

Leitchfield-Clarkson Small Urban Area Study

Grayson County, Kentucky



Kentucky Transportation Cabinet

Division of Planning

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Division of Planning



TABLE OF CONTENTS

Executive Summary

1.0 - Study Purpose.....	1
2.0 - Study Process.....	1
3.0 - Transportation Data.....	2
3.1 - Road Network.....	2
3.2 - Adequacy Ratings.....	2
3.3 - Crash Data.....	4
3.4 - Traffic Data.....	6
4.0 - Environmental and Socioeconomic Data.....	8
5.0 - Existing Projects.....	9
6.0 - Recommended Improvements.....	10
6.1 - Completed Traffic and Maintenance Improvements.....	11
6.2 - Ongoing Traffic and Maintenance Improvements.....	12
6.3 - Construction Projects.....	14

Tables:

Table 1: Crash Details for High-Crash Segments & Spots.....	4
Table 2: Existing & Projected Volume to Service Flow Ratios.....	7
Table 3: Biennial Highway Plan Projects in Study Area.....	9
Table 4: UPL Projects in Study Area.....	10
Table 5: Recommended UPL Projects to Address Identified Issues.....	17

Appendix A - Exhibits

Exhibit 1: Area Map	
Exhibit 2: Composite Adequacy Rating Percentiles	
Exhibit 3: Analysis of High-Crash Segments & Spots	
Exhibit 4: 2008 Traffic Data & Levels of Service	
Exhibit 5: 2008 Traffic Data & Volume to Service Flow Ratios for Urban & Low-Speed Streets	
Exhibit 6: 2035 Traffic Data & Levels of Service	
Exhibit 7: 2035 Traffic Data & Volume to Service Flow Ratios for Urban & Low-Speed Streets	
Exhibit 8: Environmental Footprint	
Exhibit 9: UPL & Biennial Highway Plan Projects	
Exhibit 10: Locations of Recommended Improvements and Other Issues	

Appendix B - Photographs

Appendix C - Environmental Justice and Community Impact Report

Appendix D - Meeting Minutes

December 17, 2008: Initial Project Team Meeting	
June 11, 2009: Leitchfield Advisory Committee Meeting	
June 11, 2009: Clarkson Advisory Committee Meeting	
December 7, 2009: Second Project Team Meeting	

EXECUTIVE SUMMARY

The *Leitchfield-Clarkson Small Urban Area Study* was prepared by the Division of Planning and Highway District 4 of the Kentucky Transportation Cabinet using a project team approach. The purpose of the study was to identify deficiencies in the transportation network in the Leitchfield-Clarkson urban area, and to recommend solutions to address those deficiencies. To assist in this effort, data on highway adequacy ratings, crash rates, traffic volumes, and highway capacity was retrieved and analyzed for state-maintained highways within the urban area. Meetings were also held with local officials and stakeholders from the cities of Leitchfield and Clarkson to obtain additional information on issues of local concern. As a result of this process, a number of transportation-related issues were identified in the urban area. Several traffic and maintenance improvements were identified to address these issues. Many of these improvements have already been implemented as of the writing of this report, while others are ongoing. These projects are listed below, and their locations are mapped in [Exhibit ES-1](#).

Completed Traffic and Maintenance Improvements:

- **US 62 near the Clarkson Church of Christ:** Local officials indicated that a vertical curve just east of the Clarkson Church of Christ could be causing sight distance issues. The District Office investigated this location and found that the sight distance along US 62 to the east of the Clarkson Church of Christ entrance is less than the recommended sight distance for a 55 MPH design speed, which is the posted speed limit along this section of US 62. The District Office has installed a traffic warning sign with an advisory speed plaque to advise motorists at this location.
- **North Patterson Street (KY 2191) in Clarkson:** Local officials requested that the Highway Department consider lowering the speed limit to 20 MPH or 25 MPH. A speed study performed by the District Office did not justify lowering the speed limit, so the speed limit should remain as posted.
- **KY 259 at the Western Kentucky Parkway Eastbound On-Ramp:** Vehicles tend to miss or overshoot the left turn from southbound KY 259 onto the eastbound Parkway on-ramp. The district office replaced the left-turn arrows and added thermoplastic striping to better delineate the traveled way on the ramp.
- **KY 3155 at the transition from five lanes to two lanes:** Local officials requested traffic control improvements at this location. The District Office has replaced a merge sign and added pavement merge arrows.
- **KY 54 at Bel Cheese factory:** Local officials indicated that there is a perceived safety issue at the cross-walk on KY 54 at the Bel Cheese factory just west of downtown Leitchfield. This location was not identified as having a high Critical Rate Factor, and no

collisions with pedestrians were identified during the time period for which crash data was obtained. However, the District Office did replace the 8-inch flashing beacons with 12-inch flashing beacons.

- **KY 259 at US 62 (White Oak Street):** Overhead signs for the northbound lane drop were knocked down. The District Office has added a left-turn arrow and has replaced the overhead lane-use signs.
- **US 62 at KY 3155:** Local officials indicate that there is a blind spot which may contribute to red-light running. The District Office has added reflective backplates to the signal heads on the KY 3155 southbound approach to improve their visibility.

Ongoing Traffic and Maintenance Improvements

- **US 62 near Milepoint 24.4 in Clarkson:** The culvert under US 62 near Midway Propane becomes clogged, possibly due to runoff from a large gravel parking lot. Maintenance will keep an eye on this location to make sure water doesn't overflow the roadway. Clarkson officials should discuss the erosion issue with the property owner.
- **KY 88 near US 62 in Clarkson:** There is a large drop-off into a ditch at the alley behind the car-wash, which is located on KY 88 just south of US 62. The alley is a city street, so the city would be responsible for extending the culvert. The estimated cost of this project is \$1,500.
- **KY 224 in Clarkson:** There are drainage issues along KY 224, particularly near the US 62 intersection. Maintenance will schedule work to clean the culverts and drainage pipes in this area. Drainage improvements in this area may be considered during the design phases of the KY 224 and US 62 (MP 23.000 to MP 25.463) reconstruction projects as listed in [Table ES-1](#).
- **KY 259 south of the Western Kentucky Parkway:** There has been confusion about which of the southbound lanes ends at the transition from a five-lane to a two-lane cross-section. The District Office has added merge signs and pavement merge arrows, and will re-evaluate the distance that the skip line separating the two southbound lanes of KY 259 extends toward the merge area the next time the road is resurfaced.
- **Western Kentucky Parkway between Milepoints 108 and 109:** Local officials report that frequent crashes occur in the westbound lanes when it rains. An analysis of crash data did not identify this location as a high-crash spot, and no drainage problems were noted during a field visit. The District Office will monitor the situation and will coordinate with maintenance to see if there are any pavement issues that need to be addressed.
- **KY 259 at US 62 north intersection (Mill Street), US 62 south intersection (White Oak Street), and Shain Drive:** Local officials report that vehicles are turning right on red at these intersections without coming to a complete stop. Increased enforcement is

recommended at these locations. In addition, the stop bar at Shain Drive could be extended to be compatible with the recently increased curb radius at this location.

