

APPENDIX H: TIER 2 CORRIDOR WORKSHOP



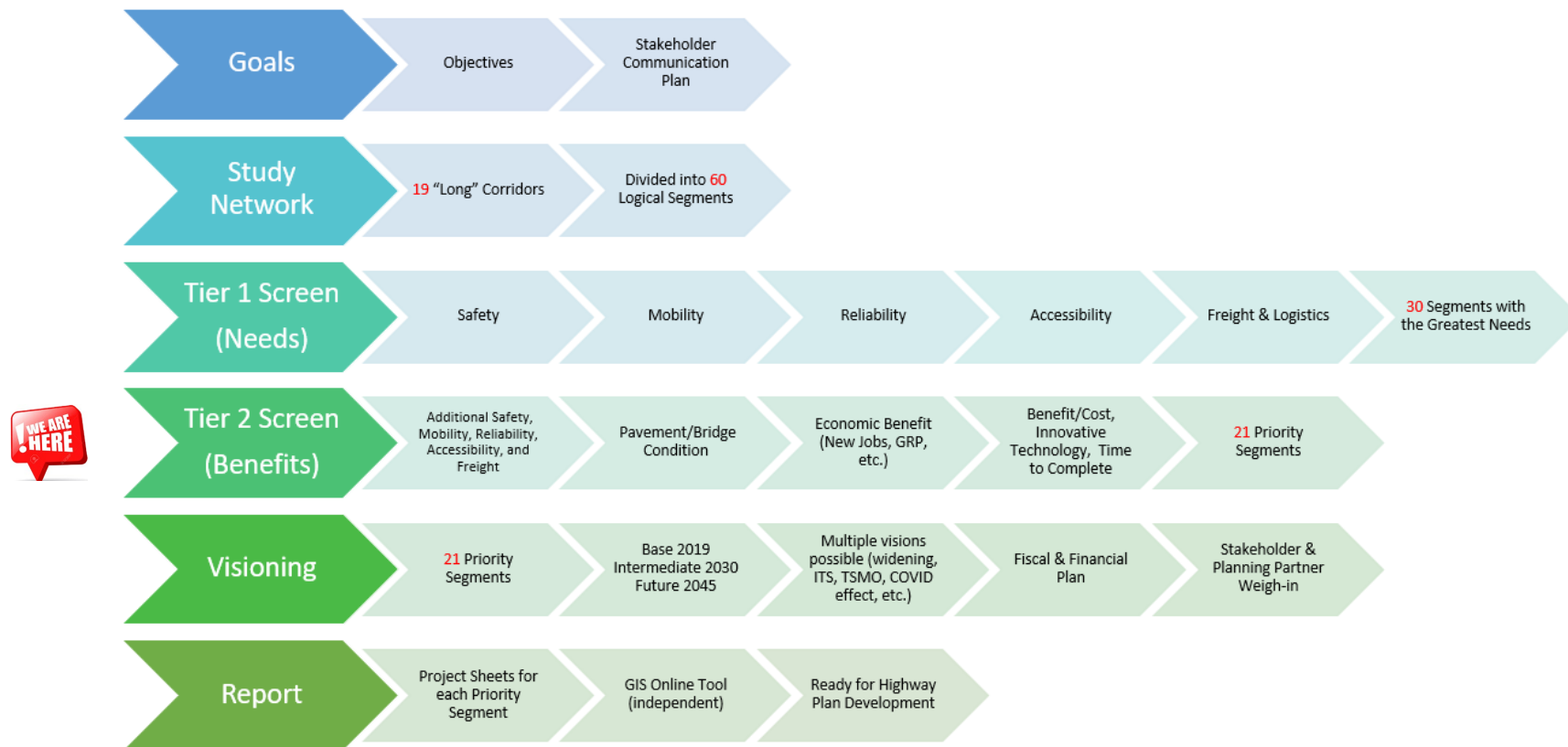
Linking Kentucky



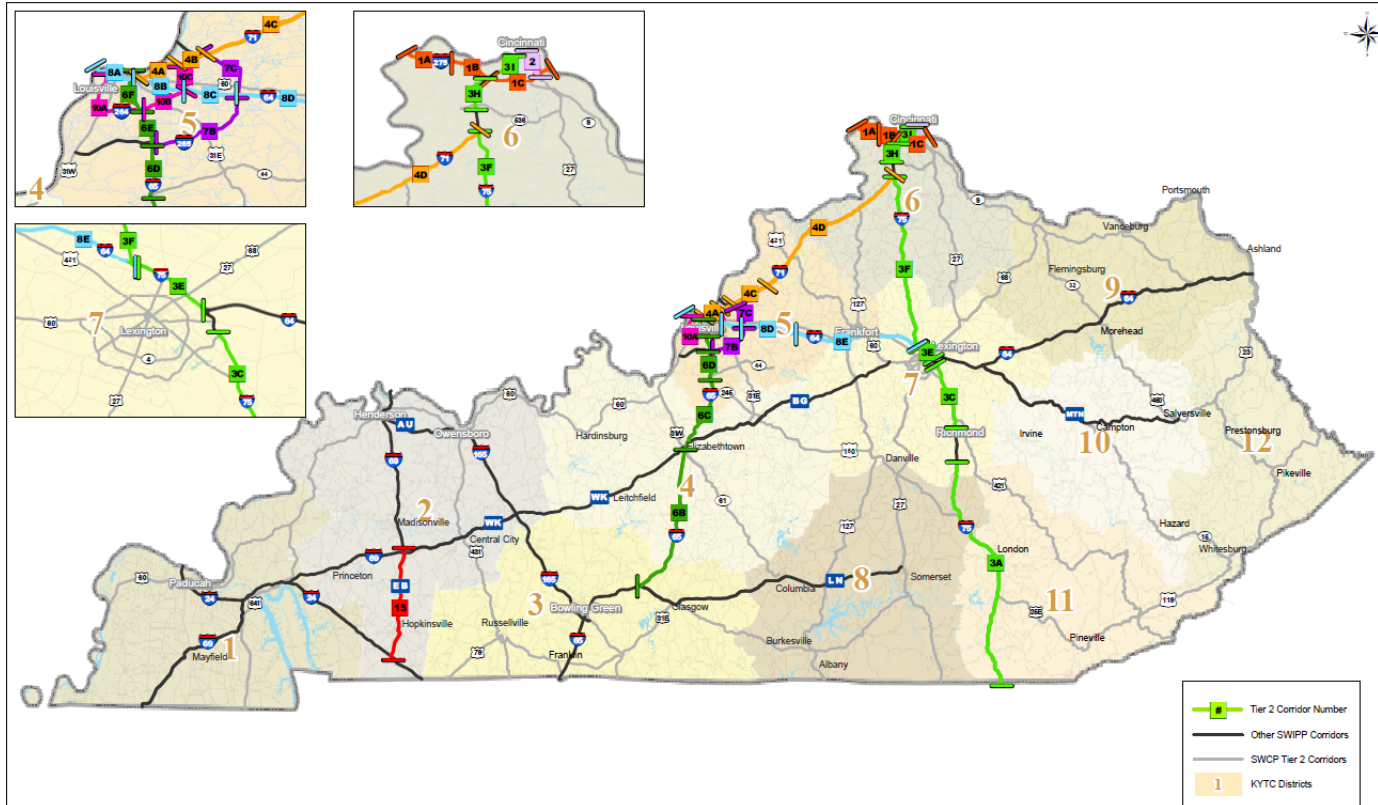
Statewide Interstate and Parkway Plan (SWIPP)

Tier 2 Corridor Review
Improvement Recommendations

Progress Overview



Tier 2 Corridors (30 segments)



Workshop Goals

- **Identify issues & needs for Tier 2 corridors**
- **Review proposed improvement strategies & reach consensus**
 - Traditional solutions (focused by **19** segments)
 - TSMO (Transportation Systems Management and Operations) solutions (focused by **11** segments)
 - TSMO solutions remain a possibility for “traditional” segments, and vice versa.

Issues & Needs

- **Potential Bottlenecks (red links) for Pre-Screening**

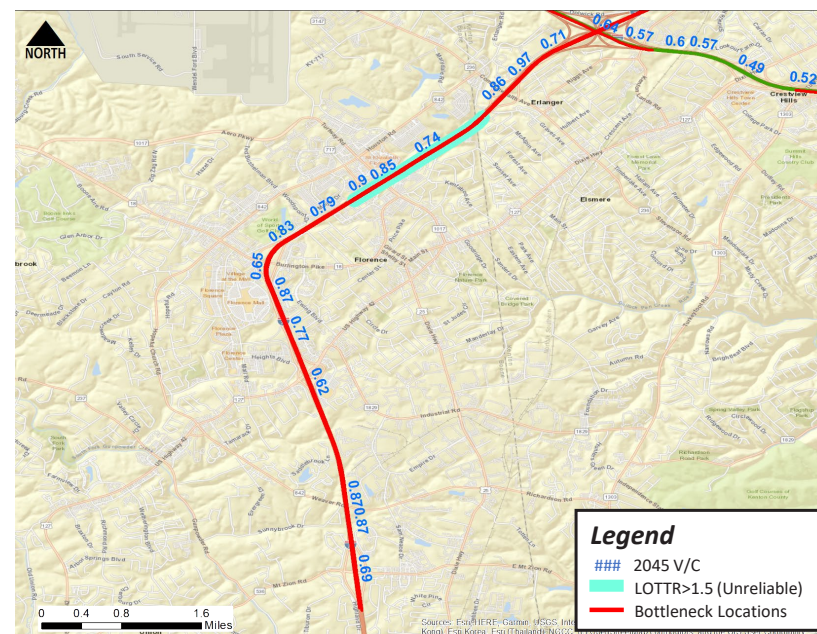
- 2045 v/c > 0.6 (KYSTM daily model; loose threshold to ensure nothing is missed)
- 2019 LOTTR (Level of Travel Time Reliability) > 1.5

- **Critical Bottlenecks for Improvements (focused by SWIPP)**

- 2045 v/c > 0.7 (rural) or > 0.85 (urban)
- 2019 LOTTR > 1.5

- **Locations for Further/Detailed Studies (not focused by SWIPP)**

- 2045 v/c: 0.6 – 0.7 (rural), 0.6 – 0.85 (urban)



Note: map is for demo purpose only.

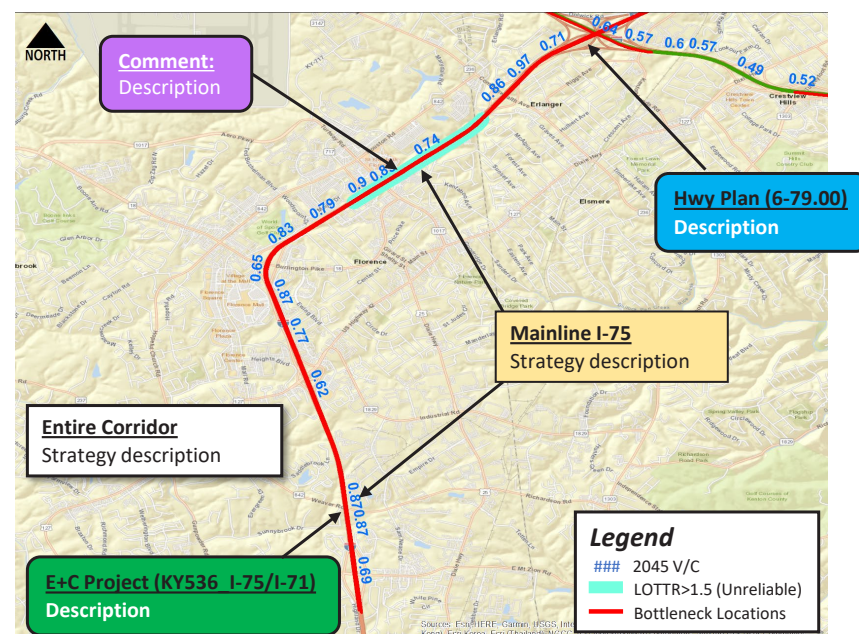
Proposed Improvement Strategies

Factors considered

- Corridor characteristics – summary table
- Planning-level analysis of mobility, reliability, safety, ROW, etc.
- E+C projects (already incorporated in 2045 model & analysis; no further improvement recommendations to avoid conflict) – green box
- Active Highway Plan projects – blue box
- VeraVoice survey comments – purple box

Proposed solutions – white/yellow box

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT	ROW	Area Type
Entire corridor	Interstate	6-8, 11-12'	31'	10-14'	83,507	340'	Suburban



Note: map is for demo purpose only.

Session J

Corridor

3A

District

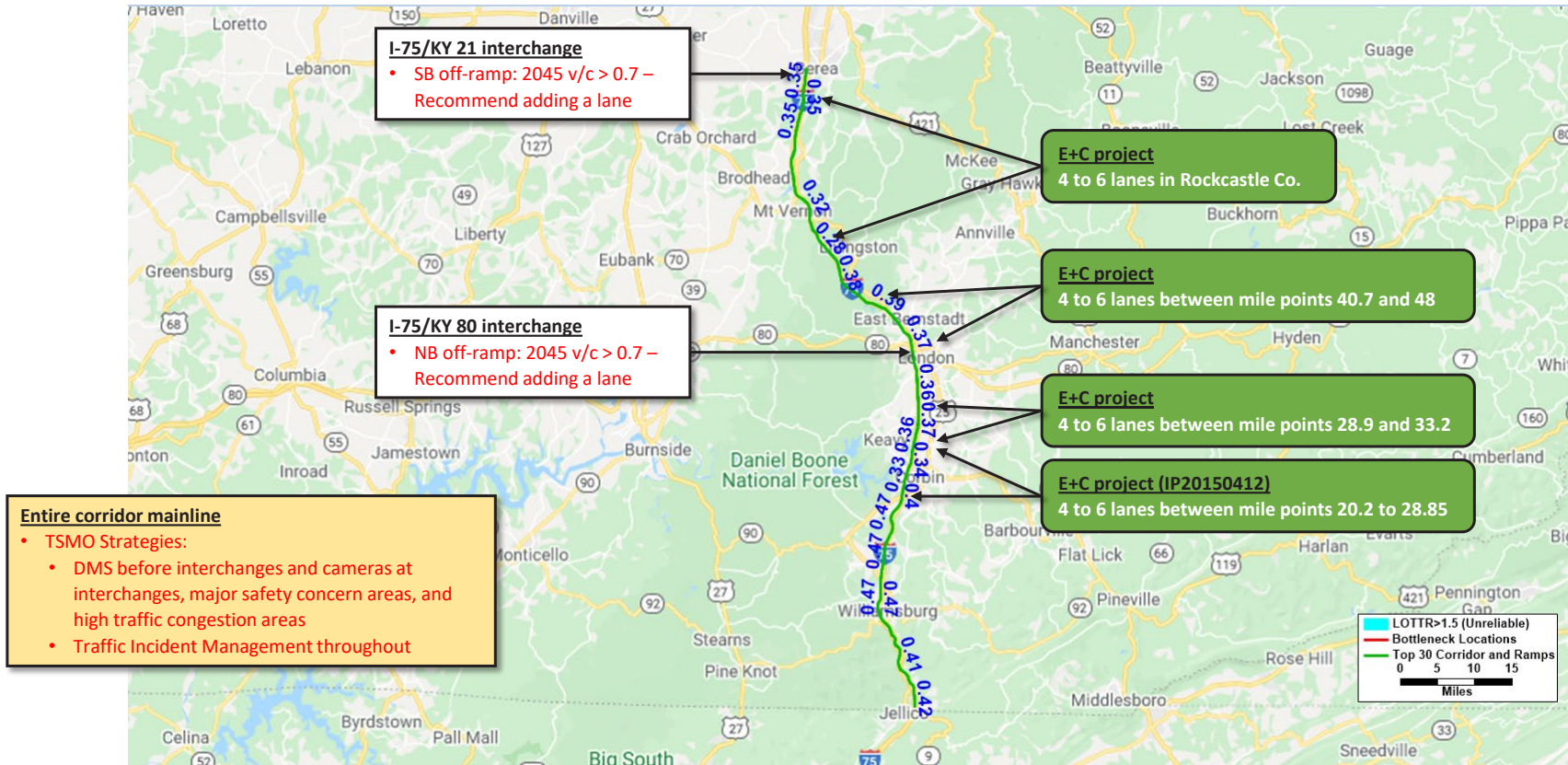
D7, D8, D11

STATEWIDE INTERSTATE AND PARKWAY PLAN (SWIPP)

3A: I-75 (from Tennessee state line to KY 21 in Berea)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	75.7	4-6, 12'	31-60'	10'	49,000	220-320'	Rural, Rural town/exurban

1) The highest traffic volume along the corridor based on KYSTMV19 data, rounded to the nearest thousand.



