



# I 69 Update – Kentucky

**Gary Valentine, P.E.**

Executive Advisor

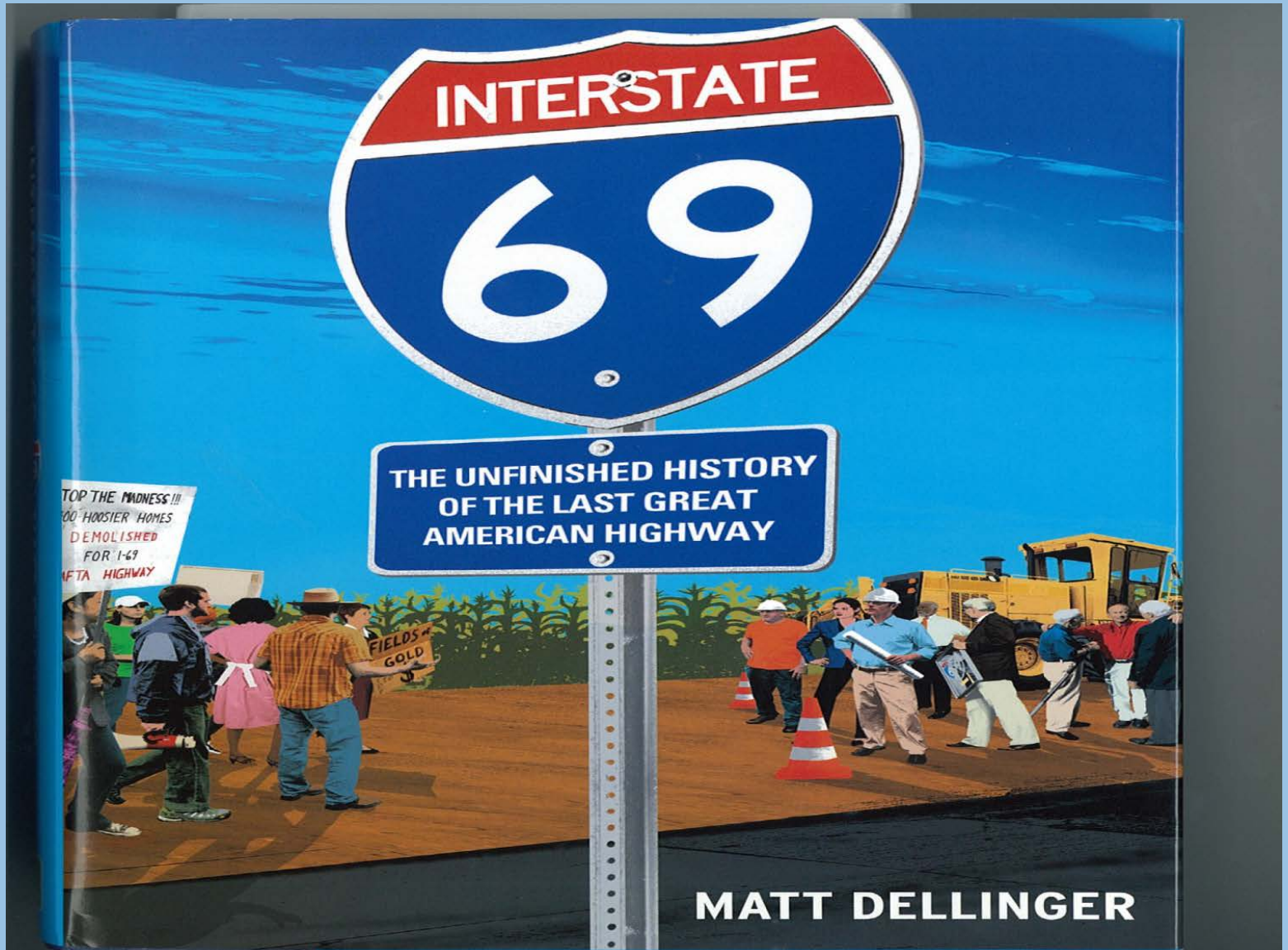
State Highway Engineer's Office



# Mexico to Canada



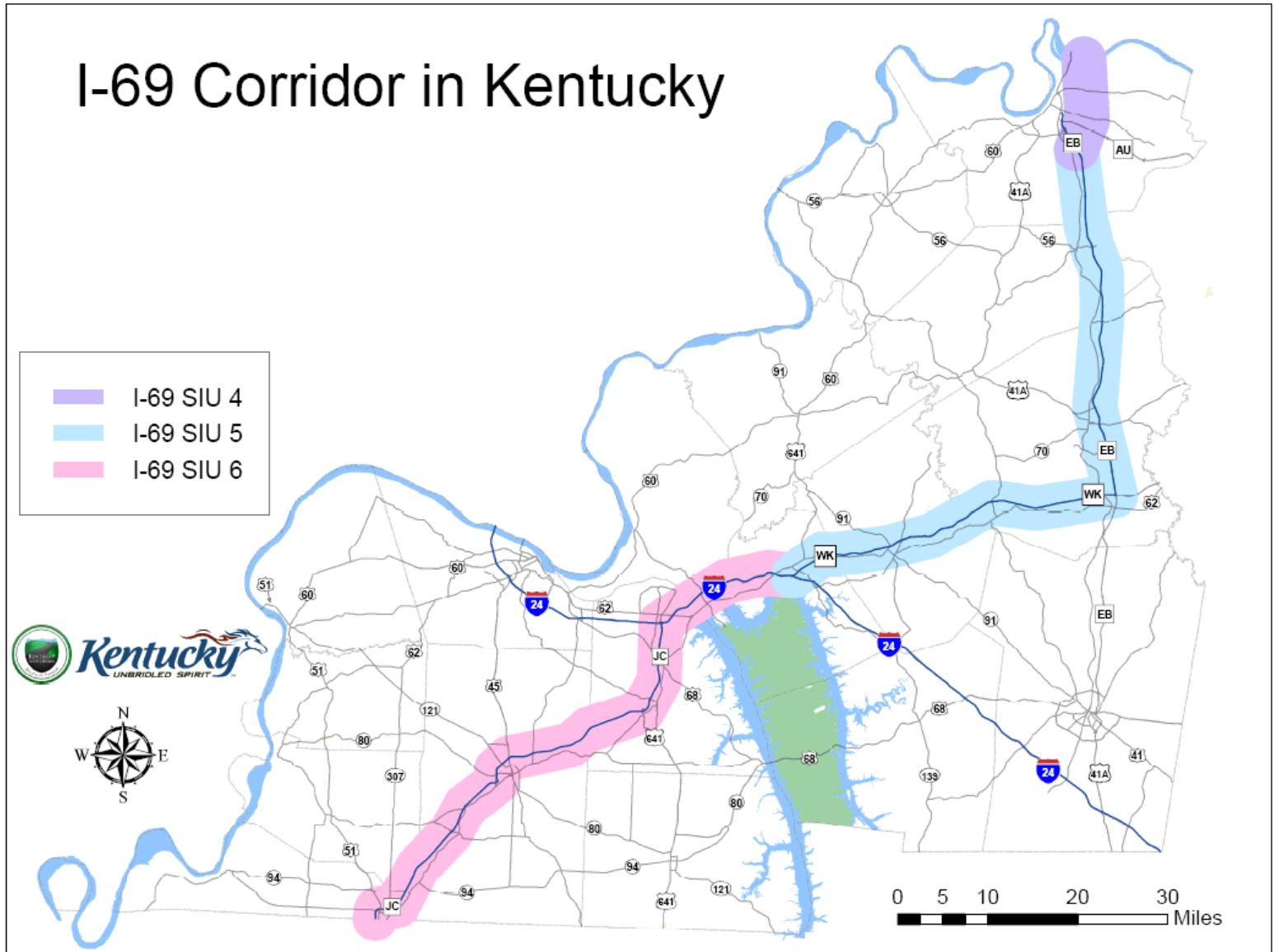
# The Real Story!





# SIU's 4, 5 and 6 in KY

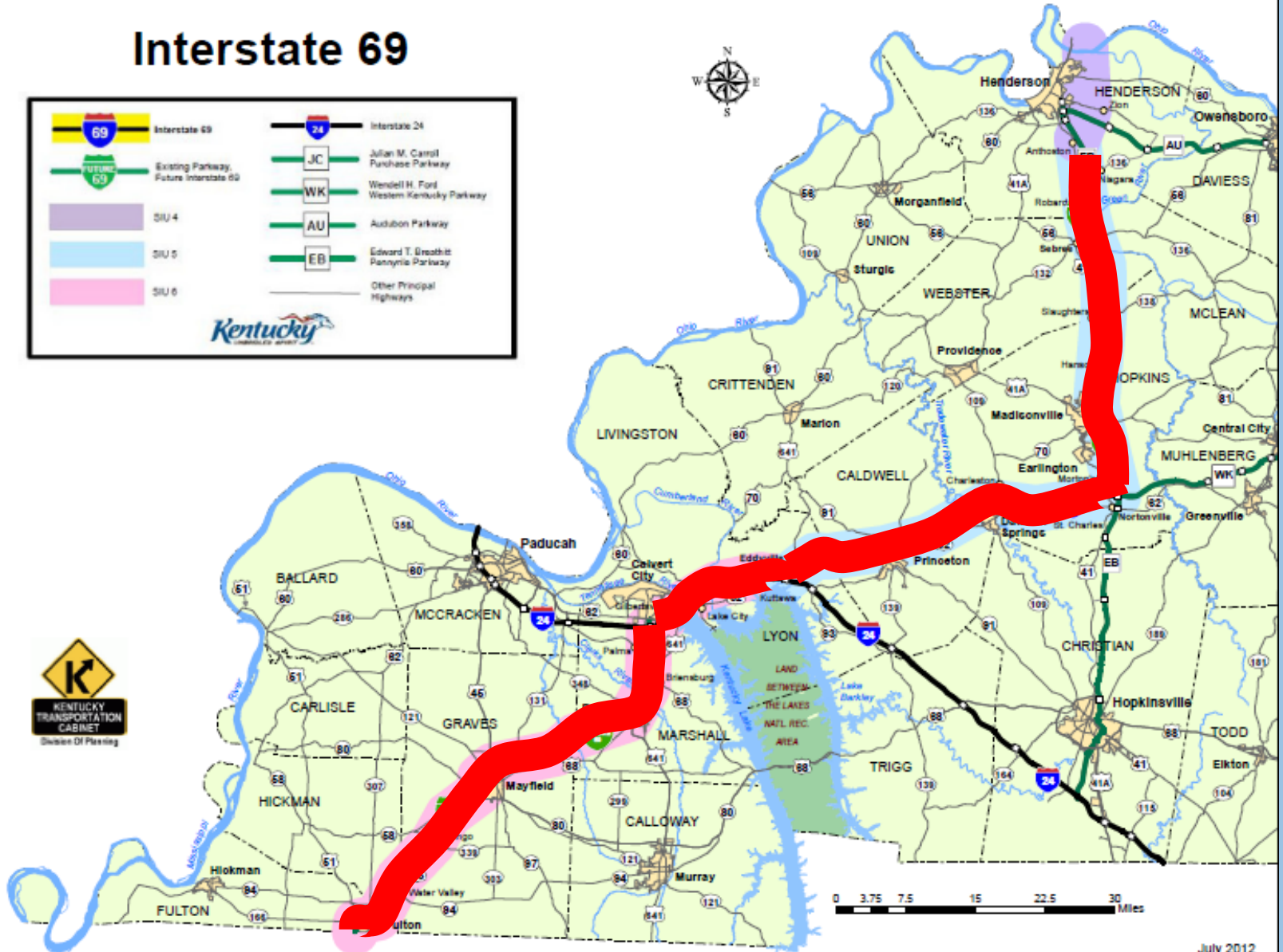
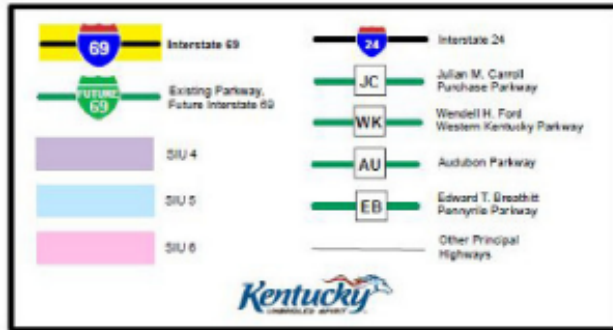
## I-69 Corridor in Kentucky





# KY Designation

## Interstate 69








# Planning our Program

**FINAL REPORT**




**OVERVIEW of EXISTING CONDITIONS**

along the Wendell H. Ford and Edward T. Breathitt Parkways  
as part of the Strategic Corridor Planning Study for I-69  
Eddyville to Henderson, Kentucky  
ITEM NO. 2-69.10  
March 2005




**Kentucky**  
UNBROILED SPIRIT  
kentucky@hca.com

prepared by:



**Kentucky**  
UNBROILED SPIRIT



**I-69 CORRIDOR  
MASTER PLAN**

*Eddyville to Henderson, Kentucky  
KYTC Item 2-69.10*

Final Draft  
March 2008



# Planning our Program

## EXECUTIVE SUMMARY

### I-69 Strategic Planning Corridor Study

Overview of Existing Conditions  
Julian M. Carroll Purchase Parkway and Interstate 24

**Fulton to Eddyville, Kentucky**

December 2011



Prepared By:



Stantec



# Key Finding

Our Parkway system adequately meets AASHTO guidelines for most design elements. Most deficiencies are minor and will be accepted as design exceptions through agreements with FHWA.