- **KY 54 at Cannon Drive in Leitchfield:** This location was identified as having a high crash rate. Taken together, angle and opposing left turn crash types made up two-thirds of the crashes at this location. Sight distance at this location may be reduced by both on-street parking and by vehicles queued at the KY 259 intersection. The district office will investigate this location to determine if any potential improvements could be implemented to improve safety.
- **US 62 (South Main Street) from White Oak Street to KY 54:** This segment is approximately 0.2-mile long and consists of one wide lane in the northbound direction and two lanes in the southbound direction, with no median or center turn lane. Only one southbound lane enters this segment from the traffic circle at East Main Street and West Main Street, but the southbound direction immediately transitions to two lanes just south of the traffic circle, which continue beyond the Western Kentucky Parkway. The northbound approach to this segment consists of two lanes, but one of these lanes is dropped as a left-turn lane onto westbound US 62 (West White Oak Street). A cluster of three overlapping one-tenth-mile high-crash spots combine to cover the southern portion of this segment and contribute to a very low adequacy rating for the segment. An analysis of the crash data from White Oak Street (Milepoint 20.737) north to Milepoint 20.9 revealed a total of 23 crashes from August 2005 to August 2008, with the most common manners of collision being rear-end (43%), angle (39%), and same-direction sideswipe (13%). The Kentucky Transportation Center (KTC) at the University of Kentucky is currently working on a research study to identify criteria under which a “road diet” would be appropriate. Based on the crash patterns and preliminary information from the KTC research study, it appears that the crash rate on this section could be reduced by implementing a road diet, which would involve converting the three through lanes to two through lanes (one lane in each direction) with a two-way left-turn lane. However, with a 2008 Average Daily Traffic volume (ADT) of 16,500 vehicles per day and an estimated no-build 2035 ADT of 19,400 vehicles per day, maintaining adequate roadway capacity could be an issue, particularly for the southbound direction at the White Oak Street intersection. Construction of a western bypass around Leitchfield, which is included on the Unscheduled Projects List, is expected to reduce traffic on US 62 through downtown Leitchfield. Therefore, it is recommended that a road diet be considered at this location once the western Leitchfield bypass is constructed and its effect on traffic patterns in downtown Leitchfield is determined. Typically, road diets are implemented during resurfacing projects.

Other issues were identified which could be better addressed by construction projects. Due to the extensive coverage of the Leitchfield-Clarkson area by projects already contained on the Unscheduled Projects List (UPL), no new projects were identified for addition to the UPL. However, a list of existing UPL projects which would address issues identified by the Leitchfield-Clarkson Small Urban Area Study is provided in [Table ES- 1](#). All information for these projects was obtained directly from the UPL database. The locations of these projects are mapped in [Exhibit ES-1](#).

Table ES- 1: Recommended UPL Projects to Address Identified Issues

Unscheduled Projects List Control Number	Route	Begin Mile Point	End Mile Point	Project Description	Estimated Cost (Millions of Dollars)*	District Priority†
04 043 B0062 10.00	US-62	18.952	20.800	Address geometric deficiencies on US-62 from KY-259 to KY-187.	P-0.1, D-1.5, R-1.0, U-1.0, C-7.2 Total-10.8	Medium
04 043 B0062 9.00	US-62	23.000	25.463	Reconstruct US-62 from KY-3155 in Leitchfield to KY-224 in Clarkson to improve geometric deficiencies and address capacity issues.	D-1.5, R-2.0, U-1.0, C-20.0 Total-24.5	High
04 043 D0224 1.00	KY-224	0.000	0.804	Reconstruct KY-224 from US-62 to the Western Kentucky Parkway to address geometric deficiencies and improve safety.	D-0.5, R-0.8, U-0.7, C-3.25 Total-5.25	High
04 043 D0920 1.00	KY-920	0.000	1.500	Reconstruct KY-920, possibly as a 3-lane urban section, from US-62 to KY-3155 to improve geometric deficiencies.	D-0.75, R-1.0, U-0.5, C-4.5 Total-6.75	Low
04 043 D1214 1.00	KY-1214	13.125	14.000	Address geometric deficiencies on KY-1214 between the East Leitchfield Bypass and the Western Kentucky Parkway in conjunction with a new interchange on the Western Kentucky Parkway at KY-1214.	P-0.2, D-0.6, R-0.7, U-0.5, C-3.0 Total-5.0	Low
04 043 D9001 16.00	WK-9001	109.275	109.375	Improve system linkage by adding an interchange on the Western Kentucky Parkway at KY-1214 in conjunction with improvements to KY-1214 between the Parkway and the East Leitchfield Bypass.	P-0.2, D-1.0, R-1.0, U-0.8, C-5.0 Total-8.0	Low
04 043 C0000 1.10	New Route			Construct a bypass section from KY-259 northwest to KY-54 to address congestion in Leitchfield and provide connectivity on the west side.	D-1.4, R-10.2, U-0.6, C-11.3 Total-23.5	N/A
04 043 C0000 1.20	New Route			Construct a bypass section from KY-54 north to KY-737 to improve connectivity on the west side of Leitchfield.	D-1.1, R-3.5, U-0.12, C-9.1 Total-13.8	Low
04 043 C0000 1.30	New Route			Construct a bypass section from KY-737 east to KY-259 to provide connectivity and improve access to the industrial park in north Leitchfield.	D-0.6, R-1.1, U-0.13, C-4.4 Total-6.23	Low
*Phase Abbreviations: P-Planning, D-Design, R-Right-of-Way, U-Utilities, C-Construction						
†District priorities were obtained from the Unscheduled Projects List database.						

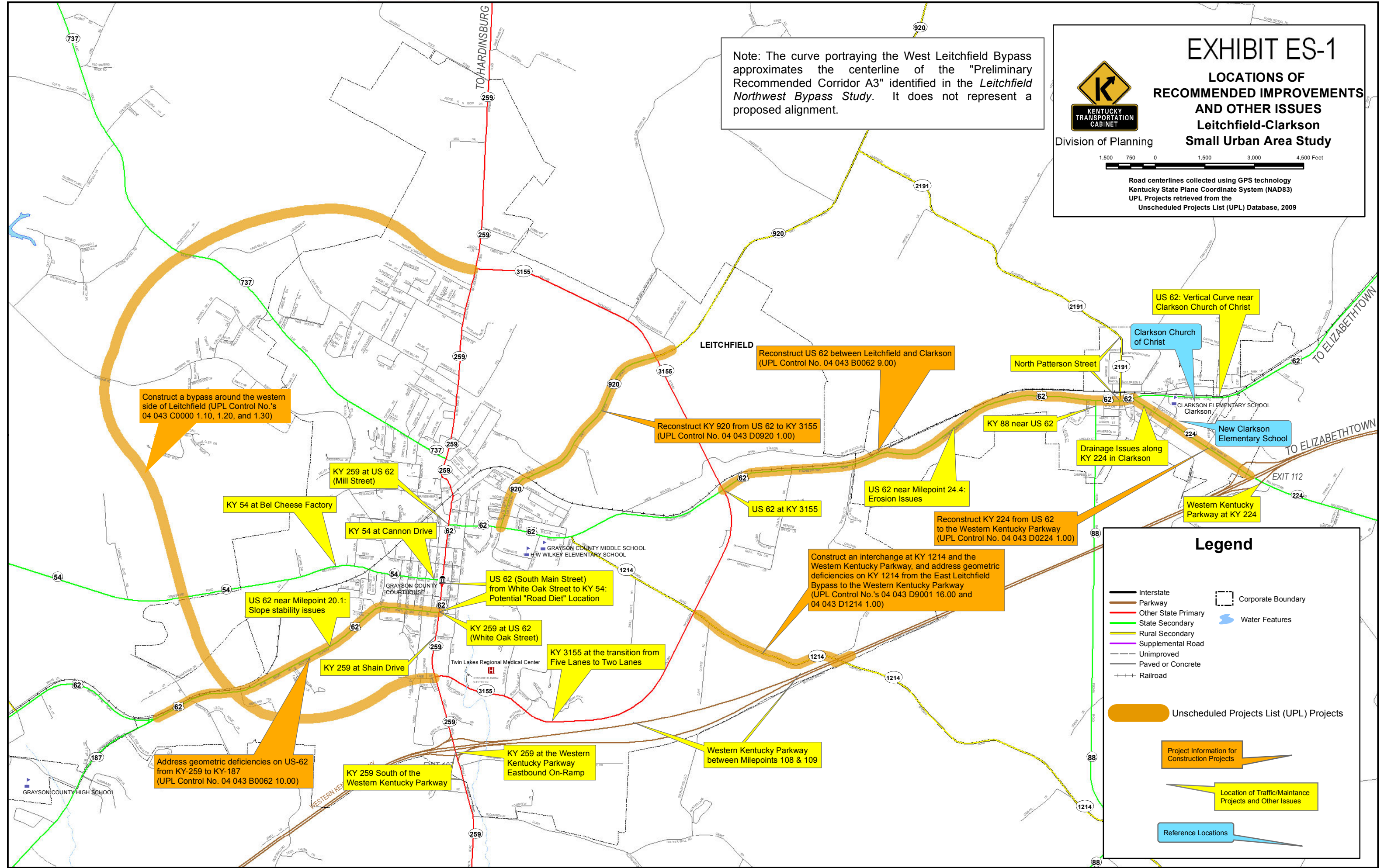
EXHIBIT ES-1
LOCATIONS OF RECOMMENDED IMPROVEMENTS AND OTHER ISSUES
Leitchfield-Clarkson Small Urban Area Study

