## Categorical Exclusion Level 2

New Circle Road (KY 4) Reconstruction and Major Widening from Georgetown Road to Boardwalk/Colesbury Circle Lexington, Fayette County, Kentucky

Item No. 7-366.00

Submitted to:

Kentucky Transportation Cabinet
District 7
Lexington, Kentucky





# KENTUCKY TRANSPORTATION CABINET CATEGORICAL EXCLUSION ENVIRONMENTAL DETERMINATION CHECKLIST

1. PROJECT INFORMAT	ION		
SYP Project #: 07-366.00	Route: KY 4 (New Circle Rd)	Work Type: Reconstruction and Major Widening	County: Fayette
Project Description: Widenin Georgetown Road to Boardw interchange and the addition	alk including Newtown Pike	improve safety, capacity, and Georgetown Road and Newto	wn Pike.
Roadway Conditions and Set to/from New Circle Road in between Georgetown Road a	ting: Uncontrolled access urban, commercial area		r (2030)- <u>83,450</u> ADT
Project Length: 1.284 miles Begin MP: 8.731 End MP: 10	0.015 mile and on a new alignment,		scuss all alternatives in Section 3
FHWA must be consulted.		See Section 3. Alternatives Su	nmary
A THUMBONIA CAUCAT D	ETEDMINATION		
2. ENVIRONMENTAL D	ETERMINATION		
	evel 2 (Attach all project corre	spondence and documentation)	
APPROVAL SIGNATURE	ES		
District Environme	Particle Coordinator	. <u>8/2/11</u> Date	
Project Manager	huley oject commitments/mitigation and	8/2/11  Date  identified required future work hav	e been entered into the CAP
Division of Environ (required for Level 2)		10/25/1 Date	<i>_</i>
Federal Highway A (required for Level 2	Administration 3)	Date	

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#### 3. ALTERNATIVES SUMMARY

Describe all alternatives that were evaluated, their impacts and the reason(s) for elimination or selection.

**REQUIRED ATTACHMENTS:** \(\sum \) Location Map \(\sum \) Plan Map/Sheet(s)

The initial planning study for the signalized portion of New Circle Road was completed in April 2002. In a July 13, 2005 meeting, four alternatives from this planning study were presented to the project team (i.e., 1 through 4). In the March 2006 planning study addendum, eight alternatives, some of which had been eliminated from further study, were described.

Alternative 1 was developed so that non-through traffic would to utilize service roads and funnel all traffic through traffic signals. This alternative was eliminated during development of the planning study addendum in 2006; however, service roads have been incorporated into other alternatives currently being considered.

Alternative 2 would have provided slip ramps for a portion of the traffic entering and leaving New Circle Road. Alternative 2 was modified in November 2007 to create Alternative 6. Alternative 6 was almost immediately eliminated because it would need to be constructed in phases due to lack of funding.

Alternative 3 would have eliminated weaving between Georgetown Road and Newtown Pike through the use of additional bridges to braid the ramps. Alternative 3 was eliminated during development of the planning study addendum in 2006 because the project team felt that the costs associated with constructing additional bridges would be much larger than funding would allow.

Alternative 4 would have provided Collector-Distributor (C-D) Roads that would begin west of Georgetown Road and merge east of Newtown Pike. Alternative 4 would have had a higher cost than the other alternatives, and property would have been acquired from Lexmark for right-of-way. In addition, this alternative would have been much more difficult to construct in phases due to the lengths of the ramps. This alternative was modified in November 2007 to create Alternative 5 because the project team felt that the size of this alternative might be much larger than funding would allow.

After eliminating Alternatives 1, 2, 3, 4, and 6, four alternatives, including the No-Build Alternative, were evaluated for the proposed reconstruction of the KY4/New Circle Road mainline from Boardwalk/Colesbury Circle to Georgetown Road. Six alternatives were considered for the South Frontage Road and two alternatives were considered for the North Frontages Road. Each of these alternatives is compatible with the Georgetown Road ramp improvements that were recently constructed; a barrier-divided median was also constructed throughout the project area.

#### **MAINLINE**

#### **No-Build Alternative**

The No-Build Alternative is used to designate the default situation that is the likely occurrence to not implement any construction actions. The purpose of defining a No-Build option and estimating its consequences is to establish a benchmark against which all viable alternatives are compared. For this project, the No Build Alternative is defined as no new alignment/no reconstruction.

The short merging length (300 feet) from Georgetown Road onto KY 4/New Circle Road combined with high traffic volumes make merging difficult. Accidents and congestion will continue and likely increase with the No-Build Alternative.

The No-Build Alternative would also be expected to fail to supply adequate transportation support of existing economic activities throughout the project area. Inadequate transportation systems increase the costs of obtaining supplies and raw materials required for production and create difficulties for workers in reaching employment locations in terms of time, predictability, economy, and safety of travel. This could lead to increased personnel and shipping costs and harmful erosion of competitive advantages for certain businesses and industries, ultimately resulting in displacement or relocation.

Based on the above discussion, the No-Build Alternative is not expected to meet the project purpose and need nor provide

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an acceptable solution for the transportation problems identified. The No-Build option is not in the best overall public interest and is not considered a prudent and feasible choice.

#### **Build Alternatives**

#### **Alternative 5: SPUI Alternative with Ramp Modifications**

Alternative 5 includes improvements to the existing Georgetown Road interchange ramps, a complete redesign of the Newtown Pike interchange, and the widening of KY 4/New Circle Road to six 11- to 12-foot lanes; auxiliary lanes will be added in both directions between the Georgetown Road/New Circle Road interchange and the Newtown Pike/New Circle Road interchange.

**Georgetown Road:** Under KYTC Item Numbers 7-114, 7-115, and 7-116, several changes were made to the Georgetown Road/New Circle Road interchange. The westbound Georgetown Road off-ramp from New Circle Road was recently widened to accommodate forecasted traffic volumes; the ramp includes dual left turn lanes and an exclusive right turn lane at Georgetown Road. The eastbound Georgetown on-ramp remained a single lane ramp with a slight shift in the horizontal alignment near KY 4. An additional lane was added to New Circle Road to improve the weaving between Georgetown Road and Newtown Pike.

**Newtown Pike:** The Newtown Pike interchange is proposed to be replaced with a single point urban interchange (SPUI). This configuration will require one signalized intersection by aligning the left turn movements of the exit ramps (onto Newtown Pike) opposite one another; in all, a single intersection is formed at the center of the grade-separated structure. To accommodate this type of intersection, the current Newtown Pike bridge will be replaced by a new structure. All left-turning on and off-ramps will be two lanes and will merge with one-lane, right-turning on-ramps. The east- and west-bound two-lane off-ramps will split into two left-turning lanes and one right-turning lane. Two six-foot bike lanes, one in both traffic directions, will be added to Newtown Pike.

**New Circle Road:** New Circle Road will be widened to allow for six 11- to 12-foot lanes, 10-foot outside shoulders, and a 10-foot inside shoulder with a median barrier separating the travel way. In addition, New Circle Road will be built with auxiliary lanes, one in each direction, from the Georgetown Road/New Circle Road interchange to the Newtown Pike/New Circle Road interchange. The Georgetown Road bridge over New Circle Road will not be reconstructed to provide for six lanes on New Circle Road; therefore, New Circle Road will widen to six lanes east of the Georgetown Road bridge. Direct access to New Circle Road will be eliminated for businesses between the Georgetown Road and Newtown Pike Interchanges. Frontage roads will be required to provide access to the businesses between Georgetown Road and Newtown Pike that will lose access as a result of the widening.

**Boardwalk/Colesbury Circle:** New Circle Road access to Lexmark will remain extant: right-in, right-out. This alternative will require the replacement of the bridge connecting the Lexmark campuses due to the additional New Circle Road lanes. The median will remain open at Boardwalk/Colesbury Circle during this phase but is planned to be closed as a result of future widening.

#### **Build Alternative 7: Tight Diamond Interchange**

Alternative 7 includes improvements to the existing Georgetown Road interchange ramps, a complete redesign of the Newtown Pike Interchange, and the widening of New Circle Road to six 11- to 12-foot lanes; auxiliary lanes will be added in both directions between the Georgetown Road/New Circle Road interchange and the Newtown Pike/New Circle Road interchange.

**Georgetown Road:** The Georgetown Road intersection improvements for Alternative 7 are consistent with those of Alternative 5.

**Newtown Pike:** The Newtown Pike interchange is proposed to be replaced with a tight diamond interchange. This configuration will eliminate the current partial cloverleaf pattern and associated merging and weaving conditions at all on

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and off-ramps by implementing two signalized intersections at both ends of the grade-separated interchange. A new interchange structure over New Circle Road will need to be constructed. Each on-ramp will consist of two lanes, whereby left-turning traffic will have two lanes from which to access New Circle Road. To accommodate capacity from east-bound New Circle Road, the ramp will consist of three turning lanes, whereby left-turning traffic will have three lanes from which to access north-bound Newtown Pike. The west-bound off-ramp will consist of two lanes, whereby left-turning traffic will have two lanes from which to access south-bound Newtown Pike. Two six-foot bike lanes, one in each direction, will be added to Newtown Pike. Newtown Pike will be constructed with curb-and-gutter, 10-foot shoulders, and a 32-foot median in non-intersection areas.

**New Circle Road:** New Circle Road will be widened to allow for six 11- to 12-foot lanes, 10-foot outside shoulders, and a 10-foot inside shoulder with a median barrier separating the travel way from Georgetown Road to Boardwalk/Colesbury Circle. In addition, New Circle Road will be built with auxiliary lanes, one in each direction, from the Georgetown Road/New Circle Road interchange to the Newtown Pike/New Circle Road interchange. The Georgetown Road bridge over New Circle Road will not be reconstructed to provide for six lanes on New Circle Road; therefore, New Circle Road will widen to six lanes east of the Georgetown Road bridge. Direct access to New Circle Road will be eliminated for businesses between the Georgetown Road and Newtown Pike Interchanges. Frontage Roads will be required to provide access to the businesses between Georgetown Road and Newtown Pike that will lose access as a result of the widening.

Boardwalk/Colesbury Circle: The proposed Boardwalk/Colesbury Circle improvements for Alternative 7 are consistent with those of Alternative 5.

#### **Build Alternative 8: Partial Cloverleaf Interchange**

Alternative 8 includes improvements to the existing Georgetown Road interchange ramps, elimination of one cloverleaf Newtown Pike interchange ramp, and the widening of New Circle Road to six 11- to 12-foot lanes; auxiliary lanes will be added in both directions between the Georgetown Road/New Circle Road interchange and the Newtown Pike/New Circle Road interchange.

Georgetown Road: The Georgetown Road intersection improvements for Alternative 8 are consistent with those of Alternatives 5 and 7.

**Newtown Pike:** The Newtown Pike interchange is proposed to be modified to a partial cloverleaf interchange. A new interchange structure over New Circle Road will need to be constructed. The cloverleaf on-ramp from north-bound Newtown Pike to west-bound New Circle Road will be replaced by a two-lane on-ramp north of New Circle Road that merges with a one-lane on-ramp from south Newtown Pike. This three-lane ramp will taper to two lanes before merging with west-bound New Circle Road. The southern-most ramp lane and the northern most west-bound New Circle Road lane will merge while the outermost will continue to the Georgetown Road off-ramp. The remaining portions of the partial cloverleaf interchange will be unchanged. Two six-foot bike lanes, one in both traffic directions, will be added to Newtown Pike. Newtown Pike will be constructed with curb-and-gutter, 10-foot outside shoulders, and a 32-foot median in nonintersection areas.

**New Circle Road:** New Circle Road will be widened to allow for six 11- to 12-foot lanes, 10-foot outside shoulders, and a 10-foot inside shoulder with a median barrier separating the travel way. In addition, New Circle Road will be built with auxiliary lanes, one in each direction, from the Georgetown Road/New Circle Road interchange to the Newtown Pike/New Circle Road interchange. The Georgetown Road bridge over New Circle Road will not be reconstructed to provide for six lanes on New Circle Road; therefore, New Circle Road will widen to six lanes east of the Georgetown Road bridge. Direct access to New Circle Road will be eliminated for businesses between the Georgetown Road and Newtown Pike Interchanges. Frontage roads will be required to provide access to the businesses between Georgetown Road and Newtown Pike that will lose access as a result of the widening.

Boardwalk/Colesbury Circle: The proposed Boardwalk/Colesbury Circle improvements for Alternative 8 are consistent with those of Alternatives 5 and 7.

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#### SOUTH FRONTAGE ROAD

#### No-Build

No provisions would be made for businesses whose only access is currently to/from New Circle Road. In addition, no improvements would be made to the Finney Drive and Georgetown Road intersection, which uses the New Circle Road off-ramp signal.

#### Alternative 1

Alternative 1 realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would connect to Newtown Pike via Adcolor Drive through the Janell, Inc. parking lot. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals. Improvements to Adcolor Drive would also be required to accommodate increases in the amount and types of vehicles.

#### Alternative 2

Alternative 2 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would end with a cul-de-sac west of Janell, Inc. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals.

#### **Alternative 3 (Blue)**

Alternative 3 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would be extended to Adcolor Drive and Kennedy Drive through the Janell, Inc. parking lot. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals. Improvements to Adcolor Drive and Kennedy Drive would be required to accommodate increases in the amount and types of vehicles.

#### Alternative 4 (Red)

Alternative 4 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would connect to Newtown Pike via Kennedy Drive and Adcolor Drive through the C&M Giant Tire building. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical (office building only); Tire Discounters; and C&M Giant Tire. Improvements to Adcolor Drive and Kennedy Drive would be required to accommodate increases in the amount and types of vehicles.

#### **Alternative 5 (Yellow)**

Alternative 5 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. A cul-de-sac would be built on the east end of Finney Drive to accommodate truck traffic, but would connect to Adcolor Drive. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals. Improvements to Adcolor Drive would be required to accommodate increases in the amount and types of vehicles.

#### NORTH FRONTAGE ROAD

#### Alternative 1

This alternative would allow access to businesses whose only access is currently to/from New Circle Road; however, the construction of this frontage road will eliminate parking and reasonable access to three businesses that rely upon tractor

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trailers to deliver products or to service for their business: Justice Shamrock Glass; Fleet Services, Inc.; and United Auto Center. Double B Distributors would have access, but they would be the only business to benefit from the construction of the frontage road.

#### **Alternative 2 (No-Build)**

This alternative does not allow access to existing businesses whose only access is currently to/from New Circle Road. Three businesses would be relocated as a result of lack of access: Double B Distributors; Justice Shamrock Glass; D&J Auto Repair & Towing; and Fleet Services, Inc.

#### PREFERRED ALTERNATIVES

#### Mainline

**Alternative 8** was chosen because of expected LOS, the elimination of weaving near Newtown Court, and less stopping points than the other alternatives. Although the public preferred Alternative 5, traffic may not move as freely with Alternative 5 as it would with Alternative 8 considering the amount of tractor-trailer traffic that travels the route. The Newtown Pike interchange will vary in Level of Service (LOS) and Average Vehicle Delay:

- o Alternative 5 has an LOS of "D" and an average delay of 37.5 seconds/vehicle;
- o Alternative 7 has an LOS of "D" and an average delay of 41.7 seconds/vehicle on the inner loop and a LOS of "C" and an average delay of 23.9 seconds/vehicle on the outer loop; and
- o Alternative 8 has an LOS of "B" and varies from 19.2 (inner) to 16.5 (outer) seconds/vehicle. Weaving is moved away from Newtown Court due to the elimination of the northbound cloverleaf, and sometime in the future, the southbound movement on Newtown Pike will need to be signalized.

Alternative 8 will have two 12-foot travel lanes and a posted speed limit of 55 miles per hour west of Newtown Pike. East of Newtown Pike, New Circle Road will have two 11-foot lanes and a 45 mile per hour posted speed limit.

#### **South Frontage Road**

At a project team meeting on March 3, 2010, **Alternative 2** was designated as the preferred alternative. This alternative provides adequate and safe access to Finney Drive from Georgetown Road, but does not require improvements to Adcolor Drive or Kennedy Drive. The frontage road will consist of two 12-foot lanes in a curb-and-gutter typical cross section. The posted speed limit and design speed of the project will be 25 miles per hour.

#### **North Frontage Road**

The **No-Build Alternative** was designated as the preferred alternative due to the amount of business parking and direct access lost to construction of the frontage road. At a stakeholders's meeting on December 11, 2007, property owners potentially affected by the frontage road generally preferred the no-build alternative. Double B Distributors, the only business that would retain enough parking and proper access to maintain a business if the frontage road were built, stated that they are not partial to their existing location; they could continue their business if the frontage road were built or if they were required to relocate because their building were acquired. The No-Build Alternative may leave some uneconomic remnants, which are remnant properties that have been determined by the Cabinet as having little or no utility to the owner; however, remnant pieces may be sold to adjoining property owners or another state agency.

4.	COMMENTS AND COORDINATION		
Att	ach all letters, meeting minutes and copies of any newspaper advertisements.	<u>YES</u>	<u>NO</u>
1.	Will the project have public, local government and resource agency outreach?		

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	Identify type of outreach used:	NA	<u>Y</u>	N
	Meeting(s) Date(s): December 11, 2007, May 3, 2007, and March 7, 2008			
	Newspaper Adv. Newspaper Name Lexington Herald-Leader Date(s): April 18 and 26, 2007			
	Meeting(s) with local government and affected property owners Date(s): December 11, 2007, May 3, 2007, and March 7, 2008			
2.	Was there public or agency controversy on the project? If "Yes", explain in #		$\boxtimes$	
3.	Additional work needed to resolve all public, resource agency, and property owners concerns? <i>If "Yes" explain plans for resolution in #4 below.</i>			
	Describe any unresolved issues: One public meeting and two stakeholder meetings were held. On Oct 2007, and November 19, 2007, field visits and contacts were made to interview property and business project area. No known unresolved issues exist. The public meeting summary is on file at the KYTC DEENVIRONMENTAL COMMITMENTS, MITIGATION, REQUIRED FUTURE ACTIONS AND	ss owners	s in th Office	ne
٠.	COMMENTS	OTHE		
1.	Does the project have environmental commitments, mitigation measures, additional environmental investigations, studies or approvals still to be completed? <i>If "Yes"</i> , <i>DEC should advise Project Manager for consideration of CAP entry in Oracle</i> .	YES	<u>NO</u>	
2.	Identify all issues: A USACE LON will be required for construction of the proposed project. In additionappears to be in the 100-year floodplain; analysis and coordination by KYTC will be required.			
3.	Other unique environmental or engineering factors that require consideration through the rendevelopment (excess excavation needs, utility considerations, drainage problems, geotechnical issue constraints, mines, acidic rock, drinking water wells, etc.): If land is acquired from H&R Oil or Jane Great Midwest Storage & Moving), further hazardous materials/underground storage tank invrecommended.	es, topo	graph (Form	ic er

TC 58-48 Rev. 03/08 Project: 07-366.00 Route: KY 4 County: Fayette NA 6. ENVIRONMENTAL CONDITIONS AND CONSEQUENCES A. Right-of-Way Impacts: 1. Does the project require the acquisition of right-of-way?  $\boxtimes$ 2. Business or residential relocations required. No. of relocations: Residential <u>0</u> Business: 8\* Suitable properties available: Residential: Yes No Unknown Describe "NO" in A.8 **Business:** Yes No Unknown Describe "NO" in A.8  $\boxtimes$ 3. Full or partial property acquisition required. Estimated acreage: Fee Simple: 9.91 acres Permanent Easement: \* 4. Will excess excavation sites be required?  $\boxtimes$ Designated Permitted/Available for Contractor Unknown (must note in Sec. 5) 5. Property transfer from a State or Federal agency required. List agency(ies) in A. 8 below  $\boxtimes$ 6. Last resort housing required. 7. Cemetery affected by project \* If total acreage >10 acres or total relocations are >5 -consult with DEA st If total acreage is >25 acres or total relocations are >10 DEA consults with FHWA 8. Describe Impacts/Comments: The north frontage road will not be constructed (see explanation in Section 3 of this checklist and Section 4.7 in attached documentation); therefore, four business relocations will result from the elimination of access along westbound New Circle Road: Fleet Services, Inc.; D&J Auto Repair & Towing; Justice Shamrock Glass; and Double B Distributors. An additional four business relocations will result from the elimination of access along eastbound New Circle Road and the construction of the southern frontage road: Water Works Car Wash; Finney Mechanical (one building); Tire Discounters; and Hands On Originals. Figure 1 depicts business relocations as a result of the project. No residential relocations or excess excavation sites will be required. **B.** Economic Impacts:

1.	The project will have economic impacts on the regional and/or local economy, such as effects on development,	$\boxtimes$	
	tax revenues and public expenditures, employment opportunities, accessibility, and retail sales.		
2.	The project will affect established businesses or business districts.	$\boxtimes$	

3. Describe Impacts/Benefits: The proposed project will relocate several businesses that contribute to Fayette County tax revenues. Businesses south of New Circle Road will not be accessed from New Circle Road; instead, a frontage road will be built that will be accessed from Georgetown Road. It is expected that the businesses that remain will have better access once the frontage road is complete. Four businesses north of New Circle Road will lose access because no frontage road will be built to serve them. Businesses outside the project area may benefit from better driving conditions through the project area. Indirectly, employment opportunities will decrease initially due to the removal of businesses, but the remaining businesses may increase employment due to better driving conditions and safer access in the project area.

TC 58-48 Rev. 03/08 Project: 07-366.00 Route: KY 4 County: Fayette NA Y C. Social Impacts:  $\boxtimes$ The project will affect neighborhoods or community cohesion for the various social groups. 2. The project will affect travel patterns and accessibility (e.g., vehicular, commuter, bicycle, or pedestrian).  $\times$ 3. The project will affect school districts, churches, businesses, police and fire protection, etc. Include the direct  $\boxtimes$ impacts and the indirect impacts that may result from the displacement of households and businesses.  $\boxtimes$ 4. The project will affect publicly owned public park, recreation area, or wildlife or waterfowl refuge. If "Yes", *Section 4(f) must be completed.* 5. Was Land and Water Conservation Fund Act funding used for any purpose at the publicly owned public park,  $\times$ recreation area, or wildlife or waterfowl refuge? If "Yes", Section 6(f) must be completed.  $\boxtimes$ 6. The project will impact the elderly, handicapped, nondrivers, transit-dependent, minority and ethnic groups, or the economically disadvantaged.  $\boxtimes$ 7. The project will significantly or disproportionately impact minorities or disadvantaged persons (Environmental Justice, E.O. 12898). Describe Impacts/Benefits: No residential relocations are expected as a result of the proposed project; therefore, no neighborhoods or communities will be affected. Figure 2 depicts Census Tract divisions in the project area. Access to schools and churches will not be altered. Vehicular travel patterns and accessibility will be altered. Through traffic will experience better travel conditions; however, direct access will be decreased for businesses along New Circle Road. Eight businesses will be relocated as a result of the project; the remaining businesses will no longer have direct access to New Circle Road. Lexington Fayette Urban County Government Fire Engine House #10 is located at 1128 Finney Drive. Existing Finney Drive parallels the eastbound Georgetown Road ramp onto New Circle Road and is located approximately 60 feet from the ramp's entrance. Finney Drive is proposed to be moved approximately 230 feet south of Georgetown Road to create a safer interchange with New Circle Road and intersection with Georgetown Road; as a result, fire trucks will have safer access to Georgetown Road. D. Local Land Use and Transportation Plan: 1. Project consistent with local land use plan. (NA if no plan exists) 2. Project consistent with local transportation plan. (NA if no plan exists)  $\boxtimes$ 3. Project would induce adverse or beneficial secondary and cumulative effects. 4. Are there any existing and/or planned bike or pedestrian walkways 5. Describe Impacts: The proposed project is listed in the Lexington Metropolitan Planning Organization's (MPO) FY 2010-FY 2013 Transportation Improvement Plan (TIP) on page 29. The project is consistent with the goals and objectives listed in the Lexington Fayette County 2007 Comprehensive Plan. The proposed project's indirect and cumulative impacts are outlined in the attached documentation. Bicycle and pedestrian facilities are proposed along Newtown Pike and would connect to the Legacy Trail, which passes through Lexmark. Bicycle and pedestrian facilities are discussed in Section 4.7.5 of the attached documentation. **E. Historic Resources:** 1. Are NRHP listed eligible/potentially eligible sites/districts present within the project viewshed?  $\bowtie$ If "No", document means for assessing ages of structures within project viewshed or attach memorandum from DEA historian documenting no historic properties affected. If "Yes", indicate level of impact: \times \cdot \times \ti \_\_- "No Adverse Effect" (attach SHPO concurrence letter)

\_\_\_\_- "Adverse Effect" (attach FHWA and SHPO concurrence letter)-Section 4(f) may need to be completed.\*

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	Memorandum of Agreement is required?	SHPO signature date:				$\frac{NA}{  } $	$ rac{\mathbf{Y}}{ } $	$ \underline{\underline{N}} $
	Individual 4(f) required, project is not eligib	•					_	
	Describe historic resource impacts: A Cult found to exist within the Area of Potential I 10, Douglass High School, is listed in the N determined that the undertaking, as propose that Site 7 (FA-W-51) and Site 9 (FA-W-30 proposed undertaking; therefore, there will be B for the SHPO letters and Figure 3 for site	Effect (APE): two previous attitudes a lational Register of Hist d, will not impact Site 10 were eligible for listing No Effect to Site 7 and 10 were	ously recorded sites (9 a coric Places. In a letter 0. In a letter dated Mar ng in the NRHP, and the	and 10) dated I ch 12, ey wil	and 11 n January 23 2008, KH I not be a	ew si 8, 200 IC det ffecte	tes. \$ 08, K termi ed by	Site HC ned the
<u>F. A</u>	Archaeological Resources:							
1.	Does project involve the acquisition or easer	nent of new right of way	y					
2.	Are new right-of-way areas undisturbed? If	"No" state basis for con	nclusion in box F.9.					
3.	Are known archaeological resources affected	d by the project (per OSA	A database)					
	Is there potential for archaeological resource If "Yes", to #2 or #3, consult with DEA Dis		urvey.					
5.	Will project impact archaeological resources	s. If "Yes", list site num	nber(s) that can not be a	voided	!:			$\boxtimes$
	Are/were sites recommended for Phase II we If "Yes", list site number(s):	ork? (attach SHPO cond	currence letter)					$\boxtimes$
7.	Are NRHP eligible/potentially eligible sites	affected by the project?						$\boxtimes$
	If "Yes", indicate level of impact; If "No", a	uttach SHPO concurrenc	ce letter:				ı	
	"No Adverse Effect" (attach SHPO con	currence letter)					ı	
	"Adverse Effect" (attach FHWA and SH preservation in-place is required.*	IPO concurrence letter)	-Section 4(f) must be co	mplete	d if			
	Memorandum of Agreement required? SHP	O signature date:	FHWA signature date:	:	=			$\boxtimes$
	Is Native American Consultation (NAC) req dates of consultation below and describe the	-	why in F.9 below; If "Y	es", de	ocument			
	Dates NAC conducted: Phase I;	se II; MOA se II; MOA	_ _					
		Tribal request for a	dditional consultation:	{	Phase I Phase II MOA			
	Fur	ther Native American C	onsultation is required			$\boxtimes$		
	Describe archaeological resource impacts: A review of the OSA database indicated t boundaries. The project area exhibits see Because the project area has been comples sensitive information, Native American Confector reconstruction, conducted in 2010, found archaeological work was recommended. In archaeological survey.	hat no surveys or previously disturbed previously insultation was not record no evidence of prehis	road construction, roadly and the overview diamended. An archaeol storic or early historic	re loca d mai d not ogical coccup	nted in the ntenance, identify a survey of pation.	e pro and any c the p	ject a utilit cultura propo dditio	area dies. ally osed onal

TC 58-48 Rev. 03/08 Project: 07-366.00 Route: KY 4 County: Fayette NA G. SECTION 4(f): 1. Are 4(f) properties affected by the project? If "Yes", notify DEA EPM who will consult with FHWA to  $\boxtimes$ *determine applicability of Section 4(f).* 2. Is the project adjacent to a 4(f) resource? If "Yes", DEA EPM consult with the FHWA to determine  $\boxtimes$ applicability of "constructive use." If Questions 1 and 2 are both "No", go to Section H.  $\boxtimes$ 3. Prudent and feasible means to avoid 4(f) properties were fully considered but resource can not be avoided Only determined in consultation with FHWA; Indicate 4(f) type below Programmatic Section 4(f) ☐ Full Section 4(f) Statement Deminimis Finding If an Individual 4(f) Statement is required, the project can not be completed as a CE Level 1 or 2 document. However, if the impacts can be satisfied by completing a Programmatic 4(f) Statement or a Deminimis Finding, the CE can be completed as a CE Level 1 or 2 project. 4. Describe process followed, consultation completed and attach documentation developed to resolve 4(f) issue: No Section 4(f) properties will be affected by the proposed project. H. SECTION 6(f): 1. Are 6(f) properties affected by the project? If "Yes", consult with DEA and FHWA to determine applicability of  $\boxtimes$ Section 6(f). \* 2. Has discussion been initiated with the Governor's Office of Local Development and the agency having responsibility for the administration of the publicly owned park, recreation area, or wildlife or waterfowl refuge. 3. Will a Memorandum of Agreement be required? Final Signature Date: \* Project may only be processed as a CE Level 3 if Section 6(f) applies. 4. Describe parties involved, property involved, process followed and consultation completed to resolve 6(f) issue: No Section 6(f) properties are located in the project area. I. Noise Impact (23 CFR Part 772): 1. There are noise sensitive receivers/land uses adjacent to the proposed project (e.g., residences, businesses, schools, parks, etc.). 2. Indicate if any of the following are applicable, which would necessitate a noise analysis:  $\boxtimes$ New roadway on new alignment; Addition of one or more through travel lanes; Significant change in vehicle mix or traffic speed; Significant change in horizontal or vertical alignment; A change in roadway character that substantially reduces the shielding effect of landforms or noise barriers.  $\boxtimes$ 3. Noise analysis demonstrates that noise impacts exceed the KYTC Noise Abatement Criteria Policy. If "Yes", a significant impact may be associated with this project. Consultation with DEA is required. 4. There are feasible and reasonable measures that can reduce impacts. If "Yes", discuss in I.5 below  $\times$ Describe noise impact and abatement measures (if applicable): A Traffic Noise Impact Analysis was completed for the Noise-sensitive land uses throughout the project area consist predominantly of proposed project in 2007. industrial/commercial uses, with one identified area of concentrated residential development, represented as Receptor 2. In addition to residential land uses, three hotels and one privately owned recreation area were identified near New Circle Road in the project study area. No sound-level impacts for the Existing, No-Build, or Build scenarios are expected. Construction of the proposed project is not expected to result in any substantive change in project area land uses,

development patterns, or traffic volumes and vehicle mix; therefore, the project is not expected to result in any indirect or

cumulative sound-level impacts for noise-sensitive receptors in the project area.

