

I. PRELIMINARY PROJECT INFORMATION			
County:	Jessamine/Woodford	Item No.:	7-80108.00
Route Number(s):*	KY 169	Road Name:	Pinckard Pike/Keene-Versailles Rd
Program No.:	1635601D	UPN:	FD04 057 0169 018-020 FD04 120 0169 000-004
Federal Project No.:	9031053	Type of Work:	SPOT IMPROVEMENT
2022 Highway Plan Project Description:			
IMPROVE KY-169 FROM NORTH OF CLEAR CREEK RD IN JESSAMINE COUNTY TO NORTH OF KY-1967 IN WOODFORD COUNTY (2020CCN)			
Beginning MP:	18.64 (Jessamine)	Ending MP:	3.54 (Woodford) Project Length: 4.081
In TIP:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Use PDP/CHAF to Verify Project Data	
State Class.:	<input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary	Route is on:	<input type="checkbox"/> NHS <input type="checkbox"/> NN <input type="checkbox"/> Ext Wt
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural Collector	Truck Class.:	A % Trucks: 7.38
MPO Area:	Lexington	Terrain:	Rolling
ADT (current):	2684 2021		
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial	Spacing: 	
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type): 		
Existing Bike Accommodations:	None	Ped:	<input type="checkbox"/> Sidewalk
Posted Speed:	<input checked="" type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input checked="" type="checkbox"/> 55 mph	<input type="checkbox"/> Other (Specify): 	
KYTC Guidelines Preliminarily Based on : 55 MPH Proposed Design Speed			
Roadway Data:	EXISTING	COMMON GEOMETRIC PRACTICES**	Existing Rdwy. Plans available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Year of Plans: 1988 <input checked="" type="checkbox"/> Traffic Forecast Requested Date Requested: 7/27/2023 <input type="checkbox"/> Mapping/Survey Requested Date Requested: Type:
No. of Lanes	2	2 Lanes	
Lane Width	9'	11'	
Shoulder Width	2'	6'	
Max. Superelevation***	5.97%	8%	
Minimum Radius***	636	960	
Maximum Grade	10%	7%	
Minimum Sight Dist.	312	495	
Sidewalk Width(urban)	n/a	n/a	
Clear-zone [†]			
Project Notes/Design Exceptions?		Common Practices from 2011 AASHTO Green Book (Rural Collector)	
Bridge No.:#	120B00036N	120B00037N	Existing Geotech Data Available? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Detour Length(s): 11.20, 9.9
Sufficiency Rating	67.4	94.8	
Total Length	30	23	
Width, curb to curb	30.3	n/a	
Span Lengths	28	23	
Year Built	1989	1989	
Posted Weight Limit	None	None	
Structurally Deficient?	Not Deficient	Not Deficient	
Functionally Obsolete?	0	0	
Existing Bridge Type	Pre-Cast Concrete Girders	Concrete Box Culvert	
*If more than one road is included in the project, include additional sheets. **Based on proposed Design Speed ***AASHTO's A Policy on Geometric Design of Highways and Streets †AASHTO's Roadside Design Guide ‡If more than two bridges are located on the project, include additional sheets.			

II. PROJECT PURPOSE AND NEED

A. Legislation

This project first appeared in 2020 enacted highway plan with the item number 7-80108.000 with all phases programmed as SPP. Design phase is currently authorized with the right of way phase within the biennium.	<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
	SPP	D	2023	\$1,350,000
	SPP	R	2024	\$4,900,000
	SPP	U	2025	\$4,950,000
	SPP	C	2026	\$15,000,000

Project stakeholders include State and Local Officials, along with the Woodford and Jessamine County Fiscal Courts. 7-80108.00 is on the highway plan to improve the safety and connectivity between Woodford County and Jessamine County.

B. Project Status

Design funding is authorized under Item #: 7-80108.00 on March 28, 2023. TC-10 Authorization No. 16356 provided through SPP funding. The original project was introduced in previous LAMPO MTPs as a spot improvement project extending from US 68 to the county line, but has never ranked well on the unscheduled needs listing. A new description was identified in SHIFT 2017 as "Reconstruct KY 169 from 0.54mi N of Clear Creek Rd in Jessamine County to 0.879mi N of KY 1967 in Woodford County." The project made the 2017 Enacted Highway Plan under Item # 7-440.00 and was reintroduced in the 2020 Enacted Highway Plan as a legislative add-in, Item # 7-80108.00. In SHIFT 2022, the project was sponsored by the Bluegrass Area Development District and received a score of 37.7. It has been sponsored and scored once again in SHIFT 2024. A portion of KY 169 near Eckert's Orchard was completed in 2014, which included cross-section and horizontal and vertical geometric improvements around the farm entrance.

C. System Linkage

The State Primary Routes in Woodford County are the Bluegrass Parkway, US 60, US 421 and I-64, and the State Primary Routes in Jessamine County are US 27 and US 68. KY 169 is classified as part of the State Secondary Road System. It connects KY 33 from Woodford County, continues through Jessamine County, and into Madison County. This project targets a portion of KY 169 between Jessamine and Woodford counties. This portion of KY 169 is classified as a Rural Major Collector and acts as a connection between Nicholasville and Versailles.

D. Modal Interrelationships

On this segment of KY 169, there are no interaction with existing or planned railways, scheduled routine city bus service, bike/ped facilities, or water ports. The project's primary objective is to establish a safe and efficient route between Woodford and Jessamine County. In the 2018 Woodford County Comprehensive Plan, the vicinity is outside the urban service boundary (USB) and identified as the Rural Service Area (RSA). The adoption of the USB, made about 50 years ago, is a planning strategy designed to protect rural areas and farms from intrusion of urban uses. The emphasis in future land use in this area is based on "preservation of the rural character" and "channeling small scale growth in the Small Outlying Communities." Although the Jessamine County portion of KY 169 was identified in a conceptual greenway/trail plan in the 2017 Jessamine County Joint Comprehensive Plan, a more recent Bicycle/Pedestrian Master Plan, produced by the Lexington area MPO, narrowed the scope down from downtown Nicholasville to US 68. Currently, there are no plans for multi-modal interconnectivity in the vicinity of the project.

