emergency And Environmental Health  
Services Division  
Mail Stop F-16  
4770 Buford Highway, N.E.  
Atlanta GA 30341-3724

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

Mr. Duane Thomas  
Director  
KYTC, Division of Traffic Operations  
Transportation Office Building, E3-04-03  
200 Mero Street  
Frankfort KY 40622

Ms. Tiffani Jackson  
KYTC, Office of Special Programs  
Transportation Office Building, E6-10-04  
200 Mero Street  
Frankfort KY 40622

Mr. James Aldridge  
Director  
Nature Conservancy - Kentucky Chapter  
642 West Main Street  
Lexington KY 40508

Sierra Club  
259 West Short Street  
Lexington KY 40507

Mr. Michael D. Hubbs  
State Conservationist  
U.S. Dept. of Agriculture, Natural Resources  
Conservation Service  
711 Corporate Drive, Suite 110  
Lexington KY 40503

Mr. Lee Andrews  
Field Supervisor  
U.S. Dept. of the Interior, Fish and Wildlife Service  
330 W. Broadway, Suite 264  
Frankfort KY 40601

The Honorable Jim Bunning  
United States Senator  
United States Senate  
316 Hart Senate Office Building  
Washington DC 20510

The Honorable Mitch McConnell  
United States Senator  
United States Senate  
361-A Russell Senate Office Building  
Washington DC 20510

Mr. Thomas M. Hunter  
Executive Director  
Appalachian Regional Commission  
1666 Connecticut Ave., NW  
Washington DC 20235

Lt. Colonel Steven Roemhildt  
District Engineer  
U. S. Army Corps of Engineers, Nashville District  
P.O. Box 1070  
Nashville TN 37202-1070

Colonel Raymond E. Midkiff  
District Engineer  
U. S. Army Corps of Engineers, Louisville District  
P.O. Box 59  
Louisville KY 40201

The Honorable Ed Whitfield  
United States Representative, 1st District  
U. S. House of Representatives  
236 Cannon House Office Building  
Washington DC 20515

Mr. Buddy Yount  
Kentucky Division Administrator  
Federal Motor Carrier Safety Administration  
300 West Broadway  
Frankfort KY 40601

Mr. Bill Lally  
Executive Director  
Kentucky Household Goods Carrier Association Inc.  
P.O. Box 22204  
Louisville KY 40252-0204

Mr. Tony Reck  
President & CEO, P& L Railway, Inc.  
Kentucky State Rail Association  
1500 Kentucky Avenue  
Paducah KY 42003

Ms. Linda Strite Murnane  
Executive Director  
Kentucky Commission on Human Rights  
332 West Broadway, Suite 700  
Louisville KY 40202

Planning Staff Officer  
U.S. Dept. of Agriculture, Forest Service, Daniel Boone  
Nat'l Forest  
1700 Bypass Rd.  
Winchester KY 40391

Mr. Roger Stephens  
Magistrate District #1  
Adair County Fiscal Court  
399 Winfrey Hill Road  
Russell Springs KY 42642

Mr. Justin Bailey  
911 Assistant Coordinator  
Adair County  
1103 Greensburg Street  
Columbia KY 42728

Mr. Tommy Corbin  
Adair County Fire Department  
500 Public Square  
Columbia KY 42728

Mr. Dennis Loy  
Adair County Fire Department  
500 Public Square  
Columbia KY 42728

Mr. Ralph Curry  
Sheriff  
Adair County Sheriff's Office  
500 Public Square  
Columbia KY 42728

Mr. Terry Akin  
EMT  
Adair County Ambulance  
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Columbia KY 42728

The Honorable Ann Melton  
Adair County Judge/Executive  
Adair County Fiscal Court  
424 Public Square, Suite #1  
Columbia KY 42728

The Honorable Vernie McGaha  
Kentucky State Senator  
Kentucky State Senate  
4787 West Highway 76  
Russell Springs KY 42642

Mr. Mark Coots  
Director  
Russell County Ambulance Service  
72 Joe T. Pettey Drive  
Russell Springs KY 42642

Mr. Jimmy McQueary  
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304 J. McQueary Road  
Russell Springs KY 42642

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Transportation Director  
Russell County Board of Education  
P.O. Box 440  
Jamestown KY 42629

The Honorable Ronnie McFall  
Russell County Judge/Executive  
Russell County Fiscal Court  
P.O. Box 397  
Jamestown KY 42629

The Honorable Jeff Hoover  
Kentucky State Representative, 83rd District  
Kentucky State Legislature  
P.O. Box 985  
Jamestown KY 42629

Mailing Title	Letter Title	First Name	Last Name	Suffix	Title	Organization	Address 1	Address 2	City	State	Zip	Send
Ms.	Ms.	Leah W.	MacSwords	x	Director	Kentucky Division of Forestry	627 Comanche Trail		Frankfort	KY	40601	Y
Mr.	Mr.	Greg	Howard	x	Commissioner	Kentucky Department of Vehicle Enforcement	Transporation Office Building, Suite 1-500	200 Metro Street	Frankfort	KY	40622	Y
Mr.	Mr.	R. Bruce	Scott	x	Director	Kentucky Division of Waste Management	14 Reilly Road		Frankfort	KY	40601	Y
Mr.	Mr.	David	Morgan	x	Secretary	Kentucky Division of Water	Capital Plaza Tower, 24th Floor	500 Metro St.	Frankfort	KY	40601	Y
Mr.	Mr.	Marvin E.	Strong	x	Secretary	Kentucky Economic Development Cabinet	464 Chenault Road		Frankfort	KY	40601	Y
Mr.	Mr.	John	Cobb	x	Executive Director	Kentucky Forward	228 Mining and Mineral Resources Bldg.		Lexington	KY	40506	Y
Mr.	Mr.	Jim	Morgan	x	State Geologist & Director	Kentucky Geological Survey, University of Kentucky	300 Washington Street		Frankfort	KY	40601	Y
Mr.	Mr.	David L.	Whitworth	x	Executive Director	Kentucky Heritage Council	100 W. Broadway		Frankfort	KY	40601	Y
Mr.	Mr.	Kent	Whitworth	x	Director	Kentucky Historical Society	2225 Lawrenceburg Road, Bldg. B., Suite 4		Frankfort	KY	40601-8489	Y
Ms.	Ms.	Sylvia L.	Lovely	x	Executive Director	Kentucky Association of Economic Development	101 East Vine Street, Ste. 600		Lexington	KY	40507	Y
Ms.	Ms.	Teresa J.	Hill	x	Secretary	Kentucky Motor Transport Association	617 Shelby Street		Frankfort	KY	40601	Y
Mr.	Mr.	Donald S.	Dort	x	Executive Director	Kentucky Nature Preserves	Capital Plaza Tower, 3th Floor		Frankfort	KY	40601	Y
Ms.	Ms.	Vickie	Bourne	x	Executive Director	Kentucky Office of Transportation	Transporation Office Building, W3-10-01		Frankfort	KY	40622	Y
Mr.	Mr.	Beecher	Hudson	x	Executive Director	Kentucky Public Transit Association	c/o Louisville Red Cross	200 Metro Street	Frankfort	KY	40601	Y
Ms.	Ms.	Marcheta	Snowrow	x	President	Kentucky Tourism Council	612B Shelby Street	P.O. Box 1675	Louisville	KY	40201	Y
Mr.	Mr.	George	Ward	x	Secretary	Kentucky Commerce Cabinet	Capital Plaza Tower, 24th Floor	500 Metro Street	Frankfort	KY	40601	Y
Mr.	Mr.	Alan	Frank	x	Director	KYTC, Division of Structural Design	Transporation Office Building, E3-16-01	200 Metro Street	Frankfort	KY	40622	Y
Ms.	Ms.	Greta	Smith	x	Director	KYTC, Division of Construction	Transporation Office Building, W3-96-01	200 Metro Street	Frankfort	KY	40622	Y
Mr.	Mr.	David	Waldner	x	Director	KYTC, Division of Environmental Analysis	Transporation Office Building, W5-22-02	200 Metro Street	Frankfort	KY	40622	Y
Mr.	Mr.	Bill	Broyles	x	Branch Manager	KYTC, Geotech Branch	1227 Wilkinson Boulevard, C-5		Frankfort	KY	40622	Y
Mr.	Mr.	Duane	Thomas	x	Director	KYTC, Division of Traffic Operations	Transporation Office Building, E3-04-03	200 Metro Street	Frankfort	KY	40622	Y
Mr.	Mr.	Tom	Najler	x	Branch Manager	KYTC, Permits Branch	Transporation Office Building, E3-04-03	200 Metro Street	Frankfort	KY	40622	Y
Ms.	Ms.	Tiffani	Jackson	x	Director	KYTC, Office of Special Programs	Capital Plaza Tower, 2nd Floor	200 Metro Street	Frankfort	KY	40601	Y
Ms.	Ms.	Laura	Owens	x	Secretary	Education Cabinet	642 West Main Street		Lexington	KY	40508	Y
Mr.	Mr.	James	Aldridge	x	Director	Nature Conservancy - Kentucky Chapter			Louisville	KY	40201	Y
Ms.	Ms.	Keith P.	Eiken	x	Executive Director	Sierra Club	259 West Short Street	P.O. Box 2646	Louisville	KY	40201	Y
Mr.	Mr.	Heinz	Mueller	x	Attorney	U.S. Environmental Protection Agency, Region 4 Office	Sam Nunn Atlanta Federal Center	61 Forsyth St. SW	Atlanta	GA	30303	Y
Mr.	Mr.	Michael D	Hubbs	x	State Conservationist	U.S. Dept. of Agriculture, Natural Resources Conservation Service	711 Concorde Drive, Suite 110		Lexington	KY	40503	Y
Mr.	Mr.	Kenneth W.	Holt		Field Supervisor	Emergency and Environmental Health Services Division	Maui Stop F-16	4770 Buford Highway, N.E.	Atlanta	GA	30341-3724	Y
Mr.	Mr.	Lee	Andrews		Bridge Administrator	United States Coast Guard, Bridge Branch	330 W. Broadway, Suite 264		Frankfort	KY	40601	Y
The Honorable	The Honorable	Roger	Wibusch	x	United States Senator	United States Senate	1222 S. Juice Street		St. Louis	MO	63103	Y
The Honorable	The Honorable	Brenning	McConnell	x	United States Senator	United States Senate	361-A Russell Senate Office Building		Washington	DC	20510	Y
Mr.	Mr.	William	McConnell	x	Executive Director	U.S. Dept. of the Interior, Fish and Wildlife Service	1666 Connecticut Ave., NW		Washington	DC	20510	Y
Lt. Colonel	Lt. Colonel	Thomas M.	Rumler	x	District Engineer	Appalachian Regional Commission	P.O. Box 1070		Nashville	TN	37202-1070	Y/N
Colonel	Colonel	Steven	Roanhiot	x	District Engineer	U. S. Army Corps of Engineers, Nashville District	P.O. Box 99		Louisville	KY	40201	Y/N
The Honorable	The Honorable	Ed	Whitfield	x	United States Representative - District 1	U. S. House of Representatives	300 West Broadway		Frankfort	KY	40601	Y
Mr.	Mr.	Buddy	Yount		Kentucky Division Administrator	Federal Motor Carrier Safety Administration			Frankfort	KY	40601	Y
Mr.	Mr.	Bill	Lally	x	Executive Director	Kentucky Household Goods Carrier Association Inc.	P.O. Box 22204		Louisville	KY	40252-0204	Y