# Exceptions and Variances

- ❑ Substandard Inside Paved Shoulder Widths
- ❑ Substandard Bridge Widths
- ❑ Cross Slope/Superelevation
- ❑ Ditch Width/Foreslopes
- ❑ Interchange Spacing
- ❑ Interchange at I24/WKP



# Necessary Upgrades

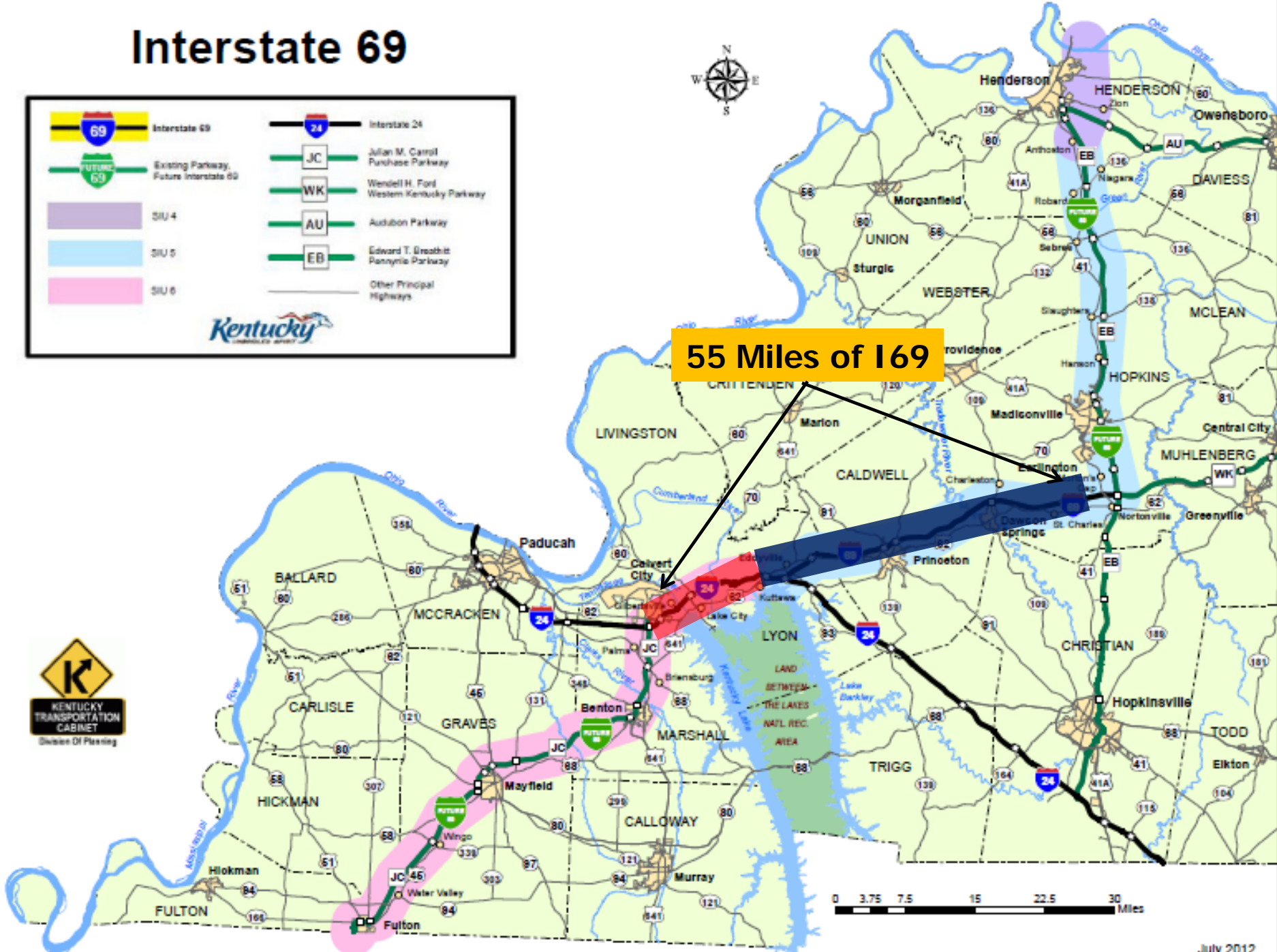
- ❑ Modernization of Toll Booth Interchanges
- ❑ 16ft vertical clearances over driving lanes
- ❑ Modernization of ramp tapers
- ❑ Interstate Route Continuity
- ❑ Modernization of guardrail and end treatments
- ❑ Appropriate median pier protection
- ❑ Modernization of bridge rails
- ❑ Modernization of signs
- ❑ Protection of Access Control at cross roads

# Interstate 69

	Interstate 69		Interstate 24
	Existing Parkway, Future Interstate 69		Julian M. Carroll Parkway
	SIU 4		Wendell H. Ford Western Kentucky Parkway
	SIU 5		Audubon Parkway
	SIU 6		Edward T. Breathitt Pennyrile Parkway
			Other Principal Highways



**55 Miles of I 69**





# KY's First 55 Miles

- ❑ Corridor Modernization Designed by HMB
- ❑ Corridor Built by Westate Construction
- ❑ Interchange Upgrade Designed by GRW
- ❑ Interchange Upgrade being built by Road Builders and Parkway Construction
- ❑ New Terrain Interstate Estimates in rural areas are roughly \$10 million/mile +/- in level to rolling terrain.

**\$20,500,000**



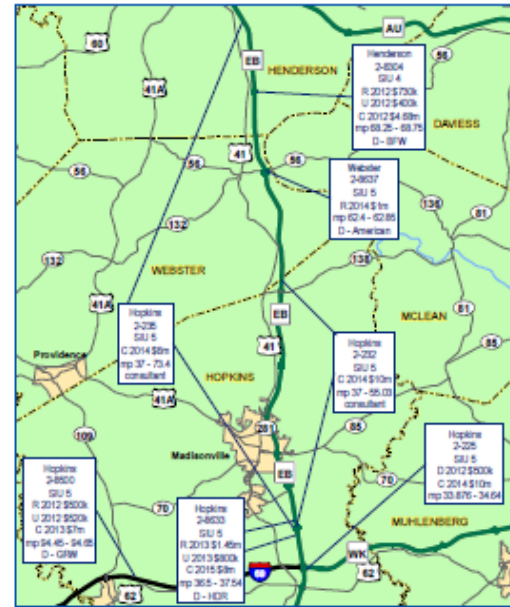
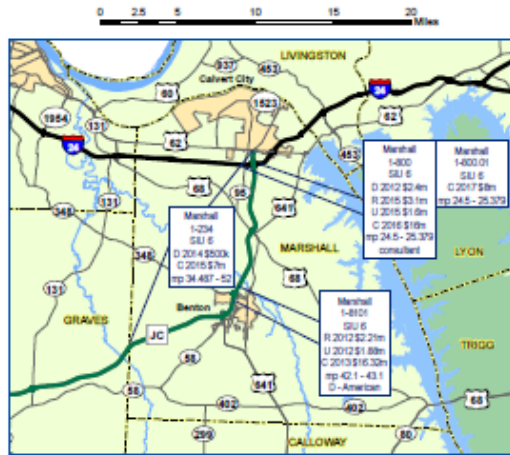


# 2012 Six Year Plan

## I-69 Corridor Phases Kentucky's FY 2012-2018 Highway Plan



District 1



District 2

- |   |   |
|---|---|
| <p><b>District 1 - Projects</b></p> <ul style="list-style-type: none"> <li><b>1-193 Graves</b> Reconstruct Julian Carroll Pkwy intersection w/ the Mayfield Bypass to provide superior through movement to the Parkway.</li> <li><b>1-234 Marshall</b> Reconstruct elements of existing Purchase Parkway from mp 26 to 82.</li> <li><b>1-800 Marshall</b> Reconstruct I-24 / Purchase Parkway Interchange</li> <li><b>1-801 Marshall</b> Reconstruct I-24 / Purchase Parkway Interchange (additional funding for C phase)</li> <li><b>1-810 Marshall</b> Julian M. Carroll Pkwy Reconstruct interchange at KY-348 in Benton. (OCCN) (OBCCR) (Design included under 1-802.00) (TOCCR)</li> </ul> | <p><b>District 2 - Projects</b></p> <ul style="list-style-type: none"> <li><b>2-832 Henderson</b> Project review to locate alignment for Interstate 69 around Henderson from E.T. Sweathill Parkway (Perryville Parkway) to Ohio River crossing. (TOCCR)</li> <li><b>2-226 Hopkins</b> Improve ramp configuration at the existing I-69 / Western Kentucky Parkway / Perryville Parkway interchange</li> <li><b>2-232 Hopkins</b> Reconstruct elements of existing Edward T. Sweathill Pkwy (Perryville Parkway) between mp 37 and 73.4 to upgrade geometrics to Interstate standards</li> <li><b>2-222 Hopkins</b> Reconstruct elements of existing Perryville Parkway between mp 37 and 73.4 to upgrade geometrics to Interstate standards</li> <li><b>2-834 Henderson</b> Reconstruct/complete the half interchange at Exit 69 (KY 416) on the Sweathill Parkway (OBCCN) (OBCCR)</li> <li><b>2-833 Hopkins</b> I-69 (Western Kentucky Parkway) KY 100 Interchange improvements (OBCCN)</li> <li><b>2-833 Hopkins</b> Upgrade Morton's Gap Interchange at mp 37.07 to Interstate standards (TOCCN)</li> <li><b>2-837 Webster</b> Reconstruct Edward T. Sweathill (Perryville Parkway) / KY 58 Interchange near Sebree (TOCCN)</li> </ul> |
|---|---|

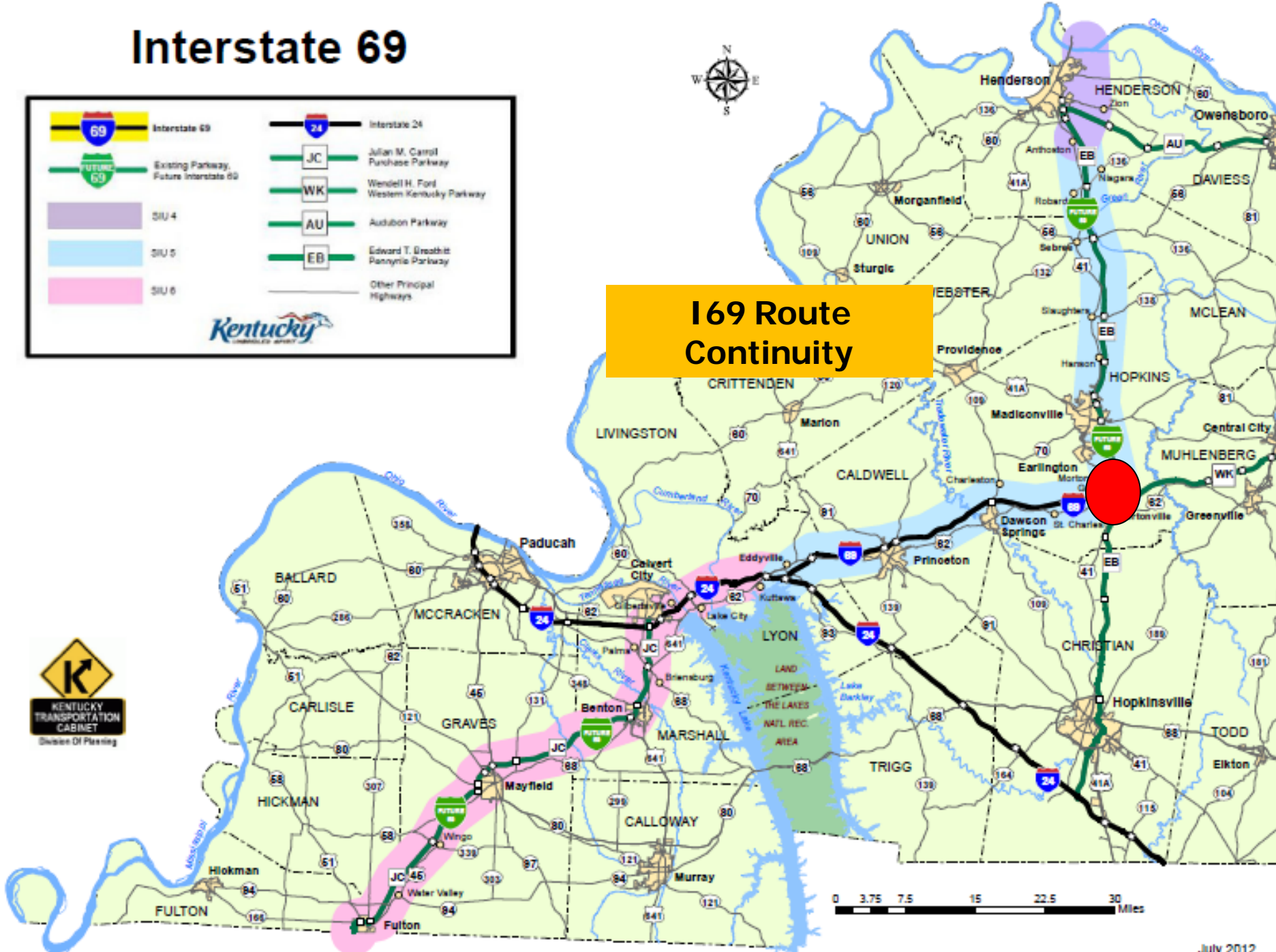


# Interstate 69

	Interstate 69		Interstate 24
	Existing Parkway, Future Interstate 69		Julian M. Carroll Parkway
	SIU 4		Wendell H. Ford Western Kentucky Parkway
	SIU 5		Audubon Parkway
	SIU 6		Edward T. Breathitt Pannynic Parkway
			Other Principal Highways



**I 69 Route Continuity**







# Interstate Continuity

## I69/Pennyrile Parkway Interchange

Item #2-225.00

D - \$500k – 2012

C - \$10m – 2014

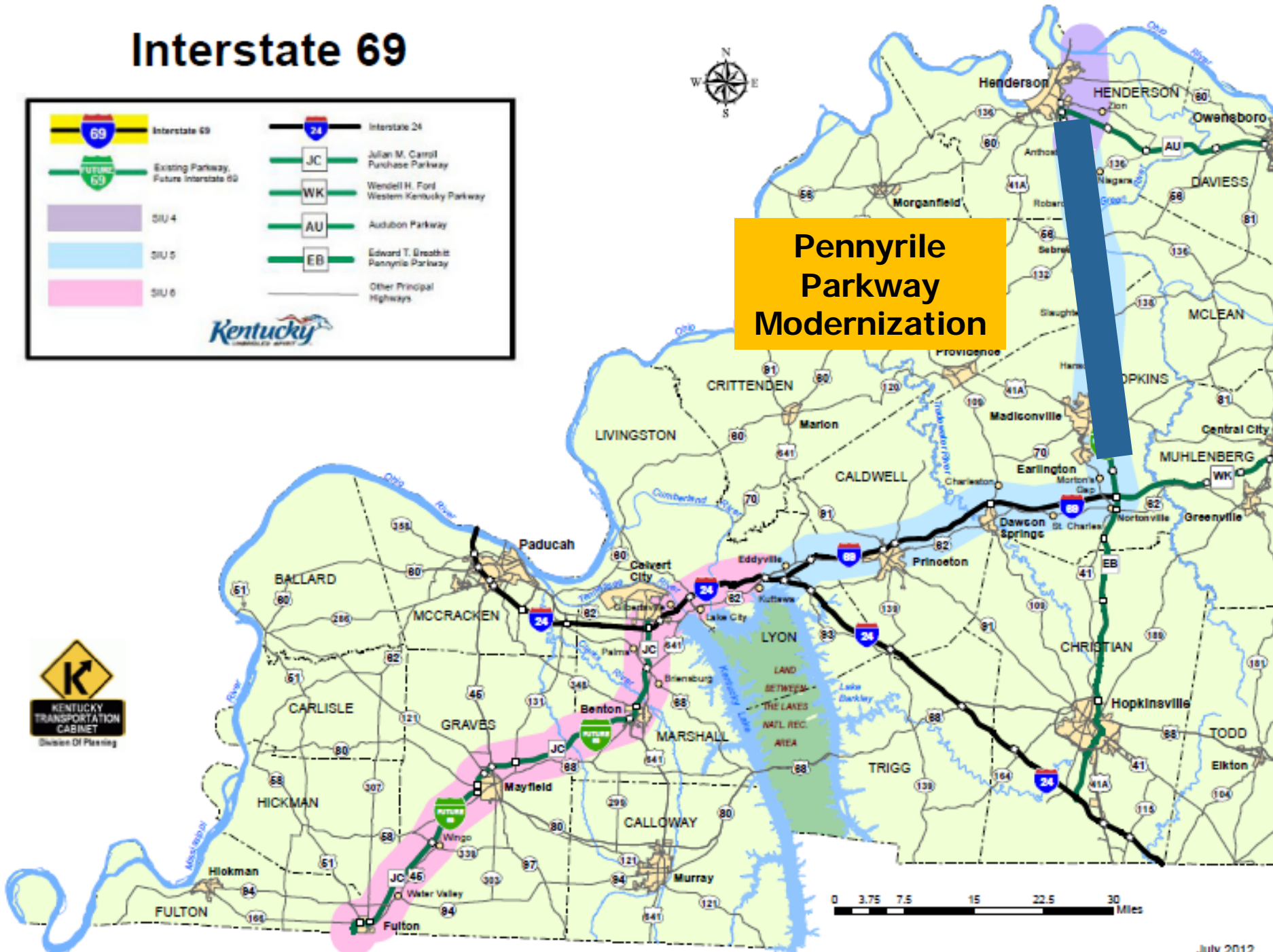


# Interstate 69

	Interstate 69		Interstate 24
	Existing Parkway, Future Interstate 69		Julian M. Carroll Parkway
	SIU 4		Wendell H. Ford Western Kentucky Parkway
	SIU 5		Audubon Parkway
	SIU 6		Edward T. Breathitt Parkway
			Other Principal Highways



