

Project Purpose and Need

- Safety problems
- Traffic congestion
- Inefficient mobility
- Inadequate system linkage



Bottom line: Improve cross-river mobility

Project Purpose and Need

A key purpose and need for the project is to alleviate traffic crossing the downtown bridges by building a new bridge for northbound traffic and converting the existing Kennedy Bridge to southbound-only traffic.

Traffic Volume – Vehicle Crossings Per Day

Bridge	Original capacity	2010	2030 no-action	2030 w/2003 Alternative	2030 w/2011 Alternative w/tolls ⁽²⁾
Kennedy ⁽¹⁾ I-65	80,000	122,000	155,000	136,000	104,000
Sherman Minton I-64	80,000	82,000	112,000	100,000	122,000
Clark Memorial US 31 (2nd St. Bridge)		22,000	25,000	28,000	35,000
East End Bridge			0	60,000	52,000

(1)Currently approximately 20% truck traffic; original capacity would have been for 5%-8% truck traffic

(2)Study based on tolls of \$1.50 car, \$3 small truck, \$6 large truck (these are not proposed rates but were used for study purposes only)

Supplemental Environmental Impact Statement

- Federal requirement to review potential changes
- Consider impacts associated with:
 - Tolling
 - Cost-saving ideas
- Purpose and Need has not changed

Proposed SEIS Alternatives

- No Action
- 2003 Selected Alternative with Tolls
 - New Downtown I-65 bridge
 - New East End bridge and I-265 linkage (6 lanes)
 - Kennedy Interchange rebuilt to south
- 2011 Modified Alternative with Tolls
 - New Downtown I-65 bridge (without bike/ped lane)
 - New East End bridge and I-265 linkage
(reduce to 4 lanes; expandable to 6 lanes)
 - Kennedy Interchange rebuilt in place

Environmental Resources

Alternatives evaluated based on following environmental factors:



- Water Resources
- Biological Resources
- Contaminated Materials
- Air Quality
- Noise
- Energy

Environmental Resources

Alternatives evaluated based on following environmental factors:

- Land Use
- Social/Economic
- Historic/Cultural
- Parks
- Environmental Justice



Environmental Impact

The 2011 Modified Alternative has less of an environmental impact than the 2003 Selected Alternative.

Social/Economic – acquisitions resulting as part of the Project

Type of property	2003 Alternative	2011 Alternative	Difference
Business & Nonprofit Organizations	80	24	56 fewer properties
Residential	80	70	10 fewer homes
Agriculture	18	18	No difference

No-Stop, Open-Road Tolling

- No toll booths, no stopping
- All funds are collected electronically
 - User opens an account and uses a transponder
 - User without an account is billed based on license plate number



Transponder attaches to windshield



Traffic passes under gantry and does not stop



Overhead cameras and receivers collect data

Cost Comparisons

Project Segment	2003 Selected Alternative	2011 Modified Alternative
Section 1 – Kennedy Interchange	\$ 1,530.0	\$ 728.2
Section 2 – Downtown River Bridge	\$ 569.7	\$ 532.6
Section 3 – Downtown IN Approach	\$ 392.7	\$ 177.8
Section 4 – KY East End Approach	\$ 885.2	\$ 794.8
Section 5 – East End River Bridge	\$ 406.2	\$ 326.2
Section 6 – IN East End Approach	\$ 234.8	\$ 231.7
Other Costs ⁽¹⁾	\$ 124.2	\$ 125.0
TOTAL ⁽²⁾	\$ 4,142.8	\$ 2,916.2

(Costs in \$, million)

(1) Includes costs that are not section-specific, including Project Oversight, Environmental Mitigation of Hazardous Materials, Wetland Remediation and Historic Preservation

(2) Totals may not sum due to rounding

Crash Rates – UK Study 2005-2009

Kennedy Interchange (Spaghetti Junction)