Richie Farmer, Commissioner  
32 Fountain Place  
Frankfort, KY 40601



Phone: (502) 564-5126  
Fax: (502) 564-5016  
E-mail: richie.farmer@ky.gov

**RECEIVED**

**MAY 31 2007**

Kentucky  
Department of  
Agriculture

*A Consumer Protection And Service Agency*

May 30, 2007

Mr. Daryl J. Greer, P.E.  
Director, Division of Planning  
200 Mero Street, 5<sup>th</sup> Floor  
Station: W5-05-01  
Kentucky Transportation Cabinet  
Frankfort, Kentucky 40622

RE: Item No. 8-8302.00

Dear Mr. Greer:

The Kentucky Department of Agriculture recognizes receipt of information relating to the above noted Item No. At this time, the Department has no comment on the proposed project other than as follows:

The proposed project may benefit movement of agricultural vehicles and commodities within the defined area.

We appreciate the opportunity to provide input.

Yours truly,

  
Richie Farmer, Commissioner





RECEIVED

MAY 31 2007

## ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

**Ernie Fletcher**  
Governor

Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601-1403

**Teresa J. Hill**  
Secretary

May 29, 2007

Mr. Daryl J. Greer, P.E.  
Director, Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street, 5<sup>th</sup> Floor  
Frankfort, Kentucky 40622

Dear Mr. Greer,

The Division has reviewed the planning study for evaluating proposed improvements along KY 76 in Adair and Russell Counties, Item Number 08-8302.00. The following Kentucky Administrative Regulations apply to this proposed project:

Kentucky Division for Air Quality Regulation **401 KAR 63:010** Fugitive Emissions states that no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precaution to prevent particulate matter from becoming airborne. Additional requirements include the covering of open bodied trucks, operating outside the work area transporting materials likely to become airborne, and that no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. Please note the Fugitive Emissions Fact Sheet located at [http://www.air.ky.gov/homepage\\_repository/e-Clearinghouse.htm](http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm).

Kentucky Division for Air Quality Regulation **401 KAR 63:005** states that open burning is prohibited. Open Burning is defined as the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outdoor atmosphere without passing through a stack or chimney. However, open burning may be utilized for the expressed purposes listed on the Open Burning Fact Sheet located at [http://www.air.ky.gov/homepage\\_repository/e-Clearinghouse.htm](http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm).

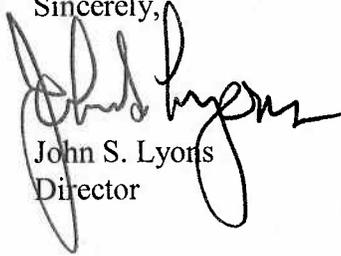
Finally, the projects listed in this document must meet the conformity requirements of the Clean Air Act as amended and the transportation planning provisions of Title 23 and Title 49 of United States Code.

Mr. Daryl Greer Letter  
May 29, 2007  
Page 2

The Division also suggests an investigation into compliance with applicable local government regulations.

Every effort should be made to maintain compliance with the preceding regulations and requirements. The Division also suggests an investigation into compliance with applicable regulations in the local governments. If there are any questions relating to this matter, please contact Joe Forgacs at (502) 573-3382 extension 309.

Sincerely,

A handwritten signature in black ink, appearing to read "John S. Lyons", written over the typed name and title.

John S. Lyons  
Director

JSL/jmf

RECEIVED



JUN 01 2007

## ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

**Ernie Fletcher**  
Governor

**Department for Natural Resources**  
2 Hudson Hollow  
Frankfort, Kentucky 40601  
Phone: (502) 564-6940  
Fax: (502) 564-5698  
[www.eppc.ky.gov](http://www.eppc.ky.gov)  
[www.dnr.ky.gov](http://www.dnr.ky.gov)

**Teresa J. Hill**  
Secretary

**Susan C. Bush**  
Commissioner

May 24, 2007

Daryl Greer, P. E.  
Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
5<sup>th</sup> Floor  
Frankfort, KY 40622

Subject: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

Dear Mr. Greer:

Thank you for the opportunity to comment on the referenced planning study project located in Russell and Adair Counties.

Review of the project location does not indicate the presence of any active or abandoned mining activities

I appreciate the notification and the opportunity to comment on the proposal. If you have any questions regarding this correspondence, please contact Pam Carew at (502) 564-2340.

Sincerely,

A handwritten signature in blue ink that reads "Paul Rothman".

Paul Rothman, Director  
Division of Mine Reclamation and Enforcement

PR/pbc

**Borres, Boday (KYTC)**

---

**From:** Beck, Charles [charles.beck@dhs.gov]  
**Sent:** Monday, June 04, 2007 8:35 AM  
**To:** Borres, Boday (KYTC)  
**Subject:** KY 76 from US 127 to KY 206, #08-8302.00

Daryl J Greer, PE:

This responds to your request of May 21, 2007 to our Regional Environmental Officer, Wm. R. Straw, regarding the need for and potential effects of improvements to KY 76 in Russell and Adair Counties.

FEMA, Region IV has no comment.

Charles Beck, Environmental Specialist

**Borres, Boday (KYTC)**

---

**From:** Palmer-Ball, Brainard (EPPC OOS KNPC)  
**Sent:** Monday, June 04, 2007 3:28 PM  
**To:** Borres, Boday (KYTC)  
**Cc:** Greer, Daryl (KYTC); Housman, Heather (EPPC OOS KNPC); White, Deborah (EPPC OOS KNPC)  
**Subject:** KY 76 project comments  
**Attachments:** sundew meadow.jpg

Ms. Borres,

Per our phone conversation earlier today, regarding the KY 76 project in Adair and Russell counties, please be aware of a site of interest to the Kentucky State Nature Preserves Commission. It is a small area depicted on the attached map north of the current KY 76 corridor. We refer to it as "Sundew Meadow" because of a rare plant, *Drosera intermedia*, (Spoon-leaved sundew) that occurs there. We have long-term plans to try to protect this site, but we currently have only a voluntary protection agreement with the landowner. We are unsure if there are other nearby locations where this species of plant might occur, but suitable habitat and additional populations should be searched for during planning stages for the project.

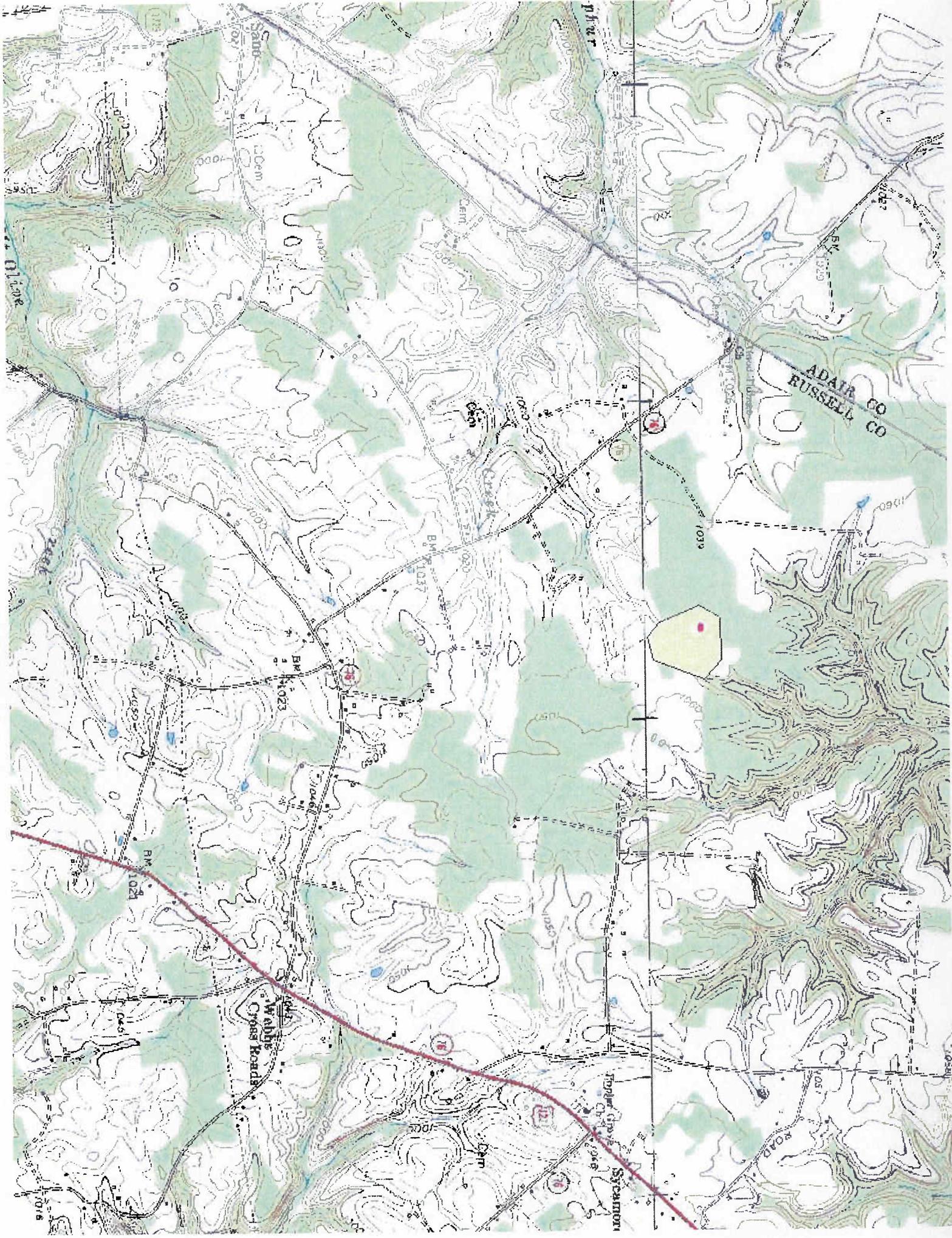
Our only additional comments on the project would be to note that the KY 76 corridor in this area is within the Green River drainage, where numerous aquatic species of interest occur. Also, there is potential to impact Gray bats (*Myotis grisescens*) in this part of Kentucky; no caves are known in this area that are used by Gray bats, but suitable caves should be searched for during planning stages for the project.

