MOREHEAD SMALL URBAN AREA Transportation Study

HISTORIC DISTRICT

0.3

E to

15 LE

GALLERY

65155 -

.

And all all and a strends



KENTUCKY TRANSPORTATION CABINET DIVISION OF PLANNING FRANKFORT, KENTUCKY

TABLE OF CONTENTS

ES	EXI	EXECUTIVE SUMMARYES-1										
1.0	INT 1.1 1.2 1.3	.2 Morehead SUA Transportation Study1										
2.0	PR	OJECT LC	OCATION AND EXISTING CONDITIONS									
	2.1	Project Lo	ocation2									
	2.2	-	Conditions									
		2.2.1	Average Daily Traffic									
			Volume to Service Flow (VSF)4									
		2.2.3	Composite Adequacy Rating4									
		2.2.4	Vehicle Crash Analysis4									
		2.2.5	AAA Truck Routes6									
		2.2.6	Environmental Justice6									
3.0	INV	OLVEMEI	EAM, LOCAL OFFICIALS AND STAKEHOLDERS									
4.0			PROJECTS									
	4.1		m and Long Term Projects10									
	4.2	•	rioritization Meeting10									
	4.3	•	n Projects									
			ng Term 1-LT12 ng Term 2-LT15									
			ng Term 3-LT									
			ng Term 4-LT									
			ng Term 5-LT									
		KYTC Long Term 6-LT										
	4.4		m Projects									
			ort Term 1-ST									
		KYTC She	ort Term 2-ST									
			ort Term 3-ST									
		KYTC She	ort Term 4-ST32									
		KYTC Sho	ort Term 5-ST									
		KYTC Sho	ort Term 6-ST34									

		Project Ranking	
	4.6	Study Recommendations	35
5.0	со	NTACTS	39

TABLES

Table 1: Existing Highway Systems	3
Table 2: Crash Analysis	
Table 3: Major Crash Types	
Table 4: Selected Rowan County Census Data, 2000	
Table 5: Other Projects Discussed	
Table 6: Prioritized Projects	
Table 7: Results from Ranking of Short Term & Long Term Projects	

FIGURES

Figure 1: Project Study Area	2
------------------------------	---

LIST OF APPENDICES

APPENDIX	40 41
Exhibit 1: Project Study Area	43 44 45 46 47 48 49
APPENDIX B Meeting Minutes	51
APPENDIX C Photos	70
APPENDIX D UPL Projects on KY 60 and KY 32	77

MOREHEAD SMALL URBAN AREA TRANSPORTATION STUDY

EXECUTIVE SUMMARY

PROJECT DESCRIPTION

Small Urban Area (SUA) studies are conducted in communities with a population of 5,000 to 50,000. The City of Morehead is eligible for a SUA study because it had an estimated population of 7707 in 2008. The primary focus of SUA studies is to identify low cost projects that would have an immediate, positive impact for the traveling public in the study area. However, other types of projects may be identified during the investigations and discussions of the Project Team.

The study was conducted with the goal of improving the transportation system in Morehead, not emphasizing additions to the transportation systems, but rather by maximizing the current transportation assets. The current road system was analyzed to identify locations within the study area where problems with safety and congestion may need to be addressed.

The Morehead SUA Transportation Study was conducted by the Kentucky Transportation Cabinet's (KYTC) Division of Planning and District 9 Office in Flemingsburg in cooperation with Gateway Area Development District (GWADD). Representatives from all these groups combined to form a "Project Team".

STUDY LOCATION

The general study area includes the incorporated city limits and surrounding developed areas of Morehead in Rowan County. The project study area is shown in Figure ES-1. A more detailed map is shown in Appendix A as Exhibit 1 in the Report.

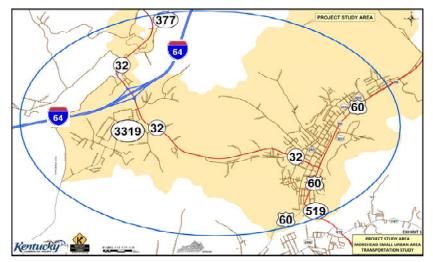


Figure ES-1: Project Study Area

PROJECT RECOMMENDATIONS

The Project Team identified Long Term projects and Short Term projects at the end of the 3rd Project Team meeting held on November 30, 2009.

Long Term Projects: Long Term projects have a higher cost associated with them and are placed in the Unscheduled Project List (UPL) and may be considered for inclusion in the Highway Plan, when prioritizing Kentucky's needs. For the current Study, detailed description of these projects can be seen in Section 4.3, pages 11-23, in the Report.

Short Term Projects: Short Term projects are low cost projects and may be completed by the area KYTC District Office. For the current study, a detailed description of these projects can be seen in Section 4.4, pages 25-34, in the Report.

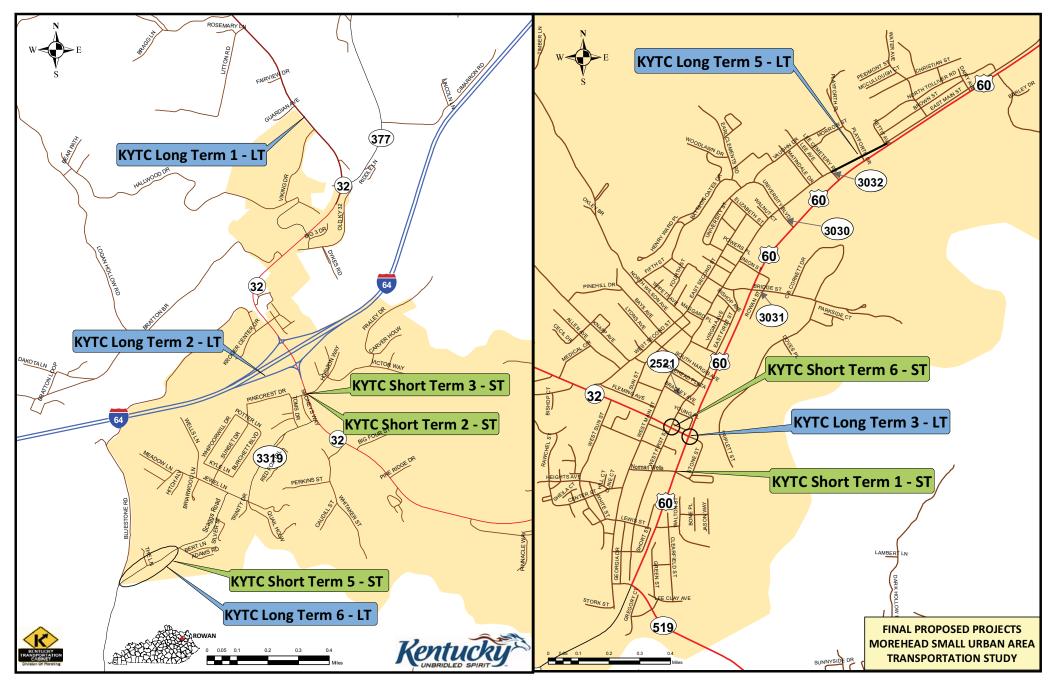
The Project Team, local elected officials and Stakeholders met on April 5th at GWAAD office in Morehead for a Project Prioritization meeting. At the meeting, the selected Long Term and Short term projects were prioritized by ranking them. Other projects discussed during the course of the study are shown in Table 5, page 36, in the Report.

As already mentioned, the primary focus of SUA studies is to identify low cost projects that would have an immediate, positive impact for traveling public in the study area. The ranking of low cost, Short Term projects is shown below:

SHORT TERM PROJECT ^a	PROJECT DESCRIPTION	RANK	TYPE	COST
			Right-	
KYTC Short	US 60 – Norman Wells Lane - Stone Street		In/Right-	
Term 1-ST	intersection	1	Out	\$95,000
KYTC Short	Offset Left Turn Lanes on KY 32 at Pinecrest		Turn	
Term 2-ST	Drive/Fraley Drive	2	Lanes	\$50,000
			Drainage	
KYTC Short	Drainage and Sidewalk improvements at		&	
Term 3-ST	Chevron/Fraley Drive corner	3	Sidewalk	\$85,000
KYTC Short	Scaggs Road/KY 3319 Guardrail project near			
Term 5-ST	Blue Stone Road	5	Guardrail	\$50,000
			Right-	
KYTC Short			In/Right-	
Term 6-ST	KY 32 at First Street Intersection	4	Out	\$35,000

^a KYTC Short Term 4-ST was dropped during the Prioritization process

A ranking of Long Term projects can be seen in Table 7, page 38, in the Report. The location of final proposed projects can be seen in the next page and also as Exhibit 9 in the Report.



1.0 INTRODUCTION

1.1 <u>Small Urban Area Transportation Study - Purpose</u>

Small Urban Area (SUA) transportation studies are conducted in communities with a population of 5,000 to 50,000. A SUA Transportation study is undertaken to identify and address transportation related safety and congestion projects within a designated urbanized area.

1.2 Morehead SUA Transportation Study

The City of Morehead had an estimated population of 7707 in 2008 based on Kentucky Data Center, University of Louisville. SUA studies are prioritized by need, by the Kentucky Transportation Cabinet, based on a normalized score of the existing conditions of the roadway. The normalized score is based on points given to Critical Rate Factor (CRF), Volume to Service Flow ratio (VSF) and Adequacy Rating. A multidisciplinary field review team coordinated by the Division of Planning involving Central Office and District Highway staff scores these points. Based on the score, KYTC identified that a SUA transportation study for Morehead should be conducted.

The study was conducted with the goal of improving the transportation system in Morehead, not emphasizing additions to the transportation systems, rather by maximizing the current transportation assets. A strong focus was given to identification and analysis of road system data for problem spots that are safety and congestion related. At these locations, low cost projects that would have an immediate, positive impact for the traveling public in Morehead were identified. These projects were identified as "Short Term Projects". If projects were encountered, that are not low cost and required major funding, they were placed in a different category as "Long Term Projects".

The study was conducted by the Kentucky Transportation Cabinet (KYTC), Division of Planning in Frankfort, KYTC District 9 Office in Flemingsburg and with cooperation from Gateway Area Development District (GWADD), Morehead. Representatives from all these groups combined to form a "Project Team".

1.3 Programming and Schedule

Several projects around Morehead are listed in Kentucky's FY 2010-2012 Enacted Biennial Highway Plan. These projects are:

• Item 09-197.00: Improve access to the St. Claire Medical Center in Morehead by relocating the existing Second St./KY-32 intersection to align with west Sun St. and continuing East 0.25 mile toward rear Lyons Ave.

- Item 09-0301.1: New route from US-60/KY-32 east of Morehead to I-64 including a new interchange.
- Item 09-1076: Replace bridge on KY-32 (MP 13.289) over Seays branch; 3.5 mi w of JCT KY 504
- Item 09-8406: Reconstruct KY-377 from KY-32 to the Lewis county line to improve safety, capacity, efficiency, and highway systems connectivity in preparation of a new interchange on I-64 at MP 3.1.

Some active construction projects are as follows:

County	SYP #	Description	
ROWAN	09 - 0197.00	SECOND STREET (CS1088) / KY32 INTERSECTION, Improve access to the St. Claire Medical Ctr in Morehead by relocating Second St/KY 32 intersection to align W. Sun St.	
ROWAN	09 - 0194.00	EXINGTON-ASHLAND ROAD (I-64) JL01, Install high mast lighting at the I- 4/KY 801 Interchange in Rowan County	
ROWAN	09 - 0156.01	WEST LIBERTY-MOREHEAD ROAD (KY 519), Reconstruct from 0.5 miles south of Warren branch to US 60 Bypass	
ROWAN	-	MOREHEAD BYPASS (US 60), from 0.112 miles east of KY 519 extending easterly to 190 feet west of KY 3032 (omit MP 7.541 to MP 7.729)	
ROWAN	-	VARIOUS ROUTES IN ROWAN COUNTY, Big Perry Road (KY 799) ; from US 60 extending northerly to KY 377	
ROWAN	-	KY 207 IN GREENUP COUNTY AND US 60 IN ROWAN COUNTY, Greenbo Boulevard (KY 207) ; from 0.207 miles north of KY 503 to 0.030 miles south of KY 503	

2.0 PROJECT LOCATION AND EXISTING CONDITIONS

2.1 Project Location

The general study area included the incorporated city limits and surrounding developed areas of Morehead in Rowan County. The project study area is shown below as Figure 1. A more detailed map is shown in Appendix A as Exhibit 1.

Figure 1: Project Study Area



2.2 Existing Conditions

Data on the existing conditions in the study area was obtained from the Division of Planning's Highway Information System (HIS) database. Table 1 lists some general route information of state-maintained roadways in the study area.

Route	Begin MP	End MP	Lane	Lane Width (feet)	Functional Classification
l 64	128.955	148.665	4	12	Rural Interstate
US 60	5.022	7.099	2	11	Rural Major Collector
	7.099	7.495	2	11	Urban Minor Arterial Street
	7.495	9.683	2	12	Urban Minor Arterial Street
	9.683	9.917	2	12	Rural Major Collector
	9.917	11.000	2	10	Rural Major Collector
KY 32	4.000	8.439	4	12	Urban Principal Arterial
	8.439	8.570	2	12	Rural Major Collector
	8.700	9.593	2	10	Rural Major Collector
KY 519	9.299	10.000	2	10	Rural Minor Arterial
KY 3319	2.250	2.500	2	8	Urban Collector Street
KY 3319	2.500	2.620	2	10	Urban Collector Street

Table 1: EXISTING HIGHWAY SYSTEMS

I 64 is the only route in the study area on the National Highway System (NHS), a system of national roads established by the Intermodal Surface Transportation Efficiency Act (ISTEA) that are important to the nation's economy, defense, and mobility. Also, I 64 is on the National Truck Network and is a Federal Designated truck route. KY 32 from MP 4.000 to MP 5.590 is also on the National Truck Network and is a State Designated truck route.

None of the routes in the study area are on the Bike Route System. KY 32 from MP 0.000 to MP. 8.4390 is a Coal Haul route.

2.2.1 Average Daily Traffic

Average daily traffic (ADT) on state-maintained routes in the study area ranges from 750 vehicles per day (vpd) to 30,600 vpd according to 2005 data. KY 32 between MP 5.662 and MP 8.564 has ADT more than 25,000 vpd. I 64 from MP 128.955 to MP 137.282 has ADT over 20,000. Exhibit 2 in Appendix A shows the ADT of route segments in the study area.

VSF is a measure of capacity. The VSF seaments with either approaching or exceeding 1.0 in the study area are: US 60 from MP 7.100 to MP 9.683 and KY 32 from MP 5.662 to MP 5.940. Also, KY 32 has VSF over 1.0 from MP 6.455 to MP Exhibit 3 in Appendix A 8.564. displays these segments of roadways VSF studv area with in the approaching or exceeding 1.0.

VSF is the quotient showing the ratio of a facility's actual vehicular traffic volume to its theoretical maximum potential vehicular traffic volume. The closer the VSF ratio is to 1.0, the closer the roadway is to capacity. Generally, a ratio higher than 0.70 indicates traffic volumes are approaching congested conditions. VSF is also referred to Volume to Capacity ratio.

2.2.3 Composite Adequacy Rating

Exhibit 4 in Appendix displays segments of roadway with a Composite Adequacy Rating less than the 25th percentile. These segments are located on KY 32 between MP 5.521 and MP 5.940. US 60 from MP 7.100 to MP 7.687 has a Composite Adequacy Rating of 24.0 percentile. KY 519 has a Composite Adequacy Rating of 8.6 percentile from MP 9.732 to MP 10.054. Composite Adequacy Rating is a method originally developed by FHWA and adapted by KYTC to assess a roadway's condition and prioritize highway improvements. The ratings are calculated by individual functional class and based upon three roadway components (safety, service, and condition) with each component comprised of several measures. The rating scores 100 as a perfect, or near perfect, highway. The Composite Adequacy Percentile ranks a particular roadway section compared to other Kentucky roads in the same functional class into a percentile. For example, a road section with a composite adequacy percentile of 75.0 means that 25% of the roads are rated better in that functional class.

2.2.4 Vehicle Crash Analysis

Crash data was obtained from Kentucky State Police database and analyzed.

Summaries of vehicle crashes were recorded with valid reference points in the study area during the three year period between August 1, 2003 and July 31, 2006. Segments exceeding critical rate factor (CRF) have been highlighted in Table 2. Exhibit 5 in Appendix A shows route segments with CRF more than 0.90. Of these 1153 crashes, 889 were property damage

The CRF is the ratio of the actual crash rate on a segment of highway for a given time period as compared to the average crash rate for other similar roads in Kentucky. A CRF greater than 1.00 indicates the segment of roadway has a statistically significant number of crashes and they may not be occurring at random.

only crashes, 250 resulted in injuries, and 4 resulted in fatalities.

Crash data for four roadway segments flagged in the initial analysis summarized in Table 2 were scrutinized in more detail; the results are shown in Table 3. A significant majority of the crashes are occurring in dry weather (77% overall). Similarly, a significant majority of crashes are occurring during daylight hours (78% overall).