TC 58-48 Rev. 03/08 Project: 07-366.00 Route: KY 4 County: Fayette NA Y J. Air Quality Impacts: The project is located in an air quality nonattainment or maintenance area  $\boxtimes$  $\boxtimes$ 2. The project is listed in an approved STIP and/or TIP. If not in STIP, notify DEA SME STIP # \_\_\_\_\_ Page # \_\_\_\_\_ TIP Page # PRJ-23 (Lexington Area TIP FY 2005-2008)  $\boxtimes$ 3. Is project controversial or does the project HAVE or ADD a signalized intersection with a projected "open to traffic" year ADT > 80,000 vehicles per day? (If "Yes" analysis may be required. Clearance memo from DEA *SME is required and must be attached. If "No", check box below)* This project does not exceed the Kentucky CO screening criteria for project-level analysis and is not expected to produce a violation of the CO standards (35 ppm over a one-hour period or 9 ppm over an eight-hour period) 4. Is the project type included in the Exempt Project list found at 40 CFR 93.126?  $\boxtimes$ *If "Yes",indicate project type as described in the list:* If "No", contact DEA SME for assistance and attach related correspondence. Project is considered to be exempt or of no potential for meaningful MSAT effects.  $\boxtimes$ 5. The project is in an area requiring PM 2.5 consideration (Boone, Boyd, Bullitt, Campbell, Jefferson, Kenton or part of Lawrence) Date Inter-agency Consultation completed \_\_\_\_\_; Project Status: Exempt Not Exempt, Not of Concern Of Concern If PM 2.5 analysis is required, attach checklist, consultation emails, etc. to document findings. 6. Impacts/Comments: An Air Quality Analysis was completed in 2007 for the proposed project. Fayette County is currently in attainment for all transportation-related pollutants. All existing and future carbon monoxide (CO) concentrations are below the one-hour standard of 35 ppm and the eight-hour standard of 9 ppm. Based on current and future one-hour and eight-hour carbon monoxide levels, the proposed project will not have a negative impact on the ambient air quality of Fayette County. The proposed project is identified as having a low-potential for MSAT emissions. Additional discussion of air quality and MSATs is located in Section 4.1.2 of the attached documentation. K. Hazardous Materials: 1. Are known or potentially contaminated sites (service stations, landfills, automotive repair, junkyard, structures  $\boxtimes$ with asbestos, etc.) along the project corridor? 2. Is ROW required from, or extensive excavation required adjacent to a potentially contaminated site?  $\boxtimes$ If "Yes" Phase II testing is required and should be completed prior to ROW authorization request. Deferral must be approved by FHWA. 3. Phase II analysis indicated the existing and/or proposed ROW is contaminated. Extent and estimated  $\boxtimes$ 

X

 $\boxtimes$ 

remediation cost to be provided by DEA SME to Div. of ROW and Project Team.

4. Will any bridges or standing structures be demolished for completion of the work?

Complete Required

*in K.6 and Sec. 5)* 

Status of inspection of bridges and structures for asbestos containing materials (ACM)

(Identify bridges and structures, discuss results of assessment, if completed, reason not required or future work

6. If bridges are to be removed, refurbished or repainted, will there be lead-based paint wastes to address?

\* If more than minor amounts of ACM, project may not be eligible for CE Level 1 and DEA must be consulted.

Not Required

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6. Discuss significance of any "Yes" marked in 1-5 and any deferred necessary activities (deferrals also discussed in Section 5 - Commitments): A Phase I Environmental Site Assessment was completed in 2007 for the proposed project. Two properties are of potential concern from the construction of the frontage road: H&R Oil Company and Former Great Midwest Moving & Storage (currently Janell, Inc.). Thirteen USTs were removed from H&R Oil Company; soil and groundwater contamination were discovered during removal, and groundwater wells were installed. At Former Great Midwest Moving & Storage, groundwater monitoring wells were installed on the property in September 1994: four wells are located in the fenced area east of the building; one well is located northwest of the building; and three wells are

	are received in the reneed area east of the banding, one wen is received northwest of the banding, and three	W CIID	ui C
	located in the outdoor storage area east of the building. If the project is proposed to impact any of these well closure and relocation of the impacted wells is recommended. Because soil and groundwater contamination are		
	Phase II investigations are recommended if ROW is acquired from these properties.	possi	ibie,
<u>L.</u>	Threatened and Endangered Species (T&E):		
1.	Sources considered to identify potential impacts to federally threatened and endangered species (attach copies):  USFWS Species List KSNPC Web site KDFWR Web site  Species Identified: Indiana bat (Myotis sodalis); running buffalo clover (Trifolium stoloniferum); gray bat		
(M	(yotis grisescens); American burying beetle (Nicrophorus americanus)		
2.	Habitat Assessment indicates Federally listed T&E <u>habitat</u> present in vicinity No Effect determined for: gray bat; running buffalo clover; American burying beetle BA required for: <u>none</u>		
3.	Indiana bat (Check all that apply):       □ To be Determined       □ No Effect;       □ KYTC NLTAA Finding;       □ IBCF;         □ Tree Cutting Restrictions       □ BA Complete;       □ BA to be scheduled;       □ To be Determined		
4.	Project located upstream of or within Designated Critical Habitat (Consultation with DEA required)		$\boxtimes$
5.	Biological Assessment required:  Completed (attach USFWS letter)  To complete before Construction (CAP entry recommended and include in Section 5)		
6.			$\boxtimes$
	* If the project is likely to affect a Federally listed T&E species it is not eligible for CE Level 1 or 2 and DEA and FHWA must be consulted.		
7.	Describe T&E species concerns/protective measures: The project does not involve changes to the location of Circle Road centerline, and construction work outside of existing ROW is expected to be limited and restrict minimum necessary to complete the planned improvements. A No Effect determination was for gray bat, runnin clover, and American burying beetle on June 15, 2010. KYTC will contribute to the Indiana Bat Conservat (IBCF) for taking 2.71 acres that include growth along ROW fencing, inside interchange medians, and some lan	ed to g buf ion F	the falo und

trees. The No Effect determination and the IBCF documentation are located in Appendix A.

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	<u>N</u>	<u>A</u> <u>Y</u>	<u>N</u>
<u>M</u> .	Water Resource Impacts:		
1.	Project impacts State Listed Special Use Waters or tributaries to a Special Use Water? (indicate all types below and consult DEA Permit SME prior to issuance of the CE)		
	□ Cold Water Aquatic Habitat       □ Outstanding National Resource Water       □ Exceptional Waters         □ Reference Reach Stream       □ Outstanding State Resource Water       □ State Wild River         □ Federally Designated Wild River       □ Federally Designated Scenic River       □ Federal T&E Species		
2.	Project will involve surface disturbance greater than one acre  If "Yes", note need for KPDES KYR10 storm water permit in box M.12.	$\boxtimes$	
3.	Project is located partially or wholly within a designated MS4 community If "Yes", identify any local ordinances, restrictions, local permits or other local requirements that require consideration before, during and after construction and specify in box M.13 below and, if appropriate, Section 5.		
4.	Project encroaches upon 100-year floodplain  If Yes, determinations regarding No Rise Certifications, FEMA Map Revisions, etc. to be made by KYTC  Design, Drainage Section during final design.		
5.	Project could potentially impact surface or groundwater drinking water supplies (public or private)		
6.	Project involves impacts to a stream below Ordinary High Water Mark (OHWM) (If answer is "No" then the reply to questions 7 and 8 will also be "No") Estimate total number of impacts below OHWM: 5		
	Identify all applicable types of impact occurring below OHWM:   ☐ Bridge/Pier Abutment ☐ Relocation/Channelization ☐ Temporary Diversion ☐ Culvert   ☐ Low Water Crossing ☐ Excess Excavation Site ☐ Bank Stabilization   ☐ Other (describe): ☐ Description ☐ Description		
7.	Project involves impacts below the OHWM to streams defined as ephemeral?  Estimate length and area of the single largest ephemeral impact: 481.7 feet andacres		
	For largest single impact: $<0.1~ac = ACE~LON$ ; between 0.1 and 0.5 $ac = ACE~NW$ ; $>0.5~acre = ACE~IP$		
8.	Project involves impacts below OHWM to streams defined as intermittent or perennial?  Estimate length and area of the <u>single largest</u> intermittent/perennial impact: 253.1 feet andacres		
	$Impact < 300' = ACE\ LON;\ Impact\ between\ 300'\ \&\ 500' = ACE\ NW +\ mitig.;\ Impact > 500' = ACE\ IP +\ mitig.\\ Impact < 0.1\ ac = ACE\ LON;\ Impact\ between\ 0.1\ ac\ \&\ 0.5\ ac = ACE\ NW +\ mitig;\ Impact > 0.5\ ac = ACE\ IP +\ mitig.\\ Impact > 300' = Ind.\ WQC +\ mitig.;\ Cumulative\ impact\ in\ HUC\ 14 > 500' = Ind.\ WQC\ +\ mitig.$		
9.	Project will impact a lake or pond requiring its draining or filling (note characteristics below)  A stream enters the lake or pond  A stream exits the lake or pond  If stream is exiting lake or pond, 404 permit is required		

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3					NA	Y	<u>N</u>
	pject will result in loss of a Special Riffle Pool Complex (#)etland consideration/delineation:  Project affects areas delineated Project affects soils designated Project affects areas identified by Wetland boundaries delineated	as wetlands on the Nati as hydric, hydric inclus by field inspection as ha	mated acreage) onal Wetlands Inventor ive or potentially hydric	on the County S	oil Survey		
	Project Team has evaluated all project Team has complied with approved as a CE acres wetland impact, project management of the complete management of the co	n the Wetlands Finding	Agreement? If "No", to	he project can no			
11. Pe	rmit Requirements						
	1/404 Permits are likely to be requiry permits are expected to be real		7 -	· ·			
	ream/Lake/Pond Impacts: AC tigation required by: AC		☐ ACE IP; ☐ DOW	' IWQC			
	etland Impacts: AC tigation required by: AC		☐ ACE IP; ☐ DOW	IWQC			
	ill this project affect navigable W Yes", then coordination with DEA		ined by USACE and req	uire a Section 10	permit? If		
	ill this project affect a navigable vordination with Div. of Structural		Coast Guard, Section 9	permit? If "Yes",	then		
W	ill this project require a KPDES s	torm water permit (KY	R10) for construction?				
W	ill this project require any additio	nal permits from a loca	1 MS4? (discuss require	ments in box M.I	13)		
	ill construction in the floodplain r sure that potential flooding impac			sign-Drainage Se	ection to		
	pject is within the watershed of a ellhead protection area, Special U		urce (private or public d	rinking water sup	pply,		
	Project is candidate for applicati						<u> </u>
Im dis pro and mi	escribe Water Resource Investigate pact Assessment was prepared in sturbances will be greater than object is within the Phase I MS4 could KYTC is not subject to local enimal impacts to the 100-year fluorittent and three ephemeral)	n October 2007 for the one acre and will requi community of Lexingtor environmental permitting loodplain of Cane Run	proposed project. Fayor the KPDES KYR10 n-Fayette County; howering requirements. The page 1. No wetlands will be	ette County is a less stormwater periver, local ordinan proposed project impacted; howe	Phase I MS4. mit. Additionaces are not ap may potentia ever, five stre	. Surnally pplically cannot a surnally cannot	rface r, the able, cause (two

discussed in Section 4.3 of the attached documentation.

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NA Y N

#### **N.** Construction Impacts:

Discuss potential impacts of construction activities pertaining to water quality, stream diversion, air quality, detours and delays of traffic, businesses, noise, etc:

#### MAINTENANCE OF TRAFFIC

Traffic will be maintained in two phases for this project. Phase IA will include construction of the South Frontage Road. Phase IB will maintain traffic on the existing roadway during construction of the outside lanes of New Circle Road. Existing access points along New Circle will be closed. The culvert at station 201+13 will be extended. Finally, Phase IB will widen Newtown Pike and replace the bridge. Phase II shifts New Circle traffic to the newly constructed outside lanes while the median is constructed. The existing ramps will remain open during construction while the proposed ramp is developed. Following the proposed ramps completion, the existing loop ramp will be removed. Finally, the Lexmark bridge will be constructed in Phase II.

#### **NOISE**

Noise resulting from construction activities, if any at all, will be temporary.

#### AIR

Any increase in particulate matter in the air due to construction activities will be temporary and will not be detrimental to the health and welfare of local residences and employees. Dust pollution may be an unavoidable, minor nuisance, and every feasible effort will be made to minimize issues with dust. Exhaust from construction equipment will be a minor impact on ambient air quality. Any open burning will be completed in compliance with state regulations and local ordinances.

#### WATER QUALITY

The project is located in an area with soils that are indicated as having no to slight-moderate potential for erosion. The disruption of vegetation and use of heavy equipment during construction will expose areas of erodible soils, resulting in potential adverse impacts to adjacent streams, including a) temporary increases in dissolved solids, nutrients, settable solids and suspended solids; b) the destruction or displacement of aquatic fauna whose foraging, reproduction or locomotion is hindered by silt; c) temporary increase in turbidity, which may reduce light penetration, pH, oxygen levels and/or the buffering capacity of the streams; and/or d) increased water temperatures that may cause oxygen demands and damage or destroy aquatic biota. The greatest potential for adverse construction related impacts is expected to occur where erodible soils are disturbed in cut sections of the project immediately above surface streams; however, short-term construction-related impacts to surface streams by the project are not expected to be substantial given strict adherence to Best Management Practices for erosion control during daily construction activities and rigid application of KYTC's Standard Specifications for erosion control.

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#### 1.0 PURPOSE AND NEED

#### 1.1 Project Setting and Description

Fayette County has a land area of 284.5 square miles of gently rolling terrain. Lexington, which includes all of Fayette County, is the county seat. Interstates 75 and 64 pass through Fayette County to the east and north, respectively, of downtown Lexington. New Circle Road/KY 4, which circles downtown Lexington, is an approximately 19-mile-long principal arterial and is a state secondary road in the State Maintained Highway System. Access along nearly 75 percent of New Circle Road is fully controlled. The proposed project is located north of downtown from Georgetown Road to Boardwalk/Colesbury Circle. This section of New Circle Road is access-by-permit only.

Land cover in the project area is urban, dominated by commercial and industrial land uses. Lexmark, the largest employer in the project area, is located at the east terminus of the project. Most residential land uses are found south of New Circle Road.

Plans for this section include widening KY 4 to six through lanes and reconstructing the interchange at Newtown Pike. The improvements also incorporate a frontage road to provide fully controlled access south of New Circle Road.

#### 1.2 Project Purpose and Need

The purpose of this project is to increase safety, mobility, and system linkages that will support continued and sustainable economic development along New Circle Road between Georgetown Road and Newtown Pike.

The Kentucky Transportation Cabinet (KYTC) provided accident data for New Circle Road for from July 1996 to July 1999. Within that three-year period, there were 210 accidents at the Georgetown Road, Newtown Pike, and Boardwalk Avenue/Colesbury Circle intersections with New Circle Road. As outlined in the *Planning Study for the Signalized Portion of New Circle Road*, completed in April 2002, the entire signalized portion, which includes the project area, was above the statewide Critical Rate.

**Table 1.1.** Accident Data at Intersecting Roads

Intersection Accidents				
Road Intersecting at New Circle Road	Number of Accidents			
Georgetown Road	67			
Newtown Pike	99			
Boardwalk/Colesbury Circle	44			

Level of Service (LOS) is a qualitative measure of traffic flow. LOS ranges from A to F, with A being the best quality of flow, and F being the poorest quality of flow. LOS is dependent upon Average Control Delay; this is the delay (in seconds) a vehicle experiences given the presence of a traffic signal and/or conflicting traffic.

If the proposed project is not constructed an LOS of F is expected to occur by 2025 at the inner New Circle Road ramp at Georgetown Road. The outer New Circle Road ramp at Georgetown Road is expected to have an LOS of E. Alternative 8 is expected to have an LOS of B in 2030.

	Future No-Build		Alternative 5 SPUI		Alternative 7 Compressed Diamond			rnative 8 Cloverleaf	Diverging Diamond		
	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	
Newtown Pike											
Inner NCR Ramp	-	-	-	-	D	41.7	В	19.2	С	28.3	
Outer NCR Ramp	-	-	D	37.5	С	23.9	В	16.5	С	29.3	
Georgetown Road											
Inner NCR Ramp	F	213.3	D	36.3	-	-	-	-	-	-	
Outer NCR Ramp	E	59.2	D	39.4	-	-	-	-	-		

#### 2.0 ALTERNATIVES

#### 2.1 Previously Considered Alternatives

The initial planning study for the signalized portion of New Circle Road was completed in April 2002. In a July 13, 2005 meeting, four alternatives from this planning study were presented to the project team (i.e., 1 through 4). In the March 2006 planning study addendum, eight alternatives, some of which had been eliminated from further study, were described.

Alternative 1 was developed so that non-through traffic would to utilize service roads and funnel all traffic through traffic signals. This alternative was eliminated during development of the planning study addendum in 2006; however, service roads have been incorporated into other alternatives currently being considered.

Alternative 2 would have provided slip ramps for a portion of the traffic entering and leaving New Circle Road. Alternative 2 was modified in November 2007 to create Alternative 6. Alternative 6 was almost immediately eliminated because it would need to be constructed in phases due to lack of funding.

Alternative 3 would have eliminated weaving between Georgetown Road and Newtown Pike through the use of additional bridges to braid the ramps. Alternative 3 was eliminated during development of the planning study addendum in 2006 because the project team felt that the costs associated with constructing additional bridges would be much larger than funding would allow.

Alternative 4 would have provided Collector-Distributor (C-D) Roads that would begin west of Georgetown Road and merge east of Newtown Pike. Alternative 4 would have had a higher cost than the other alternatives, and property would have been acquired from Lexmark for right-of-way. In addition, this alternative would have been much more difficult to construct in phases due to the lengths of the ramps. This alternative was modified in November 2007 to create Alternative 5 because the project team felt that the size of this alternative might be much larger than funding would allow.

The No-Build Alternative and Alternatives 5, 7, and 8 have not been eliminated and are discussed in this Categorical Exclusion documentation.

#### 2.2 No-Build Alternative

The No-Build Alternative is used to designate the default situation, which is the likely occurrence to not implement construction. The purpose of defining a No-Build option and estimating its consequences is to establish a benchmark against which all viable alternatives are compared. For this project, the No-Build Alternative is defined as no new alignment/no reconstruction.

The scope of the proposed project is to widen New Circle Road and reconstruct the Newtown Pike Interchange. As discussed in Section 1.0, the project is needed to construct an improved transportation facility that will increase safety, mobility, and system linkages that will support continued and sustainable economic development. The No-Build Alternative would not directly achieve any of these objectives; therefore, the No-Build Alternative would not satisfy the project purpose and need.

The No-Build Alternative is expected to fail to supply adequate transportation support of existing economic activities throughout the surrounding area. Inadequate transportation systems increase the costs of obtaining supplies and raw materials required for production and create difficulties for workers in reaching places of employment in terms of time, predictability, economy, and safety of travel. This could lead to increased personnel and shipping costs and deterioration of competitive advantages for certain businesses and industries, ultimately resulting in displacement or relocation.

Based on the above discussion, the No-Build Alternative is not expected to meet the project purpose and need nor provide an acceptable solution for the transportation problems identified. The No-Build option is not in the best overall public interest and is not considered prudent and/or feasible.

#### 2.3 Build Alternatives

#### 2.3.1 Mainline

Three build alternatives were considered for the reconstruction of KY 4 from Georgetown Road to Colesbury Circle/Boardwalk. This part of the project is designated as "Mainline."

#### 2.3.1.1 Alternative 5: SPUI Alternative with Ramp Modifications

Alternative 5 includes improvements to the existing Georgetown Road interchange ramps, a complete redesign of the Newtown Pike interchange, and the widening of KY 4/New Circle Road to six 11- to 12-foot lanes; auxiliary lanes will be added in both directions between the Georgetown Road/New Circle Road interchange and the Newtown Pike/New Circle Road interchange.

**Georgetown Road:** Under KYTC Item Numbers 7-114, 7-115, and 7-116, several changes were made to the Georgetown Road/New Circle Road interchange. The westbound Georgetown Road off-ramp from New Circle Road was recently widened to accommodate forecasted traffic volumes; the ramp includes dual left turn lanes and an exclusive right turn lane at Georgetown Road. The eastbound Georgetown on-ramp remained a single lane ramp with a slight shift in the horizontal alignment near KY 4. An additional lane was added to New Circle Road to improve the weaving between Georgetown Road and Newtown Pike.

**Newtown Pike:** The Newtown Pike interchange is proposed to be replaced with a single point urban interchange (SPUI). This configuration will require one signalized intersection by aligning the left turn movements of the exit ramps (onto Newtown Pike) opposite one another; in all, a single intersection is formed at the center of the grade-separated structure. To accommodate this type of intersection, the current Newtown Pike bridge will be replaced by a new structure. All left-turning on and off-ramps will be two lanes and will merge with one-lane, right-turning onramps. The east- and west-bound two-lane off-ramps will split into two left-turning lanes and one right-turning lane. Two six-foot bike lanes, one in both traffic directions, will be added to Newtown Pike.

**New Circle Road:** New Circle Road will be widened to allow for six 11- to 12-foot lanes, 10-foot outside shoulders, and a 10-foot inside shoulder with a median barrier separating the travel way. In addition, New Circle Road will be built with auxiliary lanes, one in each direction, from the Georgetown Road/New Circle Road interchange to the Newtown Pike/New Circle Road interchange. The Georgetown Road bridge over New Circle Road will not be demolished to provide for six lanes on New Circle Road; therefore, New Circle Road will widen to six lanes east of the Georgetown Road bridge. Direct access to New Circle Road will be eliminated for businesses between the Georgetown Road and Newtown Pike Interchanges. Frontage roads will be required to provide access to the businesses between Georgetown Road and Newtown Pike that will lose access as a result of the widening.

**Boardwalk/Colesbury Circle:** New Circle Road access to Lexmark will remain extant: right-in, right-out. This alternative will require the replacement of the bridge connecting the Lexmark campuses due to the additional New Circle Road lanes. The median will remain open at Boardwalk/Colesbury Circle during this phase but is planned to be closed as a result of future widening.

#### 2.3.1.2 Alternative 7: Tight Diamond Interchange

Alternative 7 includes improvements to the existing Georgetown Road interchange ramps, a complete redesign of the Newtown Pike Interchange, and the widening of New Circle Road to six 11- to 12-foot lanes; auxiliary lanes will be added in both directions between the Georgetown Road/New Circle Road interchange and the Newtown Pike/New Circle Road interchange.

**Georgetown Road:** The Georgetown Road intersection improvements for Alternative 7 are consistent with those of Alternative 5.

**Newtown Pike:** The Newtown Pike interchange is proposed to be replaced with a tight diamond interchange. This configuration will eliminate the current partial cloverleaf pattern and associated merging and weaving conditions at all on and off-ramps by implementing two signalized intersections at both ends of the grade-separated interchange. A new interchange structure over New Circle Road will need to be constructed. Each on-ramp will consist of two lanes, whereby left-turning traffic will have two lanes from which to access New Circle Road. To accommodate capacity from east-bound New Circle Road, the ramp will consist of three turning lanes, whereby left-turning traffic will have three lanes from which to access north-bound Newtown Pike. The west-bound off-ramp will consist of two lanes, whereby left-turning traffic will have two lanes from which to access south-bound Newtown Pike. Two six-foot bike lanes, one in each direction, will be added to Newtown Pike. Newtown Pike will be constructed with curb-and-gutter, 10-foot shoulders, and a 32-foot median in non-intersection areas.

New Circle Road: New Circle Road will be widened to allow for six 11- to 12-foot lanes, 10-foot outside shoulders, and a 10-foot inside shoulder with a median barrier separating the travel way from Georgetown Road to Boardwalk/Colesbury Circle. In addition, New Circle Road will be built with auxiliary lanes, one in each direction, from the Georgetown Road/New Circle Road interchange to the Newtown Pike/New Circle Road interchange. The Georgetown Road bridge over New Circle Road will not be demolished to provide for six lanes on New Circle Road; therefore, New Circle Road will widen to six lanes east of the Georgetown Road bridge. Direct access to New Circle Road will be eliminated for businesses between the Georgetown Road and Newtown Pike Interchanges. Frontage Roads will be required to provide access to the businesses between Georgetown Road and Newtown Pike that will lose access as a result of the widening.

**Boardwalk/Colesbury Circle:** The proposed Boardwalk/Colesbury Circle improvements for Alternative 7 are consistent with those of Alternative 5.

#### 2.3.1.3 Alternative 8: Partial Cloverleaf Interchange

Alternative 8 includes improvements to the existing Georgetown Road interchange ramps, elimination of one cloverleaf Newtown Pike interchange ramp, and the widening of New Circle Road to six 11- to 12-foot lanes; auxiliary lanes will be added in both directions between the Georgetown Road/New Circle Road interchange and the Newtown Pike/New Circle Road interchange.

**Georgetown Road:** The Georgetown Road intersection improvements for Alternative 8 are consistent with those of Alternatives 5 and 7.