Session I

Corridor

3C, **3E**

District

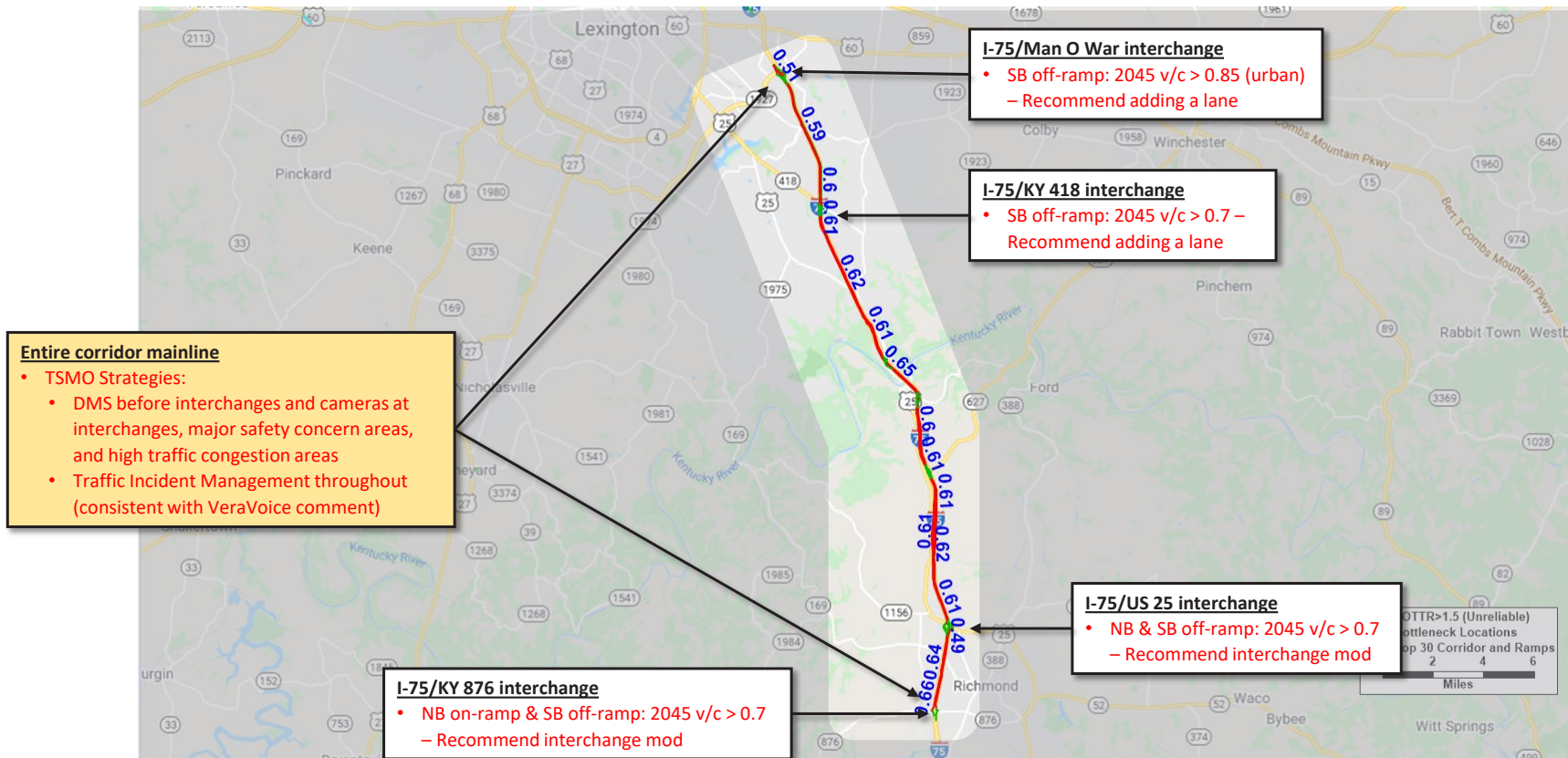
D7

Note:
TSMO-focused corridors are highlighted in red.

3C: I-75 (from KY 876 in Richmond to Man O War Blvd)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	21.2	6, 12'	30-100'	10-14'	70,000	250-300'	Rural, Rural town/exurban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.

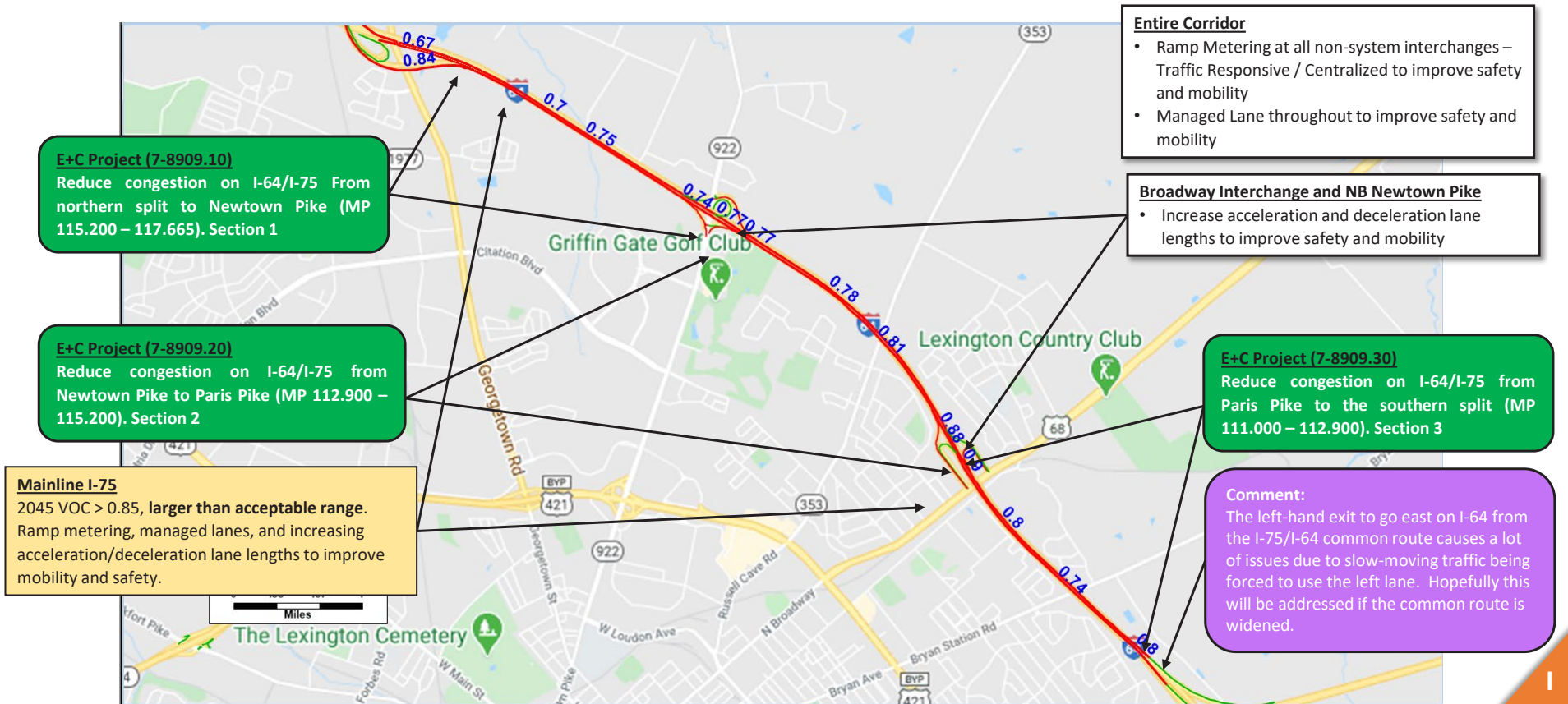


3E: I-75 (from I-64/I-75 Southern Split to I-64/I-75 Northern Split)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	6, 12'	31'	12-14'	94,000	250-280'	Suburban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



Session G

Corridor

3F

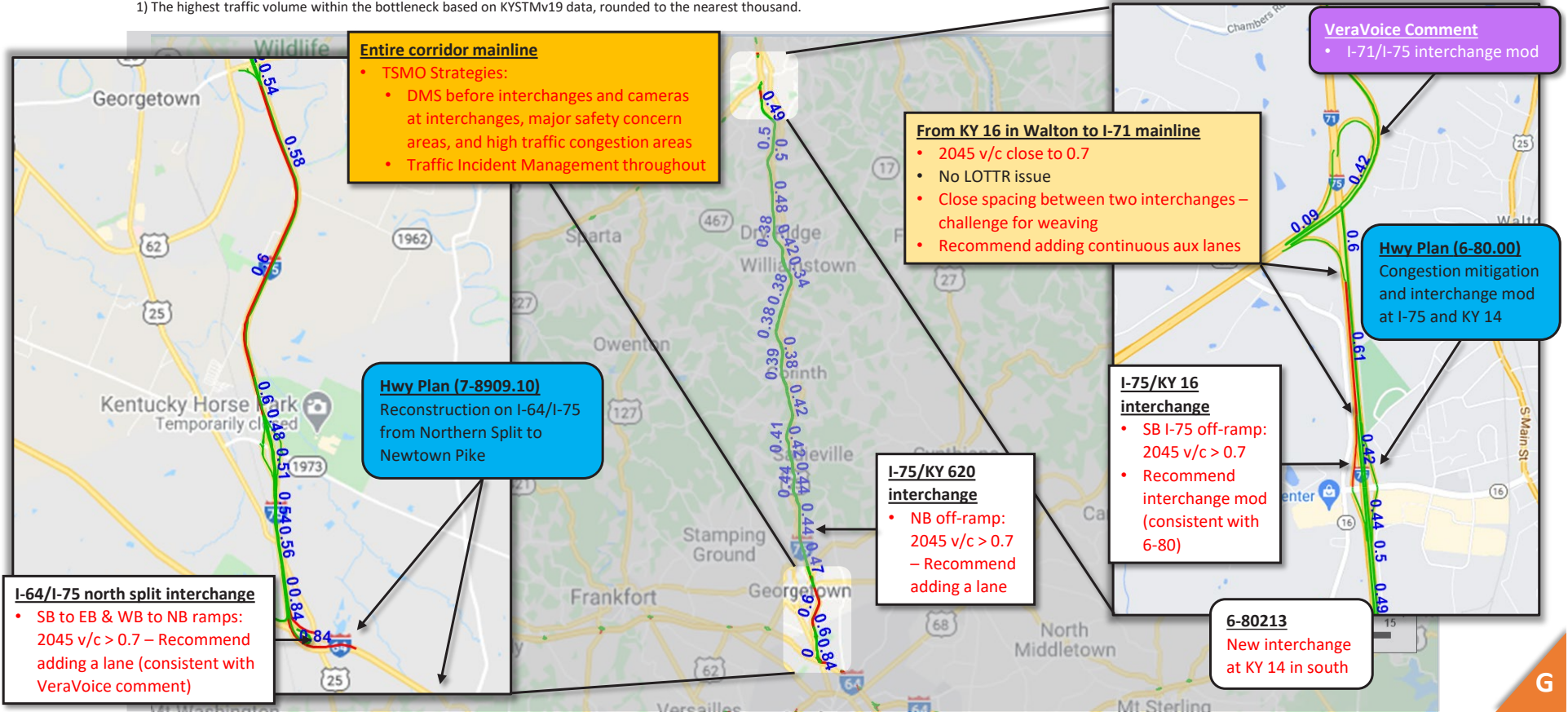
District

D6, D7

3F: I-75 (from I-64/I-75 north split to I-71)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Major Bottleneck 1: from I-64/I-75 north split to US 460	7.5	6, 12'	31'	12'	58,000	240-275'	Rural
Major Bottleneck 2: from KY 16 in Walton to I-71	0.6	6, 12'	31'	10'	67,000	330'	Rural, Suburban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



Session F

Corridor

1A, 1B, 1C, **2, 3H, 3I**

District

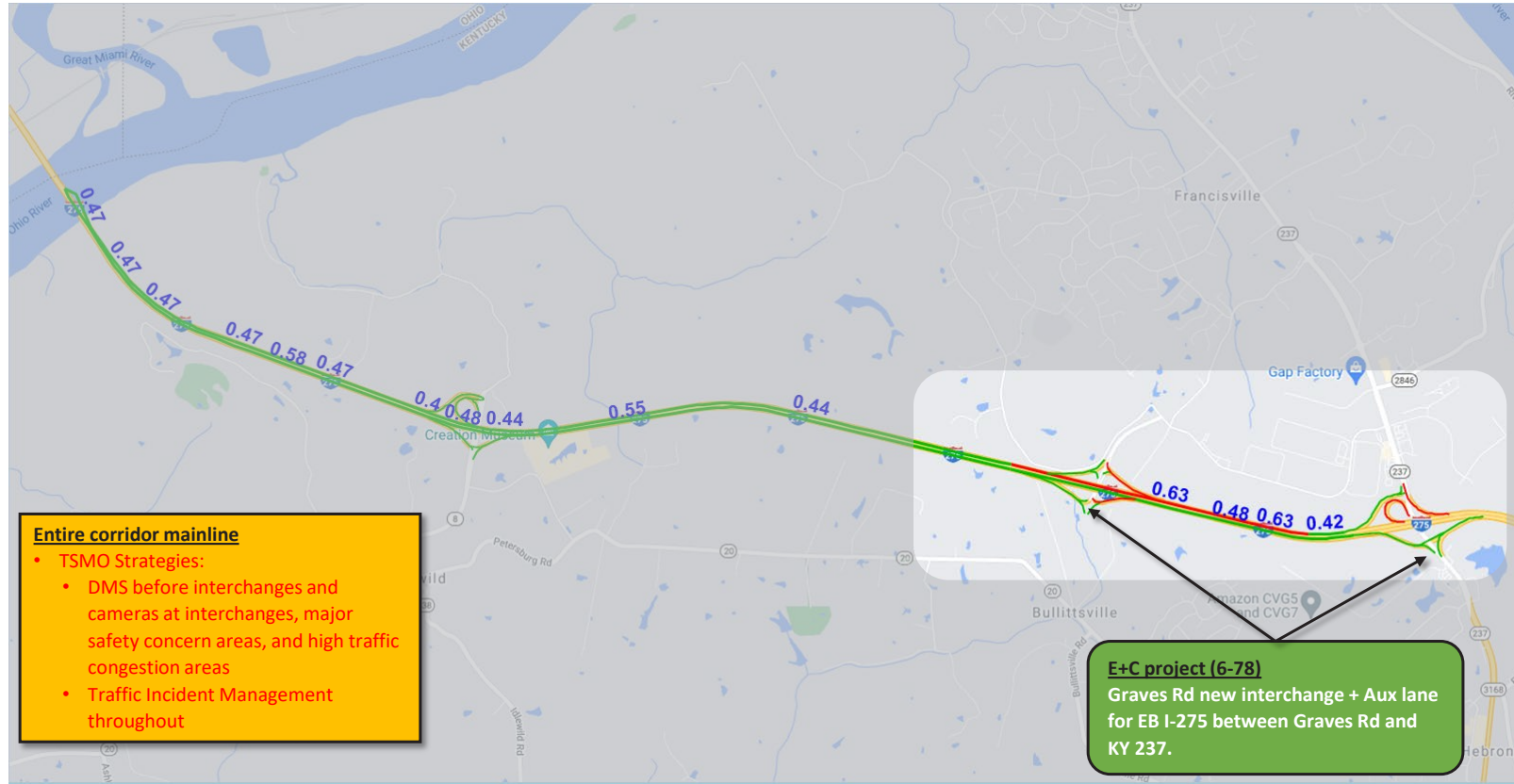
D6

Note:
TSMO-focused corridors are highlighted in red.