TABLE 2: CRASH ANALYSIS

	Begin			Cras	shes		Critical
Route	Mile point	Mile	Property Damage Only	Fatal	Injury	Total	Rate Factor
I 64	128.955	137.282	141	0	37	178	1.800
I 64	137.283	148.665	61	0	18	79	0.605
US 60	5.022	6.500	23	1	13	37	0.840
US 60	6.501	7.099	2	0	6	18	0.757
US 60	7.100	7.687	33	0	13	46	1.027
US 60	7.688	8.858	64	0	26	90	1.090
US 60	8.859	9.683	21	0	4	25	0.468
US 60	9.684	9.989	10	0	5	15	1.003
US 60	9.990	11.000	15	0	8	23	0.820
KY 32	4.000	5.520	74	2	22	98	1.679
KY 32	5.521	5.661	25	0	12	37	2.524
KY 32	5.662	5.886	48	0	7	55	2.044
KY 32	5.887	5.940	51	0	17	68	2.538
KY 32	5.941	6.454	66	0	15	81	0.885
KY 32	6.455	8.564	199	0	35	234	0.754
KY 32	8.565	8.825	11	0	1	12	1.076
KY 32	8.826	9.128	1	0	0	1	0.108
KY 32	9.129	9.593	3	0	2	5	0.452
KY 519	9.299	9.731	12	1	5	18	0.901
KY 519	9.732	10.054	25	0	3	28	1.354
KY 3319	2.261	3.715	4	0	1	5	0.658

Rear End crashes are the most frequent cause of crashes although on the segment of I-64, single vehicle crashes were nearly the same number. Such events are not uncommon along city streets where high traffic volumes contribute to vehicular congestion and where frequent access points generate turning movements which can result in both rear end crashes and "angle collisions". The dominance of rear-end collisions may indicate a potential benefit from an access management strategy for the City of Morehead.

Route	Begin MP	End MP	Crashes w/ Dry Roadway	Crashes in Daylight Condition	Most Frequent "Manner of Collision"
I 64	128.955	137.282	71.0%	76.3%	Rear End or Single Vehicle
US 60	7.100	9.989	80.1%	70.8%	Rear End
KY 32	4.000	8.825	71.8%	82.3%	Rear End
KY 519	9.732	10.054	83.3%	83.3%	Rear End

TABLE 3: MAJOR CRASH TYPES

Source: Kentucky Collision Analysis for the Public website, Data: August 1, 2003-July 31, 2006

2.2.5 AAA Truck Routes

The maximum allowable gross weight limit on each segment of state maintained highway is classified into three types: (1) "AAA" system for eighty thousand (80,000) pounds gross weight, (2) "AA" system for sixty two thousand (62,000) pounds gross weight, and (3) "A" system for forty four thousand (44,000) pounds gross weight. Exhibit 6 in Appendix A shows all the AAA truck routes within the study area.

2.2.6 Environmental Justice

A review of Year 2000 U.S. Census data for Morehead revealed that possible environmental justice issues are present in several Census Block Groups. The highlighted numbers in Table 4 reflect Census Block Groups for which the percentage of an identified population group significantly exceeds the percentage of that same population group for the entire City of Morehead. See Exhibit 7 in Appendix A for the location of the census units shown in Table 4. Recommendations resulting from this study effort should not disproportionately impact the residences of these Census Block Groups in a negative fashion.

Census Tract	Census Block Group	% Minority Persons ⁽¹⁾	% Elderly Persons	% Low Income	% Low English Proficiency ⁽²⁾
950200	1	0.00	5.32	7.85	0.00
950200	2	<mark>5.28</mark>	7.79	<mark>37.50</mark>	0.56
950200	3	<mark>4.57</mark>	<mark>12.70</mark>	<mark>26.26</mark>	0.68
950200	4	<mark>12.46</mark>	7.68	21.31	0.00
950200	5	1.35	<mark>13.05</mark>	<mark>24.96</mark>	<mark>1.09</mark>
950200	6	<mark>7.40</mark>	<mark>9.08</mark>	13.88	0.71
950300	1	<mark>5.41</mark>	5.45	<mark>36.52</mark>	0.00
950300	2	<mark>7.87</mark>	<mark>12.21</mark>	<mark>25.11</mark>	0.00
Morehead		3.60	8.44	22.72	0.54
Rowan County		4.15	7.74	21.26	0.93
Kentucky		9.96	12.46	15.82	0.81
United States		24.90	12.43	12.38	4.31

TABLE 4: SELECTED ROWAN COUNTY CENSUS DATA, 2000

1. For purposes of this table, "minority" is defined as non-white.; (2) Ages 5 and Above

3.0 PROJECT TEAM, LOCAL OFFICIALS & STAKEHOLDERS INVOLVEMENT

The Project Team comprised of KYTC representatives from the Division of Planning, Frankfort, KYTC District 9 representatives, and GWADD representatives. A total of five meetings were conducted during the course of this study.

The 1st Project Team meeting was held at KYTC, D9 Flemingsburg office. At this meeting, an introduction to SUA studies was made and the purpose of the Morehead SUA study was explained. This was followed by a local officials and Stakeholders meeting to introduce the study, provide information of intended projects and to gather input from local officials and Stakeholders. A 2nd Project Team meeting was held on January 7, 2009 for prioritizing the projects. A 3rd Project Team meeting was conducted on November 30, 2009 to update the projects discussed earlier, to update the project list, and to finalize the proposed projects.

The final meeting of the Project Advisory Committee (Project Team, local officials and Stakeholders) to prioritize the selected Projects was held on April 5, 2010. Meeting minutes for each of these meetings can be found in Appendix B.

Site visits to assess safety and congestion issues were conducted by the Project Team. After the 1st Project Team meeting held on April 10, 2008, a site review was conducted. A site visit was also conducted on December 11, 2010. Every

project proposed by the Project Team was field visited and information was gathered. After the Final Advisory Committee meeting on April 5, 2010, a final site visit was conducted to get an update on the latest condition of the intended Projects.

Type of Meeting	Date Held	Place Held		
1 st Project Team Meeting	April 10, 2008	KYTC D9 Office, Flemingsburg		
1 st Stake Holders and Local Officials Meeting	May 22, 2008	Morehead City Hall Conference		
2 nd Project Team Meeting	January 7, 2009	GWADD Office, Morehead		
3 rd Project Team Meeting	November 30, 2009	KYTC D9 Office, Flemingsburg		
Final Advisory Committee Meeting (Project Team, Stakeholders & local officials)	April 5, 2010	GWADD Office, Morehead		

4.0 PROPOSED PROJECTS

4.1 Short Term and Long Term Projects

The Project Team identified Short Term projects and Long Term projects at the end of the 3rd Project Team meeting held on November 30, 2009.

<u>Short Term Projects:</u> Short Term projects are lower cost projects and may be completed by the area KYTC District Office when or if funding becomes available.

Long Term Projects: Long Term projects have a higher cost associated with them and are placed in the Unscheduled Project List (UPL) and may be considered for inclusion in the Highway Plan, when prioritizing Kentucky's needs.

Exhibit 8 shows the proposed Short Term and Long Term Projects considered for Prioritization.

4.2 **Project Prioritization Meeting**

The Project Advisory Committee (PAC) had a final meeting to prioritize the proposed projects on April 5, 2010 at the GWADD conference room in Morehead. The Committee members who attended the meeting included the Mayor, EMS Chief, Police Chief for the City of Morehead, GWADD Planner, KYTC District 9 representatives, and Central Office Planning representatives.

At the meeting, project maps were distributed and a PowerPoint presentation was shown. The topics on the agenda included an explanation of a SUA study, the progress of the current SUA study, and the proposed Projects for the study area. It was explained to the attendees that they would prioritize the projects by ranking them and the results would be available at the end of the meeting.

It was also explained to the attendees that the Morehead SUA study had three Project Team meetings and one Advisory Committee meeting. As a result, six Long Term and six Short Term projects were identified. Meeting minutes can be found in Appendix B.

In the following pages, the proposed Projects that were considered have been discussed. Decisions made by the PAC group are also described.

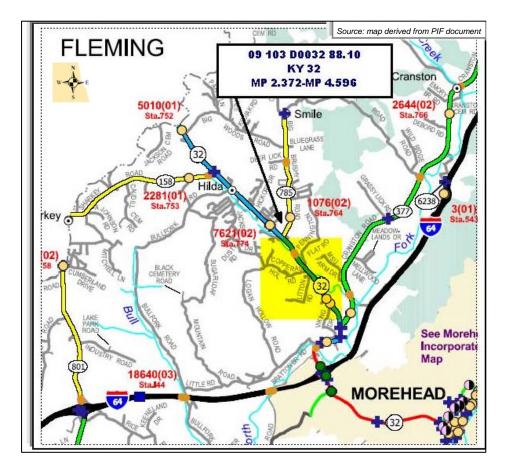
4.3 Long Term Projects (KYTC Long Term 1-LT through KYTC Long Term 6-LT)

KYTC LONG TERM 1-LT

KY 32 Projects from KY 785 (MP 2.372) to KY 377 (MP 4.596)

Project Background

KY 32 is a two lane roadway with narrow shoulders from KY 785 to KY 377 (MP 2.372 to MP 4.596). Horizontal and vertical deficiencies are evident and negatively impact sight distances and operational efficiency of the route. There are several businesses and schools along this route that use large trucks or buses for transporting people and goods. One problem area is at the junction of Copperas Hollow Road with KY 32 (see photo next page). Westbound vehicles waiting to turn left to travel to Copperas Hollow Road pose a problem to westbound traffic on KY 32.



This type of traffic combined with the rural nature of this segment causes traffic congestion, especially during peak hours of the day.

Proposed Project

This project is listed in the Unscheduled Project List (UPL Control #: 09 103 D0032 88.10) and a KYTC Project Identification Form (PIF) currently exists (see Appendix D).

The project will correct horizontal and vertical deficiencies to improve operational efficiency, improve regional systems connectivity and improve safety.

Two subprojects have been added to the original UPL project. One of the projects is the addition of a right turn lane at Guardian Avenue traveling East on KY 32 (see photo below for this location). The Middle School intends to use Guardian Avenue for all their traffic when they open in the near future. An exclusive right turn lane will address the needs of the School traffic.



The second project is the construction of a common intersection for Viking Drive and lumber yard traffic shown in the photo below. Nearly fifty trucks each day enter or leave the lumber yard and in the process, block traffic and create congestion. Signal improvements will be considered at this intersection including new loops and signal heads. There are several utilities (twelve inch and eight inch waterline and a gas line) that could be affected with intersection improvements. An improved commercial entrance at the lumberyard would help relieve congestion at this intersection.



Planning Cost Estimate

The combined estimated cost of all the improvements is \$33,726,000.

	ESTIMATED COST				
	Design/Planning	Right of Way	Utilities	Construction	TOTAL
KY 32 Improvements	\$2,052,000	\$9,075,000	\$3,888,000	\$18,036,000	\$33,051,000
Intersection at KY 32 - Viking Dr - Lumber Yard	\$50,000	\$25,000	\$50,000	\$150,000	\$275,000
Right Turn Lane at Guardian Avenue	\$75,000	\$75,000	\$100,000	\$150,000	\$400,000
TOTAL	\$2,177,000	\$9,175,000	\$4,038,000	\$18,336,000	\$33,726,000

KYTC LONG TERM 2-LT

Off ramp of I-64 East to KY 32

Project Background

The off ramp of I-64 East is a major area of concern within the study limits with backups on the ramp as well as rear end crashes. The off ramp is a single lane roadway. KYTC D-9 Traffic team reported that they have looked at the area and found no issues with signal timing, it is a capacity issue. The project location is seen in the photograph below as well as in Exhibit 8 of Appendix A.

Many crashes have been attributed to traffic merging onto KY 32 from the ramp. There is no merge lane currently. Added to this, the sight distance for merging traffic from the off ramp onto KY 32 is less than desired.



Proposed Project

One suggested solution was to add a lane on the ramp and signing it 'no right turn on red' and not build a merge lane on KY 32. This solution, could improve safety, but may not alleviate the capacity and congestion issues and was not considered to be carried forward.

The recommendations for the project include adding a lane on the ramp and adding a merge lane on KY 32. These two lanes would perform as a continuous right turn lane for traffic from the ramp to East KY 32. The proposed continuous right turn lane may result in the closure of the entrance to Hardees.



Planning Cost Estimate

The combined estimated cost of the two improvements is \$4,550,000.

	ESTIMATED COST				
	Design/Planning	Right of Way	Utilities	Construction	TOTAL
Add a lane to the Off Ramp	\$300,000	\$0	\$0	\$2,500,000	\$2,800,000
Add a merge lane on KY 32	\$250,000	\$500,000	\$250,000	\$750,000	\$1,750,000
TOTAL	\$550,000	\$500,000	\$250,000	\$3,250,000	\$4,550,000

KYTC LONG TERM 3-LT

KY32 – US 60 Bypass intersection

Project Background

The intersection of KY 32 - US 60 Bypass has traffic congestion and delay issues. Traffic is often heavy at this intersection but the problem becomes severe during the evening peak hour. Traffic backs up on KY 32 as well as the US 60 Bypass. Some traffic was observed using 1st Street to bypass this intersection. A project location map can be seen on the next page as well as Exhibit 8 in Appendix A.



District 9 Traffic staff has made adjustments to the traffic signal; however, congestion was not alleviated. More development is expected in the area in the near future with two to three lots to be developed and possibly a new theatre. The new Courthouse and Justice Center that are currently under construction nearby will add more traffic to this intersection. Rear end crashes are the most common type currently occurring at this intersection.

Proposed Project

This project will involve a complete traffic study of the intersection. Cost for the traffic study is estimated at \$10,000. The Project Team suggested that an additional left turn lane on KY 32 and an additional lane to accommodate this traffic on US 60 Bypass would be beneficial. Also, there is a future project for the expansion of the US 60 Bypass which might address the congestion issues at this intersection (UPL Control #: 09 103 B0060 90.00) and a PIF currently exists (see Appendix D). The total cost of this project will depend on recommendations from the traffic study.

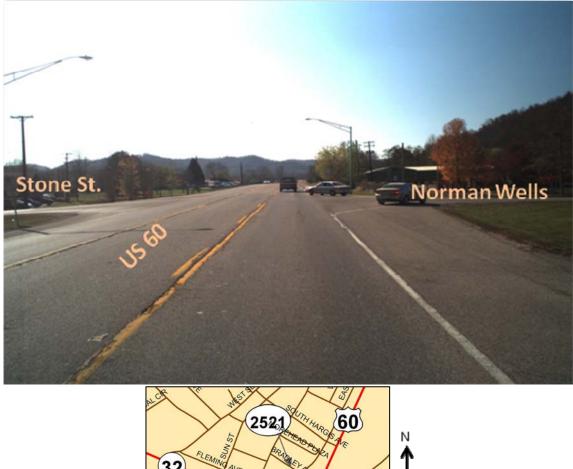


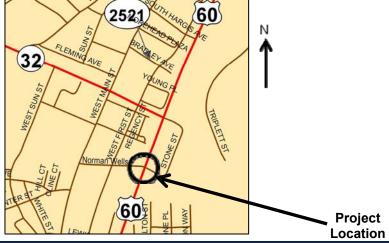
KYTC LONG TERM 4-LT

US 60 – Norman Wells Lane - Stone Street intersection

Project Background

This intersection is just south of the KY 32 – US 60 Bypass intersection and is another project of high importance. There are several businesses along Stone Street. The United States Post Office has a large facility along the Normal Wells Lane. Some new lots are expected to be developed in the near future. A new auto store and a new theatre are also expected in the area. The project location is shown below as well as in Exhibit 8.





The majority of the traffic from the new Courthouse and the new Justice Center are expected to use Norman Wells Lane to access US 60 Bypass. Several conflicting traffic movements involving left turns exist at this intersection. The intersection is not signalized. One solution discussed by the Project Team is to install "No Left Turn" movement signage on Normal Wells Road and Stone Street at this intersection. Another suggestion from the Project Team is to conduct a traffic signal warrant study for the intersection.

The Project Team decided that adding a traffic signal at this intersection, so close to the KY 32 – US 60 Bypass signal (approximately 650 ft) is not desired. The previous recommendation for this project for the possibility of a traffic signal at this intersection is not recommended. This project (KYTC Long Term 4-LT) was decided by the Project Team to not be considered in the prioritization process.



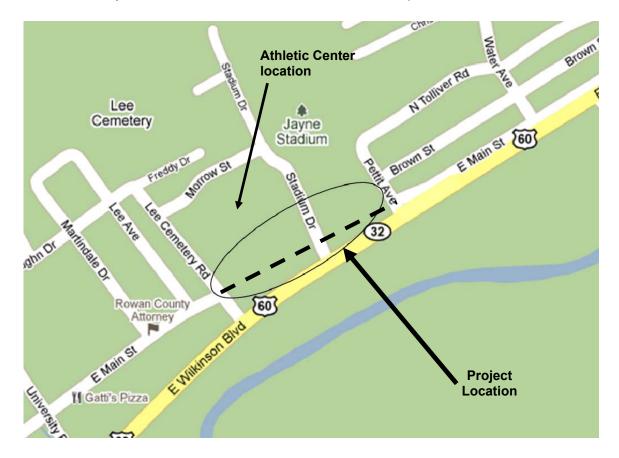
The future project to widen US 60 Bypass to 4-lanes (UPL Control #: 09 103 B0060 90.00) will also improve this intersection. Some preliminary work on the widening project has been done by the District Office.

KYTC LONG TERM 5-LT

Extend East Main Street from Lee Cemetery Road to Pettit Avenue (Old 60 in front of the Morehead Athletic Center)

Project Background

The Project Team discussed that, as there is no connecting road currently, local traffic coming from Pettit Avenue has to use heavily travelled US 60 to reach the Athletic Center for events or for other needs. Extending East Main Street from Lee Cemetery Road to Pettit Avenue will alleviate this problem.