All Crashes – 3,304

Average of 2 crashes per day

Twice the national average

Injury Crashes – 579

Twice the national average

Fatalities – 7



Interstates leading to the Kennedy Interchange

All Crashes – 2,990

Higher than national average

Injury Crashes – 562

Higher than national average

Fatalities – 4



Existing Kennedy Interchange



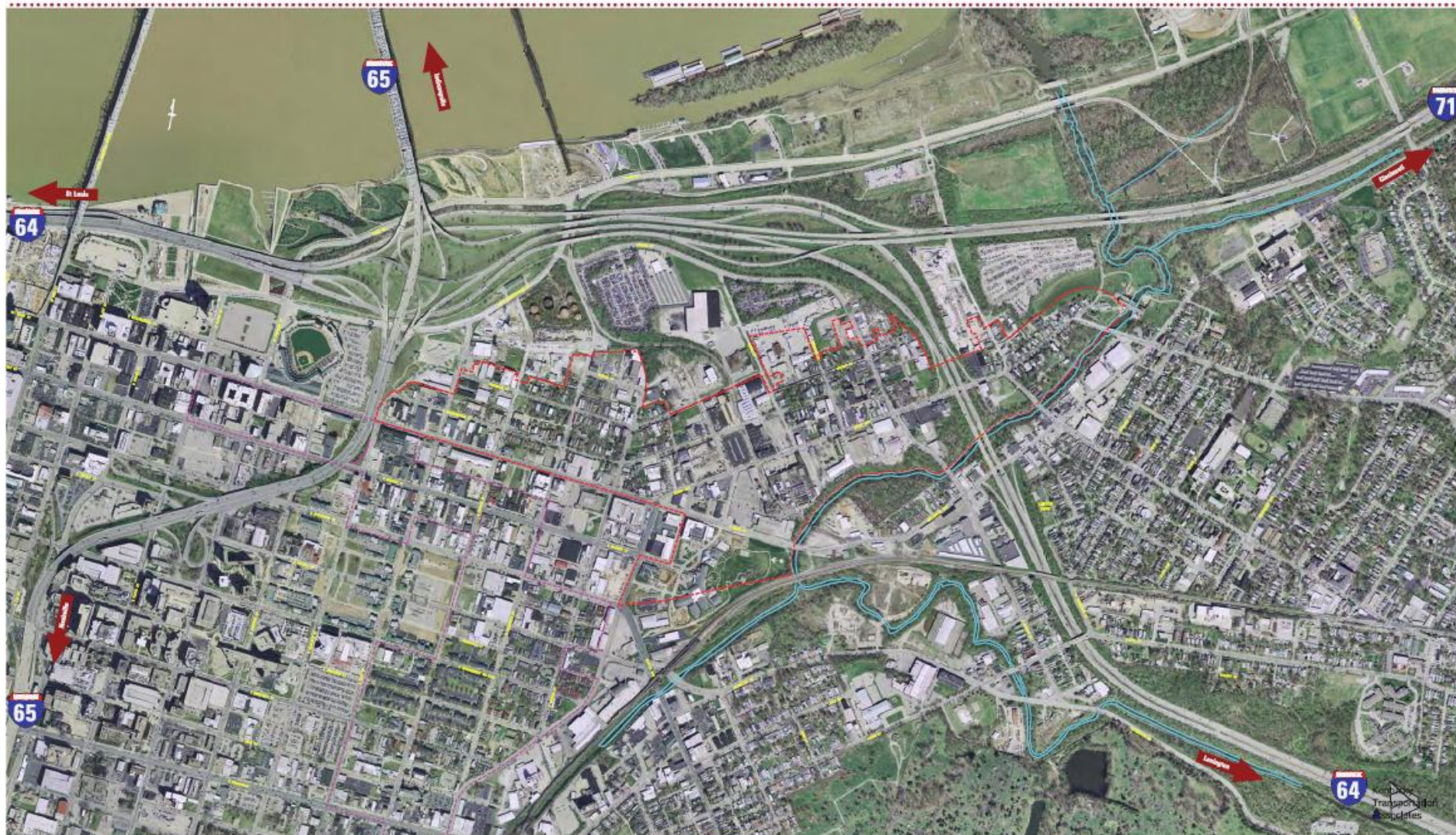
EIS Selected Alternative



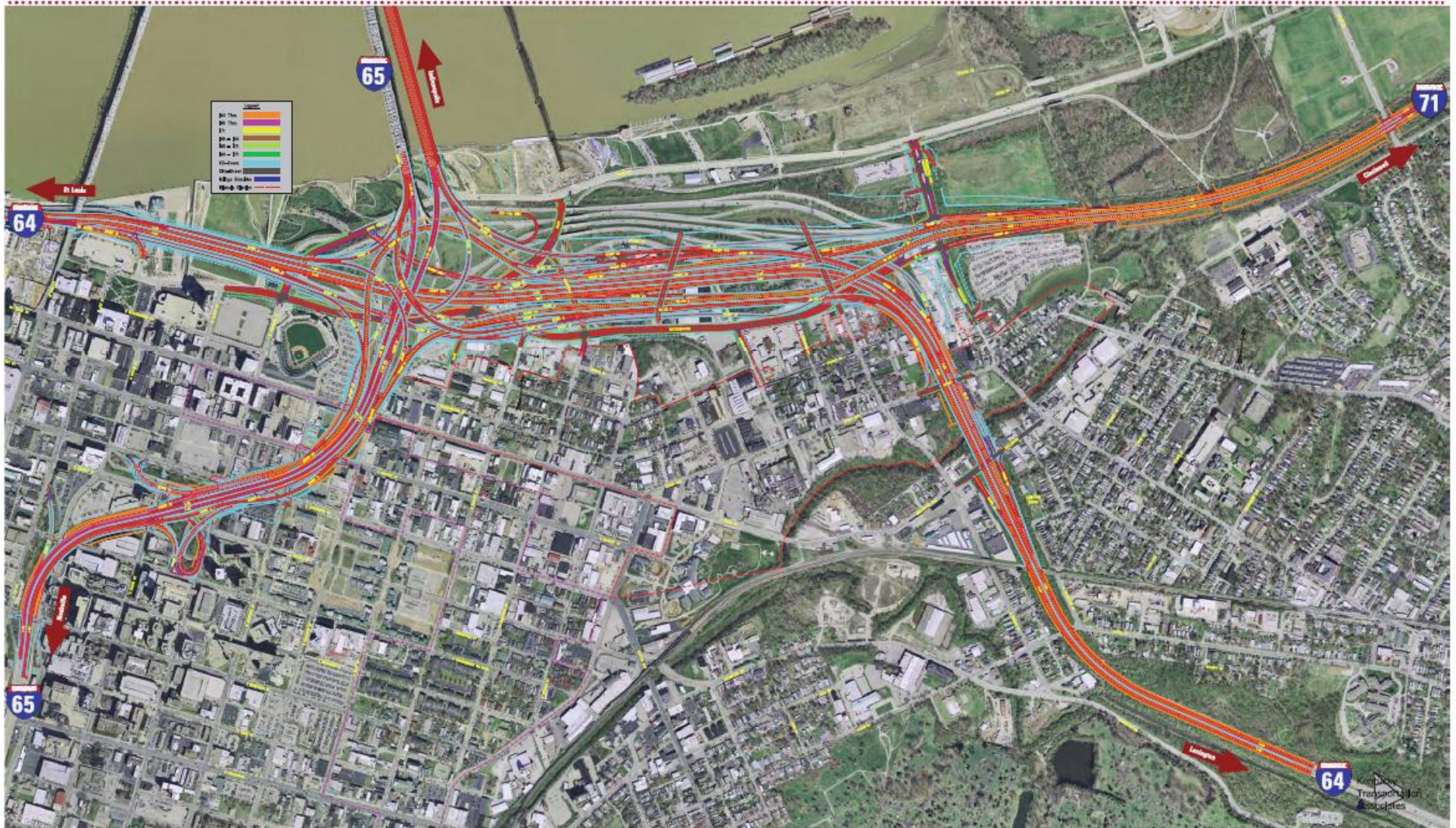
Modified Alternative



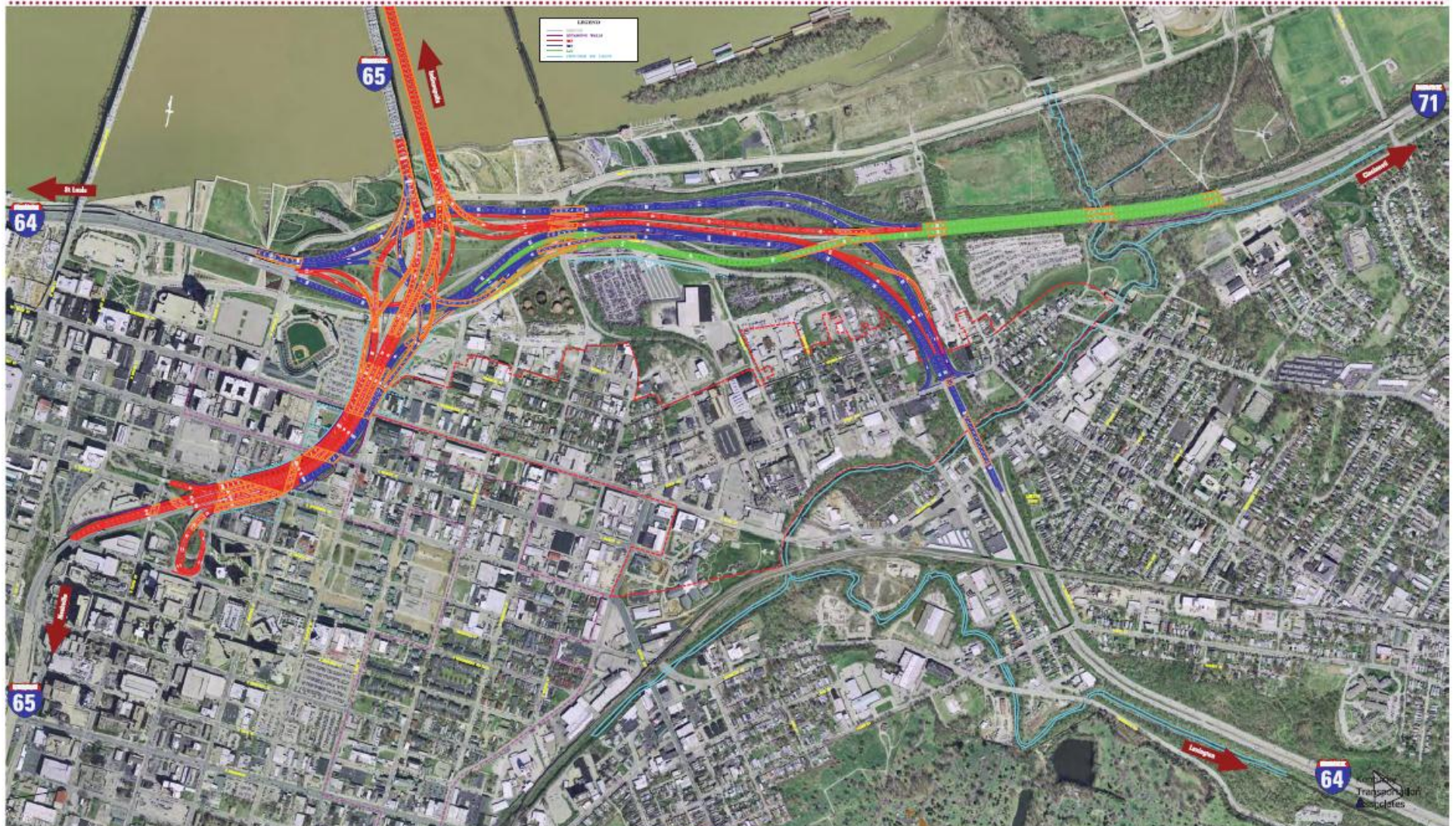
Existing Kennedy Interchange



EIS Selected Alternative



Modified Alternative



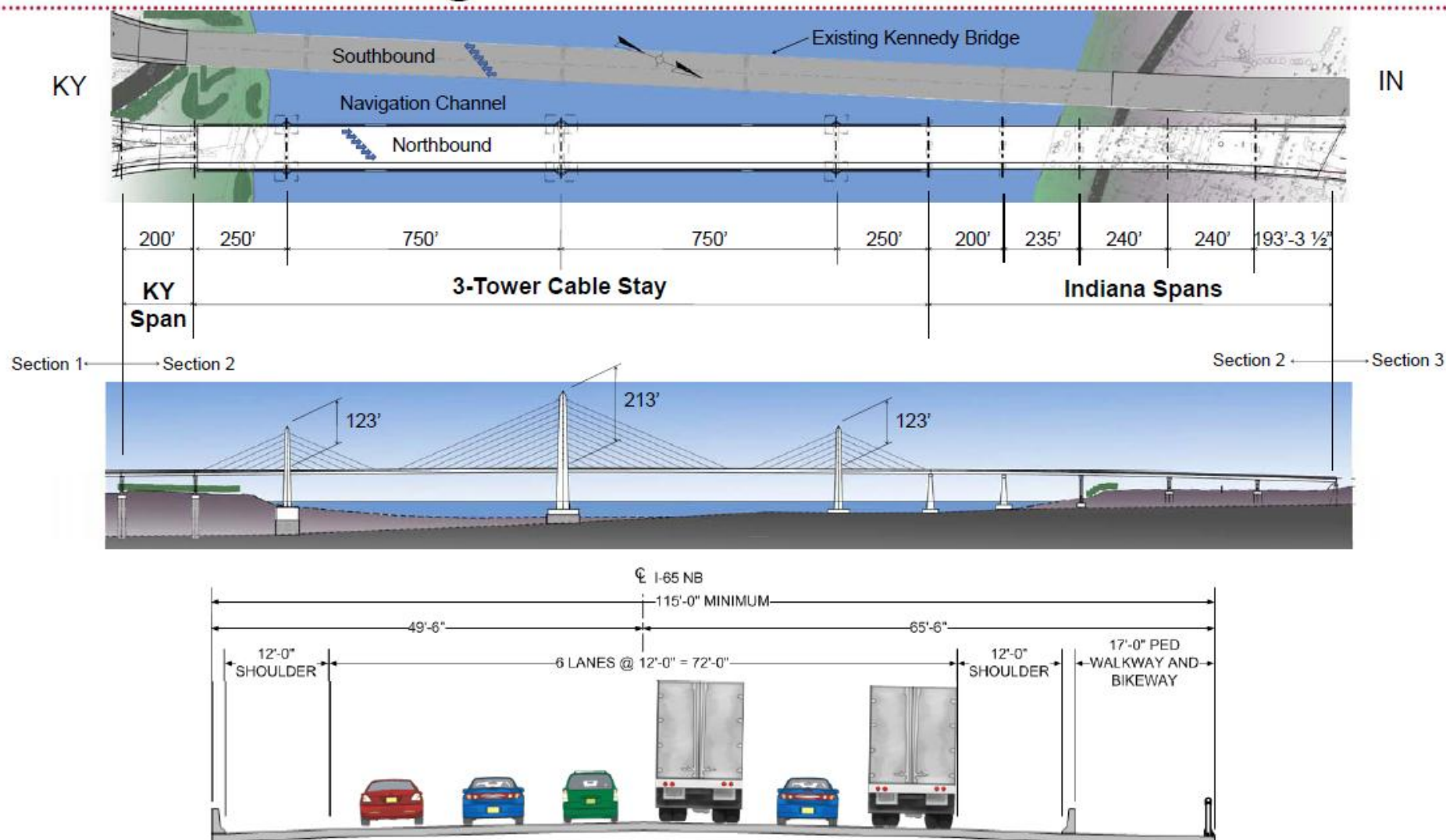
EIS Selected Alternative

Modified Alternative

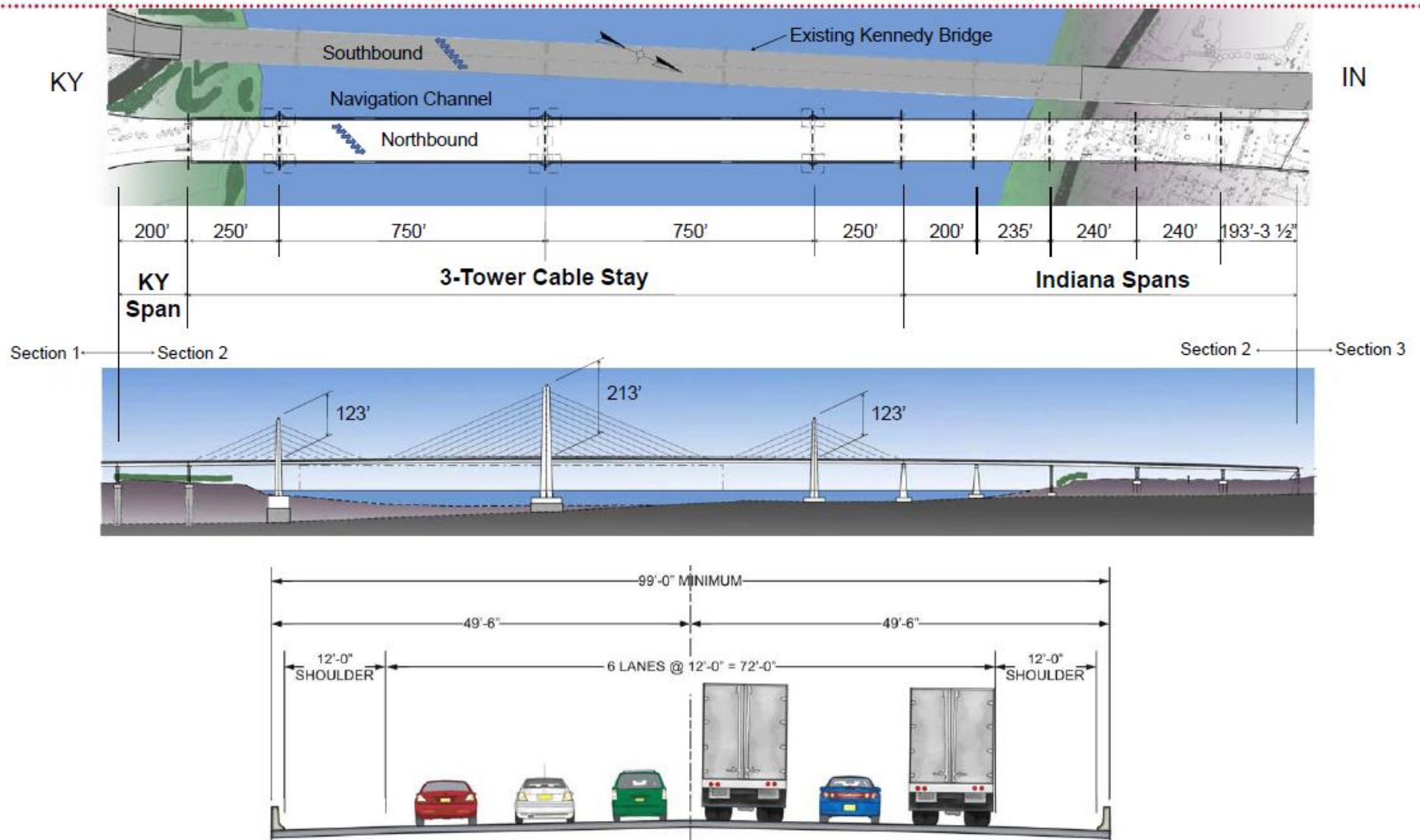
Estimated cost - \$1.5 billion	⇔ Estimated cost - \$0.7 billion
Average travel speed - 50 mph*	⇔ Average travel speed - 50 mph*
Average delay – 100 hours*	⇔ Average delay – 100 hours*
Ramp curves and lane and shoulder widths on roadway and bridges meet today's AASHTO criteria.	⇔ Ramp curves and lane and shoulder widths on roadway and bridges meet today's AASHTO criteria.
Right of Way taking: 93 Parcels - 70 Acres - 38 relocations	⇔ Right of Way taking: 30 Parcels - 11 Acres - 16 relocations