KENTUCKY TRANSPORTATION CABINET
 Division of Planning

1,500 750 0 1,500 3,000 4,500 Feet

Road centerlines collected using GPS technology
 Kentucky State Plane Coordinate System (NAD83)
 UPL Projects retrieved from the
 Unscheduled Projects List (UPL) Database, 2009

Note: The curve portraying the West Leitchfield Bypass approximates the centerline of the "Preliminary Recommended Corridor A3" identified in the *Leitchfield Northwest Bypass Study*. It does not represent a proposed alignment.



Construct a bypass around the western side of Leitchfield (UPL Control No.'s 04 043 C0000 1.10, 1.20, and 1.30)

Reconstruct US 62 between Leitchfield and Clarkson (UPL Control No. 04 043 B0062 9.00)

Reconstruct KY 920 from US 62 to KY 3155 (UPL Control No. 04 043 D0920 1.00)

Reconstruct KY 224 from US 62 to the Western Kentucky Parkway (UPL Control No. 04 043 D0224 1.00)

Construct an interchange at KY 1214 and the Western Kentucky Parkway, and address geometric deficiencies on KY 1214 from the East Leitchfield Bypass to the Western Kentucky Parkway (UPL Control No.'s 04 043 D9001 16.00 and 04 043 D1214 1.00)

Address geometric deficiencies on US-62 from KY-259 to KY-187 (UPL Control No. 04 043 B0062 10.00)

KY 259 South of the Western Kentucky Parkway

KY 259 at the Western Kentucky Parkway Eastbound On-Ramp

Western Kentucky Parkway between Milepoints 108 & 109

US 62 (South Main Street) from White Oak Street to KY 54: Potential "Road Diet" Location

KY 259 at US 62 (White Oak Street)

KY 3155 at the transition from Five Lanes to Two Lanes

KY 54 at Bel Cheese Factory

KY 54 at Cannon Drive

US 62 near Milepoint 20.1: Slope stability issues

KY 259 at Shain Drive

KY 88 near US 62

Drainage Issues along KY 224 in Clarkson

Western Kentucky Parkway at KY 224

US 62: Vertical Curve near Clarkson Church of Christ

Clarkson Church of Christ

CLARKSON ELEMENTARY SCHOOL Clarkson

New Clarkson Elementary School

Legend

- Interstate
- Parkway
- Other State Primary
- State Secondary
- Rural Secondary
- Supplemental Road
- Unimproved
- Paved or Concrete
- Railroad
- Corporate Boundary
- Water Features

Unscheduled Projects List (UPL) Projects

Project Information for Construction Projects

Location of Traffic/Maintenance Projects and Other Issues

Reference Locations

1.0 STUDY PURPOSE

The purpose of this Small Urban Area Study is to identify deficiencies in the transportation network in the Leitchfield-Clarkson urban area, and to recommend solutions to address those deficiencies. The primary emphasis of this study is on traffic operations and maintenance improvements that can be implemented relatively quickly and inexpensively, and a number of the recommended improvements have already been implemented as of the writing of this report. A listing of recommended improvements, as well as the status of these improvements, is included in Section 6 of this report.

2.0 STUDY PROCESS

This study was conducted using a project team approach. The project team included representatives of the Kentucky Transportation Cabinet (KYTC) Central Office, the KYTC Elizabethtown Highway District Office, and the Lincoln Trail Area Development District. In addition, input was solicited from project advisory committees consisting of local officials and stakeholders. The following steps were completed in the development of this study:

- The initial step in the study process was to obtain data for the study area including traffic volumes, levels of service, volume-to-service-flow ratios, crash rates, and adequacy ratings.
- A field visit was conducted in October 2008 to obtain a better understanding of the study area, with particular emphasis on locations identified as having high crash rates since safety was the main area of concern identified from an analysis of available data.
- An initial project team meeting was held on December 17, 2008. At this meeting, initial data on adequacy ratings, crash history, traffic volumes, and planned area projects were presented to the project team for discussion. Specific transportation concerns of the project team members were discussed, including non-highway projects which could impact future traffic patterns. Preparations were made for Advisory Committee meetings, and the District Office agreed to review high-crash locations for potential safety improvements.
- Two Advisory Committee meetings were held on June 11, 2009 (one in Leitchfield and one in Clarkson) to obtain input from local officials and stakeholders. In both of these meetings, data on adequacy ratings, crash history, traffic volumes, and planned area projects were presented to the Advisory Committee. Advisory Committee members then provided input on their concerns about the transportation system in the study area. Most of the problems identified in these meetings were related to traffic, safety, and maintenance. In general, the Advisory Committee in Leitchfield provided more information about issues in Leitchfield, while the Advisory Committee in Clarkson provided more information about issues in Clarkson. However, both Advisory

Committees expressed the need for improvements to US 62 between Leitchfield and Clarkson. Other issues which could potentially be addressed by construction projects (as opposed to maintenance and traffic projects) included sight distance limitations at the vertical curve on US 62 near the Clarkson Church of Christ (between 2nd Street and Bethel Church Road in Clarkson) and improvements to KY 224 to accommodate traffic from the new Clarkson Elementary School building, which will have its main entrance on KY 224. Both of these issues were mentioned at the Clarkson Advisory Committee meeting.

- A field visit was conducted in July 2009 to further investigate issues identified by the project team and the advisory committee.
- A final project team meeting was held on December 7, 2009 to make recommendations to address identified concerns. Because most of the issues identified were related to traffic, safety, and maintenance, the suggested solutions tended to be traffic and maintenance type projects. The project team also noted that implementation of several projects currently identified on the Unscheduled Projects List would address many of the issues identified in the project area.