**Pennyrile Parkway Modernization**







# Parkway Modernization

## Pennyrile Parkway from I69 to Henderson

Item #2-232/235

C - \$16M - 2014

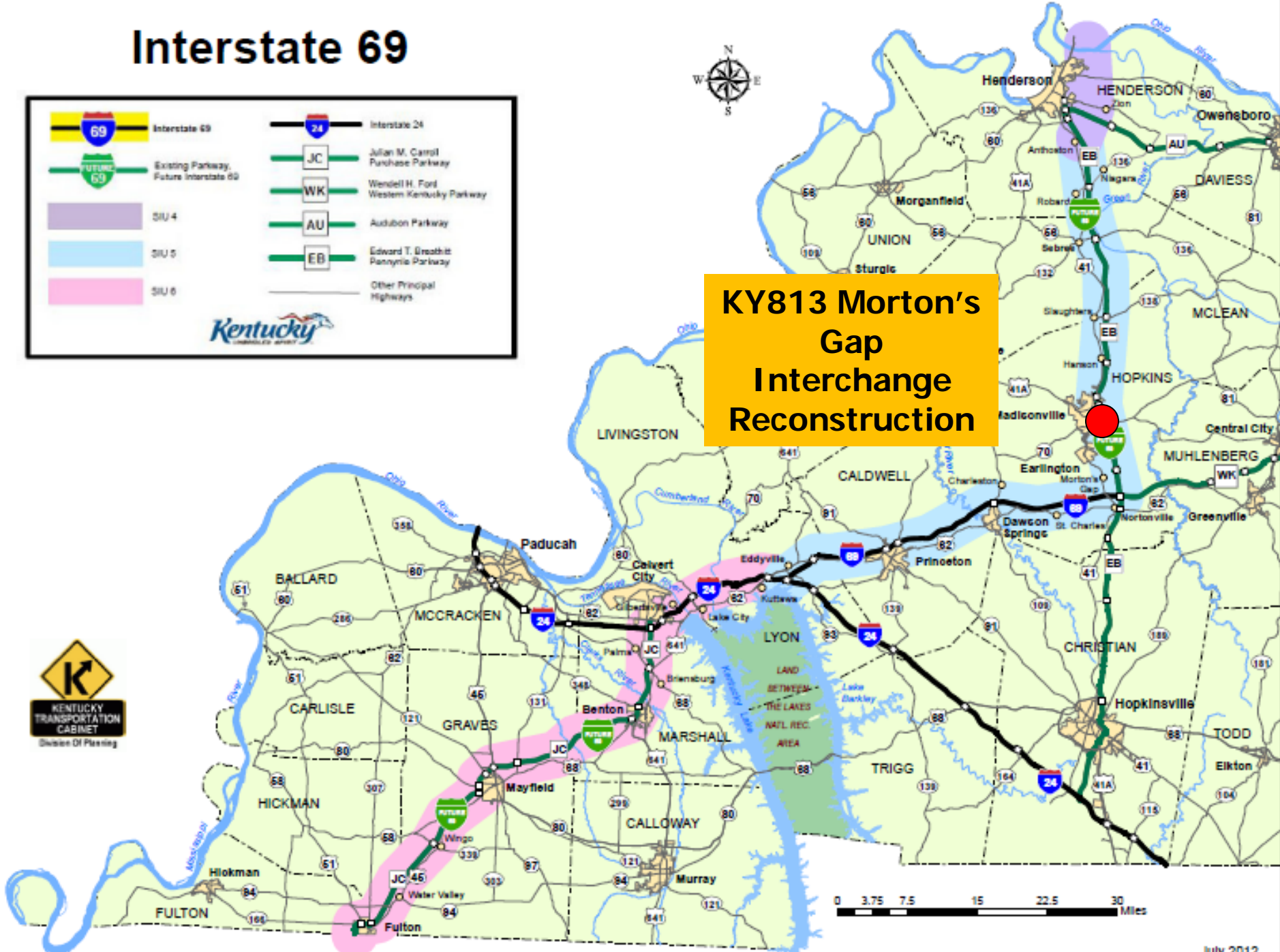


# Interstate 69

	Interstate 69		Interstate 24
	Existing Parkway, Future Interstate 69		Julian M. Carroll Parkway
	SIU 4		Wendell H. Ford Western Kentucky Parkway
	SIU 5		Audubon Parkway
	SIU 6		Edward T. Breathitt Pennylic Parkway
			Other Principal Highways



**KY813 Morton's Gap Interchange Reconstruction**



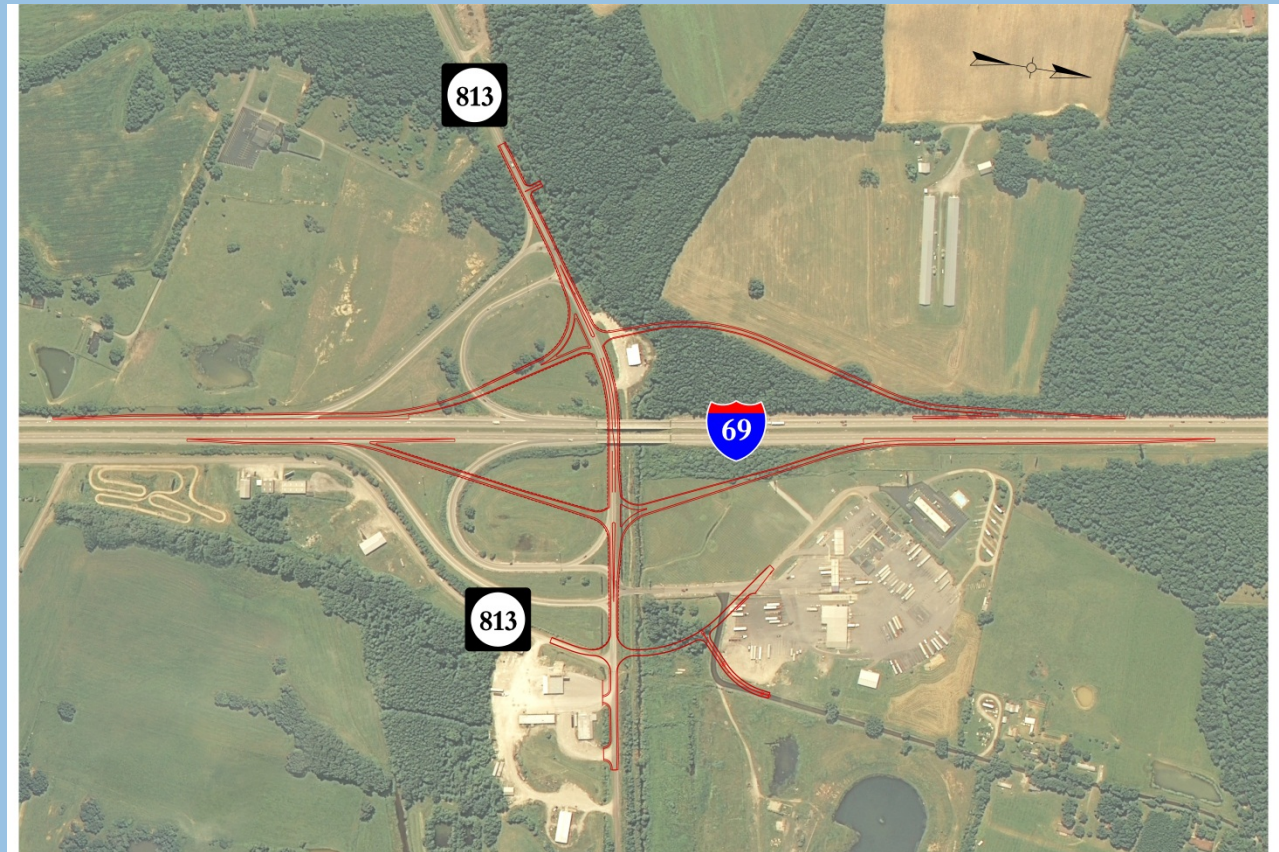


# Interchange Reconstruction

## Morton's Gap KY813/Pennyrile Parkway Interchange

Item #2-8633

R-\$1.45M-2013  
U-\$800K- 2013  
C-\$8.0M -2015



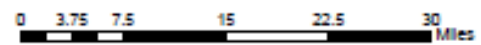
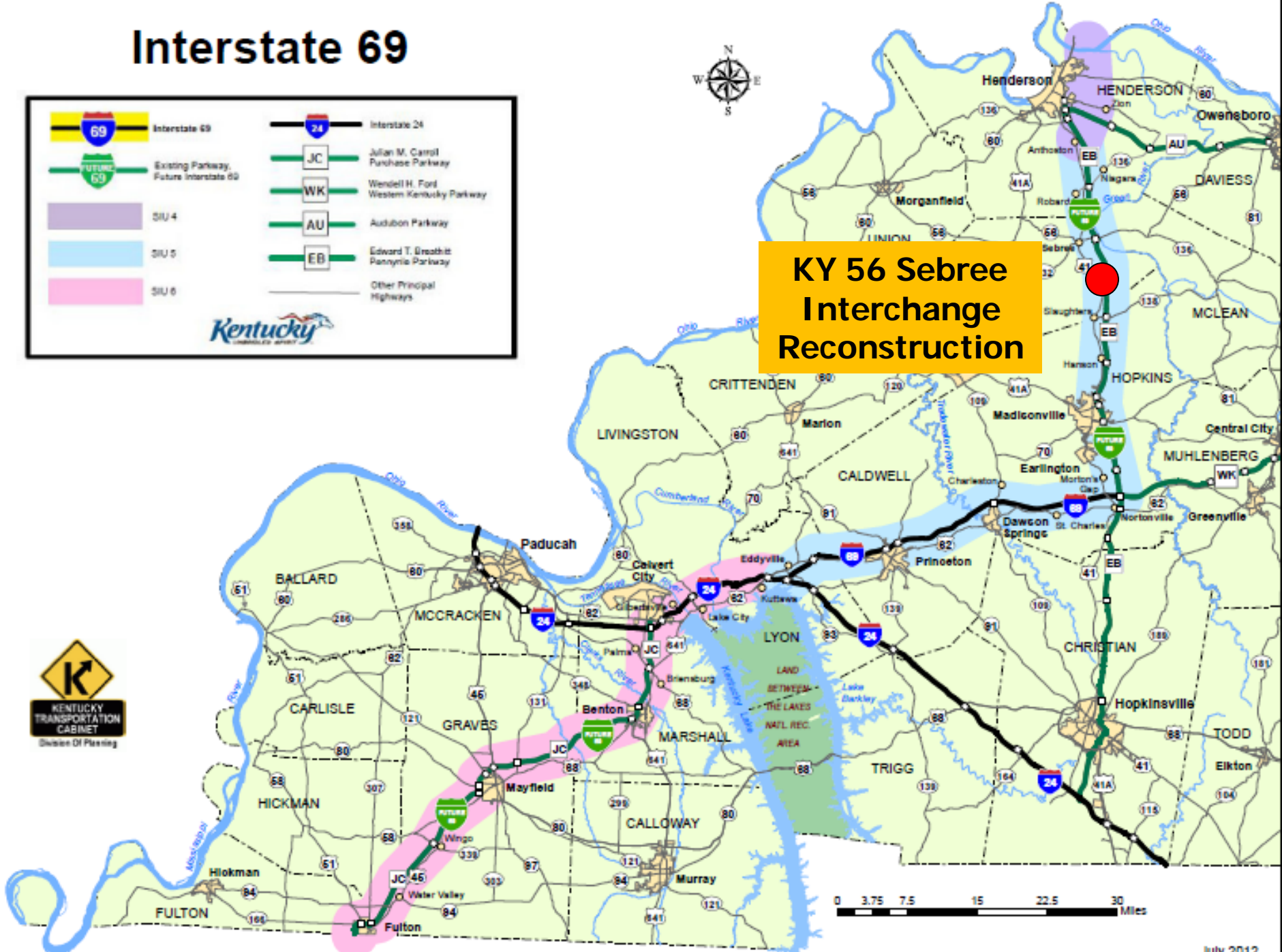


# Interstate 69

	Interstate 69		Interstate 24
	Existing Parkway, Future Interstate 69	JC	Julian M. Carroll Parkway
	SIU 4	WK	Wendell H. Ford Western Kentucky Parkway
	SIU 5	AU	Audubon Parkway
	SIU 6	EB	Edward T. Breathitt Pennylic Parkway
			Other Principal Highways