E. Social Demands & Economic Development

The most recent census data shows Jessamine County at about 49,112 residents and Woodford County at about 24,939 residents Overall, 66% of residents in Jessamine County are in the labor force with more than half (52%) of those working outside the county. Almost all (92%) of Jessamine County commuters drive personal vehicles to work. In Woodford County, about 49.1% of residents are in the labor force and, just like in Jessamine, over half (55%) of their labor force work in neighboring counties. It was noted that this may be a reflection of the County's physical location between two major employment centers (Lexington and Frankfort). The major industries in Jessamine County include educational/healthcare and social services while those in Woodford revolve around agricultural, manufacturing, and retail. The area along this corridor is predominately agricultural with a few residential lots subdivided from farms.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

Recent traffic counts on KY 169 show an AADT of 2,684 in Jessamine County and 2,993 in Woodford County with approximately 7.38% of it being truck traffic. Historic counts from two count stations on this section of KY 169 have indicated an average increase in traffic of about 2.20% per year from 2011 to 2017. A moderate increase in traffic demand is anticipated on this corridor mainly due to the population growth and those who are in the work force commuting from Jessamine County. According to the Future Land Use Maps in both counties, this area is identified as agricultural with no significant development planned along this corridor. Some of the traffic generators on this corridor include a Montessori School that serves kindergarten through 6th grade and Eckert's Orchard, an agritourism site both located in Woodford County.

G. Capacity

Currently, there are no capacity issues along this corridor with the most recent traffic counts showing an AADT of 2,993 with a truck percentage of 7.38% and a peak factor of 8.50. Based on the most recent traffic count done in 2020, KY 169 has seen a dip in the AADT likely due to the pandemic. A more recent count has yet to be completed post pandemic, however it is unlikely that a traffic forecast will show a lack of roadway capacity. The truck weight classification for the entire portion of KY 169 within the project limits in Woodford and Jessamine counties is A (44,000 lbs limit).

H. Safety

The Jessamine County portion of KY 169, according to the Kentucky State Police collision data, had 12 collisions between 2017 and 2021. There were 2 collision with injuries, 1 with fatalities, 9 collisions with property damage, 3 collisions involving a commercial vehicle. According to CDAT, the Jessamine County portion had an Excess Expected Crash frequency (EEC) of 9.6 and a LOSS of 4.

The Woodford County portion of KY 169, according to the Kentucky State Police collision data, had 68 collisions between 2017 and 2021. There were 11 collision with injuries, 0 with fatalities, 57 collisions with property damage, 2 collisions involving a commercial vehicles. According to CDAT, the Woodford County portion had an EEC of 61.2 and a LOSS of 4. One of the more critical intersections in Woodford County is the northern intersection with Delaney Ferry Ext. (CR 1108) which had an EEC of 2.573.

Exhibits, at the end of this study, include maps generated from the KSP public collision data search showing the collision location and severity.

I. Roadway Deficiencies

On KY 169, there exists some horizontal curve and clear zone issues. The most prevalent and severe roadway deficiencies includes the narrow roadway width, narrow or lack of shoulder width, steep drop offs, and sight distance deficiencies due to the road curvature. The Common Geometric Practice for a 55 MPH design speed on a Major Rural Collector consists of 11' lanes with 6' shoulders. Due to the expensive impacts that such a wide typical would have on the portion of KY 169, a design exception/variance may be recommended in the design process to better fit the context and match driver expectancy for the corridor.

This portion of KY 169 has had some improvements made from two smaller Six Year Highway Plan projects. A portion of KY 169 along Eckert's Orchard was completed in 2014 which included improvements to the roadway cross section and curvature to provide adequate sight distance from the entrance approaches. Another project completed in 2003 included modifying the intersection at KY 33 by realigning KY 169 such that it intersects KY 33 perpendicularly eliminating the previous "Y" intersection. Much of the roadway surface has been resurfaced 2007 and based on the IRI Index, is in relatively fair to good condition.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW	
A. Air Quality	Project is in: <input checked="" type="checkbox"/> Attainment area <input type="checkbox"/> Nonattainment or Maintenance Area <input type="checkbox"/> PM 2.5 County STIP Pg.#: FY 21-24 Exhibit A-5 C.pg. TIP Pg.#: FY 21-24 pg. 36
No air quality impacts anticipated.	
B. Archeology/Historic Resources	<input checked="" type="checkbox"/> Known Archeological or Historic Resources are present Archaeological and historical resources are present in the project area (Hughes House, John Lancaster House, stone walls, ect.). Surveys will be required.
C. Threatened and Endangered Species	Shorts Bladderpod, Monarch Butterfly, Longsolid Clam, Gray Bat, Indiana Bat, and Northern Long-eared Bat are the T&E species listed for this location. Potential impacts to bats will need to be addressed. No effect for all other species.
D. Hazardous Materials	<input type="checkbox"/> Potentially Contaminated Sites are present <input checked="" type="checkbox"/> Potential Bridge or Structure Demolition Bridge/culvert (29 ft) potentially impacted.
E. Permitting	Check all that may apply: <input checked="" type="checkbox"/> Waters of the US <input type="checkbox"/> MS4 area <input type="checkbox"/> Floodplain Impacts <input type="checkbox"/> Navigable Waters of the US Impacts Are 401/404 Permits likely to be required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Impacts to: <input type="checkbox"/> Wetlands <input checked="" type="checkbox"/> Stream/Lake/Pond <input type="checkbox"/> ACE LON <input checked="" type="checkbox"/> ACE NW <input type="checkbox"/> ACE IP <input type="checkbox"/> DOW IWQC <input type="checkbox"/> Special Use Waters
Minor stream impacts anticipated (BNR).	
F. Noise	Are existing or planned noise sensitive receptors adjacent to the proposed project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is this considered a "Type I Project" according to KYTC Noise Analysis and Abatement Policy? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
No noise impacts anticipated.	
G. Socioeconomic	Check all that may apply: <input type="checkbox"/> Low Income/Minority Populations <input type="checkbox"/> Relocations <input checked="" type="checkbox"/> Local Land Use Plan available Relocations not anticipated.
H. Section 4(f) or 6(f) Resources	The following are present on the project: <input checked="" type="checkbox"/> Section 4(f) Resources <input type="checkbox"/> Section 6(f) Resources Potential impacts may occur to (4)f resources located in project area.
Anticipated Environmental Document: None (Completely State funded) ▼	