Detailed minutes for the project team meetings and advisory committee meetings are included in [Appendix D](#) of this report.

3.0 TRANSPORTATION DATA

3.1 Road Network

Data was retrieved for state-maintained routes within the incorporated areas of Leitchfield and Clarkson. A map showing these routes, along with the route mile points at key intersections and the corporate limits, is included as [Appendix A, Exhibit 1](#).

3.2 Adequacy Ratings

The Division of Planning calculates composite adequacy ratings for state-maintained roadway sections. These composite adequacy ratings are based on functional classification; pavement condition as measured by the International Roughness Index; safety factors including lane width, shoulder width, median type, horizontal alignment, and crash history; and traffic service factors including volume to service flow ratio and access control. These composite adequacy ratings are then used to calculate composite adequacy rating percentiles for each roadway section. For example, if a roadway section had a composite adequacy rating percentile of 25, this would indicate that 25% of state-maintained roadway sections in Kentucky have a lower composite adequacy rating, while 75% have a higher composite adequacy rating.

Composite adequacy rating percentiles for state-maintained roadway sections within the study area were obtained from the Division of Planning's Highway Information System (HIS) database and are shown graphically in [Appendix A, Exhibit 2](#). These composite adequacy rating percentiles give a good idea of the overall adequacy of each roadway section compared to other roadway sections throughout the state. Several sections had composite adequacy rating percentiles of less than 15:

- KY 88 in Clarkson: The low adequacy rating is primarily due to the safety component. However, a crash rate analysis showed this section as having an overall critical rate factor (as defined in Section 3.3) of less than 1.00. The evaluation section for which the adequacy rating was calculated includes the portion of KY 88 that lies outside the Clarkson city limits and was therefore outside of the scope of this Small Urban Area study. A one-tenth-mile spot with a somewhat high crash rate was identified near the US 62 intersection, but due to the low traffic volumes, this crash rate was attributed to only three collisions, and no crash patterns were noted that would indicate a particular safety concern at this location. A photograph of this location is included in [Appendix B, Page B-12](#).
- US 62 from the western Leitchfield city limits to KY 259: The low composite adequacy rating is due primarily to safety. This section has a high critical rate factor indicating a probable safety concern. Level of service is also fairly low indicating that traffic volumes may be approaching a level for which the facility is inadequate. There are currently two projects on the Unscheduled Projects List (UPL) which would address these issues: One would improve geometric deficiencies and address capacity issues on this section of US 62, and the other would construct the southern portion of the west Leitchfield bypass - from KY 259 to KY 54 - which would divert some traffic from this section of US 62.
- US 62 from White Oak Street north to KY 54: The low composite adequacy rating is due primarily to the safety and pavement condition components. A cluster of three overlapping one-tenth-mile high-crash spots combine to cover the southern portion of this segment. An analysis of the crash data from White Oak Street (Milepoint 20.737) north to Milepoint 20.9 revealed a total of 23 crashes from August 2005 to August 2008. The most common manners of collision were rear-end (43%), angle (39%), and same-direction sideswipe (13%). This section of US 62 is scheduled to be resurfaced in 2012. Photographs of this location are included in [Appendix B, Page B-4](#).
- US 62 from KY 259 east to KY 1214: The low adequacy rating is due to a combination of the condition, service, and safety components. This section was recently reconstructed, which should improve the composite adequacy rating when new data is collected.
- KY 259 from US 62 north to Floyd Street: The low adequacy rating is mainly due to the safety component, although an analysis of crash data did not reveal this evaluation

section to be located within a high-crash segment or to include any high-crash spot locations.

3.3 Crash Data

Crash data for the three-year period from August 2005 to August 2008 was obtained from the Kentucky State Police database and used to calculate crash rates for both one-tenth-mile spots and for longer sections of roadways. These longer sections were chosen based on changes in traffic volumes and roadway characteristics. The calculated crash rates were then compared to statewide critical crash rates based on the type of roadway; the ratio of the actual crash rate to the critical crash rate is called the critical rate factor (CRF). A high CRF indicates that there is a high probability that crashes at a particular location are not occurring simply due to random chance. CRF's for all state-maintained roadways in the study area, as well as for spots with CRF's greater than 1.00, are shown in [Appendix A, Exhibit 3](#).

To provide additional insight into potential safety issues, additional data on crash severity and on the manner of collision was initially obtained for the segments having a CRF greater than 1.00, as well as for spots having a CRF greater than 1.25 - or clusters of nearby high-crash spots with at least one of these spots having a CRF greater than 1.25 - where data was not already provided as part of a segment analysis. This data is shown in tabular format in [Table 1](#) below, and also in [Appendix A, Exhibit 3](#).

Table 1: Crash Details for High-Crash Segments & Spots

		Segments					Spots					
	Route	KY 259	KY 259	US 62	US 62	KY 920	KY 54	KY 1214	US 62	KY 920	KY 920	US 62
	Begin MP	11.761	12.121	18.952	21.297	0	18.352	13.852	22.289	1.297	2	24.8
	End MP	12.12	12.954	20.787	22.013	1.397	18.466	14.2	22.489	1.527	2.1	24.9
Number of Crashes	Total	32	79	71	60	18	9	8	18	10	3	9
	Injury	10	10	22	18	3	2	5	3	3	3	5
	Fatal	0	0	0	0	0	0	0	0	0	0	0
Manner of Collision	Angle	9	26	11	22	6	3	5	5	3	0	0
	Backing	0	5	0	1	0	0	0	0	0	0	0
	Head-on	0	0	3	1	0	0	1	0	0	0	0
	Opposing Left Turn	2	2	1	1	0	3	0	2	0	0	0
	Rear-End	9	28	38	31	3	0	0	6	2	0	7
	Sideswipe	5	11	9	0	0	0	1	2	0	0	1
	Fixed Object*	5	6	6	2	6	2	1	2	1	3	1
	Bike/Pedestrian	1	0	1	1	1	1	0	0	0	0	0
	Animal	0	1	2	1	2	0	0	0	2	0	0

*Includes collision with parked vehicle

Several observations about the crash data are noted below:

- The high crash rates on KY 1214 and KY 920 near KY 3155 (the Leitchfield bypass) may be attributed to drivers having to adjust to the new intersections created by the construction of the bypass. Several low-cost safety improvements have been implemented by the District Office at these locations following the opening of the bypass. Stop Ahead warning signs and transverse rumble strips were installed on the KY 1214 and KY 920 approaches to KY 3155, and flashing beacons were installed at the KY 1214/KY 3155 intersection. A photograph of the KY 3155/KY 1214 intersection is included in [Appendix B, Page B-8](#). An analysis of collision dates on KY 1214 near KY 3155 revealed that number of crashes declined from four in the January 2006 to January 2007 time period to two in the July 2007 to July 2008 time period. A similar reduction in crash frequencies was not noted for KY 920 near the KY 3155 intersection, but the most common type of collision changed from angle collisions for the January 2006 to January 2007 time period to single vehicle and rear-end collisions for the July 2007 to July 2008 time period. In addition, there were three injury collisions on KY 920 near KY 3155 in 2006, but none in 2007 or through July 2008.
- A number of factors could be contributing to the high crash rate for the segment of KY 259 just south of the Western Kentucky Parkway. KY 259 is reduced from five lanes to the north of Commerce Drive to two lanes just south of Commerce Drive, and there are four closely spaced entrances just south of Commerce Drive (three entrances to a gas station on the west side of KY 259 and one entrance to a commercial building on the east side of KY 259). Also, motorists unfamiliar with the area sometimes miss the turn onto the eastbound Western Kentucky Parkway ramp from southbound KY 259, which may contribute to driver confusion in the area. Photographs of this location are included in [Appendix B, Page B-6](#).
- Grayson County High School generates a large amount of traffic on US 62 west of Leitchfield, which may contribute to the high crash rate on that roadway. The planned construction of the southwest Leitchfield Bypass is expected to divert much of the traffic from this section of US 62.