**KY 56 Sebree Interchange Reconstruction**







# Interchange Reconstruction

## KY56/Pennryile Parkway Interchange in Sebree

Item #2-8637

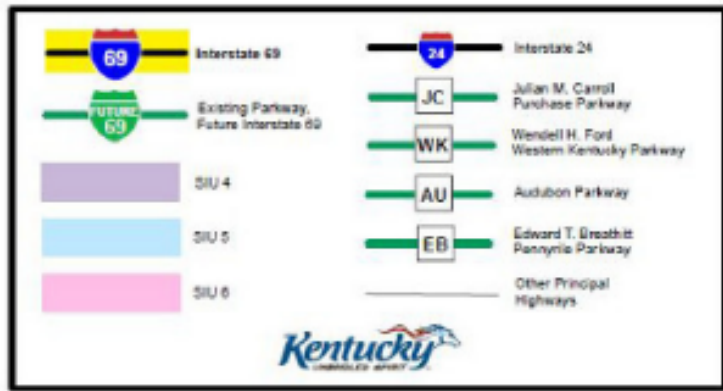
R - \$1M - 2014

U - \$500k - 2014

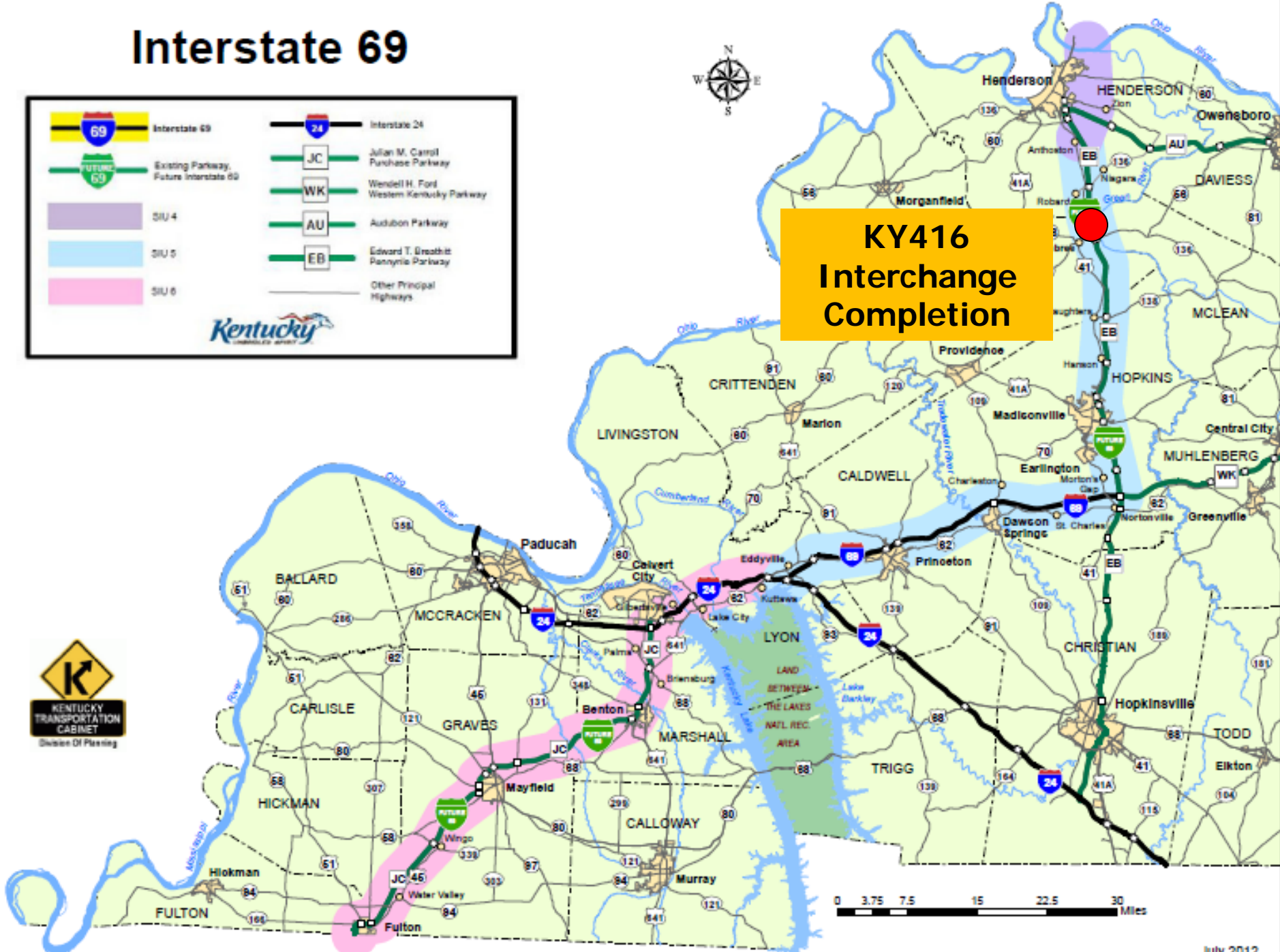
C - \$8M - 2015



# Interstate 69



**KY416 Interchange Completion**







# Interchange Completion

## KY416/Pennyrile Parkway Interchange

Item #2-8304

R - \$730k - 2012

U - \$400k - 2012

C - \$4.68m - 2012

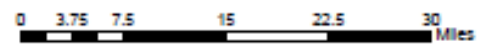
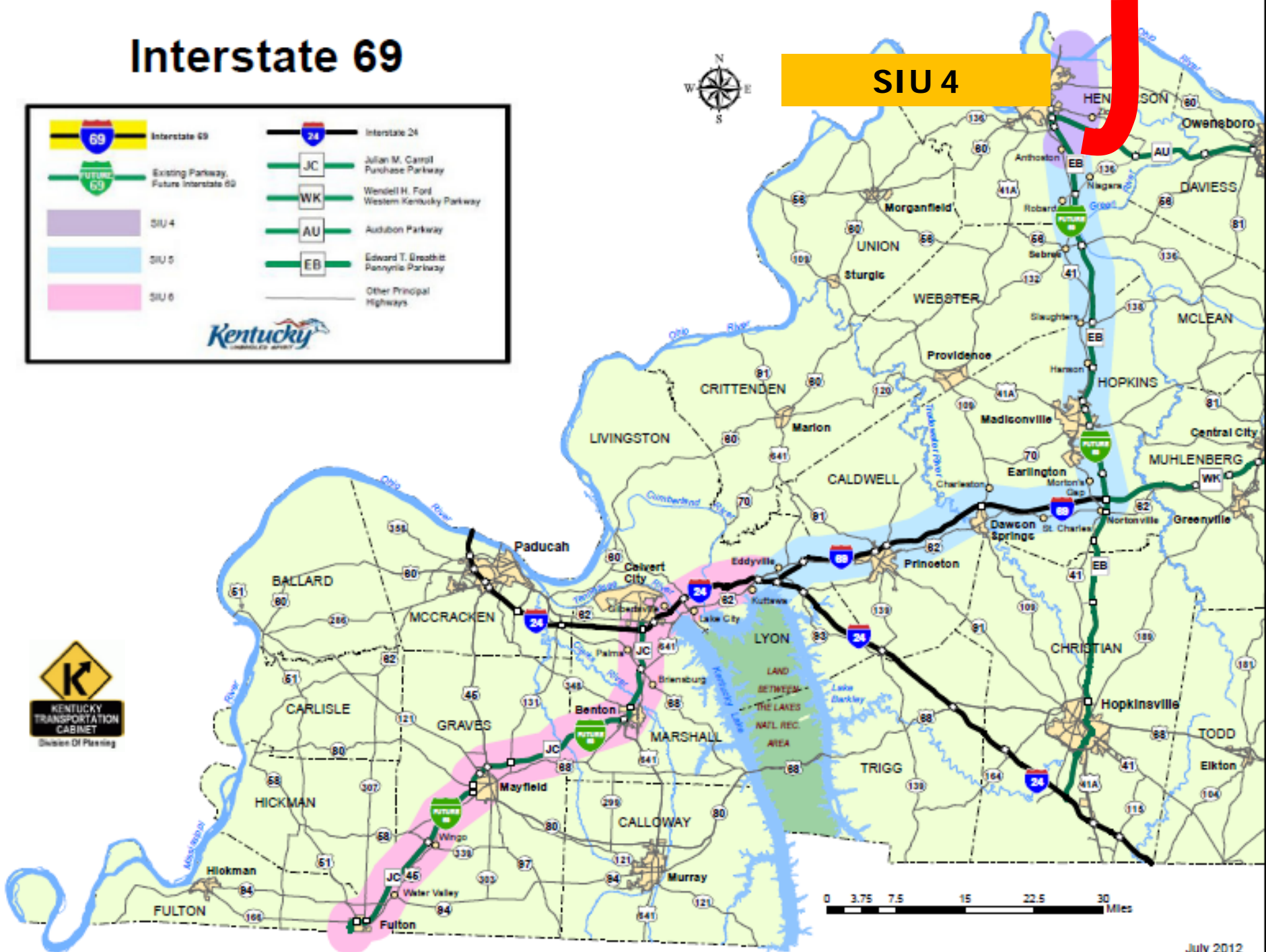


# Interstate 69



SIU 4

	Interstate 69		Interstate 24
	Existing Parkway, Future Interstate 69		Julian M. Carroll Parkway
	SIU 4		Wendell H. Ford Western Kentucky Parkway
	SIU 5		Audubon Parkway
	SIU 6		Edward T. Breathitt Pennylic Parkway
			Other Principal Highways



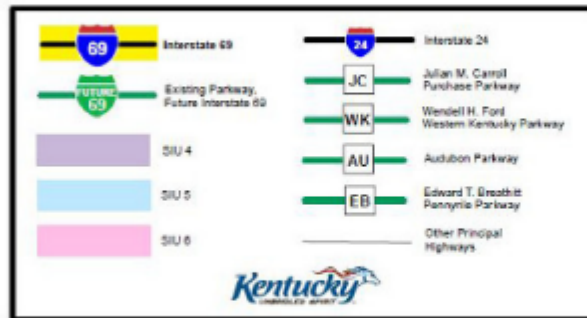




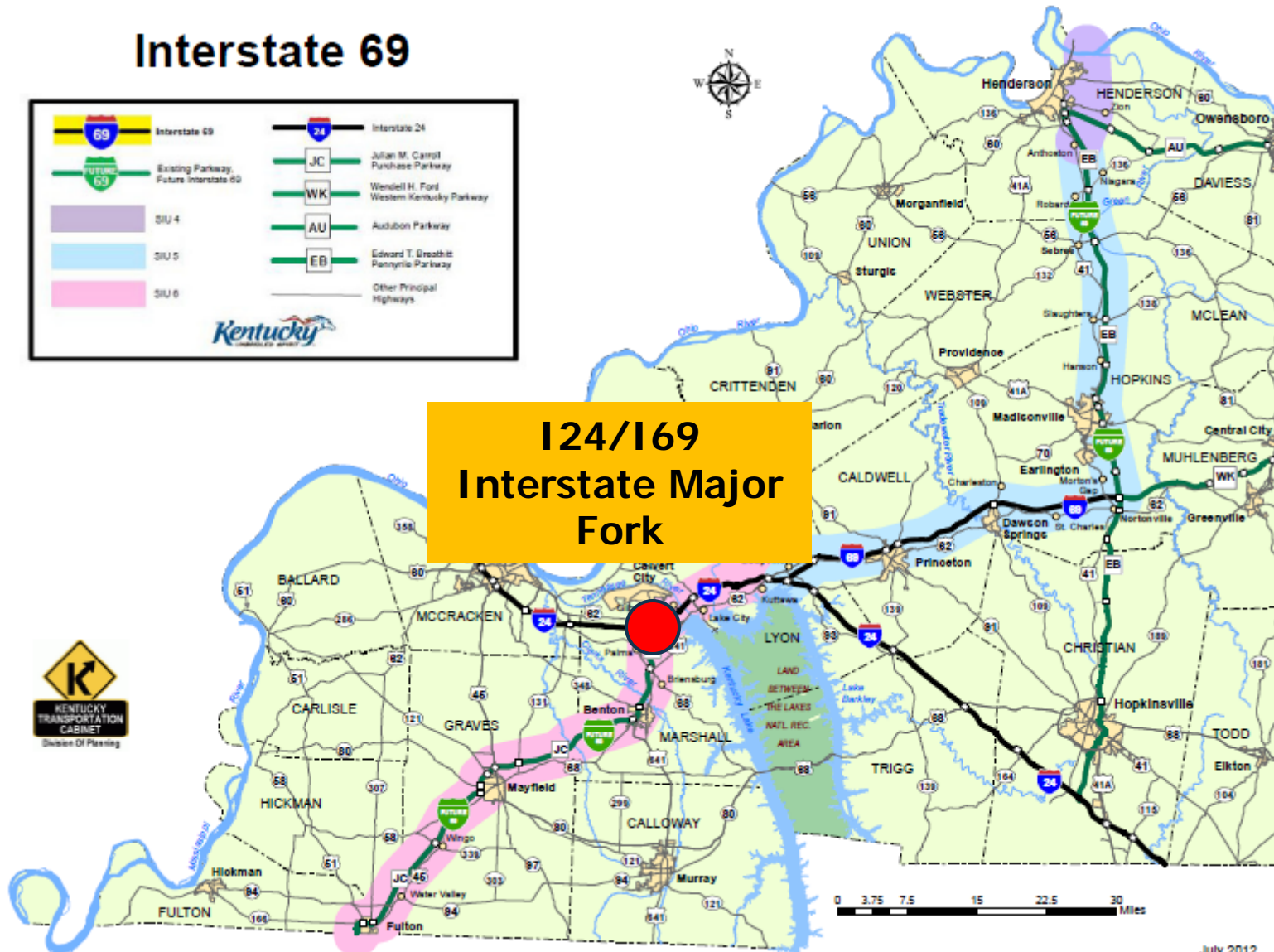


# Interstate Continuity

## Interstate 69



**I24/I69  
Interstate Major  
Fork**



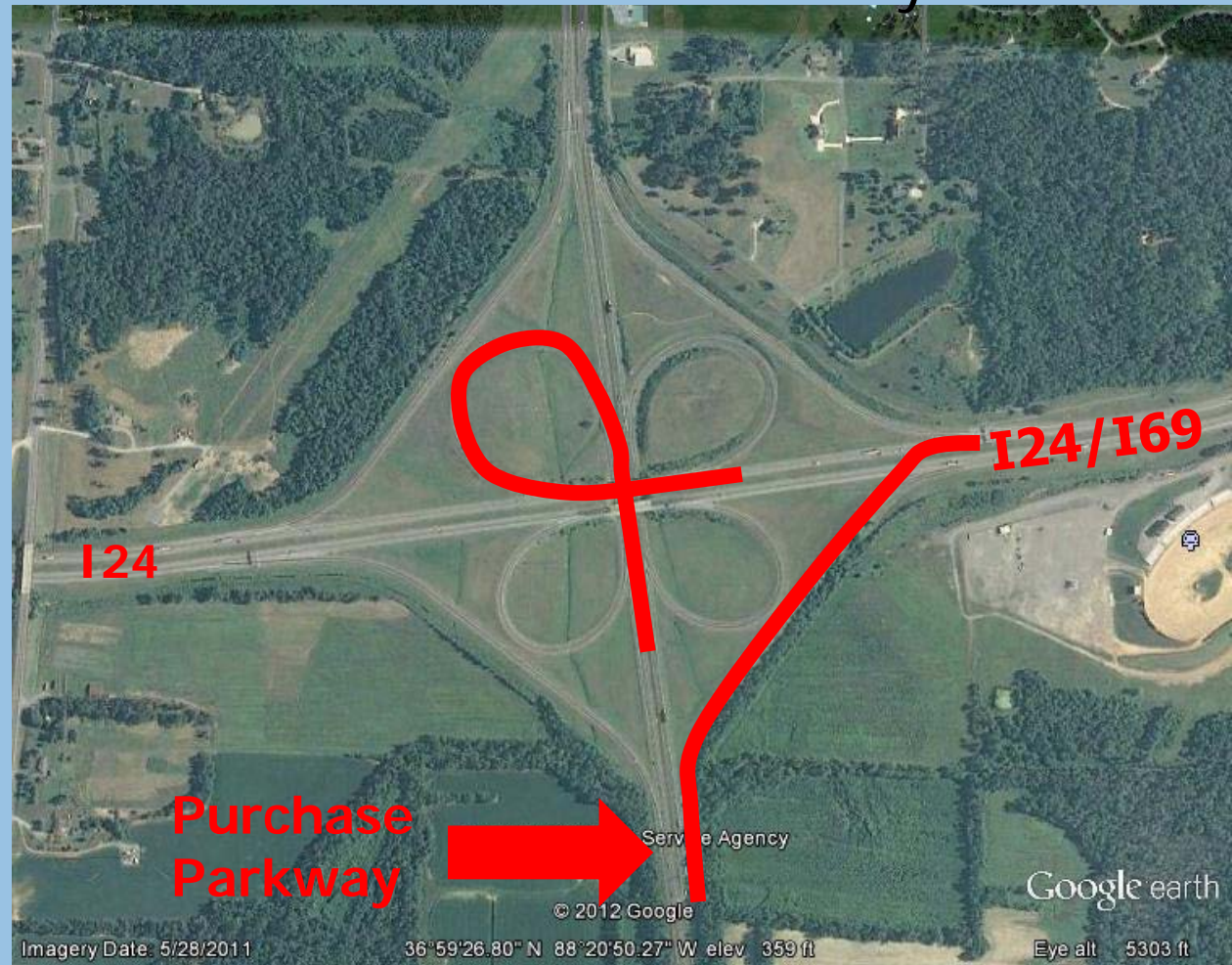


# Interstate Continuity

## I24/I69 at Calvert City

### Item #1-800

- D - \$2.5m - 2012
- R - \$3.1m - 2015
- U - \$1.6m - 2015
- C - \$16m - 2016
- C - \$8.0m - 2017