**Newtown Pike:** The Newtown Pike interchange is proposed to be modified to a partial cloverleaf interchange. A new interchange structure over New Circle Road will need to be constructed. The cloverleaf on-ramp from north-bound Newtown Pike to west-bound New Circle Road will be replaced by a two-lane on-ramp north of New Circle Road that merges with a one-lane on-ramp from south Newtown Pike. This three-lane ramp will taper to two lanes before merging with west-bound New Circle Road. The southern-most ramp lane and the northern most west-bound New Circle Road lane will merge while the outermost will continue to the Georgetown Road off-ramp. The remaining portions of the partial cloverleaf interchange will be unchanged. Two six-foot bike lanes, one in both traffic directions, will be added to Newtown Pike. Newtown Pike will be constructed with curb-and-gutter, 10-foot outside shoulders, and a 32-foot median in non-intersection areas.

**New Circle Road:** New Circle Road will be widened to allow for six 11- to 12-foot lanes, 10-foot outside shoulders, and a 10-foot inside shoulder with a median barrier separating the travel way. In addition, New Circle Road will be built with auxiliary lanes, one in each direction, from the Georgetown Road/New Circle Road interchange to the Newtown Pike/New Circle Road interchange. The Georgetown Road bridge over New Circle Road will not be demolished to provide for six lanes on New Circle Road; therefore, New Circle Road will widen to six lanes east of the Georgetown Road bridge. Direct access to New Circle Road will be eliminated for businesses between the Georgetown Road and Newtown Pike Interchanges. Frontage roads will be required to provide access to the businesses between Georgetown Road and Newtown Pike that will lose access as a result of the widening.

**Boardwalk/Colesbury Circle:** The proposed Boardwalk/Colesbury Circle improvements for Alternative 8 are consistent with those of Alternatives 5 and 7.

#### 2.3.2 South Frontage Road

Six alternatives, including a no-build alternative, were evaluated for the construction of a southern frontage road from Georgetown Road to Newtown Pike.

#### 2.3.2.1 No-Build

No provisions would be made for businesses whose only access is currently to/from New Circle Road. In addition, no improvements would be made to the Finney Drive and Georgetown Road intersection, which uses the New Circle Road off-ramp signal.

#### 2.3.2.2 Alternative 1

Alternative 1 realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would connect to Newtown Pike via Adcolor Drive through the Janell, Inc. parking lot. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals. Improvements to Adcolor Drive would also be required to accommodate increases in the amount and types of vehicles.

#### 2.3.2.3 Alternative 2

Alternative 2 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would end with a cul-de-sac west of Janell, Inc. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals.

#### 2.3.2.4 Alternative 3 (Blue)

Alternative 3 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would be extended to Adcolor Drive and Kennedy Drive through the Janell, Inc. parking lot. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals. Improvements to Adcolor Drive and Kennedy Drive would be required to accommodate increases in the amount and types of vehicles.

#### 2.3.2.5 Alternative 4 (Red)

Alternative 4 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. The east end of Finney Drive would connect to Newtown Pike via Kennedy Drive and Adcolor Drive through the C&M Giant Tire building. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical (office building only); Tire Discounters; and C&M Giant Tire. Improvements to Adcolor Drive and Kennedy Drive would be required to accommodate increases in the amount and types of vehicles.

### 2.3.2.6 Alternative 5 (Yellow)

Alternative 5 also realigns the west end of Finney Drive from its current location to the south at the intersection of Georgetown Road and Lima Drive. A cul-de-sac would be built on the east end of Finney Drive to accommodate truck traffic, but would connect to Adcolor Drive. This alternative would require the relocation of four businesses: Water Works Car Wash; Finney Mechanical, Inc. (office building only); Tire Discounters; and Hands On Originals. Improvements to Adcolor Drive would be required to accommodate increases in the amount and types of vehicles.

#### 2.3.3 North Frontage Road

Two alternatives, including a no-build alternative, were evaluated for the construction of a northern frontage road from Georgetown Road to Newtown Pike.

#### 2.3.3.1 Alternative 1

This alternative would allow access to businesses whose only access is currently to/from New Circle Road; however, the construction of this frontage road will eliminate parking and reasonable access to two businesses that rely upon tractor trailers to deliver products or to service for their business: Justice Shamrock Glass; and Fleet Services, Inc. Double B Distributors would have access, but they would be the only business to benefit from the construction of the frontage road.

#### 2.3.3.2 Alternative 2 (No-Build)

This alternative does not allow access to existing businesses whose only access is currently to/from New Circle Road. Four businesses would be relocated as a result of lack of access: Double B Distributors; Justice Shamrock Glass; D&J Auto Repair & Towing; and Fleet Services, Inc.

#### 2.3.4 Preferred Alternatives

**Mainline Alternative 8** was chosen because of expected LOS, the elimination of weaving near Newtown Court, and less stopping points than the other alternatives. Although the public preferred Alternative 5, traffic may not move as freely with Alternative 5 as it would with Alternative 8 considering the amount of tractor-trailer traffic that travels the route. The Newtown Pike interchange varies in Level of Service (LOS) and Average Vehicle Delay:

- o Alternative 5 has an LOS of D and an average delay of 37.5 seconds/vehicle;
- Alternative 7 has an LOS of D and an average delay of 41.7 seconds/vehicle on the inner loop and a LOS of C and an average delay of 23.9 seconds/vehicle on the outer loop; and
- Alternative 8 has an LOS of B and varies from 19.2 (inner) to 16.5 (outer) seconds/vehicle. Weaving is moved away from Newtown Court due to the elimination of the northbound cloverleaf, and sometime in the future, the southbound movement on Newtown Pike will need to be signalized.

Alternative 8 will have two 12-foot travel lanes and a posted speed limit of 55 miles per hour west of Newtown Pike. East of Newtown Pike, New Circle Road will have two 11-foot lanes and a 45 mile per hour posted speed limit.

At a project team meeting on March 3, 2010, **South Frontage Road Alternative 2** was designated as the preferred alternative. This alternative provides adequate and safe access to Finney Drive from Georgetown Road, but does not require improvements to Adcolor Drive or Kennedy Drive. The frontage road will consist of two 12-foot lanes in a curb-and-gutter typical cross section. The posted speed limit and design speed of the project will be 25 miles per hour.

The **No-Build Alternative** was designated as the preferred alternative for the **North Frontage Road** due to the amount of business parking and direct access lost to construction of the frontage road. At a property/business owners's meeting on December 11, 2007, property owners potentially affected by the frontage road generally preferred the no-build alternative. Double B Distributors, the only business that would retain enough parking and proper access to maintain a business if the frontage road were built, stated that they are not partial to their existing location; they could continue their business if the frontage road were built or if they were required to relocate because their building were acquired. The No-Build Alternative may leave some uneconomic remnants, which are remnant properties that have been determined by the Cabinet as having little or no utility to the owner; however, remnant pieces may be sold to adjoining property owners or another state agency.

#### 3.0 PROJECT AREA CHARACTERISTICS

#### 3.1 Population

Population growth percentages over the next forty years in Fayette County are expected to outpace those of the Commonwealth. As shown in Table 3.1, Fayette County is projected to have 300,000 people within the next 10 years, and Kentucky is projected to exceed 5,000,000 people within the next 20 years.

Table 3.1. Current Population and Population Projections for Kentucky and Fayette County

Area	Census		Projection							
	2000	)	2010	2020	)	2030	2040	2050		
Kentucky	4,041,	769	4,338,878	4,669	,801	5,001,748	5,277,618	5,508,928		
Fayette County	260,	512	285,921	312	,190	341,326	367,343	396,787		

The project area is composed of portions of Census Tracts 11, 12, 37, and 38.01. The majority of the project area is commercial and industrial, and very few residences are in the immediate vicinity. Populations for Block Groups through which the proposed project passes, are listed in Table 3.2. Very little population growth is expected to occur in these Census Tract Block Groups because little developable land is available.

Table 3.2. Current Population for the Project Area Census Tract Block Groups

	Census Tract		Census Tract 12	Census Tract 37	Census 38.	
	Block Group 1	Block Group 3	Block Group 1	Block Group 3	Block Group 1	Block Group 2
Population	812	1,779	250	1,552	5,836	1,294

#### 3.2 Race and Ethnicity

As shown in Table 3.3, minority populations exist in the project area at higher percentages than that of the state and county.

Table 3.3. Race and Ethnicity of Project Area

	Kentucky	Fayette County	Censu 1	s Tract	Census Tract 12	Census Tract 37		Census Tract 38.01		
			Block Group 1 Block 1000	Block Group 3 Block 3000	Block Group 1 Block 1001	Block Group 3 Block 3060	Block Group 1 Block 1026	Block Group 1 Block 1027	Block Group 2 Block 2012	
White	3,610,112	206,238	169	136	0	0	0	0	2	
Black or African American	291,735	34,728	73	578	0	0	0	0	110	
American Indian & Alaska Native	8,424	643	1	0	0	0	0	0	0	
Asian	28,697	5,786	1	1	0	0	0	0	0	
Native Hawaiian & Other Pacific Islander	947	74	0	0	0	0	0	0	0	
Some other race alone	3,303	341	1	0	0	0	0	0	0	
Two or more races	42,137	4,025	3	13	0	0	0	0	0	
Hispanic or Latino Origin	56,414	8,677	13	8	0	0	0	5	0	
Total	4,041,769	260,512	261	736	0	0	0	5	112	

#### 3.3 Poverty

Four of six project area Census Tracts have higher rates of poverty than Fayette County; however, the immediate project area does not contain residential land uses that will be affected. Census Tract 12 Block Group 1 has the highest rate of poverty among all project area Block Groups.

Table 3.4. Percent of Project Area Residents in Poverty

	Kentucky	Fayette	Census Tract		Census	Census	Census Tract	
		County	11		Tract 12	Tract 37	38.01	
			Block	Block	Block	Block	Block	Block
			Group 1	Group 3	Group 1	Group 3	Group 1	Group 2
Percent in Poverty	15.8	12.9	29.3	13.8	50.0	0.3	22.2	9.7

#### 3.4 Income and Employment

Per capita and median household incomes in much of the project area Block Groups are less than those of the county and state. Census Tract 12 Block Group 1 has the lowest per capita income and the highest poverty rate among all project area Block Groups.

**Table 3.5.** Per Capita and Median Household Incomes of Project Area Residents

	Kentucky	Fayette County	Census Tract 11		Census Tract 12	Census Tract 37	Census Tract 38.01	
			Block Group 1	Block Group 3	Block Group 1	Block Group 3	Block Group 1	Block Group 2
Per Capita Income	18,093	23,109	16,257	15,380	9,299	24,740	17,465	23,463
Median Household Income	33,672	39,813	23,438	26,444	0*	65,882	30,562	47,917

<sup>\*</sup>Likely to not be a correct tabulation

Due to recent economic downturns, unemployment rates have risen throughout most of the nation, including central Kentucky. Table 3.6 outlines employment figures during the last 10 years. The project area and its vicinity contain many businesses that are very important to central Kentucky's economy. Adequate and safe access to these businesses is an important factor in their existence.

**Table 3.6.** Employment Figures of Kentucky, Lexington MSA, and Fayette County

		Kentucky		Lex	cington M	SA	Fayette County			
	Jan Jan		Jan	Jan	Jan	Jan	Jan	Jan	Jan	
	2010	2005	2000	2010	2005	2000	2010	2005	2000	
Labor Force	2,058,438	1,954,575	1,927,549	237,944	221,310	225,799	150,867	141,249	147,428	
Employed	1,818,256	1,831,153	1,834,420	216,245	210,922	218,150	138,082	134,998	142,567	
Unemployed	240,182	123,422	93,129	21,699	10,388	7,649	12,785	6,251	4,861	
Unemployment	11.7%	6.3%	4.8%	9.1%	4.7%	3.4%	8.5%	4.4%	3.3%	
Rate										

#### 3.5 Agriculture

Fayette County's total market value of sold agricultural products increased 182 percent from \$178,892,000 to \$504,125,000 between 2002 and 2007; the number of farms, land in farms, and average size of farms increased accordingly. Over \$400,000,000 was the result of horse, pony, mule, burro, and donkey sales; Fayette County ranks highest in this industry among state counties and U.S. counties. Agricultural activities are not present in the project limits. The project area is located entirely within urban boundaries; therefore, the provisions of the Farmland Protection Policy Act (7 CFR 658) do not apply, and no farmland impact assessment rating is required.

#### 4.0 ENVIRONMENTAL IMPACTS

#### 4.1 Air Quality

#### 4.1.1 Carbon Monoxide and Particulate Matter

Fayette County, Kentucky, is currently in attainment for all transportation-related pollutants. Based on calculations of current and future one-hour and eight-hour carbon monoxide (CO) levels, the proposed reconstruction of New Circle Road/KY 4 will not have a negative impact on the ambient air quality of Fayette County. The proposed project will not have a negative impact on the Bluegrass Intrastate Air Quality Control Region when current and predicted CO levels are compared to the National Ambient Air Quality Standards (NAAQS).

Maximum existing CO concentrations, 2.5 parts per million (ppm) and 1.6 ppm for one-hour and eight-hour levels, respectively, and future CO concentrations, 2.5 ppm and 1.6 ppm for one-hour and eight hour levels, respectively, are below the one-hour standard of 35 ppm and eight-hour standard of 9 ppm specified in the NAAQS.

Fayette County is designated as being in attainment for PM<sub>2.5</sub>. Guidance contained within 40 CFR Part 93, Final Rule on PM<sub>2.5</sub> and PM<sub>10</sub> Hot Spot Analyses in Project-Level Transportation Conformity Determinations for the New PM<sub>2.5</sub> and Existing PM<sub>10</sub> National Ambient Air Quality Standards (71 FR 12468, March 10, 2006) identifies the KY 4 project as a project that is not an air quality concern; therefore, a hot spot analysis was not required.

Transportation control measures are not required pursuant to the Transportation Conformity Rule Amendments, August 2, 2004. Based on this air quality analysis, the proposed project is in compliance with the Kentucky State Implementation Plan for Attainment and Maintenance of National and State Ambient Air Quality Standards.

Indirect impacts on residential and commercial areas within the proposed project corridor are expected to be minor as future traffic volumes increase and improved access encourages redevelopment in the project vicinity. Favorable indirect impacts are expected to result from construction of the proposed project, as improvement in traffic patterns will allow for improved transportation and delivery of materials to and from the commercial areas adjacent to the project corridor.

Cumulative impacts of the proposed project are expected to be minimal. Additional transportation projects include the reconstruction of US 25 north of the project area and the widening of US 421 southwest of the project area; however, these projects are not expected to alter the commercial nature of the project corridor or the background CO levels.

#### 4.1.2 Mobile Source Air Toxics (MSATs)

In addition to the criteria pollutants for which there are NAAQS, the United States Environmental Protection Agency (EPA) also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area source (e.g., dry cleaners), and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The EPA is the lead Federal Agency for administering the Clean Air Act and has certain responsibilities regarding the health effects of MSATs. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources, 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the Clean Air Act. In its rule, EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program; its national low emission vehicle (NLEV) standards; its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements; and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Between 2000 and 2020, FHWA projects that even with a 64% increase in VMT, these programs will reduce on-highway emissions of benzene, formaldehyde, 1,3 butadiene, and acetaldehyde by 57% to 65%, and reduce on-highway diesel Particulate Matter (PM) emissions by 87%.

As a result, EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to further control MSATs. The agency is preparing another rule under authority of CAA Section 201(I) that will address these issues and could make adjustments to the full 21 and six primary MSATs.

#### 4.1.2.1 MSAT Health Impacts

The KY 4 project in Fayette County, Kentucky, includes a basic analysis of the likely MSAT emission impacts of this project. However, available technical tools do not enable us to predict the project-specific heath impacts of the emission changes associated with the alternatives in the KY 4 project. Due to these limitations, the following discussion is included in accordance with CEQ regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information.

Information that is Unavailable or Incomplete: Evaluating the environmental and health impacts from MSATs on a proposed highway would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

Emissions: The EPA tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of highway projects. While MOBILE 6.2 is used to predict emissions at a regional level, it has limited applicability at the project level. MOBILE 6.2 is a trip-based model in that emission factors are projected based on a typical trip of 7.5 miles and on average speeds for this typical trip. This means that MOBILE 6.2 does not have the ability to predict emission factors for a specific vehicle operating condition at a specific location at a Because of this limitation, MOBILE 6.2 can only specific time. approximate the operating speeds and levels of congestion likely to be present on the largest-scale projects, and cannot adequately capture emissions effects of smaller projects. For particulate matter, the model results are not sensitive to average trip speed, although the other MSAT emission rates do change with changes in trip speed. Also, the emissions rates used in MOBILE 6.2 for particulate matter and MSATs are based on a limited number of tests of mostly older-technology vehicles. Lastly, in its discussions of PM under the conformity rule, EPA has identified problems with MOBILE 6.2 as an obstacle to quantitative analysis.

These deficiencies compromise the capability of MOBILE 6.2 to estimate MSAT emissions. MOBILE 6.2 is an adequate tool for projecting emissions trends and performing relative analysis between alternatives for very large projects, but is not sensitive enough to capture the effects of travel changes tied to smaller projects or to predict emissions near specific roadside locations.

 Dispersion: The tools to predict how MSATs disperse are also limited. The EPA's current regulatory models, CALINE3 and CAL3QHC were developed and validated more than a decade ago for the purpose of predicting episodic concentrations of carbon monoxide to determine compliance with the NAAQS. The performance of dispersion models is more accurate for predicting maximum concentrations that can occur at some time at some location within a geographic area. This limitation makes it difficult to predict accurate exposure patterns at specific times at specific highway project locations across an urban area to assess potential health risk. The NCHRP is conducting research on best practices in applying models and other technical methods in the analysis of MSATs. This work also will focus on identifying appropriate methods of documenting and communicating MSAT impacts in the NEPA process and to the general public. Along with these general limitations of dispersion models, FHWA is also faced with a lack of monitoring data in most areas for use in establishing project-specific MSAT background concentrations.

Exposure Levels and Health Effects: Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude us from reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways, and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period. There are also considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors such as low dose extrapolation and translation of occupational exposure data to the general population. Because of these shortcomings, any calculated difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with calculating the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against other project impacts that are better suited for quantitative analysis.

Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of MSATS: Research into the health impacts of MSATs is ongoing. For different emissions types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposures to toxics have been a focus of a number of EPA efforts. Most notably, the agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The EPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at <a href="http://www.epa.gov/iris">http://www.epa.gov/iris</a>. The following toxicity information for the six prioritized MSATs was taken from the IRIS database Weight of Evidence Characterization summaries. This information is taken verbatim from EPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

- **Benzene** is characterized as a known human carcinogen.
- The potential carcinogenicity of **acrolein** cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.
- **Formaldehyde** is a probable human carcinogen based on limited evidence in humans and sufficient evidence in animals.
- **1,3-butadiene** is characterized as carcinogenic to humans by inhalation.
- **Acetaldehyde** is a probable human carcinogen based on increased incidence of nasal tumors in male or female rats and laryngeal tumors in male and female hamsters after inhalation exposure.
- Diesel exhaust (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.
- Diesel exhaust also represents chronic respiratory effects, possibly the primary non-cancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways, The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the studies is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes—particularly respiratory problems. Much of this research is not specific to MSATs, instead of surveying the full spectrum of both criteria and other pollutants. FHWA cannot evaluate the validity of these studies, but more importantly, they do not provide information that would be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

Relevance of Unavailable or Incomplete Information to Evaluating Reasonably Foreseeable Significant Adverse Impacts on the Environment, and Evaluation of impacts based upon theoretical approaches or research methods generally accepted in the scientific community: Because of the uncertainties outlined above, a quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project alternatives cannot be predicted with

enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives would have "significant adverse impacts on the human environment".

A qualitative assessment of MSAT emissions is provided relative to the various alternatives; the 2030 No-Build Alternative; 2030 Alternative 1; 2030 Alternative 2; 2030 Alternative 3; 2030 Alternative 4a; and 2030 Alternative 4b may result increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.

#### 4.1.2.2 Qualitative Analysis

As discussed above, technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate health impacts of MSATs at the project level, it is possible to qualitatively assess the level of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions-if any -from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Amona Transportation **Project** Alternatives, **Emissions** found at: www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm.

For each alternative in the New Circle Road project, the amount of MSATs emitted would be proportional to the vehicle miles traveled (VMT), assuming that other variables such as fleet mix are the same for each alternative. The total VMT estimated for each of the Build Alternatives is lower than that for the No-Build Alternative, as the distances traveled coupled with the corresponding traffic volumes in ADT for the entire project corridor are reduced (see Table 4.1).

**Table 4.1.** Project Vehicle Miles Traveled (Daily VMT)

Facility	2030 No-Build	2030 Alternative 5	2030 Alternative 7	2030 Alternative 8
KY 4	120,920	99,922	106,651	110,478
US 25	6,618	6,641	5,738	6,508
KY 922	20,214	15,160	19,290	20,648
Ramps @ KY 4/US 25 Interchange	12,548	12,222	11,973	12,013
Ramps @ KY 4/KY 922 Interchange	13,017	13,861	9,491	11,870
Total VMT	173,317	147,806	153,143	161,517

In addition, because the estimated VMT under each of the design Alternatives are less than those of the No-Build Alternative, varying by 6.8% to 14.7%, it is expected that there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will be likely lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent from 2000 to 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after

accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes and businesses; therefore, under each alternative, there may be localized areas where ambient concentrations of MSATs could be higher under certain design Alternatives than the No-Build Alternative. The localized increases in MSAT concentrations would likely be more pronounced along the expanded roadway sections that would be built along KY 4 for each Design Alternative; however, as discussed above, the magnitude and duration of these potential increases compared to the No-Build Alternative cannot be accurately quantified due to the inherent deficiencies of current models. In sum, when a highway is widened and, as a result, moves closer to receptors, the localized level of MSAT emissions for the Design Alternatives could be higher relative to the No-Build Alternative, but this could be offset from increases in speeds and reductions in congestion, which are associated with lower MSAT emissions. Also, MSATs will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

#### 4.1.2.3 MSAT Mitigation Strategies

Lessening the effects of mobile source air toxics should be considered for projects with substantial construction-related MSAT emissions that are likely to occur over an extended building period, and for post-construction scenarios where NEPA analysis indicates potentially meaningful MSAT levels. Such mitigation efforts should be evaluated based on the circumstances associated with individual projects and they may not be appropriate in all cases. However, there are a number of mitigation strategies and solutions for countering the effects of MSAT emissions.

Mitigating for Construction MSAT Emissions: Construction activity may generate a temporary increase in MSAT emissions. Project-level assignments that render a decision to pursue construction emission mitigation will benefit from a number of technologies and operational practices that should help lower short-term MSATs. In addition, SAFETEA-LU has emphasized a host of diesel retrofit technologies in the law's CMAQ provisions-technologies that are designed to lessen a number of MSATs.

Construction mitigation includes strategies that reduce engine activity or reduce emissions per unit of operating time. Operational agreements that reduce or redirect work or shift times to avoid community exposures can have positive benefits when sites are near vulnerable populations. For example, agreements that stress work activity outside normal hours of an adjacent school campus would be operations-oriented mitigation. Also on the construction emissions front, technological adjustments to equipment, such as off-road dump trucks and bulldozers, could be appropriate strategies. These technological fixes could include particulate matter traps, oxidation catalysts, and other devices that provide an after-treatment of exhaust emissions. The use of clean fuels, such as ultra-low sulfur diesel, also can be a very cost beneficial strategy.

EPA has listed a number of approved diesel retrofit technologies; many of these can be deployed as emissions mitigation measures for equipment used in construction. This listing can be found at: <a href="https://www.epa.gov/otag/retrofit/retroverifiedlist.htm">www.epa.gov/otag/retrofit/retroverifiedlist.htm</a>.

Post Construction Mitigation for Projects with Potentially Significant MSAT Levels: Longer-term MSAT emissions can be more difficult to control, as variables such as daily traffic and vehicle mix are elusive. Operational strategies that focus on speed limit enforcement or traffic management policies may help reduce MSAT emissions even beyond the benefits of fleet turnover. Well-traveled highways with high proportions of heavy-duty diesel truck activity may benefit from active Intelligent Transportation System programs such as traffic management centers or incident management systems. Similarly, anti-idling strategies, such as truck stop electrification can complement projects that focus on new or increased freight activity.

Planners also may want to consider the benefits of establishing buffer zones between new or expanded highway alignments and areas of vulnerable populations. Modifications of local zoning or the development of guidelines that are more protective also may be useful in separating emissions and receptors.

The initial decision to pursue MSAT emissions mitigation should be the result of interagency consultation at the earliest juncture. Options available to project sponsors should be identified through careful information gathering and the required level of deliberation to assure an effective course of action.

#### 4.2 Noise

Six noise-sensitive receptors (i.e., Receptor 2), representing two residences, three hotels, and one privately-owned outdoor recreation area, were analyzed used FHWA TNM® 2.5 under Existing (2007) and Design Year (2030) conditions.

Under Existing (2007) conditions, none of the six receptors modeled are currently experiencing a sound-level impact. FHWA TNM® 2.5 predicts sound levels to range between 54.5 dBA and 63.5 dBA. Under Design Year (2030) No-Build conditions, none of the six receptors modeled will experience a sound-level impact. FHWA TNM® 2.5 predicts sound levels to range between 55.9 dBA and 65.0 dBA. Under Design Year (2030) Build conditions, seven of the 20 receptors modeled will experience a sound-level impact. FHWA TNM® 2.5 predicts sound levels to range between 54.5 dBA and 64.7 dBA.

Construction of the proposed project is not expected to result in any substantive change in project area land uses, development patterns, or traffic volumes and vehicle mix; therefore, the project is not expected to result in any indirect or cumulative sound-level impacts for noise-sensitive receptors in the project area.

**Table 4.2.** Sound Level Impacts for Receptor 2

Receptor	Number and Type of	NAC	Existing (2007)	Desig	gn Year (Le		Increase (No build to Build)			
	Receptor(s) Represented	IVAO	dBA (Leq)	No Build	Alt 5	Alt 7	Alt 8	Alt 5	Alt 7	Alt 8
2a	2 hotels		59.1	60.7	60.2	60.3	60.6	-0.5	-0.4	-0.1
2b	1 hotel		54.5	55.9	54.5	55.5	55.4	-1.4	-0.4	-0.5
2c	Private recreation area	67	58.7	60.2	60.4	60.4	60.5	0.2	0.2	0.3
2d	Private recreation area	07	62.7	64.2	64.3	64.3	64.3	0.1	0.1	0.1
2e	Private recreation area		63.5	65.0	64.7	64.7	64.7	-0.3	-0.3	-0.3
2f	2 single-family residences		55.7	57.3	57.6	57.6	57.6	0.3	0.3	0.3

# 4.3 Ecological

# 4.3.1 Stream Impacts

Six surface streams were identified in the project study area; five occur within the proposed construction limits of Alternatives 5, 7, and 8, and are expected to be impacted by the project. The placement of new or the extension of existing pipe or box culverts is anticipated for three of the five streams expected to be impacted by the project; two are small limited-quality non-USGS Ordinary High Water (OHW) features (Sites 5 and 6), and one is a limited-quality USGS feature (Site 4). Three stream relocations (Sites 2, 3, and 6) are expected to result; two are small, limited-quality non-USGS OHW features (Sites 2 and 6), and one is a limited-quality USGS feature (Site 3).

Table 4.3. Preliminary Stream Impacts by Alternative

Site	Stream	ÚSGS	Preliminary	Steam Impact	by Alternative	(linear feet)
	Name	Designation	Impact Activity	Alternative 5	Alternative 7	Alternative 8
2	Unnamed Tributary #2 to Cane Run	None	Relocate channel to new roadside ditch	481.7	481.7	481.7
3	Unnamed Tributary #3 to Cane Run	Intermittent	Relocate channel to new roadside ditch	253.1	253.1	253.1
4	Unnamed Tributary #4 to Cane Run	Intermittent	Extend existing culverts	94.6	94.6	94.6
5	Unnamed Tributary #5 to Cane Run	None	Extend existing culverts	116.6	68.5	73.3
6	Unnamed Tributary #6 to Cane Run	None	Relocate channel and extend existing culverts	637.7	359.5	367.7
Total Expected USGS Stream Length Impact			347.7	347.7	347.7	
Total	Expected Non-	USGS OHW Cha	annel Length Impact	966.0	909.7	922.7
	Grand Total Ex	pected Stream I	Length Impact	1,313.7	1,257.4	1,270.4

No unique or high-quality stream segments or associated riparian corridors were found to occur within the project study area or within the proposed construction limits, and none of the stream segments crossed by the project are considered to be critical to the local environment. No Federal or state-listed aquatic species were identified from any of the streams surveyed for this project.