1A: I-275 (from Indiana state line to KY 237 in Boone Co.)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
From Graves Rd to KY 237 in Boone County	1.4	4, 12'	60'	10'	38,000	240-270'	Rural

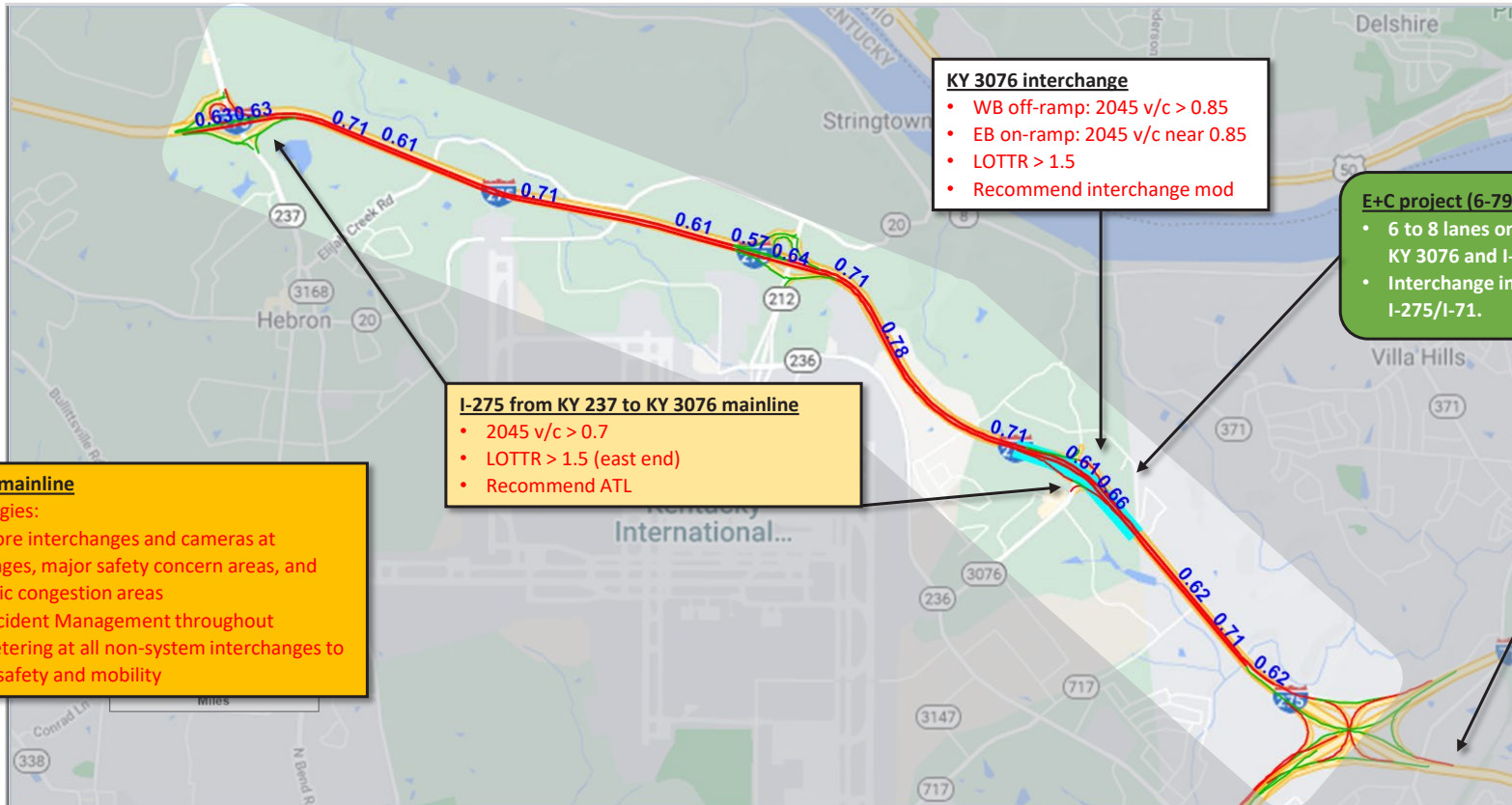
1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.



1B: I-275 (from KY 237 in Boone Co. to I-71)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire Corridor	6.9	6, 12'	60'	10'	84,000	275-320'	W of KY 212: Rural town/exurban E of KY 212: Suburban

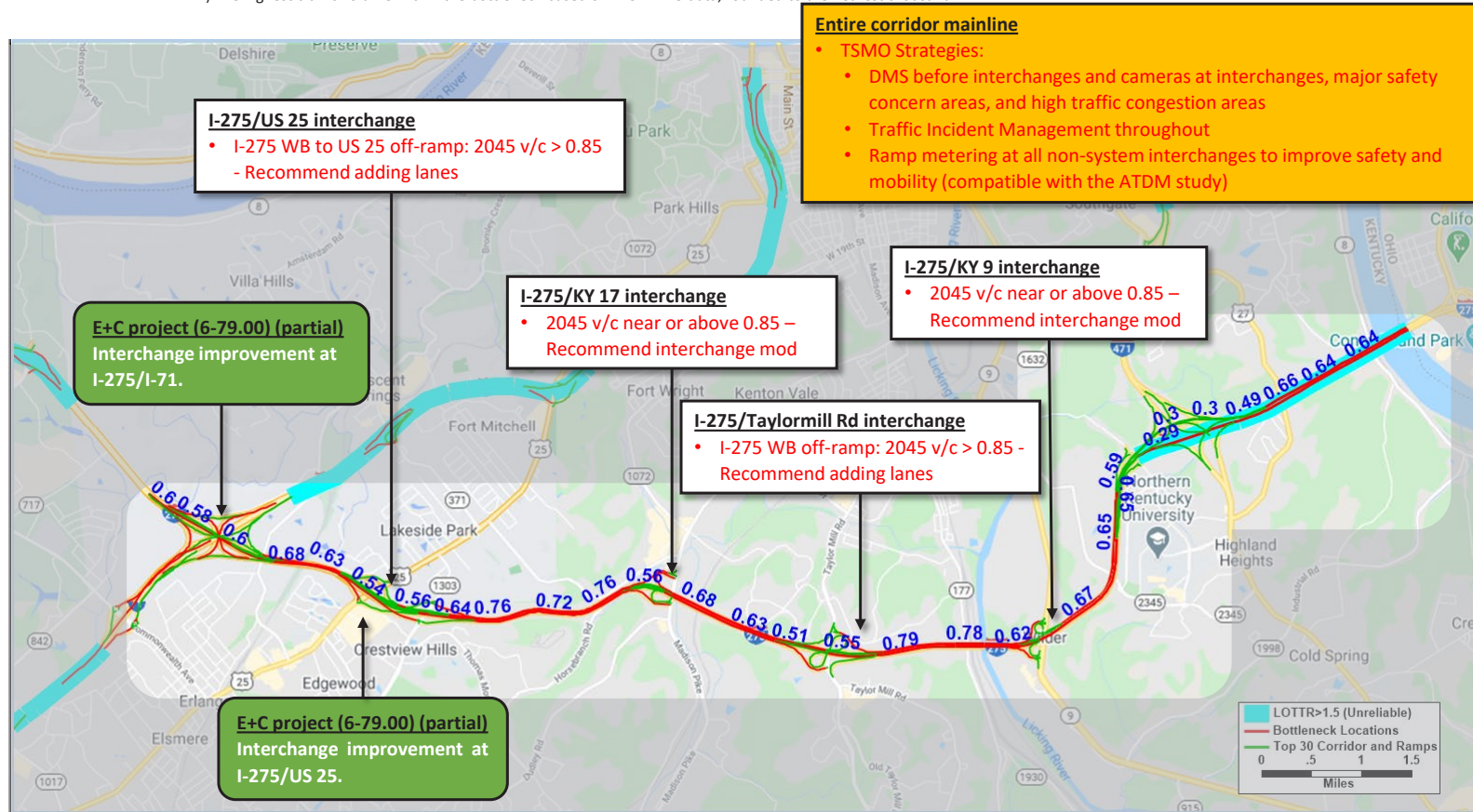
1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



1C: I-275 (from I-71 to Ohio state line)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	11.2	6, 12'	60-80'	10'	101,000	240-275'	Suburban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.

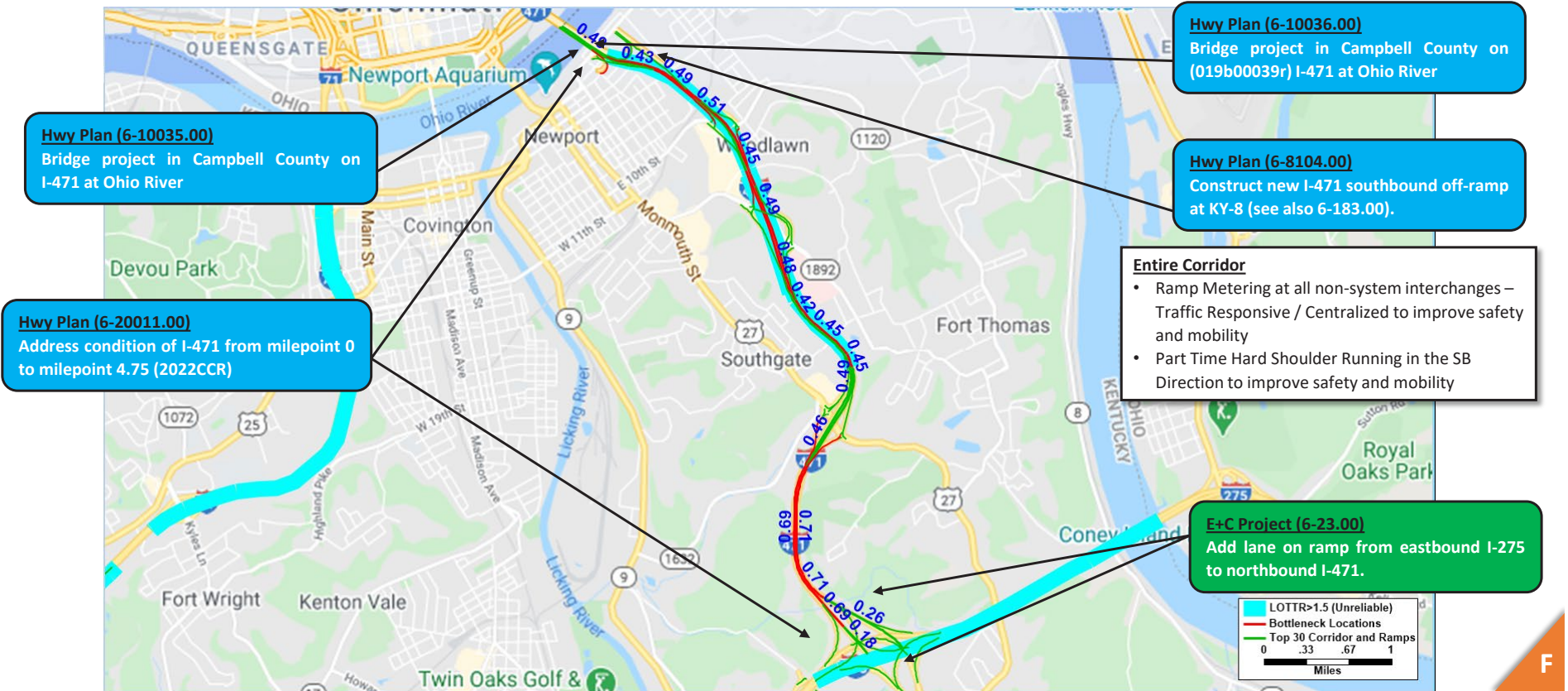


2: I-471 (from Ohio State Line to I-275)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	6-8, 12'	40'	10'	105,000	180-280'	Suburban, Dense urban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



3H: I-75 (from KY 536 in Boone County to I-275)

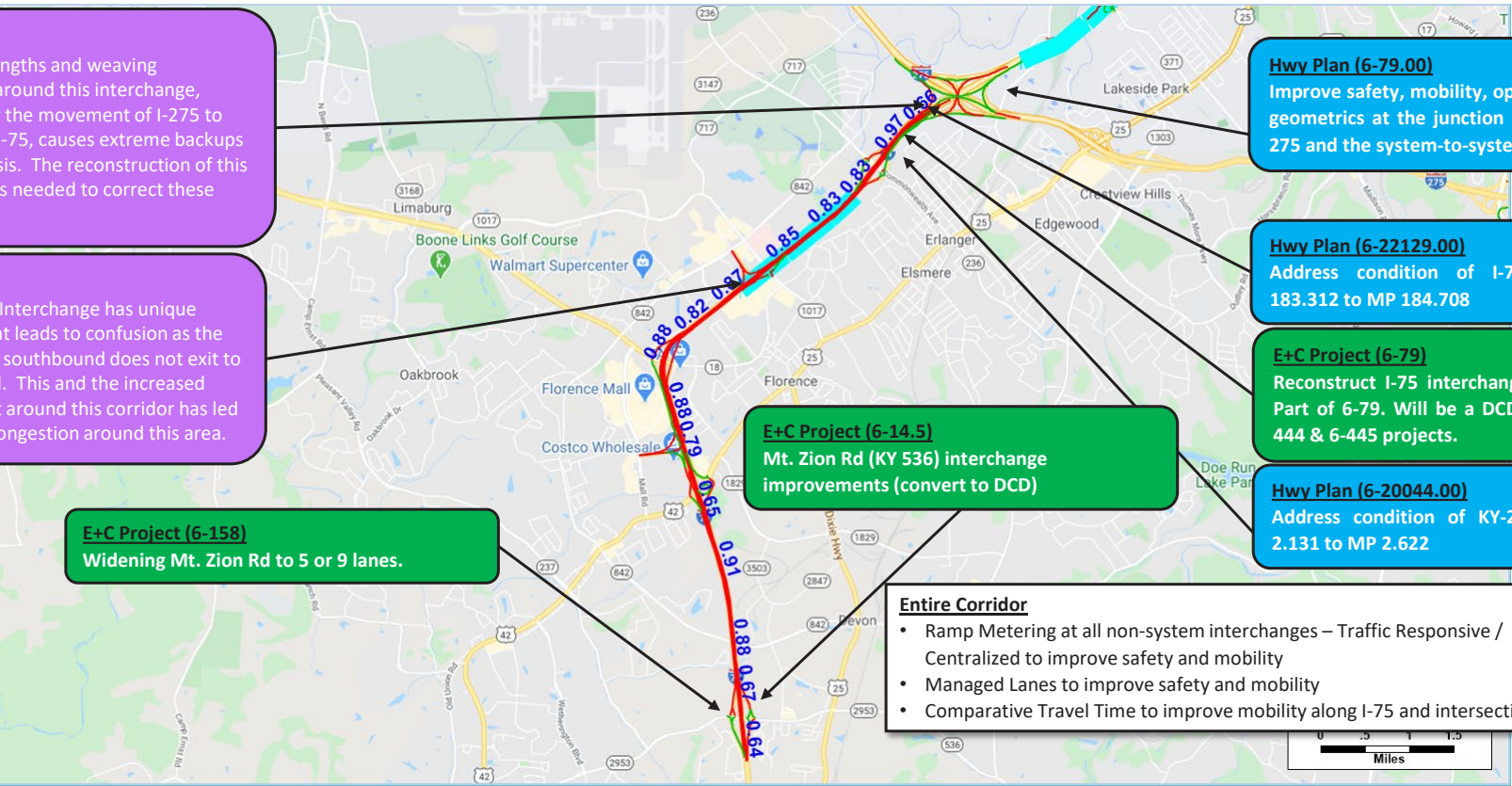
TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	6-8, 11-12'	31'	10-14'	168,000	340'	Suburban

1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.

Comment:
The merge lengths and weaving movements around this interchange, especially for the movement of I-275 to southbound I-75, causes extreme backups on a daily basis. The reconstruction of this interchange is needed to correct these issues.

Comment:
The Turfway Interchange has unique geometry that leads to confusion as the exit ramp for southbound does not exit to Turfway road. This and the increased development around this corridor has led to extreme congestion around this area.