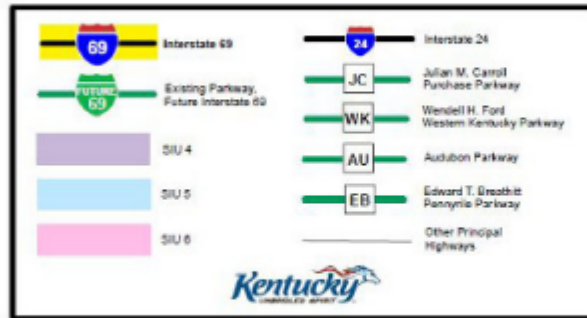




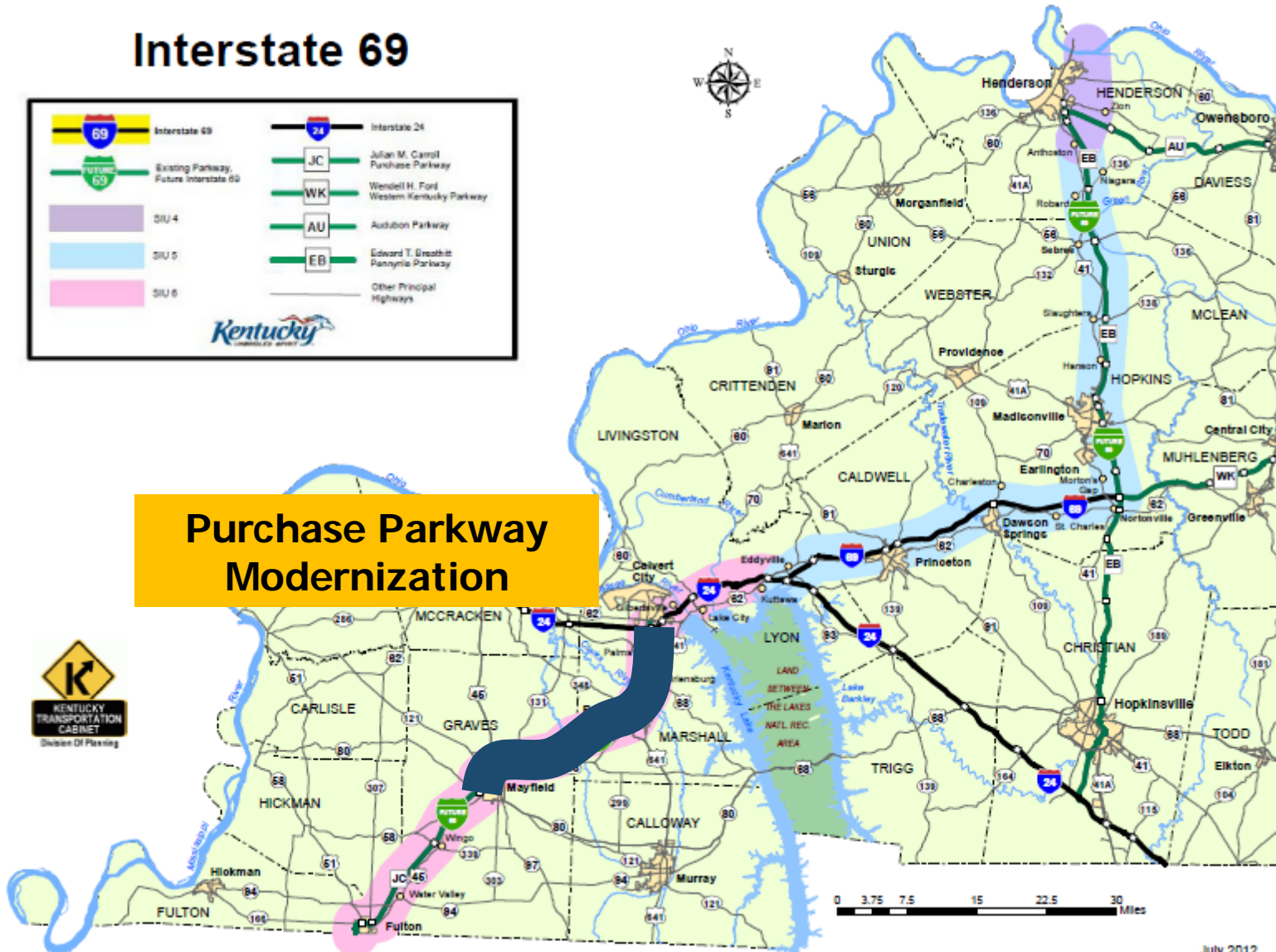


# Parkway Modernization

## Interstate 69



**Purchase Parkway Modernization**







# Parkway Modernization

## Purchase Parkway from Mayfield to Calvert City

Item #1-234

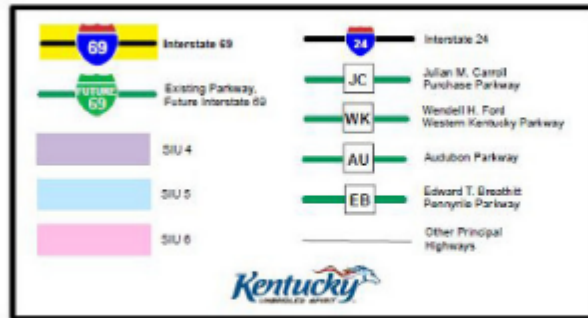
D - \$500k – 2014  
C - \$7M - 2015



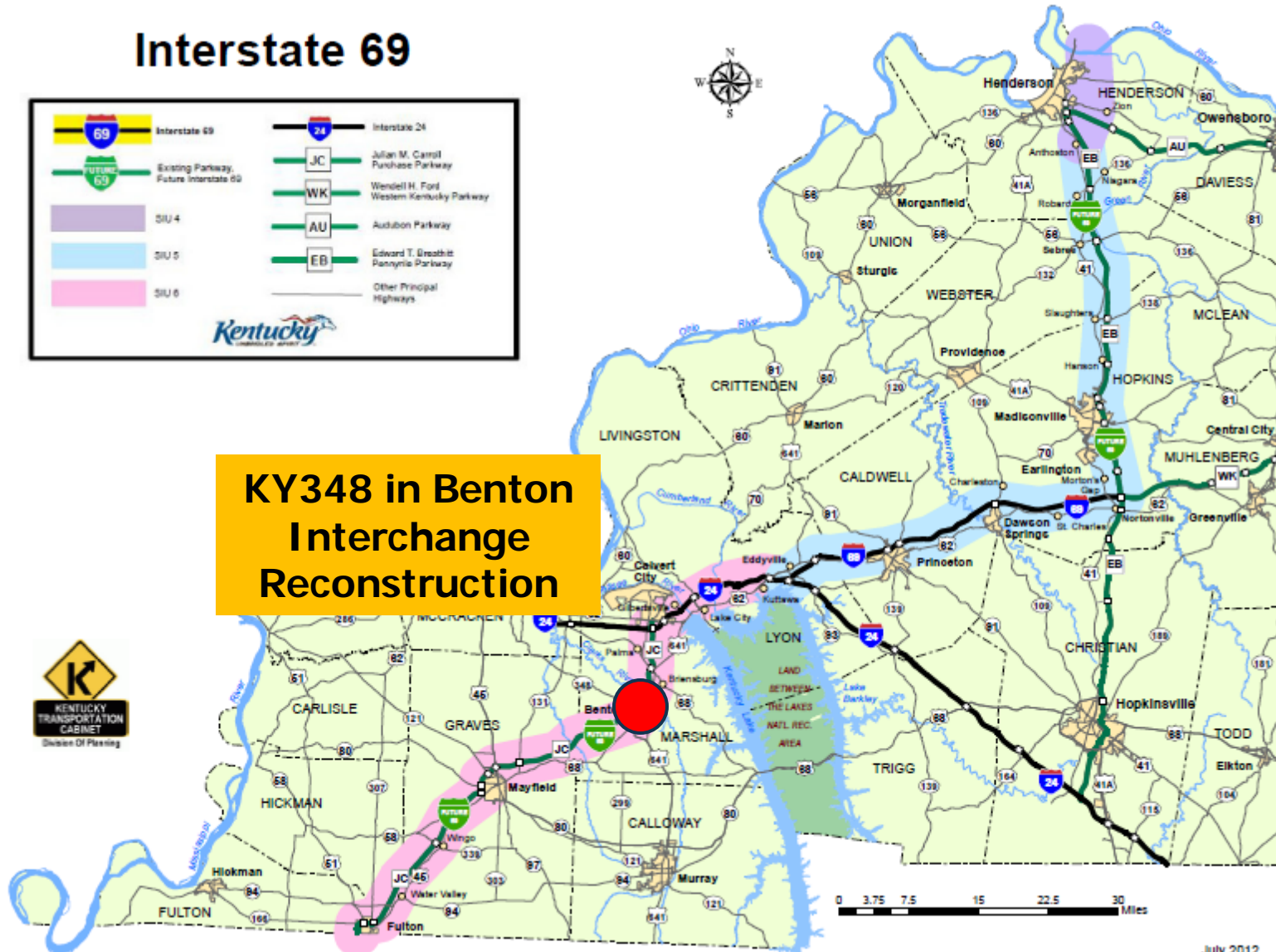


# Interchange Reconstruction

## Interstate 69



**KY348 in Benton Interchange Reconstruction**



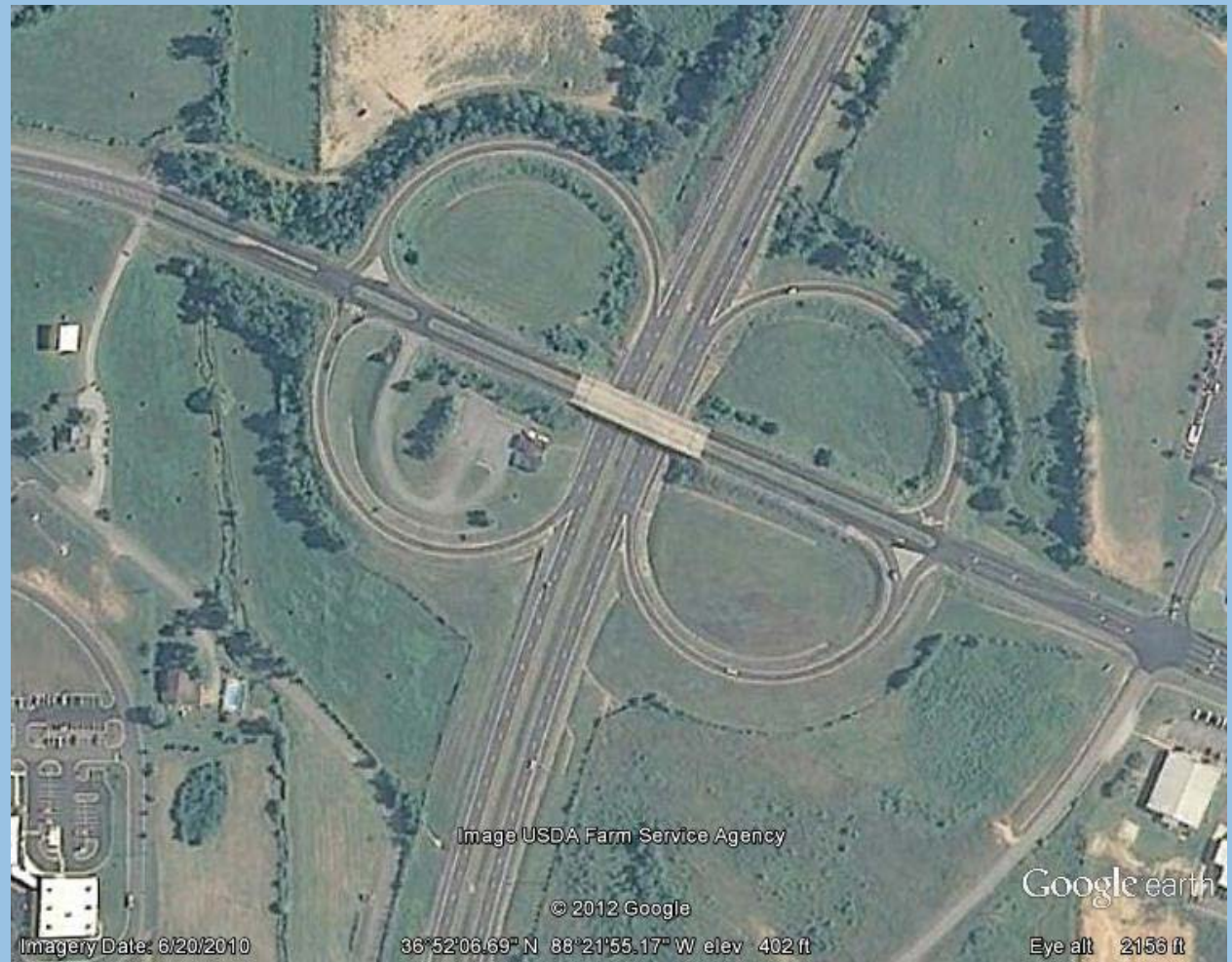


# Interchange Reconstruction

## KY348/Purchase Parkway in Benton

Item #1-8101

R - \$2.21m - 2012  
U - \$1.88m - 2012  
C - \$16.32m - 2013

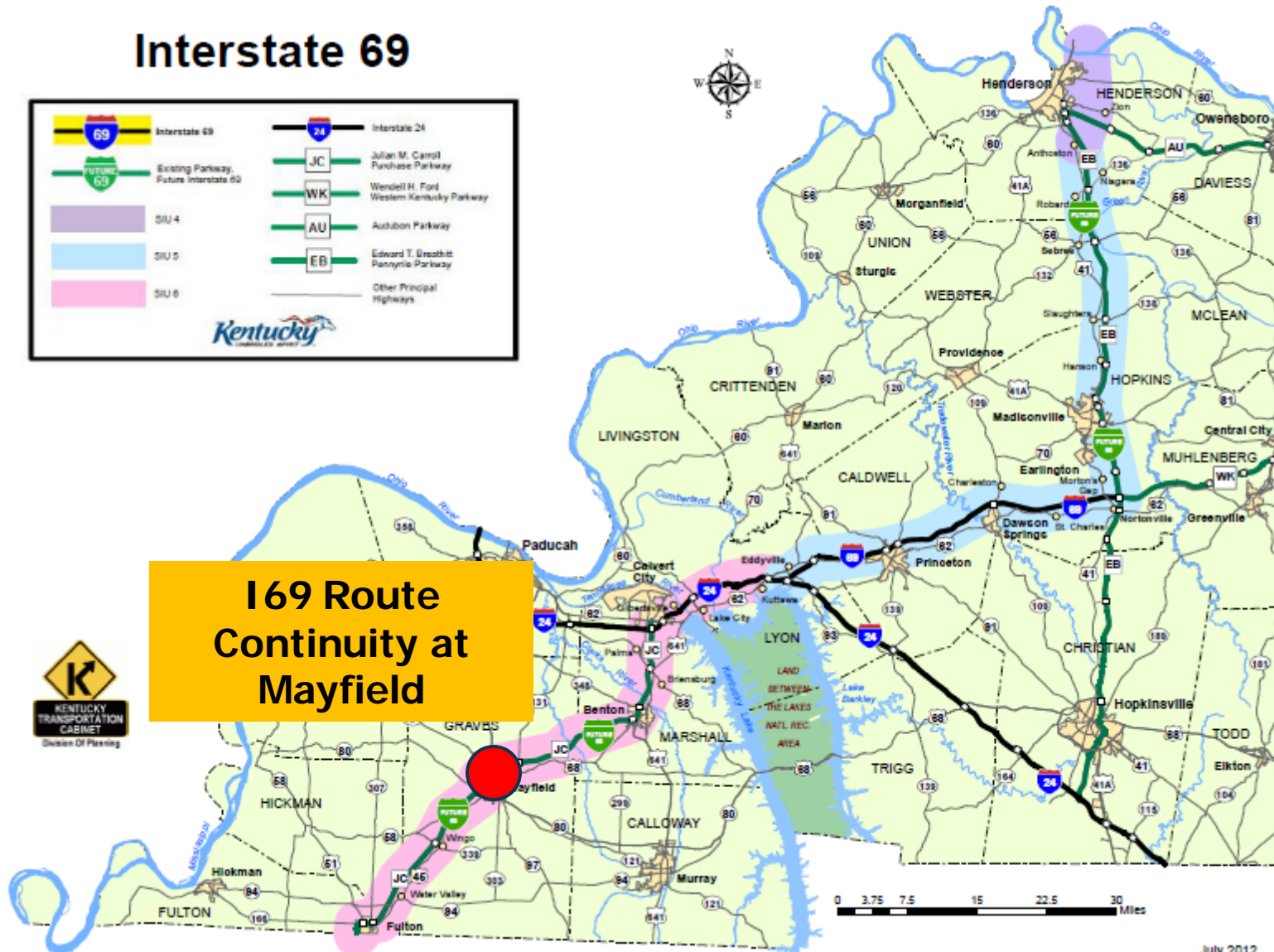
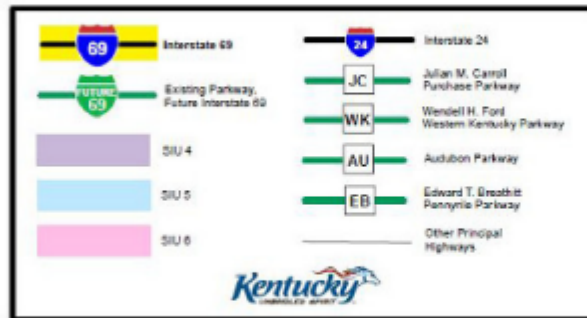