Stream conditions within the project study area are characterized by disturbed open or narrow wooded riparian corridors, Poor to Very Poor Bioregion Classification for macroinvertebrate species occurrence and Good to Excellent Ichthyo-Region Classification for fish species occurrence; however, this stream's provisional use designation support was determined to be "Not Supporting" for all stream features, due primarily to the occurrence of in-stream and adjacent semi-natural stream habitat disturbances within the project study area and proposed construction limits.

Adverse impacts to water quality and stream habitat structure by the project are not considered to be critical (minor to moderate only) due to pre-existing disturbed stream conditions.

# 4.3.2 Floodplains

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the proposed project crosses the Cane Run 100-year floodplain (Zone AE) and the 500-year floodplain. Ecological features, particularly floodplains, are depicted in Figure 5.

### 4.3.3 Wetlands

No wetland features were identified during field surveys conducted for the proposed project; as a result, no wetland impacts are expected.

### 4.3.4 Terrestrial Environment

### 4.3.4.1 Floral

Terrestrial habitat areas expected to be impacted by the proposed build alternatives are summarized in Table 4.4.

Table 4.4. Habitat Characteristics of Project Area

Habitat	Extent of Habitat Within	Net Habitat In	mpact by Altern	ative (acres)	
Парна	Project Study Area (acres)	Alternative 5	Alternative 7	Alternative 8	
Existing ROW	79.7	35.61	33.19	35.05	
ROW Wooded	5.24	1.22	0.87	1.05	
Fencerows	5.24	1.22	0.67	1.00	
ROW Scrubby	6.71	0.41	0.32	0.62	
Woods	0.71	0.41	0.32	0.02	
Commercial	25.68	12.09	10.54	11.29	
TOTALS	117.33	49.33	44.92	48.01	

Most of the area expected to be impacted by the three proposed alternatives (between 72 and 74 percent) consists of existing ROW followed by commercial habitat, which comprises between 23 and 25 percent of the area, depending on the alternative. The remaining area consists of wooded fencerows and scrubby woods within existing ROW.

No unique or high-quality terrestrial features or old-growth woodlands were identified in the project's construction limits. Overall, the terrestrial habitats expected to be impacted were determined to be relatively young, and all sustained some form of significant past or continuous present disturbance due to proximity to human activities and intense adjacent land uses. As a result, impacts to terrestrial ecological features and habitats by the proposed project are expected to be minor.

Terrestrial fauna inhabiting any of the habitat types in the project construction limits will be displaced or eliminated. Animal travel patterns may be temporarily disrupted as construction occurs. The elimination of scrubby woodland habitats will result in the loss of a small amount of foraging and nesting sites for locally common mammals and birds; however, disturbances to these habitats are considered to be minor due to the limited amount and generally low quality of woodland habitats impacted and the limited ecological value of other terrestrial habitats existing in the project area.

# 4.3.4.2 Faunal

Due to the developed/commercial nature and intensity of human disturbances in the general vicinity, faunal activity in the project study area is generally poor. In general, species observed in the project area are characteristically tolerant and/or well adapted to proximity to humans. No unusual bird, reptile, amphibian or mammal populations were encountered during project field studies. No federally or state-listed species were encountered during field surveys for this project.

# 4.3.5 Threatened and Endangered Species

A detailed survey of the project area to identify potential federally endangered running buffalo clover (Trifolium stoloniferum) individuals or suitable habitat was conducted. In addition, efforts were made during field surveys to identify potential species habitat for the remaining nine listed species and to determine the presence of any federally or state-listed species through careful identification of any collected individuals.

**Table 4.5.** Threatened and Endangered Federal and State-Listed Species

Species	Common	Status
Myotis grisescens	gray bat	Federal endangered
Myotis sodalist	Indiana bat	Federal and State endangered
Nicrophorus americanus	American burying beetle	Federal endangered
Trifolium stoloniferum	running buffalo clover	Federal endangered and state threatened
Lesquerella globosa	globe bladderpod	Federal candidate and state endangered
Ammodramus henslowii	Henslow's sparrow	Federal species management concern and state special concern
Cistothorus platensis	sedge wren	State special concern
Dolichonyz oryzivorus	bobolink	State special concern
Passerculus sandwichensis	Savannah sparrow	State special concern
Tyto alba	barn owl	State special concern

The project does not involve changes to the location of the New Circle Road centerline, and construction work outside of existing ROW is expected to be limited and restricted to the minimum necessary to complete the planned improvements. No suitable habitat for any of the ten federally or state-listed species with known ranges in the project area was identified within the project construction limits. A No Effect finding was issued by KYTC on June 15, 2010, for gray bat, running buffalo clover, and American burying beetle. The project area has little habitat; no survey was conducted for Indiana bat. Instead, KYTC will contribute to the Indiana Bat Conservation Fund (IBCF) for the 2.71 acres that include growth along ROW fencing, inside interchange medians, and some landscaping areas. No Effect and IBCF information is included in Appendix A.

Due to the high density of urban development, indirect development of the project area is expected to be minor and confined to areas near existing interchange location. Past and present actions in the existing New Circle Road project study area have likely resulted in some loss or modification to the area's ecological resources. Relevant foreseeable future actions as a result of this project include continued maintenance of the local road network, including New Circle Road, and continued commercial development concentrated near existing interchange locations; however, due to the existing limited and generally disturbed nature of ecological

resources in the project vicinity, indirect and cumulative impacts resulting from this project are not expected to have a critical effect upon these resources.

# 4.4 Cultural Resources

### 4.4.1 Historic Structures or Districts

Utilizing data acquired from records research and archival documentation, a historic context of the project area was developed, and an on-site survey of the study area was undertaken. Fourteen historic properties (three previously recorded and 11 new sites) were evaluated within the Area of Potential Effect (APE). Of the three previously recorded sites, FA-W-438 is no longer extant; and FA-W-30 (Site 9) and FA-W-39 (Site 10) are still standing. Site 10 is listed on the National Register of Historic Places (NRHP). Site 9 is a complex of buildings. Historic structures are depicted in Figure 3.

Table 4.6. Historic Properties Evaluated for the Proposed Project

		c Froperties Evaluated for the Fropos	70 a 1 10 juli	
Site	KHC	Building Type	NDUD Eligible	Effect of
No.	Number	Building Type	NRHP Eligible	Project
1	FA-N-1	Lexmark manufacturing building	No	N/A
2	FA-W-46	Greenhouse complex	No	N/A
3	FA-W-47	One-story, frame house	No	N/A
4	FA-W-48	Four-door, concrete-block garage	No	N/A
5	FA-W-49	One-story, wood-frame shotgun house	No	N/A
6	FA-W-50	One-story, gable-front, wood- frame house	No	N/A
7	FA-W-51	One-story, gable-front, brick commercial building	Yes (Criterion C)	No Effect
8	FA-W-52	Two-story, concrete-block hotel	No	N/A
9	FA-W-30	Sanatorium	Yes (Criteria A, B, and C (Children's Building only))	No Effect
10	FA-W-39	Two-story, brick school building	Listed	No Effect
11	FA-W-53	Two-story, gable-front structure	No	N/A
12	FA-1046	One and one-half-story, three-bay, brick structure	No	N/A
13	FA-1047	Trane Company plant	No	N/A

In a letter dated January 28, 2008, the State Historic Preservation Office (SHPO) determined that the proposed undertaking will not impact Site 10, Douglass High School, which currently houses apartments.

Site 7, a commercial structure associated with Keller Florist, was determined eligible for listing in the NRHP under Criterion C for its distinctive style, particularly in an area of Fayette County where little commercial architecture from the 1930s is intact. Site 9 is a complex of buildings that once housed the Bluegrass/Julius Marks Sanatorium.

Since neither Site 7 nor Site 9 would be affected by the undertaking, the SHPO determined in a letter dated March 12, 2008, that there will be No Effect to Site 7 (FA-W-51) and Site 9 (FA-W-30) from this project, as proposed. The SHPO letter is located in Appendix B.

# 4.4.2 Archaeological Sites

According to the Office of State Archaeology (OSA) site files and database, six archaeological surveys have been conducted, and five archaeological sites have been identified within the 2.0-kilometer (km) buffer around the study area. Since very few archaeological surveys have been conducted within a 2.0-km buffer around the study area, the prehistoric and historic archaeological resources are largely unknown.

An examination of historic maps of the proposed alternatives was conducted to determine if any extant historic structures depicted on the maps are still present. The 1908 USGS Topographic quadrangle of Georgetown; the 1929 Topographic map of Lexington; and the 1941 General Highway Map of Fayette County, Kentucky, were used to determine the presence of historic structures in the study area. One historic structure, depicted on the 1908 USGS topographic quadrangle, suggests that the project area has a high potential for archaeological resources, particularly in proximity to historic transportation routes, such as Georgetown Road or Newtown Pike; however, the project area exhibits severe disturbances from road construction, road maintenance, and utilities. An archaeological survey of the proposed reconstruction, conducted in 2010, found no evidence of prehistoric or early historic occupation. No additional archaeological work was recommended. In a letter dated February 16, 2011, KHC concurred with the findings of the archaeological survey. The SHPO letter is located in Appendix B.

Induced growth as a result of roadway improvements would be the most likely indirect effect on cultural historic sites. Better access to KY 4 may make the area surrounding the project more desirable for redevelopment; therefore, cultural historic sites, particularly, historic structures, may be impacted by development. Over time, these indirect effects may lead to cumulative impacts.

### 4.5 Hazardous Materials

Several research and survey methods were utilized to complete the Phase I Environmental Site Assessment for this project. All assessment methods were completed in accordance with the scope and limitations of published ASTM Practice E 1527-05 and KYTC DEA guidance.

State and federal databases were consulted during the literature search and agency inquiry process. Information was provided for the locations of currently and formerly listed UST sites and mappable CERCLA, RCRA, and ERNS sites.

Three sites of environmental concern were located in the project area; of which, two have the potential for environmental impact on the project.

The Former Great Midwest Moving & Storage, Inc. property (now Janelle Concrete Equipment), located at 970 New Circle Road NW, is listed as a RCRA Small Quantity Generator and FINDS property. According to the database search, no violations were reported; however upon further investigation at the Kentucky Division of Solid Waste Management (KDSWM), violations were discovered. According to KDSWM records, groundwater monitoring wells were installed on the property in September 1994: four wells are located in the fenced area east of the building; one well is located northwest of the building; and three wells are located in the outdoor storage area east of the building. If the project is proposed to impact any of these wells, proper closure and relocation of the impacted wells is recommended.

H&R Oil Company, located at 1144 Finney Drive, is listed as having underground storage tanks (USTs) and being a closed State Hazardous Waste Site. In addition, the property has two visible aboveground storage tanks (ASTs). According to the database search, 14 USTs were removed, and four groundwater monitoring wells were installed. A closure letter was issued to the property owner in 1995. Potential for the proposed project to encounter soil contamination exists on this property. The ASTs, which appear to be in the proposed ROW, should be moved to another portion of the property prior to construction.

If ROW is acquired from the Former Great Midwest Moving & Storage, Inc. or H&R Oil Company, a Phase II Environmental Site Assessment is recommended. Electrical transformers located within the project area that potentially contain polychlorinated biphenyls (PCBs) should be addressed prior to construction.

# 4.6 Land Use

Current land uses in the project area are primarily high-density commercial and industrial. In the project vicinity, residential areas are located south of New Circle Road and north of Colesbury Circle. Due to the intensity at which the project area is developed, very few changes in the type of land use is expected to remain unchanged. Since some businesses on the north side New Circle Road from Georgetown Road to Newtown Pike will lose existing access to New Circle Road, and they will not have access to Nandino Boulevard, they will be acquired. Lack of access may render these properties uneconomic remnants, which are remnant properties that have been determined by the Cabinet as having little or no utility to the owner. Remnant pieces may be sold to adjoining property owners or another state agency, and, in most instances, land use is expected to remain unchanged.

# 4.7 Socioeconomic

# 4.7.1 Relocations and Displacements

The proposed project is not expected to relocate any residences, schools, public services, organizations, or fire stations.

The proposed project is expected to relocate seven businesses between Georgetown Road and Newtown Pike. Four businesses (Water Works Car Wash (car wash); Finney Mechanical, Inc. (mechanical contractor); Tire Discounters (tire sales); and Hands On Originals (promotional products manufacturer)) will be relocated by the construction of the south frontage road. The lack of a northern frontage road will require an additional three business relocations: Double B Distributors (meat distributor); Justice Shamrock Glass (automotive, commercial, residential glass distributor and installer); and Fleet Service Incorporated (semi truck repair). Business relocations are depicted in Figure 1.

In 2007, interviews and meetings were conducted with business and property owners that may be relocated as a result of the proposed project. A stakeholder meeting was held on November 11, 2007, at which, business and property owners were presented with potential alignments. Additional alternatives for the southern frontage road were developed and investigated as a result of the meeting.

As of April 2011, 57 commercial properties, including ones with store fronts, were available for lease or purchase in the project vicinity; two hundred and seventy-four properties were available in Lexington-Fayette County.

# 4.7.2 Community

Community impacts as a result of direct impacts to the project area are expected to be minimal; however, changes in surrounding land uses from induced growth may occur. For example, businesses where people gather, particularly along Georgetown Road or Newtown Pike south of New Circle Road, may change to other businesses or types of land uses because of redevelopment or revitalization.

None of the alternatives considered will negatively impact any residences, schools, public services, organizations, or fire stations. The proposed south frontage road will improve access and safety for emergency vehicles that service hospitals and police services located in and around Lexington. LFUCG Fire Station No. 10 will directly benefit from the improved Finney Drive/Georgetown Road intersection. Currently, to exit Finney Road, fire trucks must enter opposite lanes of traffic to turn north on Georgetown Road, and they are unable to enter the eastbound ramp of New Circle Road from Finney Drive.

# 4.7.3 Environmental Justice

The purpose of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, is to focus Federal attention on the environmental and human health condition in minority and low-income communities; to promote non-discrimination in Federal programs affecting human health and the environment; and to provide minority and low-income communities access to public information and an opportunity to participate in matters relating to the environment and human health. Social and economic information of the project area is listed in Section 3.0. Census Tracts and their associated poverty rates are depicted in Figure 2.

Although minority and low-income populations exist in the project area, disproportionately high and adverse human health or environmental effects on these groups are not anticipated from the construction of the proposed project. No residences will be displaced by the proposed project. Beneficial impacts are expected.

# 4.7.4 Accessibility

The build alternatives will not displace any schools, churches, or emergency service facilities, but it will improve access to these facilities and other areas in the project area.

Although accessibility from Georgetown Road to Newtown Pike will change from access by permit to controlled access, driving conditions and accessibility, particularly for tractor trailers entering and exiting businesses, are expected to improve with the construction of the proposed project.

# 4.7.5 Bicycle and Pedestrian Facilities

Bicycle and pedestrian facilities do not currently exist in the area surrounding the project. However, LFUCG is implementing a new plan to integrate bicycling and walking in Fayette County. The plan calls for the design of complete streets, which allow cars, bikes, and pedestrians to travel together more efficiently. Additionally, the demand for bicycle and pedestrian facilities is expected to increase with the future extension of Newtown Pike to the University of Kentucky. The project team has incorporated bicycle and pedestrian facilities into the design, providing two six-foot bike lanes to accommodate bicycle traffic.

Newtown Pike has an eight-foot paved shoulder through the New Circle Road interchange. With the utilization of the paved shoulder as a bicycle lane, rumble strips will not be installed where they will interfere with bicycle traffic. With the proposed interchange reconfigurations eliminating the majority of the existing free-flow movements on Newtown Pike through the interchange, the safety of bicycle traffic will be greatly increased. Due to the limited-access nature of New Circle Road, bicycles lanes were not provided on New Circle Road. Significant pedestrian traffic is not expected at the Newtown Pike and New Circle Road interchange. Pedestrians that are on Newtown Pike can utilize the paved shoulder.

Furthermore, bicyclists and pedestrians will have access to a multi-use path that will extend from the Kentucky Horse Park to downtown Lexington via the Lexmark bridge.

### 4.8 Visual

The existing visual character of the project area is typical for the area and urban routes of Lexington and does not have any unique features or viewsheds that could be impacted by the proposed project. The view of the surrounding area from the roadway will be altered by construction of the project since several buildings will be eliminated. The view of the roadway from the surrounding area will be altered from the addition of the frontage road and change in interchange configuration. Vegetation will be temporarily altered until regrowth is established.

Indirect and cumulative impacts due to the project on the visual environment will be minimal.

# 5.0 CONSTRUCTION IMPACTS

### 5.1 Water Quality

The project is located in an area with soils that are indicated as having no to slight-moderate potential for erosion. The disruption of vegetation and use of heavy equipment during construction will expose areas of erodible soils, resulting in potential adverse impacts to adjacent streams, including a) temporary increases in dissolved solids, nutrients, settable solids and suspended solids; b) the destruction or displacement of aquatic fauna whose foraging, reproduction or locomotion is hindered by silt; c) temporary increase in turbidity, which may reduce light penetration, pH, oxygen levels and/or the buffering capacity of the streams; and/or d) increased water temperatures that may cause oxygen demands and damage or destroy aquatic biota. The greatest potential for adverse construction related impacts is expected to occur where erodible soils are disturbed in cut sections of the project immediately above surface streams; however, short-term construction-related impacts to surface streams by the project are not expected to be substantial given strict adherence to Best Management Practices for erosion control during daily construction activities and rigid application of KYTC's Standard Specifications for erosion control.

# 5.2 Maintenance of Traffic

Traffic will be maintained in two phases for this project. Phase IA will include construction of the South Frontage Road. Phase IB will maintain traffic on the existing roadway during construction of the outside lanes of New Circle Road. Existing access points along New Circle will be closed. The culvert at station 201+13 will be extended. Finally, Phase IB will widen Newtown Pike and replace the bridge. Phase II shifts New Circle Road traffic to the newly constructed outside lanes while the median is constructed. The existing ramps will remain open during construction while the proposed ramp is developed. Following construction of the proposed ramps, the existing loop ramp will be removed. Finally, the Lexmark bridge will be constructed in Phase II.

### 5.3 Air

Any increase in particulate matter in the air due to construction activities will be temporary and will not be detrimental to the health and welfare of local residences and employees. Dust pollution may be an unavoidable, minor nuisance, and every feasible effort will be made to minimize issues with dust. Exhaust from construction equipment will be a minor impact on ambient air quality. Any open burning will be completed in compliance with state regulations and local ordinances.

### 5.4 Noise

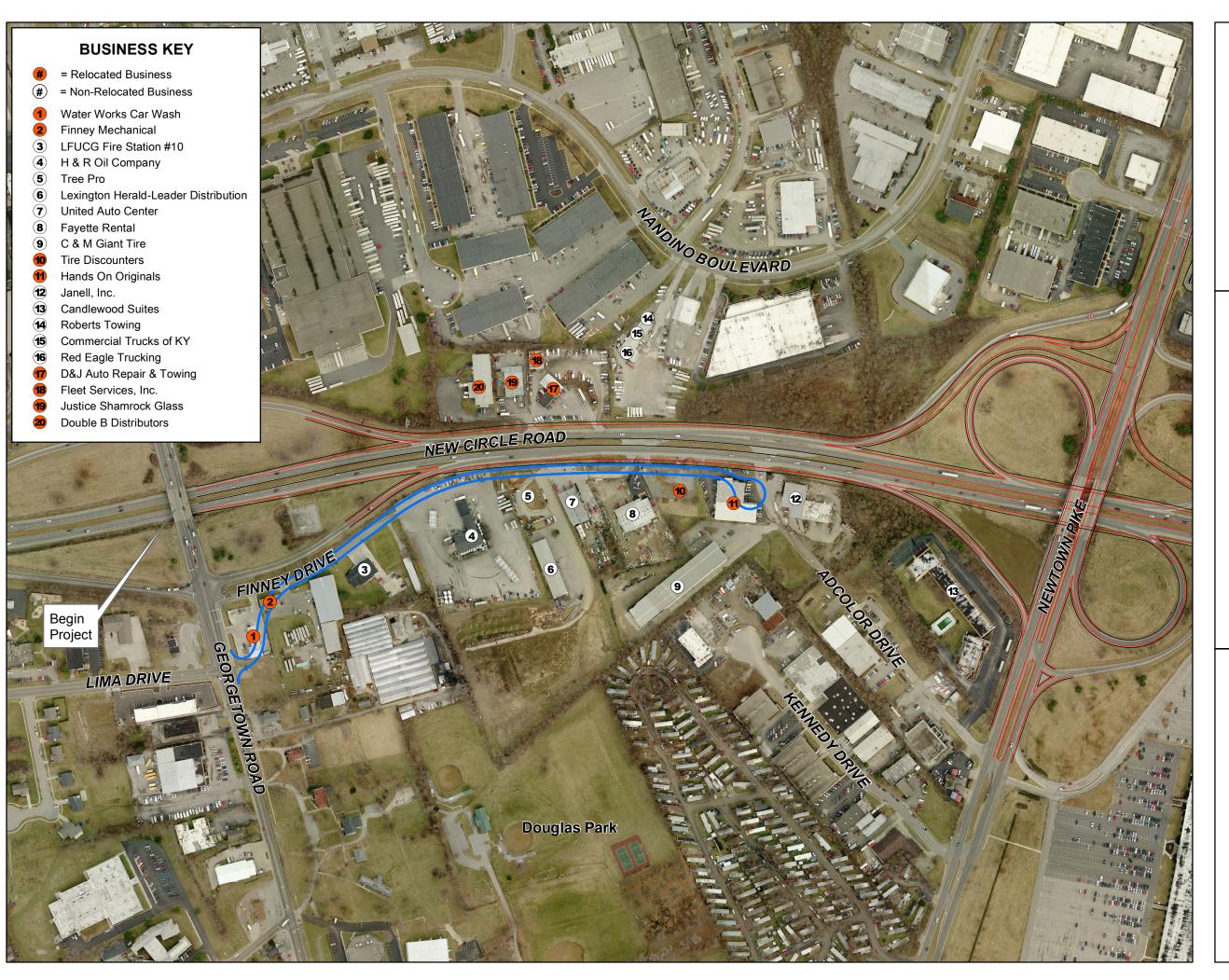
With respect to construction noise, the contractor shall be required to provide such equipment as sound deadening devices, shields, and physical barriers, and take such noise abatement measures that may be necessary to restrict the transmission of noise in the immediate vicinity of schools, hospitals, rest homes, churches, libraries, museums, parks, and other noise-sensitive sites. Aside from residential land uses, three hotels, one church, one preschool, one public park, and one privately owned recreational area were identified adjacent to New Circle Road in the project area. Measures to restrict construction noise may include, but are not necessarily limited to: provide sound-proof housing or enclosures for stationary noise-producing machinery, such as drills, augers, cranes, derricks, compactors, pile drivers, etc.; provide silencers on equipment air intakes; provide air intake and exhaust mufflers on internal combustion engines; perform proper maintenance on all equipment to prevent excessive vibration of metal surfaces; restrict construction operations in the vicinity of noise-sensitive locations to periods of the day when excessive noise could be least harmful; and take other measures as necessary to prevent construction noise from becoming a public nuisance or detriment to public health. It shall be the responsibility of KYTC to monitor construction noise and advise the contractor of violations of the maximum allowable noise levels.

### 6.0 COMMENTS AND COORDINATION

Nineteen members of the public signed in at the public meeting held on May 3, 2007, at the KYTC District 7 Office. All individuals who returned questionnaires were owners or representatives of commercial properties. The public meeting summary is located in Appendix C. On October 30 and 31, 2007, and November 19, 2007, field visits and contacts were made to interview property and business owners in the project area. As a result, a property/business owner meeting was held on November 29, 2007. Discussions, particularly about the frontage roads, took place that prompted additional design of the southern frontage road by the project team. An additional meeting was held on March 7, 2008, to present the additional southern

Categorical Exclusion Level 2 New Circle Road (KY 4) Reconstruction and Major Widening Lexington, Fayette County, Kentucky 07-366.00

frontage road alternatives. The property and business owners were generally pleased with the alternatives presented at the meeting. No known unresolved issues exist.