Please feel free to contact me if you have any questions concerning these comments.

Cordially,

Brainard Palmer-Ball, Jr.  
Environmental Review Coordinator

6/4/2007



# Drosera intermedia

From Wikipedia, the free encyclopedia

***Drosera intermedia***, commonly known as the **oblong-leaved sundew** or **spoonleaf sundew**, is an insectivorous plant species belonging to the sundew genus. It is a temperate or tropical species native to Europe, southeastern Canada, the eastern half of the United States, Cuba and northern South America.

## Contents

- 1 Morphology
- 2 Distribution and habitat
- 3 References
- 4 External links

## Morphology

*D. intermedia* is a perennial herb which forms a semi-erect stemless rosette of spatulate leaves up to 10 cm tall. Plants in temperate regions undergo dormancy during which they form a winter resting bud called a hibernaculum.

As is typical for sundews, the leaf blades are densely covered with stalked mucilagenous glands which secrete a sugary nectar to attract insects. These then become ensnared by the mucilage and, unless they are strong enough to escape, are suffocated by the sticky goo or die from exhaustion. The plant then secretes digestive enzymes from sessile glands and later absorbs the resulting nutrient solution to supplement the poor mineral nutrition of the plants natural environment.

*D. intermedia* blooms from June through August, forming up to 15 cm. tall inflorescences bearing 3-8 white flowers. Fertilized ovaries swell to form egg-shaped dehiscent seed capsules which bear numerous tiny seeds.

## Distribution and habitat

*D. intermedia* is one of the most widely distributed species in the genus, and one of only three *Drosera* species native to Europe (the others are *D. rotundifolia* and *D. anglica*). It is also found in eastern North America, Cuba, and northern South America. The Cuban and South American forms are tropical and do not form hibernacula in the winter.

*D. intermedia* grows in constantly moist to wet bogs, fens, and marshes. It prefers nutrient free soils - such as sphagnum peat moss or sandy ground - and open, sunny habitats.

## References

- L. Diels: *Droseraceae*, 1906, 135 pages. (*The only Monograph of the family Droseraceae to date.*) --

<i><b>Drosera intermedia</b></i> <span style="float: right;">!</span>

<b>Scientific classification</b>
Kingdom: Plantae
Order: Caryophyllales
Family: Droseraceae
Genus: <i>Drosera</i>
Species: <i><b>D. intermedia</b></i>
<b>Binomial name</b>
<i><b>Drosera intermedia</b></i> Hayne, 1800

is this true? "Insectivorous Plants" by Charles Darwin (see below), published 1875, mostly dealt with Droseraceae, and is certainly a Monograph.

- Barthlott, Wilhelm; Porembski, Stefan; Seine, Rüdiger; Theisen, Inge: *Karnivoren*, Stuttgart, 2004, ISBN 3-8001-4144-2
- Darwin, Charles; *Insectivorous Plants* (London: John Murray, 1875, 462 pages) Library of Congress Control-Number: 04001280; Replica reprints (Scotland: Langford Press, 2005(?), 462 pages) ISBN 1904078004; Non-Replica reprints (New York: New York University Press, 1990, 345 pages) ISBN 978-0814718223; Project Gutenberg online edition at <http://www.gutenberg.org/etext/5765>

## External links

- Distribution map (not including Cuba or South America) (<http://linnaeus.nrm.se/flora/di/drosera/drose/drosintv.jpg>)
- USDA plant page (<http://plants.usda.gov/java/profile?symbol=DRIN3>)

Retrieved from "[http://en.wikipedia.org/wiki/Drosera\\_intermedia](http://en.wikipedia.org/wiki/Drosera_intermedia)"

Category: Drosera

- 
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JUN 04 2007

## KENTUCKY COMMERCE CABINET

**Ernie Fletcher**  
Governor

Capital Plaza Tower, 24th Floor  
500 Mero Street  
Frankfort, Kentucky 40601  
Phone (502) 564-4270  
Fax (502) 564-1512  
[www.commerce.ky.gov](http://www.commerce.ky.gov)

**George Ward**  
Secretary

May 31, 2007

Mr. Daryl Greer, P.E.  
Division of Planning Director  
Kentucky Transportation Cabinet  
200 Mero Street  
Frankfort, Kentucky 40622

Re: Programming Study  
Russell & Adair Counties  
KY 76  
Item No. 08-8302.00

Dear Mr. Greer:

The Department of Parks has reviewed your correspondence to me regarding the subject. The study will not directly impact any of our facilities. I would like to state in general that our Agency's mission is protecting the environment associated with our facilities, and we are certainly concerned about environmental impacts for the entire Commonwealth.

I appreciate you seeking our Agency's comments on this project.

Sincerely:

George Ward  
Secretary

GW/jmd

cc: John Drake, Director of Planning and Design, Department of Parks

# Commonwealth of Kentucky

STATE SENATE

4787 West Highway 76  
Russell Springs, KY 42642  
(270) 866-3068



**VERNIE McGAHA**  
15th Legislative District

State Capitol Annex  
Room 209  
Frankfort, KY 40601  
Message Line: 800-372-7181

**RECEIVED**

JUN 05 2007

June 4, 2007

Mr. Daryl J. Greer, P.E., Director  
Division of Planning  
KY Transportation Cabinet  
200 Mero Street, 5<sup>th</sup> Floor  
Frankfort, KY 40622

Dear Mr. Greer:

Thank you for the opportunity to submit input regarding a planning study for improvements on KY 76 in Russell and Adair Counties. Having traveled this road my entire life, I feel I have first hand knowledge of the need of this project.

This six-mile road is a narrow road that has considerable traffic. Some of my concerns are:

\*No shoulders on the road-if you happen to drop off the road you are in the ditch. With the narrow width of the road, this is a major concern. If a truck leaves the road, the ditch will cause many to overturn.

\*This is a connector road for eastern Adair County, southeastern Taylor County, and Western Casey County in their commute to Russell County or vice versa.

\*Russell County is home to Lake Cumberland. Adair and Taylor Counties are home to Green River Reservoir. There is boat traffic on this narrow road going to these recreational destinations.

\*There is considerable activity in the logging business in our area with one sawmill on this road and other sawmills nearby who use this road to transport logs on large trucks.

\*The approach to this road from U.S. 127 in Russell County is extremely difficult to find. There have been numerous wrecks as vehicles enter and exit from U.S. 127 to Hwy. 76. There is also a steep grade as you enter Hwy. 76.

\*There is a concrete plant just south of the Hwy. 76 entrance off U.S. 127. Concrete orders in eastern Adair County and southwest Casey County come from this plant. Concrete trucks on this road leave little room.

\*Since Hwy. 76 is a connector road, many delivery and service trucks ranging in size from six wheelers to eighteen-wheelers use this road. Again, these trucks leave little room on the road and no shoulders.

The traffic count projection for the future shows the increased use of this road and thus the increased danger that will come from the increased traffic. My concern is for the safety of the citizens who travel this road. We would like to see the road made wider with some shoulder for safety.

Again, I appreciate the opportunity for input and stand ready to assist in any manner.

Sincerely,

A handwritten signature in black ink, appearing to read "Vernie". The signature is fluid and cursive, with a large initial "V" and a long, sweeping tail.

Vernie McGaha  
State Senator



DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE  
CORPS OF ENGINEERS  
P.O. BOX 59  
LOUISVILLE, KENTUCKY 40201-0059  
<http://www.lrl.usace.army.mil/>

RECEIVED

May 30, 2007

JUN 01 2007

Operations Division  
Regulatory Branch (South)  
ID No. LRL-2007-698-jea

Mr. Daryl J. Greer  
Director, Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street, 5th Floor  
Station: W5-05-01  
Frankfort, Kentucky 40622

Dear Mr. Greer:

This is in response to your request for review of a Programming Study for the need for improvements to KY 76 between US 127 and KY 206 in Russell and Adair Counties, Kentucky. The project area identified in the submitted information encompasses several streams subject to our regulatory authority under Section 404 of the Clean Water Act (33 USC 1344). These include Sulphur Creek, Hawk Branch, and several unnamed tributaries.

However, the information given is insufficient for us to be certain of the need for a permit on this particular proposal. We will need additional detail on the project's design, scope, construction methods and purpose in order to determine whether a permit is required.

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

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

If we can be of any further assistance, please contact us by writing to the above address, ATTN: CELRL-OP-FS, or by calling me at (502) 315-6682.