Proposed Project

This Project will connect E. Main Street from Lee Cemetery Road to E. Main Street at Pettit Avenue. The connection of Stadium Drive to US 60 will be eliminated to reduce access points on US 60. The Project Team discussed several design issues for this project during the meetings. As US 60 Bypass and E Main Street are close to each other, the Project Team suggested installing a concrete barrier to prevent crashes as part of this project. Possible roadway

design could include a curb and gutter section with sidewalk immediately adjacent to the curb.



Planning Cost Estimate

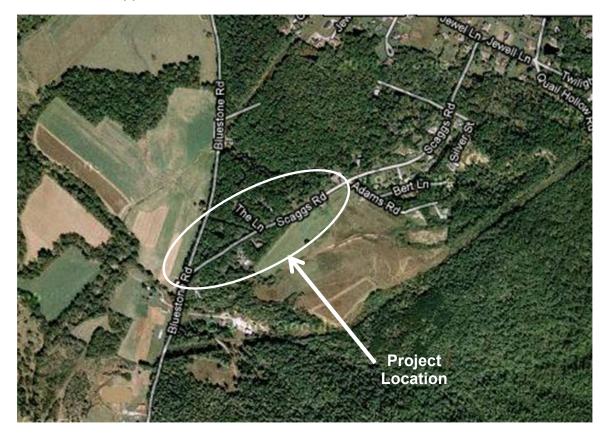
ESTIMATED COST				
Design/Planning	Right of Way	Utilities	Construction	TOTAL
\$150,000	\$100,000	\$150,000	\$750,000	\$1,150,000

KYTC LONG TERM 6-LT

Scaggs Road/KY 3319 widening from MP 2.25 to MP 2.62

Project Background

Scaggs Road/KY 3319 from Blue Stone Road (MP 2.25) to Jewel Road (MP 3.05) is a narrow two lane road. Lane width varies from 8 ft to 10 ft. Field visits show that motorists pull over to the side to allow opposing vehicles to pass. Current ADT (2010) on this segment is 502. Some of the traffic travels this roadway to reach south US 60. The project location can be seen here as well as in Exhibit 8 of Appendix A.



The stretch of the road from MP 2.25 to MP 2.62 is on a steep down grade. Vehicles often lose control during wet and slick conditions. The narrow lanes add to the hazardous conditions.

The T-intersection of KY 3319 and Blue Stone Road is at a steep grade and skewed. The steep grade makes stopping very difficult especially during slick conditions. The skew of the intersection along with the grade reduces sight distance.

Proposed Project

This project involves grade change, lane widening and adding turn lanes from MP 2.25 to MP 2.62. The project also includes realigning the intersection of KY 3319 and Blue Stone Road.

Planning Cost Estimate

ESTIMATED COST				
Design	Right of Way	Utilities	Construction	TOTAL
\$150,000	\$500,000	\$200,000	\$2,000,000	\$2,850,000



Narrow lanes on Scaggs Road 4.4 Short Term Projects (KYTC Short Term 1-ST through KYTC Short Term 6-ST)

KYTC SHORT TERM 1-ST

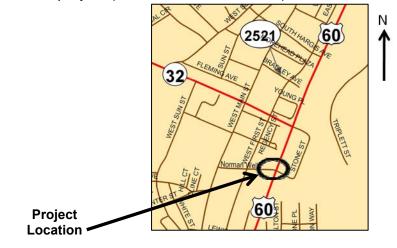
US 60 – Norman Wells Lane - Stone Street intersection

Project Background

As previously discussed in KYTC Long Term 4-LT, the Project Team decided not to add a signal at this intersection, since it is very close (650') to the KY 32 - US 60 Bypass signal. The future project to widen US 60 Bypass to 4-lanes should also improve this intersection. The project location is shown below and can also be seen in Exhibit 8 of Appendix A.



The Project Team decided that left turns from both Stone St. and Norman Wells Lane should be eliminated as soon as possible. The solution discussed will be a Short Term project (KYTC Short Term 1-ST).



MOREHEAD SMALL URBAN AREA TRANSPORTATION STUDY

Proposed Project

KYTC Short Term 1-ST will construct right-in/right-out only access on Stone Street as well as Norman Wells Lane. A non-traversable median will be designed at this intersection. This will prevent left turns and force such traffic to use the US 60 Bypass – KY 32 intersection for left turns.

Planning Cost Estimate

ESTIMATED COST				
Design	Right of Way	Utilities	Construction	TOTAL
\$20,000	\$O	\$0	\$75,000	\$95,000



KYTC SHORT TERM 2-ST

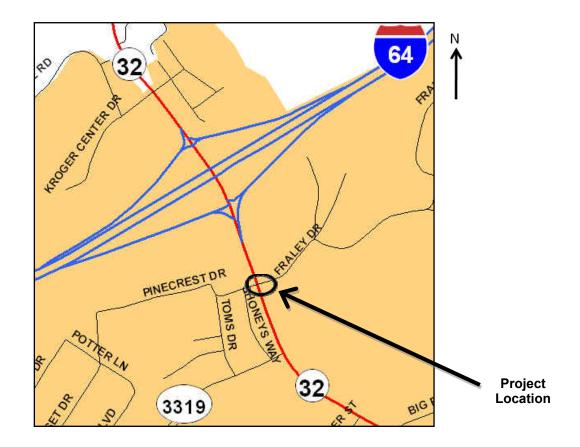
Offset Left Turn Lanes on KY 32 at Pinecrest Drive/Fraley Drive

Project Background

Left turn traffic traveling in either direction of KY 32 has sight distance problems and difficulty seeing on-coming traffic at this location.

Proposed Project

Offset left turn lanes are proposed on either side of KY 32 under KYTC Short Term 2-ST project. Part of the existing shoulder may need to be used to achieve this. The project may require removing existing striping and restripe.



Planning Cost Estimate

The estimated cost for the project is \$50,000.

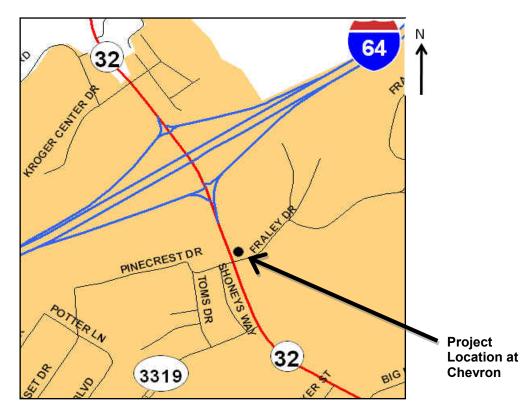


KYTC SHORT TERM 3-ST

Drainage and Sidewalk improvements at Chevron/Fraley Drive corner

Project Background

A deep ditch exists in the west corner of Chevron next to the Pedestrian Button. Several incidents of cars in the ditch were reported. The Pedestrian Button is not ADA (American Disability Act) accessible due to the edge of pavement drop-off and grade in the grassy area. Also, the location of the Button is a tripping hazard to other pedestrians trying to access it.



Proposed Project

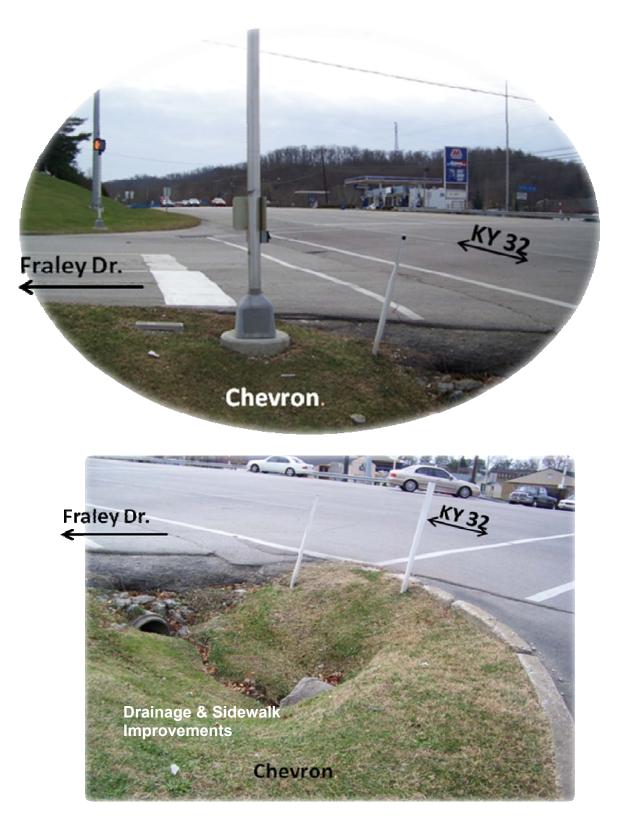
The Project Team proposed installing multiple drop box inlets and eliminate the ditch in the west corner in this project. Sidewalk access to the Pedestrian Button will be recommended.

Planning Cost Estimate

The estimated cost for the project is \$85,000.

Completed Work

At the time of this report, KYTC District Office had completed construction of the drop box inlets.



KYTC SHORT TERM 4-ST

KY 32 – KY 3319 Intersection Improvements

Project Background

The Project Team discussed that the recent striping work done at this intersection has been very helpful to the left turning traffic. The striping was a curved dotted line through the intersection to help guide turning vehicles as they move through their turn. There is a luminaire that exists at the south east corner of the intersection. The project location can also be seen in Exhibit 8 of Appendix A.



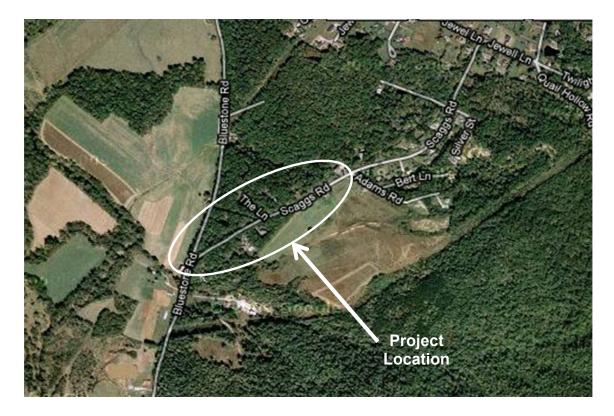
Recent upgrades done to the luminaire were found to be very effective for the intersection. The Project Team agreed that no additional lighting was needed at the intersection. Therefore, KYTC Short Term 4-ST was dropped from the prioritization process.

KYTC SHORT TERM 5-ST

Scaggs Road/KY 3319 Guardrail project near Blue Stone Road

Project Background

This stretch of the road (from MP 2.25 to MP 2.62) is on a steep down grade. Vehicles often lose control during wet and slick conditions. The lanes are narrow, 8 feet - 10 feet wide and add to the hazardous conditions. KYTC Long Term 6-LT which was discussed earlier will widen the roadway and add shoulders.



Proposed Project

KYTC Short Term 5-ST project is for the installation of guardrail from MP 2.25 to MP 2.62 on Scaggs Road to improve safety over the hill to the intersection of Blue Stone Road. The project location can also be seen in Exhibit 8 of Appendix A.

Planning Cost Estimate

The estimated cost for the project is \$50,000.

KYTC SHORT TERM 6-ST

KY 32 at First Street Intersection

Project Background

This project involves improving safety and congestion problems due to left turn traffic crossing KY 32 from First Street. The project was originally intended to construct a right-in/right-out on First Street near Allstate Insurance. The City of Morehead informed the Project Team that a streetscape project is planned along that side at the Prioritization Meeting.



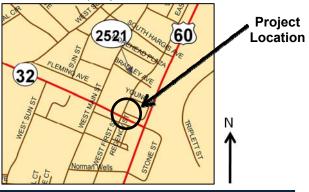
Proposed Project

The Project Team decided to drop a right-in/right-out entrance project at KY 32 – East First Street intersection near Allstate Insurance. Installation of signage such as "no left turn" was recommended. At the time of this report, the sign has been installed. Right-in/right-out can be considered as a future option.

The Project Team recommended a right-in/right-out entrance to be constructed with concrete barriers on West First Street where there is a similar problem of left turn traffic crossing KY 32 and blocking through traffic. The project location can also be seen in Exhibit 8 of Appendix A.

Planning Cost Estimate

The estimated cost for the project is \$35,000.



4.5 Project Ranking

During the Project Prioritization meeting held on April 5th, other projects considered during the study were discussed. Current status on these projects was explained (see Table 5).

Following the explanation of the projects, all attendees were given a spreadsheet with the listed projects for prioritization (see Table 6). The attendees were asked to rank the Long Term and Short Term projects. The project with the highest priority was to be ranked No.1. It was explained to the Project Team that Long Term 4-LT and Short Term 4-ST should not be considered in the ranking process as explained earlier in this document under those items. Results from the ranking of Short Term and Long Term Projects are shown in Table 7.

4.6 Study Recommendations

The Project Team, local officials and Stakeholders combined their input and made decisions on the proposed projects and ranked them as discussed earlier. KYTC District 9 Office in Flemingsburg will address the list of Short Term Projects as funds become available. A Project Identification Form (PIF) will be developed for the new Long Term Projects recommended by the district. The new recommended projects will then be considered to be included on the UPL list.

TABLE 5: OTHER PROJECTS DISCUSSED

PROJECT	PROJECT LOCATION	SOLUTION	STATUS
O - 1	Right Turn Lane to Old Flemingsburg Rd. from KY 32	Project approved for HSIP funds. Construction to begin in year 2010	Approved
0 - 2	Lights on KY 32 just north of I64	Signal backplates were installed	Completed
O - 3	South Hargis - US 60 intersection	This is a T-intersection with a stop control on S. Hargis road. US 60 has a TWTL at this time. Sight distance at this intersection is good. Drivers from S. Hargis have to be cautious turning left or merging. No other recommendations	Not Recommended
O - 4	Scaggs - KY 3319 intersection	Signage has been fixed. Other solutions to improve the alignment are expensive and not recommended by the Project Team at this time	Not Recommended
O - 5	Petit Avenue - US 60 intersection near car wash	The road was built at a lower elevation than the original design. Culvert has been cleaned. No other recommendations	Not Recommended
O - 6	KY 32 - 2nd St. intersection	This intersection improvement is listed in the current six year plan (Item 9-197.00)	Future Project
0 - 7	Turn lanes at Lakeside on US 60	A PIF exists to improve US 60 from Bath County line to US 60 Bypass	Future Project
O - 8	Signals from Walmart to KY 377 on KY 32	As GES (green extension) is more important, synchronization is not considered	Not Recommended

TABLE 6: PRIORITIZED PROJECTS

The following projects were discussed at the Prioritization Meeting held on April 5, 2010. Some decisions/changes made at the meeting are listed at the bottom of the table. Final Proposed Projects are explained in Section 4 of the Report.

LONG TERM PROJECTS					ESTIMATED (COST			
PROJECT	RANK	PROJECT LOCATION	POSSIBLE SOLUTION	DESIGN (& Planning if any)	RIGHT-OF- WAY	UTILITIES	CONSTRUCTION	TOTAL	
KYTC Long Term 1 - LT		KY 32 from KY 785 to KY 377 approximately (MP	Correct horizontal and vertical geometric deficiencies of the road, intersection improvements at N. Viking Dr. and Lumber Yard and add a right turn lane at Guardian Avenue	\$2,177,000	\$9,175,000	\$4,038,000	\$18,336,000		1. KY 32 geometry imp D & P = \$2,052,000, R 2 . Intersection improve D=50,000, R=25,000, U (construct a common ir 3. Add a right turn lane D=75,000, R=\$75,000,
KYTC Long Term 2 - LT		Off ramp of I-64 to KY 32 east	Add a lane to the Off Ramp of I-64 to KY 32 East and add a merge lane on KY 32	\$550,000	\$500,000	\$250,000	\$3,250,000	\$4,550,000	1. Add a lane to the Off 2. Add a merge lane or
KYTC Long Term 3 - LT		KY 32 - US 60	Conduct Traffic Study to evaluate the intersection and construct recommended solutions	-	-	-	-	-	Cost estimate will be ba
KYTC Long Term 4- LT ^a		US 60 - Stone St Norman Wells intersection	Improvements recommended from Traffic Signal Warrant Study	-	-	-	-	-	Cost estimate will be ba
KYTC Long Term 5 - LT		Avenue near Morehead State	Extend East Main St. from Lee Cemetery Rd. to Petit Ave and remove connection of Playforth Dr. to US 60	\$150,000	\$100,000	\$150,000	\$750,000	\$1,150,000	
KYTC Long Term 6 - LT		KY 3319 from Scaggs Rd. going south	Widen each lane to 11' or add 2' shoulders	\$150,000		\$200,000	\$2,000,000		MP 2.25 to MP 2.62 (th

SHORT TERM PROJECTS

	DANK	PROJECT LOCATION		ESTIMATED COST	COMMENTS
PROJECT	RANK	LUCATION	POSSIBLE SOLUTION	0031	COMINIENTS
KYTC Short Term 1 - ST		US 60 - Stone St Norman Wells intersection	Conduct Traffic Signal Warrant Study ^b	5000 ^b	D-9 Traffic will complete Warrant study following a request from City of Morehead ^b
KYTC Short Term 2 - ST		KY 32 - Fraley Dr Pinecrest Dr.	Design and provide offset left turn lanes on KY 32	\$50,000	Possibly use part of shoulder and restripe lanes to get offset; may require overlay to cover up existing stripes
KYTC Short Term 3 - ST		Deep ditch near Chevron at Fraley Dr.	Eliminate ditch and install drop box inlet. Construct sidewalks for access to Ped. button and cross walks	\$85,000	Multiple drop box inlets required
KYTC Short Term 4 - ST ^a		KY 32 - KY 3319 intersection	Install intersection lighting to improve visibility. "Cat Tracks" were painted recently.	\$30,000	
KYTC Short Term 5 - ST		Scaggs Rd. close to Blue Stone Rd intersection	Install guardrail	\$50,000	Includes cribbing to support the guardrail
KYTC Short Term 6 - ST		KY 32 at First St.	Install raised barrier "right in and right out" with signage	\$35,000	

NOTES^a Project not recommended after Prioritization Meeting on April 5th, 2010

^b Project was revised after Prioritization Meeting on April 5th, 2010. See Section 4.4 of the Report for the revised project.