43 Contaminated parcels in Right of Way.	⇔ 14 Contaminated parcels in Right of Way.
Requires relocation of major overhead electric transmission line on the south side of the interchange.	⇔ Avoids major electric transmission line on the south side of the interchange.
Provides right side I 65 exits/entrances on I 64.	⇔ Retains current left side I 65 exits/entrances on I 64.
Eliminates current I 64 pump station and provides 500 year flood design (raises height of interchange).	⇔ Retains an I 64 pump station with a 100 year flood design (same as existing – significantly lowers interchange height versus EIS Selected Alternative).
At Ohio Street – Frankfort Avenue – I 71 1) provides I 71 entrance/exit ramps to/from I 71 NB at Frankfort Avenue; 2) raises Frankfort Avenue at I 71 underpass above 10 +/- year flood; 3) provides direct local access under I 64 to Witherspoon.	At Ohio Street - Frankfort Avenue - at I 71; same as today- ⇔ 1) no access to/from I 71 NB from Frankfort Avenue; 2) no grade change on Frankfort Avenue under I 71 overpass; 3) no new connection under I 64 between Frankfort Avenue and Witherspoon.
Provides – Mellwood to Story connection to facilitate I 64 WB exit movement to WB Story (Downtown Louisville).	⇔ I 64 WB exit movement from Mellwood to WB Story (Downtown Louisville) same as today.