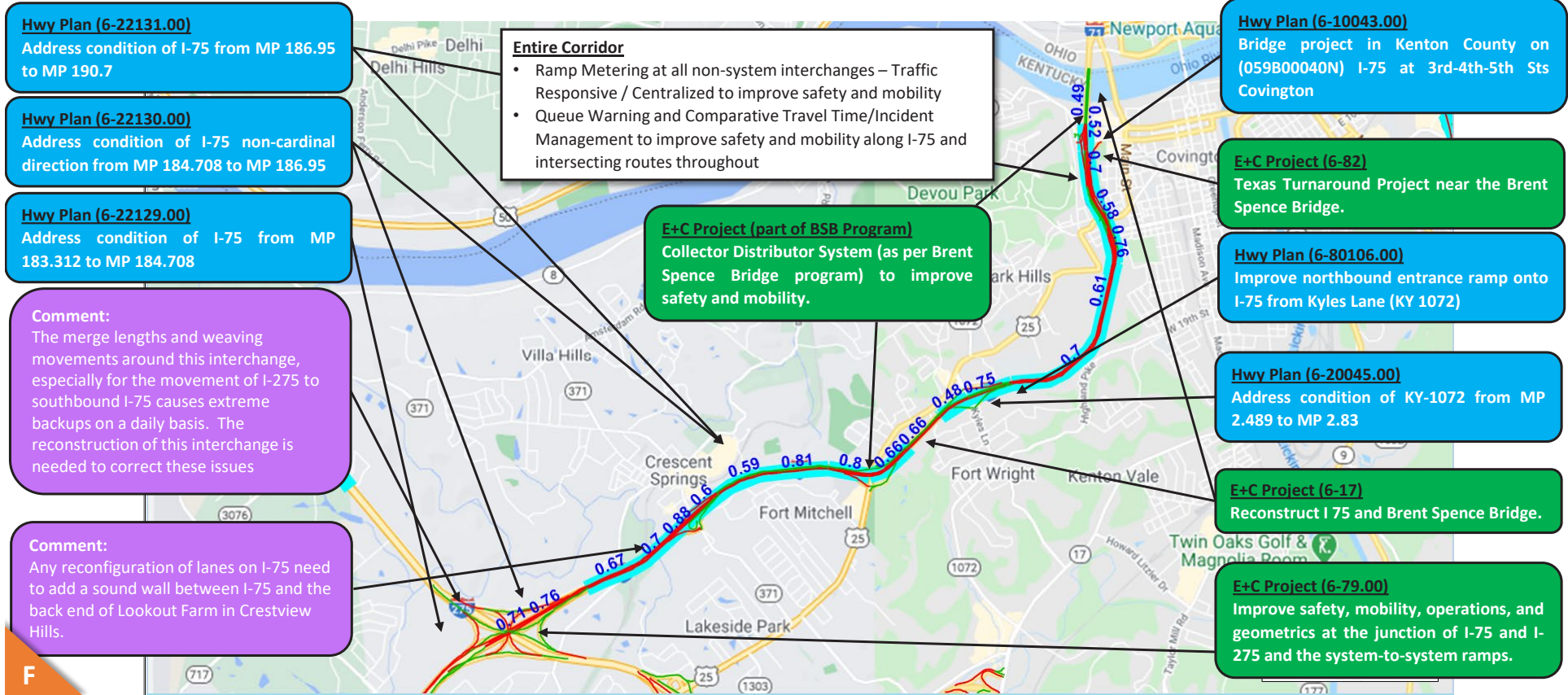
F

3I: I-75 (from I-275 to Ohio State Line)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	8-12, 12'	31'	12'	158,000	270-490'	Suburban, Dense urban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



F

Session E

Corridor

4D

District

D5, D6

STATEWIDE INTERSTATE AND PARKWAY PLAN (SWIPP)

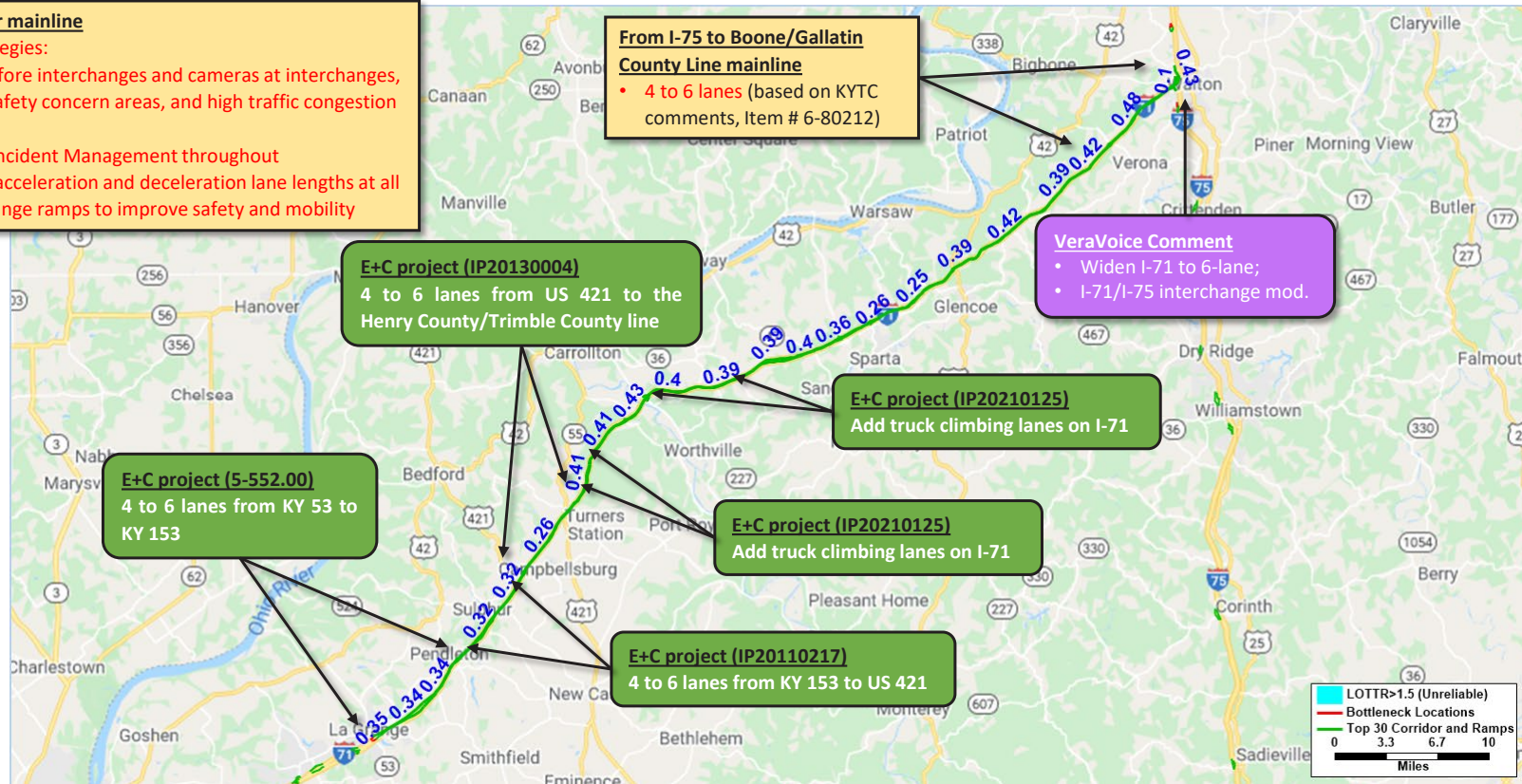
4D: I-71 (from KY 53 in La Grange to I-75)

Existing Typical Roadway Attributes							
Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	55.6	4, 12'	31-60'	10'	40,000	220-265'	Rural, Rural town/exurban

1) The highest traffic volume along the corridor based on KYSTMv19 data, rounded to the nearest thousand.

Entire corridor mainline

- TSMO Strategies:
 - DMS before interchanges and cameras at interchanges, major safety concern areas, and high traffic congestion areas
 - Traffic Incident Management throughout
 - Extend acceleration and deceleration lane lengths at all interchange ramps to improve safety and mobility



Session H

Corridor

8E

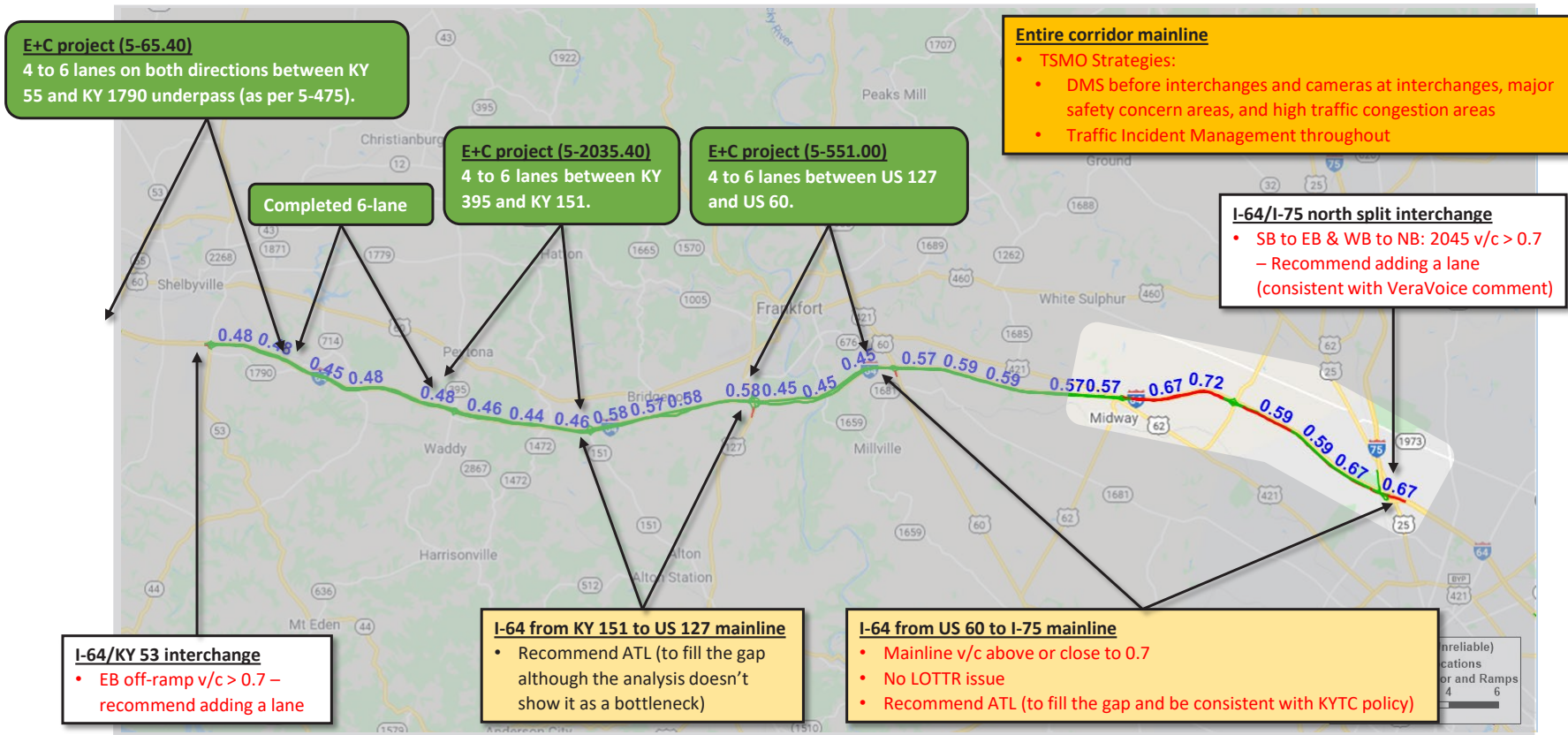
District

D5, D7

8E: I-64 (from KY 53 in Shelbyville to I-64/I-75 north split)

Existing Typical Roadway Attributes at Major Traffic Bottlenecks							
Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
From KY 341 to I-64/I-75 north split	9.6	4, 12'	60'	10'	48,000	300'	Rural

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to nearest thousand.



Session D

Corridor

4A, 4B, 4C, 6D, **6E, 6F, 7B,**
7C, 8A, 8B, 8C, 8D, 10A,
10B, 10C

District

D5

Note:
TSMO-focused corridors are highlighted in red.

4A: I-71 (from I-64 to I-264)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire Corridor	6	4, 12'	36'	10'	64,000	220-395'	Suburban

1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.

- Entire corridor mainline**
- TSMO Strategies:
 - DMS before interchanges and cameras at interchanges, major safety concern areas, and high traffic congestion areas
 - Traffic Incident Management throughout
 - Part-Time Shoulder Use throughout to improve mobility

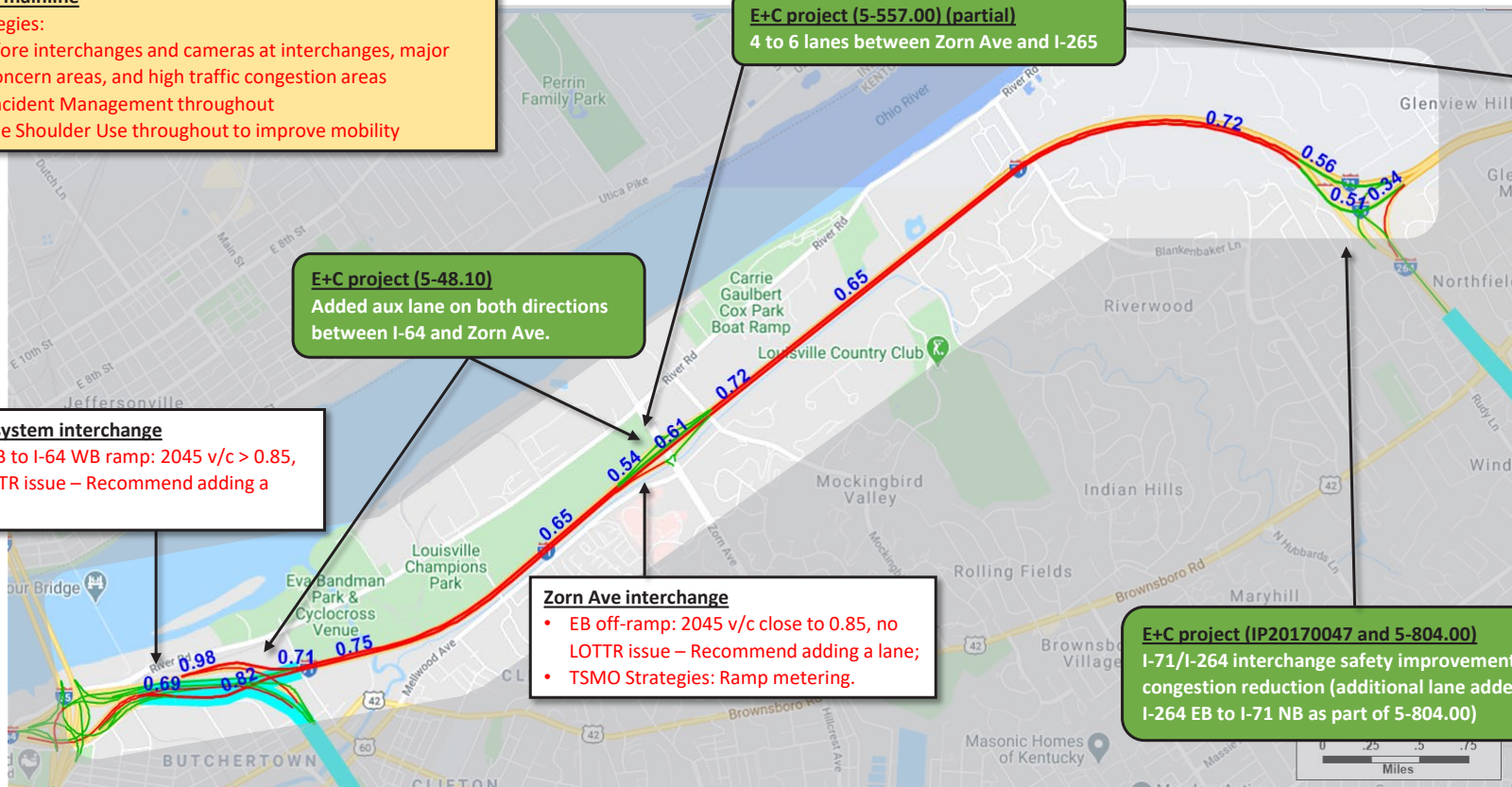
- I-64/I-71 system interchange**
- I-71 WB to I-64 WB ramp: 2045 v/c > 0.85, no LOTTR issue – Recommend adding a lane;

- E+C project (5-48.10)**
Added aux lane on both directions between I-64 and Zorn Ave.

- E+C project (5-557.00) (partial)**
4 to 6 lanes between Zorn Ave and I-265

- Zorn Ave interchange**
- EB off-ramp: 2045 v/c close to 0.85, no LOTTR issue – Recommend adding a lane;
 - TSMO Strategies: Ramp metering.