COMMENTS*

mprovements (UPL 09 103 D0032 88.10): R = 9,075,000, U = 3,888,000, C = 18,036,000, Total = \$33,051,000 evements at Viking Dr. and White's Lumber yard: 0, U=50,000, C=150,000, Total = \$275,000 intersection, install signal loops etc for a part time or set signal) ine at KY 32 - Guardian Avenue: 10, U=\$100,000, C=\$150,000, Total = \$400,000

Off-Ramp: D=\$300,000 R=\$0 U=\$0 C=\$2,500,000 on KY 32: D=\$250,000 R=\$500,000 U=\$250,000 C=\$750,000

based on recommendations from Traffic Study

based on recommendations from Traffic Signal Warrant Study

(the mainly undeveloped area and over the hill to the intersection) * D = Design, P = Planning, R = Right of Way, U = Utilities, C = Construction

TABLE 7: RESULTS FROM RANKING OF SHORT TERM AND LONG TERMPROJECTS

LONG TERM PROJECT	PROJECT DESCRIPTION	RANK
	KY 32 Projects from KY 785 (MP 2.372) to KY	
KYTC Long Term 1-LT	377 (MP 4.596)	1
KYTC Long Term 2-LT	Off ramp of I-64 East to KY 32	2
KYTC Long Term 3-LT	KY32 – US 60 Bypass intersection	3
	Extend East Main Street from Lee Cemetery	
KYTC Long Term 5-LT	Road to Pettit Avenue	4
	Scaggs Road/KY 3319 widening from MP 2.25	
KYTC Long Term 6-LT	to MP 2.62	5

SHORT TERM PROJECT	PROJECT DESCRIPTION	RANK
KYTC Short Term 1-ST	US 60 – Norman Wells Lane - Stone Street intersection	1
KYTC Short Term 2-ST	Offset Left Turn Lanes on KY 32 at Pinecrest Drive/Fraley Drive	2
KYTC Short Term 3-ST	Drainage and Sidewalk improvements at Chevron/Fraley Drive corner	3
KYTC Short Term 5-ST	Scaggs Road/KY 3319 Guardrail project near Blue Stone Road	5
KYTC Short Term 6-ST	KY 32 at First Street Intersection	4

Contacts

The following persons may be contacted if additional information is needed concerning the project or the study process:

- Keith Damron, Director, Division of Planning
- Steve Ross, Transportation Engineer Branch Manager, Strategic Planning Activity Center, Division of Planning
- Jill Asher, Team Leader, Strategic Planning Activity Center, Division of Planning
- Sreenu Gutti, Morehead Small Urban Area Transportation Study Project Manager, Strategic Planning Activity Center, Division of Planning

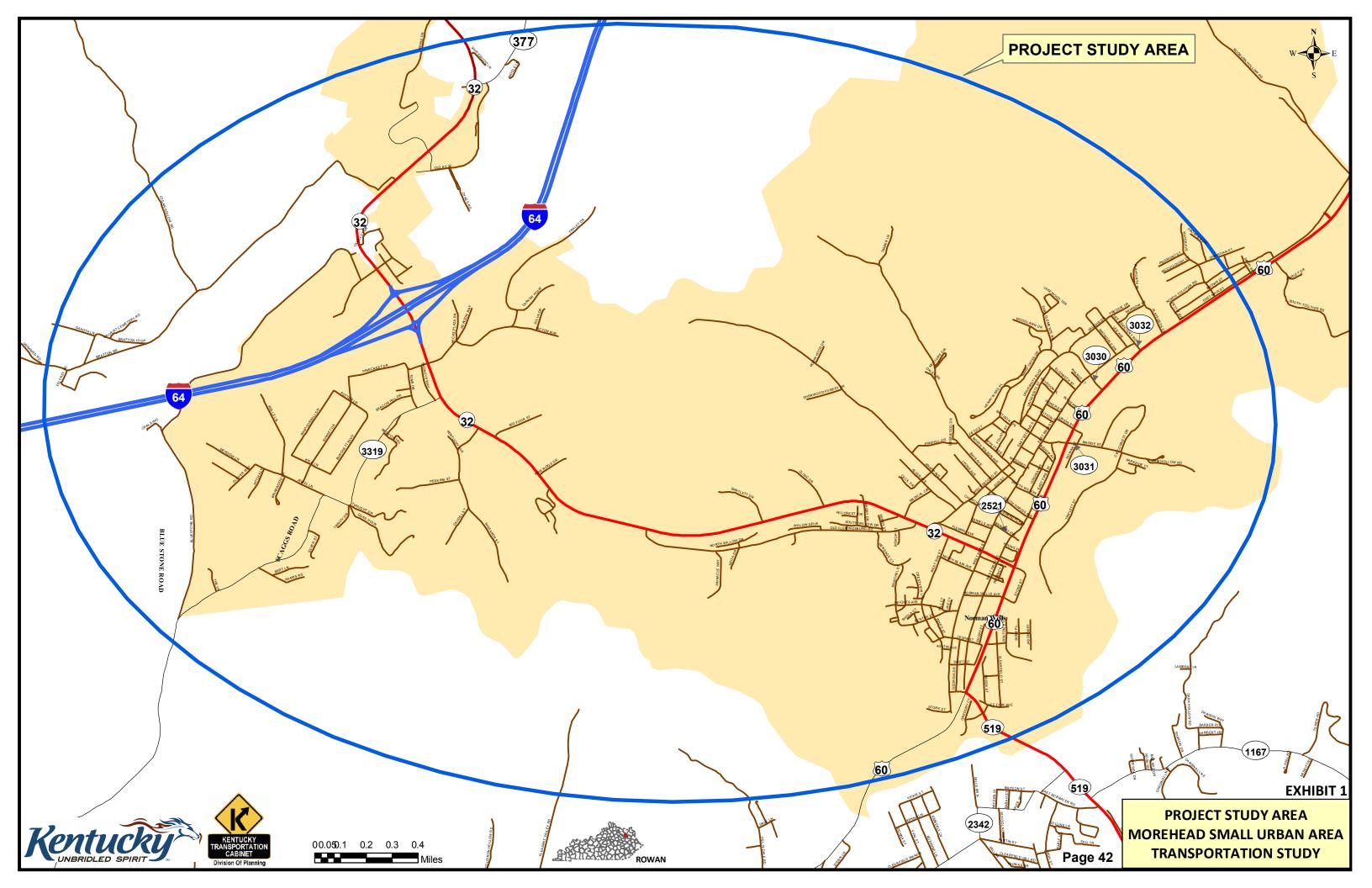
The following address and phone number may be used:

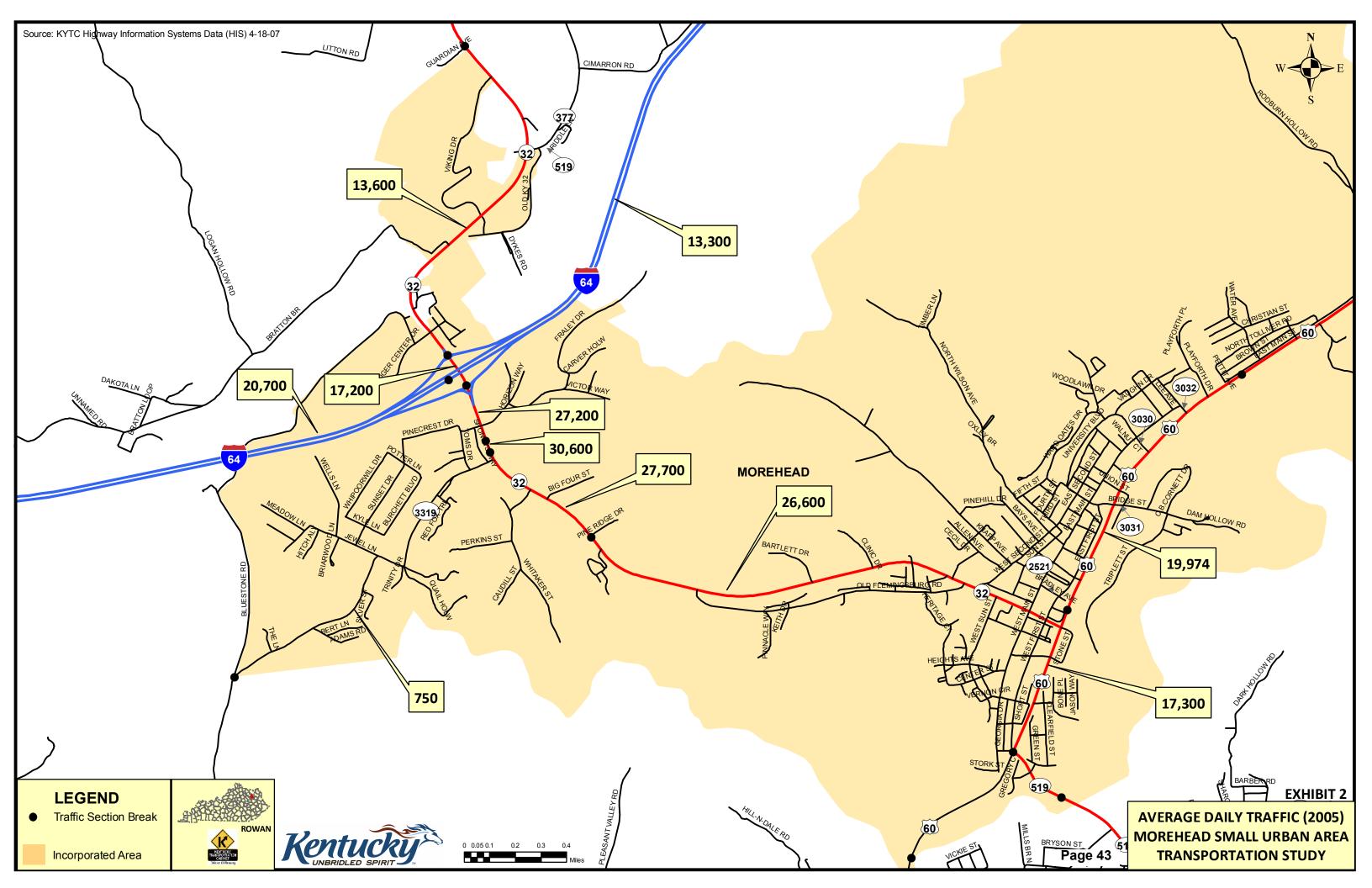
Phone:	(502) 564-7183
Address:	Division of Planning
	Kentucky Transportation Cabinet
	200 Mero Street
	Frankfort, KY 40622