Provides movement to I 65 NB from the 2nd Street entrance ramp.	⇔ Maintains current 2nd Street access to only I 64 EB and I 71 NB (no access to I 65 NB).
Provides for potential future direct access from Butchertown area to River Road/Waterfront Park.	⇔ Butchertown area to River Road/Waterfront Park access - essentially same as today's.
Eliminates 3rd Street exit from I 64 WB – and adds new access from I 64 WB and I 71 SB to Preston/River Road.	⇔ 3rd Street ramp continues to operate the same as today - no new access from I 64 WB and I 71 SB to Preston/River Road.
Reconstructs I 64 Bridge over Great Lawn to align and reduce piers and improve view shed.	⇔ Leaves I 64 bridge over Great Lawn as is.

*from 2004 IJS traffic forecasts for 2030

Downtown Bridge – 2003 EIS Selected Alternative



Downtown Bridge – 2011 Modified Alternative



Downtown Bridge – 2003 EIS Selected Alternative



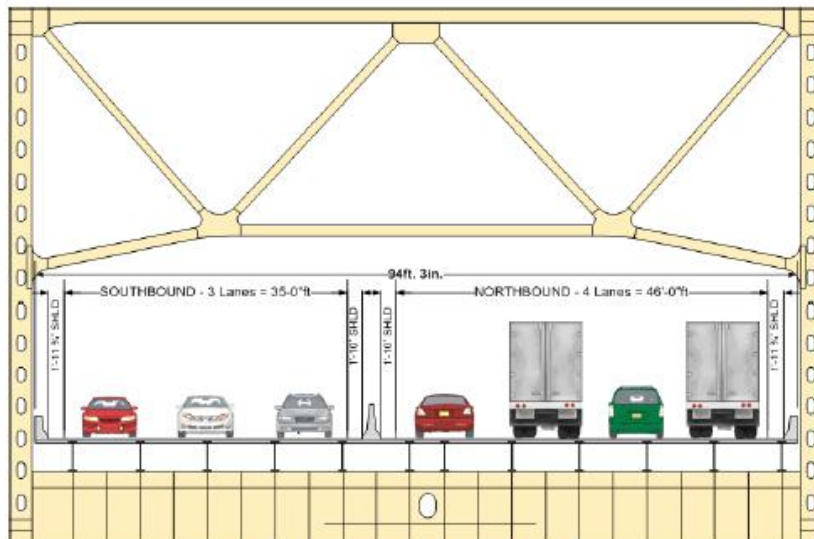
Downtown Bridge – 2011 Modified Alternative



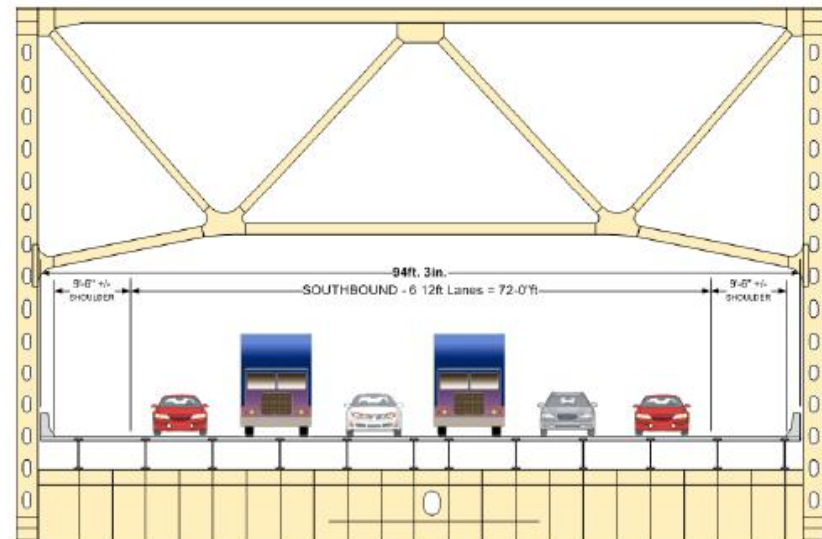
Kennedy Bridge



- 6 Lanes Southbound Only
- Shoulders, Each Side
- Deck Replacement
- Remove Median Barrier
- New Signing
- No change to the Steel Structure