IV. PROJECT NEED, PURPOSE & SCOPE
<p>A. Need:</p> <p>This section of KY 169 is functionally classified as a Rural Major Collector connecting Nicholasville and Versailles. Currently, the facility consists of narrow lanes and portions with little to no shoulders and inadequate sight distance in spots. Based on a collision analysis from the Kentucky State Police Collision Analysis Tool in both counties, from 2017 to 2021, there were a combined 80 collisions resulting in a total of 2 fatalities, 13 injuries, and 66 counts of property damage. Five of the collisions involved commercial vehicles. The Woodford County portion of this project has seen the majority of the reported collisions and has a tabulated EEC of 61.2 and an LOSS rating of 4.</p>
<p>B. Purpose:</p> <p>The purpose of this project is to improve the safety and driver expectation through consistent geometric design parameters, based on design and target speed, on KY 169 from .28 miles west of the Clear Creek Road in Jessamine County to .08 miles east of the Clear Creek crossing in Woodford County while minimizing the impacts to the surrounding environment.</p>
<p>C. Scope:</p> <p>KY 169 provides a connection between Nicholasville and Versailles and is one of a few corridors from Nicholasville that connects to the Bluegrass Parkway in Woodford County. This section of KY 169 has seen several collisions over a 5 year period between 2017 and 2021. The majority of the collisions occur on the Woodford County side, however one collision in Jessamine County involved a fatality. The scope of the project is to examine and implement solutions that will have a positive impact to the level of safety and driver expectancy to KY 169 between MP 18.64 in Jessamine County and MP 3.54 in Woodford County.</p>

V. PROJECT ESTIMATE & METHODOLOGY															
Estimate Methodology:	Current Estimate														
<p>These estimates are from the 2022 Enacted Highway Plan which is derived from Planning level estimates and escalated based on the fiscal year listed. Design and right of way phases are in the current biennium.</p>	<table border="1"> <thead> <tr> <th style="text-align: left;"><u>Phase</u></th> <th style="text-align: center;"><u>Estimate</u></th> </tr> </thead> <tbody> <tr> <td>Planning</td> <td></td> </tr> <tr> <td>Design</td> <td style="text-align: right;">(2023) \$910,000</td> </tr> <tr> <td>R/W</td> <td style="text-align: right;">(2024) \$2,020,000</td> </tr> <tr> <td>Utilities</td> <td style="text-align: right;">(2025) \$2,630,000</td> </tr> <tr> <td>Const</td> <td style="text-align: right;">(2026) \$13,220,000</td> </tr> <tr> <td>Total</td> <td style="text-align: right;">\$18,780,000</td> </tr> </tbody> </table>	<u>Phase</u>	<u>Estimate</u>	Planning		Design	(2023) \$910,000	R/W	(2024) \$2,020,000	Utilities	(2025) \$2,630,000	Const	(2026) \$13,220,000	Total	\$18,780,000
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	Const	(2026) \$13,220,000													
Total	\$18,780,000														

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

Company Name -	South Woodford Water District
Contact -	Dale Gatewood, office@southwoodfordwater.com
Address -	117 Crossfield Drive Versailles KY, 40383
Phone No. -	502-395-0108
Company Name -	Jessamine South Elkhorn Water District
Contact -	Richard Decker, richarddecker@gmail.com
Address -	802 South Main Street Nicholasville KY, 40356
Phone No. -	859-881-0589
Company Name -	Kentucky Utilities Distribution Operations
Contact -	Tyler Skaggs, Tyler.Skaggs2@lge-ku.com
Address -	500 Stone Road Lexington KY, 40503
Phone No. -	(859) 367-4217
Company Name -	Blue Grass Energy
Contact -	Tony Smith, tonys@bgenergy.com
Address -	PO Box 990 Nicholasville KY, 40340
Phone No. -	(859) 885-2134
Company Name -	Columbia Gas
Contact -	Andrew P Weber, aweber@nisource.com
Address -	2001 Mercer rd, Lexington KY 40511
Phone No. -	859-227-6424
Company Name -	Windstream
Contact -	Steve Johnson, steve.johnson@windstream.com
Address -	130 W New Circle Road, Lexington KY 40515
Phone No. -	859-357-6209