# Interstate Continuity

## Interstate 69





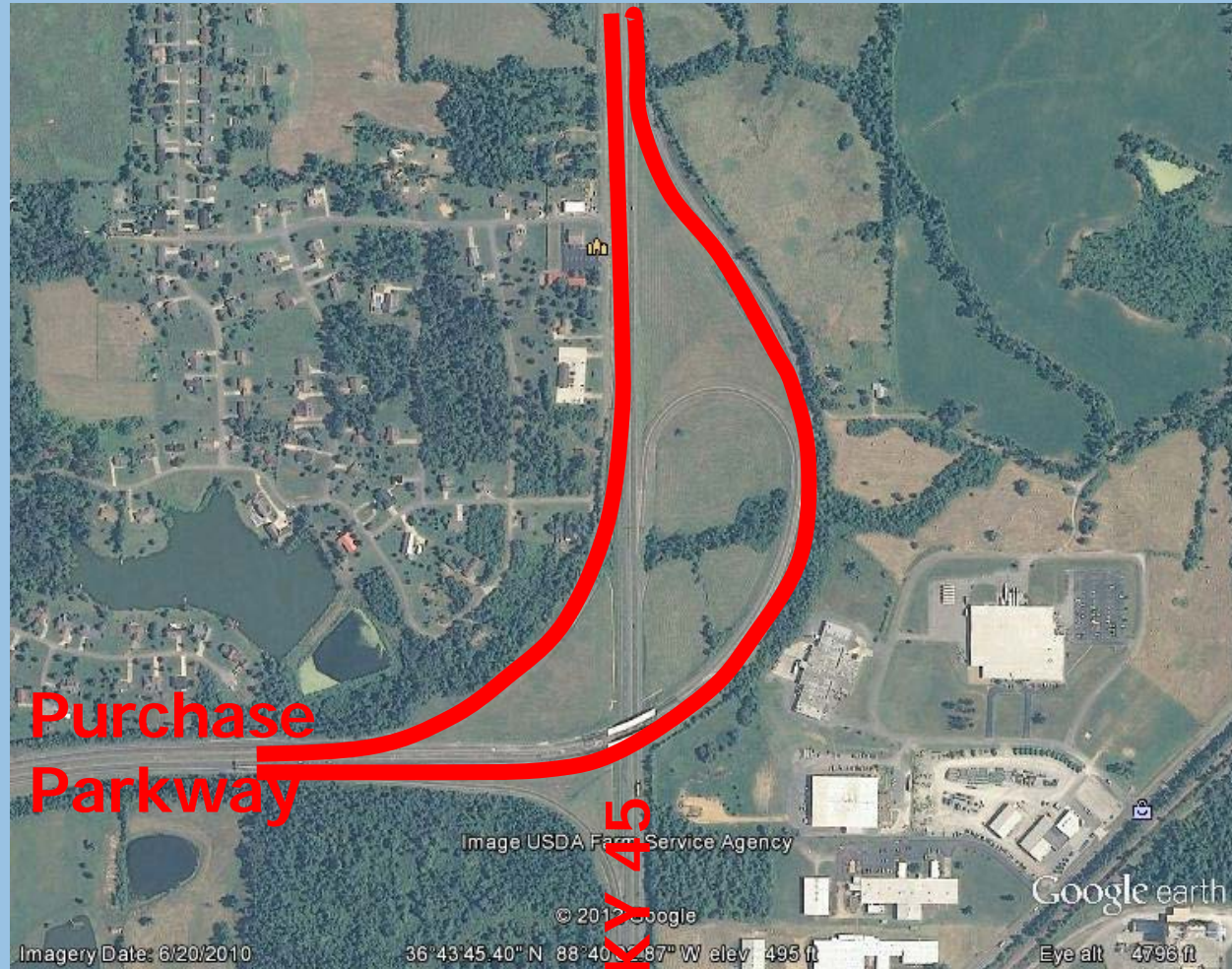


# Interstate Continuity

## KY45/Purchase Parkway in Mayfield

### Item #1-193

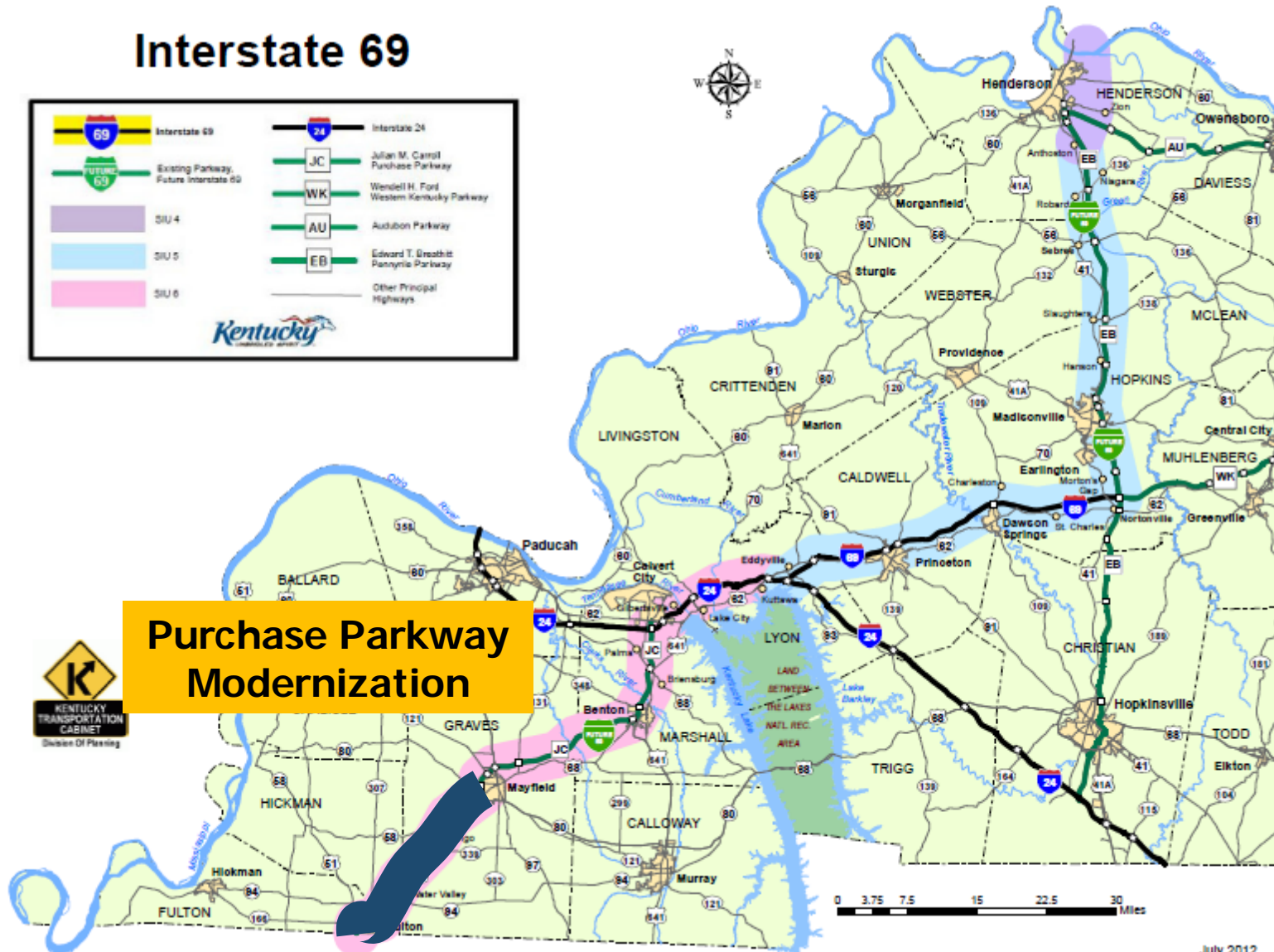
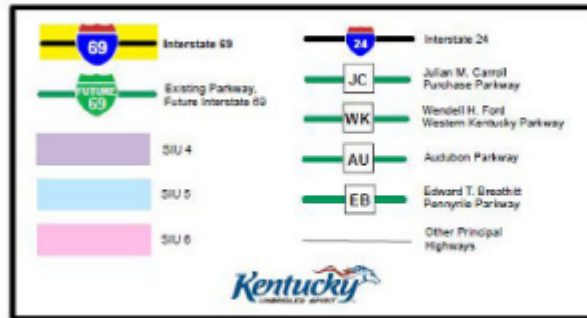
- D - \$2M – 2012
- R - \$5M -2015
- U - \$2.5M – 2015
- C - \$25M -2018