# FIGURE 1 BUSINESS RELOCATIONS

# **NEW CIRCLE ROAD/KY 4**

from

**Georgetown Road** 

to

Broadway/Colesbury Circle Leixngton, Fayette Co., Kentucky

Item No.: 7-366.00

# **Legend**

**South Frontage Road** 

Alternative 2

Mainline

Centerline

Edge of Pavement

— Shoulder









# FIGURE 2 CENSUS TRACT LOCATION MAP

# **NEW CIRCLE ROAD/KY 4**

from Georgetown Road

to

Broadway/Colesbury Circle Leixngton, Fayette Co., Kentucky

Item No.: 7-366.00

Census Tract 11, Block Group 1

Census Tract 11, Block Group 3

Census Tract 12, Block Group 1

Census Tract 37, Block Group 3

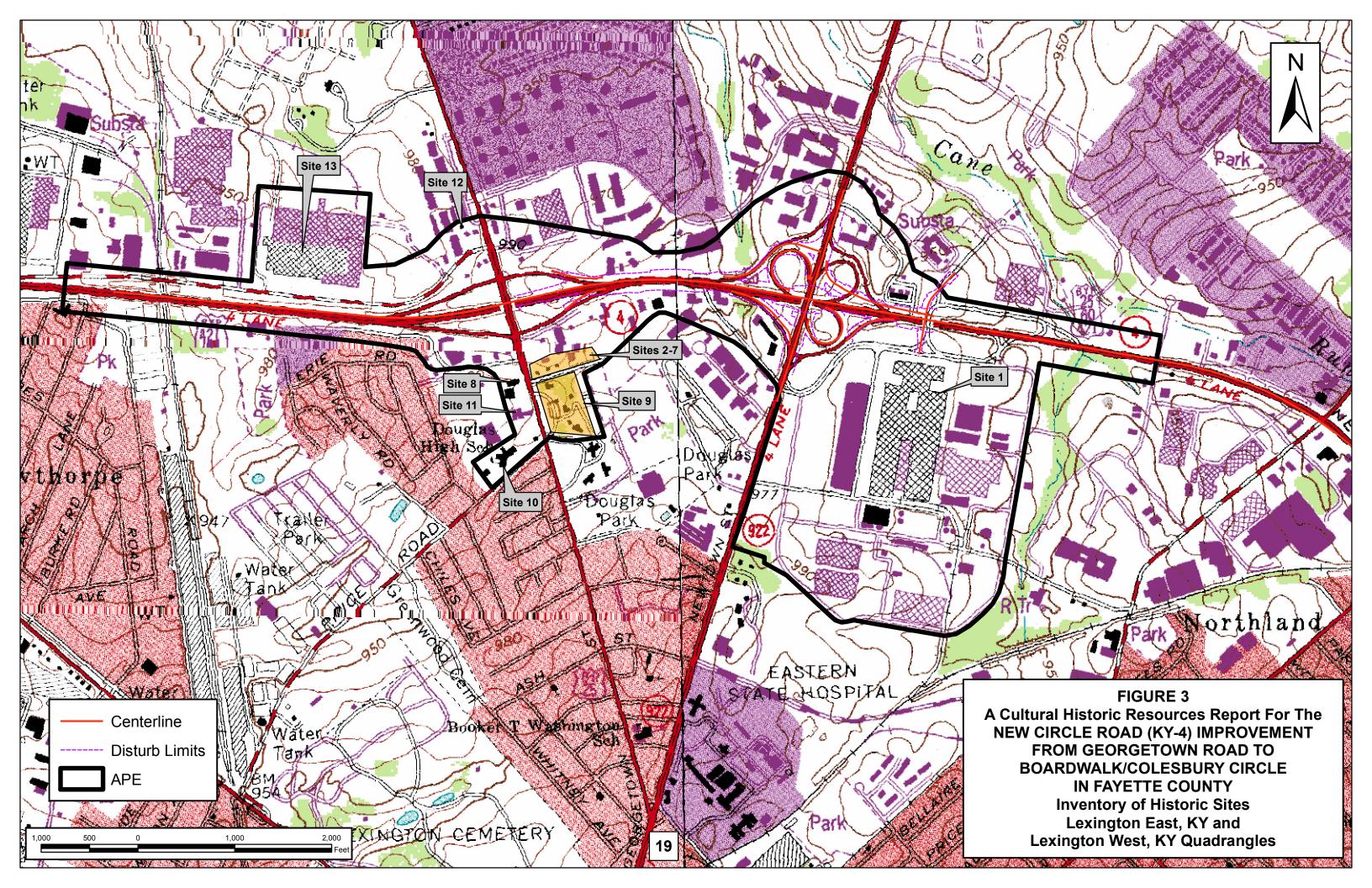
Census Tract 38.01, Block Group 1

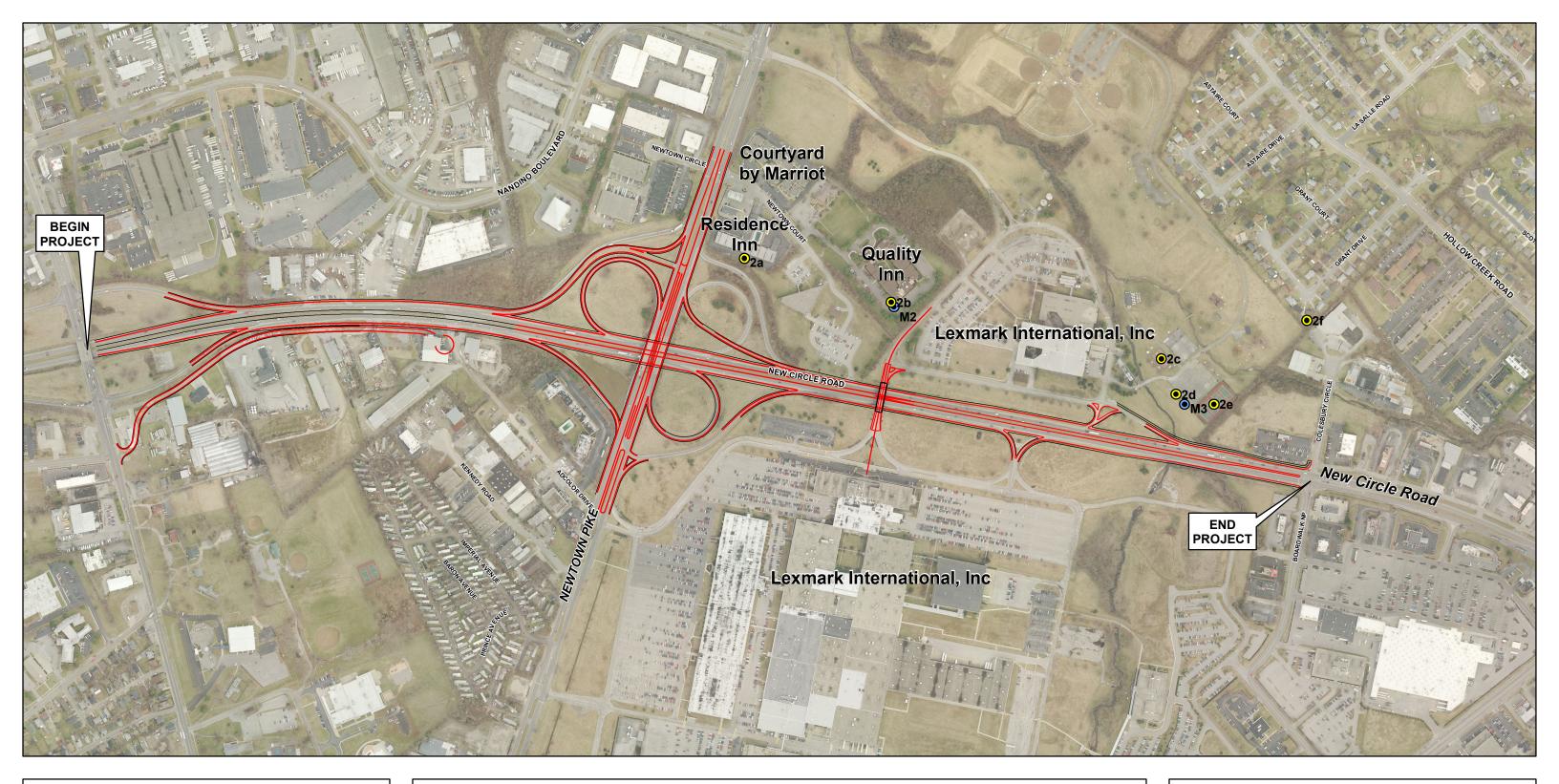
Census Tract 38.01, Block Group 2











# <u>Legend</u>

# Receptor Type

- Field Sound-level Measurement Location
- Representative Noise-Sensitive Receptor

# Proposed Alternative

- Edge of Pavement
- ---- Shoulder

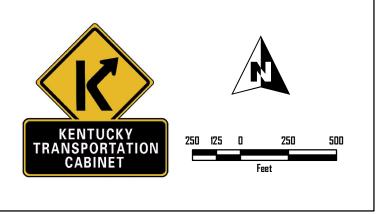
# FIGURE 4 NOISE RECEPTORS

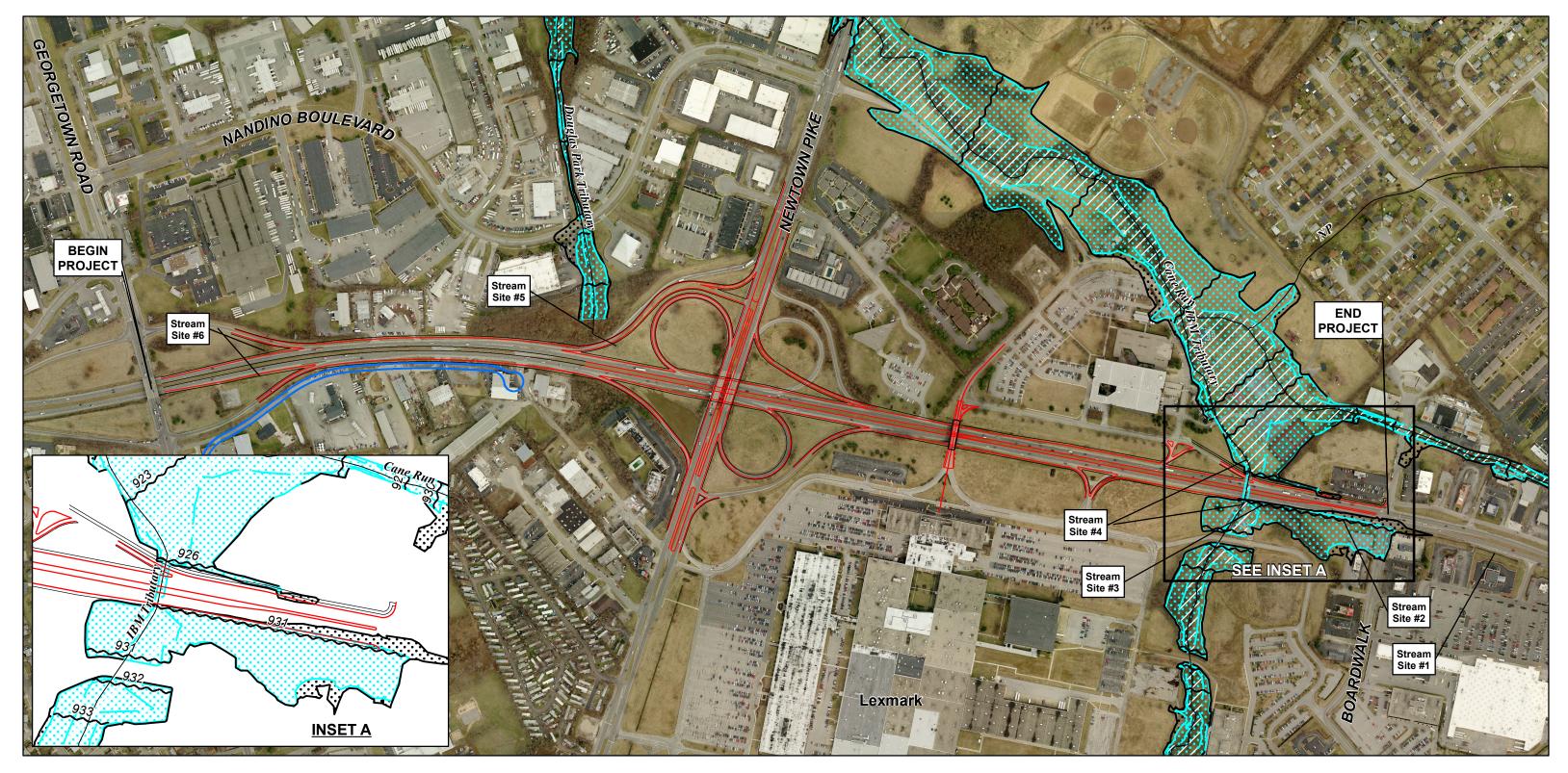
# **NEW CIRCLE ROAD/KY 4**

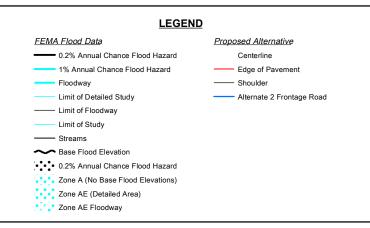
from Georgetown Road to

Broadway/Colesbury Circle Leixngton, Fayette Co., Kentucky

Item No.: 7-366.00





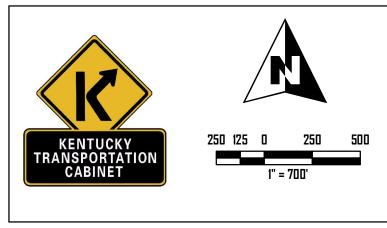


# FIGURE 5 ECOLOGICAL FEATURES

# **NEW CIRCLE ROAD/KY 4**

From Georgetown Road to Boardwalk/Colesbury Circle Lexington, Fayette County, Kentucky

Item No. 7-366.00



Categorical Exclusion Level 2 New Circle Road (KY 4) Reconstruction and Major Widening Lexington, Fayette County, Kentucky 07-366.00

# **APPENDIX 1**

No Effect Determination and IBCF Information



# Kentucky Transportation Cabinet

# No Effect Finding

KYTC Item No:	7 - 366	Route:	New Circle Road (KY4)/Newtown Pike (KY 922) Interchange/Georgetown Rd (US 25) Interchange
Quadrangle(s):	Lexington West and Lexington East	County(ies):	Fayette

**Project Description**: (Type of improvement, areas to be impacted, crossroad improvements, easements, etc.)

55-mph improvement to address short merging length and storage of the interchanges. Project proposes lengthening the merging lanes and all ramps (eastern on and off ramps at US 25), removing the north east clover leaf at KY 922 Interchange, and widening KY 4 to six or eight 12' lanes. This will provide motorists with additional time to safely merge in with the New Circle Road (KY4) traffic and keep traffic from backing up onto the mainline during peak traffic volumes. The project will require right-of-way acquisitions and easements, and will likely impact several utilities.

Listed Species: (Attach copy of USFWS county list, KSNPC web site and KDFWR web site)

Indiana Bat, Gray Bat, Running Buffalo Clover, American burying beetle

This assessment does not address Indiana Bat. It is addressed through the IBCF.

**Site Description**: (Habitats present, existing intrusions, landforms, waterways, vegetation, wetlands, land use, etc.)

The setting is urbanized rolling terrain in the inner-bluegrass region. The groundcover is dominated by fescue, which is regularly maintained by mowing. No clover was observed. In many places, the fence line is overgrown with bush honeysuckle. Mature fence-row trees were observed consisting mainly of black cherry, hackberry, and locust trees. Less observed trees included maple, ash, oak, walnut, box elder, elm, mulberry, sycamore, basswood, beech, and pine.





Methodologies: (Methods of assessment, who, what, when, resources, etc.)

The project area was assessed in the field by Becky Barrick on June 15, 2010. Photographs of the project area were taken.

Office research included on-line research to evaluate geology, terrain, soils and tree cover. Recent low-level aerial photography was also utilized to verify tree cover. Standard resource agency websites were consulted to determine potential and known federally listed species. Approximately 3 hours were spent in office review and evaluation.

Results: (Compare habitat used by listed species with available habitat)

Gray Bat: There are karst sinkhole features within 1.5 miles of the project area; however, no known open throated sinkholes are within this range. There is no foraging habitat contained within the project area.

Running Buffalo Clover (RBC): The project is in well-drained limestone soils; however, the soils are mainly acidic and would not support RBC. Also, there is a narrow band of trees along some of the fence lines, but bush honeysuckle has heavily shaded this area and regular mowing and dense fescue growth has eliminated any potential habitat outside of the honeysuckle. No clover was observed.

American Burying Beetle (ABB): ABB is considered extirpated from Fayette County.

# Recommendations:

The project has been assessed in accordance with the provisions of Section 7 of the Endangered Species Act, and KYTC recommends a finding that the project will have No Effect on any listed species or their critical habitat.

(i	TO SECURITY OF THE PARTY OF THE	
Kentucky Ecological Services Field C	U.S. Fish & Wildlife Servi	

330 West Broadway, Rm 265 U.S. Fish & Wildlife Service

Phone: 502-695-0468 Frankfort, KY 40601

Fax: 502-695-1024

ice Office

Plants Species in Mammals Endangered, Threatened, & Candidate Insects Group Trifolium stoloniferum Lesquerella globosa Myotis grisescens Myotis sodalis FAYETTE Nicrophorus americanus Species County, KY American burying beetle running buffalo clover globe bladderpod Common name Indiana bat gray bat Status Legal\* П П ဂ П m Potential Known\*\* historic ㅈ U ㅈ ㅈ considered extirpated Special Comments

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notations:
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Endangered,
Threatened,
0
* Key to notations: E = Endangered, T = Threatened, C = Candidate, CH = Critica
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Critical
al Habitat

NOTES:

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

County Report of Endangered, Threatened, and Special Concern Plants, Animals, and Natural Communities of Kentucky Kentucky State Nature Preserves Commission

Kentucky Sta	Kentucky State Nature Preserves Commission	nmission				# Of	000	Occurrences	ňce	n
County	Taxonomic Group	Scientific name	Common name	Statuses	Ranks	m	Ι	71	×	<u> </u>
Estill	Mammals	Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	S/	G3G4 / S3	7	0	0	٥	0
Estill	Mammals	Corynorhinus townsendii virginianus	Virginia Big-eared Bat	E/LE	G4T2 / S1	2	0	0	0	0
Estill	Mammals	Myotis sodalis	Indiana Bat	~~	G2 / S1S2	4		0	0	0
Estill	Mammals	Ursus americanus	American Black Bear	S/	G5 / S2	_	0	0	0	0
Estill	Communities	Acidic sub-xeric forest		Z	GNR / S5	_	0	0	0	0
Estill	Communities	Appalachian mesophytic forest		Z `	GNR / S5	4	0	0	0	0
Estill	Communities	Appalachian sub-xeric forest		Z '	GNR / S5	_	0	0	0	0
Estill	Communities	Calcareous mesophytic forest		Z \	GNR / S5	N	0	0	0	0
Estill	Communities	Calcareous sub-xeric forest		<u>Z</u>	GNR / S5	7	0	0	0	0
Estill County Total:	lotal:	:		•		- 2		4	_	· c
Fayette	Vascular Plants	Elymus svensonii	Svenson's Wildrye	S/	G2G3 / S3		0	0	0	0
Fayette	Vascular Plants	Juglans cinerea	White Walnut	S/	G3G4 / S3	0	0	_	0	0
Fayette	Vascular Plants	Lesquerella globosa	Globe Bladderpod	E/C	G2 / S1	0	0		_	0
Fayette	Vascular Plants	Malvastrum hispidum	Hispid Falsemallow	T/	G3G5 / S2?		0	0	0	0
Fayette	Vascular Plants	Oenothera triloba	Stemless Evening-primrose	T/	G4 / S1S2	0	_	0	0	0
Fayette	Vascular Plants	Onosmodium molle ssp. hispidissimum	Hairy False Gromwell	E/	G4G5T4 / S1		->	0	0	0
Fayette	Vascular Plants	Prenanthes crepidinea	Nodding Rattlesnake-root	T/	G3G4 / S2		0	0	0	0
Fayette	Vascular Plants	Salix amygdaloides	Peach-leaved Willow	H/	G5 / SH	0	_	0	0	0
Fayette	Vascular Plants	Schizachne purpurascens	Purple Oat	Τ/	G5 / S2	_	0	0	0	0
Fayette	Vascular Plants	Stellaria fontinalis	Water Stitchwort	Τ/	G3 / S2	_	0	0	>	0
Fayette	Vascular Plants	Trifolium stoloniferum	Running Buffalo Clover	T/LE	G3 / S2S3	Œ	0	0	2	0
Fayette	Vascular Plants	Viburnum molle	Softleaf Arrowwood	Τ/	G5 / S3?	_	0	0	0	0
Fayette	Vascular Plants	Viburnum rafinesquianum var. rafinesquianum	Downy Arrowwood	Τ/	G5T4T5 / S2?	_	0	0	0	0
Fayette	Vascular Plants	Viola walteri	Walter's Violet	1/	G4G5 / S2	<u> </u>	0	0	0	0
Fayette	Insects	Nicrophorus americanus	American Burying Beetle	H/LE	G2G3 / SH	0	<b>→</b>	0	O	0
Fayette	Insects	Pseudanophthalmus horni horni	Garman's Cave Beetle	S/	G3T3 / S2S3	_	0	N	0	0
Fayette	Insects	Satyrium favonius ontario	Northern Hairstreak	S/	G4T4 / S2	0	<u>~</u>	0	0	0
Fayette	Amphibians	Rana pipiens	Northern Leopard Frog	S/	G5 / S3	0	0	0	_	0
Fayette	Breeding Birds	Ammodramus henslowii	Henslow's Sparrow	SI	G4 / S3B	_	0	0	0	0
Fayette	Breeding Birds	Cistothorus platensis	Sedge Wren	S/	G5 / S3B	0	_	0	0	0
Fayette	Breeding Birds	Dolichonyx oryzivorus	Bobolink	S/	G5 / S2S3B	_	0	0	0	0
Fayette	Breeding Birds	Nyctanassa violacea	Yellow-crowned Night-heron	Τ/	G5 / S2B		0	0	0	0
Fayette	Breeding Birds	Passerculus sandwichensis	Savannah Sparrow	S/	G5 / S2S3B,S2S3N	ω	0	0	0	0
Fayette	Breeding Birds	Riparia riparia	Bank Swallow	S/	~	_	0	0	0	0
Fayette	Breeding Birds	Tyto alba	Barn Owl	S/	G5 / S3	0	0	_	0	0
Fayette	Mammals	Mustela nivalis	Least Weasel	S/	G5 / S2S3	_	0	0	0	0
Fayette	Mammals	Myotis sodalis	Indiana Bat	E/LE	G2 / S1S2	0	<b>-</b>	0	0	0
Data Current	Data Current as of August 2004						ם ממ	Page 35 of 126	숙 15	ற்

Data Current as of August 2004

County Report of Endangered, Threatened, and Special Concern Plants, Animals, and Natural Communities of Kentucky Kentucky State Nature Preserves Commission

Nentucky Stat	Reflicky state Nature Preserves Collinission					# of	# of Occurrences	ürre	mce	Ű
County	Taxonomic Group	Scientific name	Common name	Statuses	Ranks	Ш	I	П	×	_
Fayette Coun	County Total:					23	2	Çī	Çī	۰
Fleming	Vascular Plants	Rhynchospora recognita	Globe Beaked-rush	S/	G5? / S3		0	0	0	0
Fleming	Vascular Plants	Solidago shortii	Short's Goldenrod	E/LE	G1/S1	2	0	0	0	0
Fleming	Freshwater Mussels	Cyprogenia stegaria	Fanshell	~~	G1/S1		0	0	0	0
Fleming	Freshwater Mussels	Epioblasma torulosa rangiana	Northern Riffleshell	E/LE	G2T2 / S1	0	0	0	_	0
Fleming	Freshwater Mussels	Epioblasma triquetra	Snuffbox	E/	G3 / S1	ω	0	_	0	0
Fleming	Freshwater Mussels	Fusconaia subrotunda subrotunda	Longsolid	S/	G3T3 / S3	ュ	0	_	0	0
Fleming	Freshwater Mussels	Plethobasus cyphyus	Sheepnose	E/C	G3 / S1	7	0	0	0	0
Fleming	Freshwater Mussels	Simpsonaias ambigua	Salamander Mussel	7/	G3 / S2S3	۔۔۔	0	0	0	0
Fleming	Insects	Dryobius sexnotatus	Sixbanded Longhorn Beetle	1/	GNR / S1	_	0	0	0	0
Fleming	Fishes	lchthyomyzon fossor	Northern Brook Lamprey	Τ/	G4 / S2	_	0	0	0	0
Fleming	Fishes	Noturus stigmosus	Northern Madtom	S/	G3 / S2S3	N	0	0	0	0
Fleming	Fishes	Percopsis omiscomaycus	Trout-perch	S/	G5 / S3	0	_	0	0	0
Fleming	Amphibians	Cryptobranchus alleganiensis alleganiensis	Eastern Hellbender	S/	G3G4T3T4 / S3	N	0	0	0	0
Fleming	Breeding Birds	Accipiter striatus	Sharp-shinned Hawk	S/	G5 / S3B,S4N	2	0	0	0	0
Fleming	Breeding Birds	Ardea herodias	Great Blue Heron	S/	G5 / S3B,S4N	_	0	0	0	0
Fleming	Communities	Bottomland hardwood forest		<b>Z</b>	GNR / S2	_	0	0	0	0
Fleming Cou	County Total:					36	N	10	_	0
Floyd	Vascular Plants	Erythronium rostratum	Yellow Troutlily	S/	G5 / S2S3	2	0	0	0	0
Floyd	Vascular Plants	Hydrophyllum virginianum	Eastern Waterleaf	Τ/	G5 / S2?		0	0	0	0
Floyd	Vascular Plants	Lathyrus venosus	Smooth Veiny Peavine	S/	G5 / S2S3	ယ	0	0	0	0
Floyd	Gastropods	Patera panselenus	Virginia Bladetooth	S/	G3G4 / S1	0	_	0	0	0
Floyd	Freshwater Mussels	Fusconaia subrotunda subrotunda	Longsolid	S/	G3T3 / S3	0	_	_	0	0
Floyd	Freshwater Mussels	Quadrula cylindrica cylindrica	Rabbitsfoot	Τ/	G3T3 / S2	0	0	0	<u>~</u>	0
Floyd	Freshwater Mussels	Villosa lienosa	Little Spectaclecase	S/	G5 / S3S4	0	_	0	0	0
Floyd	Insects	Calopteryx dimidiata	Sparkling Jewelwing	H/	G5 / SH	0	_	0	0	0
Floyd	Insects	Pseudanophthalmus hypolithos	Ashcamp Cave Beetle	Τ/	G1G2 / S2	_	0	0	0	0
Floyd	Fishes	Ichthyomyzon fossor	Northern Brook Lamprey	T/	G4 / S2	_	_	0	0	0
Floyd	Fishes	Lampetra appendix	American Brook Lamprey	Τ/	G4 / S2	0	_	0	0	0
Floyd	Fishes	Percina macrocephala	Longhead Darter	E/	G3 / S1	0	_	0	0	0
Floyd	Fishes	Percopsis omiscomaycus	Trout-perch	S/	G5 / S3	0		0	0	0
Floyd	Reptiles	Lampropeltis triangulum elapsoides	Scarlet Kingsnake	S/	G5T5 / S3	0		0	0	0
Floyd County Total:	Total:					œ	10	_	_	0
Franklin	Vascular Plants	Aesculus pavia	Red Buckeye	11	G5 / S2S3	0	>	0	0	0
Franklin	Vascular Plants	Arabis perstellata	Braun's Rockcress	T/LE	G2 / S2	34	0	0	4	0
Franklin	Vascular Plants	Elymus svensonii	Svenson's Wildrye	S/	G2G3 / S3	17	0	0	0	0
							7	) )		\$

Species Information KDFWR Maps

Public Hunting Area Maps

Game Maps Download GIS Data

Links

**Species Information** 

State Threatened, Endangered, and Special Concern Species observations for selected counties

Linked life history provided courtesy of <u>NatureServe Explorer</u>.

Records may include both recent and historical observations.

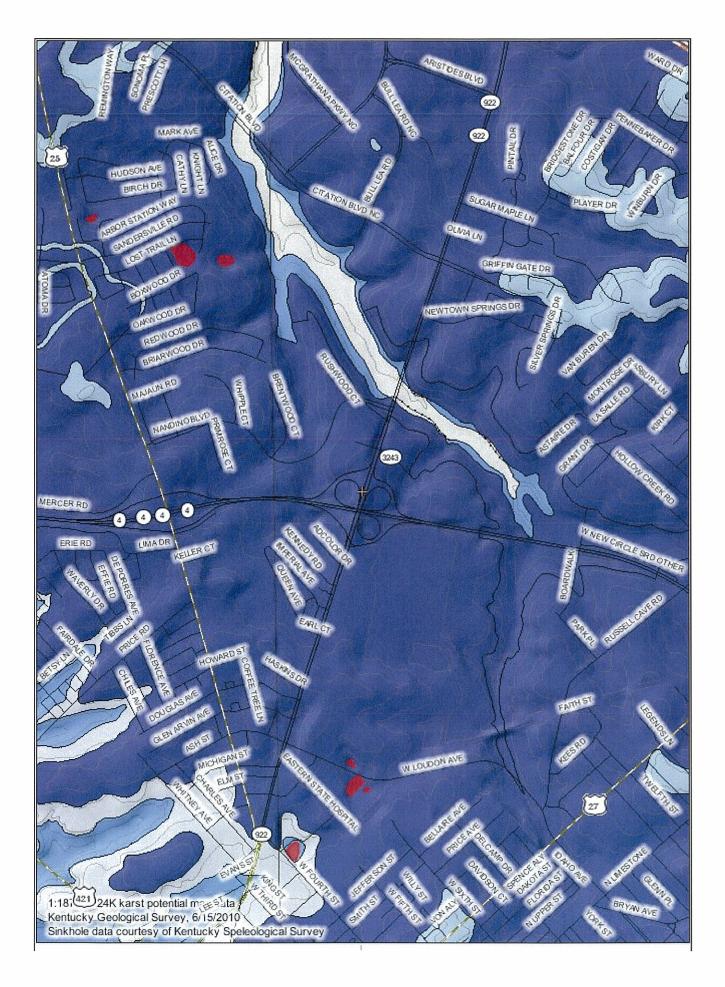
US Status Definitions Kentucky Status Definitions

List State Threatened, Endangered, and Special Concern Species observations in 1 selected county.

Selected county is: Fayette.