Sincerely,

Jane Archer  
Project Manager  
Regulatory Branch

Enclosure

JUN 05 2007



## TRANSPORTATION CABINET

Frankfort, Kentucky 40622  
www.kentucky.govErnie Fletcher  
GovernorBill Nighbert  
SecretaryCrystal Murray Ducker  
Deputy Secretary

---

**INTRA-DEPARTMENTAL MEMO**

---

**TO:** Daryl J. Greer, P.E.  
Director  
Division of Planning

**FROM:** Tiffani Jackson  
Bicycle and Pedestrian Coordinator  
Office of Special Programs

**DATE:** June 4, 2007

**SUBJECT:** Comments on Scoping study of KY 76 from US 127 to KY 206

After reviewing the project information for the scoping study of KY 76, I have the following comments that I feel should be taken into consideration when identifying improvements for this stretch of roadway:

- Currently there is a varying shoulder width of 3-4 feet. My recommendation is to consider keeping a minimum of 4 ft of paved shoulder width (after any rumble strips that are installed) to accommodate any cyclists that may use the road. The section in question is in proximity to a three Scenic Byways (US 127, US 80 and US 55) and a KYTC designated Bike Route (Central Heartland Tour). Cyclists may use this roadway as a cut through to the other Scenic Byway or to reach the designated bike route.

A handwritten signature in blue ink, appearing to read "Tiffani Jackson", written over a horizontal line.

Tiffani Jackson



## TRANSPORTATION CABINET

Frankfort, Kentucky 40622  
www.kentucky.gov

**Ernie Fletcher**  
Governor

**Bill Nighbert**  
Secretary

**Marc Williams**  
Commissioner of Highways

May 21, 2007

Ms. Tiffani Jackson  
KYTC, Office of Special Programs  
Transportation Office Building, E6-10-04  
200 Mero Street  
Frankfort KY 40622

Dear Ms. Jackson:

Subject: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00



We are requesting your agency's input and comments on a planning study to determine the need and potential impacts for improvements on the KY 76 highway project in Russell and Adair Counties. The Kentucky Transportation Cabinet has assembled a study team to evaluate the safety issues and connectivity along this route. This study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns from your agency that would give insight for this study. The planning study will include a study purpose and project goals for identifying improvements and/or recommendations related to the concerns. We believe that early identification of issues can help us develop a highway project that would avoid or minimize negative impacts in the future.

We respectfully ask that you provide us with your comments by June 15, 2007, to ensure timely progress in this planning effort.

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

Ms. Tiffani Jackson

Page 2

May 21, 2007

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

- Purpose, Issues, Schedule, & Project Goals
- Project Location
- General Information
- Level of Service 2007 & 2030
- High Crash Spot and Segment

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to Boday Borres, P.E., of the Division of Planning by phone at (502) 564-7183 or by email at [boday.borres@ky.gov](mailto:boday.borres@ky.gov). Please address all written correspondence to Daryl J. Greer, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 200 Mero Street, 5<sup>th</sup> Floor, Frankfort, KY 40622.

Sincerely,



Daryl J. Greer, P.E.  
Director  
Division of Planning

DJG/BRB/NH

Enclosures

c/enc: Jose Sepulveda  
John Ballantyne  
Mary Murray  
Anthony Goodman  
Donna Diaz  
Larry Wilson  
Lewis T. Phelps  
Tom Clouse  
David Beattie  
Joe Cox  
Cathi Blair  
David Waldner  
Ananias Calvin



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

RECEIVED

JUN 08 2007

Memphis Airports District Office  
2862 Business Park Dr, Bldg G  
Memphis, TN 38118-1555  
Phone: 901-322-8180

June 5, 2007

Mr. Daryl J. Greer, P.E.  
Director, Division of Planning  
Kentucky Department of Transportation  
200 Mero Street  
Frankfort, KY 40622

Re: Monroe County Item No.: 03-8310.00 and  
Russell & Adair Counties Item No.: 03-8310.00

Dear Mr. Greer:

We have reviewed the proposed studies and found no issue or concerns that will affect the airports in those areas. We feel, from your proposal, that these propose projects will have no environmental impact for future development at these airports. We would like to be notified if any changes might occur from the original studies.

For future reference, please address all correspondence to Mr. Phillip Braden, Memphis Airport District Office Manager.

Sincerely,

James H. Williams  
Program Manager

## Borres, Boday (KYTC)

---

**From:** Wilson, Jimmy (KYTC)  
**Sent:** Tuesday, June 19, 2007 9:26 AM  
**To:** Borres, Boday (KYTC)  
**Subject:** FW: Airport Studies

**Attachments:** Airport Studies Letter Signed.doc



Airport Studies  
Letter Signed....

A follow up response on KY 76.

-----Original Message-----

**From:** James.Hayward.Williams@faa.gov [mailto:James.Hayward.Williams@faa.gov]  
**Sent:** Monday, June 18, 2007 3:39 PM  
**To:** Wilson, Jimmy (KYTC)  
**Subject:** Airport Studies

Please replace the original letter with the attachment.

James H. Williams  
Program Manager  
Memphis Airports District Office  
901-322-8184      FAX: -8195

(See attached file: Airport Studies Letter Signed.doc)



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

Memphis Airports District Office  
2862 Business Park Dr, Bldg G  
Memphis, TN 38118-1555  
Phone: 901-322-8180

June 5, 2007

Mr. Daryl J. Greer, P.E.  
Director, Division of Planning  
Kentucky Department of Transportation  
200 Mero Street  
Frankfort, KY 40622

Re: Monroe County Item No.: 03-8310.00 and  
Russell & Adair Counties Item No.: 03-8302.00

Dear Mr. Greer:

We have reviewed the proposed studies and found no issue or concerns that will affect the prospective airports in those areas. We feel, from your proposal, that these projects will have no environmental impact at these airports. We would like to be notified if any changes might occur from the original studies.

For future reference, please address all correspondence to Mr. Phillip Braden, Memphis Airport District Office Manager.

Sincerely,

*Original signed by James H. Williams*

James H. Williams  
Program Manager  
Memphis, ADO  
[James.Hayward.Williams@faa.gov](mailto:James.Hayward.Williams@faa.gov)  
901-322-8184



RECEIVED

JUN 06 2007

**JUSTICE AND PUBLIC SAFETY CABINET**

**Ernie Fletcher**  
Governor

**Kentucky Vehicle Enforcement**  
Frankfort, Kentucky 40601

**BG Norman E. Arflack**  
Secretary

**Gregory G. Howard**  
Commissioner

June 4, 2007

Mr. Daryl J. Greer, P.E.  
Division of Planning  
Transportation Cabinet  
200 Mero Street  
Frankfort, KY 40622

Dear Mr. Greer:

We are in receipt of your letter requesting any input that Kentucky Vehicle Enforcement might have in regards to a programming study in Russell and Adair Counties on KY 76 from US 127 to KY 206, item no. 08-8302.00.

After having my staff research the matter, our only concern would be if the alternative that is being considered, a reduced Typical Section of 11' lanes with 3'-4' shoulders, would be implemented instead of the 12' lanes and 10' shoulders and the upgrading of all structures which would make KY 76 a Truck Weight Class of "AAA" with the load limit of 80,000 pounds gross weight.

Regardless, it appears that widening the road would be much safer for the motoring public and we see no reason to oppose this upgrade.

If you need any further information, please do not hesitate to let us know.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory G. Howard".

Gregory G. Howard  
Commissioner  
Department of Kentucky Vehicle Enforcement

RECEIVED

JUN 08 2007



UNIVERSITY OF KENTUCKY

**Kentucky Geological Survey**  
Research  
228 Mining & Mineral Resources Bldg.  
Lexington, KY 40506-0107  
Phone: (859) 257-5500  
Fax: (859) 257-1147  
[www.uky.edu/kgs](http://www.uky.edu/kgs)

June 1, 2007

Daryl J. Greer, P.E.  
Director, Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
5<sup>th</sup> Floor  
Frankfort, KY 40622

Dear Mr. Greer:

This letter is to summarize any geologic concerns for the planning study:  
Russell and Adair Counties.  
Ky. 76, Study from U.S. 127 to Ky. 206.  
Item No. 08-8302.00.

**Physiographic Region**

The planning area is in the Mississippian Plateau (Pennyroyal or Pennyrile) Physiographic Region, which is underlain by limestone, some of which is argillaceous and arenaceous in parts, sandstone, siltstone, shale, claystone, gravel, sand, and silt.

**Karst Potential**

The planning area should not encounter karst features such as sinkholes and caves.

**Landslide Potential**

The planning area would not encounter any pre- or post-landslide hazard.

**Unconsolidated Sediments**

The planning area would encounter unconsolidated sediments, such as clay, silt, sand, gravel, and chert rubble in the streams.

**Resource Conflicts**

The planning area should not encounter resource conflicts such as prior ownership of property for quarrying or mining.



**Materials Suitability**

The limestones within the planning area are too thinly bedded to be a sufficient supply for road construction and the gravel deposits are too small for any extensive use on large highway projects.

**Fault Potential**

The planning area would not encounter faulted areas.

**Earthquake Ground Motions**

The planning area has a probable peak ground acceleration (PGA) due to earthquake ground motion of 0.09g. There would be a minimal potential for liquefaction or slope failure in the unconsolidated sediments at or near streams by bedrock ground motion.

Sincerely,



Richard A. Smath  
Geologist

JUN 07 2007



Natural Resources Conservation Service  
771 Corporate Drive; Suite 210  
Lexington, KY 40503-5479

June 1, 2007

Mr. Daryl J. Greer, P.E.  
Director, Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street, 5<sup>th</sup> Floor  
Frankfort, KY 40622

RE: Programming Study for Russell and Adair Counties, KY 76, Study from US 127 to KY 206,  
Item No. 08-8302.00

Dear Mr. Greer:

In regards to the Programming Study to determine the potential impacts for improvements on the KY76 highway project in Russell and Adair Counties, the USDA-Natural Resources Conservation Service (NRCS) is concerned with potential impacts that any proposed highway project might have upon prime farmland soils and additional farmlands of statewide importance. If federal dollars are to be used to convert important farmlands from agricultural uses to non-agricultural uses a Form AD-1006 (or Form NRCS-CPA-106 if the project is a corridor type project) must be submitted to the local NRCS office. These forms may be obtained from the local NRCS office and are also available as electronic forms on the web at [http://www.nrcs.usda.gov/programs/fppa/pdf\\_files/AD1006.PDF](http://www.nrcs.usda.gov/programs/fppa/pdf_files/AD1006.PDF) and [http://www.nrcs.usda.gov/programs/fppa/pdf\\_files/CPA106.pdf](http://www.nrcs.usda.gov/programs/fppa/pdf_files/CPA106.pdf).