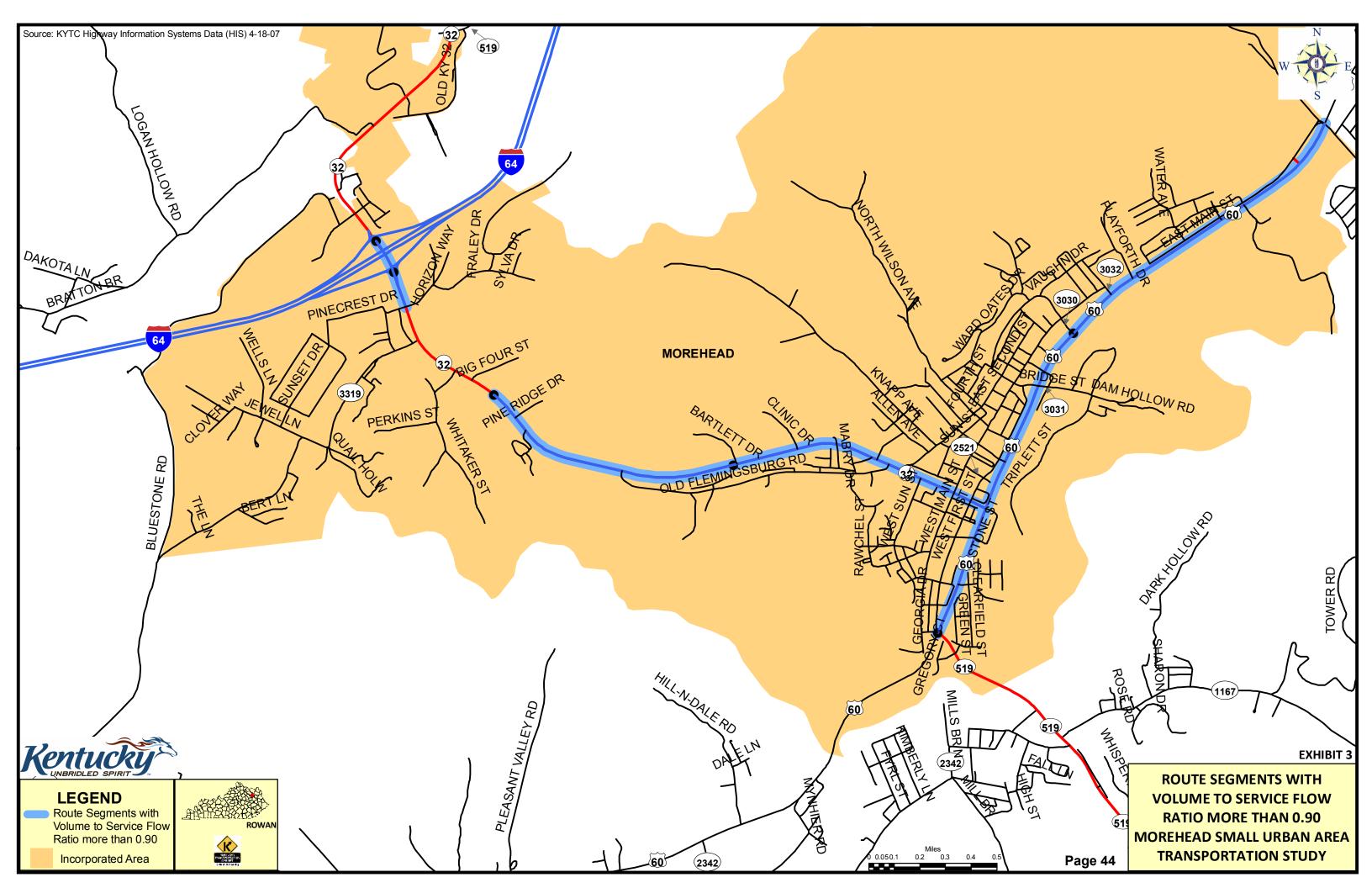
APPENDIX

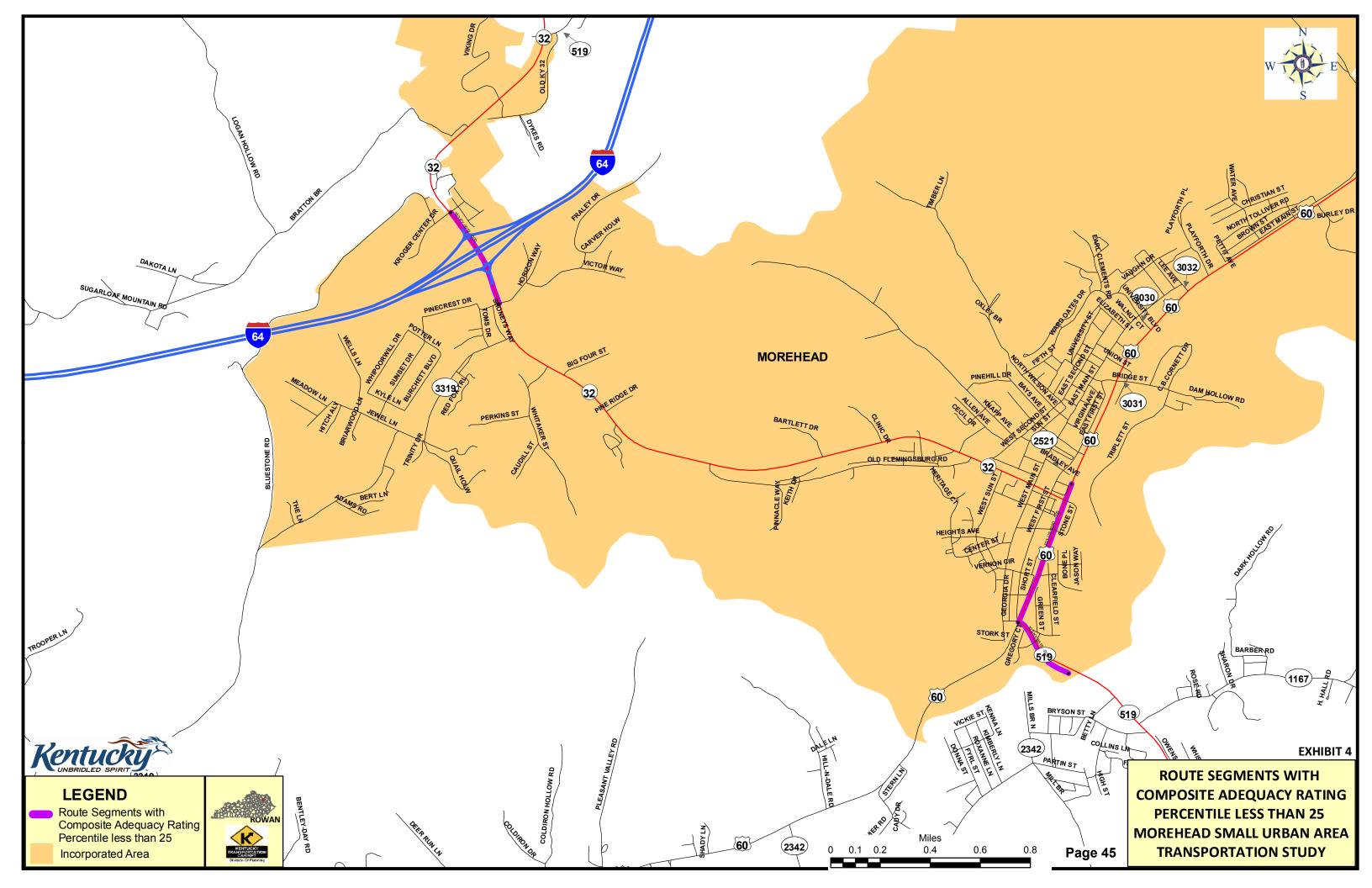
APPENDIX A

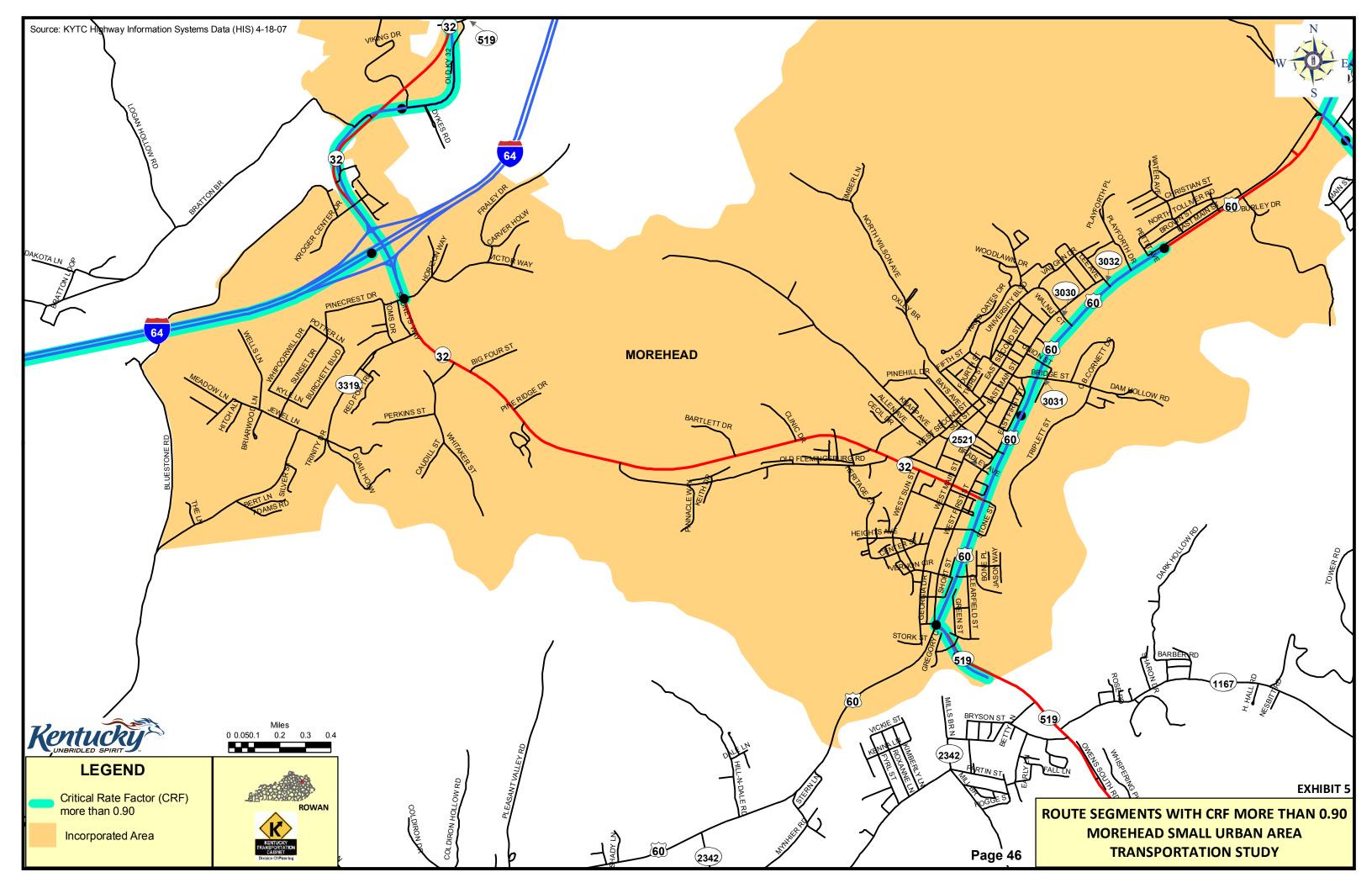
Exhibits

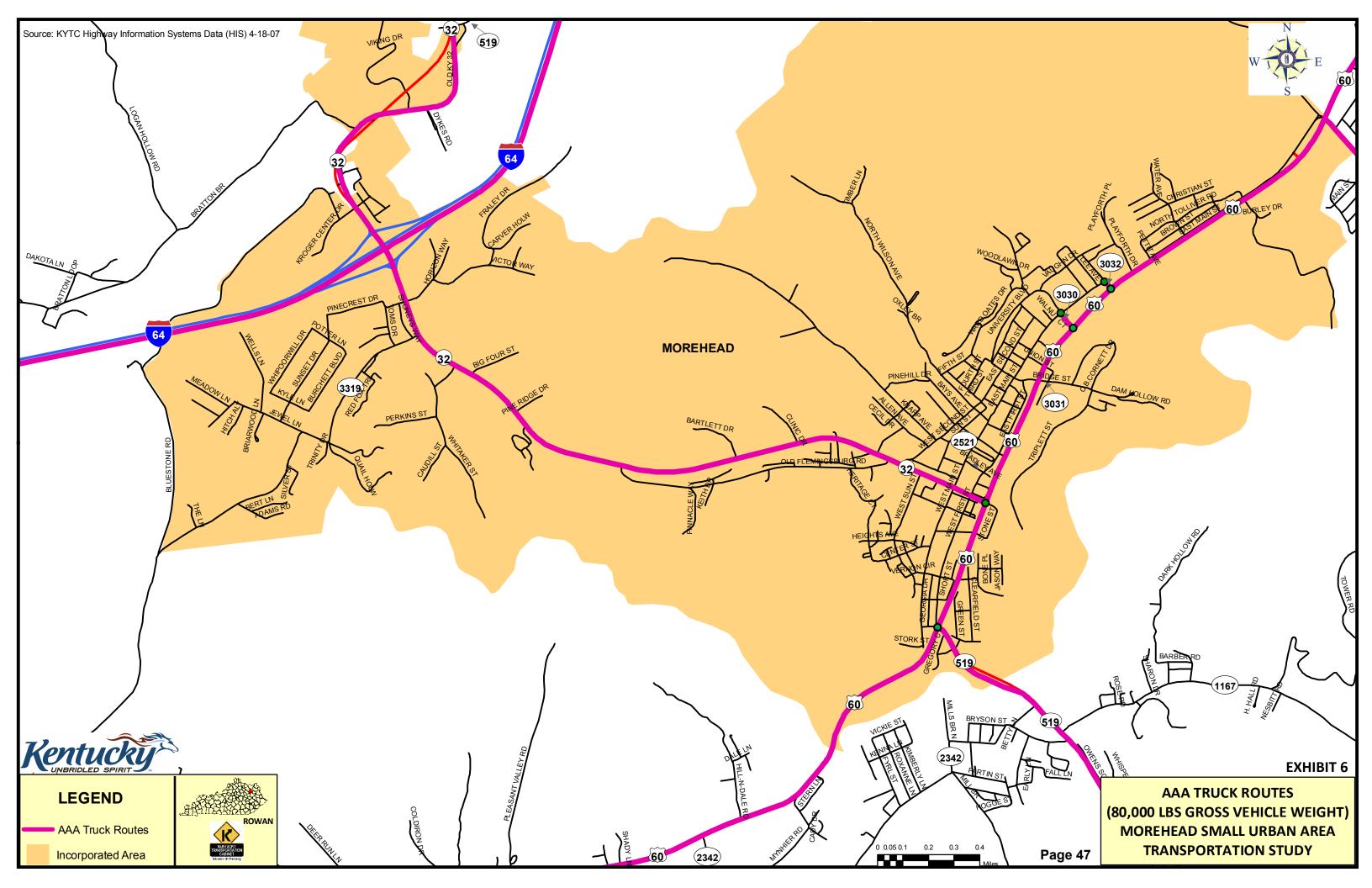


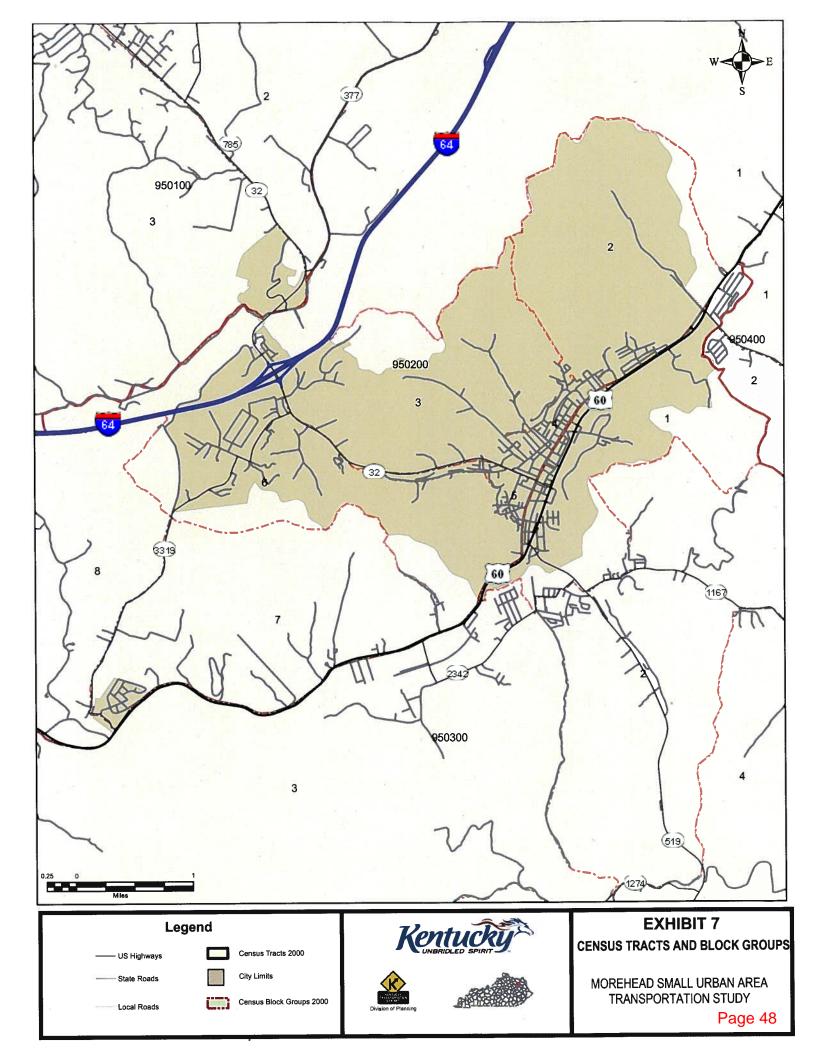


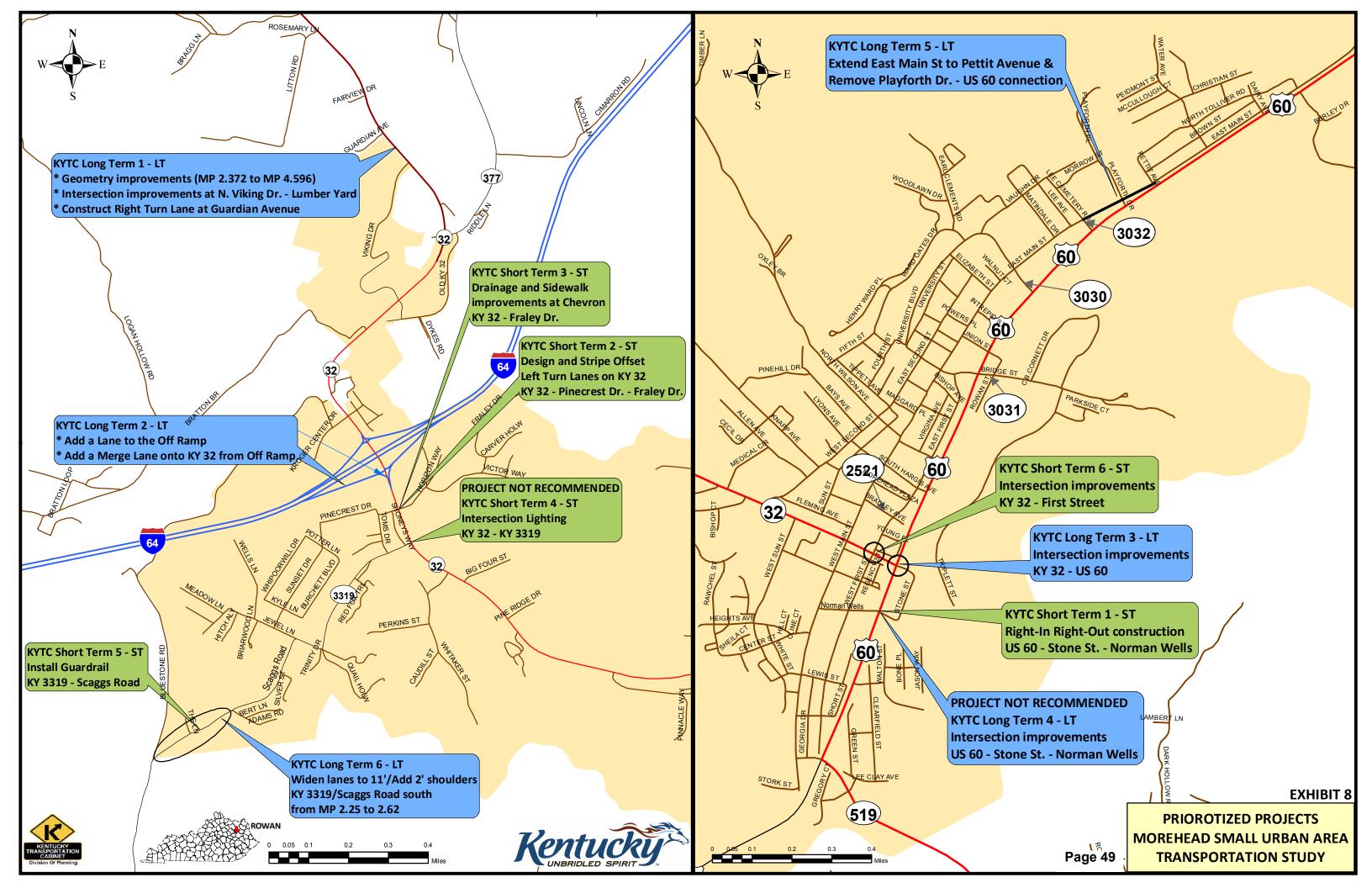


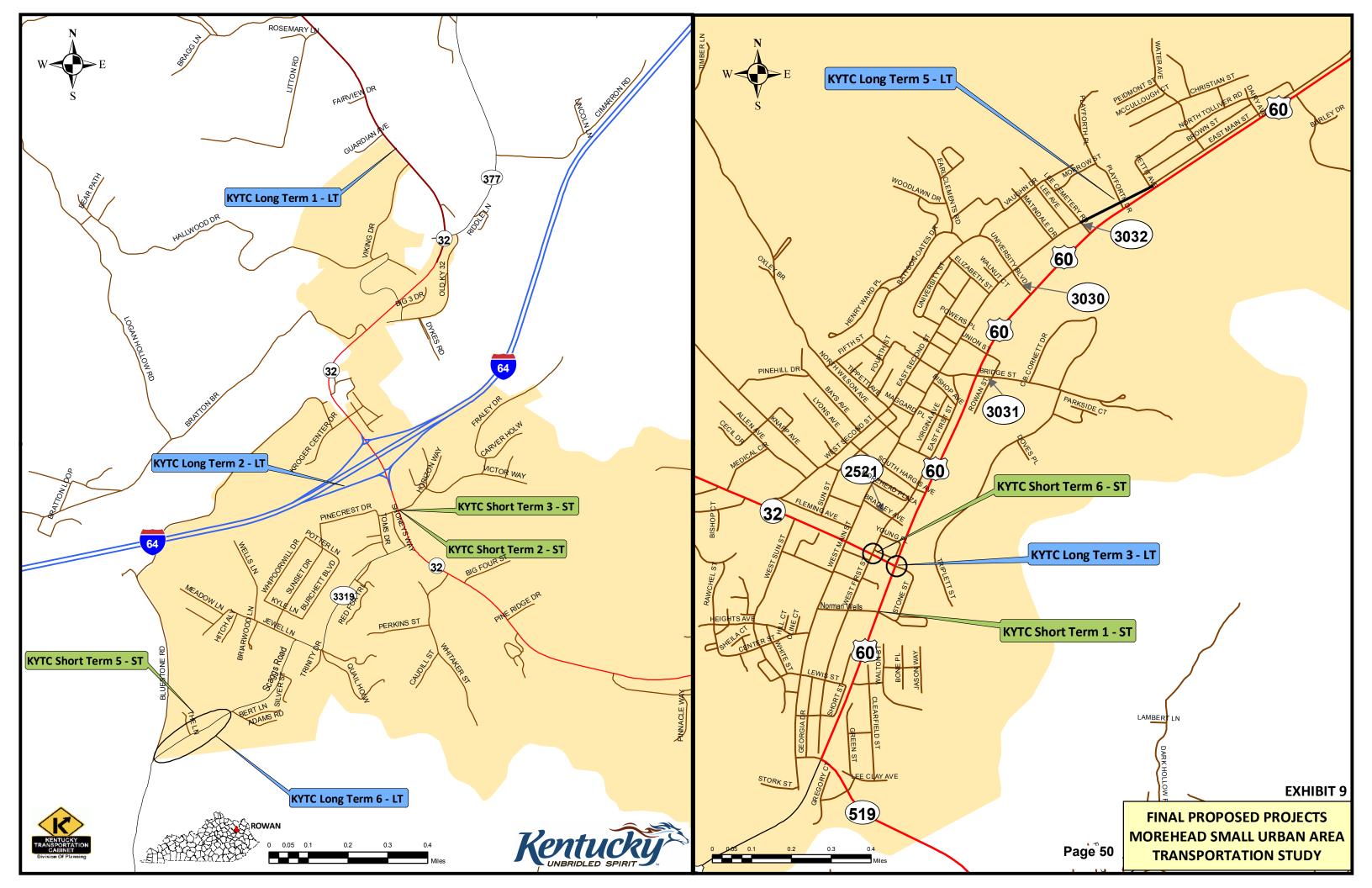












APPENDIX B

Meeting Minutes

Meeting Minutes Morehead Small Urban Area Study Initial Project Team Meeting April 10, 2008