Further analysis of crash data was performed at certain locations to develop recommendations for improvements at those locations. In some cases, crash reports from the Kentucky State Police database were examined to identify crash patterns. These analyses are discussed in Section 6, “Recommended Improvements.”

3.4 Traffic Data

Year 2008 Levels of Service (LOS) were calculated for routes in the study area having relatively high free-flow speeds and few intersections. This information, along with traffic volumes and truck percentages, where available, is shown in [Appendix A, Exhibit 4](#). Where truck volumes were not known, estimated values based on the roadway's functional classification were used to calculate Levels of Service. LOS can range from A to F, with LOS A indicating free-flow conditions and LOS F indicating severe congestion. Most of the routes in the Leitchfield-Clarkson area for which LOS were calculated have LOS A, B, or C. Two sections of US 62, one between Clarkson and the Leitchfield Bypass (Milepoint 23.002 to Milepoint 25.249) and one west of the downtown Leitchfield area (Milepoint 18.952 to Milepoint 20.330), have LOS D. Both of these sections of US 62 are currently on the [Unscheduled Projects List](#), and a Programming Study dated August 2008 has been prepared for the section between Clarkson and the Leitchfield Bypass. This Programming Study contains a recommendation to reconstruct the route with a three-lane urban cross-section.

Other routes within the study area were characterized by low free-flow speeds and/or frequent intersections. For these routes, calculating Level of Service would have required additional data such as intersection turning movement volumes and travel speeds. As an alternative measure of congestion, Year 2008 Volume to Service Flow (VSF) ratios for these routes were retrieved from the HIS database. These VSF ratios are listed in [Table 2](#) below and are shown graphically in [Appendix A, Exhibit 5](#). Sections of US 62 (Milepoint 20.464 to Milepoint 20.787 and Milepoint 20.950 to Milepoint 21.609) and KY 54 (Milepoint 18.299 to Milepoint 18.466) in downtown Clarkson had volume to service flow ratios between 0.5 and 0.7, indicating minor congestion. The remaining roadway sections had Volume to Service Flow ratios of less than 0.5, indicating an insignificant amount of congestion.

Traffic volumes in Year 2035 were estimated by applying an annual growth rate, ranging from 0.6% to 1.0% based on each route's functional classification, to the Year 2008 traffic volumes. This method of estimating future traffic volumes assumes that no transportation projects which would significantly alter travel patterns in the area would be built before Year 2035 (i.e., the no-build scenario). The projected traffic volumes were then used to calculate projected Year 2035 Level of Service or Volume to Service Flow ratios, depending on the route characteristics. The results of these calculations are shown in [Appendix A, Exhibit 6](#) for routes where Levels of Service were calculated, and in [Appendix A, Exhibit 7](#) for routes where Volume to Service Flow ratios were calculated. Estimated Volume to Service Flow ratios in Year 2035 are also listed in [Table 2](#).

Table 2: Existing & Projected Volume to Service Flow Ratios

Route	Beginning Milepoint	Ending Milepoint	Volume to Service Flow Ratio	
			2008	2035
KY 54	17.310	18.299	0.22	0.26
KY 54	18.299	18.466	0.64	0.75
KY 88	0.000	0.457	0.11	0.14
KY 187	10.983	11.178	0.41	0.48
KY 224	0.000	0.694	0.21	0.27
KY 224	0.694	0.930	0.35	0.45
KY 259	11.761	11.860	0.20	0.23
KY 259	11.860	12.230	0.24	0.28
KY 259	12.230	12.954	0.44	0.52
KY 259	12.954	13.159	0.32	0.38
KY 259	13.159	13.505	0.30	0.35
KY 259	13.505	13.692	0.27	0.32
KY 259	13.692	13.976	0.19	0.22
KY 737	0.000	0.481	0.14	0.18
KY 920	0.000	0.886	0.07	0.09
US 62	20.330	20.464	0.33	0.39
US 62	20.464	20.787	0.67	0.79
US 62	20.787	20.950	0.29	0.34
US 62	20.950	21.005	0.57	0.67
US 62	20.950	21.005	0.64	0.75
US 62	21.005	21.296	0.57	0.67
US 62	21.296	21.609	0.71	0.83
US 62	21.609	22.013	0.39	0.46
US 62	22.013	23.002	0.41	0.48
US 62	25.249	25.461	0.42	0.54
US 62	25.461	26.041	0.26	0.33

Comparing [Appendix A, Exhibit 4](#) and [Exhibit 6](#), it can be seen that two roadway segments in the Leitchfield area are expected to see declines in Level of Service by Year 2035 under the no-build scenario. The northeast portion of the Leitchfield Bypass, from KY 920 to KY 259 is expected to decline from the LOS A and B range in 2008 to LOS C in 2035. Similarly, a portion of KY 737 northwest of downtown Leitchfield is expected to decrease from the LOS A and B range in 2008 to LOS C in 2035. Despite these declines, Levels of Service on these roadway segments, as well as all segments in the study area for which LOS was calculated, are expected to remain at or above LOS D, which is considered acceptable for urban areas.

Comparing [Appendix A, Exhibit 5](#) and [Exhibit 7](#), it can be seen that levels of congestion based on Volume to Service Flow ratios are expected to increase for several roadway segments in the Leitchfield-Clarkson area by Year 2035 under the no-build scenario. Levels of congestion based on Volume to Service Flow ratios were established by examining the effect of different VSF

ratios on the service component of the Adequacy Ratings and are color-coded in the exhibits as follows:

- Green indicates insignificant congestion (VSF less than 0.50);
- Yellow indicates minor congestion (VSF from 0.50 to 0.74); and
- Orange indicates moderate congestion (VSF from 0.75 to 0.89).

Under the no-build scenario, two segments of US 62 and one segment of KY 54 in downtown Leitchfield are expected to go from minor to moderate congestion. KY 259 just south of downtown Leitchfield is expected to go from insignificant congestion to minor congestion. A portion of US 62 in the downtown Clarkson area is also expected to go from insignificant congestion to minor congestion.

4.0 ENVIRONMENTAL AND SOCIOECONOMIC DATA

An Environmental Footprint map was prepared for the study area using available data from the Commonwealth Office of Technology's Division of Geographic Information and is included as [Appendix A, Exhibit 8](#). Approximate locations of construction projects which would address issues identified in the Leitchfield-Clarkson Small Urban Area Study, as discussed in Section 6.3 of this report, are also shown on the Environmental Footprint map. Most of these projects would approximately follow the alignments of existing routes and would not be expected to produce any environmental impacts which would be unusually difficult to mitigate, although this should be confirmed as more detailed plans are developed. One possible exception is the proposed western Leitchfield bypass. The *Leitchfield Northwest Bypass Study*, prepared by the consulting firm Parsons Brinckerhoff, examined the potential environmental impacts of this project in detail and considered these impacts in the recommendation of a preliminary corridor for the western Leitchfield bypass. The curve portraying the proposed western Leitchfield bypass represents the approximate centerline of the preliminary corridor recommended in the *Leitchfield Northwest Bypass Study*.