The NRCS contact person for Russell County is:

Kenny Hammond  
Resource Conservationist  
1640-A North Main Street  
Jamestown, KY 42629  
270-343-3343

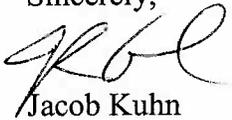
The NRCS contact person for Adair County is:

James Smith  
Resource Conservationist  
965 Campbellsville Road  
Columbia, KY 42728  
270-384-6628

Mr. Hammond and Mr. Smith can help in identifying important farmlands in any proposed project area.

To further assist with the planning efforts, I am enclosing a CD containing ArcView GIS shapefiles of basic soils information for Russell County. The GIS shapefiles are in UTM projection, nad83, zone 16. The soil database table includes a column for "farmland classification-all components" (farmclac) that identifies prime farmlands and soils of statewide importance. A legend file has been provided (farmland\_classif.avl), which may be used with GIS software to more clearly display the soils that are considered prime farmlands and soils of statewide importance. The shapefiles for Adair are currently not completed and should be available later this year. Please contact the district conservationist for Adair if you have any questions regarding soils in that county.

Sincerely,



Jacob Kuhn

Assistant State Conservationist

cc:

J. David Stipes, Area Conservationist, Area 2, 103 Lakeview Court, Frankfort, KY 40601

James Smith, Resource Conservationist, 965 Campbellsville Road, Columbia, KY 42728

Kenny Hammond, Resource Conservationist, 1640-A North Main Street, Jamestown, KY 42629

**Borres, Boday (KYTC)**

---

**From:** Fox, Cynthia (KCHR)  
**Sent:** Wednesday, June 13, 2007 12:55 PM  
**To:** Borres, Boday (KYTC)  
**Subject:** Planning Study  
**Importance:** High

Mr. Borres:

This office has received correspondence from the Transportation Cabinet requesting our input and comments on a planning study to determine the appropriate improvements to KY76 in Russell and Adair Counties.

The Kentucky Commission on Human Rights is charged with the responsibility, under Kentucky law, to enforce the Kentucky Civil Rights Act. We therefore, receive, investigate, and litigate claims of unlawful discrimination in employment, housing, financial transactions and public accommodations, based on protected class status such as race, gender, religion, color, age (40 and over in employment), disability and national origin.

I am not sure what we have to offer you in regards to your study. Most issues that come to the attention of our office, where roads are concerned, are accessibility issues (for people with disabilities).

Please let me know if you have any questions or if we can be of any further assistance.

*Cynthia B. Fox*

Executive Staff Advisor  
Kentucky Commission on Human Rights  
332 W. Broadway, Suite 700  
Louisville, KY 40202  
502-595-4024/800-292-5566



RECEIVED

**Ernie Fletcher**  
Governor

**TRANSPORTATION CABINET**

Frankfort, Kentucky 40622  
www.kentucky.gov

JUN 18 2007

**Bill Nighbert**  
Secretary

**MEMORANDUM**

**Marc Williams**  
Commissioner of Highways

TO: Daryl Greer, P.E.  
Director  
Division of Planning

FROM: Cass T. Napier *CTN*  
Branch Manager  
Permits

DATE: June 18, 2007

RE: KY 76, Adair and Russell Counties  
Scoping Study, Improvements from  
US 127 in Russell Co. to KY 206 in Adair Co.  
Item No. 8-8302.00

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

1. Please notify this office should portions of this project be designed as partial control access.
2. In segments where access may be partial control we encourage all possible access points be set on the plans in accordance with 603 KAR 5:120, even if they are not to be constructed at that time.
3. When buying R/W for this and all reconstruction routes, if a segment has partial control access, new deeds for all adjoining property owners need to be executed to identify the access control even if no new R/W is acquired.
4. Please notify this office if the proposed roadway is to be placed on the National Highway System. This information is needed to assist this office in regulating the installation of any outdoor advertising device. Also, if the proposed roadway is to be on the N. H. S., early notification of the final line and grade is needed. This enables us to monitor outdoor advertising devices prior to road construction being completed.

Thank you for the opportunity to verbalize our concerns.

CTN/mlc



## TRANSPORTATION CABINET

Frankfort, Kentucky 40622  
www.kentucky.gov

**Ernie Fletcher**  
Governor

**Bill Nighbert**  
Secretary

### MEMORANDUM

**Marc Williams**  
Commissioner of Highways

TO: Daryl Greer, P.E.  
Director  
Division of Planning

FROM: Cass T. Napier *CTN*  
Branch Manager  
Permits

DATE: June 18, 2007

RE: KY 76, Adair and Russell Counties  
Scoping Study, Improvements from  
US 127 in Russell Co. to KY 206 in Adair Co.  
Item No. 8-8302.00

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Thank you for the opportunity to verbalize our concerns.

CTN/mlc



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JUN 20 2007

**ENVIRONMENTAL AND PUBLIC PROTECTION CABINET**

**Ernie Fletcher**  
Governor

**Department for Natural Resources**  
2 Hudson Hollow  
Frankfort, Kentucky 40601  
Phone (502) 564-6940  
Fax (502) 564-5698  
www.eppc.ky.gov  
www.dnr.ky.gov

**Teresa J. Hill**  
Secretary

**Susan C. Bush**  
Commissioner

June 15, 2007

Daryl J. Greer, P.E., Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
Station W5-05-01  
Frankfort, Kentucky 40622

RE: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 80-8302.00

Dear Mr. Greer:

Thank you for the opportunity to comment on the planning study to determine the need and potential impacts for improvements on the KY 76 highway project in Russell and Adair Counties. The Department for Natural Resources has examined the documentation. The Division of Mine Reclamation and Enforcement has found no active or historic mining in the area.

According to the Kentucky Division of Oil and Gas Conservation, this is an area of known oil and gas exploration activity. The Kentucky Geological Survey can provide an overlay with the wells plotted for this area. Should you have any additional questions or concerns, please call Kim Collings at (502) 573-0147 or Linda Potter at (502) 564-6940.

Sincerely,

Susan C. Bush, Commissioner

**Borres, Boday (KYTC)**

---

**From:** Potter, Linda (EPPC DNR COM)  
**Sent:** Friday, June 15, 2007 3:08 PM  
**To:** Borres, Boday (KYTC)  
**Subject:** Russell and Adair Counties improvements to KY 76  
**Attachments:** KYTC Response Adair and Russell KY76.doc

Ms. Borres,  
I have attached DNR's response to the planning study. I will forward a signed copy to Mr. Greer. Thank you.

Linda Potter  
Department for Natural Resources  
#2 Hudson Hollow  
Frankfort, Kentucky 40601  
linda.potter@ky.gov  
502-564-6940 Phone  
502-564-5698 Fax

June 15, 2007

Daryl J. Greer, P.E., Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
Station W5-05-01  
Frankfort, Kentucky 40622

RE: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 80-8302.00

Dear Mr. Greer:

Thank you for the opportunity to comment on the planning study to determine the need and potential impacts for improvements on the KY 76 highway project in Russell and Adair Counties. The Department for Natural Resources has examined the documentation. The Division of Mine Reclamation and Enforcement has found no active or historic mining in the area.

According to the Kentucky Division of Oil and Gas Conservation, this is an area of known oil and gas exploration activity. The Kentucky Geological Survey can provide an overlay with the wells plotted for this area. Should you have any additional questions or concerns, please call Kim Collings at (502) 573-0147 or Linda Potter at (502) 564-6940.

Sincerely,

Susan C. Bush, Commissioner



RECEIVED

JUN 13 2007

DEPARTMENT OF MILITARY AFFAIRS

**Ernie Fletcher**  
Governor

Office of the Adjutant General  
Boone National Guard Center  
Frankfort, KY 40601-6168

**Donald C. Storm**  
Major General, KYNG  
The Adjutant General

June 5, 2007

Daryl J. Greer, P.E.  
Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
5<sup>th</sup> Floor  
Frankfort, KY 40622

Dear Sir:

Subject: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

Pursuant to your May 21, 2007 letter, we have reviewed the project. There are no issues or concerns that impact this agency.

Sincerely, <

Julius L. Berthold, BG (R)  
Executive Director  
Office of Management and Administration  
Department of Military Affairs

C: Joseph Sanderson



**TRANSPORTATION CABINET**

Frankfort, Kentucky 40622  
www.kentucky.gov

**Ernie Fletcher**  
Governor

**Bill Nighbert**  
Secretary

**Marc Williams**  
Commissioner of Highways

May 21, 2007

Mr. Donald C. Storm  
Adjutant General  
Department of Military Affairs  
Boone Nat'l Guard Ctr., 100 Minuteman Pky.  
Frankfort KY 40601

Dear Mr. Storm:

Subject: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

We are requesting your agency's input and comments on a planning study to determine the need and potential impacts for improvements on the KY 76 highway project in Russell and Adair Counties. The Kentucky Transportation Cabinet has assembled a study team to evaluate the safety issues and connectivity along this route. This study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns from your agency that would give insight for this study. The planning study will include a study purpose and project goals for identifying improvements and/or recommendations related to the concerns. We believe that early identification of issues can help us develop a highway project that would avoid or minimize negative impacts in the future.

We respectfully ask that you provide us with your comments by June 15, 2007, to ensure timely progress in this planning effort.

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

Emplo

Mr. Donald C. Storm  
Page 2  
May 21, 2007

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

- Purpose, Issues, Schedule, & Project Goals
- Project Location
- General Information
- Level of Service 2007 & 2030
- High Crash Spot and Segment

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to Boday Borres, P.E., of the Division of Planning by phone at (502) 564-7183 or by email at [boday.borres@ky.gov](mailto:boday.borres@ky.gov). Please address all written correspondence to Daryl J. Greer, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 200 Mero Street, 5<sup>th</sup> Floor, Frankfort, KY 40622.