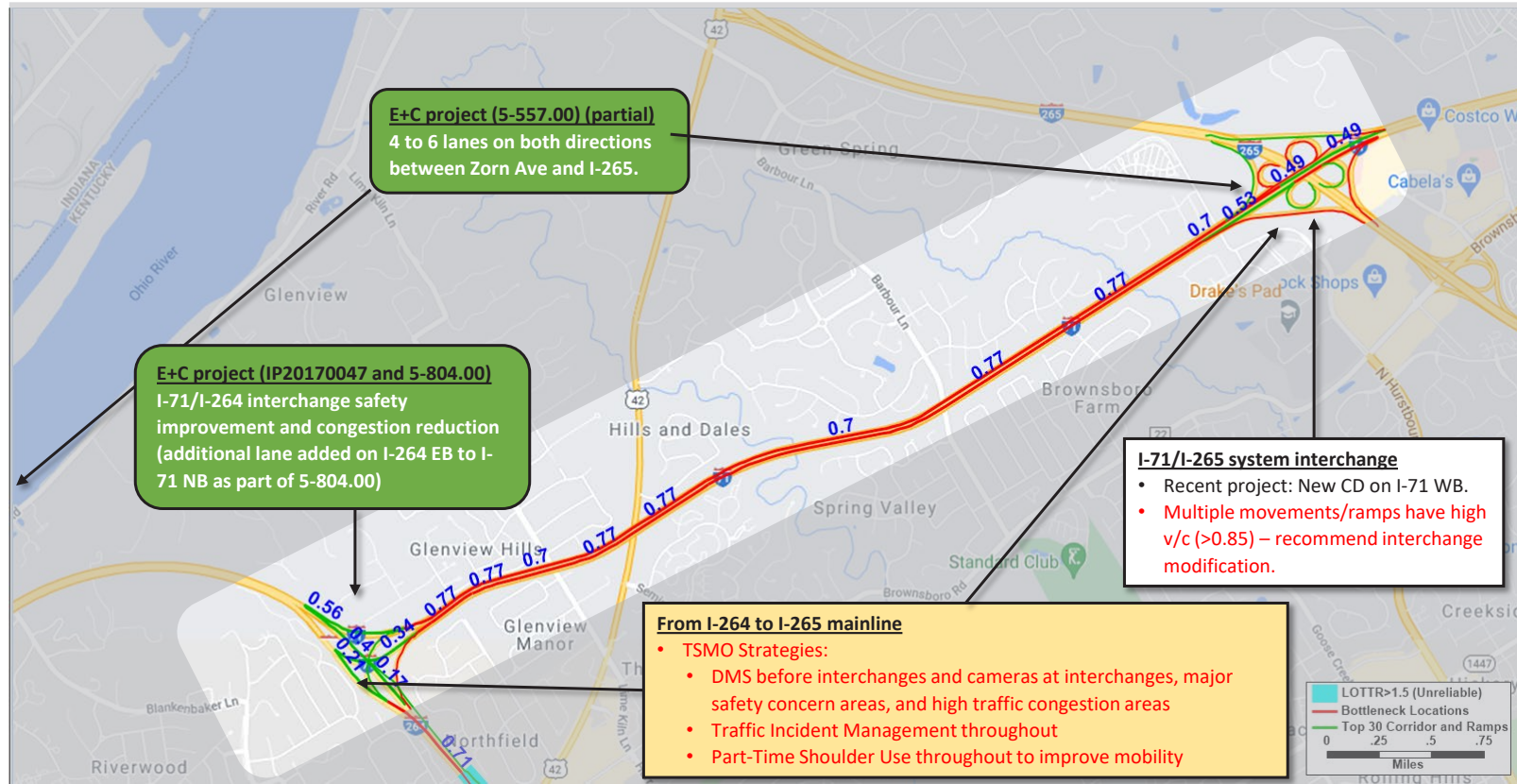
- E+C project (IP20170047 and 5-804.00)**
I-71/I-264 interchange safety improvement and congestion reduction (additional lane added on I-264 EB to I-71 NB as part of 5-804.00)



4B: I-71 (from I-264 to I-265)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire Corridor	4	4, 12'	60'	10'	66,000	260-340'	Suburban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



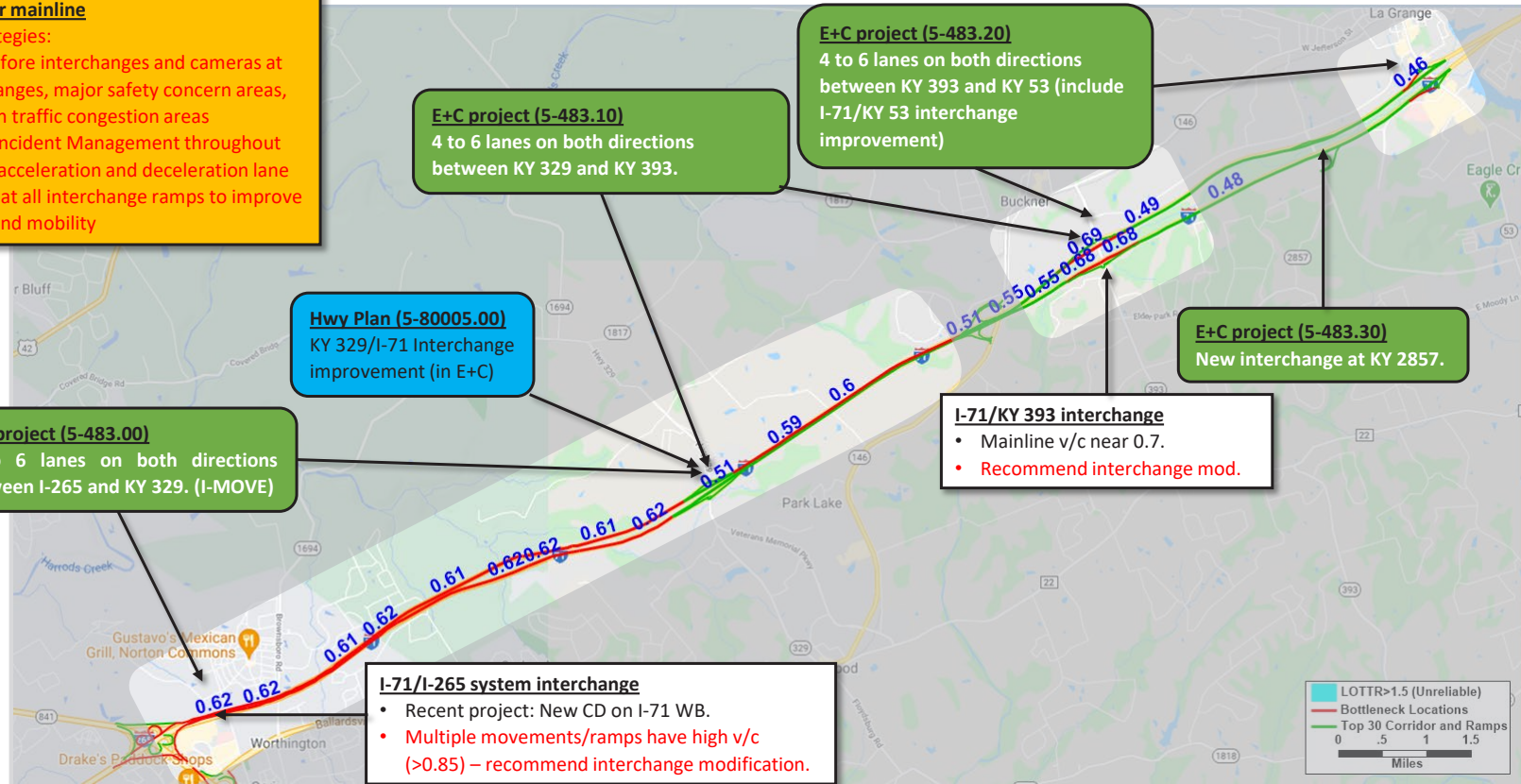
4C: I-71 (from I-265 to KY 53 in La Grange)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
From I-265 to KY 146	5.4	4, 12'	60-350'	10'	61,000	250-460'	Rural town/exurban, Suburban

1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.

Entire corridor mainline

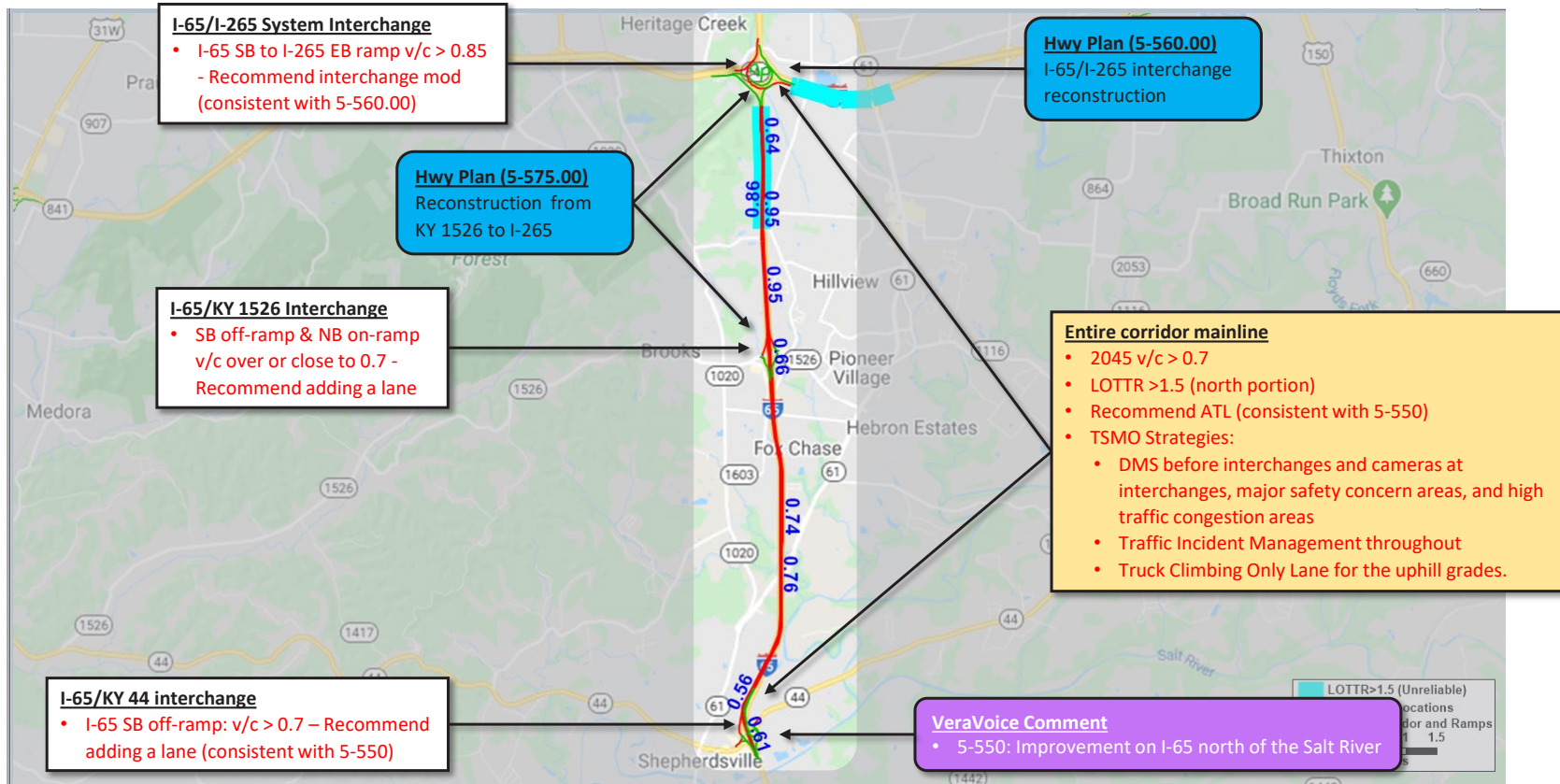
- TSMO Strategies:
 - DMS before interchanges and cameras at interchanges, major safety concern areas, and high traffic congestion areas
 - Traffic Incident Management throughout
 - Extend acceleration and deceleration lane lengths at all interchange ramps to improve safety and mobility



6D: I-65 (from KY 44 in Shepherdsville to I-265)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	8.5	6, 12'	60'	10'	115,000	275-310'	Rural town/exurban

1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.



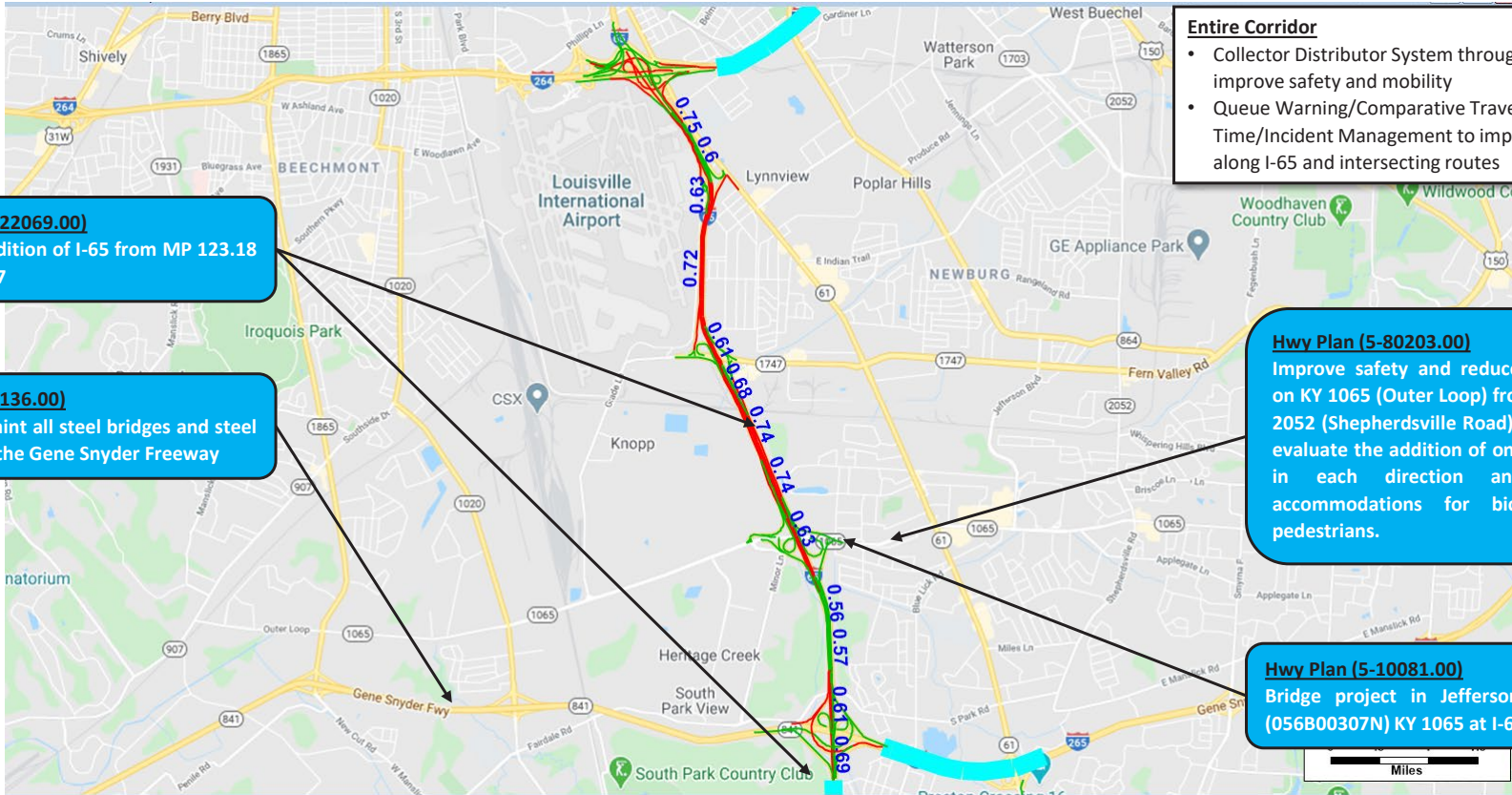
D

6E: I-65 (from I-265 to I-264)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	10, 12'	23'	10-15'	159,000	240-460'	Suburban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



Entire Corridor

- Collector Distributor System throughout to improve safety and mobility
- Queue Warning/Comparative Travel Time/Incident Management to improve mobility along I-65 and intersecting routes

Hwy Plan (5-22069.00)
Address condition of I-65 from MP 123.18 to MP 127.57

Hwy Plan (5-136.00)
Clean and paint all steel bridges and steel bearings on the Gene Snyder Freeway

Hwy Plan (5-80203.00)
Improve safety and reduce congestion on KY 1065 (Outer Loop) from I-65 to KY 2052 (Shepherdsville Road). Project will evaluate the addition of one travel lane in each direction and consider accommodations for bicyclists and pedestrians.