An *Environmental Justice and Community Impact Report* for the study area was prepared by the Lincoln Trail Area Development District and is included in [Appendix C](#) of this report. Several Census Block Groups containing relatively high percentages of minority, elderly, and low-income persons were identified in the report, but it is not anticipated that these groups would be disproportionately impacted in a negative way by the recommended transportation improvements.

5.0 EXISTING PROJECTS

Only one project in the study area was identified in *Kentucky's 2008 Highway Plan*. This project was for the design of the southern portion of the new West Leitchfield Bypass and was scheduled for 2010. *Kentucky's FY2010-FY2012 Enacted Biennial Highway Plan*, which replaced *Kentucky's 2008 Highway Plan*, continues to include funds for the design of the southern portion of the new west Leitchfield Bypass, adds funds for Right-of-Way and Utilities for this portion of the west Leitchfield Bypass, and adds design funds for widening portions of US 62 between Leitchfield and Clarkson. **Table 3** provides a summary of the projects in the study area that are listed in *Kentucky's FY2010-FY2012 Enacted Biennial Highway Plan*. In addition to these projects, the portion of US 62 just east of KY 259 in Leitchfield was recently reconstructed with a three-lane urban cross-section.

Table 3: Biennial Highway Plan Projects in Study Area

Item Number	Route	Begin Milepoint	End Milepoint	Length (miles)	Description	Funding			
						Type	Phase	Year	Amount
4-308.01	New Route			4.000	Design for Leitchfield Bypass priority section	SP	D	2010	\$1,560,000
						SP	R	2011	\$16,090,000
						SP	U	2012	\$990,000
4-8502.00	US-62	22.786	25.249	-	Widen portions of US-62 from Leitchfield to Clarkson	STP	D	2010	\$1,500,000

Note: Phases are abbreviated as D (Design), R (Right-of-Way), U (Utilities), and C (Construction).

Several projects from the Unscheduled Projects List (UPL) are located in the study area. Information about these projects was obtained from the UPL Database maintained by the Division of Planning and is summarized in **Table 4**. The locations of each of these projects are shown in **Appendix A, Exhibit 9** along with the locations of the *Biennial Highway Plan* projects. Many of these projects correspond to the worst roadway segments in terms of adequacy ratings, safety, and congestion. Cost estimates listed in **Table 4** were retrieved from the UPL database and were not revised as part of this Small Urban Area study.

Table 4: UPL Projects in Study Area

Unscheduled Projects List Control Number	Route	Begin Mile Point	End Mile Point	Project Description	Estimated Cost (includes all applicable phases)
04 043 B0062 10.00	US-62	18.952	20.800	Address geometric deficiencies on US-62 from KY-259 to KY-187.	\$10,800,000
04 043 B0062 9.00	US-62	23.000	25.463	Reconstruct US-62 from KY-3155 in Leitchfield to KY-224 in Clarkson to improve geometric deficiencies and address capacity issues.	\$24,500,000
04 043 D0054 13.00	KY-54	17.962	18.162	Address safety and alignment at railroad crossing on KY-54 in Leitchfield.	\$1,100,000
04 043 D0187 10.00	KY-187	9.443	11.178	Construct an interchange on the Western Kentucky Parkway and improve KY-187 and US-62 from the Parkway to the proposed western Leitchfield bypass.	\$17,500,000
04 043 D0224 1.00	KY-224	0.000	0.804	Reconstruct KY-224 from US-62 to the Western Kentucky Parkway to address geometric deficiencies and improve safety.	\$5,250,000
04 043 D0259 15.20	KY-259	6.400	12.116	Reconstruct KY-259 from KY-226 at Smitty City to the Western Kentucky Parkway in Leitchfield to address geometric issues.	\$31,000,000
04 043 D0259 16.00	KY-259	13.359	13.459	Address safety and improve deficiencies at intersection of KY-259 and KY-737 in Leitchfield.	\$1,850,000
04 043 D0259 17.10	KY-259	14.400	15.553	Address geometric deficiencies and provide for truck traffic on KY-259 north of Leitchfield, from the Leitchfield Bypass to Hanging Rock Church Road.	\$6,600,000
04 043 D0920 1.00	KY-920	0.000	1.500	Reconstruct KY-920, possibly as a 3-lane urban section, from US-62 to KY-3155 to improve geometric deficiencies.	\$6,750,000
04 043 D1214 1.00	KY-1214	13.125	14.000	Address geometric deficiencies on KY-1214 between the East Leitchfield Bypass and the Western Kentucky Parkway in conjunction with a new interchange on the Western Kentucky Parkway at KY-1214.	\$5,000,000
04 043 D9001 16.00	WK-9001	109.275	109.375	Improve system linkage by adding an interchange on the Western Kentucky Parkway at KY-1214 in conjunction with improvements to KY-1214 between the Parkway and the East Leitchfield Bypass.	\$8,000,000
04 043 C0000 1.10	New Route			Construct a bypass section from KY-259 northwest to KY-54 to address congestion in Leitchfield and provide connectivity on the west side.	\$23,500,000
04 043 C0000 1.20	New Route			Construct a bypass section from KY-54 north to KY-737 to improve connectivity on the west side of Leitchfield.	\$13,800,000
04 043 C0000 1.30	New Route			Construct a bypass section from KY-737 east to KY-259 to provide connectivity and improve access to the industrial park in north Leitchfield.	\$6,230,000

6.0 RECOMMENDED IMPROVEMENTS

A number of transportation issues in and near the study area were identified through the study process. These issues, along with actions that have been taken or are recommended to be taken, are identified in the list below. Photographs of the project sites, where applicable, are

included in Appendix B of this report. The locations listed below are mapped in [Appendix A, Exhibit 10](#).

6.1 Completed Traffic and Maintenance Improvements:

- **US 62 near the Clarkson Church of Christ:** Local officials indicated that a vertical curve just east of the Clarkson Church of Christ could be causing sight distance issues. The District Office investigated this location and found that the sight distance along US 62 to the east of the Clarkson Church of Christ entrance is less than the recommended sight distance for a 55 MPH design speed, which is the posted speed limit along this section of US 62. The District Office has installed a traffic warning sign with an advisory speed plaque to advise motorists at this location. Photographs of this location are included in [Appendix B, Page B-15](#).
- **North Patterson Street (KY 2191) in Clarkson:** Local officials requested that the Highway Department consider lowering the speed limit to 20 MPH or 25 MPH. A speed study performed by the District Office did not justify lowering the speed limit, so the speed limit should remain as posted. A photograph of this location is included in [Appendix B, Page B-10](#).
- **KY 259 at the Western Kentucky Parkway Eastbound On-Ramp:** Vehicles tend to miss or overshoot the left turn from southbound KY 259 onto the eastbound Parkway on-ramp. The District Office replaced the left-turn arrows and added thermoplastic striping to better delineate the traveled way on the ramp. A photograph of this location is included in [Appendix B, Page B-6](#).
- **KY 3155 at the transition from five lanes to two lanes:** Local officials requested traffic control improvements at this location. The District Office has replaced a merge sign and added pavement merge arrows. Photographs of this location are included in [Appendix B, Page B-7](#).
- **KY 54 at Bel Cheese factory:** Local officials indicated that there is a perceived safety issue at the cross-walk on KY 54 at the Bel Cheese factory just west of downtown Leitchfield. This location was not identified as having a high Critical Rate Factor, and no collisions with pedestrians were identified during the time period for which crash data was obtained. However, the District Office did replace the 8-inch flashing beacons with 12-inch flashing beacons. Photographs of this location are included in [Appendix B, Page B-2](#).
- **KY 259 at US 62 (White Oak Street):** Overhead signs for the northbound lane drop were knocked down. The District Office has added a left-turn arrow and has replaced the overhead lane-use signs. A photograph of this location are included in [Appendix B, Page B-2](#).