EXHIBIT 1: PHOTOS OF KY 169

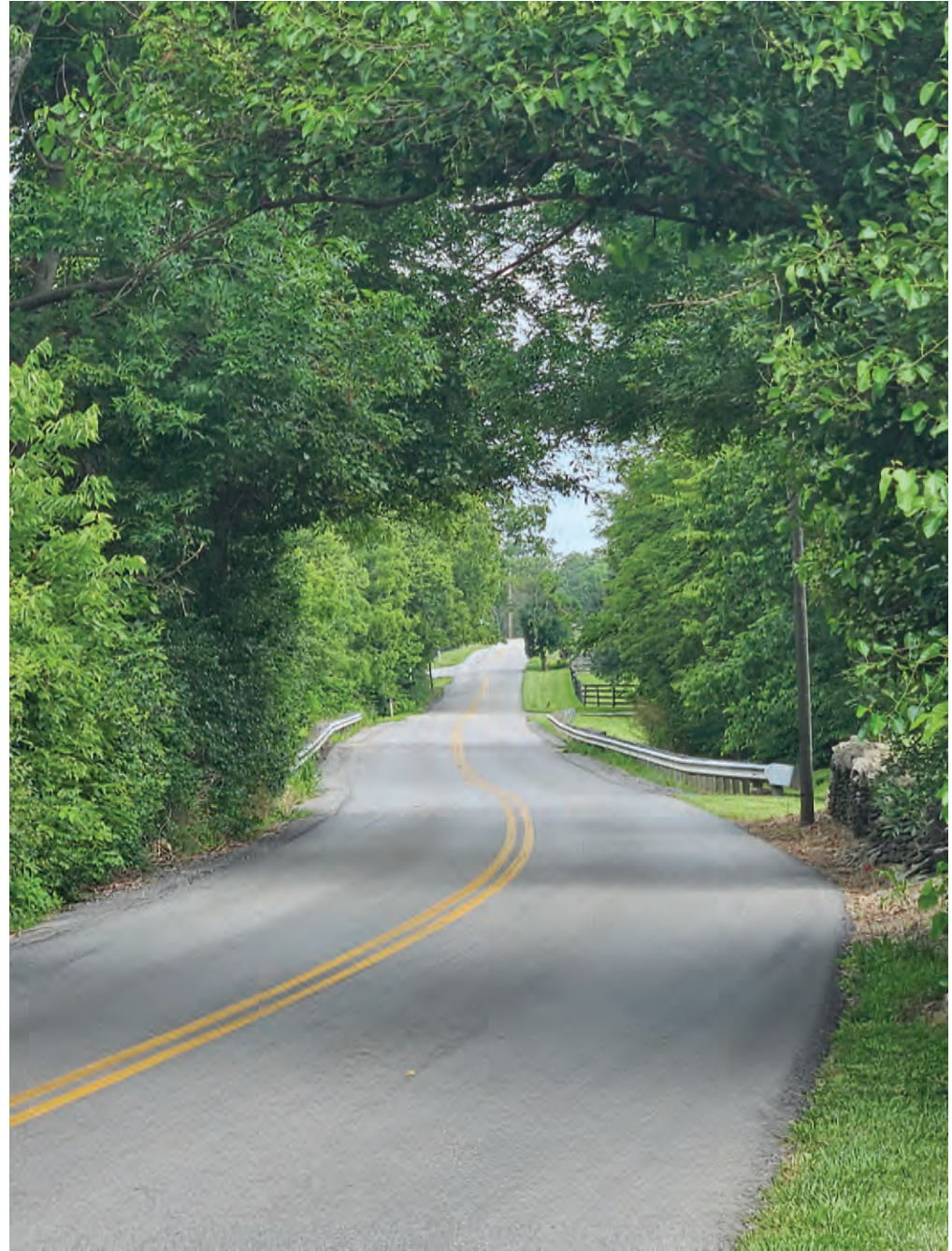
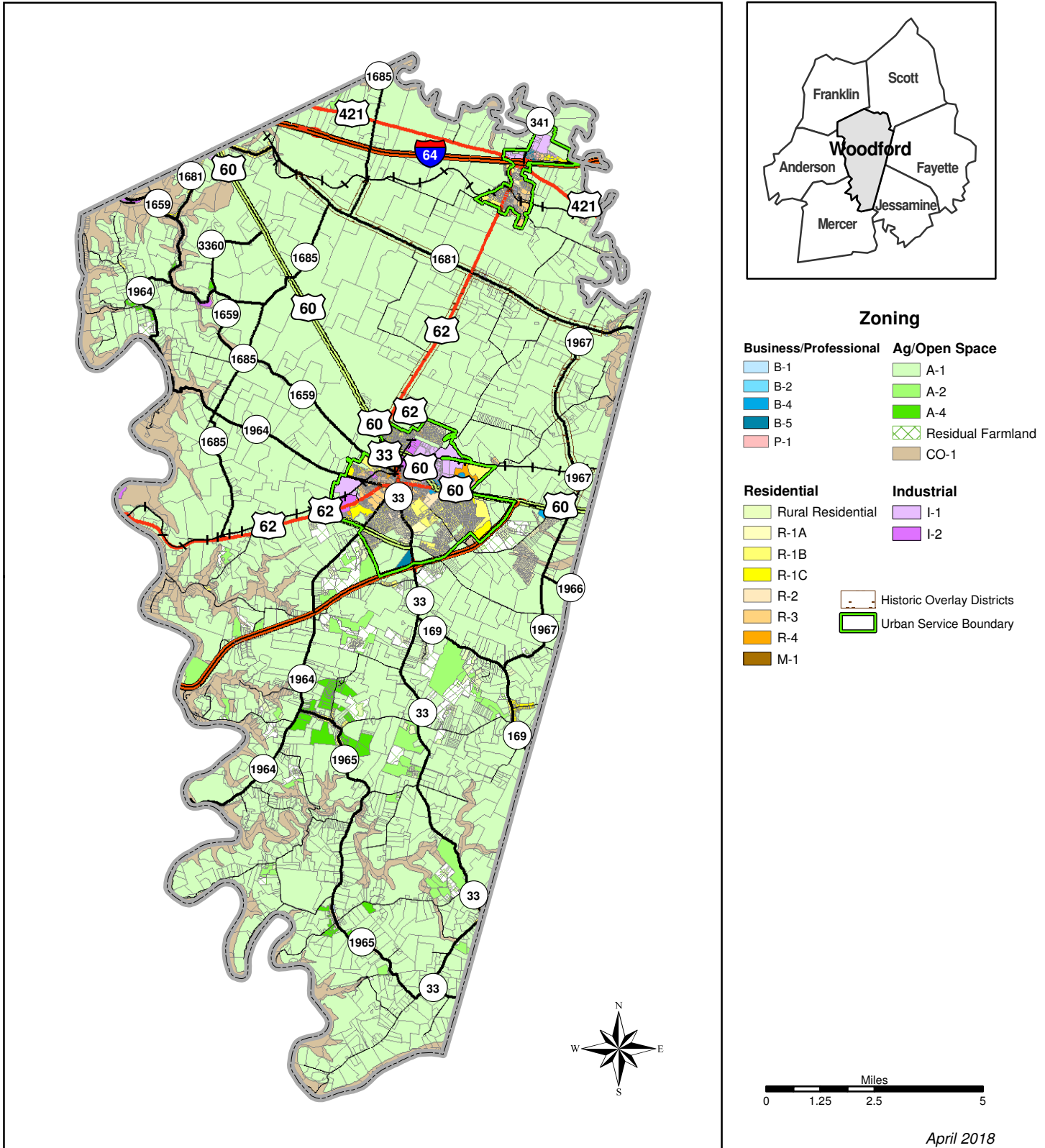