Hwy Plan (5-10081.00)
Bridge project in Jefferson County on (056B00307N) KY 1065 at I-65

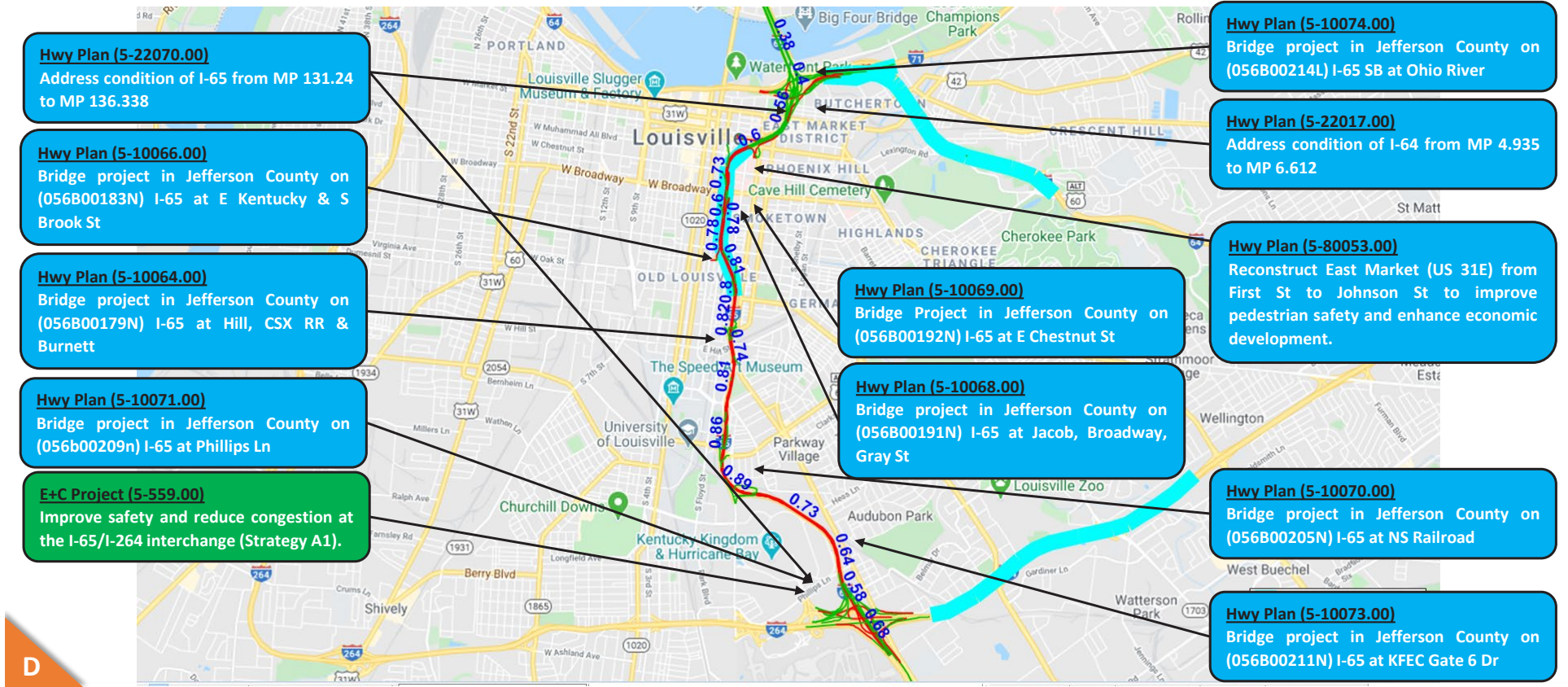
STATEWIDE INTERSTATE AND PARKWAY PLAN (SWIPP)

6F: I-65 (from I-264 to Indiana State Line)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	6-7, 12'	9'	3-10'	124,000	170-220'	Suburban, Dense urban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



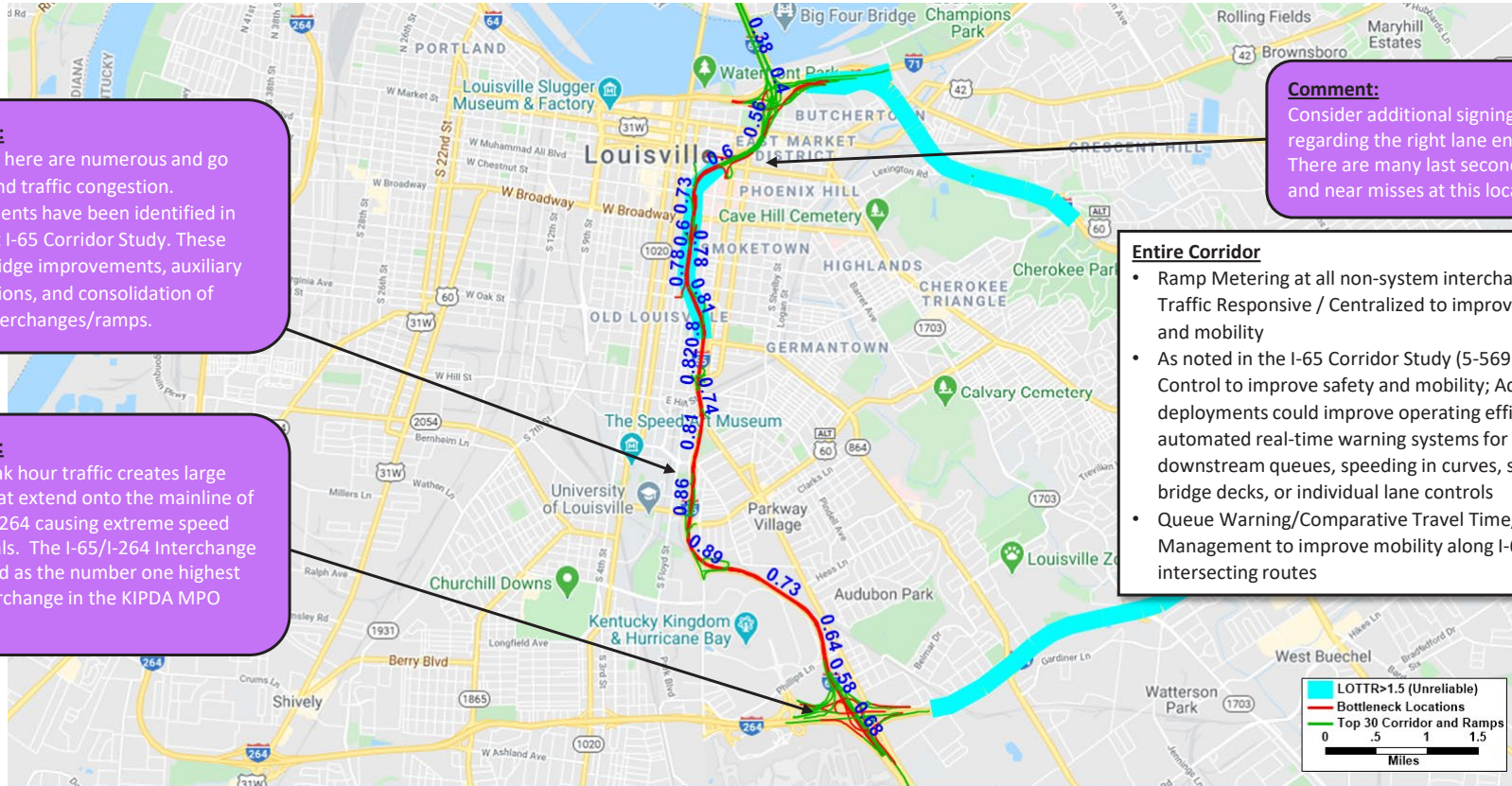
D

6F: I-65 (from I-264 to Indiana State Line) (cont.)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	6-7, 12'	9'	3-10'	124,000	170-220'	Suburban, Dense urban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data.



Comment:
The issues here are numerous and go well beyond traffic congestion. Improvements have been identified in the recent I-65 Corridor Study. These include bridge improvements, auxiliary lane additions, and consolidation of certain interchanges/ramps.

Comment:
5-569: Peak hour traffic creates large queues that extend onto the mainline of I-65 and I-264 causing extreme speed differentials. The I-65/I-264 Interchange was ranked as the number one highest crash interchange in the KIPDA MPO region.

Comment:
Consider additional signing or markings regarding the right lane ending here. There are many last second transitions and near misses at this location.

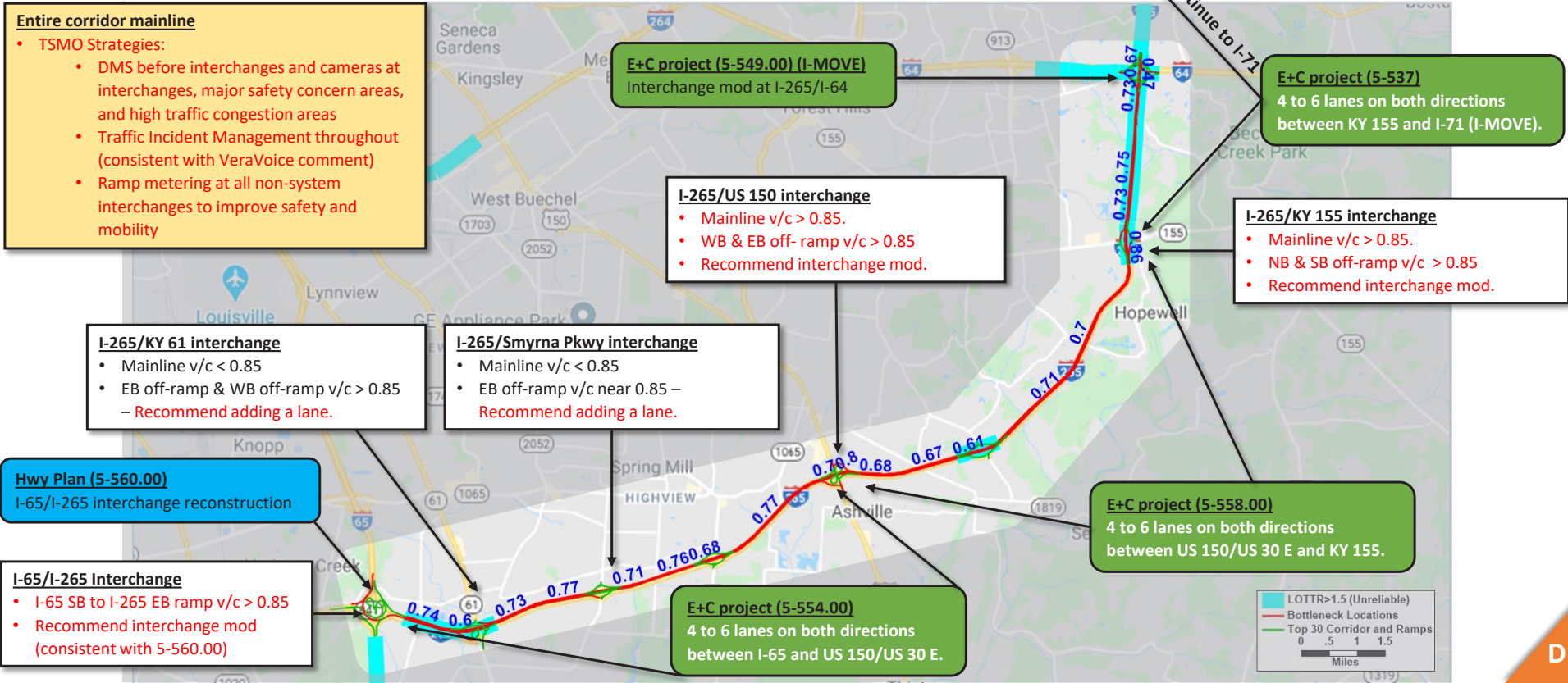
- Entire Corridor**
- Ramp Metering at all non-system interchanges – Traffic Responsive / Centralized to improve safety and mobility
 - As noted in the I-65 Corridor Study (5-569): Access Control to improve safety and mobility; Additional ITS deployments could improve operating efficiency; automated real-time warning systems for downstream queues, speeding in curves, slippery bridge decks, or individual lane controls
 - Queue Warning/Comparative Travel Time/Incident Management to improve mobility along I-65 and intersecting routes

D

7B: I-265/KY 841 (Gene Snyder Fwy) (from I-65 to I-64)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	15	4, 12'	60'	10'	80,000	265-340'	Suburban, Urban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.

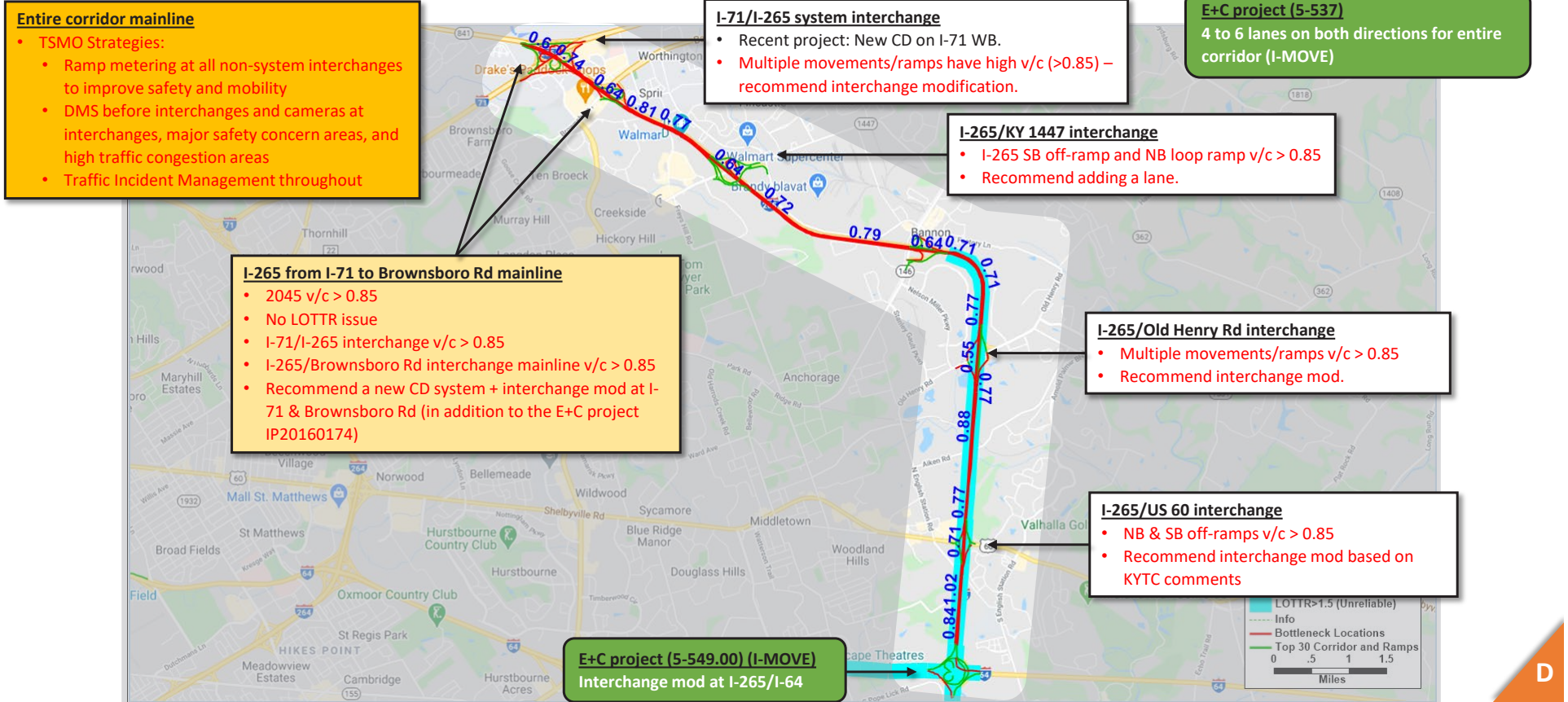


D

7C: I-265/KY 841 (Gene Snyder Fwy) (from I-64 to I-71)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	9.4	4, 12'	60'	10-11'	88,000	270-320'	Suburban

1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.