Common Name and Pictures	Class	County	US Status	KY Status	WAP	Reference
Henslow's Sparrow	Aves	Fayette	N	s	Yes	<u>Reference</u>
Northern Shoveler	Aves	Fayette	N	E		Reference
Blue-winged Teal	Aves	Fayette	N	Т		Reference
<u>Eastern</u> Hellbender	Amphibia	Fayette	N	5	Yes	Reference
Bobolink	Aves	Fayette	N	S	Yes	Reference
<u>Little Blue</u> Heron	Aves	Fayette	N	E	Yes	Reference
Peregrine Falcon	Aves	Fayette	PS:LE	E	Yes	Reference
American Coot	Aves	Fayette	N	E		Reference
Dark-eyed Junco	Aves	Fayette	N	s		Reference
<u>Least</u> Weasel	Mammalia	Fayette	N	S		Reference
Gray Myotis	Mammalia	Fayette	LE	Т	Yes	Reference
<u>Indiana Bat</u>	Mammalia	Fayette	LE	E	<u>Yes</u>	<u>Reference</u>
<u>Sedge</u> Sprite	Insecta	Fayette	N	E	A44	<u>Reference</u>
<u>Yellow-</u> <u>crowned</u> Night-heron	Aves	Fayette	М		Yes	Reference
Black- crowned Night-heron	Aves	Fayette	N	<b>T</b>	Yes	Reference
Savannah Sparrow	Aves	Fayette	N	s	Yes	Reference
	Name and Pictures Henslow's Sparrow Northern Shoveler Blue-winged Teal Eastern Hellbender Bobolink Little Blue Heron Peregrine Falcon American Coot Dark-eyed Junco Least Weasel Gray Myotis Indiana Bat Sedge Sprite Yellow-crowned Night-heron Black-crowned Night-heron Savannah	Name and PicturesClassHenslow's SparrowAvesNorthern ShovelerAvesBlue-winged TealAvesEastern HellbenderAmphibiaBobolink AvesAvesLittle Blue HeronAvesPeregrine FalconAvesAmerican CootAvesDark-eyed JuncoAvesLeast WeaselMammaliaGray Myotis MammaliaIndiana Bat MammaliaSedge SpriteInsectaYellow-crowned Night-heronAvesBlack-crowned Night-heronAvesSavannahAves	Name and PicturesClassCountyHenslow's SparrowAvesFayetteNorthern ShovelerAvesFayetteBlue-winged TealAvesFayetteEastern HellbenderAmphibiaFayetteBobolinkAvesFayetteLittle Blue HeronAvesFayettePeregrine FalconAvesFayetteAmerican CootAvesFayetteDark-eyed JuncoAvesFayetteLeast WeaselMammaliaFayetteGray MyotisMammaliaFayetteIndiana BatMammaliaFayetteSedge SpriteInsectaFayetteYellow-crowned Night-heronAvesFayetteBlack-crowned Night-heronAvesFayetteSavannahAvesFayette	Name and PicturesClassCountyUS StatusHenslow's SparrowAvesFayetteNNorthern ShovelerAvesFayetteNBlue-winged TealAvesFayetteNBobolink HellbenderAvesFayetteNBobolink HeronAvesFayetteNPeregrine FalconAvesFayetteNAmerican CootAvesFayetteNDark-eyed JuncoAvesFayetteNLeast WeaselMammaliaFayetteNGray MyotisMammaliaFayetteLEIndiana BatMammaliaFayetteLESedge SpriteInsectaFayetteNYellow-crowned Night-heronAvesFayetteNSavannahAvesFayetteN	Name and PicturesClassCountyUS StatusHenslow's SparrowAvesFayetteNNorthern ShovelerAvesFayetteNBlue-winged TealAvesFayetteNEastern HellbenderAmphibiaFayetteNBobolinkAvesFayetteNLittle Blue HeronAvesFayetteNPeregrine FalconAvesFayetteNAmerican CootAvesFayetteNDark-eyed JuncoAvesFayetteNLeast WeaselMammaliaFayetteNGray MyotisMammaliaFayetteLETIndiana Bat MammaliaFayetteLEESedge SpriteInsectaFayetteNEYellow-crowned Night-heronAvesFayetteNTBlack-crowned Night-heronAvesFayetteNTSavannahAvesFayetteNT	Name and PicturesClassCountyUS StatusKY StatusWAPHenslow's SparrowAvesFayetteNSYesNorthern ShovelerAvesFayetteNTIBlue-winged TealAvesFayetteNTIEastern HellbenderAmphibiaFayetteNSYesBobolinkAvesFayetteNSYesLittle Blue HeronAvesFayetteNEYesPeregrine FalconAvesFayettePS:LEEYesAmerican CootAvesFayetteNEIDark-eyed JuncoAvesFayetteNSILeast WeaselMammaliaFayetteNSIGray MyotisMammaliaFayetteLETYesIndiana BatMammaliaFayetteLEEYesSedge SpriteInsectaFayetteNTYesYellow-crowned Night-heronAvesFayetteNTYesSavannahAvesFayetteNTYes

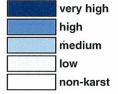
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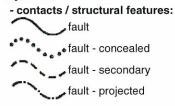
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# **Kentucky Geological Survey Geologic Information Service** Map Legend

Karst Potential Index:



### Symbols:





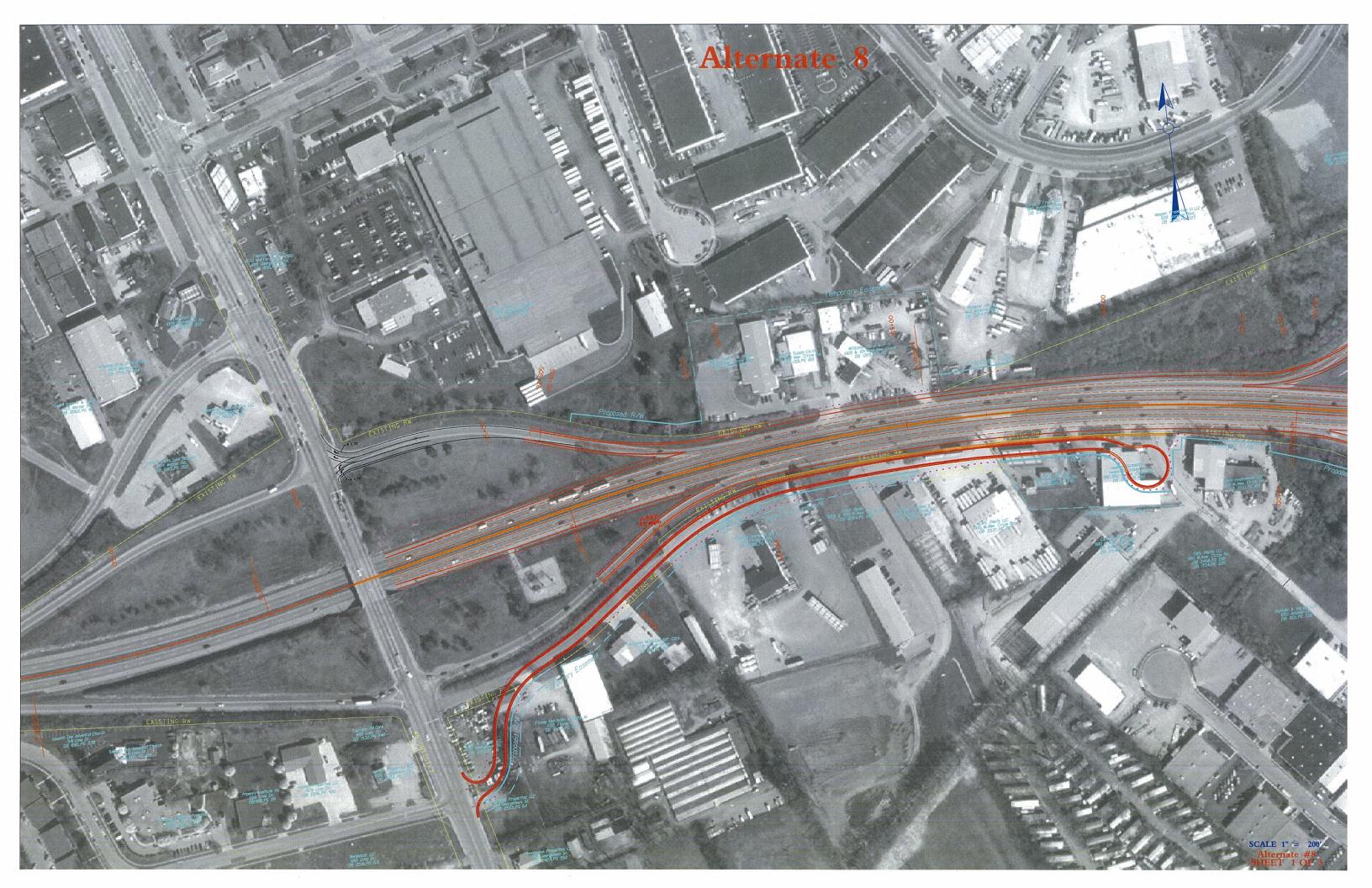
sinkhole location

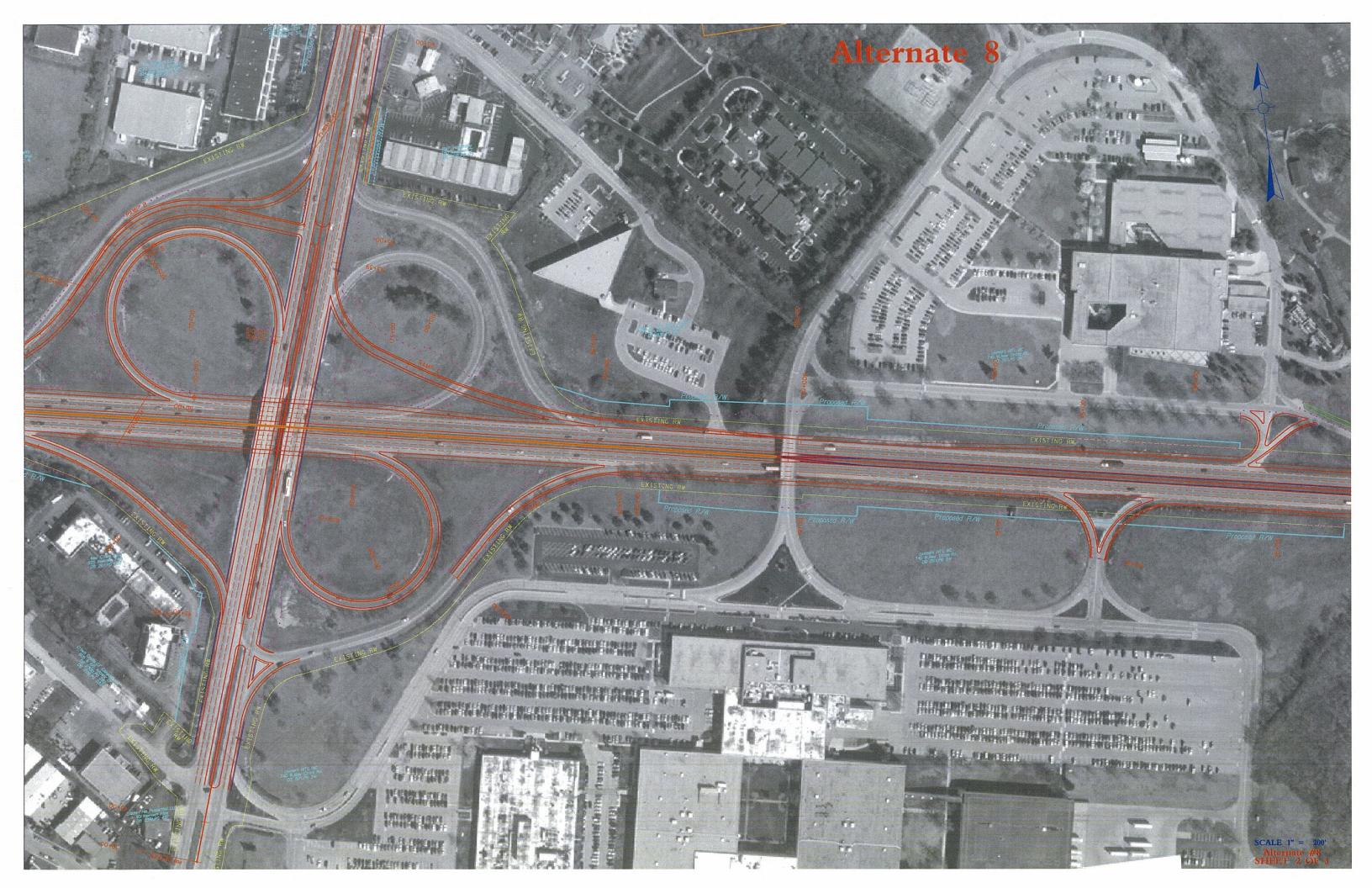
# **PRINT THIS PAGE**

NOTE: in order to print colors, make sure your browser is enabled to print background colors.

Internet Explorer Instructions: Go to Tools --> Internet Options --> Advanced --> Under the "Printing" header, click the "Print background colors and images" box.

Firefox Instructions: Go to File --> Page Setup --> Click the "Print Background (colors & images)" box.







# KENTUCKY TRANSPORTATION CABINET

# **Indiana Bat Conservation Fund**

# **Commitment for Use of Take**

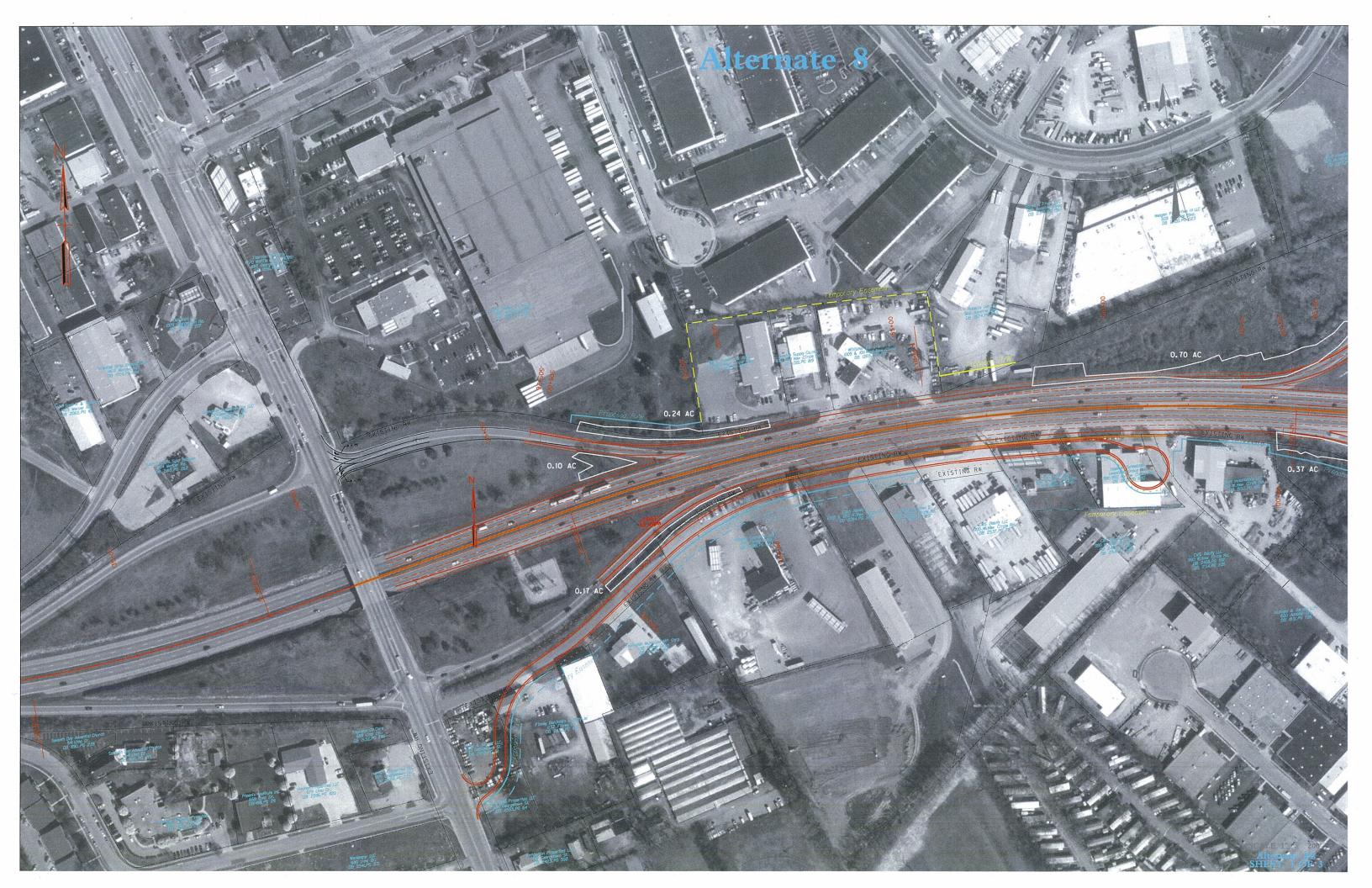
Item No.: 7 - 366 Route: KY 4	County: <b>Fayette</b>
Description of project areas requiring "take":  Areas of take include growth along ROW fence, insistence and scaping trees. The areas are outlined on	
Amount of Take: 2.71 acres trees (amount)	Mean Land Cost/ac: \$ 3000
Anticipated Value of Take: \$1626.00	
Attachments:   Maps  Photographs  Other:	
The amount listed above has been determined in according Biological Opinion issued by the US Fish and Wildlife Stamendments thereto, and the KYTC Habitat Assessment	Service June 9, 2006, any subsequent
Becky Banke Becky Bar (Name of Biologist or DEC)  Becky Bar Signature	rick 6/17/10  Date
As Project Manager, I understand that this authorization irretrievable commitment for the referenced project. Further funds are available for immediate payment of this experience (ROBERT W. NUNCEY)	rthermore, I acknowledge that Design
Robert Muley Robert What (Name of Project Manager) Signatur	re Date
Following completion, route form to Ecology and Permitting Branch Manager, Divis	ion of Environmental Analysis
FOR DEA USE ONLY	
Approved:  Date Sign  All appropriate entries to reflect use of the	ature take have been
entered into the Environmental Analysis T	0.000 A 100 PT 0.000
Reported to USFWS: Sign	ature
- Jan	

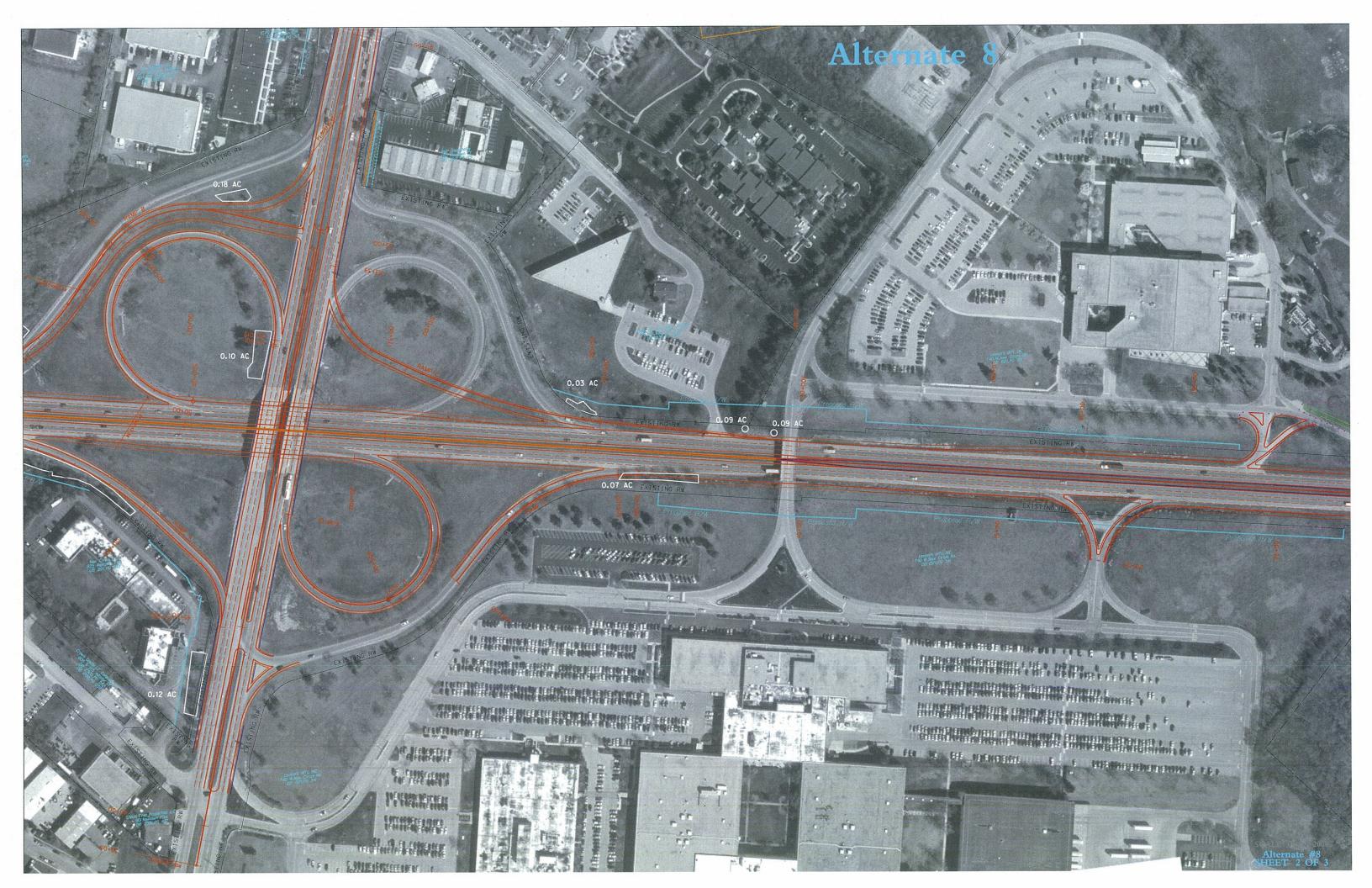














APPENDIX 2 SHPO Concurrence Letters



# COMMERCE CABINET KENTUCKY HERITAGE COUNCIL

Steven L. Beshear Governor The State Historic Preservation Office 300 Washington Street Frankfort, Kentucky 40601 Phone (502) 564-7005 Fax (502) 564-5820 www.kentucky.gov Marcheta Sparrow
Secretary

Donna M. Neary
Executive Director and
State Historic Preservation Officer

March 12, 2008

Mr. David Whitworth, Transportation Specialist Federal Highway Administration 330 West Broadway Frankfort, KY 40601

Re:

Determination of Effects for Site 7 and Site 9; A Cultural Historic Resources Report for the New Circle Road (KY-4) Improvement from Georgetown Road to Board/Colesbury Circle in Fayette County, Kentucky (Item No 7-113.00)

Dear Mr. Whitworth:

The State Historic Preservation Office determined, in a letter from this office dated January 28, 2008, that Site 7 (FA-W-51) and Site 9 (FA-W-30) located within the above-referenced undertaking's Area of Potential Effect, are eligible for listing in the National Register of Historic Places. Based on the information provided at the time, however, we were unsure as to the effects of this undertaking on these sites.

Based on additional information provided to this office, it is our determination that according to the currently proposed project plans, neither site would be impacted by this undertaking. Therefore, there will be **No Effect** to Site 7 (FA-W-51) and Site 9 (FA-W-30) from this project as proposed.

Should you have any questions regarding these comments, please feel free to contact Janie-Rice Brother of my staff at (502) 564-7005, extension 121.

Sincerely,

Donna M. Neary, Executive Director and State Historic Preservation Officer

Cc: David Waldner, Amanda Abner (KYTC-DEA) JRB: jrb





STEVEN L. BESHEAR GOVERNOR

# TOURISM, ARTS AND HERITAGE CABINET KENTUCKY HERITAGE COUNCIL

MARCHETA SPARROW SECRETARY

THE STATE HISTORIC PRESERVATION OFFICE

300 WASHINGTON STREET FRANKFORT, KENTUCKY 40601 PHONE (502) 564-7005 FAX (502) 564-5820 www.heritage.ky.gov

MARK DENNEN
EXECUTIVE DIRECTOR AND
STATE HISTORIC PRESERVATION OFFICER

February 16, 2011

Mr. David M. Waldner, Director Division of Environmental Analysis Kentucky Transportation Cabinet 200 Mero Street Frankfort, Kentucky 40622

Re: An Archaeological Survey of the Proposed Reconstruction of New Circle Road between Georgetown Road and Boardwalk/Colesbury Circle, Fayette County, Kentucky, by Michael Curran (CRAI)

Fayette County
KYTC Item Number 7-366.00

Dear Mr. Waldner,

This office has received the above mentioned report for review. The survey found no evidence of prehistoric or early historic occupation in the project area. The authors recommend that no additional archaeological work should be undertaken for the current project. I concur with the author's findings. Therefore, we have no further comments and responsibility to consult with the Kentucky State Historic Preservation Officer under the Section 106 review process for archaeology on this project is fulfilled.

If you have any questions, please do not hesitate to contact Wes Stoner of my staff at (502) 564-7005 ext 151.

Sincerely,

Mark Dennen, Executive Director Kentucky Heritage Council and State Historic Preservation Officer

MD: wds

cc. Charles M Niquette (CRAI)

Dan Davis (KYTC-DEA)

Dr. George Crothers (KY-OSA)



**APPENDIX 3**Public Meeting Summary

# New Circle Road Public Meeting

Widening of KY 4 form Georgetown Rd (Including Ramps) to Boardwalk/Colesbury Circle

Fayette County 7-366.00 & 7-366.10 KY 4 (New Circle Road)

May 3, 2007 5:00 pm to 7:00 pm Transportation Cabinet District 7 Office

Endorsement: To the best of my knowledge the meeting summary is accurate and repres of the meeting held May 3, 2007.		
Robert Sturgeon, PE Chief District Engineer – D7	Rob Sprague, PE KYTC Project Manager	

# **Table of Contents**

1.	<b>Public</b>	Meeting	Corres	pondence

Letter to Manager of Advertising Section of Newspaper

**Public Meeting Advertisement** 

Tear Sheet from Newspaper

**Project Limits** 

Letter to Property Owners

#### 2. Public Meeting Handout Material

Handout

Questionnaire

#### 3. Sign-in Sheets and Comments Sheets

#### 4. Meeting Summary

Meeting Photographs

**Presentation Slides** 

#### 5. Responses to Comments

# **SECTION 1**

**Public Meeting Correspondence** 

#### **Stephen Sewell**

From: Sprague, Robin (KYTC-D07) [Robin.Sprague@ky.gov]

**Sent:** Wednesday, May 30, 2007 4:10 PM

To: Step hen Sewell

Subject: FW: New Circle Ad

Attachments: New Circle Rd Ad 5-3-2007.pdf

From: Sprague, Robin (KYTC-D07) Sent: Tuesday, April 03, 2007 3:42 PM

To: 'McConnell, Tammy'

Cc: Forrester, Diane (KYTC-D07); Thacker, David B (KYTC-D07)

Subject: FW: New Circle Ad

#### Tammy,

I need the attached advertisement ran on Wednesday April 18<sup>th</sup> and Thursday April 26<sup>th</sup>. You have any questions about running the ad you can contact me or David Thacker at 246-2355 or by email at <a href="mailto:robin.sprague@ky.gov">robin.sprague@ky.gov</a> or <a href="mailto:davidb.thacker@ky.gov">davidb.thacker@ky.gov</a>. Diane Forrester will be handling the bill for the ad. She can be contacted at the same number or by email at <a href="mailto:diane.forrester@ky.gov">diane.forrester@ky.gov</a>.

We believe in may take 3 columns to make it legible.

Please respond back, so I will know that the ad was received.

Rob

From: Stephen Sewell [mailto:ssewell@palmernet.com]

**Sent:** Tuesday, April 03, 2007 3:09 PM

**To:** Sprague, Robin (KYTC-D07)

Subject: New Circle Ad

#### Rob

Take a look at this and let me know if you want to change anything or if I missed something.

Thanks Stephen

Stephen Sewell, PE
Project Manager
mailto:ssewell@palmernet.com
Palmer Engineering
400 Shoppers Drive

Winchester, Ky. 40392-0747

Tel: (859) 744-1218 Fax: (859) 744-1266 http://www.palmernet.com

# The Kentucky Transportation Cabinet NEEDS YOUR INPUT!

Concerning the Widening of KY 4 (New Circle Rd) from Georgetown Road (including ramps) to Boardwalk/Colesbury Circle in Fayette County

Item No 7-366.00 & 7-366.10

Public Informational Meeting Thursday, May 3 5:00pm - 7:00pm

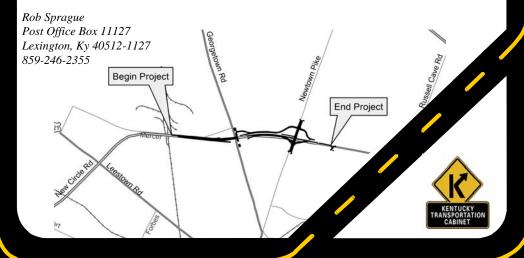
# Transportation Cabinet District 7 Office 763 West New Circle Rd. Lexington, KY

This meeting is to present to the public the latest plans that have been developed for the project. Handouts, containing information about the project, comment sheets and displays will be available at the meeting. Representatives from the KY Transportation Cabinet and their consultants will be available to answer questions. Written and oral comments will be accepted during the meeting. Written comments will be accepted, and information made available, up to 15 days after the meeting at the District Seven office address listed above.