EXHIBIT 1: PHOTOS OF KY 169



EXHIBIT 2: WOODFORD ZONING MAP

Figure 22
Woodford County: Zoning



RURAL SERVICE AREA - LAND USE DISTRICTS

FIGURE 25

2018 COMPREHENSIVE PLAN UPDATE
VERSAILLES MIDWAY WOODFORD COUNTY

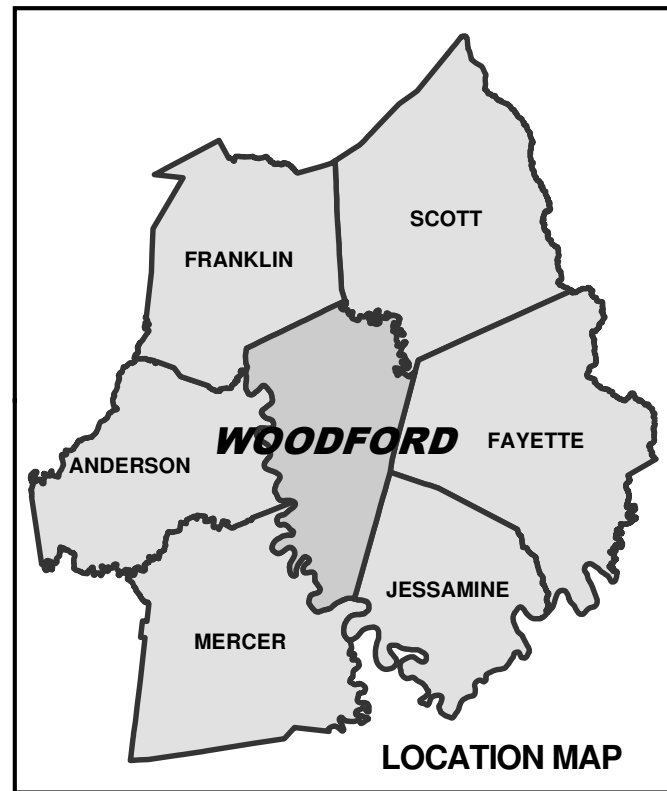
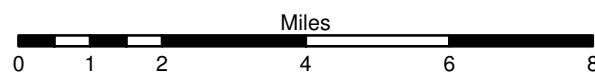
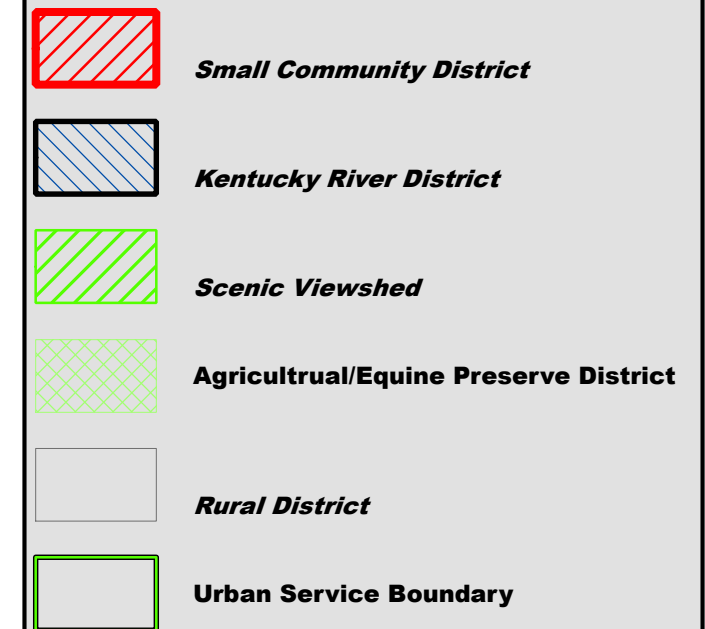
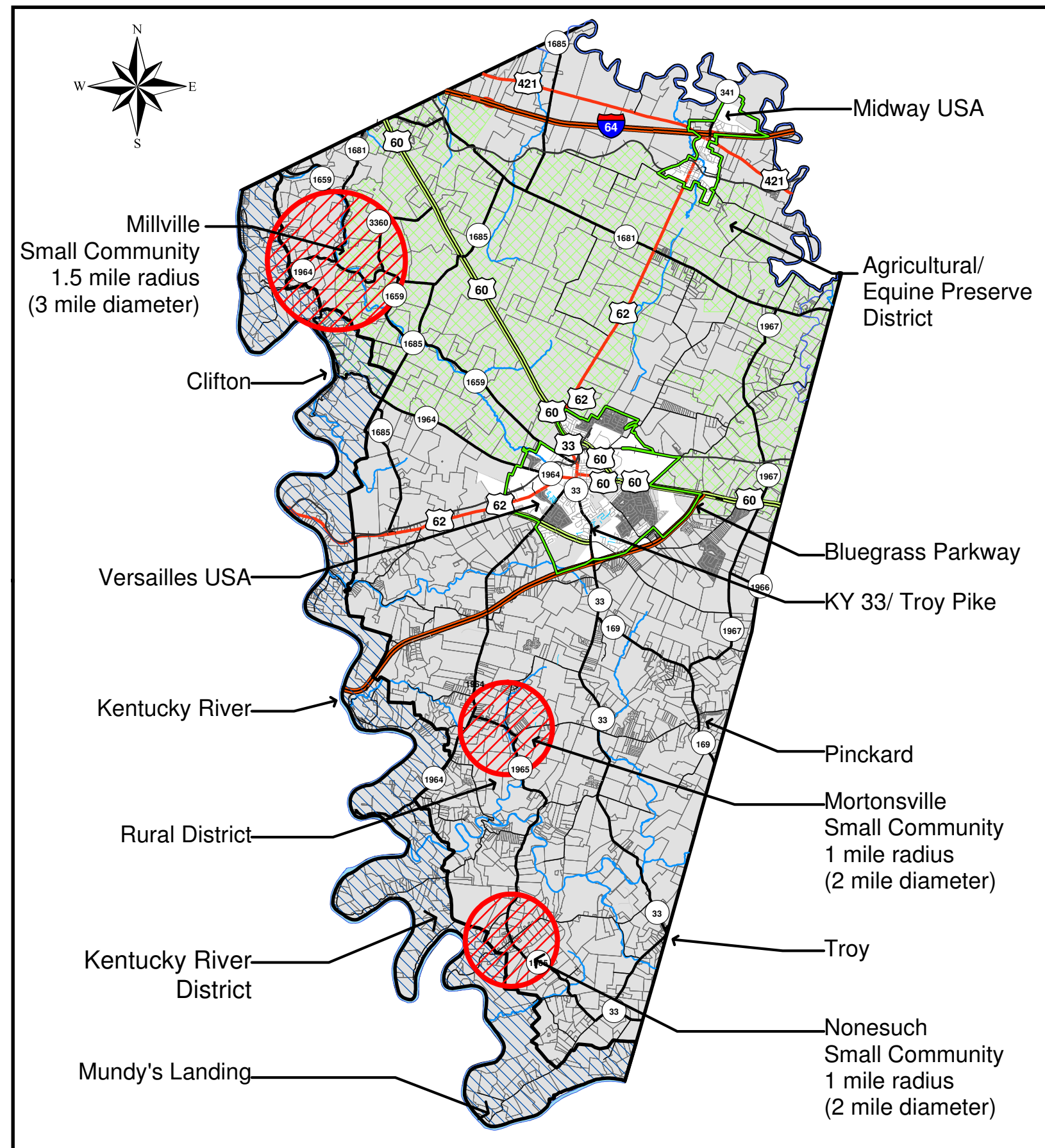
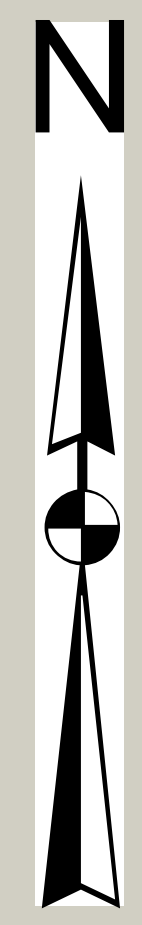