Sincerely,



Daryl J. Greer, P.E.  
Director  
Division of Planning

DJG/BRB/NH

Enclosures

c/enc: Jose Sepulveda  
John Ballantyne  
Mary Murray  
Anthony Goodman  
Donna Diaz  
Larry Wilson  
Lewis T. Phelps  
Tom Clouse  
David Beattie  
Joe Cox  
Cathi Blair  
David Waldner  
Ananias Calvin

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commander  
Eighth Coast Guard District

1222 Spruce Street  
St. Louis, MO 63103-2832  
Staff Symbol: dwb  
Phone: (314) 269-2380  
Fax: (314) 269-2737  
Email: peter.j.sambor@uscg.mil

16591.1/KY 76  
May 31, 2007

**RECEIVED**

**JUN 18 2007**

Mr. Daryl J. Greer, Director, Div of Planning  
Kentucky Transportation Cabinet  
200 Mero Street, 5<sup>th</sup> Floor, Station W5-05-01  
Frankfort, KY 40622

Subj: KY 76 IMPROVEMENT PROJECT

Dear Mr. Greer:

We have reviewed the information provided in your letter of May 21, 2007 and determined that this project is not a project over which the Coast Guard exercises jurisdiction for bridge administration purposes. A Coast Guard permit is not required.

If there are any questions, please contact Mr. Peter Sambor at the above extension. We appreciate the opportunity to comment on the project.

Sincerely,

A handwritten signature in blue ink that reads "R. K. Wiebusch".

ROGER K. WIEBUSCH  
Bridge Administrator  
By direction of the District Commander



RECEIVED

JUN 18 2007

## ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

**Ernie Fletcher**  
Governor

**Division of Conservation**  
375 Versailles Road  
Frankfort, Kentucky 40601  
Phone (502) 573-3080  
Fax (502) 573-1692  
[www.conservation.ky.gov](http://www.conservation.ky.gov)

**Teresa J. Hill**  
Secretary

**Stephen A. Coleman**  
Director

June 15, 2007

Mr. Daryl Greer, P.E.  
Director, Division of Planning  
Kentucky Transportation Cabinet  
Station: W5-05-01  
200 Mero Street  
Frankfort, KY 40622

**Subject:** Programming Study for KY 76 in Russell and Adair Counties

Dear Mr. Greer:

As requested, the Division of Conservation has reviewed the planning study to improve KY 76 beginning at the intersection of US 127/KY 76 in Russell County and ending at the intersection of KY 206/KY 76 in Adair County. We would like to provide the following comments and express concerns that may be helpful in this initial data-gathering stage.

There are no agricultural districts established along the project area, therefore land enrolled in the Agricultural District Program will not have to be mitigated by the Department of Transportation.

We would like to see the issue of the loss of farmland addressed. Both prime farmland and farmland of statewide importance could be impacted by this project. Every year pressure imposed by utility right-of-ways, urban expansion, and new roads reduce the land available for agricultural use in the Commonwealth. There are three documents that could be utilized to identify these farmland designations: the *Soil Survey Adair County* (NRCS 1964), *Soil Survey of Russell County* (NRCS 1982) and *Important Farmland Soils of Kentucky* (NRCS 1981). All documents are available through this office. The soil survey information for Russell County can also be downloaded at the following web sites: <http://soildatamart.nrcs.usda.gov/> or <http://websoilsurvey.nrcs.usda.gov>. Adair County soil information is not yet available at either web site.

One other concern we would like to comment on is the control of erosion and sedimentation during and after earth-disturbing activities once this project begins. We recommend best management practices (BMPs) be utilized to prevent nonpoint source water pollution. This would protect the water quality and aquatic habitat of the perennial and intermittent streams that this project could impact.

**Mr. Daryl Greer, P.E.**

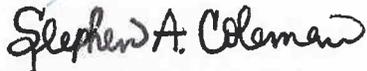
**June 15, 2007**

**Page Two**

The manual, *Best Management Practices for Construction Activities*, contains information on the kinds of BMPs most appropriate for this project and is available through the Russell County or Adair County Conservation Districts, the Kentucky Division of Water, or this office. Also an electronic version of the *Kentucky Erosion Prevention and Sediment Control Field Guide* is available online at <http://www.water.ky.gov/sw/nps/Publications.htm>

We appreciate the opportunity to comment on this project. If you have any questions, please contact this office any time.

Sincerely,



Stephen A. Coleman, Director  
Kentucky Division of Conservation

SAC/MD/aeh



RECEIVED

JUN 18 2007

**CABINET FOR HEALTH AND FAMILY SERVICES  
FACILITIES MANAGEMENT DIVISION**

**Ernie Fletcher**  
Governor

275 E. Main Street, 4E-C  
Frankfort, KY 40621  
(502) 564-6631  
Fax: (502) 564-2608  
www.chfs.ky.gov

**Mark D. Birdwhistell**  
Secretary

June 13, 2007

Kentucky Transportation Cabinet  
Dept. of Highways District 5 Office  
Mr. Daryl J. Greer, P.E., Director, Division of Planning  
200 Mero Street  
5<sup>th</sup> Floor  
Frankfort, Ky. 40622

Subject: Russell & Adair Counties Planning Study  
KY 76 from US 127 to KY 206

Mr. Greer;

The Kentucky Transportation Cabinet has asked that we identify specific issues or concerns which may affect the development of a road improvement project in Russell & Adair Counties; the project would involve improvements in the KY 76 from US 127 to KY 206. We have reviewed the project location map, the existing area highway management system data, geometric and traffic characteristics of the existing highways, and crash analysis provided by your office.

The Cabinet for Health and Family Services does not lease or own property located within KY 76 from US 127 to KY 206; therefore, we do not anticipate or have any specific issues or concerns with regards to this proposed project.

Thank you for giving consideration to our facilities, staff, and clients.

Sincerely,

  
Robert W. Wright  
Leased Properties Branch

Cc: file

File Code: 1950

Date: JUN 1 - 2007

RECEIVED

JUN 20 2007

Mr. Daryl J. Greer  
Director, Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street, 5th Floor  
Frankfort, KY 40622

Dear Mr. Greer:

Thank you for the opportunity to provide input on projects coming from the Transportation Cabinet. I applaud your effort to involve the public and other agencies early. Russell and Adair Counties are outside of, and to the west of the proclamation boundary for the Daniel Boone National Forest. Any activities designed to improve KY 76 are not likely to cause impacts to resources or programs on National Forest System lands. However, I encourage you to include wildlife-friendly passages as part of project design.

Sincerely,



JEROME E. PEREZ  
Forest Supervisor



RECEIVED

JUN 21 2007

ERNIE FLETCHER  
Governor

COMMONWEALTH OF KENTUCKY  
KENTUCKY STATE POLICE  
919 VERSAILLES ROAD  
FRANKFORT 40601

JOHN (JACK) ADAMS  
COMMISSIONER

**MEMORANDUM**

**To:** Lt. Brent Roper  
**FROM:** Sgt. David Ray Gibbs  
**DATE:** June 7, 2007  
**SUBJECT:** Ky 76 Improvements

Kentucky 76 needs improvements. Some include but are not limited to, increasing the shoulder in both directions, if it rains at night it is almost impossible to notice any of the lines on the roadway. The roadway is very dark with no light and very few Roadway signs that show the contours of the roadway. The main problem is if you have car trouble there is no where to pull over. You have to hope you are near a driveway that you can pull into. Bigger shoulders and more visible roadway are the two big issues.

dg/DG

*Rw 6-12-07  
Lt. Brent Roper u/a*

Sgt. David Ray Gibbs Unit 191

*Sgt. David Ray Gibbs u/a*

**Kentucky**  
UNBRIDLED SPIRIT

AN EQUAL OPPORTUNITY EMPLOYER M/F/D



KENTUCKY STATE POLICE  
COMMISSIONER'S OFFICE

Ernie Fletcher  
Governor

TRANSPORTATION CABINET

Frankfort, Kentucky 40622  
www.kentucky.gov

May 21, 2007

Route To:  
5-22-07

- Commissioner
- Deputy Commissioner
- Legal
- Fin./Grant Mgmt.
- Operations Div.
- Administrative Div.
- Technical Services
- Human Resources
- Community Relations
- Other

Bill Nighbert  
Secretary

Marc Williams  
Commissioner of Highways

*LTC Hayes*  
*Man - Banks*  
*Cap + Speck*

*Cap Speck*  
*For response*  
*5/22*

Mr. John Adams  
Commissioner  
Kentucky Department of State Police  
919 Versailles Road  
Frankfort KY 40601

Dear Mr. Adams:

Subject: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

We are requesting your agency's input and comments on a planning study to determine the need and potential impacts for improvements on the KY 76 highway project in Russell and Adair Counties. The Kentucky Transportation Cabinet has assembled a study team to evaluate the safety issues and connectivity along this route. This study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns from your agency that would give insight for this study. The planning study will include a study purpose and project goals for identifying improvements and/or recommendations related to the concerns. We believe that early identification of issues can help us develop a highway project that would avoid or minimize negative impacts in the future.

We respectfully ask that you provide us with your comments by June 15, 2007, to ensure timely progress in this planning effort.

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

Mr. John Adams  
Page 2  
May 21, 2007

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

- Purpose, Issues, Schedule, & Project Goals
- Project Location
- General Information
- Level of Service 2007 & 2030
- High Crash Spot and Segment

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to Boday Borres, P.E., of the Division of Planning by phone at (502) 564-7183 or by email at [boday.borres@ky.gov](mailto:boday.borres@ky.gov). Please address all written correspondence to Daryl J. Greer, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 200 Mero Street, 5<sup>th</sup> Floor, Frankfort, KY 40622.