Written and oral comments from this meeting will become a part of the official record for the project. Once compiled, the meeting record will be made available for review and coping only after an Open Records Request has been received and approved. All Open Records Requests must be submitted to the Office of Legal Services, 200 Mero Street, Frankfort, Kentucky 40622.

In accordance with the Americans with Disabilities Act (ADA), if anyone has a disability and requires assistance, please notify Ken Huffine, no later than May 1, 2007. Please call 859-246-2355 or mail your request to the address listed below.

Please address any questions regarding this meeting or project to:



# INSULT | 'In Appalachia we call this cultural strip-mining'

#### From Page B1

years ago after it ran a cartoon depicting the breakup of a rus-tic couple with a caption, "Can

"Appalachia has long been fair game as the nation's whip-ping boy and, unfortunately, The New Yorker has jumped to the head of the line," he wrote. "In Appalachia, we call this cul-tural strip-mining."

wrote, is "How cân a professor at Columbia in the 21st century use such a stereotypical ethnic reference so casually it doesn't even register consciously, and how did the remark then pass now not the remark men pass inchallenged both by Mr. Co-lapinto and by the editorial staff of The New Yorker? Gordon told Ashland critic

Denise Yankin that he asked the magazine writer about the

"He said that neither he, nor the copy editor of the New

ď

∙( h.

Yorker, caught it, since they probably would have redacted it if it had popped out at them, Gordon wrote. "This is not an excuse for what I said, but I think a way of saying that the less obvious kinds of prejudices that we all have become opaque and sometimes we need to be

reminded that they are offen-Yankin, for one, wasn't buy ing Gordon's explanation.

EVERY SATURDAY!

Vine St. between Upper and Limestone

7 AM until sold out

The Kentucky Transportation Cabinet

**NEEDS YOUR INPUT!** 

Concerning the Widening of KY 4 (New Circle Rd) from Georgetown Road (including

ramps) to Boardwalk/Colesbury Circle in Fayette County

Item No 7-366.00 & 7-366.10 Public Informational Meeting

Thursday, May 3 5:00pm - 7:00pm

Transportation Cabinet District 7 Office 763 West New Circle Rd. Lexington, KY

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project. Once compiled, the meeting record will be made available for review and coping only

after an Open Records Request has been received and approved. All Open Records Requests must

meeting at the District Seven office address listed above:

apology from some pompous bigot.

In a subsequent note to Yankin, Gordon said he was sorry she did not feel his apology

Perhaps you think that I am some high and mighty professor sitting in the Ivory Tower, pronouncing some pseudo-intellectual judgment on people, but that is not true," he wrote. "I'm truly humbled by this experi-

HOMEGROWN SPRING LETTUCES COMING INI

**FREE PARKING** 

11 AM UI 3 PM

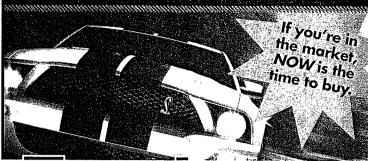
www.lexingtonfarmersmarket.com

spinach, green garlic, lots of homemade baked goods

bedding plants, seasonings, fresh herbs local honey, handmade scaps,

EVERY SUNDAY! TUES., MAY 1st!

For a limited time, Man-O-War Ford is offering EVERYONE employee prices on over 250 brand new 2007 Ford cars, trucks, SUVs and vans.



No dealers; 2,990 sale prices apply to in-stock vehicles.

Was \$14,400 NOW §**9**.997

Overdrive transmisison air conditione 15" wheels, rear defra

Factory rebates up to \$5,000!

2007 Ford Focus SE

-speed automatic transmission, 16" aluminum wheels. power mirrors

High trade-in offers during this sale.

Was \$21,295 NOW 7,99

2007 Ford Escape XLS

All new and pre-owned vehicles on sale at absolutely the lowest prices this year.

**CHECK OUT THESE PRE-OWNED DEALS** Price Year Model Year Model 2002 Buick Read s10 990 2006 Nissan Altima \$6.997

Price \$15,949 2003 Dodge Neon \$15 989 2002 Ford F-150 ·57.988 2006 Chrysler PT Cruiser \$11.988 2006 Toyota Camry 2006 Chrysler Town & Country, Stow&Go \$15,989 2006 Ford Taurus SE s11,997 Chevrolet Cavalier \$8,497 s12,990 Chevy HHR LT \$15,997 2002 Chrysler Sebring \$8,988 2003 Ford Windstar Ltd. 2006 \$15,998 \$8,988 2006 Pontiac Vibe \$12,998 Chevy Monte Carlo Memory Grand Marquis, Low Miles \$13,495 2006 Ford Escape XLT 4WD s16,998 2005 Pontiac Grand Am 2005 Chevrolet Impala \$9,495 2005 Dodge Dakota V8 4x4 517,997 2006 Hyundai Sonata \$13,989 Mitsuhishi Lancer

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be submitted to the Office of Legal Services, 200 Mero Street, Frankfort, Kentucky 40622. In accordance with the Americans with Disabilities Act (ADA), if anyone has a disability and requires assistance, please notify Ken Huffine, no later than May 1, 2007: Please call 859-246-2355 or mail your request to the address listed below. Please address any questions regarding this meeting or project to: Post Office Box 11127 Lexington, Ky 40512-1127 859-246-2355

## GE to sell plastics unit, **CEO** says

By Stephen Singer

GREENVILLE, S.C. eral Electric Co. expects to sell its plastics unit in the second or third quarter this year, its chief executive said yesterday, divesting itself of a business that has slowed the company's earnings during recent years.

GE Chairman and Chief Executive Jeff Immelt, speaking to reporters at the company's an-

change services and car appear ance products had been strug-gling for several quarters before showing signs of a turnaround in the first quarter.

Ashland said its Water Technologies division had operating income of \$6.2 million for the quarter that has just ended, compared with a \$1 million loss for the year-ago period. Sales and operating revenues rose by \$90 million during the quarter

## **HOME SALES Foreclosures** yo-yo from Jan. to March

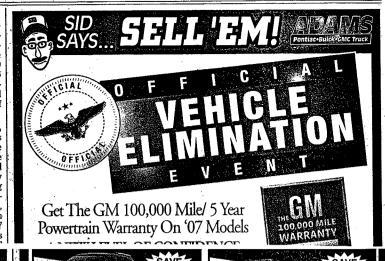
From Page C1

of the houses sold locally during the first quarter increased 1.7 per-cent to \$146,000, compared with \$143.500 one year earlier. Nation-

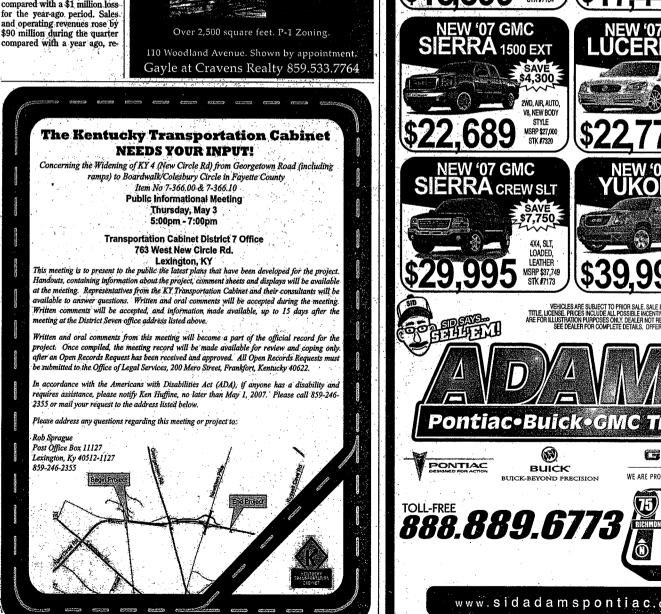
ally, prices declined 8.1 percent.
"It is important to note that prices continue to show moderate but steady growth that we have experienced for the last decade or more," said Becky

parts of the country, the association said. Its Housing Affordability Index - a ratio of median family income to the income required to qualify for an 80 percent, fixed-rate mortgage to buy the median-priced home was 1.5 in March, compared with the national average of 1.15, the Realtors said.

RealtyTrac said foreclosures, which occur when home buyers default on mortgages and the lender goes to court to have the from 948 statewide in January to 628 in February before rising to 700 in March. In the sixcounty Lexington metro area, there were 207 foreclosures in the first quarter, including 197 in Fayette County. The total was

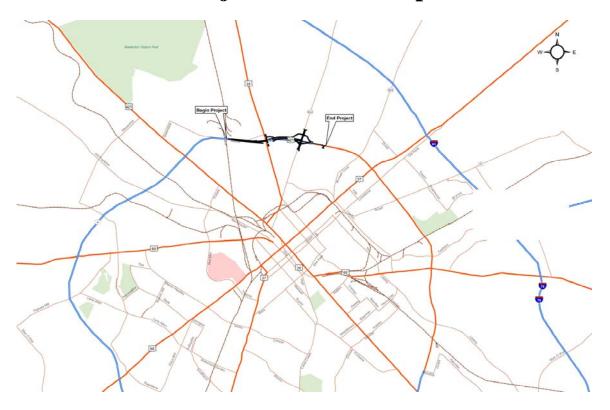








# **Project Location Map**



#### April 24, 2007

«Name»
«Address»
«City», «State» «PostalCode»



#### To Whom It May Concern:

The Kentucky Transportation Department has scheduled a public meeting concerning the widening of KY 4 (New Circle Rd) from Georgetown Road (including ramps) to Boardwalk/Colesbury Circle. The public meeting will be held:

# Thursday May 3, 2007 5:00 to 7:00 pm

## Transportation Cabinet District 7 Office 763 West New Circle Rd Lexington, KY

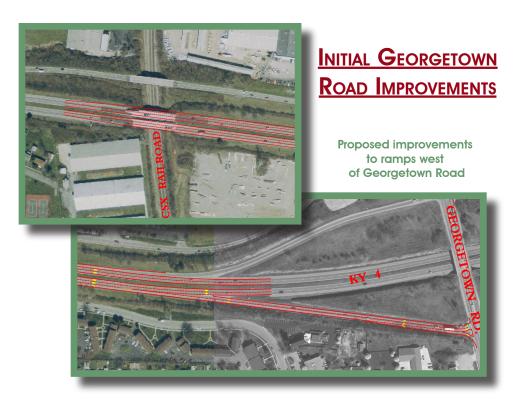
The meeting will present the latest plans that have been developed for the project along with handouts, containing information about the project, comment sheets and displays. A short presentation will be given at 5:30pm to describe the proposed improvements along the corridor. Representatives from the KY Transportation Cabinet and their consultants will be available to answer questions.

Written and oral comments will be accepted during the meeting. Written comments will be accepted, and information made available, up to 15 days after the meeting at the District Seven office address listed above.



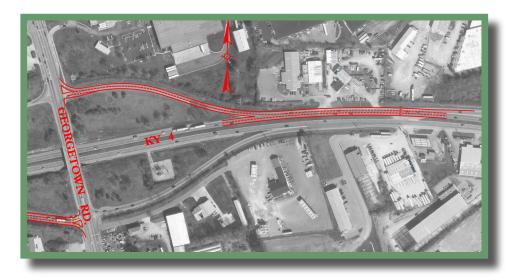
# **SECTION 2**

**Public Meeting Handouts** 



#### IMPROVEMENTS WEST OF GEORGETOWN ROAD

- Two (2) exit lanes from New Circle Road
- Additional lane along New Circle Road beginning near Norfolk Southern Railroad
- Two (2) left-turn lanes and a right-turn lane at Georgetown Road
- Westbound on-ramp will extend to Norfolk Southern Railroad



Proposed improvements to off ramp east of Georgetown Road

#### IMPROVEMENTS TO THE EAST OF GEORGETOWN ROAD

- Two (2) exit lanes at Georgetown Road
- Continuous auxiliary lane from Newtown Pike to Georgetown Road
- Additional turn lanes at Georgetown Road

#### PURPOSE AND NEED

The proposed improvements from west of Georgetown Road to Boardwalk increase safety, mobility, and system continuity in order to support continued and sustainable economic development within the northeast portion of New Circle Road. Mobility on the existing roadway is limited by congestion caused by high traffic volumes, business entrances, and conflicting weaves. Traffic volumes along New Circle Road have steadily increased over the years due to development on the north side of Lexington and providing a connection between Interstate 75 and Bluegrass Parkway.

#### WHERE ARE WE HEADED FROM HERE?

- Final design of the Georgetown Road Ramps improvements will lead to the planned construction in a 2008 Fiscal Year Letting.
- The improvements to New Circle Road and Newtown Pike Interchange will require a longer time frame before construction can begin. Following the completion of final environmental studies, a formal public hearing will be held to gather public comments. Funding has not been established for reconstruction of the Newtown Interchange yet.



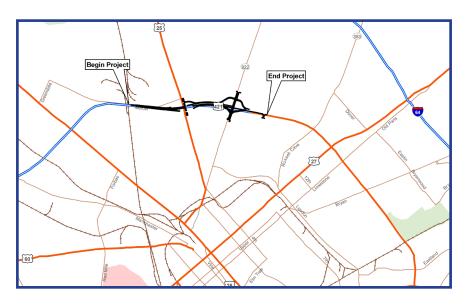
#### PROCEDURE FOR SUBMITTING COMMENTS

Representatives of the Kentucky Transportation Cabinet and selected engineering consultants are available to answer questions you may have regarding this project. In addition, various exhibits are on display to assist you in understanding the facets of this project. You are encouraged to make an official comment that will be incorporated into the official project summary.

To make a written statement, complete one of the comment sheets provided and leave it tonight with one of the representatives or mail it within 15 days to the address listed below.

Robert Surgeon, P.E.
Kentucky Transportation Cabinet - District 7
P. O. Box 11127
Lexington, KY 40512-1127





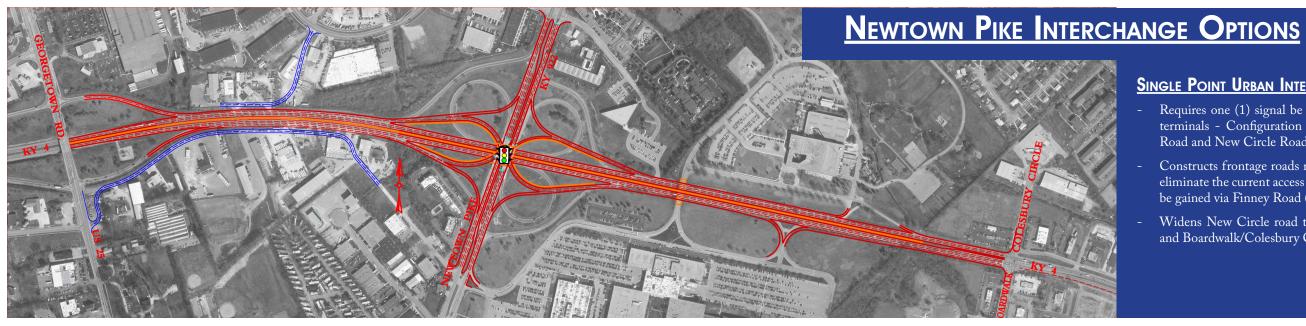
May 3, 2007 5:00 pm - 7:00 pm

Kentucky Transportation Cabinet
District 7 Office









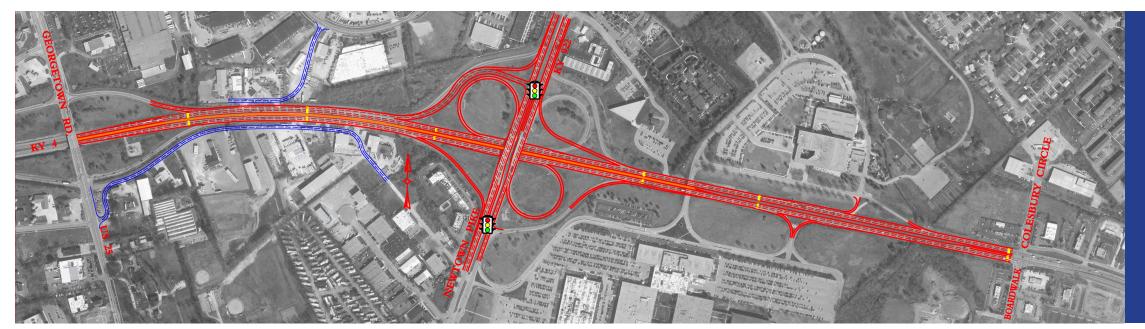
#### SINGLE POINT URBAN INTERCHANGE (SPUI)

- Requires one (1) signal be placed on Newtown Pike at the Ramp terminals Configuration similar to interchange at Winchester Road and New Circle Road
- Constructs frontage roads north and south of New Circle Road to eliminate the current access points along New Circle - Access would be gained via Finney Road (south) or Nandino Blvd (north)
- Widens New Circle road to six-lanes between Georgetown Road and Boardwalk/Colesbury Circle



#### TIGHT DIAMOND URBAN INTERCHANGE (TDUI)

- Requires two (2) signals be placed on Newtown Pike at the Ramp
- Constructs frontage roads north and south of New Circle Road to eliminate the current access points
- Widens New Circle road to six-lanes between Georgetown Road and Boardwalk/Colesbury Circle



#### PARTIAL CLOVERLEAF INTERCHANGE

- Requires two (2) signals be placed on Newtown Pike traffic would only stop at one (1) signal due to the loop ramps
- Eliminates one (1) of the existing loop ramps (Northeastern loop
- Constructs frontage roads north and south of New Cirlce Road to eliminate the current access points
- Widens New Circle road to six-lanes between Georgetown Road and Boardwalk/Colesbury Circle

#### Questionnaire (Please Print)

N	Name: I	Date:
Ac	ddress	
City, Stat	te, Zip	
Phone nu	umber	
	a few minutes to fill out the questionnaire and turn it i omments. Thank you in advance for your assistance.	n at the meeting or mail it back
☐ Is	y I'm most interested in: (Check as many as apply) s commercial s residential s a residential area served by New Circle Road s a commercial development served by New Circle Road s owned by me s leased	d
	portion of New Circle Road: Multiple Times Daily Once A Day Once A Week Rarely	
	change Configuration Do you Prefer: Single Point Urban Interchange Fight Diamond Urban Interchange Current Configuration	
What do you	u see as the transportation needs in the New Circle Road	Corridor?
$\begin{array}{cc} \square & Sa \\ \square & R \end{array}$	Less Traffic Congestion Safer Roadway Reduce Access Points Other – Please Describe Below	
		(Continue on back)

(Additional Comments Continued From Front)			

# **SECTION 3**

Sign-In Sheets and Comment Sheets

## New Circle Road Improvements Public Meeting

Item Number 7-366.00 &7-366.10 May 3, 2007



## SIGN-IN SHEET

RENTUCKY TRANSPORTATION CABINET

Please sign-in so that we may have an accurate record of attendance at this meeting. Name Address CIRCLE 40550

## New Circle Road Improvements Public Meeting

Item Number 7-366.00 &7-366.10 May 3, 2007



# SIGN-IN SHEET



Please sign-in so that we may have an accurate record of attendance at this meeting. Name Address

## FAYETTE COUNTY NEW CIRCLE ROAD (KY4) ITEM NO. 7-366.0 EMPLOYEE ATTENDANCE

## NAME:

1.	DAVID LINDEMAN	PAMBR ENGINEERING
2.	Stephen Sewell	Palmer Engineering
	Ken Huffing	D-7 Pesign
4.	Colen Hardin	ENTRAN
5.	Karis Day	Palmer Engineering
6.	Robin Sprague	KYTC D-7 Design
	Keith McDonald	KYTC D-7 R/W
	an Lawson	KYTC DJ UTILITIES
9.	Phil Logsdon	KYTC D-7 Environmental
	STUART GOODPASTER	KATE D-7 PLANNING
11.	Randy Turner	Kyte D-7 Planning
12.	BRIAN ALDRINGE	ENTRAJ
13.	Ananias Calvin III	KYTC C.O. Design
14.	James Ballinger	KYTC D-7 PreConstruction
	David Thacker	KYTC D-7 Public Information
	Bob Kennedy	Palmy Engeneere
17.	Carol Granken	KYTC D-7 ESOLTIHERT
18.	Robin A. Hammons	Lex Area MPO
19.	Bob Bayert	LFUCG-Expineering
	Sarah Brown	LFUCA - District 1 Assistant
	•	

MAY 3, 2007 5:00 P.M. TO 7:00 P.M.

## FAYETTE COUNTY NEW CIRCLE ROAD (KY4) ITEM NO. 7-366.0 EMPLOYEE ATTENDANCE

## NAME:

1	Jason	Allinder	LFUCG	Traffic	Engineering	
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<b>5.</b> _	******					
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17						
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MAY 3, 2007 5:00 P.M. TO 7:00 P.M.

#### New Circle Road (KY 4) Item Number 7-366.00 & 7-366.10

Fayette County
Ouestionnaire (Please Print)

Name:	Robert C. Black, JA		$_{\text{oate:}}$ $5/3$	ba
Address	2112 CANGDON CF.	<u></u>	vaie. <u>- 127</u>	<u> </u>
City, State, Zip	LEXINGTON, Ky. 40	514		
Phone number	859-223-4707			
Please take a few min with your comments.	nutes to fill out the questionnaire a Thank you in advance for your ass	and turn it in	at the meetin	g or mail it back
Is commer ☐ Is resident ☐ Is a residen	ial ntial area served by New Circle Ro ercial development served by New	ad		
I travel this portion of  Multiple T  Once A Da  Once A W  Rarely	imes Daily ay			
Single Poir	onfiguration Do you Prefer: at Urban Interchange aond Urban Interchange verleaf			
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<ul><li>✓ Safer Road</li><li>☐ Reduce Ac</li></ul>	•			
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#### New Circle Road (KY 4) Item Number 7-366.00 & 7-366.10

Fayette County
Questionnaire (Please Print)

Nan	ne: Rest	duryd G. D	255_	Date: _	5-3-8	27
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City, State, 2	Zip Lex	Ky 405	7/			-
Phone numl	per <u>877</u>	-873-11	39			<u>-</u>
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☐ Singl☐ Tight	nge Configuratio e Point Urban In Diamond Urba al Cloverleaf					
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(Additional Comments Continued From Front)		
•		

Questionnaire (Please Print)

	Name:	MARCY	HOLCOT	15	Date: 3 - 72 - 0/	
	Address	808	CELIA	LANE		
City, S	tate, Zip	<u>L</u> ÈYI	N4TON, 9- 523	KY	40505	
Phone	number	85	9- 523	,-8830		
Please tak with your	e a few mir comments.	utes to fill Thank you	out the questi	onnaire and turn your assistance	n it in at the meeting or ma	il it back
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I travel thi	is portion of Multiple T Once A Da Once A W Rarely	imes Daily ay				
Which Into	Single Poin	nt Urban In nond Urbar	n Do you Prefe iterchange 1 Interchange	r:		
What do y	ou see as th	e transport	ation needs in t	he New Circle R	Road Corridor?	
			3			
		<del></del>				
	·				(Continue on ba	

(Additional Comments Continued From Front)			
•			

Questionnaire (Please Print)

	Name:	A. JO	SEPH O	HUHEISE	Date Date	: <u>5-30</u>	<u>&gt;</u>	
1	Address	1893	BARKL	EY RD			<del></del>	
City, St	tate, Zip	SAPIEN	ILE, K	4 40	35%			
Phone	number		857_6					
Please take with your o	e a few mi comments.	nutes to fill Thank you	out the quest in advance fo	ionnaire and r your assista	turn it in at ance.	the meeting o	r mail it back	<u>.</u>
	Is commentated Is resident Is a reside	rcial tial ential area ser aercial develo	in: (Check as	Circle Road				
			Road:					
	Single Poi	nt Urban Inte mond Urban		r;				
What do yo	ou see as th	ne transportat	ion needs in (	the New Circ	le Road Cor	ridor?		
	Safer Road Reduce Ad	ic Congestio dway ccess Points ease Describ						
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(Additional Comments Continued From Front)						
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Questionnaire (Please Print)

	Name:	LEE	KOBI	GRIS	<del>-</del>	_ I	Date:	5,3.0	7
	Address	P.0	····						
City, St	ate, Zip				KT		<del>88</del>		
Phone	number	859	7 2	94	5566	<del>ر</del> .			<del></del>
Please take with your o	e a few min comments.	utes to fill Thank you	out the in advar	questior nce for y	naire and our assist	l turn it in	n at th	e meeting (	or mail it back
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	erchange Co Single Poin Tight Diam Partial Clov	it Urban Ini iond Urban	terchang	e					
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	Less Traffic Safer Road Reduce Acc Other – Ple	c Congestic way cess Points	on						
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(Additional Comments Continued From Front)							
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#### New Circle Road (KY 4) Item Number 7-366.00 & 7-366.10

Fayette County
Questionnaire (Please Print)

Name: Christen Creech Date: 5-3-07
Address P0 526
City, State, Zip Nicholasville KY 40340
Phone number 859 537 0846
Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.
The Property I'm most interested in: (Check as many as apply)  Is commercial  Is residential  Is a residential area served by New Circle Road  Is a commercial development served by New Circle Road  Is owned by me  Is leased
I travel this portion of New Circle Road:  ☐ Multiple Times Daily ☐ Once A Day ☐ Once A Week ☐ Rarely
Which Interchange Configuration Do you Prefer:  ☐ Single Point Urban Interchange  ☐ Tight Diamond Urban Interchange  ☐ Partial Cloverleaf
What do you see as the transportation needs in the New Circle Road Corridor?
Less Traffic Congestion  Safer Roadway  Reduce Access Points  Other – Please Describe Below
(Continue on back)

(Additional Comments Continued From Front)							
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#### New Circle Road (KY 4) Item Number 7-366.00 & 7-366.10

# Fayette County Questionnaire (*Please Print*)

Address
City, State, Zip
Phone number
Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.
The Property I'm most interested in: (Check as many as apply)  ☐ Is commercial ☐ Is residential ☐ Is a residential area served by New Circle Road ☐ Is a commercial development served by New Circle Road ☐ Is owned by me ☐ Is leased
I travel this portion of New Circle Road:  ☐ Multiple Times Daily ☐ Once A Day ☐ Once A Week ☐ Rarely
Which Interchange Configuration Do you Prefer:  ☐ Single Point Urban Interchange ☐ Tight Diamond Urban Interchange ☐ Partial Cloverleaf
What do you see as the transportation needs in the New Circle Road Corridor?
<ul> <li>□ Less Traffic Congestion</li> <li>□ Safer Roadway</li> <li>□ Reduce Access Points</li> <li>□ Other – Please Describe Below</li> </ul>

Your answers will be given to New Circle Road Team for their use in evaluating the proposed improvements.