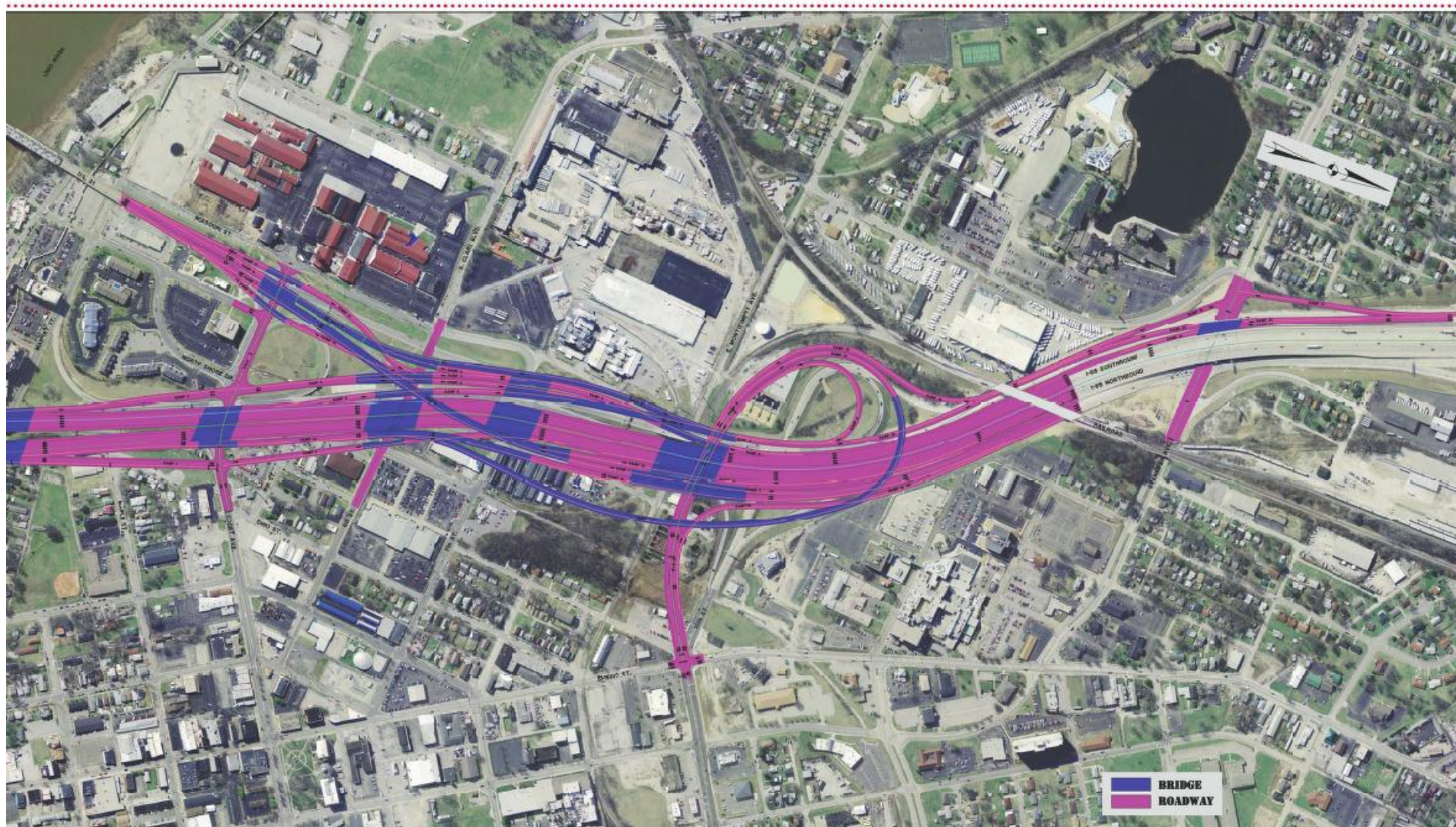
Existing Traffic Pattern



Proposed Traffic Pattern

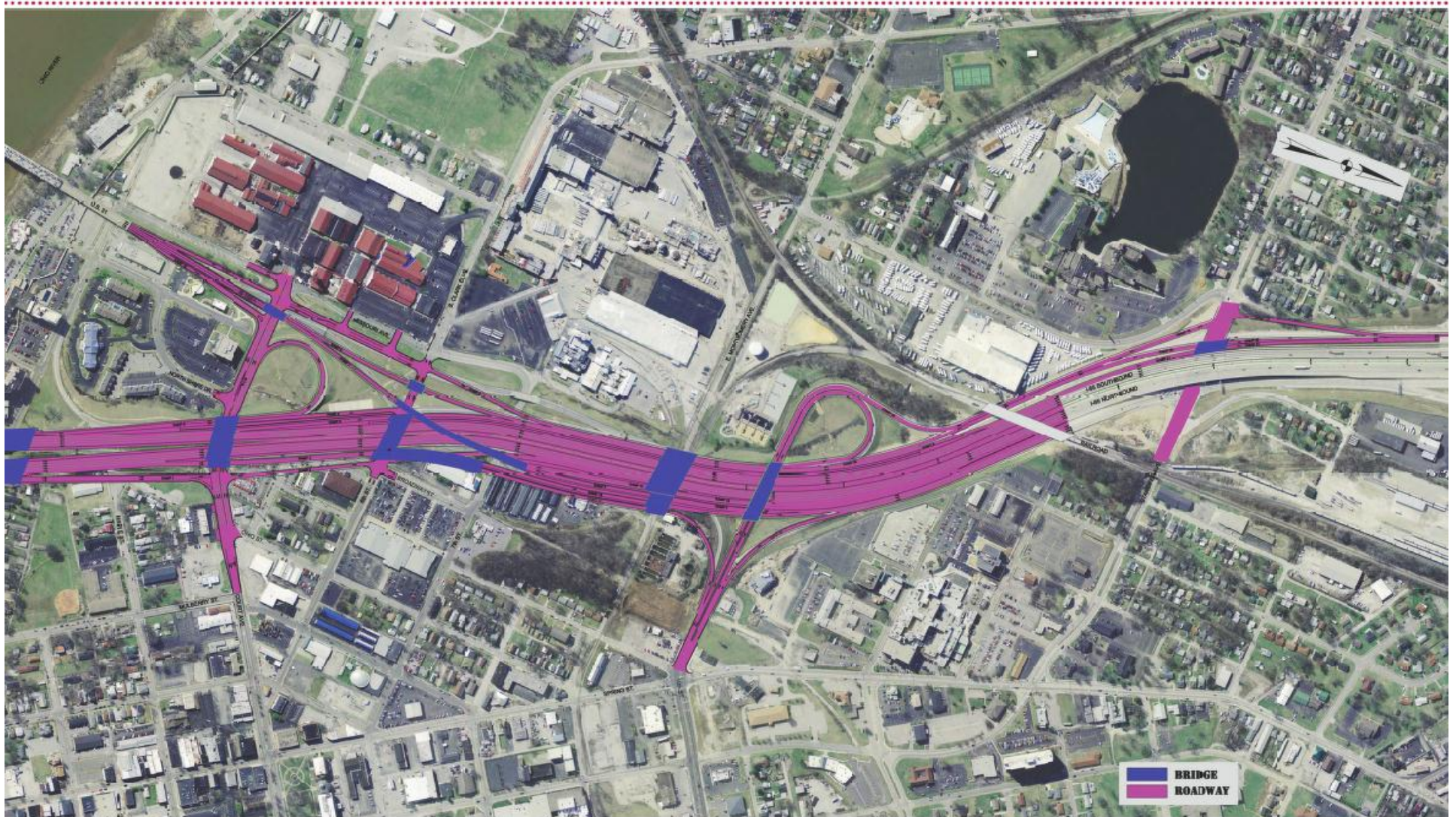
EIS Selected Alternative

Section 3