# Parkway Modernization

## Interstate 69



**Purchase Parkway Modernization**







# Parkway Modernization

## Purchase Parkway Exit 1 to Mayfield

NON 6YP

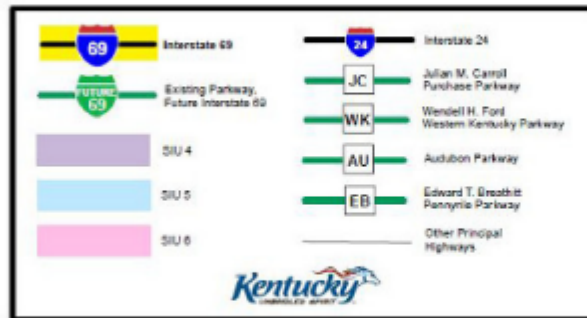
Estimate -  
\$2.75m





# Interchange Reconstruction

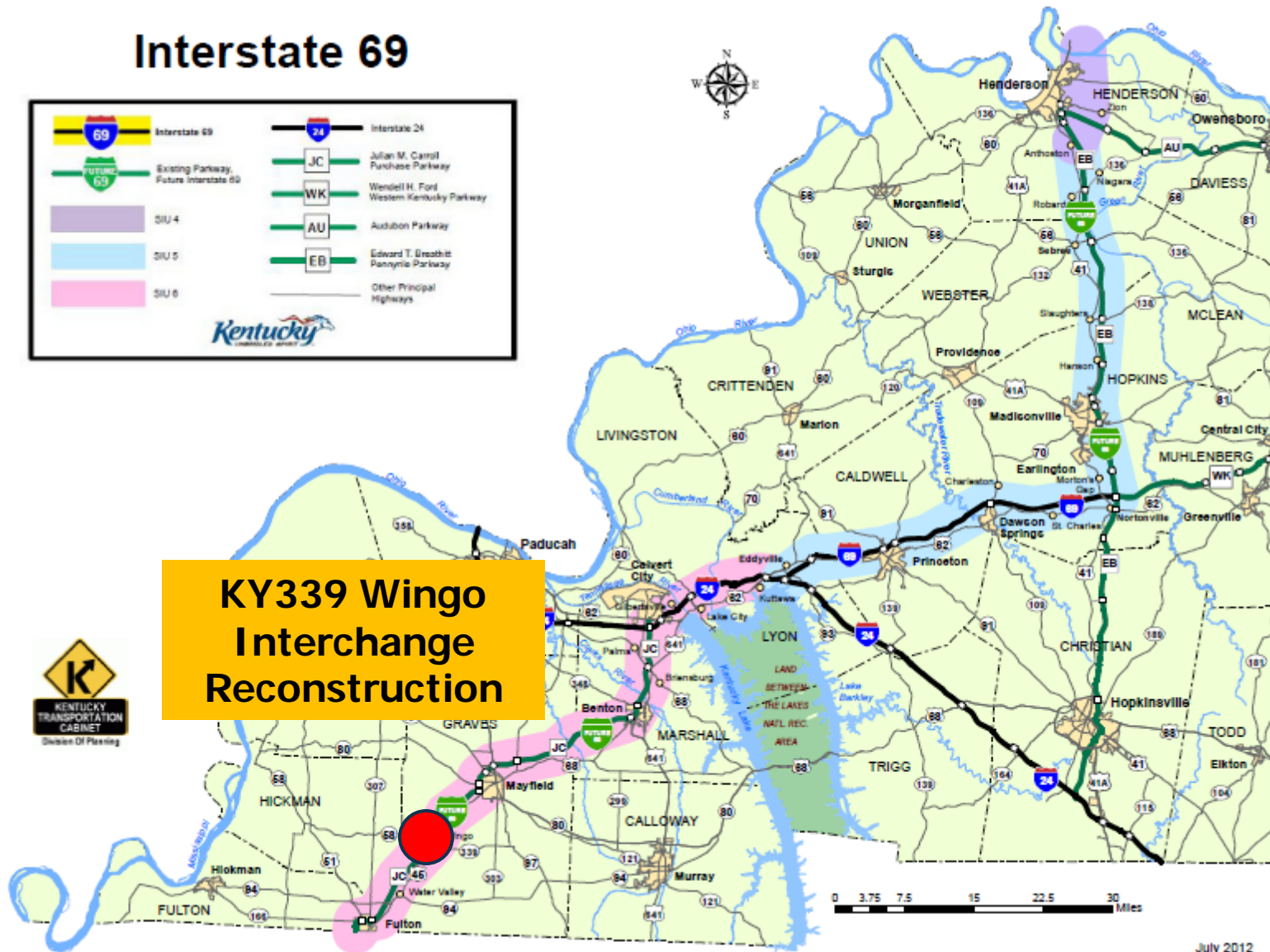
## Interstate 69



**KY339 Wingo Interchange Reconstruction**



KENTUCKY TRANSPORTATION CABINET  
Division Of Planning





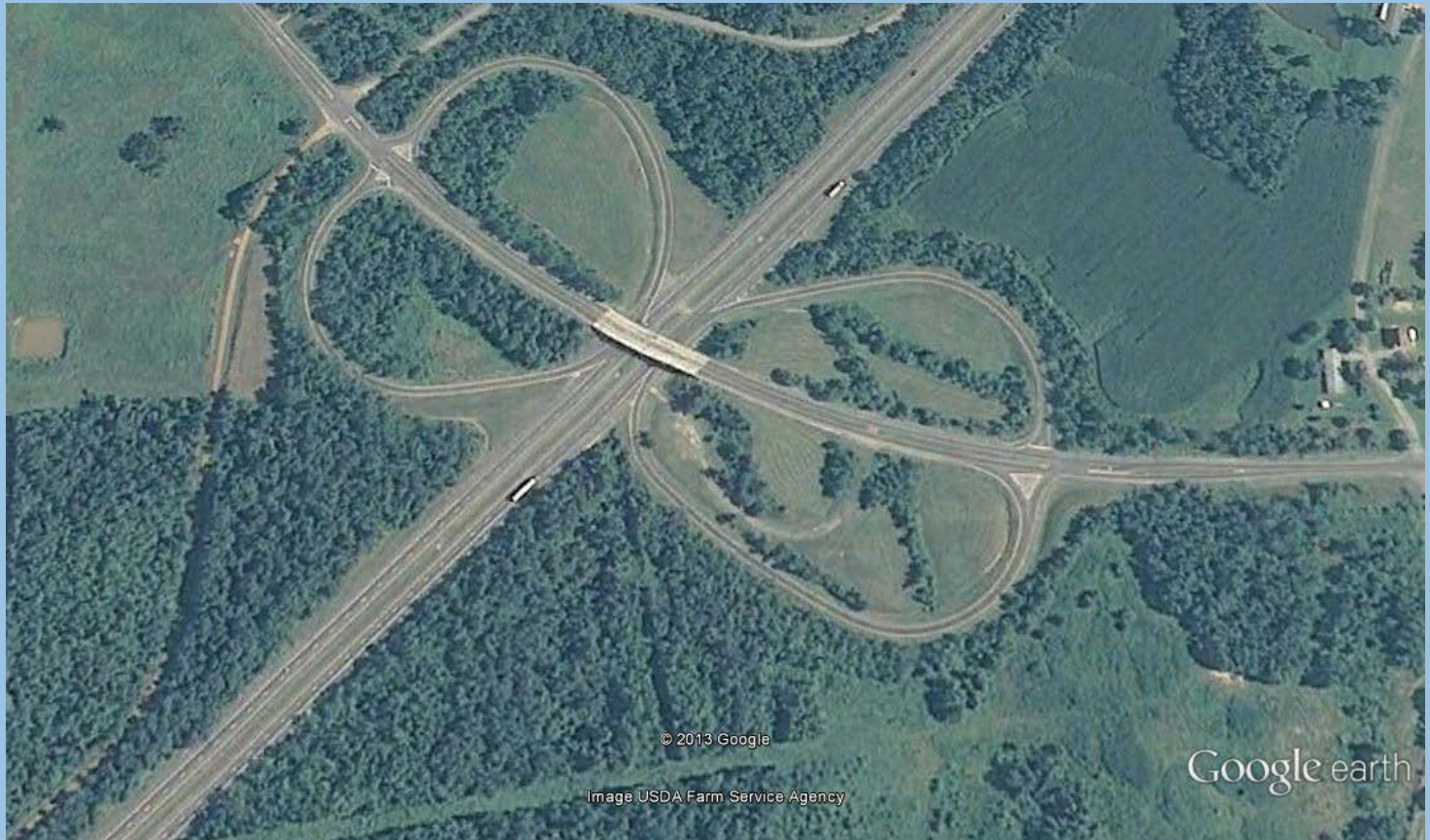


# Interchange Reconstruction

KY339/Purchase Parkway in Wingo, KY

NON 6YP

Estimate - \$10m





# TDOT Coordination

## Purchase Parkway at KY/TN State Line







# Pennyrile Pkwy Interchange







# Pennyrile Pkwy Interchange

- Palmer Selection – Oct 2012
- Notice to Proceed – March 2013
- Proof of Concept – May 2013
- Conversion to Design Build
- PL&G – July 2013
- Request for Proposals – Sept 2013
- Bids Submitted – Nov 2013
- Contractor Selection – Dec 2013





# Pennyrile Pkwy Interchange

## Interstate Design Criteria

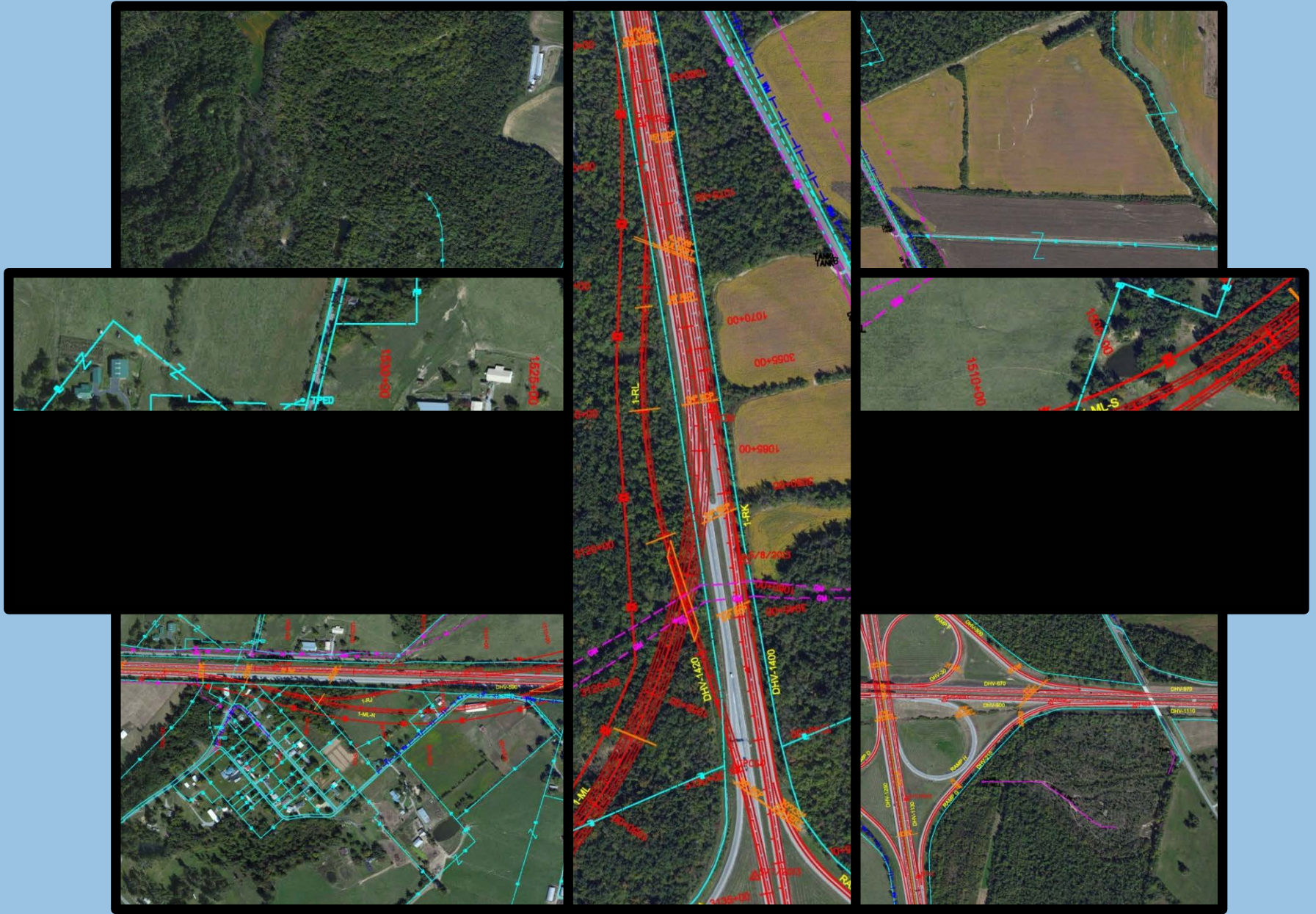
- Design Speed – 70 mph
- 4 lane Facility
- Lane Width – 12 feet
- Shoulder Width – 10 feet Paved (outside)  
4 feet Paved (inside)
- Median Width – 36 feet Pennyrile Parkway  
30 feet Western Ky Parkway







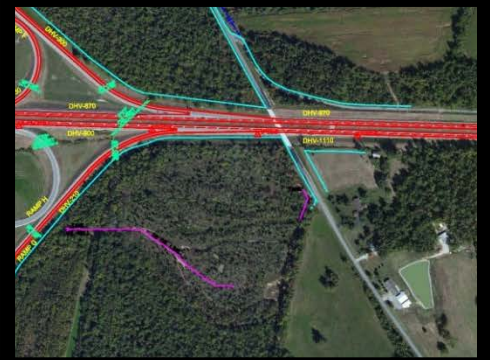
# Alternative 1







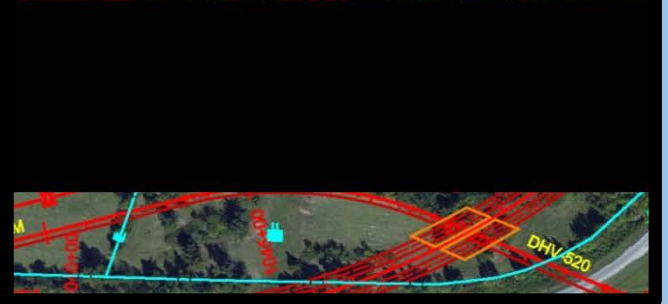
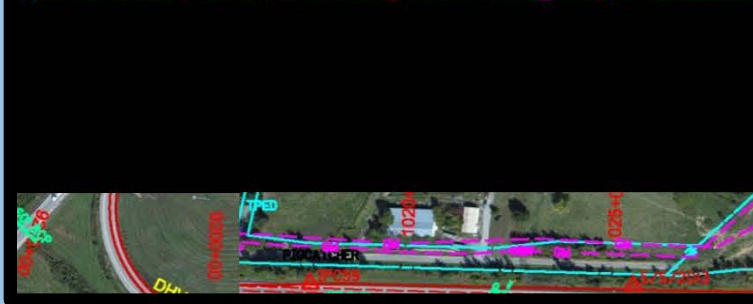
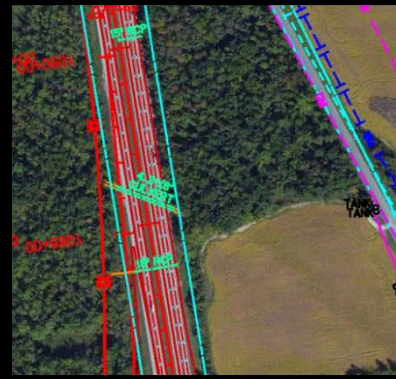
# Alternative 2