(Continue on back)

(Additional Comments Continued From Front)
When the George town on range enters the outer loop, the
rock "block visibility for mailine trafic speing the
entering traffic. The extension of this on namp land will
help the situation for now. But when the extended namp lane
eventually becomes the 3th land of the order loop, the marge
visibility is me will be back. Consider removing the rock
nose, either with these improvements or write the next phate.
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Please Drop this sheet off as you leave or mail within 15 days to: Robert Sturgeon, P.E. Your answers will be given to the New Circle Road KYTC District 7 Team for their use in evaluating the proposed improvements. P.O. Box 11127

Lexington, Kentucky 40512

# New Circle Road (KY 4) Item Number 7-366.00 & 7-366.10 Fayette County Questionnaire (*Please Print*)

Nan	ne: _	Steve	<u>Da</u>	NS		Date:	<u>5-3</u>	3-07	
Addr	ess _	Lexma 740 W	-	Ven a	rde i	Ed,			,
City, State, 2	Zip _	Lexin	, ton	, KY	405	50			1 14
Phone numl	ber _	859-	- 23	2-44	11	****			
Please take a fe with your comm	w minu nents. T	ites to fill o Thank you i	out the o	questionna ce for you	iire and to ir assistan	urn it in at	the meetin	ıg or mai	l it back
□ Is read □ Is a r □ Is a c	mmerci sidentia resident commer vned by	ial	ved by I	New Circle erved by I	e Road New Circ	le Road			
I travel this portion of New Circle Road:  Multiple Times Daily  □ Once A Day □ Once A Week □ Rarely									
☐ Tigh	le Point	: Urban Inte ond Urban I	erchange	•					
What do you see	e as the	transportat	ion need	is in the N	ew Circle	Road Corr	idor?		
⊠ Safer □ Redu	r Roadw ice Acc	Congestion vay ess Points use Describe						÷	
Consideration Needs to be given to insure that traffice does Not									
backup and block the Northern Lexmark Newtown entrance/ent. IT									
would appear that the SPUI would place the traffic Synd the Larthust									
from the Lexmark ent so it should be the best (Continue on back) at Breventing this back up; Your answers will be given to New Circle Road Team for their use in evaluating the proposed									
Your answers w improvements.	ill be gi	iven to Nev	c <b>k np 1</b> v Circle	, Road Tea	m for the	ir use in eva	luating the	propose	:d

(Additional Comments Continued From Front)							
Leximark is interested in discussing ;	phe						
Leximark 15 Interested in discussing ; location of the New Circle Road overpa that connects Leximark's North & Soul							
that connects Lexmerk's North & Soul	n proporties,						
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Fayette County
Questionnaire (Please Print)

Name: Mike Hart Date: 5/3/07
Address 927 Googe form Re
City, State, Zip Lex Ky. 4071
Phone number
Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.
The Property I'm most interested in: (Check as many as apply)  ☐ Is commercial ☐ Is residential ☐ Is a residential area served by New Circle Road ☐ Is a commercial development served by New Circle Road ☐ Is owned by me ☐ Is leased
I travel this portion of New Circle Road:
Which Interchange Configuration Do you Prefer:  ☐ Single Point Urban Interchange ☐ Tight Diamond Urban Interchange ☐ Partial Cloverleaf
What do you see as the transportation needs in the New Circle Road Corridor?
<ul> <li>□ Less Traffic Congestion</li> <li>□ Safer Roadway</li> <li>□ Reduce Access Points</li> <li>□ Other – Please Describe Below</li> </ul>
(Continue on back)

(Additional Comments Continued From Front)	

Fayette County
Questionnaire (*Please Print*)

Name:	John	Bryant	Date:	: 5/3/07	<del>.</del>
Address	1335	Prather Po	<u> </u>		_
City, State, Zip	<u> Lexu</u>	ngton K.	7 4050	2	<u>.</u>
Phone number	859	361-925	[ [2]		-
Please take a few n with your comments	ninutes to fill or s. Thank you in	at the questionnaire advance for your as	and turn it in at sistance.	the meeting or n	nail it back
☐ Is comm☐ Is residen☐ Is a residen	ercial ntial lential area serv mercial develop l by me	ed by New Circle Roment served by New	ad		
I travel this portion  Multiple  Once A l Once A l Rarely	Times Daily Day	Road:			
☐ Tight Di	Configuration Doint Urban Inter amond Urban Ir loverleaf	change			
What do you see as	the transportation	on needs in the New	Circle Road Corr	ridor?	
☐ Safer Ro ☐ Reduce A	ffic Congestion adway Access Points Please Describe	Below			
				(Continue on l	oack)

Additional Comments Continued From Front)	
	<del>_</del>
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Fayette County
Questionnaire (*Please Print*)

	Name:	Lange 6	3/0000		Data	\$5/2/012	
	Address	10161	/140 PL		Date:	<u> </u>	
	Address	10( ( )	110				
City, S	tate, Zip	Lessets	n KY	40507	·		
Phone	number	<i>8</i> 59-3	258-36	5			
Please tak with your	e a few min comments.	nutes to fill out the Thank you in ad-	he questionna vance for you	ire and turn it rassistance.	in at th	e meeting or mai	l it back
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I travel thi		•	d:				
Which Inte	Single Poi	onfiguration Do y nt Urban Intercha nond Urban Intero overleaf	nge	7			
What do y	ou see as th	ne transportation n	needs in the No	ew Circle Road	d Corrid	or?	
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bike	+ pea	estral a	alls	will be	AL	nded	
Thro	noh 1	Kewtown	Elentin	Phareo	ati	Continue on ba	ek)
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(Additional Comments Continued From Front)
Please determine feasibility of trail
Please acterning feasibilts of trail Underpass at Steam Hibrah Lexmond perpet near Boardwork.
perset near Boardwalk.
P P S
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Fayette County
Questionnaire (*Please Print*)

Name: Murt Hulliger Date: 5-3-07
Address 620 Adcolor Rd
City, State, Zip Lex Ky 4051/
Phone number cell 859 806 3875 Plant 253 1046 (ask for Bob Kersey
Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.
The Property I'm most interested in: (Check as many as apply)  Is commercial  Is residential  Is a residential area served by New Circle Road  Is a commercial development served by New Circle Road  Is owned by me  Is leased
I travel this portion of New Circle Road:  ☐ Multiple Times Daily  ☐ Once A Day  ☐ Once A Week  ☐ Rarely
Which Interchange Configuration Do you Prefer:  ☐ Single Point Urban Interchange ☐ Tight Diamond Urban Interchange ☐ Partial Cloverleaf
What do you see as the transportation needs in the New Circle Road Corridor?
<ul> <li>Less Traffic Congestion</li> <li>Safer Roadway</li> <li>Reduce Access Points</li> <li>Other − Please Describe Below</li> </ul>
Our property Hulliger Kersey LLP, which is now Hulliper Kersey Mennes LLC
owns the land on both sides of Adolor Drive and presently there are
2 truck clocks, where trucks block the street when loading and unloads
There is a gate at the end of Adcolor Drive (Continue on back)

(Additional Comments Continued From Front)
which is locked every night.
Also, there are parking bots on both sides of the street
at both ends of the Advolor building, (Safety?)
When there are floodrains, the low point at the
creekbridge than tends to flood because the limited
capacity of the water pipe that goes under the
Mens Circle Rd.
He would be against opening Adolor Rd as a
through access frontage road to Newtown, since
that presents a safety problem already now / left
that presents a safety problem already now left to N. Newtown them into Lexmont Sand exit from Lexmark N. Newtown
and would be much worse.
Dur operation suffers from roaddust, when the
docks are used since our graphics operations one
very sensitive to air particulates
a bette alternative would be to connect to Kennichy Rd
Heat would also be more conducive to a light signal
away from the Cloverleaf
thoules Kent fulling

Please Drop this sheet off as you leave or mail within 15 days to: Robert Sturgeon, P.E.

Your answers will be given to the New Circle Road

KYTC District 7

Team for their use in evaluating the proposed improvements.

P.O. Box 11127

Lexington, Kentucky 40512

#### **SECTION 4**

**Meeting Summary** 

A public meeting was held on May 3, 2007 from 5pm – 7 pm at KYTC-District 7 office to display the alternatives currently being studied for the improvements to New Circle Road between Georgetown Road and Boardwalk/Colesbury Circle. The meeting also displayed the Georgetown Road Ramps Improvements, which are currently being finalized. Members from KY Transportation Cabinet, Consultants, and Local Government were in attendance to answer questions that the public may have had. Below is a summary of the questionnaire results.

The signed attendance at the meeting was 19 and there were 11 comments sheets received at the meeting.

#### **Summary of Questionnaire Results**

#### The Property I'm most interested in: (Check as many as apply)

- 8 Is Commercial
- 0 Is Residential
- 1 Is a residential area served by New Circle Road
- 3 Is owned by me
- 2 Is leased

#### I travel this portion of New Circle Road:

- 7 Multiple Times Daily
- 1 Once A Day
- 2 Once A Week
- 0 Rarely

#### Which Interchange Configuration Do you Prefer:

- 5 Single Point Urban Interchange
- 0 Tight Diamond Urban Interchange
- 3 Partial Cloverleaf

#### What do you see as the transportation needs in the New Circle Road Corridor?

- 5 Less Traffic Congestion
- 3 Safer Roadway
- 2 Reduce Access Points
- 1 Other

Needs bike and ped accommodations.

Please host a meeting to discuss how bike and ped access will be permitted through Newtown Interchange

#### Comments

- Less Accessibility for my business. Very difficult for trucks and trailers to maneuver, no access to New Circle Rd.
- When the Georgetown Rd on ramp enters the outer loop the rock bluff blocks visibility for mainline traffic seeing the entering traffic. The extension of this on ramp will help the situation for now, but when the extended ramp eventually becomes the third lane of the outer loop, the merge visibility will be back.
   Consider removing the rock nose, either with these improvements or with the next phase.
- Consideration needs to be given to insure that traffic does not backup and block the northern Lexmark Newtown ent/exit. It would appear that the SPUI would place the traffic signal the furthest form from the Lexmark exit so it should be the best at preventing this backup.
- Lexmark is interested in discussing the location of the New Circle Road overpass that connects Lexmark's North and South properties.
- Please host a meeting to discuss how bike and ped access will be permitted through Newtown Interchange.
- Please determine feasibility of trail underpass at stream through Lexmark property near Boardwalk.











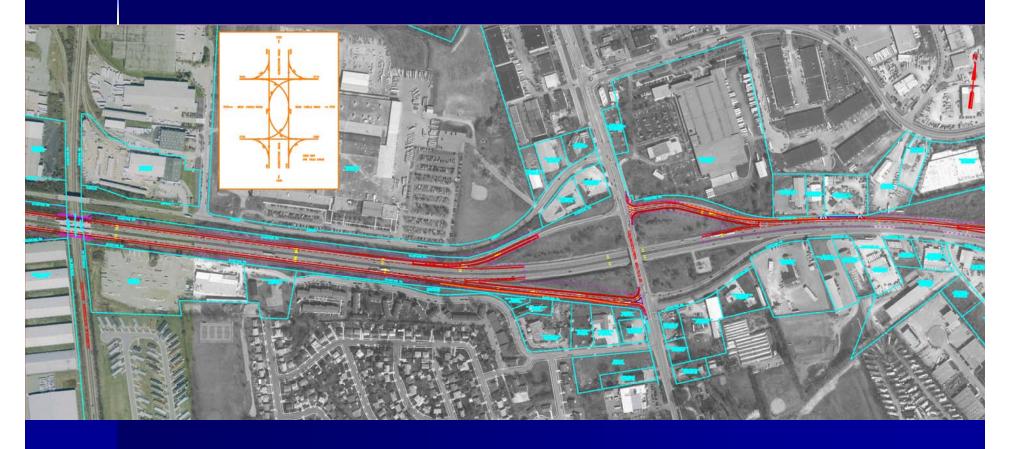






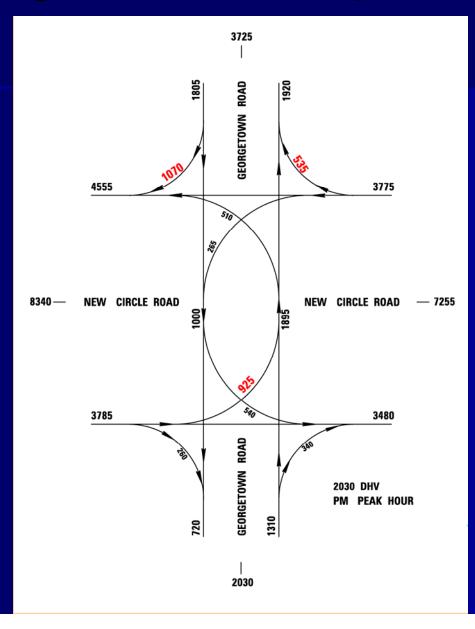


### Georgetown Ramps

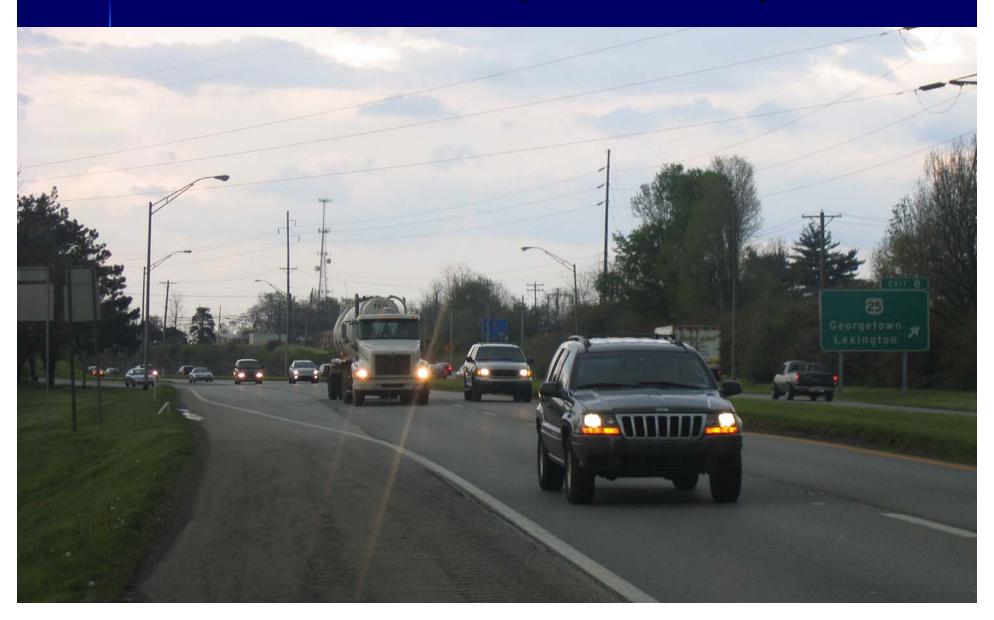


\* No Improvements along Georgetown Road

### Georgetown Ramps Traffic



### Outer Loop On-Ramp

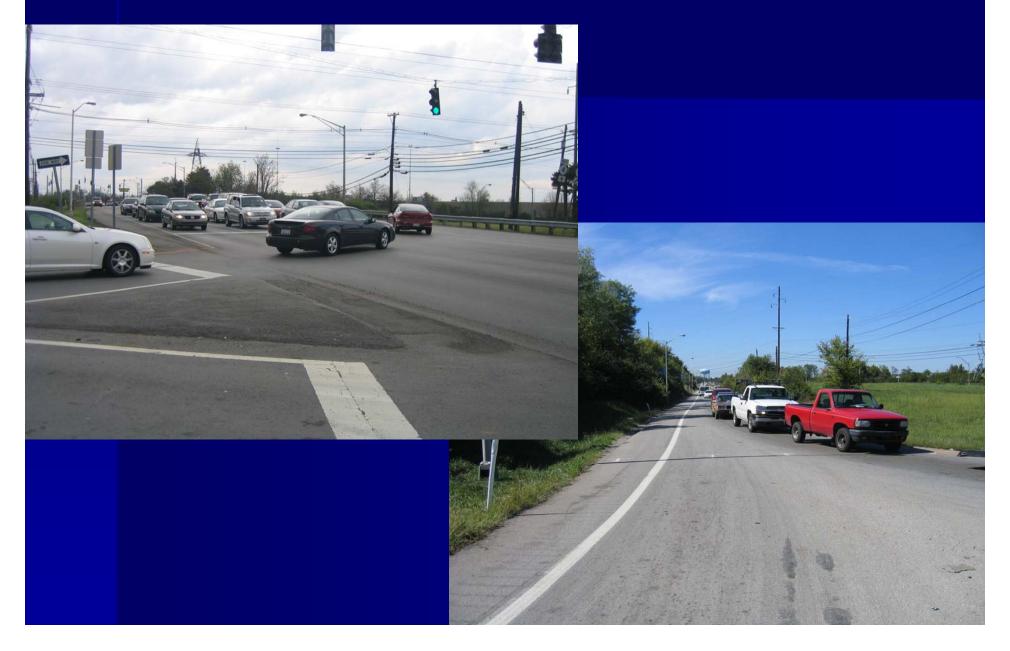


#### Outer Loop On-Ramp



 Extended Past Norfolk Southern Railroad

### Inner Loop Off-Ramp



### Inner Loop Off-Ramp



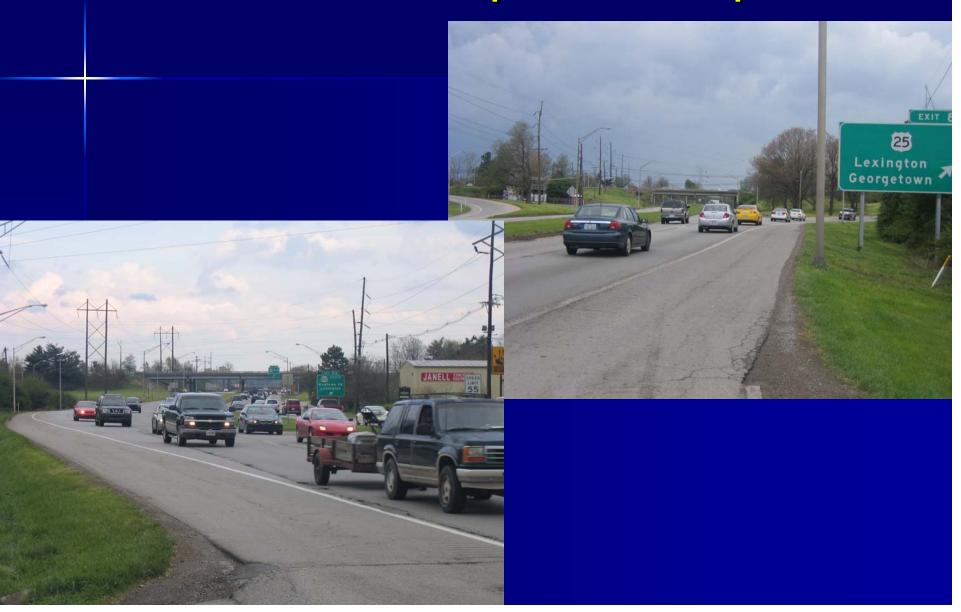
 Begins west of Norfolk Southern Railroad

#### Inner Loop Off-Ramp



 Two Lane Ramp with Additional Left Turn Lane at Georgetown Road

### Outer Loop Off-Ramp



### Outer Loop Off-Ramp



Auxiliary lane between Interchanges

### Outer Loop Off-Ramp



Choice Turn Lane at Georgetown

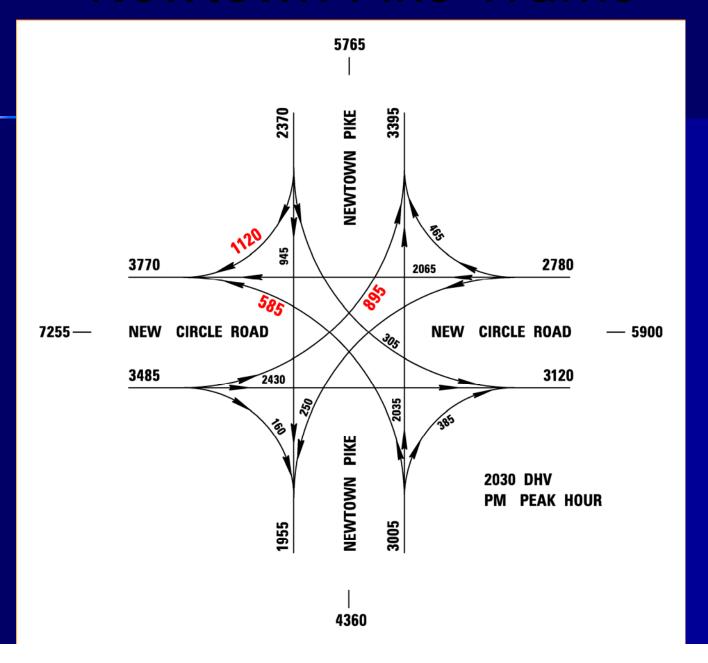
# Initial New Circle Road Improvements

- Pavement Overlay
- Closed Median between Interchanges
- Right-In/Right-Out to Businesses





#### Newtown Pike Traffic



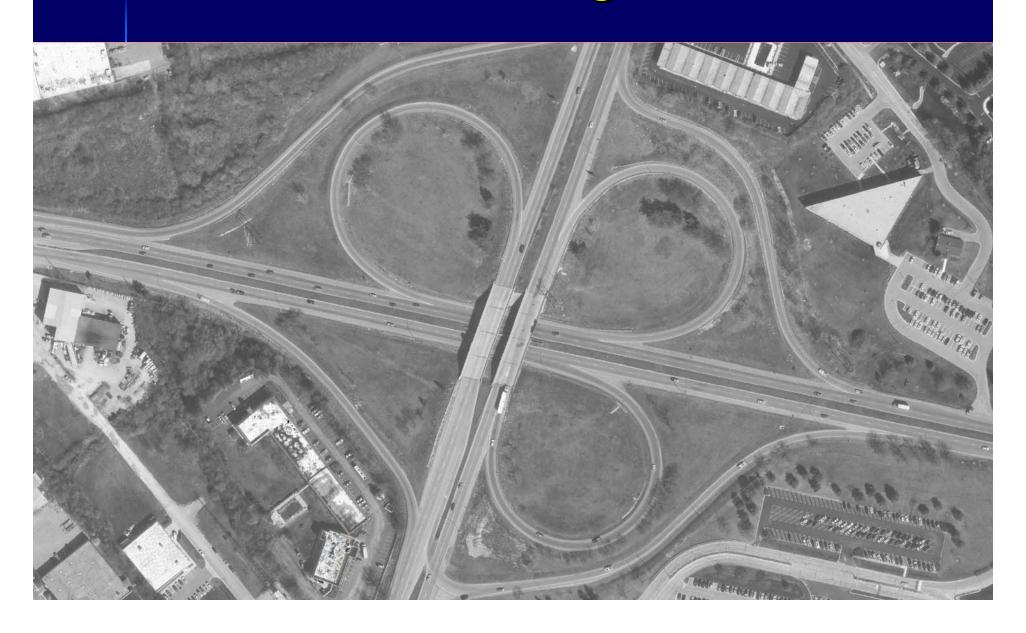
#### Newtown Pike Interchange

- Three Alternatives
- Single Point Urban Interchange (SPUI)

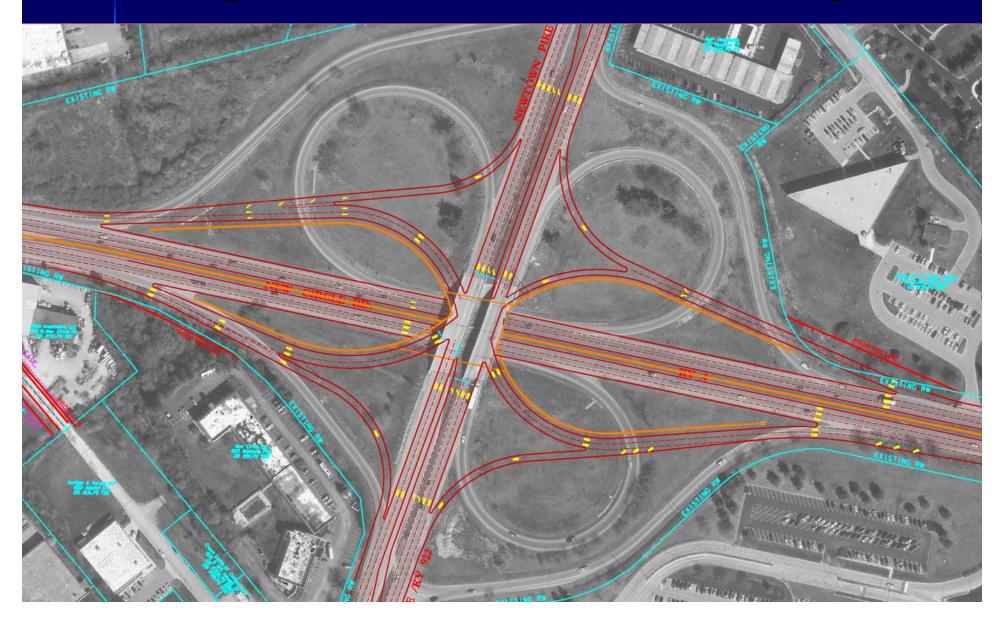


- Tight Urban Diamond Interchange (TUDI)
- Partial Cloverleaf

# **Current Configuration**



### Single Point Urban Interchange



### Tight Urban Diamond Interchange



### Partial Cloverleaf



#### **New Circle Road**

- Four Lanes to Georgetown Road
- Widen to Six Lanes from Georgetown to Boardwalk
- Auxiliary Lanes between Interchanges



# Two Lane Ramps



## Frontage Road Connecting Finney Dr. to Sturgill Road



## Frontage Road Connecting Businesses to Nandino Drive



## Why We Are Here

- Handouts
- Maps
- Questionnaire
- Traffic Simulations

New Circle Road (KY 4) Item Number 7-366.00 & 7-366.10 Fayette County Questionnaire (Please Print)

	Name: Date:	
	Address	
City, State, Zip		
Pho	ne number	
Please take a few minutes to fill out the questionnaire and turn it in at the meeting or r with your comments. Thank you in advance for your assistance.		mail it
The Prop	perty I'm most interested in: (Check as many as apply)	
	Is commercial	
	Is residential	
	Is a residential area served by New Circle Road	
	Is a commercial development served by New Circle Road	
	Is owned by me	
□ I travel tl	Is leased his portion of New Circle Road:	
	Once A Day	
□ □ Which In	Once A Week Rarely nterchange Configuration Do you Prefer:	
	Single Point Urban Interchange	
	Tight Diamond Urban Interchange	
	Current Configuration	
What do	you see as the transportation needs in the New Circle Road Corridor?	
	Less Traffic Congestion	
	Safer Roadway	
	Reduce Access Points	
	Other - Please Describe Below	
		_
	(Continue on b	ack













## SECTION 5

Responses to Comments

Robert Black Jr 2112 Langdon Ct Lexington, Ky 40514



To Robert Black Jr:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

We plan to move forward with constructing improvements to the ramps at the Georgetown Road interchange this year. Also by the end of 2007, we plan to make a final decision on the interchange design at Newtown Pike and start developing construction plans.

For further information or questions regarding this project contact:

Rev Edward Doss 340 Lima Drive Lexington, Ky 40511



To Rev Edward Doss:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

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For further information or questions regarding this project contact:

Mary Holcomb 808 Celia Lane Lexington, Ky 40505



To Mary Holcomb:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

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For further information or questions regarding this project contact:

Joesph Ohnheiser 1893 Barkley Rd Sadieville, Ky 40356



To Joesph Ohnheiser:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

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For further information or questions regarding this project contact:

Lee Roberts PO Box 815 Lexington, Ky 40588



To Lee Roberts:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

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For further information or questions regarding this project contact:

Cristen Creech PO Box 526 Nicholasville, Ky 40340



To Cristen Creech:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

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For further information or questions regarding this project contact:

Steve Davis 740 West New Circle Rd Lexington, Ky 40550



To Steve Davis:

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For further information or questions regarding this project contact:

Mike Hart 925 Georgetown Rd Lexington, Ky 40511



To Mike Hart:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

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For further information or questions regarding this project contact:

John Bryant 1335 Prather Rd Lexington, Ky 40502



To John Bryant:

The Kentucky Transportation Cabinet thanks you for your attendance and input at the recent New Circle Road Public Meeting. We appreciate your completion of the questionnaire/comment form, as we strive to develop a design that meets the traffic and safety needs associated with the highway and the concerns of the local community. This is a demanding task and your input will be used in our future decision making process.

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For further information or questions regarding this project contact:

Kenzie Gleeson 101 E Vine Street Lexington, Ky 40507



To Kenzie Gleeson:

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