EXHIBIT 3:
WOODFORD COUNTY
LAND USE DISTRICTS

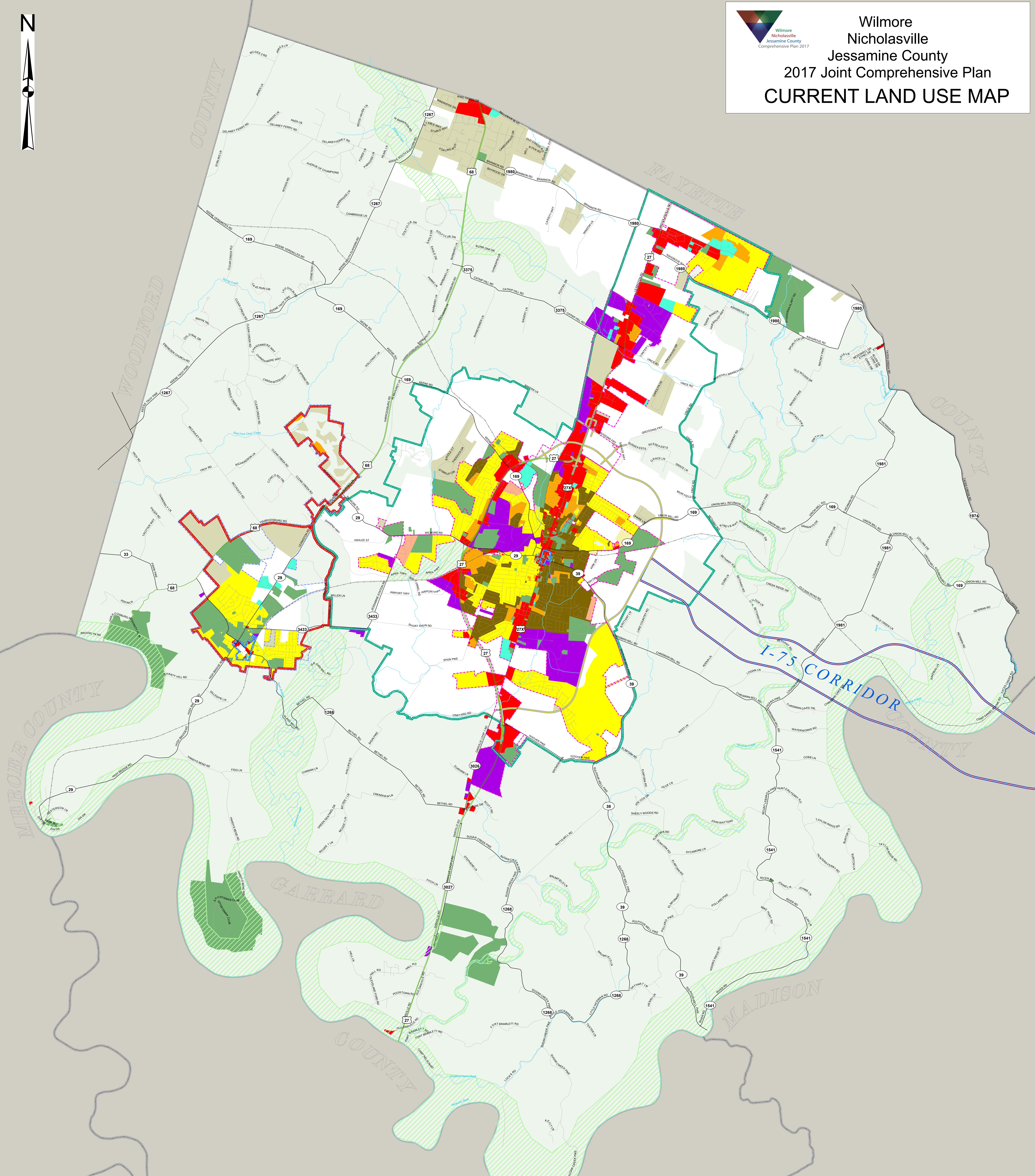


Maps Prepared by
Versailles Midway Woodford County P & Z
GIS

NOTE: The boundaries of the Land Use Districts depicted on this map are for illustration only. The determination of the appropriate district policies will be made by the Planning Commission or Planning Director on a case-by-case basis.



Wilmore
Nicholasville
Jessamine County
2017 Joint Comprehensive Plan
CURRENT LAND USE MAP

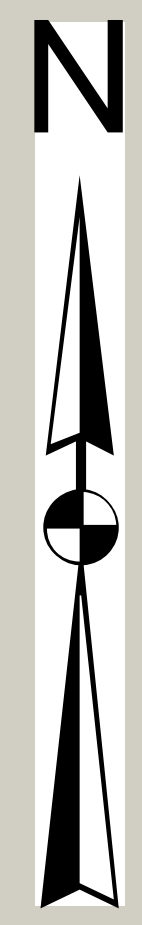


LIMITATION OF LIABILITY: The City of Nicholasville, City of Wilmore, and Jessamine County Governments have no reason to believe that there are any inaccuracies or defects in information incorporated in this work, but they make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information of data furnished herein.