- **US 62 at KY 3155:** Local officials indicate that there is a blind spot which may contribute to red-light running. The District Office has added reflective backplates to the signal heads on the KY 3155 southbound approach to improve their visibility. A photograph of this intersection is included in [Appendix B, Page B-9](#).

6.2 Ongoing Traffic and Maintenance Improvements

- **US 62 near Milepoint 24.4 in Clarkson:** The culvert under US 62 near Midway Propane becomes clogged, possibly due to runoff from a large gravel parking lot. Maintenance will keep an eye on this location to make sure water doesn't overflow the roadway. Clarkson officials should discuss the erosion issue with the property owner. Photographs of this location are included in [Appendix B, Page B-10](#).
- **KY 88 near US 62 in Clarkson:** There is a large drop-off into a ditch at the alley behind the car-wash, which is located on KY 88 just south of US 62. The alley is a city street, so the city would be responsible for extending the culvert. The estimated cost of this project is \$1,500. A photograph of this location is included in [Appendix B, Page B-12](#).
- **KY 224 in Clarkson:** There are drainage issues along KY 224, particularly near the US 62 intersection. Maintenance will schedule work to clean the culverts and drainage pipes in this area. Drainage improvements in this area may be considered during the design phases of the KY 224 and US 62 (MP 23.000 – MP 25.463) reconstruction projects as discussed in Section 6.3 of this report. Photographs of this location are included in [Appendix B, Page B-13](#).
- **KY 259 south of the Western Kentucky Parkway:** There has been confusion about which of the southbound lanes ends at the transition from a five-lane to a two-lane cross-section. The District Office has added merge signs and pavement merge arrows, and will re-evaluate the distance that the skip line separating the two southbound lanes of KY 259 extends toward the merge area the next time the road is resurfaced. Photographs of this location are included in [Appendix B, Page B-6](#).
- **Western Kentucky Parkway between Milepoints 108 and 109:** Local officials report that frequent crashes occur in the westbound lanes when it rains. An analysis of crash data did not identify this location as a high-crash spot, and no drainage problems were noted during a field visit. The District Office will monitor the situation and will coordinate with maintenance to see if there are any pavement issues that need to be addressed. A photograph of this location is included in [Appendix B, Page B-7](#).
- **KY 259 at US 62 north intersection (Mill Street), US 62 south intersection (White Oak Street), and Shain Drive:** Local officials report that vehicles are turning right on red at these intersections without coming to a complete stop. Increased enforcement is recommended at these locations. In addition, the stop bar at Shain Drive could be

extended to be compatible with the recently increased curb radius at this location. Photographs of these intersections are included in [Appendix B, Page B-5](#).

- **KY 54 at Cannon Drive in Leitchfield:** This location was identified as having a high crash rate. Taken together, angle and opposing left turn crash types made up two-thirds of the crashes at this location. Sight distance at this location may be reduced by both on-street parking and by vehicles queued at the KY 259 intersection. The district office will investigate this location to determine if any potential improvements could be implemented to improve safety. Photographs of this intersection are included in [Appendix B, Page B-3](#).
- **US 62 (South Main Street) from White Oak Street to KY 54:** This segment is approximately 0.2-mile long and consists of one wide lane in the northbound direction and two lanes in the southbound direction, with no median or center turn lane. Only one southbound lane enters this segment from the traffic circle at East Main Street and West Main Street, but the southbound direction immediately transitions to two lanes just south of the traffic circle, which continue beyond the Western Kentucky Parkway. The northbound approach to this segment consists of two lanes, but one of these lanes is dropped as a left-turn lane onto westbound US 62 (West White Oak Street). Photographs of this portion of US 62 are included in [Appendix B, Page B-4](#). A cluster of three overlapping one-tenth-mile high-crash spots combine to cover the southern portion of this segment and contribute to a very low adequacy rating for the segment. An analysis of the crash data from White Oak Street (Milepoint 20.737) north to Milepoint 20.9 revealed a total of 23 crashes from August 2005 to August 2008, with the most common manners of collision being rear-end (43%), angle (39%), and same-direction sideswipe (13%). The Kentucky Transportation Center (KTC) at the University of Kentucky is currently working on a research study to identify criteria under which a “road diet” would be appropriate. Based on the crash patterns and preliminary information from the KTC research study, it appears that the crash rate on this section could be reduced by implementing a road diet, which would involve converting the three through lanes to two through lanes (one lane in each direction) with a two-way left-turn lane. However, with a 2008 Average Daily Traffic volume (ADT) of 16,500 vehicles per day and an estimated no-build 2035 ADT of 19,400 vehicles per day, maintaining adequate roadway capacity could be an issue, particularly for the southbound direction at the White Oak Street intersection. Construction of a western bypass around Leitchfield, which is included on the Unscheduled Projects List, is expected to reduce traffic on US 62 through downtown Leitchfield. Therefore, it is recommended that a road diet be considered at this location once the western Leitchfield bypass is constructed and its effect on traffic patterns in downtown

Leitchfield is determined. Typically, road diets are implemented during resurfacing projects.

6.3 Construction Projects

No new construction projects were recommended as part of the Leitchfield-Clarkson Small Urban Area study. However, several existing projects were identified on the Unscheduled Projects List (UPL) and in *Kentucky's FY2010-FY2012 Enacted Biennial Highway Plan* that would help to alleviate safety, congestion, and maintenance issues identified through the Small Urban Area Study process. Most projects from the Unscheduled Projects List went through a prioritization process in 2007 at the Highway District level and have been assigned a priority of High, Medium, or Low. Therefore, no additional prioritization of these projects was performed. It is important to note that the priorities assigned to these UPL projects reflect the relative urgency of the project compared to other projects within the Highway District. Therefore, while projects identified as Low and Medium priorities would address valid issues within the transportation network, they are currently considered less urgent than High-priority projects within the Highway District which are also competing for funds. Projects that are identified as Low and Medium priorities are generally not included in the periodic rankings of top-priority projects.

- **US 62 between Leitchfield and Clarkson:** Local officials indicated that reconstruction of US 62 between Leitchfield and Clarkson is a top priority for both Leitchfield and Clarkson. A planning study was completed in 2008 which recommended reconstruction with a three-lane cross-section at an estimated cost (in 2008 dollars) of \$16.3 million. \$1.5 million for the construction phase was included in *Kentucky's FY2010-FY2012 Enacted Biennial Highway Plan*. The district office has requested to use these funds for design, and will pursue additional funding for future phases. This project is also included on the Unscheduled Projects List (UPL Control Number 04 043 B0062 9.00 - High Priority). Some issues were raised during the development of the *Leitchfield-Clarkson Small Urban Area Study* that could potentially be addressed during the reconstruction of this portion of US 62, including pedestrian accommodations and drainage issues in the Clarkson area. Photographs of US 62 near Patterson Street and KY 88 in Clarkson are included in [Appendix B, Page B-14](#). *Estimated cost: \$25 Million.*
- **KY 224 from US 62 to the Western Kentucky Parkway:** A new Clarksville Elementary School building opened in 2010 at the site of the old school building. As a result of the construction of the new building, the school's main entrance was moved from US 62 to KY 224. Buses continue to use the US 62 entrance. Prior to the opening of the new school building, local officials indicated a need for a turn lane and sidewalks along KY 224, as well as cross-walks at 1st Street and KY 224, and possibly at 1st Street and US 62.