A project team meeting for the Morehead Small Urban Area Study (SUA) was held on April 10, 2008 in the Gateway ADD conference room in Morehead. The meeting began at 10:30 a.m. and concluded at 12:30 p.m. The meeting began with introductions. The following were in attendance:

Wesley Delk	Gateway ADD
Sandy Meadows	Gateway ADD
Bart Bryant	KYTC District 9 Executive Officer
Deanna Miller	KYTC District 9 Planning TEBM
Brent Wells	KYTC District 9 Planning
Darrin Eldridge	KYTC District 9 Preconstruction TEBM
Daran Razor	KYTC District 9 Traffic TEBM
Vickie Griggs	KYTC District 9 Traffic
Boday Borres	KYTC Central Office Division of Planning
David Tipton	KYTC Central Office Division of Planning

Handouts were distributed by Mr. Tipton as he began by explaining that past Small Urban Area studies written by the Division of Planning utilized a detailed traffic model of the urban areas in both present day conditions and forecasted conditions. Final recommendations resulting from these studies often resulted in major route upgrades such as bypasses, new interchanges and significant intersection upgrades. However, the current methodology has placed emphasis on gathering information from project teams, stakeholders, and local officials in lieu of detailed models. The objective of this study is to identify low-cost transportation projects that can be implemented more easily and that would address traffic and safety concerns for the Morehead study area.

The study area was then discussed. Four areas were added to the Morehead incorporated area to obtain the updated study area. The four areas were US 60 to Shady Lane (southwest extension), KY 519 to Clack Mountain (southeast extension), KY 32 to Litton Road (northwest extension) and US 60 to Eastwood Heights Road (northeast extension).

The northwest extension was made to encompass the new Wal-Mart area that was included in the incorporated boundaries as of last month. Mr. Delk agreed to send the new GIS layer to Mr. Tipton. Mr. Eldridge explained that the study area should be extended in the northwest to Litton Road. He agreed to send a MicroStation design file with the new road alignment and cross-section north of the interchange for KY 32. KY 519, the southwest extension, was made because congestion has been a historical problem in this area. It was noted, however, that the current reconstruction from 2-lane to 3-lanes may alleviate some of this congestion.

Current projects in the City of Morehead were then discussed. They included the following:

- KY 32 (east) A current planning study Item No. 9-192.00 includes Elliot/Rowan Counties, Project Manager – Thomas Witt) and a previous KY 645 study had recommended KY 32 as a final recommended alternate. The SUA report should reference these studies.
- US 60 Projects, Item No. 9-301.00 currently on hold. This connector extends from US 60 to KY 377 north of I-64. This would require a new interchange.
- KY 377 has a possible planning/design for 3 miles as per Ms. Miller.
- Many various private/parochial schools are in the area.

It was noted that all state routes in the Morehead area are either 5, 3 or 2-lanes. Mr. Eldridge mentioned that he has completed cost estimates for certain projects and will send to Mr. Tipton.

The project team then discussed existing conditions and problem areas. It was decided to discuss all potential problem areas and then review each area in the field after lunch for a more detailed understanding. The following areas were noted:

- US 60/KY32 intersection split phase signal, designated right turn. Mr. Razor explained that there in not much room for improvement at this location unless an additional lane was added to US 60 to accommodate dual left turn lanes on KY 32.
- The old Wal-Mart entrance has 2000/hr counts. Although the counts have dropped dramatically on the side streets since Wal-Mart has moved to a new location. Ms. Griggs recently has performed a 12 hour count and will forward that to Mr. Tipton.
- Issues at Viking Drive north of the Interstate which is the entrance for the High School and Technical College. This is a possible place for a right turn lane addition.
- A lumber yard entrance could be realigned with the signal at the Guardian Corporation entrance to help the situation, but there are two water lines that may be interrupted.
- Second Street has a proposed alignment. There are connectivity issues and one way routing that may be confusing.
- Lakeside Christian Academy a proposed grade correction and possible right lane addition at entrance. (3/4 mile distance)
- Mr. Razor discussed lighting on the US 60 Bypass. He indicated that it will probably be mentioned at the upcoming Local Officials/Stakeholders meeting. Mr. Bryant stated that he would look into the possibility of the salvaged poles being purchased at cost by local entities.

- Mr. Eldridge discussed a pedestrian overpass at the new community center downtown that would cross over the US 60 Bypass to a parking lot.
- The I-64 off-ramp to KY 32 eastbound has sight distance issues. Ms. Meadows stated that she had a fender bender there the day of this meeting, but did not report it to the police. It was decided that the team may need to look at the crash reports and compare them with what the public has to say about this area.
- Access points on KY 32 south of the Interstate were discussed.
- Left turn movements are an issue at the intersection of First Street and KY 32. Left turns from KY 32 onto First Street and left turns from First Street onto KY 32 may need to be prohibited.

Mr. Bryant asked what "Programming" meant in context with the SUA study. Ms. Borres explained that these studies specifically address traffic congestion and crash and/or safety issues in the SUA. The goal for these studies is to prioritize low-cost, quick-to-implement recommendations that address the congestion and safety issues within the SUA. The team agreed that "Programming" needs to be taken out of the title of the study and out of the Agenda.

Environmental justice issues were then discussed. Mr. Eldridge noted that the only issue pertaining to EJ was the low-income areas in the vicinity. But that may not be an issue, since the surrounding area compares to what the overall region.

The CRASH data comparisons were discussed. Ms. Miller suggested that Crash Rate Factors (CRF) may need to be recalculated to reflect the current crashes. Since construction on KY 32 was completed in August of 2007 instead of May of 2006 the current CRF comparison are shown in the handouts.

A discussion was held with regard to which stakeholders and local officials should be invited to the subsequent meetings. The following names and positions were mentioned:

- David Perkins Newly elected Mayor
- Joe Parsons City Planner
- Jim Nichols County Judge Executive
- Magistrates possibly 2
- City Council members possibly 8
- Ted Trent Rowan County Board of Education, Transportation Director
- Morehead State University Officials possibly 3
- EMS/City Police/Fire Dept.
- Lakeside Academy Representative and/or other private school representatives
- Lumber yard representative.
- Tourism/ Renaissance on Main Terri Cline

- Parks Service National Forest Service representative
- Chamber of Commerce
- Neighborhood Associations
- Randy Stull D9 Operations/Maintenance

Ms. Meadows and Ms. Miller agreed to forward lists with addresses for these groups and send to Mr. Tipton.

Possible dates for the Local Officials/Stakeholders Meeting were discussed. May 15, 21, and 22 had the least conflict with the project team. Subsequent to the meeting, a combined Stakeholders and Local Officials meeting was scheduled for 9:30 am May 22, 2008 at City Hall in Morehead.

The meeting was adjourned approximately 12:30 pm and a site review was performed directly after lunch.

Meeting Minutes Morehead Small Urban Area Study First Stakeholders and Local Officials Meeting May 22, 2008

A stakeholders and local officials meeting for the Morehead Small Urban Area Study (SUA) was held on May 22, 2008 in the Morehead City Hall conference room. The meeting began at 9:30 a.m. and concluded at 11:30 p.m. The meeting began with introductions. The following were in attendance:

David Perkins	Mayor, City of Morehead
Joe Parson	City of Morehead
Bruce Adkins	City of Morehead
Bill Patrick	Morehead City Councilman
Jerry Alderman	Rowan County Judge Executive Office
Mike Adams	Chief, Morehead Police Department
Brad Wade	Chief, Morehead Fire Department
Danny Blevins	Rowan County EMS Director
Jerry Bowen	Rowan County EMS
Sandy Meadows	Gateway ADD
Deanna Miller	KYTC District 9 Planning TEBM
Darrin Eldridge	KYTC District 9 Preconstruction TEBM
Daran Razor	KYTC District 9 Traffic TEBM
Daran Razor	KYTC District 9 Traffic TEBM
Boday Borres	KYTC Central Office Division of Planning
David Tipton	KYTC Central Office Division of Planning

Handouts were distributed by Mr. Tipton as he began by explaining that past Small Urban Area studies written by the Division of Planning utilized a detailed traffic model of the urban areas in both present day conditions and forecasted conditions. Final recommendations resulting from these studies often resulted in major route upgrades such as bypasses, new interchanges and significant intersection upgrades. However, the current methodology has placed emphasis on gathering information from project teams, stakeholders, and local officials in lieu of detailed models. The objective of this study is to identify low-cost transportation projects that can be implemented more easily and that would address traffic and safety concerns for the Morehead study area.

The study area was discussed. Mr. Parson and Mr. Eldridge agreed to provide updated map showing the new corporation boundaries.

Necessary improvements were then discussed. The off ramp of I-64 East was said to be the worst problem area in the study limits. Approximately one fourth of the accidents in Morehead are on this off ramp. The best solution would be to construct a merging lane for traffic coming off the interstate onto KY 32. This would require closing the current entrance to Hardee's. The timing of the traffic

light on this ramp should be adjusted. Mr. Razor agree to check the morning peak hour cycle time.

The intersection of Fraley Drive and Pinecrest Drive with KY 32 has congestion and sight distance issues. An offset and added turn lane should be considered. A large deep ditch exists in the grading near the Chevron on KY 32 resulting in a potential hazard to pedestrian traffic.

KY 32 north of I-64 has issues with sun light distraction. Several ideas were discussed such as "double red" lights, strobe lights, pulsating red lights were discussed. Mr. Eldridge stated that back plates may be the simplest solution.

The intersection of KY 32 and Viking Drive was discussed. Mr. Eldridge stated that moving the truck entrance to Harold White's Lumber Co. to line up with the intersection would alleviate some congestion.

Intersection of KY 32 and KY 3319 has sight distance issues when a driver is headed north on KY 32 and trying to turn right onto KY 3319. Possible solutions discussed were "cat traps", illuminares, and pavement markings.

The intersection of Skaggs Lane and KY 3319 has several issues. It is currently a sharp left turn for school buses and has a utility pole close to the road. A couple of road signs are to close to each other which blocks the view of the "Skaggs Lane" sign.

The queue time needs to be examined at the light near Dairy Queen.

A right hand turn lane from KY 32 onto Viking Drive would alleviate congestion now and in the future when the new Middle School is opened.

Coppers Hollow Road has three vertical curves that should be eliminated for better sight distance.

A right hand turn lane is necessary from South KY 32 onto Old Flemingsburg Road. The necessary right-of-way is already available.

An additional left turn lane would be beneficial from KY 32 onto the by-pass but a 5 lane by-pass or a merging lane would be necessary to accommodate it.

Reconnecting the segment of Old US 60 in front of the Morehead State gym would improve traffic in this area. Ms. Harris will research why road was disconnected. First Street intersection with KY 32 has large number of accidents. A raised barrier permitting only "right in and right out" traffic would reduce accidents. The left turn from South Hargis onto US 60 and the Stone Street & US 60 intersection are other high accident areas. These intersections, along with the First Street issue and the Interstate 64 off ramp, account for about half of the accidents in the Morehead area.

Final Meeting Minutes Morehead Small Urban Area Study 3rd Project Team Meeting November 30, 2009

A Project Team meeting for the Morehead Small Urban Area Study (SUA) was held on November 30, 2009 at the District 9 conference room in Flemingsburg. The meeting began at 1 p.m. and concluded at 2:30 p.m. The following were in attendance:

Terry Ishmael Joy Mullins	KYTC District 9 Traffic/Permits Transportation Planner, Gateway ADD
Bart Bryant	KYTC District 9 CDE
Randy Stull	KYTC District 9 PDP TEBM
Rachel Catchings	KYTC District 9 Design
Allen Blair	KYTC District 9, PIO
Phil Mauney	KYTC District 9 Planning
Brent Wells	KYTC District 9 Planning
Darrin Eldridge	KYTC District 9 Project Development TEBM
Vickie Griggs	KYTC District 9 Traffic
Jill Asher	KYTC Central Office Division of Planning
Allen Rust	KYTC Central Office Division of Planning
Sreenu Gutti	KYTC Central Office Division of Planning

The meeting began with a brief explanation of the Project's current status. Previous Central Office staff who were involved in the study are no longer with the Division. Sreenu Gutti is the new Project Manager and Jill Asher is the Team Leader. Meeting minutes from the past meetings and Project Exhibits were distributed.

The Project Team discussed the prioritized list from the last Project Team meeting held on January 7, 2009. The Team agreed to review this list and add any new projects and delete projects that have been already been completed. The following is the updated list of projects and recommendations of the Project Team:

KYTC Long Term	Off ramp of I-64 East to KY 32 was said to be one of the worst problem areas within the study limits. Several rear end crashes were reported on this ramp. Also, severe traffic
	backups were noticed on this ramp. Also, severe traffic backups were noticed on this ramp. D-9 Traffic team reported that there was no issue with signal timing. It is a capacity issue. Dual left turn lanes may be needed on the ramp. Another issue was the need for a merging lane for traffic
	coming off the Interstate ramp onto KY 32. The current entrance to Hardee's has to be closed to accommodate the merge lane. Joy Mullins stated that there may be recent

	traffic counts for the entrance.
	The capacity of the ramps needs to be evaluated along with the need for a merge lane onto KY32. Increasing the ramp capacity may solve both the problems.
KYTC Long Term	KY 32 from KY 785 (MP 2.372) to KY 377 (MP 4.596): This project is listed as an Unscheduled Project and a KYTC Project Identification Form (PIF) currently exists. This project has the highest ranking in the district. The description from the PIF is as follows: This segment is a rural 2-lane roadway with narrow shoulders. Horizontal and vertical deficiencies are evident and negatively impact sight distances and operational efficiency of the route. There are several businesses and schools along this route that use large trucks or buses for transporting people and goods. This type of traffic combined with the rural nature of this segment causes traffic congestion, especially during peak hours of the day. The project will correct horizontal and vertical deficiencies to increase operational efficiency,
KYTC Long Term	improve regional systems connectivity and improve safety. KY 32 – US 60 Bypass intersection: This intersection has traffic backup issues. The problem is severe during peak time in the evening and heavy at other times. Traffic gets backed we hath KY 22 as well as US 60 Bypass. Some traffic is
	up on both KY 32 as well as US 60 Bypass. Some traffic is seen using 1 st Street to bypass this intersection. An additional left turn lane on KY 32 and an additional lane to accommodate this traffic on US 60 Bypass would be beneficial. A complete traffic study at this intersection is recommended.
KYTC Long Term	KY 60 – Norman Wells Lane - Stone St. intersection : This intersection is just south of the intersection mentioned above and is another problem of high importance. There are several businesses (Sonic, Auto Zone, Movie Place, BWW etc.) along Stone Street. On the Normal Wells Lane side, USPS has a huge facility. Several conflicting traffic movements involving left turns are seen at this intersection. The intersection is not signalized. One solution suggested was to install "No Left Turn" movement signage on Normal Wells Road and Stone St. at this intersection. The intersection must be reviewed to see if it meets warrants for a traffic signal.
KYTC Long Term	Extend East Main St to Petit Ave. (Old 60 in front of the Morehead State gym): As there is no connecting road

	currently, local traffic coming from Petit Ave. has to get on the heavily travelled US 60 to reach the Gym for events or for other needs. Connecting and building this frontage road (1000' approx.) will alleviate this problem. Origin-Destination traffic studies during events may be conducted to get a better understanding and substantiate the need for the frontage road. After the extension is built, the connection of Playforth Dr. to US 60 may be eliminated to reduce access points on US 60.
KYTC Short Term	Right turn lane from KY 32 onto Old Flemingsburg Road: This project was submitted and was approved for HSIP funds. Construction may begin in year 2010.
KYTC Short Term	KY 32 intersection of Fraley Drive and Pinecrest Drive : This intersection has congestion and sight distance issues. An offset and added turn lane should be considered. The problems at this intersection should be reviewed in the field. A deep ditch exists in the grading near the Chevron next to the Ped. Button on KY 32. Several accidents of cars ending in the ditch were reported. A Drop Box inlet may be installed in the vicinity to improve safety. There is a need for sidewalk for pedestrians to access the Ped. Buttons.
KYTC Short Term	Sun light distraction with lights on KY 32 north of I-64: This issue has been completed by D-9 KYTC Office. Signal backplates were installed.
KYTC Short Term	Viking Drive – White's Lumber intersection at KY 32: Currently, these entrances/roads are offset. Trucks and other traffic (nearly 50 per day) pulling into the lumber yard block traffic and create congestion. It is proposed to line up the two entrances and build one common intersection. This project can be included in KY 32 Long Term project listed above. KY 32 PIF should be updated with this information. There are several utilities (12" & 8" waterline and a gas line) that may be affected with this intersection. The lumber yard would require a commercial entrance. A part time signal may be needed. New loops and signal heads would be required.
KYTC Short Term	KY 32 - KY 3319 intersection : This intersection has sight distance issues when a driver is headed north on KY 32 and tries to turn left onto KY 3319. Possible solutions discussed were "cat tracks", illuminares, and pavement markings "Cat Tracks" have been recently painted by KYTC D-9