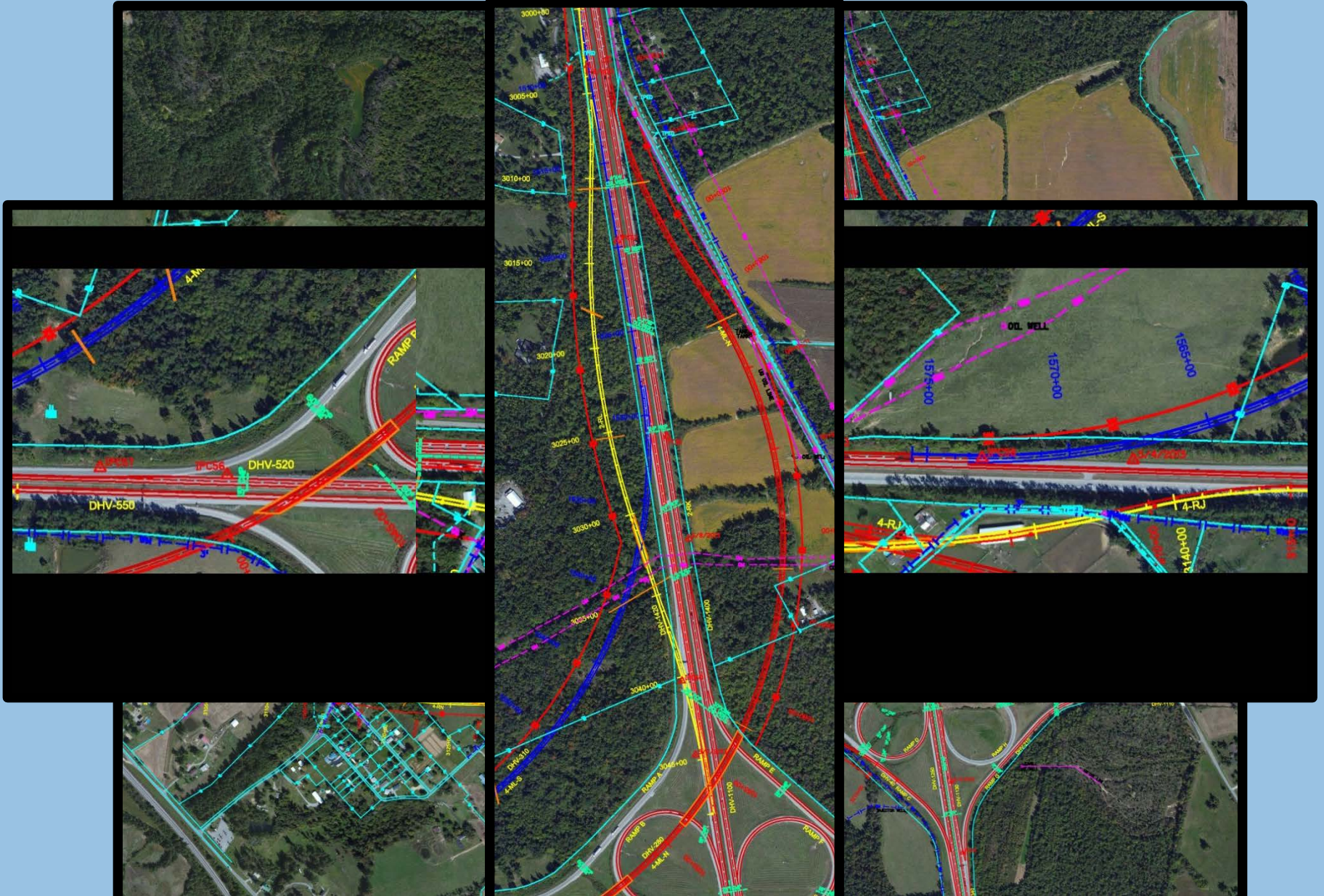
# Alternative 3







# Alternative 4

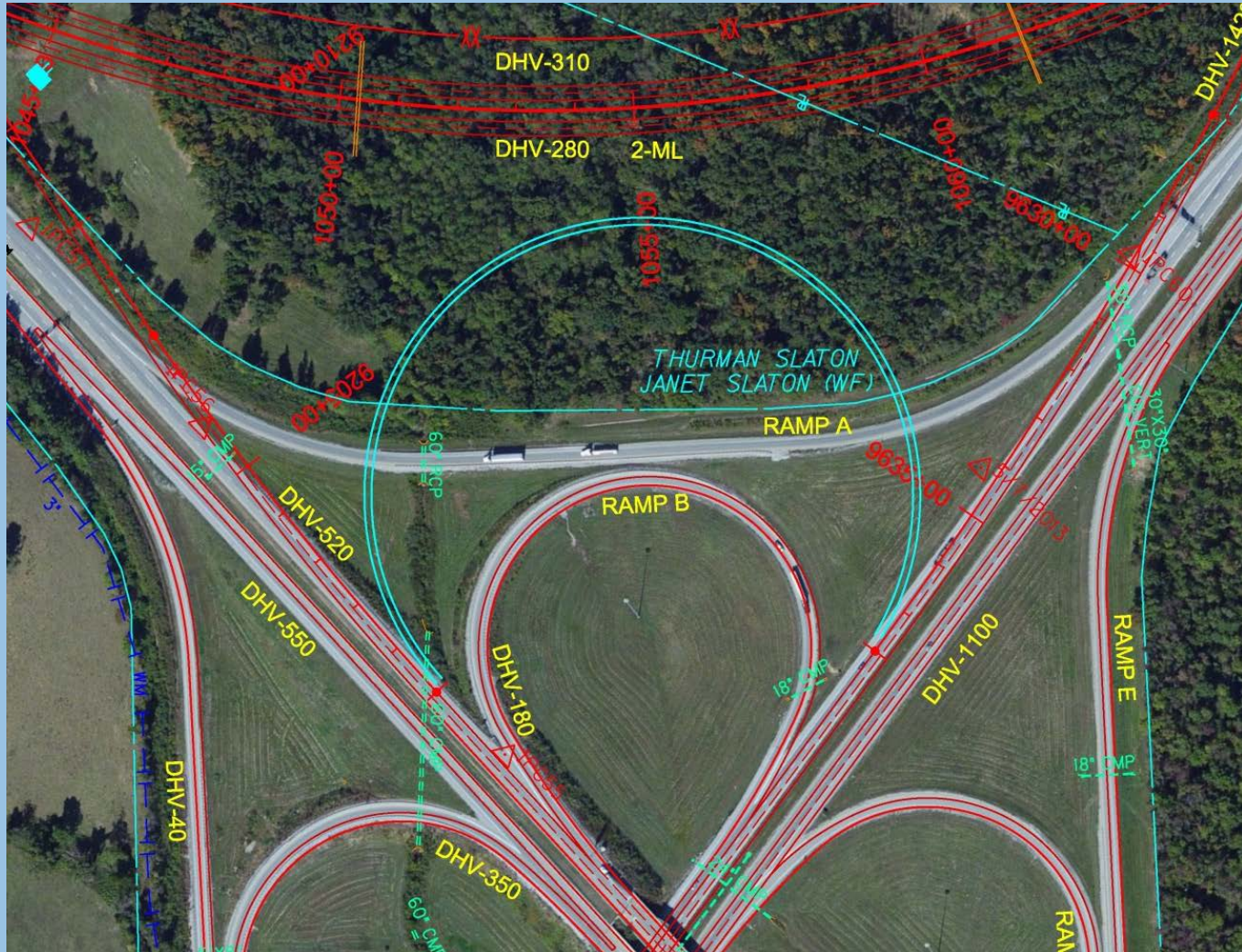






# Pennyrile Pkwy Interchange

## EXISTING INTERCHANGE IMPROVEMENTS

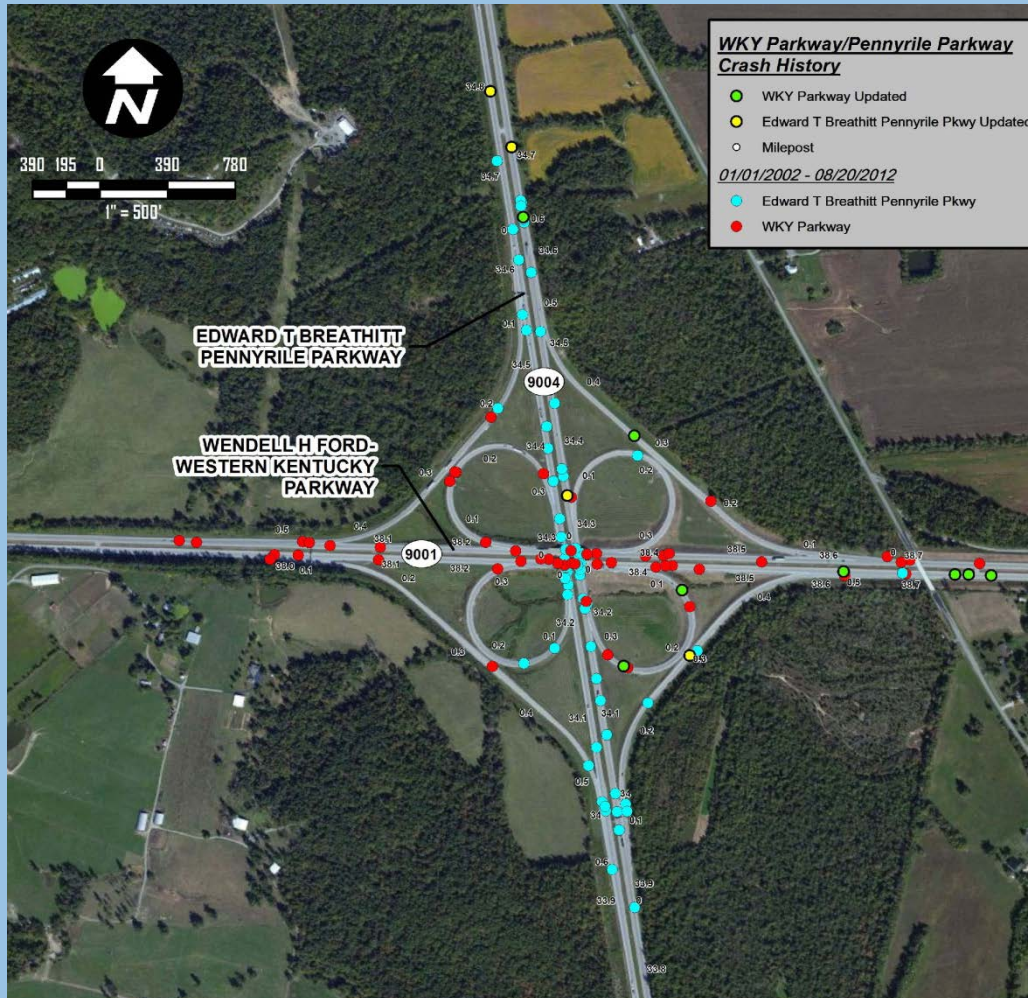






# Pennyrile Pkwy Interchange

## Safety Analysis



**Western Kentucky Parkway  
CRF - 0.858**

**Pennyrile Parkway  
CRF - 0.779**

**0 Fatal Crashes**

**7 Injury Crashes**







# Pennyrile Pkwy Interchange

## Conversion to Design Build

- Owners Representative
  - Develop RFP
  - Assist with Plan Review
  - Not part of scoring committee
  - Utility Coordination
  - Preliminary Line and Grade Plans
  - Geometric Layout Sheet/ Design Executive Summary
  - Right of Way Plans



# Pennyrile Pkwy Interchange

## SURVEY

- Horizontal & Vertical Control**
- Edges of Pavement**
- Drainage data**
- Geotechnical Staking**
- Right of Way Staking**
- Property Lines**
- Utility Coordination**





# Pennyrile Pkwy Interchange

## ENVIRONMENTAL

- CE Level III Reevaluation
  - Archaeology (UK)
  - Noise & Air Analysis
  - Haz-Mat/ UST
  - Document Preparation
  
- Document Approved
  - August 8, 2013







# Pennyrile Pkwy Interchange

## Right of Way Plans

- No Relocations
- Relocation of Cates Rd
  - Acquisition of Barn
- 6 Parcels
  - Mostly Farmland





# Pennyrile Pkwy Interchange

## Utility Coordination

- Meeting with Utility Companies
  - On site and Office
  
- Relocation Timing
  - Electric relocation in fall or spring
  - Gas relocation in fall or spring
  - Water relocation by contractor





# Pennyrile Pkwy Interchange

## Utility Coordination

### □ Electric Transmission Line

- Relocation Required

### □ Gas Transmission Lines

- Atmos (8in line)
- Orbit (6 in line) (Future 16in line)
- Survey of Line Elevations
- Relocation of Vent Pipes
- Avoided Relocating Lines







# Pennyrile Pkwy Interchange

## Utility Coordination

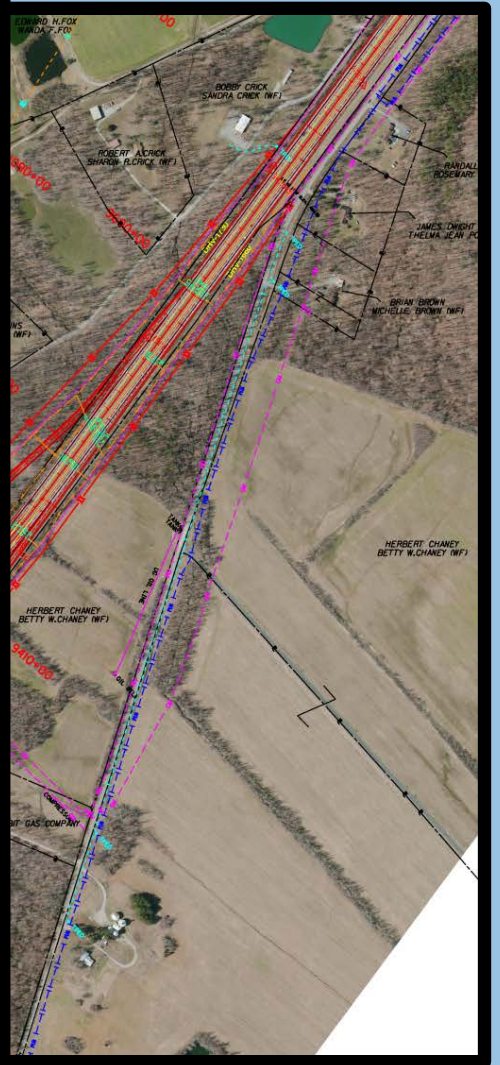
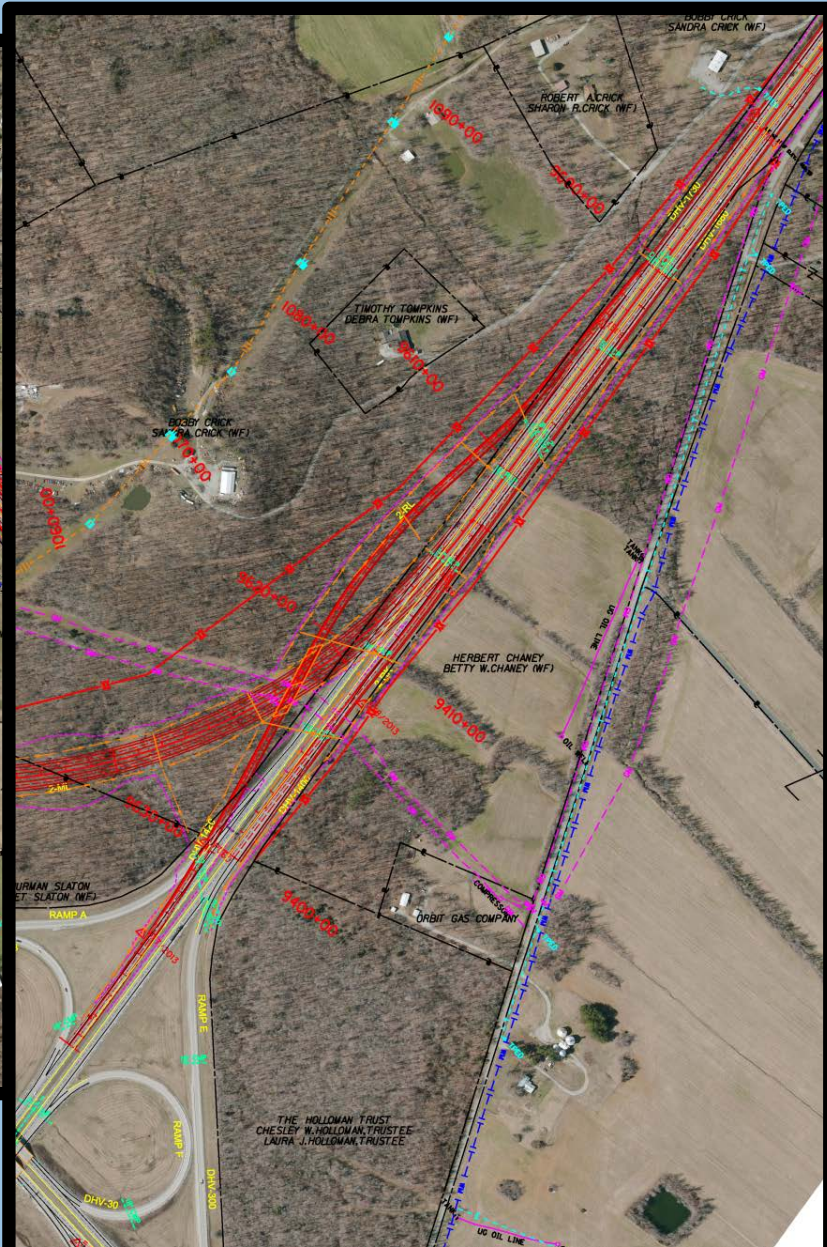
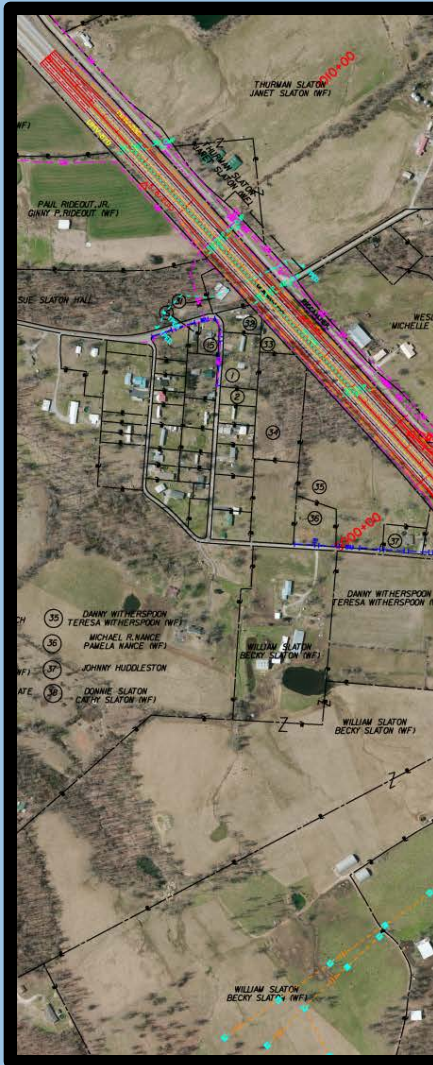
- Waterline Relocation
  - Relocation Plans included in RFP
  - Developed Conceptual Plans
  - Coordination with Utility Company
  
- AT&T
  - Abandon Line (No Relocation)
  
- No Cell Tower or Oil Tank Impacts







# ALTERNATIVE 2







# ALTERNATIVE 5







# Pennyrile Pkwy Interchange

## COST ESTIMATE

HOPKINS COUNTY

I-69 AND PENNYRILE PARKWAY INTERCHANGE

	ROADWAY				CONSTRUCTION TOTAL		PROJECT TOTAL
	Earthwork	Pavement	Structures	Misc.	RIGHT OF WAY	UTILITIES	
	CY	SY	Ft <sup>2</sup>	40%			
Alternate 2	\$2,200,000	\$7,500,000	\$2,800,000	\$5,000,000	\$950,000	\$1,000,000	\$19,450,000
	311,000 CY EMB 250,000 CY EXC		23,400 SQ FT				
Alternate 5	\$2,900,000	\$7,300,000	\$2,200,000	\$5,000,000	\$950,000	\$500,000	\$18,850,000
	405,000 CY EMB 180,000 CY EXC		18,000 SQ FT				
One lane WKY Ramps	-\$300,000	-\$450,000	-\$500,000	-\$500,000			-\$1,750,000
	40,000 CY EMB		4300 SQ FT				



# Pennyrile Pkwy Interchange

## FUTURE STEPS

- DRAFT RFP RELEASED – SEPTEMBER 5, 2013
- FINAL RFP RELEASED – OCTOBER 1, 2013
- TECHNICAL PROPOSAL - NOVEMBER 15, 2013
- PRICE PROPOSAL - DECEMBER 6, 2013
- AWARD CONTRACT - DECEMBER 13, 2013
- CONSTRUCTION COMPLETION - OCTOBER 2015



# I 69 Update – Kentucky

## Questions

Gary Valentine, P.E.

[Gary.Valentine@ky.gov](mailto:Gary.Valentine@ky.gov)