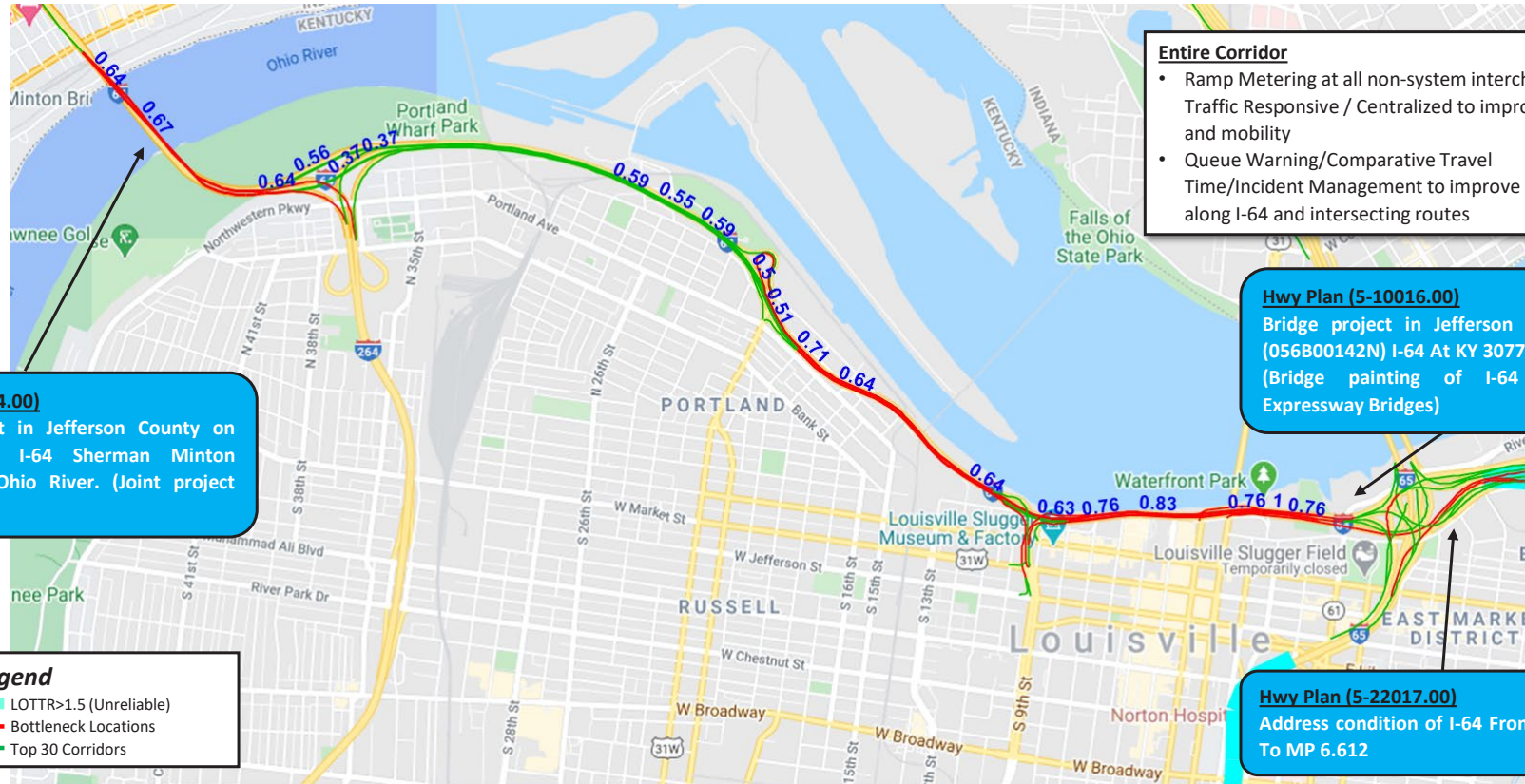
STATEWIDE INTERSTATE AND PARKWAY PLAN (SWIPP)

8A: I-64 (from Indiana State Line to I-65)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	6, 12'	9'	3-6'	108,000	120-140'	Dense urban

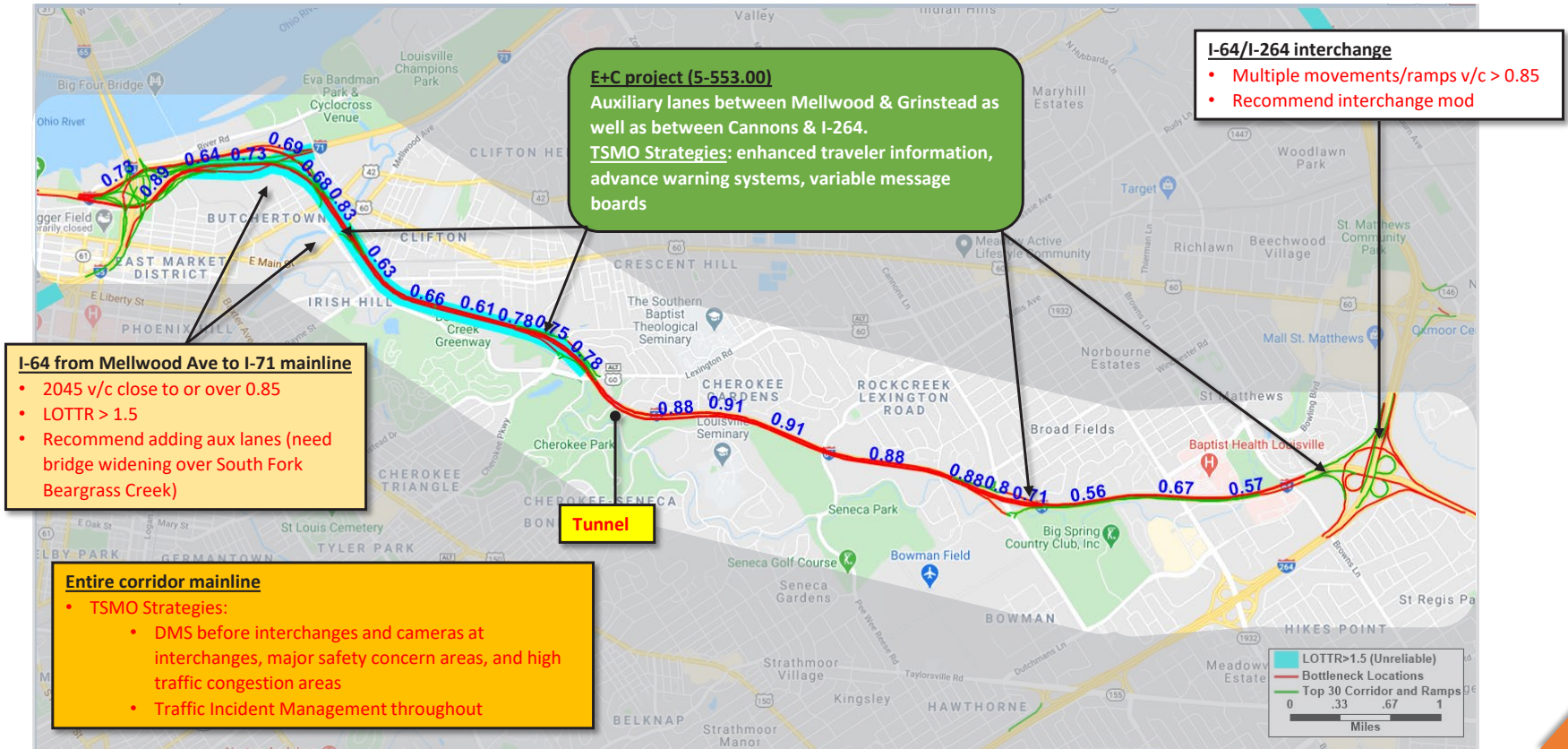
1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



8B: I-64 (from I-65 to I-264)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	6.8	4, 12'	40'	10'	76,000	225-270'	Suburban, Dense urban

1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.

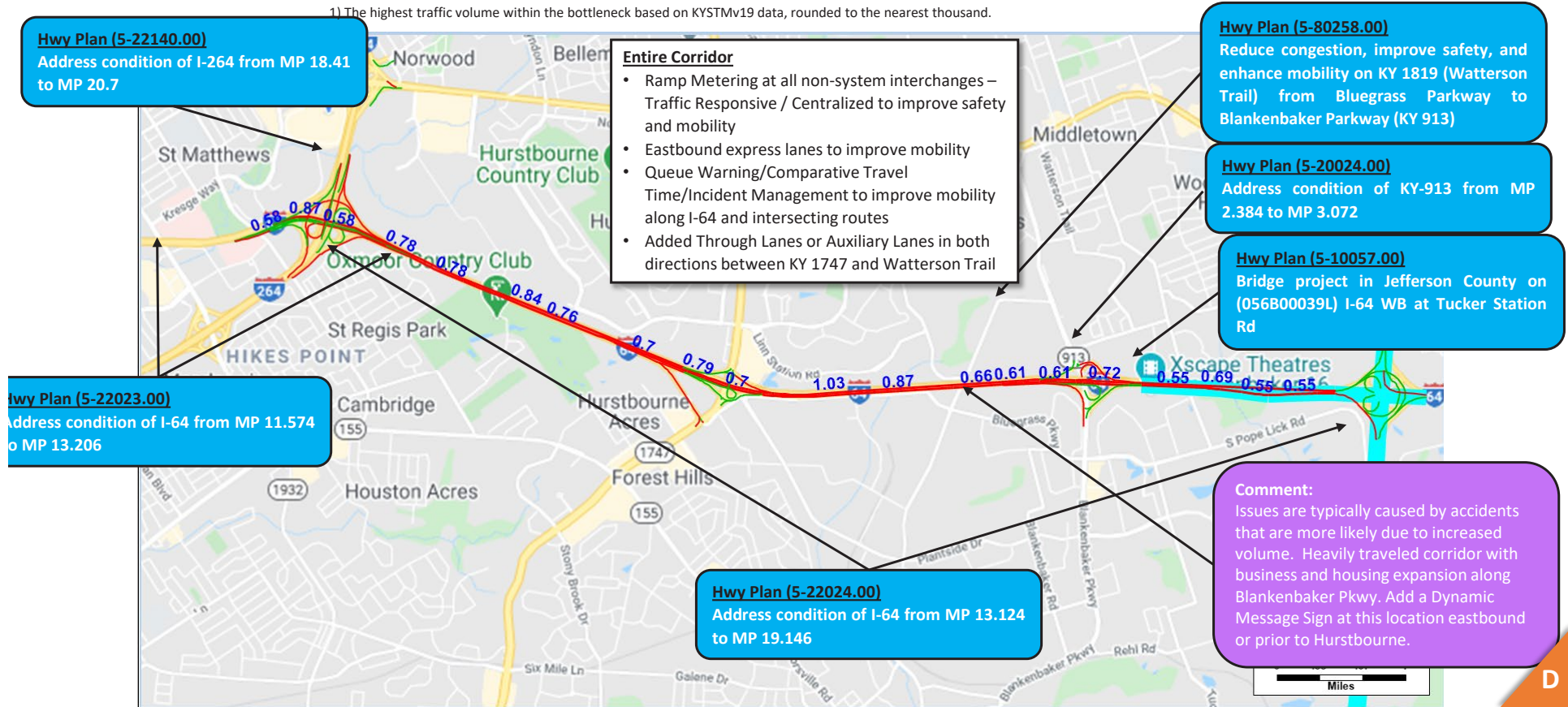


8C: I-64 (from I-264 to I-265)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	4, 12'	40'	10-12'	131,000	260-280'	Suburban, Dense urban

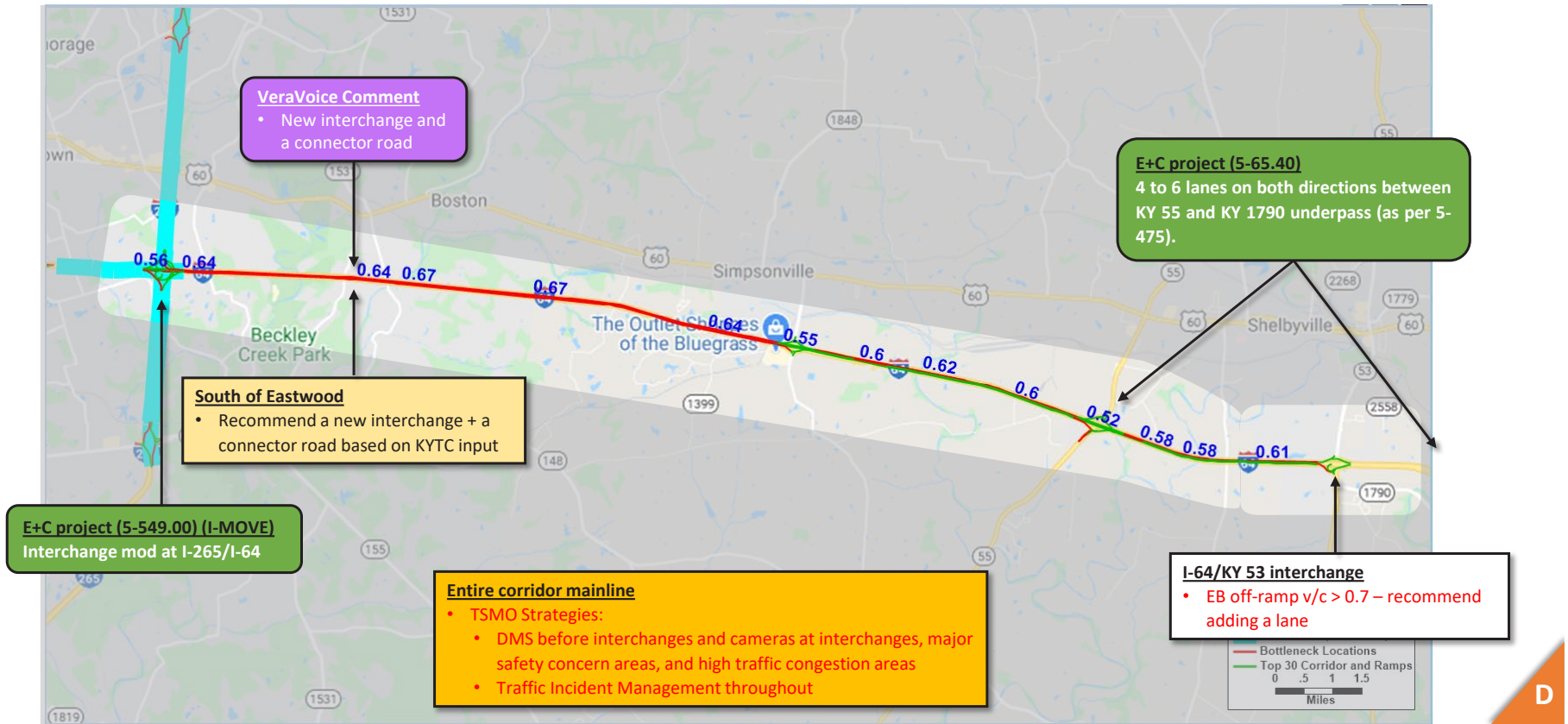
¹ The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



8D: I-64 (from I-265 to KY 53 in Shelbyville)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire Corridor	16.3	6, 12'	31'	10'	64,000	270-315'	Rural, Rural town/exurban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



D

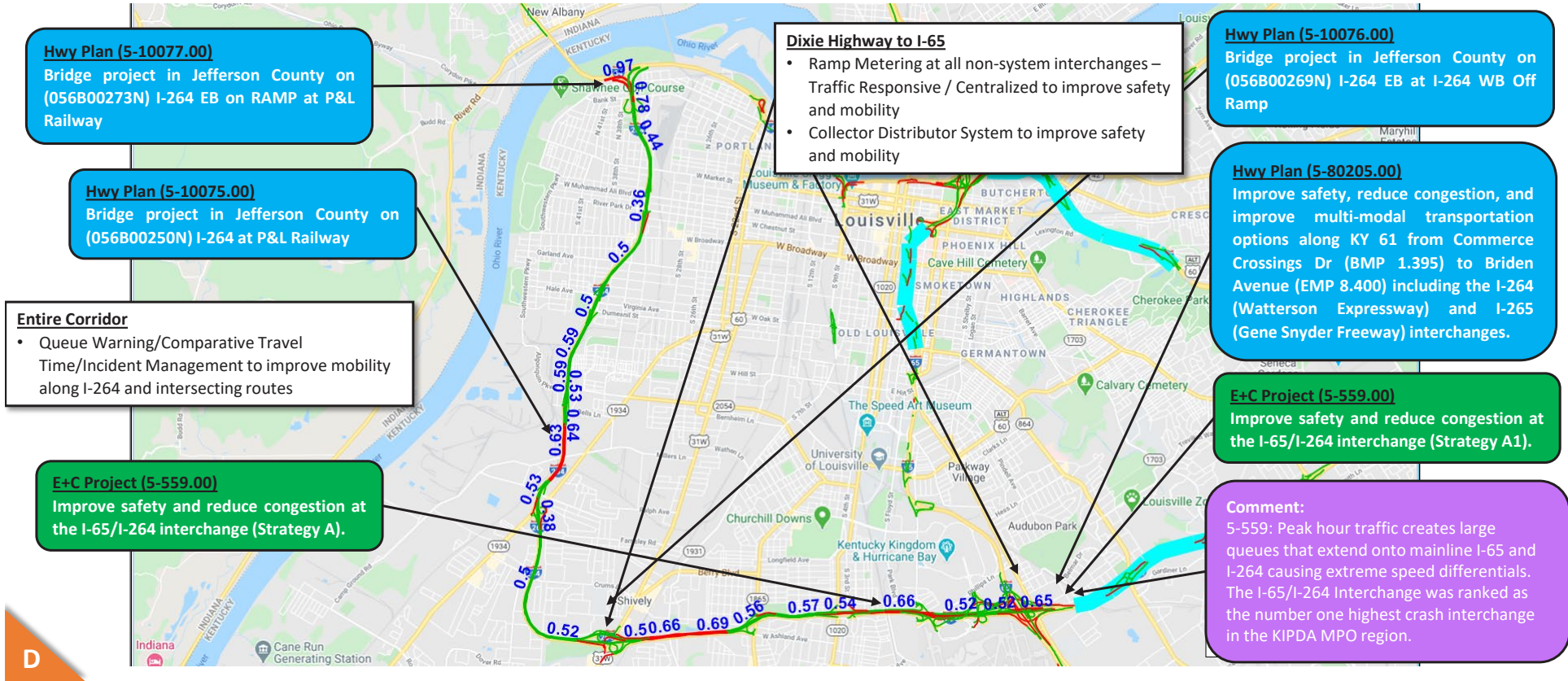
STATEWIDE INTERSTATE AND PARKWAY PLAN (SWIPP)

10A: I-264 (from I-64 (West) to I-65)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Major Bottleneck 1: from Bells Ln to KY 1934	Interstate	6, 12'	18'	10'	70,000	180-210'	Suburban
Major Bottleneck 2: from Dixie Highway to I-65	Interstate	6-8, 12'	27'	10'	120,000	180-210'	Dense urban

1) The highest traffic volume within the bottleneck based on KYSTMV19 data, rounded to the nearest thousand.