KYTC Short Term	KY 32 – Guardian Ave/Viking Drive Right Turn Lane: When the new Middle School is open, a right-turn lane may be necessary for school traffic to alleviate congestion. The Middle School expressed their intention to use Guardian Ave. for their traffic. This decision will be confirmed by D-9 Traffic when they meet the school authorities in the near future.
KYTC Short Term	KY 32 - First Street intersection: This intersection has a large number of crashes. A lot of traffic uses First Street to bypass the intersection of KY 32 and US 60 which has backups. A raised barrier permitting only "right in and right out" traffic would reduce accidents. A second solution could be to provide painted island striping along with signage.
KYTC Short Term	South Hargis – US 60 intersection: Left turn traffic from S. Hargis onto US 60 has several accidents. This is a T- intersection with a stop control on S. Hargis road. US 60 has a TWTL at this time. Sight distance at this intersection is good. Drivers from S. Hargis have to be cautious turning left or merging. No other recommendations.
KYTC Short Term	 Scaggs Lane – KY 3319 intersection: It is currently a sharp left turn for school buses and has a utility pole close to the road. The Project Team decided that geometry of the intersection can be left as is because it would require expensive relocation of utilities and affects the residences in the area. There was an signage issue (with a couple of road signs being too close to each other) that has been fixed by D-9 Maintenance forces.
KYTC Short Term	Petit Ave. – US 60 intersection near Car Wash: There is a flooding issue noticed at this intersection. At one point, the culvert was full and was cleaned by Maintenance forces. The road has geometry issues because the current profile of the road is much lower than the profile that the road was designed for, which might be contributing to the flooding issues. The district stated that flooding has only been reported at this location once.
KYTC Short Term	KY 32 – 2nd Street intersection: This intersection improvement is listed in the current six year plan (Item 9-197.00).
KYTC Short Term	US 60 Turn Lanes for Lakeside near KY 2342: This item was not considered by the Project Team as it falls outside the City Limits. A PIF exists for a project to improve safety and geometry on US 60 beginning at Bath County line and

	extending into the 3-lane section of Morehead Bypass.
KYTC Short Term	Signals from Walmart to KY 377 need to be synchronized: Synchronization is not considered as GES (green extension) operation is more important.

A summary of KY 32 Rowan/Elliott counties Traffic model will be included in the SUA Study Report. Other area projects on KY 32 (MP 2.372 to MP 4.596) and KY 377 (Item 9-8406.00) will be listed in the study report. Updates to Project Exhibits were discussed. The next step for this study will be conducting a final Local Officials and Stakeholder's meeting and prioritizing the projects. The meeting was adjourned approximately 2:50 pm.

A field visit was conducted by Central Office team members with District assistance. The section of KY 3319 from Scaggs Road to Blue Stone road was found to be a very narrow road and steep at its south end. A Short Term project to install guardrail at the south end and a Long Term project to widen the roadway will be added to the recommendations.

Also, a fatal crash has been reported recently on December 4th, 2009 on KY 32 near the Guardian Plant possibly related to the vertical curve deficiency issue. The Long Term project on KY 32 mentioned above from KY 785 to KY 377 is scoped to correct the horizontal and vertical deficiencies of this roadway.

Meeting Minutes Morehead Small Urban Area Study

Prioritization of Proposed Projects Final Advisory Committee Meeting April 5, 2010

A Prioritization meeting for the proposed projects for the Morehead Small Urban Area Study (SUA) was held on April 5, 2010 at the Gateway ADD conference room in Morehead. The meeting began at 10 a.m. and concluded close to noon. The following were in attendance:

Hand outs were distributed and a Power Point presentation was started. The agenda for the meeting was presented. The topics on the agenda were defining a SUA Study, the progress to date for the current SUA study, and the proposed Projects for the Study area. It was explained to the attendees that they would prioritize the projects by ranking them and the results would be available at the end of the meeting.

A SUA study is conducted in communities with a population of 5,000 to 50,000 to identify and address transportation related safety and congestion projects. To date, the Morehead SUA study had three Project Team meetings and one Advisory Committee meeting. As a result, six Long Term and six Short Term projects were identified. Long Term projects have a higher cost associated with them and are placed in the Unscheduled Project list and may be considered for inclusion to the Highway Plan. Short Term projects are lower cost projects and may be completed by the area KYTC District Office if funding is available.

Each of the twelve projects was discussed in detail.

KYTC Long Term	ky 32 from KY 785 (MP 2.372) to KY 377 (MP 4.596)
1-LT	KI 52 IFOIII KI 785 (IVIP 2.572) 10 KI 577 (IVIP 4.590)
	KY 32 is a 2-lane roadway with narrow shoulders from KY 785 to KY 377. The roadway has severe geometric deficiencies resulting in a number of crashes and congestion. One such area is at the junction of Copperas Hollow Rd. with KY 32. There is no exclusive left turn or right turn lane at this junction. A fatal crash was reported recently in this area. The roadway carries a lot of truck traffic as well as school bus traffic.
	This project is listed in the Unscheduled Project List (UPL) and a KYTC Project Identification Form (PIF) currently exists. To the original project, two subprojects have been added. One of the projects is the addition of a right turn lane at Guardian Avenue going East on KY 32. The Middle School intends to use Guardian Avenue for all their traffic when they open in the near future. The second project is the construction of a common intersection for Viking Drive and lumber yard traffic. Nearly 50 trucks each day, enter or leave the lumber yard and in the process block traffic and create congestion. Signal improvements will be required at this intersection.
KYTC Long Term 2-LT	Off ramp of I-64 East to KY 32
2-L1	Off ramp of I-64 East is said to be one of the worst problem areas within the study limits with backups on the ramp as well as rear end crashes. Morehead Police informed that the back up on the ramp caused a secondary accident just last week. Accidents are not usually bad but many of them are caused by traffic merging onto KY 32 coming off the ramp.
	The recommendations for the project were adding a lane on the ramp and adding a merge lane on KY 32. These two lanes would perform as a continuous right turn lane for traffic from the ramp to East KY 32. It was suggested that instead of a merge lane, we could add a lane on the ramp and signalize it 'no turn on red' so that drivers make a right angle turn onto KY 32. This solution, could improve safety, but may not alleviate the capacity and congestion issues and was not considered to be carried forward.
	The group was informed that the proposed continuous right turn lane may cause the closure of the entrance to Hardees. Mayor Perkins informed that he was in favor of closing the entrance as it serves a lot of purposes and will be a good long term solution.

	Also, some group members informed that they see backups on the ramp almost every day. They usually hold the shoulder.
KYTC Long Term	KY 32 – US 60 Bypass intersection
3-LT	District Traffic informed that adjustments to the traffic signal has not alleviated the congestion issues of the intersection. More development is expected in the area in the spring with 2-3 more lots to be developed and possibly a new theatre. The new Courthouse and Justice Center that are under construction at this time close to this intersection will add more traffic to this intersection. Severe accidents are not an issue, however, rear end crashes are known to occur.
	This project will involve a complete traffic study of the intersection. The group was informed about a future project for the expansion of US 60 Bypass which might address the congestion issues at this intersection.
KYTC Long Term	KY 60 – Norman Wells Lane - Stone St. intersection
4-LT	This intersection is just south of the intersection mentioned above and is another problem of high importance. As mentioned already, some new lots are expected to be developed in the near future. A new auto store and a new Theatre are also expected in the area. The majority of the traffic from the new Courthouse and the new Justice Center are expected to use Norman Wells Lane to get on US 60 Bypass.
	It was discussed that having a signal at this intersection, so close to the KY 32 – US 60 Bypass signal will be counterproductive. The previous recommendation for this project for the possibility of a Traffic Signal at this intersection was dropped by the group. This project (KYTC Long Term 4- LT) will not be considered in the Prioritization process.
	The ultimate fix for the above two intersections is the expansion of US 60 Bypass to 4-lanes. Some preliminary work has been done by the District Office. A Project Identification Form (PIF) to add the project to the Unscheduled Project List needs to be produced.
	However, majority of the group agreed that left turns from both Stone St. and Norman Wells Lane should be eliminated. The solution discussed will be a Short Term project. See KYTC Short Term 1-ST.

KYTC Long Term	Extend East Main St. to Petit Avenue
5-LT	(Old 60 in front of the Morehead State gym)
	An error in the Presentation slide showing the connection of E. Main St. to Brown St. must be fixed. This project will connect E. Main St. from Lee Cemetery Rd. to E. Main St. at Petit Avenue. The connection of Playforth Dr. to US 60 will be eliminated to reduce access points on US 60. The project will allow local traffic to stay away from US 60 Bypass to access other local streets on that side.
	Several accidents, some severe were noticed in this area. The connection of Lee Cemetery Rd. to US 60 Bypass may be considered for elimination. Several design issues were discussed. Installing a concrete barrier to prevent accidents between US 60 Bypass and Main St. traffic and also address head light issues were discussed. Possible roadway design could be a curb and gutter section with sidewalk up against the curb. Clear zone issues will need to be addressed.
KYTC Long Term 6-LT	Scaggs Rd./KY 3319 widening from MP 2.25 to MP 2.62
KYTC Short Term 1-ST	 This stretch of the road is on a steep down grade. The project will make the hill more traversable, widen the lanes to 11', add shoulders, add turn lanes for the new subdivision and improve the intersection at the bottom of the hill. The City says that this project is of least concern to them. US 60 Bypass – Norman Wells Lane - Stone St. intersection As mentioned in the KYTC Long Term 4-LT above, the group decided that the proposal for a Signal at this intersection should be dropped. Therefore, the prior discussed project, Short Term 1-ST, for a Signal Warrant Study was modified as follows. The group agreed that the future project, US 60 Bypass expansion will address the ultimate capacity and congestion issues in this area. However, in the interim, the problem of conflicting turning movements of traffic coming from US 60 Bypass – Norman Wells Lane - Stone St. intersection needs to be addressed.
	KYTC Short Term 1-ST will construct right-in/right-out on Stone St. as well as Norman Wells Lane. A non traversable median with a long sweep in concrete triangle should be designed to prevent left turns. This will force the Stone St. traffic to use US 60 Bypass – KY 32 intersection for left turns.
KYTC Short Term	Offset Left Turn Lanes on KY 32 near Chevron/Pinecrest Dr.

0.0T	
2-ST	Left turn traffic on either sides of KY 32 have sight distance problems seeing on-coming traffic. Offset left turn lanes will be designed on either sides of KY 32 under KYTC Short Term 2- ST project. Part of existing shoulder may need to be used to achieve this. The project may also require pavement overlay to restripe the lanes.
KYTC Short Term 3-ST	Drainage and Sidewalk improvements at Chevron
	A deep ditch exists in the west corner of Chevron next to the Pedestrian Button. Several accidents of cars ending in the ditch were reported. KYTC Short Term 3-ST project will design and construct multiple drop box inlets and provide sidewalk access to the Pedestrian Button.
KYTC Short Term 4-ST	KY 32 - KY 3319 Intersection improvements
16111 4-01	The City of Morehead Officials and the District Team informed that "Cat Tracks" striped recently at this intersection have been very helpful to the left turning traffic. At the present time, there is a light pole at the south east corner of the intersection. The Mayor informed that the light fixture was upgraded recently and is very effective and adequate for the intersection. No additional lighting was suggested and agreed by the group. Therefore, KYTC Short Term 4-ST was dropped from the prioritization process.
KYTC Short Term 5-ST	Scaggs Rd./KY 3319 Guardrail project near Blue Stone Rd.
	KYTC Short Term 5-ST project will be installation of guardrail from MP 2.25 to MP 3.00 on Scaggs Rd to improve safety over the hill to the intersection of Blue Stone Rd.
KYTC Short Term 6-ST	KY 32 at First St. intersection
	This project involves improving safety and congestion problems due to left turn traffic crossing KY 32 from First St. The project was originally intended to construct right-in/right-out entrance on the west side along "Allstate Insurance". The City of Morehead informed the group that a streetscape project is planned along that side; therefore the right-in/right-out would be counterproductive. Installation of signage such as "no left turn" was recommended on the west side at this intersection. Right- in/right-out entrance is recommended to be constructed with concrete barriers on the east side of KY 32-First Street where there is a similar problem of left turn traffic crossing KY 32 and blocking traffic.

The group reviewed other projects that were discussed in previous meetings and a project status was presented on each of them. Each member of the group was asked to rank the Long-Term and Short-Term projects. The project with highest priority was to be ranked 1. It was pointed to the group that Long Term 4-LT and Short Term 4-ST should not be considered in the ranking process. As discussed earlier, these projects were not going to be carried forward.

Results from the ranking are as follows:

Project	Location	Rank		
	KY 32 from KY 785 to KY 377 approximately (MP 2.372 to MP			
KYTC Long Term 1 - LT	4.596)	1		
KTTC Long Term T - LT	4.570)	1		
		_		
KYTC Long Term 2 - LT	Off ramp of I-64 to KY 32 east	2		
KYTC Long Term 3 - LT	KY 32 - US 60 Bypass intersection	3		
KYTC Long Term 5 - LT	East Main St Petit Avenue near Morehead State Gym	4		
KYTC Long Term 6 - LT	KY 3319 from Scaggs Rd. going south	5		
RTTC Long Term o E1	KT 5517 Hom Sougge Ku. going south	5		

LONG TERM PROJECTS

SHORT TERM PROJECTS

Project	Location	Rank
KYTC Short Term 1 - ST	US 60 - Stone St Norman Wells intersection	1
KYTC Short Term 2 - ST	KY 32 - Fraley Dr Pinecrest Dr.	2
KYTC Short Term 3 - ST	Deep ditch near Chevron at Fraley Dr.	3
KYTC Short Term 5 - ST	Scaggs Rd. close to Blue Stone Rd intersection	5
KYTC Short Term 6 - ST	KY 32 at First St.	4

Next Steps:

A Draft version of the Study Report will be available in the near future for comment. The Final report will be developed thereafter and will be available in hard copy format. The report can be viewed on KYTC Division of Planning website. The meeting concluded close to noon.

APPENDIX C

Photos



KY 32 at Copperas Hollow Rd. is a high CRF segment



KY 32 at KY 377 junction going East towards I-64 and Downtown Morehead



KY 32 going West past Copperas Hollow Rd. Limestone Rd. seen ahead intersects at an skewed angle and causes sight distance problems.



KY 32 going East at Viking Dr. intersection and Lumber Yard



KY 32 and Guardian Avenue intersection. Schools in this area intend to use Guardian Avenue for Bus and other School traffic.