Sincerely,



Daryl J. Greer, P.E.  
Director  
Division of Planning

DJG/BRB/NH

Enclosures

c/enc: Jose Sepulveda  
John Ballantyne  
Mary Murray  
Anthony Goodman  
Donna Diaz  
Larry Wilson  
Lewis T. Phelps  
Tom Clouse  
David Beattie  
Joe Cox  
Cathi Blair  
David Waldner  
Ananias Calvin



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JUN 22 2007

**COMMERCE CABINET  
DEPARTMENT OF PARKS**

**Ernie Fletcher**  
Governor

Capital Plaza Tower, 11<sup>th</sup> Floor  
500 Mero Street  
Frankfort, Kentucky 40601-1974  
Phone 502-564-2172  
Fax 502-564-9015  
www.parks.ky.gov

**George Ward**  
Secretary

**J.T. Miller**  
Commissioner

June 19, 2007

Daryl J. Greer  
P.E. Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
Frankfort, KY 40622

Dear Mr. Greer:

Subject: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

The Kentucky Department of Parks received your request for input and comments relating to a study for improvements on the KY 76 highway project in Russell and Adair counties.

The Department of Parks has no preference in the KY 76 highway project.

Sincerely,

John Kington  
Deputy Commissioner  
Kentucky Department of Parks



Centers for Disease Control  
and Prevention (CDC)  
Atlanta GA 30333

June 11, 2007

RECEIVED

JUN 25 2007

Mr. Daryl Greer, P.E.  
Director, Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street, 5<sup>th</sup> Floor  
Frankfort, Kentucky 40622

Dear Mr. Greer:

Thank you for your advance notification for an environmental study for KY 76, Study from US 127 to KY 206.. We are responding on behalf of the Department of Health and Human Services (DHHS), U.S. Public Health Service.

While we have no project specific comments to offer at this time, we do recommend that the topics listed below be considered during the NEPA process along with other necessary topics, and addressed if appropriate. Mitigation plans which are protective of the environment and public health should be described wherever warranted.

AREAS OF POTENTIAL PUBLIC HEALTH CONCERN:

I. Air Quality

- dust control measures during project construction, and potential releases of air toxins potential process air emissions after project completion
- compliance with air quality standards

II. Water Quality/Quantity

- special consideration to private and public potable water supply, including ground and surface water resources
- compliance with water quality and waste water treatment standards
- ground and surface water contamination (e.g. runoff and erosion control)
- body contact recreation

III. Wetlands and Flood Plains

- potential contamination of underlying aquifers
- construction within flood plains which may endanger human health
- contamination of the food chain

IV. Hazardous Materials/Wastes

- identification and characterization of hazardous/contaminated sites
- safety plans/procedures, including use of pesticides/herbicides; worker training
- spill prevention, containment, and countermeasures plan

V. Non-Hazardous Solid Waste/Other Materials

- any unusual effects associated with solid waste disposal should be considered

VI. Noise

- identify projected elevated noise levels and sensitive receptors (i.e. residential, schools, hospitals) and appropriate mitigation plans during and after construction

VII. Occupational Health and Safety

- compliance with appropriate criteria and guidelines to ensure worker safety and health

VIII. Land Use and Housing

- special consideration and appropriate mitigation for necessary relocation and other potential adverse impacts to residential areas, community cohesion, community services
- demographic special considerations (e.g. hospitals, nursing homes, day care centers, schools)
- consideration of beneficial and adverse long-term land use impacts, including the potential influx of people into the area as a result of a project and associated impacts
- potential impacts upon vector control should be considered

IX. Environmental Justice

- federal requirements emphasize the issue of environmental justice to ensure equitable environmental protection regardless of race, ethnicity, economic status or community, so that no segment of the population bears a disproportionate share of the consequences of environmental pollution attributable to a proposed project. (Executive Order 12898)

While this is not intended to be an exhaustive list of possible impact topics, it provides a guide for typical areas of potential public health concern which may be applicable to this project. Any health related topic which may be associated with the proposed project should receive consideration when developing the draft and final EISs. Please furnish us with one copy of the draft document when it becomes available for review.

Sincerely yours,



Paul Joe, DO, MPH  
Medical Officer  
National Center for Environmental Health (F16)  
Centers for Disease Control & Prevention



RECEIVED

JUL 03 2007

KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES  
COMMERCE CABINET

Ernie Fletcher  
Governor

#1 Sportsman's Lane  
Frankfort, Kentucky 40601  
Phone (502) 564-3400  
1-800-858-1549  
Fax (502) 564-0506  
fw.ky.gov

George Ward  
Secretary

Dr. Jonathan W. Gasset  
Commissioner

June 27, 2007

Daryl J. Greer, P. E.  
Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
Frankfort, KY 40622

RE: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

Dear Mr. Greer:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) have received your request for the above-referenced information. The Kentucky Fish and Wildlife Information System indicate that the federally endangered gray bat, *Myotis grisescens* and Indiana bat, *Myotis sodalis* are known to occur or could occur within close proximity to the project area. Please be aware that our database system is a dynamic one that only represents our current knowledge of the various species distributions.

- The Indiana bat utilizes a wide array of habitats, including riparian forests, upland forest, and fencerows for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Trees in excess of 16 inches diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH. Removal of suitable Indiana bat roost trees due to construction of the proposed project should be completed between October 15 and March 31 in order to avoid impacting summer roosting Indiana bats. However, if any Indiana bat hibernacula are identified on the project area or are known to occur within 10 miles of the project area, we recommend the applicant only remove trees between November 15 and March 31 in order to avoid impacting Indiana bat "swarming" behavior.
- In areas where bats are known to occur, cave entrances, mine portals, and/or rock shelters that exist within the project area should be surveyed for potential use by such species as gray bats and Indiana bats. KDFWR recommends avoiding those areas that provide adequate habitat for bats.
- To minimize impacts to aquatic resources strict erosion control measures should be developed and implemented prior to construction to minimize siltation into streams located within the project area. Such erosion control measures may include, but are not limited to silt fences, staked straw bales, brush barriers, sediment basins, and diversion ditches. Erosion control measures will need to be installed prior to construction and should be inspected and repaired regularly as needed.



For more information on how to proceed with the threatened/endangered species surveys please contact the US Fish and Wildlife Service Kentucky Field Office at (502) 695-0468.

It appears that the proposed project has the potential to impact wetland habitats. KDFWR recommends that you look at the appropriate US Department of Interior National Wetland Inventory Map (NWI) and the appropriate county soil surveys to determine where the proposed project may impact wetlands. Additionally, field verification may be needed to determine the extent and quality of wetland habitats within the project area. Any planning should include measures designed to eliminate and/or reduce impacts to wetland habitats. If impacts cannot be avoided, mitigation should be properly designed and proposed to offset the losses. KDFWR will recommend, at a minimum, a 2:1 mitigation ratio for any permanent loss or degradation of wetland habitats.

KDFWR recommends that you contact the appropriate US Army Corps of Engineers office and the Kentucky Division of Water prior to any work within the waterways or wetland habitats of Kentucky. Additionally, KDFWR recommends the following for the portions of the project that impact streams:

- Channel changes located within the project area should incorporate natural stream channel design.
- If culverts are used, the culvert should be designed to allow the passage of aquatic organisms.
- Culverts should be designed so that degradation upstream and downstream of the culvert does not occur.
- Development/excavation during low flow period to minimize disturbances.
- Proper placement of erosion control structures below highly disturbed areas to minimize entry of silt into area streams.
- Replanting of disturbed areas after construction, including stream banks, with native vegetation for soil stabilization and enhancement of fish and wildlife populations. We recommend a 100 foot forested buffer along each stream bank.
- Return all disturbed instream habitat to a stable condition upon completion of construction in the area.
- Preservation of any tree canopy overhanging any streams within the project area.

I hope this information proves helpful to you. If you have any questions or require additional information, please call me at (800) 852-0942 Extension 366.

Sincerely,



Doug Dawson  
Wildlife Biologist III

Cc: Environmental Section File

RECEIVED

JUL 24 2007



**ENVIRONMENTAL AND PUBLIC PROTECTION CABINET**

**Ernie Fletcher**  
Governor

**DEPARTMENT FOR ENVIRONMENTAL PROTECTION**  
14 REILLY ROAD  
FRANKFORT, KENTUCKY 40601  
PHONE (502) 564-2150  
FAX (502)564-4245  
[www.dep.ky.gov](http://www.dep.ky.gov)

**Teresa J. Hill**  
Secretary

**Cheryl A. Taylor**  
Commissioner

July 20, 2007

Mr. Daryl J. Greer, P.E., Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
Frankfort, KY 40622

Re: Programming Study Russell and Adair Counties KY 76 from US 127 to KY 206 (SERO 2007-10)

Dear Mr. Greer,

The Environmental and Public Protection Cabinet serves as the state clearinghouse for review of environmental documents generated pursuant to the National Environmental Policy Act (NEPA). Within the Cabinet, the Commissioner's Office in the Department for Environmental Protection coordinates the review for Kentucky state agencies.

The Kentucky agencies listed on the attached sheet have been provided an opportunity to review the above referenced report. Responses were received from 7 of the reviewing agencies that were forwarded a copy of the document. One agency, the Department for Natural Resources indicated that they had already responded to your request via letter dated June 15, 2007. If you cannot locate that letter, let me know. Comments were also received from the Kentucky Divisions of Water, Waste Management, and Air Quality, and the Division of Forestry, Kentucky Heritage Council, and the Department of Fish and Wildlife Resources.

If you should have any questions, please contact me at (502) 564-2150, ext. 112.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry C. Taylor".

Larry C. Taylor  
State Environmental Review Officer

Enclosures

**COMMONWEALTH OF KENTUCKY  
STATE ENVIRONMENTAL REVIEW PROCESS**

**Project Number:** SERO 2007 - 10

**Initial Coordination Effort**

**Project Title:**

Programming Study Russell and Adair Counties KY 76 from US 127 to KY 206

The following Commonwealth of Kentucky agencies make up the State Environmental Review Process. Their response is listed below. Agencies that did not receive the document for review or did not respond are also noted.