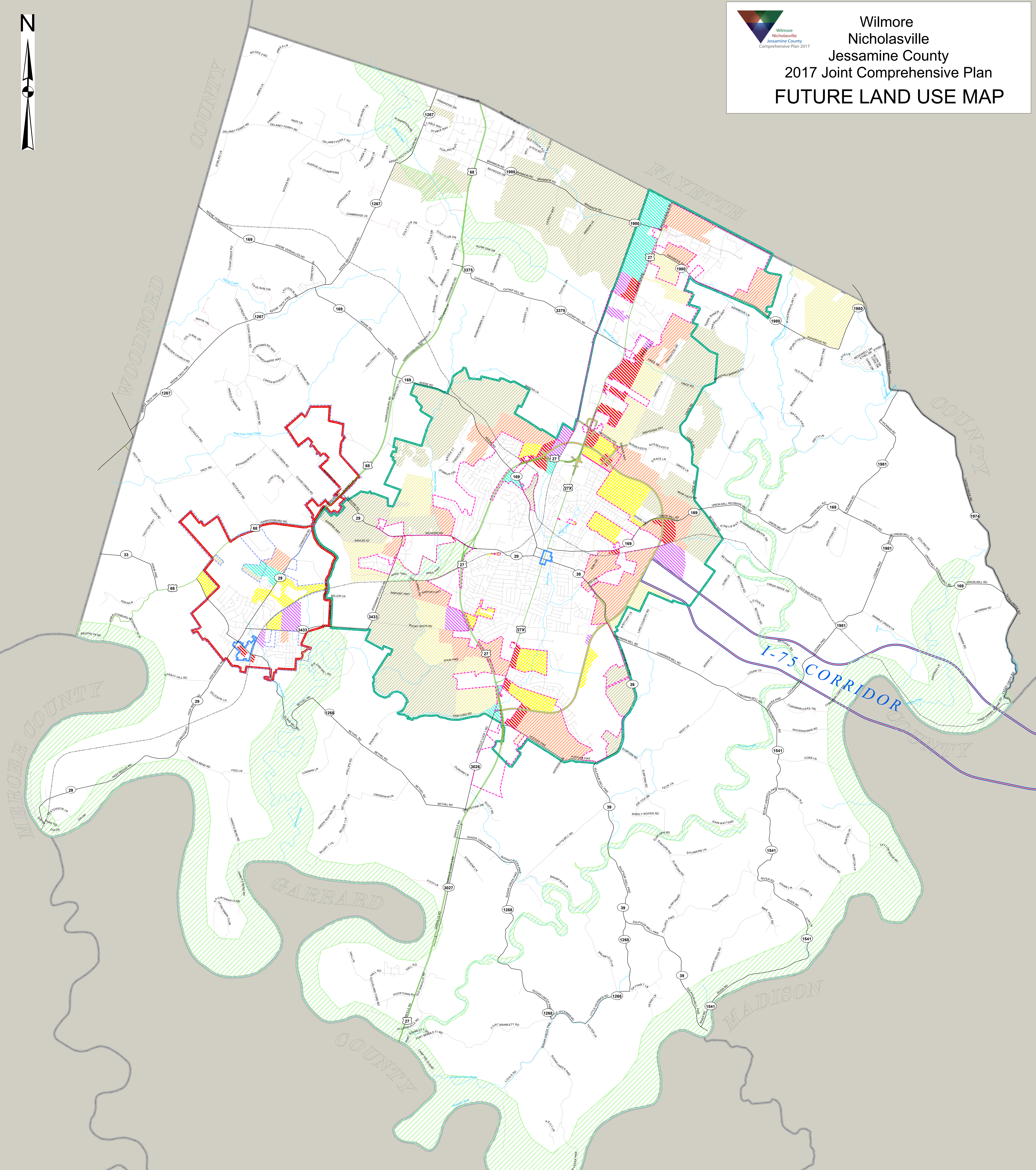
EXHIBIT 4: JESSAMINE COUNTY CURRENT LAND USE MAP



Very Low Residential	High Duplex Residential	Professional Office	See Future Land Use Map	Local Road	Future Eastern By-Pass
Low Residential	Very High Residential	Public/Semi-Public/Institutional	City of Nicholasville	Private Road	I-75 Connector Corridor
Medium Residential	Commercial	Agriculture	City of Wilmore	KY Highway	Streams
High Residential	Industrial	Conservation	Nicholasville Urban Service Boundary	US Highway	Downtown Business District
			Wilmore Urban Service Boundary	Railroad	



Wilmore
Nicholasville
Jessamine County
2017 Joint Comprehensive Plan
FUTURE LAND USE MAP



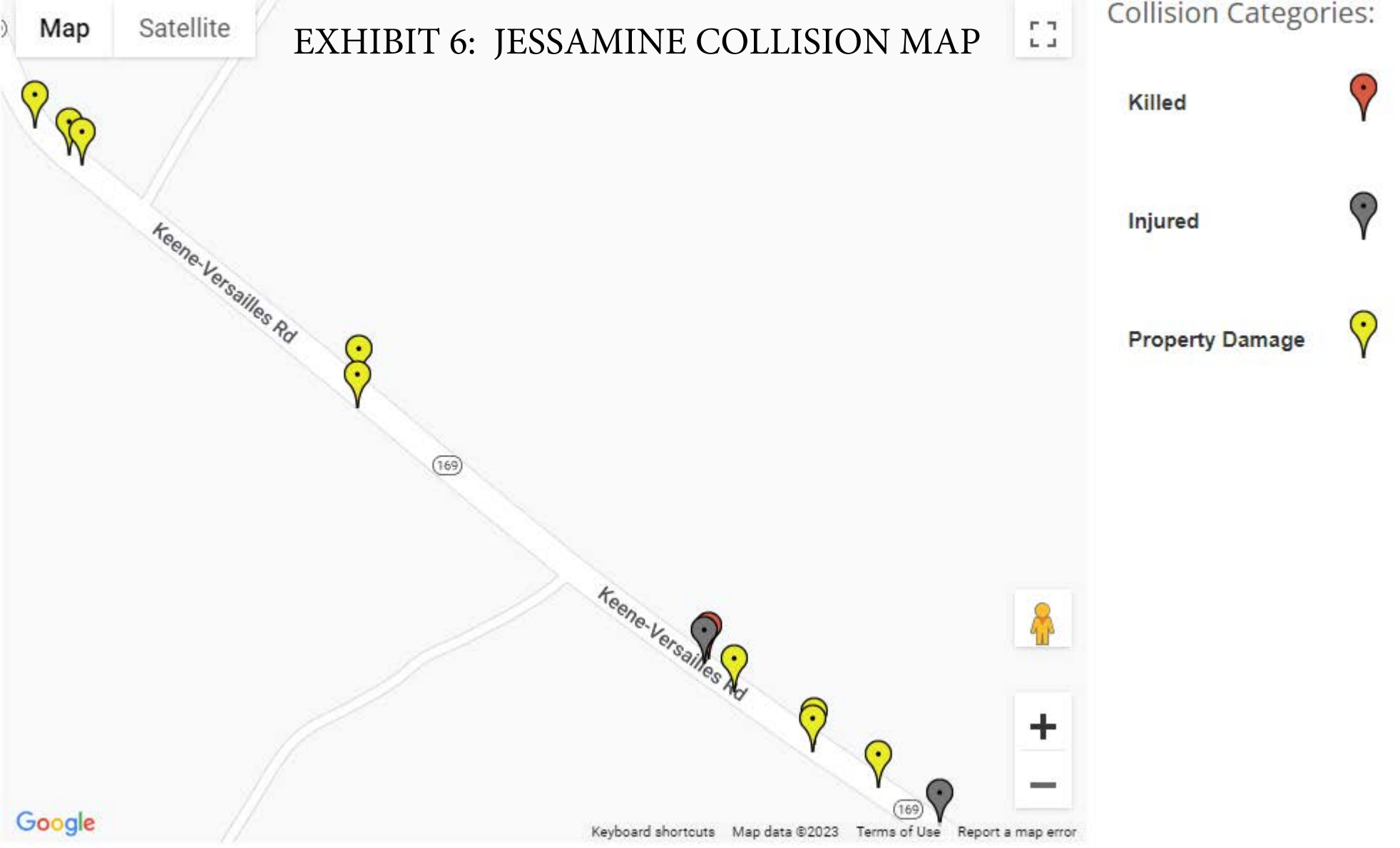
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EXHIBIT 5: JESSAMINE COUNTY FUTURE LAND USE MAP



- | | | | | |
|--------------------------------|----------------------------|--------------------------------------|--------------|----------------------------|
| Future Very Low Residential | Future Commercial | City of Nicholasville | Local Road | Future Eastern By-Pass |
| Future Low Residential | Future Industrial | City of Wilmore | Private Road | I-75 Connector Corridor |
| Future Medium Residential | Future Professional Office | Nicholasville Urban Service Boundary | KY Highway | Streams |
| Future High Residential | Conservation | Wilmore Urban Service Boundary | US Highway | Downtown Business District |
| Future High Duplex Residential | See Current Land Use Map | | Railroad | |

EXHIBIT 6: JESSAMINE COLLISION MAP



Collision Categories:

Killed



Injured



Property Damage



Map

Satellite

EXHIBIT 7: WOODFORD COLLISION MAP

Collision Categories:

Injured



Property Damage