Turn lanes are normally included as part of the school construction, but were not in this case. Personnel from the Highway District Office re-examined the need for turn lanes once the new school building was open, but did not observe any significant issues related to the lack of turn lanes on KY 224. Sidewalks were constructed directly in front of the school as shown in the photographs of this location in [Appendix B, Page B-11](#). Unfortunately, these sidewalks do not currently connect to any other sidewalks. A project is currently included on the Unscheduled Projects List (UPL Number 04 043 D0224 1.00 - High Priority) to reconstruct the portion of KY 224 from US 62 to the Western Kentucky Parkway to address geometric deficiencies and improve safety. This project could also address drainage issues along this section of KY 224 which were mentioned by local officials. Improved pedestrian access and the need for turn lanes may be considered during the Design phase of this project. In addition, Safe Routes to School (SRTS) grants may be available for sidewalk construction; the Lincoln Trail Area Development District may be able to assist the city in applying for these grants.

Estimated cost for reconstruction of KY 224: \$5.3 Million.

- **US 62 from KY 187 to KY 259:** This section of US 62 was identified as a high-crash location, with a Critical Rate Factor of 1.02. It also has a very low composite adequacy rating (<15), which is primarily due to the safety component. A project currently on the Unscheduled Projects List (UPL Control Number 04 043 B0062 10.00 - Medium Priority) to address geometric deficiencies should improve safety along this section of US 62. There are also slope stability issues along this section of US 62 near Milepoint 20.1, as shown in photographs in [Appendix B, Page B-8](#), which could be addressed by this project. *Estimated cost for addressing geometric deficiencies on US 62: \$11 Million.*
- **KY 920 from US 62 to KY 3155:** This section of KY 920 has a Critical Rate Factor of 1.51, indicating a high probability of safety issues in this area. The most common crash types were angle and fixed-object crashes. Rear-end, bike/pedestrian, and animal collisions were also represented. A project currently on the Unscheduled Projects List (UPL Control Number 04 043 D0920 1.00 - Low Priority) would reconstruct this section of KY 920, possibly as a 3-lane urban section, which should improve traffic safety at this location. *Estimated cost: \$6.8 Million.*
- **KY 1214 from KY 3155 to the Western Kentucky Parkway:** Two projects exist on the Unscheduled Projects List at this location. One (UPL Control Number 04 043 D1214 1.00 - Low Priority) would address geometric deficiencies on this section of KY 1214. The other (UPL Control Number 04 043 D9001 16.00 - Low Priority) would add an interchange to connect KY 1214 to the Western Kentucky Parkway. Together, these projects would provide a route for vehicles traveling from points east of Clarkson to access the Leitchfield Bypass and points north of Leitchfield without having to travel

through Clarkson or along US 62 between Leitchfield and Clarkson, which has a current (Year 2008) and projected (Year 2035) Level of Service of D. *Estimated cost: \$13 Million.*

- **West Leitchfield Bypass:** Three projects on the Unscheduled Projects List (UPL Control Numbers 04 043 C0000 1.10 – No Priority Assigned, 04 043 C0000 1.20 – Low Priority, and 04 043 C0000 1.30 – Low Priority) would combine to form a bypass around the west side of Leitchfield. A project also exists in *Kentucky’s FY2010-FY2012 Enacted Biennial Highway Plan* (Item Number 4-308.01) to design the portion of the western Leitchfield bypass from KY 259 northwest to KY 54. Providing a bypass around the western side of Leitchfield would address several issues identified in the Leitchfield-Clarkson Small Urban Area Study. It would divert traffic from US 62 west of Leitchfield, which has a high crash rate and a current Level of Service of D. It would also divert traffic from downtown Leitchfield, where portions of US 62 and KY 54 are expected to experience increased congestion in the future if no projects were implemented. Finally, construction of a bypass around the western side of Leitchfield could potentially divert enough traffic from US 62 between White Oak Street and KY 54 that a road diet could be considered at this location. *Estimated cost: \$44 Million.*

The projects noted above are summarized in [Table 5](#), which also includes phased cost estimates for each of the projects.

Table 5: Recommended UPL Projects to Address Identified Issues

Unscheduled Projects List Control Number	Route	Begin Mile Point	End Mile Point	Project Description	Estimated Cost (Millions of Dollars)*	District Priority†
04 043 B0062 10.00	US-62	18.952	20.800	Address geometric deficiencies on US-62 from KY-259 to KY-187.	P-0.1, D-1.5, R-1.0, U-1.0, C-7.2 Total-10.8	Medium
04 043 B0062 9.00	US-62	23.000	25.463	Reconstruct US-62 from KY-3155 in Leitchfield to KY-224 in Clarkson to improve geometric deficiencies and address capacity issues.	D-1.5, R-2.0, U-1.0, C-20.0 Total-24.5	High
04 043 D0224 1.00	KY-224	0.000	0.804	Reconstruct KY-224 from US-62 to the Western Kentucky Parkway to address geometric deficiencies and improve safety.	D-0.5, R-0.8, U-0.7, C-3.25 Total-5.25	High
04 043 D0920 1.00	KY-920	0.000	1.500	Reconstruct KY-920, possibly as a 3-lane urban section, from US-62 to KY-3155 to improve geometric deficiencies.	D-0.75, R-1.0, U-0.5, C-4.5 Total-6.75	Low
04 043 D1214 1.00	KY-1214	13.125	14.000	Address geometric deficiencies on KY-1214 between the East Leitchfield Bypass and the Western Kentucky Parkway in conjunction with a new interchange on the Western Kentucky Parkway at KY-1214.	P-0.2, D-0.6, R-0.7, U-0.5, C-3.0 Total-5.0	Low
04 043 D9001 16.00	WK-9001	109.275	109.375	Improve system linkage by adding an interchange on the Western Kentucky Parkway at KY-1214 in conjunction with improvements to KY-1214 between the Parkway and the East Leitchfield Bypass.	P-0.2, D-1.0, R-1.0, U-0.8, C-5.0 Total-8.0	Low
04 043 C0000 1.10	New Route			Construct a bypass section from KY-259 northwest to KY-54 to address congestion in Leitchfield and provide connectivity on the west side.	D-1.4, R-10.2, U-0.6, C-11.3 Total-23.5	N/A
04 043 C0000 1.20	New Route			Construct a bypass section from KY-54 north to KY-737 to improve connectivity on the west side of Leitchfield.	D-1.1, R-3.5, U-0.12, C-9.1 Total-13.8	Low
04 043 C0000 1.30	New Route			Construct a bypass section from KY-737 east to KY-259 to provide connectivity and improve access to the industrial park in north Leitchfield.	D-0.6, R-1.1, U-0.13, C-4.4 Total-6.23	Low
<p>*Phase Abbreviations: P-Planning, D-Design, R-Right-of-Way, U-Utilities, C-Construction †District priorities were obtained from the Unscheduled Projects List database.</p>						