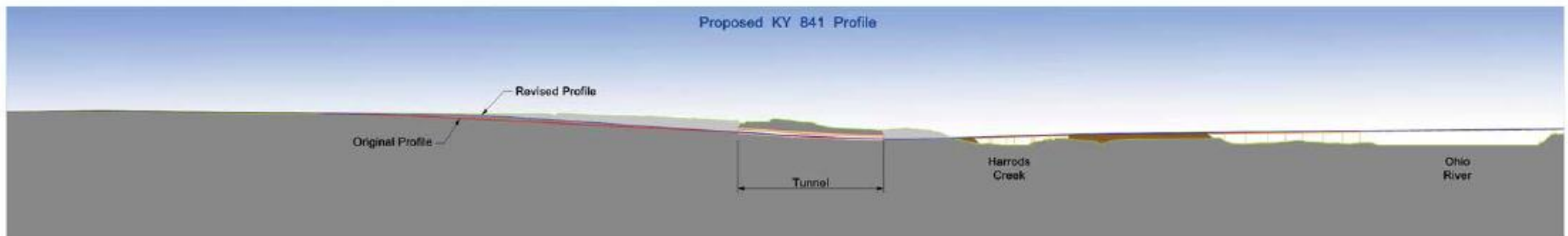
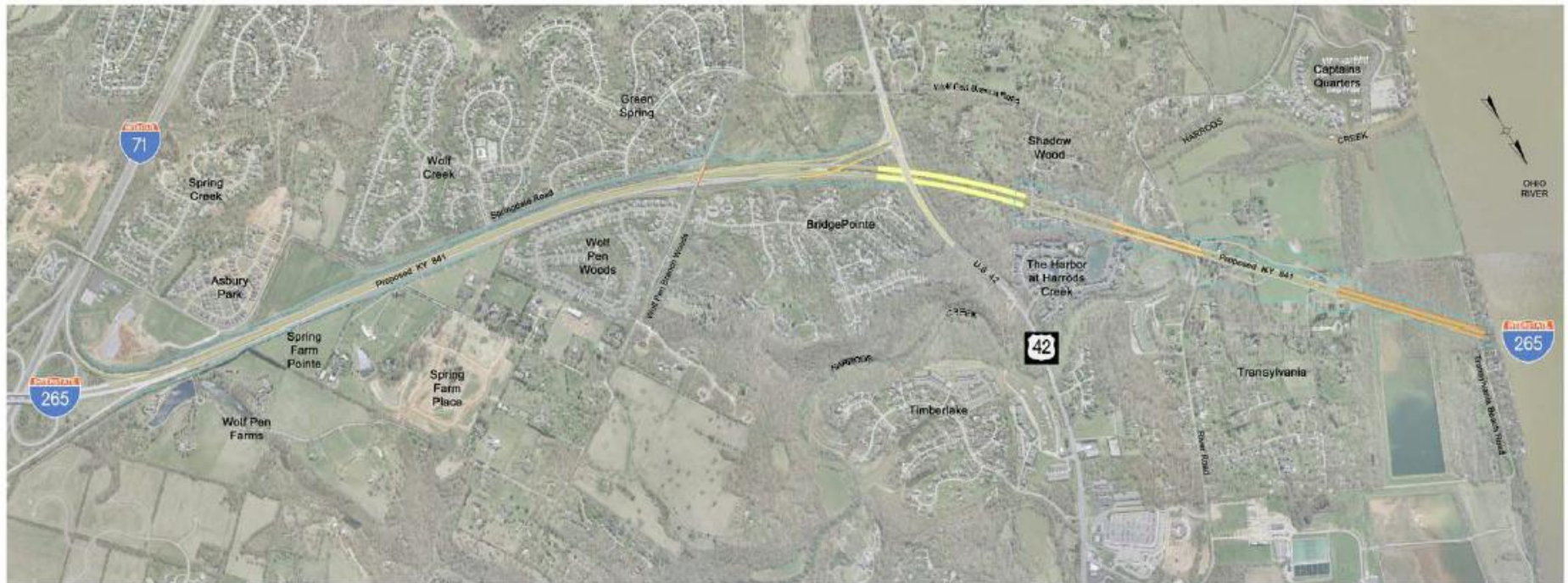


Modified Alternative

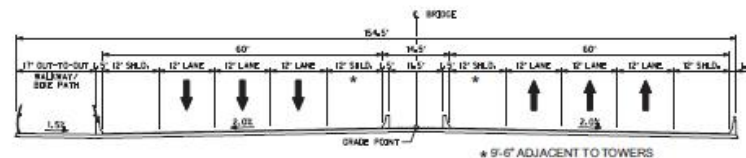
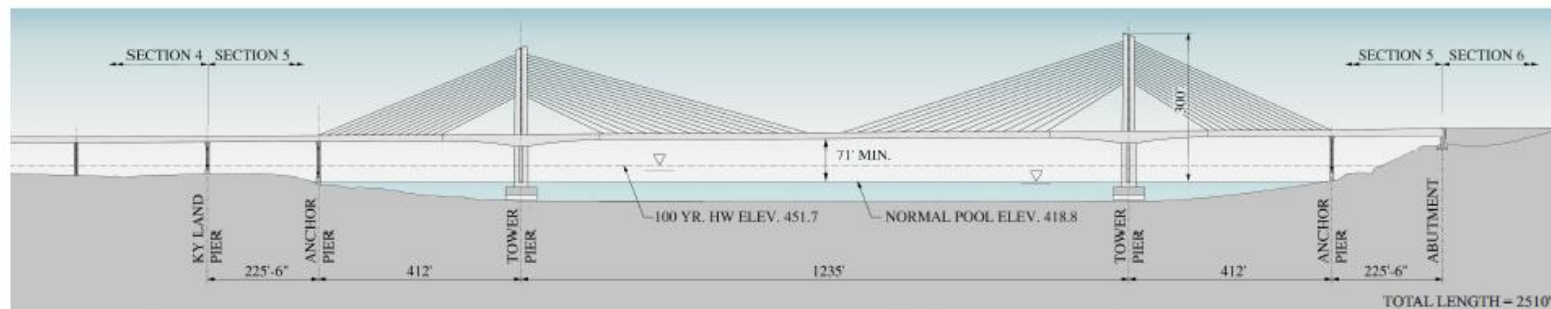
Section 3