KY 32 approaching US 60 Bypass. This intersection for known for severe traffic backups during both peak and off peak hours

APPENDIX D

UPL Projects on KY 60 and KY 32

PIF Revised: Aug. 2004	<u>KYTC Pr</u>	oject Identification F	Orm Prior Tier: Tier I	e Year: <u>2007</u> ity: L : <u>Hi</u> R: <u>H</u> <u>2</u> Rank:R: all Top Ten:R: 5	D:
Section I – General Infe	ormation			1	
Requested by: Title/Organization: Date:		UPL Control #: 09 1 Parent Control #:	03 D0032 88.10 		Co. #: <u>103</u>
		District: <u>9</u> ADD: <u>GWADD</u>	County: Rowan MPO: <u>n/a</u>	Route SUA:	: <u>KY-32</u>
Form Completed by: Title/Organization: Date:	Adam Montgomery Gateway ADD 10-20-04	Mode: <u>Highway</u> Type: <u>Relocation</u>	State Sy Funct'l (
Revision 1 by: Title/Organization: Date:	Adam Montgomery Gateway ADD September, 2006	Project Length: <u>2.224 mi</u> Possible Funding Sources (C □IM □NH □HES	(P:216 D:1836 Check all that apply)	ost Estimate: \$ <u>330</u> R:9075 U:3888 : ⊠SP □TE	51 C:18036) □CMAQ
Revision 2 by: Title/Organization: Date:	Joy Mullins/B.Wells Gateway ADD November 2008	Highway Networks (Check a	ull that apply):	Non NHS Bike ADHS ()	□NHS □Forest
Section II – Problem St	atement	Existing Project Studies (Yes	_		
Route Number: KY-32 Beginning MP: 2.372 Ending MP: 4.596		(Use Report Year) Adequacy Rating: • CRF: (Year)	Original 78.10: (03) .88: (03)	Rev. 1 65.50: (05) 4.88: (05)	Rev. 2 80.00: (08) 1.162: (08)
Total Length: $\frac{4.376}{2.224}$ mi		• IRI: (Year)	98: (03)	102: (05)	127: (08)
Primary Purpose: Upgrade	Existing System(Major)	• V/SF: (Year) Current ADT: (Year): Percent Trucks: (Year):	.47: (03) 11500: (02) n/a: ()	0.5: (05) 11500: (02) 11.5: (02)	.37: (08) 14600: (08) 4.6: (08)
		Projected ADT (HDO): Year:	%Grow	th: AD'	1:

Please provide a clear problem statement for this project:

This segment of KY 32 (from KY 785 to KY 377 is just one of a series of proposed UPL projects along the route. KY 32 is a main thoroughfare for traffic travelling between Morehead and Flemingsburg to Maysville. KY 32 is a vital systems link for traffic traveling both EB and WB all the way from Lawrence County to Nicholas County.

This segment of Existing KY 32 is a rural 2-lane roadway with narrow shoulders. Horizontal and verical deficiencies are evident and negatively impact sight distances and operational efficiency of the route. There are several businesses and schools along this route that use large trucks or buses for transporting people and goods. This type of traffic combined with the rural nature of this segment causes traffic congestion, especially during peak hours of the day.

Section III – Project Description

Project Description Narrative:

Correct horizontal and vertical deficiencies to increase operational efficiency, improve regional systems connectivity and improve safety on KY 32 beginning near KY 785(MP 2.372) and ending near KY 377 (MP 4.593)

Regional Goals/Objectives Addressed: The Regional Goal that this project addresses is to target possible high accident areas.

UPL #: 09 103 D0032 88.10 County: Rowan Co. #: 103 Route: KY-32

1.	Miscellaneous		Existing: Permit		Existing: <u>N/A</u>	Width:		
	Roadway	Access Control:	Proposed Domis	Median Type:	Proposed: <u>N/A</u>	Width		
	Conditions		Proposed: <u>Permit</u> Existing: <u>2/12</u>		Proposed: <u>N/A</u> Existing: <u>Asphalt</u>	Width: Width: 4		
		Lane	Existing. <u>#14</u>	Shoulders:	Enisting. Asphalt	······································		
		No./Width:	Proposed: <u>2-3/12</u>		Proposed: Asphalt	Width: <u>6-8</u>		
			Existing: 1	Other	None SYP Resurfa	lce		
		No. of Bridges:	Draw and 1 B(4	Improvement	$\square Other \underline{9-132.00}$			
		Comments:	Proposed: <u>1 B64</u> 9-160.00 was let 09-98, completed	Projects in Area:				
		comments.	> 100,00 mas ici 07-70, compicicu					
2.	Right of Way	Avg.						
		Width: Exist	ing: <u>60</u> Source: 🛛 HI	S Plans M	licrofilm Other			
		Current Primary U	se: XIndustrial XCommer	cial ⊠Residential	Farmland Other:			
		🗌 No 🖂 Yes	Project may require additional R/W	. Possible Reloca	tions : Homes: <u>6-10</u> Busines	ses: <u>1-5</u>		
		Comments:		1				
2								
3.	Utilities		Power Gas	Telephone 🛛 🖂	Cable Sewer Water	□ ITS		
		Existing Utilities:	None Other:					
				. Comments:				
_		🗌 No 🔀 Yes	Project may require Utility Relocation	ions.				
Δ	Environmental	(Check all that apply):					
	Impacts	(encer an unit appry	/-					
	puvo	Blueline Streams Wetlands Floodplain Wildlife Managed Areas Historic Properties						
		Cemeteries			Idangered Species Publotential NR Properties Othe	ic Land/Park		
				Tropenies Po		<i>.</i>		
		Potential Conta	aminated sites: 🛛 Gas Stations	☐ Landfills	Auto Repair Junkya	ards Other		
		Comments:	Gas wells in area					
5.	Air Quality	⊠No □Yes	Project is located in a Maintenance	or Nonattainment A	area 🗌 Ozone	□ PM 2.5		
			-					
		⊠No □Yes	Project adds through lane capacity					
		⊠No □Yes	Project results from a Congestion M	Ianagement Plan				
		⊠No □Yes	Project is included in TIP/STIP TIP Page # STIP Page #					
		Comments:						
6.	Economic	□No □Yes	Planning/Zoning Regulations					
	Impacts	No Xes	exist in Community This project has economic impacts	on regional/local eco	Commercial or Industria	ai Districts.		
			\square Development \square Tax Revenues \square					
			Plage Describe:					
		No 🗌 Yes	Please Describe: This project provides direct access	to major points of in	iterest:			
			Nat'l/State Parks Monuments			Other		
			Please Describe:					
		🗌 No 🖂 Yes	This project provides direct access					
			☐ Shopping Centers ☐ Schools ⊠Ind			Dece 70		
			Please Describe:			Page 79		

				UPL #: <u>09 1</u>	03 D0032 88.10 County: Rowa	an Co. #: 103 Route: KY-32
7.	Multimodal Opportunities	This project is a candidate for: (check all that apply)		icycle Paths ark/Ride Lots	☐ Sidewalks ⊠ N/A	Shared-Use Paths
		This project improves direct access to: (check all that apply)		irports ucking Route	□ Railways s ⊠ N/A	Riverports
		Type of Public Transportation available:	🗌 Fiz	xed Route	Demand Respo	onse
		Comments:				
8. 9	Social Impacts	This project may affect: Neighborhood or Commu (Check all that apply) Travel Patterns (Vehicula Household Relocations Elderly, disabled, nondriv No adverse effects to neig No adverse effects to neig	r, com vers, m	nmuter, bicyc ninorities, lov	-income persons	
		Comments/Impact Descriptions: House relocations possible				

$Section \ V-Cost \ Estimate \ Information \ ({\it to be completed by Hwy District Office}):$

Cost Estimate by Phase:

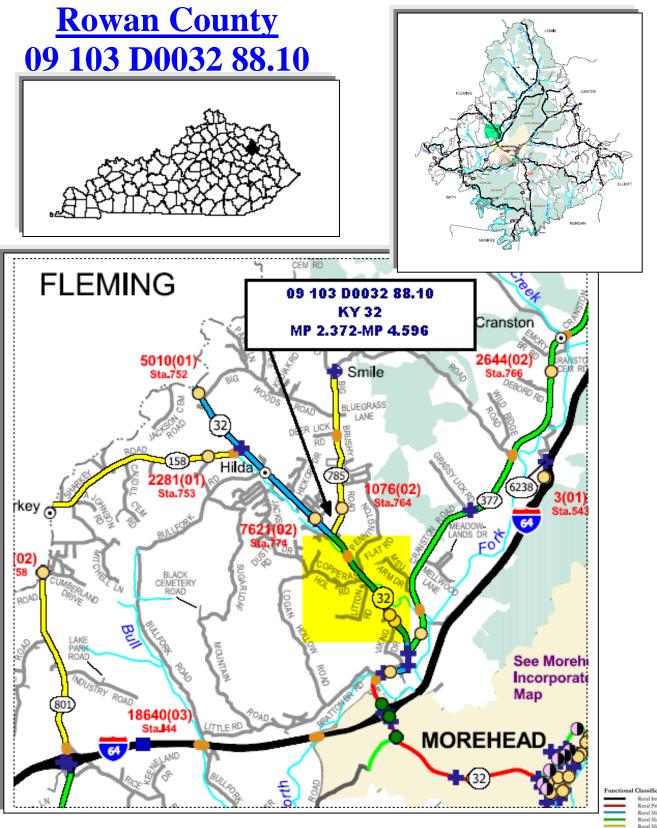
Phase	Original Estimate	By:	Revision 1	Date	By:	Revision 2	Date	By:
Planning			200,000			\$216,000		
Design	\$1,360,000		1,700,000			\$1,836,000		
ROW	\$6,600,000		8,250,000			\$9,075,000		
Utilities	\$2,880,000		3,600,000			\$3,888,000		
Construction	\$13,350,000		16,700,000			\$18,036,000		
Total Cost	\$24,190,000		28,890,000	9-2006	DDH	\$33,051,000	11-2008	bdw

Estimate Procedure Used:

Original Estimate:		Revision 1:	Revision 2:		
\boxtimes	Per Mile@ \$ <u>11 million</u>	Per Mile@ \$	Per Mile@ \$		
	Terrain: <u>Rolling</u>	Terrain:	Terrain:		
	Detailed Estimate with Calculations Attached	Detailed Estimate with Calculations Attached	Detailed Estimate with Calculations Attached		
Estimate Assumptions: 2-12' lanes with 8' paved shldrs 1 Bridge – B64 included Per mile \$ based upon 9-142.00 Total of 16.5 Mil for 1.5 miles 9-142.00 (divide by 1.5 X 2.2 miles) D=918K D1=1.36 mil R=4.5 mil R1=6.6 mil U=1.965 mil U1=2.88 mil C=9.1 mil C1=13.35 T= 16.5 mil T1=24.19 mil		Estimate Assumptions: Added a planning phase and increase previously estimated phase costs by 25+%.	Estimate Assumptions: Update estimate phases by YOE percentages: P, D, U, C by 4% per year R by 5% per year		
Estimate	Class: E-Requires further study	Estimate Class:	Estimate Class:		

Section VI – Attachments:

The following items are attached to this document:	\square Location Map \square Photograph(s) \square Other:	
		Page 80
Comments:		-



Cional Classification Rural Interests Rural Minor Anterial Rural Minor Collector Rural Minor Collector Rural Minor Collector State-minimized Local Urban Interstate Urban Principal Anterial Urban Minor Anterial Street Urban Collector Street Rural or Urban Local

PIF Revised: Aug. 2004 KYTC P.	roject Identification	F ORM Prio	le Year: <u>2005</u> ority: L : <u>Low</u> R:	Low D: Med
Section I – General Information				<u>n/a</u> D: <u>n/a</u> <u>n/a</u> D: <u>n/a</u>
Section 1 – General miormation	UPL Control #: <u>09</u>	103 B0060 90.00	0 Co. #:	<u>103</u>
Requested by:	Parent Control #:		_	
Title/Organization:	RSE Unique Number: 103	US-60		
Date:				
	District: <u>9</u>	County: Rowan		te: <u>US-60</u>
	ADD: <u>GWADD</u>	MPO:	SUA	A:
Form Completed by: Adam Montgomery	Mode: Highway	State S	vstem: State	Secondary
Title/Organization: Gateway ADD	Type: <u>Reconstruction</u>	Funct'l		Mjr Coll
Date: 2-28-05			~	
	Project Length: <u>6.1</u>	(P: D:	C ost Estimate: \$ <u>42</u> R: U:	<u>2000 (1000's)</u> C:)
Revision 1 by:Adam MontgomeryTitl (O)ADD		(1. D.	K. 0.	C.)
Title/Organization: Gateway ADD	Possible Funding Sources (_
Date: 1-22-07	IM NH HES	BR STP	SP TE	CMAQ
Revision 2 by:				
Title/Organization: Date:	Highway Networks (Check		Non NHS	□NHS
Date.		ay Coal Haul		Forest
	DefenseStrahnet	Ext. Wt.	\square ADHS ()	
Section II – Problem Statement	Existing Project Studies (Y	ear):		
Route Number: <u>US-60</u>	(Use Report Year)	Original	Rev. 1	Rev. 2
Beginning MP: <u>0</u>	AdequacyRating:	89.75 : (04)	90.50 : (05)	:()
Ending MP: <u>6.1</u>	CRF: (Year) IRI: (Year)	.66: (04) 114: (04)	<u>.82: (05)</u> 121: (05)	:()
Total Length: <u>6.1</u>	IRI: (Year) V/SF: (Year)	.38: (04)	.54: (05)	:()
Primary Purpose: Upgrade Existing System(Major)	Current ADT: (Year):	7,180: (02)	7,140: (05)	:()
rinne, rapole, epsile Ending System(Hujor)	Percent Trucks: (Year):	n/a : ()	:()	:()
	Projected ADT (HDO): Yea	r: %Grov	wth: A	DT:

Please provide a clear problem statement for this project:

This segment of existing US 60 begins at the Bath/Rowan County Line (MP 0.00) and extends into the 3 lane section of the Morehead Bypass (US 60) MP 6.100. This route draws boat/recreation traffic to and from Cave Run Lake as well as traffic using the KY 801 I-64 exit (133) into Moreahead. The critical rate factor has increase from 0.66 to D9 for the Highway Safety Task force study program.

Section III – Project Description

Project Description Narrative:

Improve safety and geometry on US 60 beginning at the Bath County Line (MP 0.00) and extending into the 3 laned section of the Morehead Bypass (MP 6.1) for improved access into the city of Morehead from the west.

Regional Goals/Objectives Addressed: The Regional Goal that is addressed is to improve the safety issues in our region.

UPL #: 09 103 B0060 90.00 County: Rowan Co. #: 103 Route: 0060

	Section	IV –	Projec	t Area	Inform	nation:
--	---------	------	--------	--------	--------	---------

1. Miscellaneous	A append Country 1	Existing:		Existing: <u>N/A</u>	Width:
Roadway Conditions	Access Control:	Proposed:	Median Type:	Proposed: <u>N/A</u>	Width:
Conditions	Lane	Existing: 2/11	G1 11	Existing: Earth	Width: <u>3</u>
	No./Width:	Proposed: //	Shoulders:	Proposed:	Width:
		Existing:	Other	None SYP Resurfa	
	No. of Bridges:	Proposed:	Improvement Projects in Area:	Other	
	Comments:	Tioposed Tioposed.			
	<u> </u>				
2. Right of Way	Avg.				
8 2		ting: <u>60</u> Source: HI	S Plans M	icrofilm Other	
	Current Primary Use:				
	□ No □ Yes	Project may require additional R/W.	Possible Reloca	tions : Homes: Busines	ses:
	Comments:	5 5 1			
	l				
3. Utilities					
5. Others	Existing Utilities:		Telephone 🛛 🕅	Cable Sewer Water	🗌 ITS
	Existing Utilities:				
	No Yes	Project may require Utility Relocation	ions. Comments:		
4. Environmental	(Check all that apply	<i>)</i> .			
4. Environmental Impacts					
Ĩ					
	Potential Contaminated sites: Gas Stations Landfills Auto Repair Junkyards Other				
	Comments:				
5. Air Quality	⊠No □Yes	Project is located in a Maintenance	or Nonattainment A	rea 🗌 Ozone	□ PM 2.5
		-			
	No Yes	Project adds through lane capacity			
	No Yes Project results from a Congestion Management Plan				
	No Yes Project is included in TIP/STIP TIP Page # STIP Page #			: #	
	Comments:				
	I				
6. Economic	No Yes	Planning/Zoning Regulations		<i>.</i>	
Impacts	No Xes	exist in Community This project has economic impacts of	on regional/local es	Commercial or Industria	al Districts.
		Development Tax Revenues			
		Please Describe:			
	No 🗌 Yes	This project provides direct access t			Other
	No Yes	Please Describe: No Yes This project provides direct access to major traffic generators:			
		Shopping Centers Schools Ind			Page 83
		Please Describe: City of Morehead			i aye oo

Page 2 of 3

	UPL #: <u>09 103 B0060 90.00</u>			
	County: Rowan Co. #: 103 Route: 0060			
7. Multimodal Opportunities	This project is a candidate for: (check all that apply)			
	This project improves direct access to: (check all that apply) Airports Railways Riverports Trucking Routes X N/A			
	Type of Public Transportation available: Fixed Route Demand Response			
	Comments:			
8. Social Impacts	This project may affect: Neighborhood or Community Cohesion (Check all that apply) Travel Patterns (Vehicular, commuter, bicycle, pedestrian) Household Relocations Elderly, disabled, nondrivers, minorities, low-income persons No adverse effects to neighborhoods apparent. Comments/Impact Descriptions:			

$Section \ V-Cost \ Estimate \ Information \ ({\it to be completed by Hwy District Office}):$

Cost Estimate by Phase:

Phase	Original Estimate	By:	Revision 1	Date	By:	Revision 2	Date	By:
Planning								
Design								
ROW								
Utilities								
Construction								
Total Cost	\$42,000,000	ddh						

Estimate Procedure Used:

Original Estimate:	Revision 1:	Revision 2:	
Per Mile@ \$ <u>7 mill</u>	Per Mile@ \$	Per Mile@ \$	
Terrain: <u>Rolling</u>	Terrain:	Terrain:	
Detailed Estimate with Calculations Attached	Detailed Estimate with Calculations Attached	Detailed Estimate with Calculations Attached	
Estimate Assumptions: 3-4 lanes with 4'paved shldrs	Estimate Assumptions:	Estimate Assumptions:	
6miles x 7 million = 42 mil			
Estimate Class: E-Requires further study	Estimate Class:	Estimate Class:	

Section VI – Attachments:

The following items are attached to this document:	\square Location Map \square Photograph(s) \square Other:	
Comments:		Page 84