<b>REVIEWING AGENCIES:</b>	<b>RESPONSE:</b>
Division of Water.....	COMMENTS ATTACHED
Division of Waste Management.....	COMMENTS ATTACHED
Division for Air Quality.....	COMMENTS ATTACHED
Department for Public Health.....	Not Sent for Review
Cabinet for Economic Development.....	Not Sent for Review
Department of Forestry.....	COMMENTS ATTACHED
Department of Parks.....	No Response Received
Department of Agriculture.....	No Response Received
Nature Preserves Commission.....	No Response Received
Kentucky Heritage Council.....	COMMENTS ATTACHED
Division of Conservation.....	No Response Received
Department for Natural Resources.....	COMMENTS ATTACHED
Department of Fish and Wildlife Resources....	COMMENTS ATTACHED
Transportation Cabinet.....	Not Sent for Review
Department for Military Affairs.....	Not Sent for Review

**Division of Water Comments**

## **KY 76 Programming Study from US 127 to KY 206**

### **Endorsement:**

A request for review of the Programming Study for Russell and Adair County's KY 76 from US 127 to KY 206 was received on June 11, 2007. The Division of Water (DOW) completed this assessment review and found that the information provided warranted an endorsement of this project. Below are the comments that were received.

### **Water Quality Branch:**

A Special Water exists and will mostly likely be affected by this construction corridor of this project. The segment is a Unnamed Tributary to Green River (MPT 1.0 to 3.3). The Lat/Long for this segment is downstream point (37.1854, -85.1156) and upstream point (37.1595, -85.1134) in Adair County. It is part of the KDOW's reference reach stream program that is used to provide data for similar streams for support comparisons. We use this data from streams like this one to be able to tell what biota should be living in the stream if not affected by man-made perturbations.

### **Groundwater:**

Proposed improvements to Highway 76 in Russell and Adair counties are likely to have minimal, if any, effects to groundwater. However, if they do occur, they are likely to be transitory.

To protect the area's groundwater, the measures found in the following should be adhered to: Kentucky Transportation Cabinet (KYTC) Best Management Practices, the Kentucky Department of Highways Standard Specifications, and the KYTC Generic Groundwater Protection Plan. If, during construction, these measures are found to be inadequate, KYTC is strongly encouraged to consult with the Kentucky Geological Survey and the Division of Water in the development of any new measures that may be necessary.

### **Field Operations**

Endorse.

### **Water Resources:**

This project does not require a Stream Construction Permit from the DOW; however, the Transportation Cabinet must meet FEMA requirements.

### **Enforcement Branch:**

The Division of Enforcement does not object to the project proposed by the applicant.

**Division of Waste Management Comments**

Project #: SERO 2007-10

All solid waste generated by this project must be disposed at a permitted facility. If underground storage tanks are encountered they must be properly addressed. If asbestos, lead paint, and/or other contaminants are encountered during this project, they must be properly addressed.

**Division for Air Quality Comments**

Kentucky Division for Air Quality Regulation **401 KAR 63:010** Fugitive Emissions states that no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precaution to prevent particulate matter from becoming airborne. Additional requirements include the covering of open bodied trucks, operating outside the work area transporting materials likely to become airborne, and that no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. Please note the Fugitive Emissions Fact Sheet located at [http://www.air.ky.gov/homepage\\_repository/e-Clearinghouse.htm](http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm)

Kentucky Division for Air Quality Regulation **401 KAR 63:005** states that open burning is prohibited. Open Burning is defined as the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outdoor atmosphere without passing through a stack or chimney. However, open burning may be utilized for the expressed purposes listed on the Open Burning Fact Sheet located at [http://www.air.ky.gov/homepage\\_repository/e-Clearinghouse.htm](http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm)

The Division also suggests an investigation into compliance with applicable local government regulations.

**Division of Forestry**

## Taylor, Larry (EPPC DEP COM)

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**From:** Olszowy, Diana (EPPC DNR DOF)  
**Sent:** Monday, June 25, 2007 3:53 PM  
**To:** Taylor, Larry (EPPC DEP COM)  
**Cc:** Olszowy, Diana (EPPC DNR DOF)  
**Subject:** KY 76 road construction

**Attachments:** selecting and planting trees.pdf



selecting and  
planting trees.p...

This e-mail serves as an environmental assessment of the proposed KY 76 highway project being initiated in Russell and Adair counties. There are currently no state forests or champion trees located in the project area. However, special care should be taken around existing trees that will remain after the construction is complete. Heavy equipment should be kept away from the base of the tree to prevent wounding of the trunk or surface roots. Construction traffic should be routed away from the dripline of the tree to lessen the severity of soil compaction. Compacted soil reduces the amount of water available to the tree, and this lack of water can cause added stress. Stressed trees are vulnerable to insect and disease infestation.

After completion of the project, consider planting additional trees in the landscape. Trees selected should be matched to the site. I've attached a publication entitled "Selection and Planting Trees," which will assist in determining the correct species for the correct site conditions. Please contact me for further assistance.

Diana Olszowy  
Kentucky Division of Forestry  
diana.olszowy@ky.gov  
502-564-4496

**Kentucky Heritage Council Comments**



**COMMERCE CABINET  
KENTUCKY HERITAGE COUNCIL**

**Ernie Fletcher**  
Governor

**The State Historic Preservation Office**  
300 Washington Street  
Frankfort, Kentucky 40601  
Phone (502) 564-7005  
Fax (502) 564-5820  
www.kentucky.gov

**George Ward**  
Secretary

July 9, 2007

Mr. Larry Taylor  
Department for Environmental Protection  
Commissioner's Office  
14 Reilly Road  
Frankfort, Kentucky 40601

**Re: Programming Study KY 76 from US 127 to KY 206 (Russell and Adair Counties, Kentucky)**

Dear Mr. Taylor:

Thank you for your letter concerning the above referenced project. While no known historical, cultural, or archaeological sites are directly located in the project area, a number of archaeological sites are located nearby the project area including, 15Ru4 and 15Ru116 representing prehistoric sites. Our review indicates that the proposed project has the potential to impact sites eligible for listing in the National Register of Historic Places. Therefore, I recommend that the entire project area be surveyed by a professional archaeologist. A report documenting the results of this investigation must be submitted to the State Historic Preservation Officer for review, comment, and approval.

Should you have any questions, feel free to contact Lori Stahlgren of my staff at (502) 564-7005, extension 118.

Sincerely,

Donna M. Neary, Executive Director  
Kentucky Heritage Council and  
State Historic Preservation Officer

**Department of Fish and Wildlife Resources Comments**



**KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES  
COMMERCE CABINET**

**Ernie Fletcher**  
Governor

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Frankfort, Kentucky 40601  
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**George Ward**  
Secretary

**Dr. Jonathan W. Gassett**  
Commissioner

June 27, 2007

Daryl J. Greer, P. E.  
Director  
Division of Planning  
Kentucky Transportation Cabinet  
200 Mero Street  
5<sup>th</sup> Floor  
Frankfort, KY 40622

RE: Programming Study  
Russell & Adair Counties  
KY 76, Study from US 127 to KY 206  
Item No. 08-8302.00

Dear Mr. Greer:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) have received your request for the above-referenced information. The Kentucky Fish and Wildlife Information System indicate that the federally endangered gray bat, *Myotis grisescens* and Indiana bat, *Myotis sodalis* are known to occur or could occur within close proximity to the project area. Please be aware that our database system is a dynamic one that only represents our current knowledge of the various species distributions.

- The Indiana bat utilizes a wide array of habitats, including riparian forests, upland forest, and fencerows for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Trees in excess of 16 inches diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH. Removal of suitable Indiana bat roost trees due to construction of the proposed project should be completed between October 15 and March 31 in order to avoid impacting summer roosting Indiana bats. However, if any Indiana bat hibernacula are identified on the project area or are known to occur within 10 miles of the project area, we recommend the applicant only remove trees between November 15 and March 31 in order to avoid impacting Indiana bat "swarming" behavior.
- In areas where bats are known to occur, cave entrances, mine portals, and/or rock shelters that exist within the project area should be surveyed for potential use by such species as gray bats and Indiana bats. KDFWR recommends avoiding those areas that provide adequate habitat for bats.
- To minimize impacts to aquatic resources strict erosion control measures should be developed and implemented prior to construction to minimize siltation into streams located within the project area. Such erosion control measures may include, but are not limited to silt fences, staked straw bales, brush barriers, sediment basins, and diversion ditches. Erosion control measures will need to be installed prior to construction and should be inspected and repaired regularly as needed.



For more information on how to proceed with the threatened/endangered species surveys please contact the US Fish and Wildlife Service Kentucky Field Office at (502) 695-0468.

It appears that the proposed project has the potential to impact wetland habitats. KDFWR recommends that you look at the appropriate US Department of Interior National Wetland Inventory Map (NWI) and the appropriate county soil surveys to determine where the proposed project may impact wetlands. Additionally, field verification may be needed to determine the extent and quality of wetland habitats within the project area. Any planning should include measures designed to eliminate and/or reduce impacts to wetland habitats. If impacts cannot be avoided, mitigation should be properly designed and proposed to offset the losses. KDFWR will recommend, at a minimum, a 2:1 mitigation ratio for any permanent loss or degradation of wetland habitats.

KDFWR recommends that you contact the appropriate US Army Corps of Engineers office and the Kentucky Division of Water prior to any work within the waterways or wetland habitats of Kentucky. Additionally, KDFWR recommends the following for the portions of the project that impact streams:

- Channel changes located within the project area should incorporate natural stream channel design.
- If culverts are used, the culvert should be designed to allow the passage of aquatic organisms.
- Culverts should be designed so that degradation upstream and downstream of the culvert does not occur.
- Development/excavation during low flow period to minimize disturbances.
- Proper placement of erosion control structures below highly disturbed areas to minimize entry of silt into area streams.
- Replanting of disturbed areas after construction, including stream banks, with native vegetation for soil stabilization and enhancement of fish and wildlife populations. We recommend a 100 foot forested buffer along each stream bank.
- Return all disturbed instream habitat to a stable condition upon completion of construction in the area.
- Preservation of any tree canopy overhanging any streams within the project area.

I hope this information proves helpful to you. If you have any questions or require additional information, please call me at (800) 852-0942 Extension 366.

Sincerely,



Doug Dawson  
Wildlife Biologist III

Cc: Environmental Section File