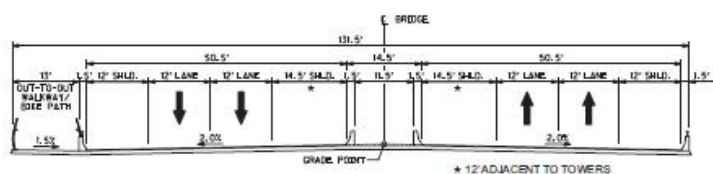
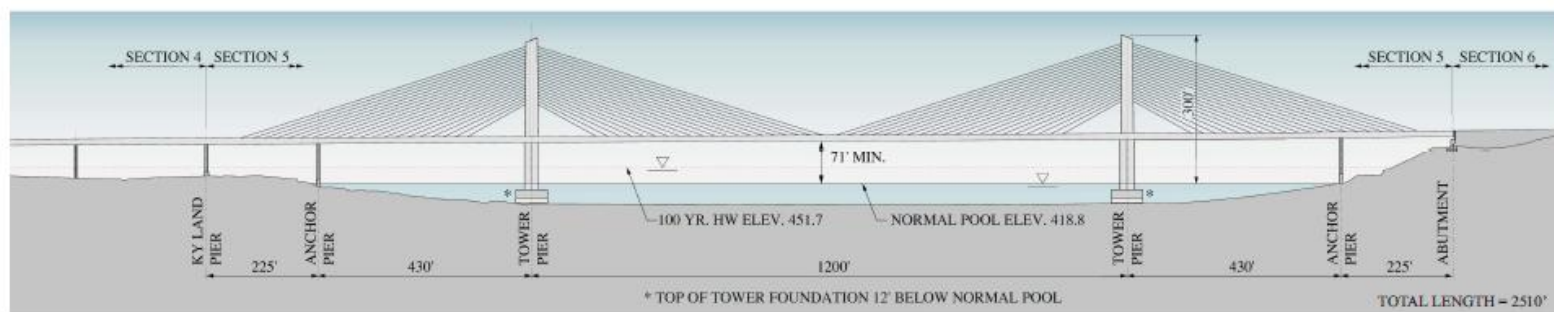
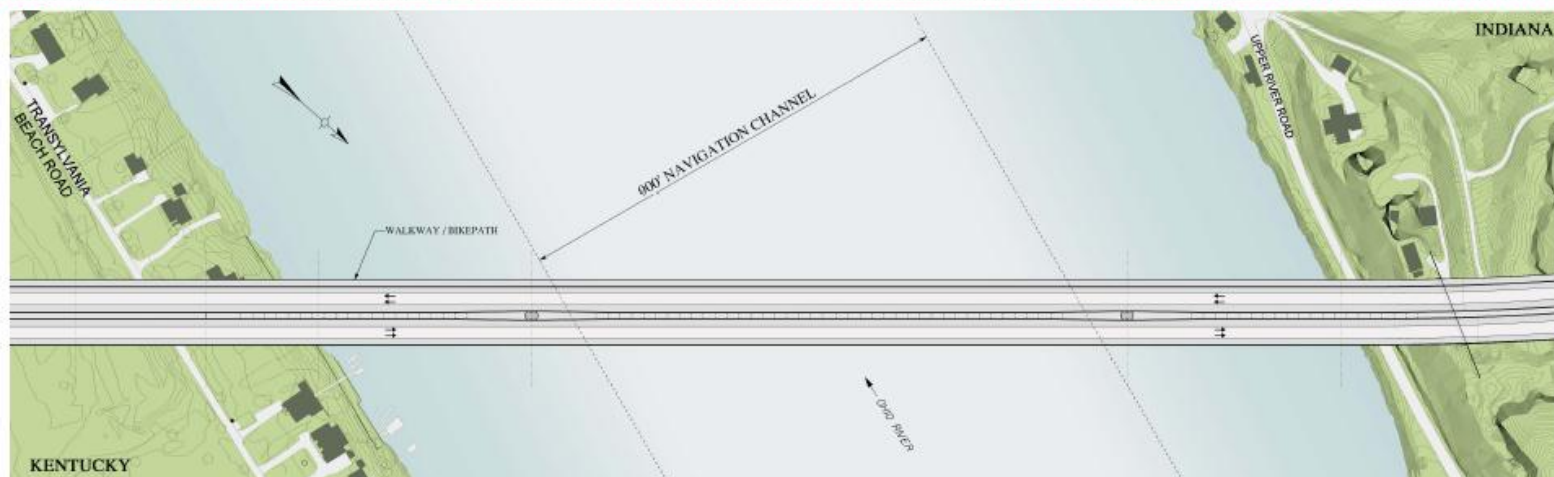
East End Kentucky Approach



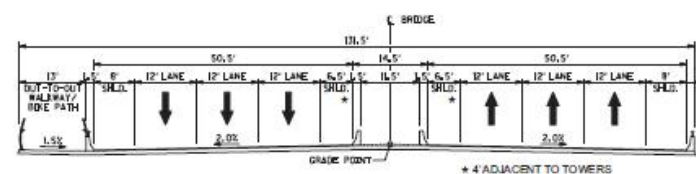
This map illustrates the Ohio River crossing between Kentucky and Indiana. The river flows horizontally across the center. A '900' NAVIGATION CHANNEL' is marked with a double line and arrows. A 'WALKWAY / BIKEPATH' is shown as a dashed line with arrows. Roads include 'TRANSYLVANIA BEACH ROAD' on the left and 'UPPER RIVER ROAD' on the right. A north arrow and a 'DOD RIVER' label are also present.



East End Bridge - 2011 Modified Alternative



4 LANES WITH FULL 12' SHOULDERS



6 LANES (IF EVER NEEDED) WITH REDUCED SHOULDERS
(BRIDGE WOULD BE RE-STRIPED)

East End Bridge - 2003 EIS Selected Alternative

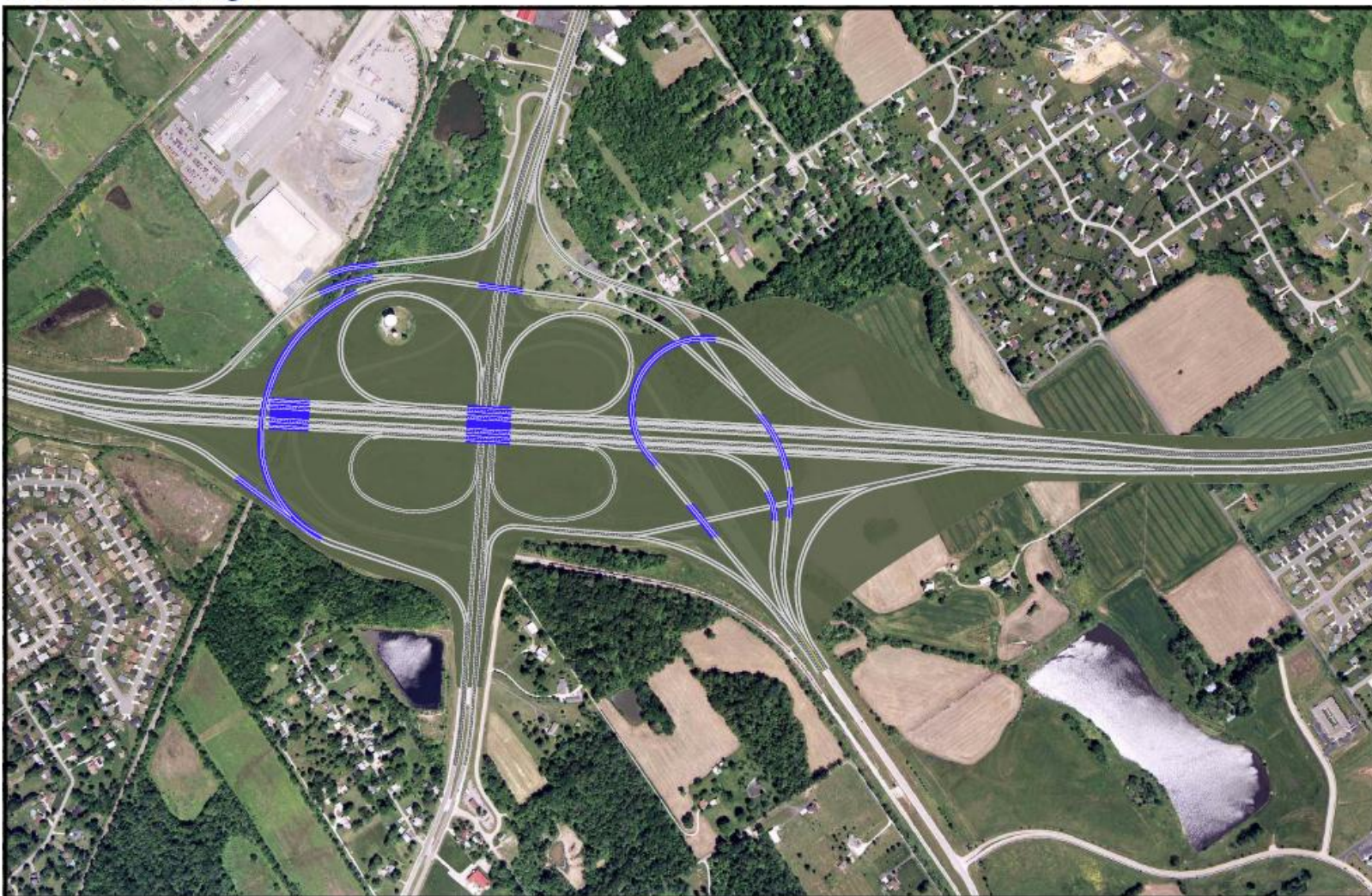


East End Bridge - 2011 Modified Alternative



Indiana Approach to the East End Bridge - 2003 EIS Selected Alternative

Full Clover Leaf Interchange



Indiana Approach to the East End Bridge - 2011 Modified Alternative

Diverging Diamond Interchange



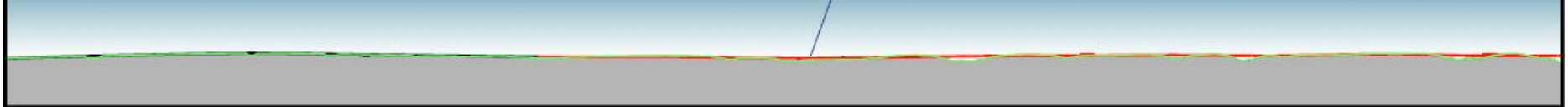
Indiana Approach to the East End Bridge

2011 Modified Alternative (shown)



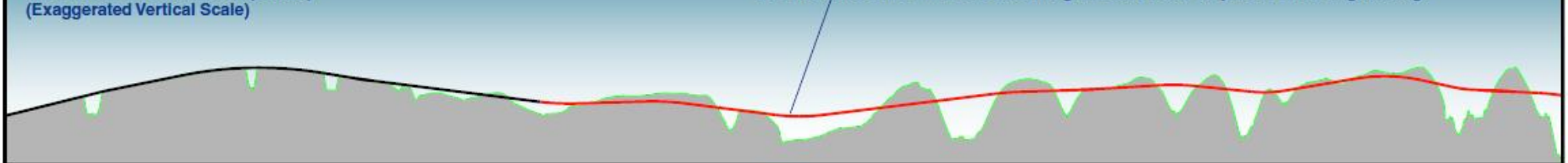
1x Vertical & 1x Horizontal (shown)

Red line shows the limits of where the grade was lower as part of Value Engineering



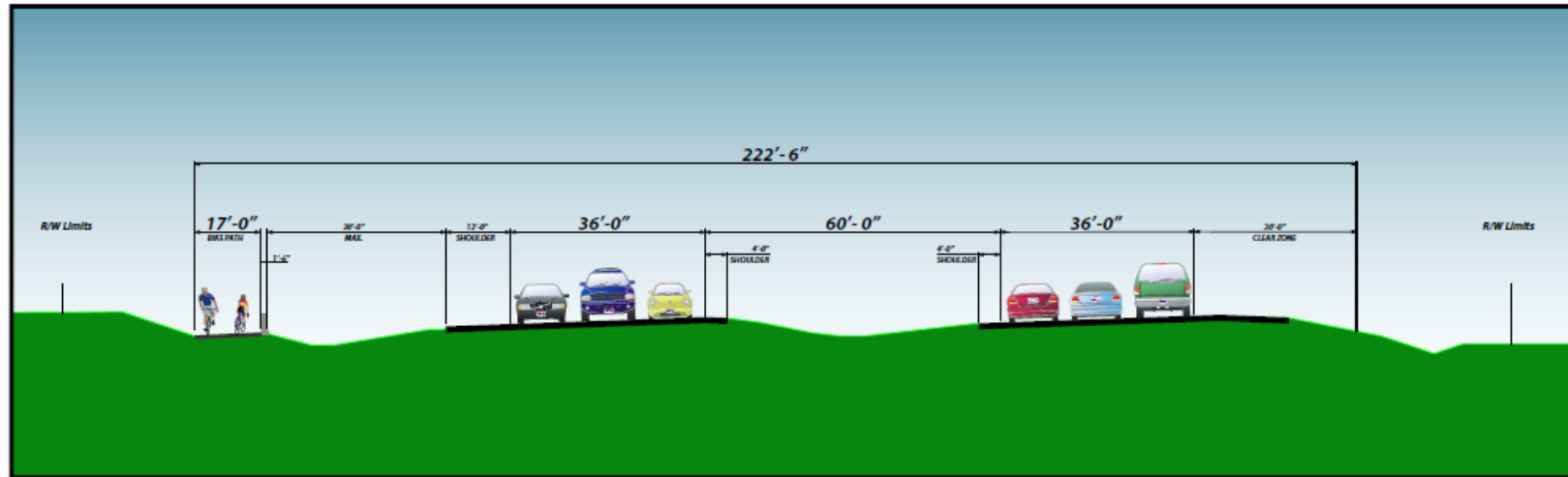
10x Vertical & 1x Horizontal (shown)
(Exaggerated Vertical Scale)

Red line shows the limits of where the grade was lower as part of Value Engineering

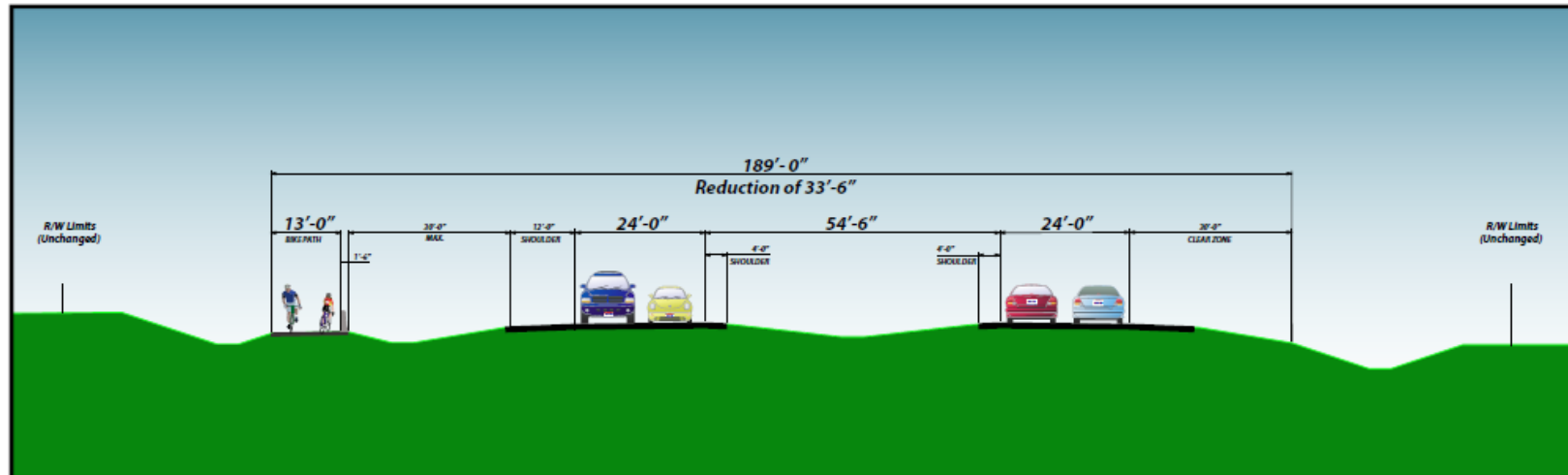


Indiana Approach to the East End Bridge - Typical Section Revision

2003 EIS Selected Alternative



2011 Modified Alternative



Federal Review Process

- Public Involvement Meetings
- Analysis of Alternatives
- Draft SEIS Published
- Public Comment Period
- Final SEIS Published
- FHWA Review
- Record of Decision

Environmental Resources

Alternatives evaluated based on following environmental factors:



- Water Resources
- Land Use
- Biological Resources
- Social/Community
- Historic/Cultural
- Economic Resources
- Parkland
- Contaminated Materials
- Hazardous Materials
- Air Quality
- Traffic Noise
- Environmental Justice
- Energy