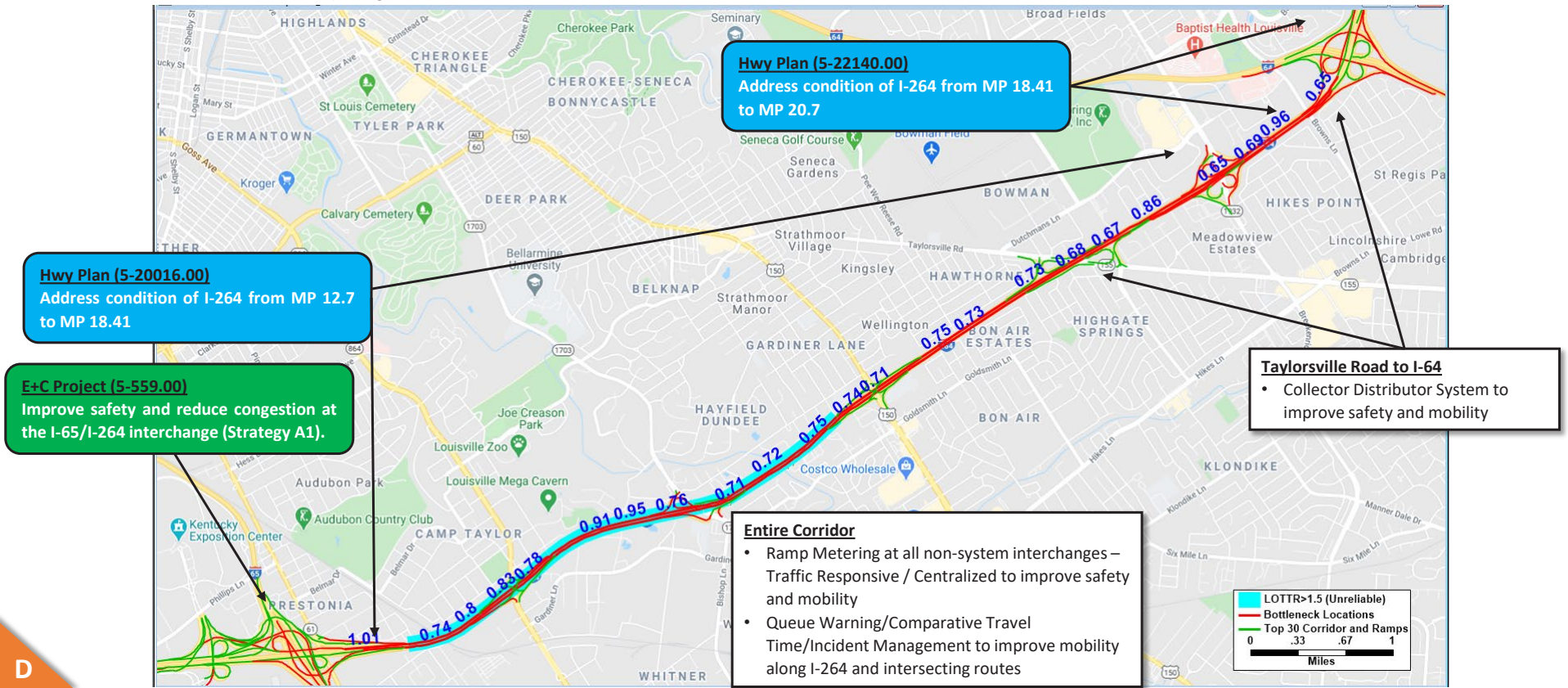
D

10B: I-264 (from I-65 to I-64 (East))

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	8-10, 12'	27'	12'	173,000	220-280'	Suburban, Dense urban

¹) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



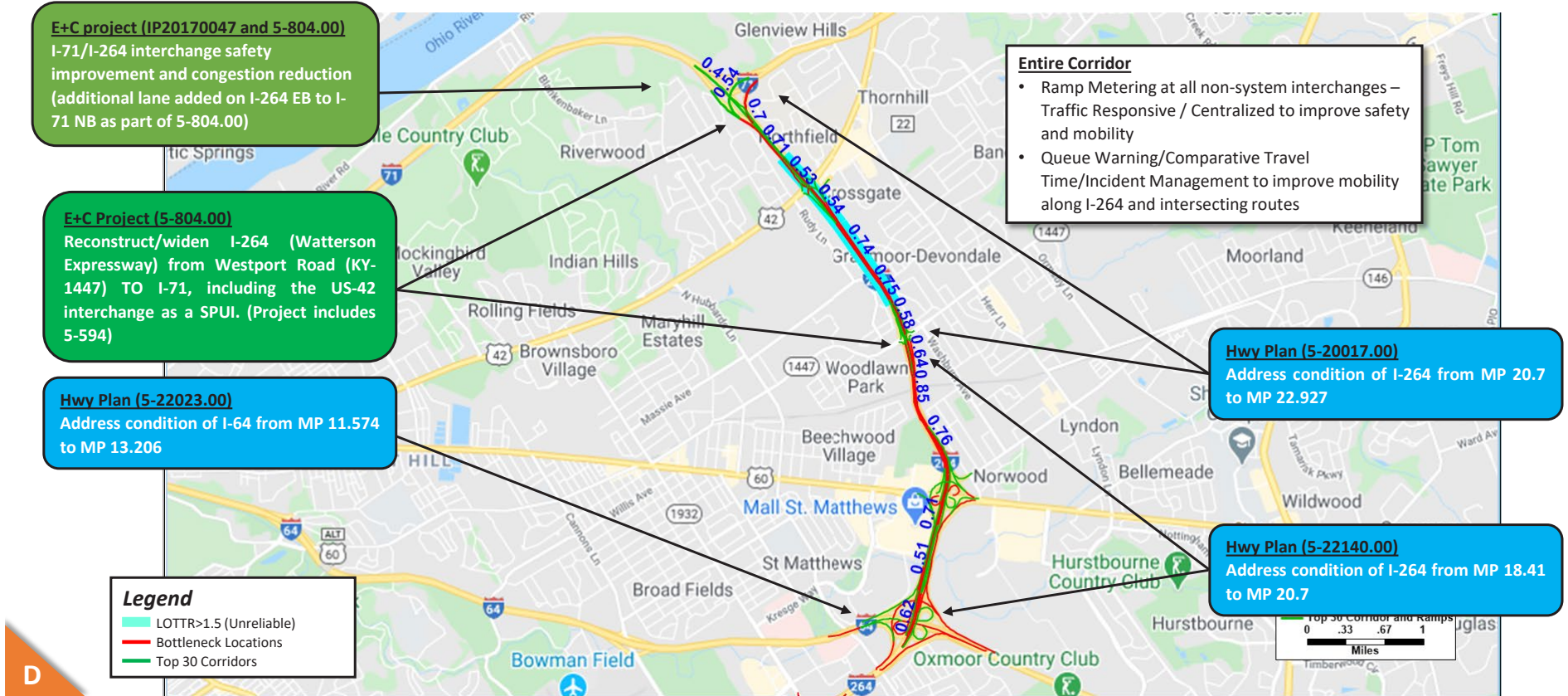
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10C: I-264 (from I-64 (East) to I-71)

TSMO-Focused

Locations	Functional Classification	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	Interstate	4-6, 12'	25'	12'	82,000	170-220'	Suburban, Dense urban

1) The highest traffic volume within the bottleneck based on KYSTMv19 data, rounded to the nearest thousand.



Session C

Corridor

6C

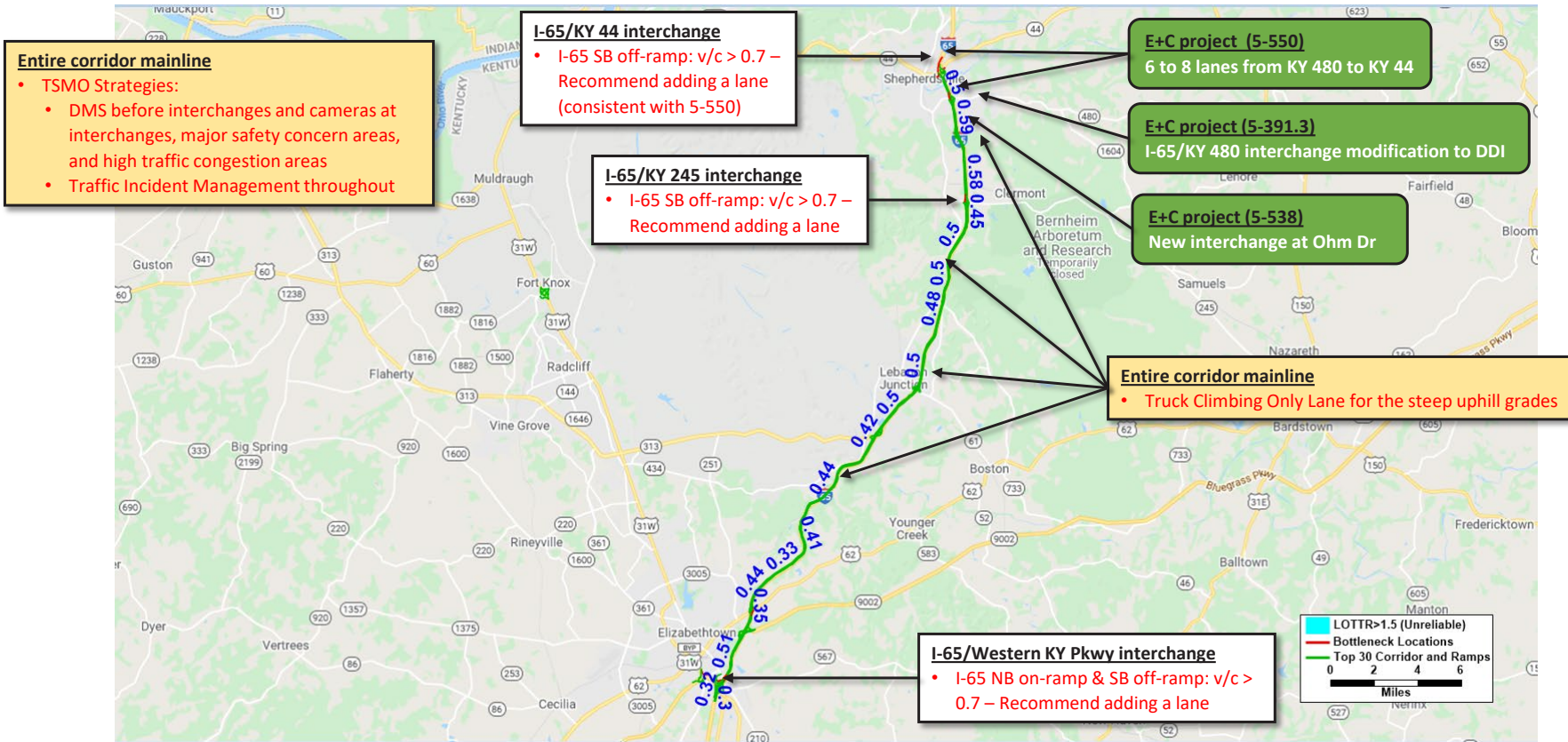
District

D4,D5

6C: I-65 (from Western KY Pkwy to KY 44 in Shepherdsville)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	25.8	6, 12'	23-60'	10'	80,000	285-365'	Rural, Rural town/exurban

1) The highest traffic volume along the corridor based on KYSTMv19 data, rounded to the nearest thousand.



Session B

Corridor

6B

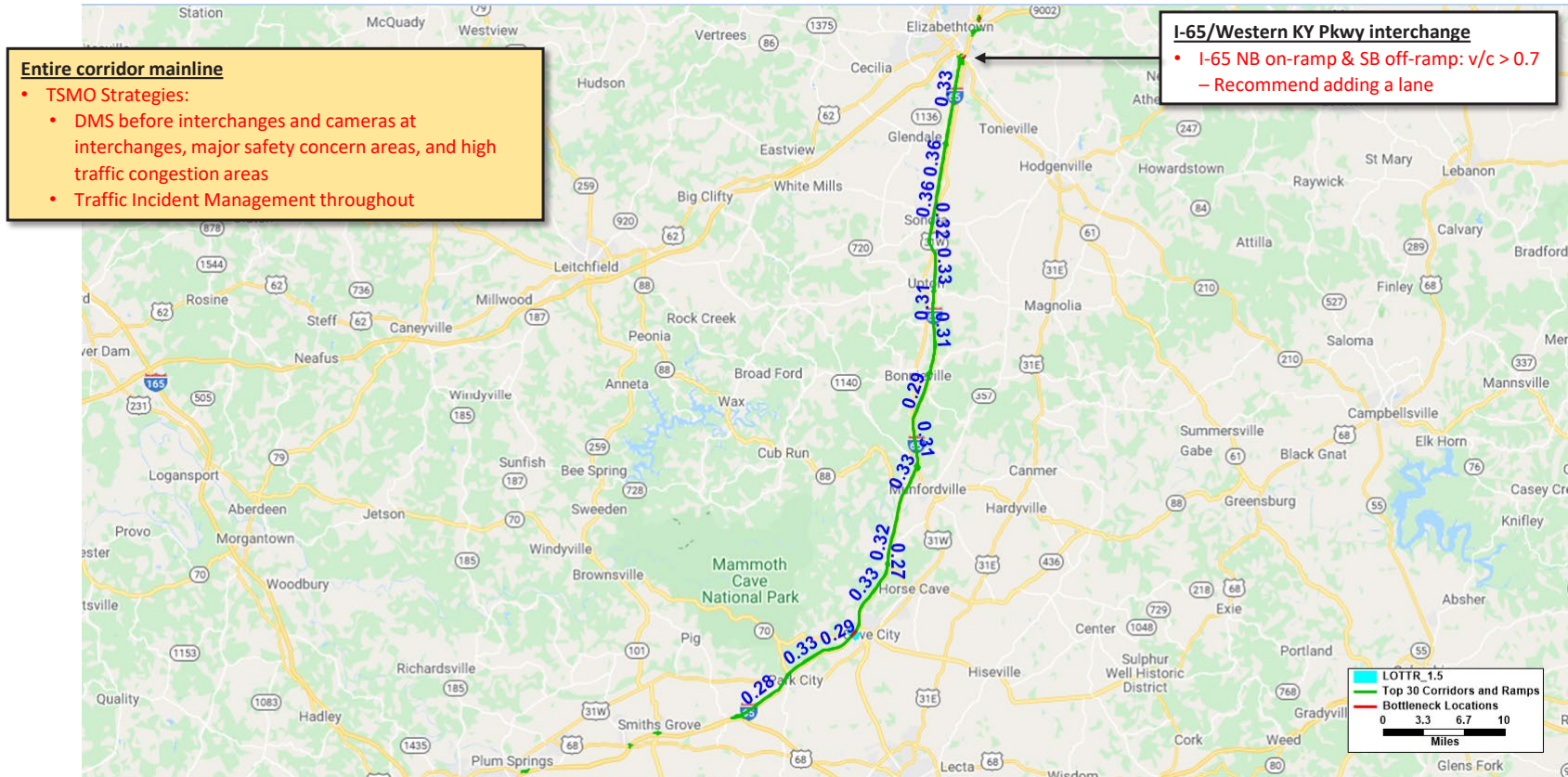
District

D3, D4

6B: I-65 (from Cumberland Expressway to Western KY Pkwy)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	47.7	6, 12'	31	10'	39,000	230-320'	Rural

1) The highest traffic volume along the corridor based on KYSTMv19 data, rounded to the nearest thousand.



Session A

Corridor

15

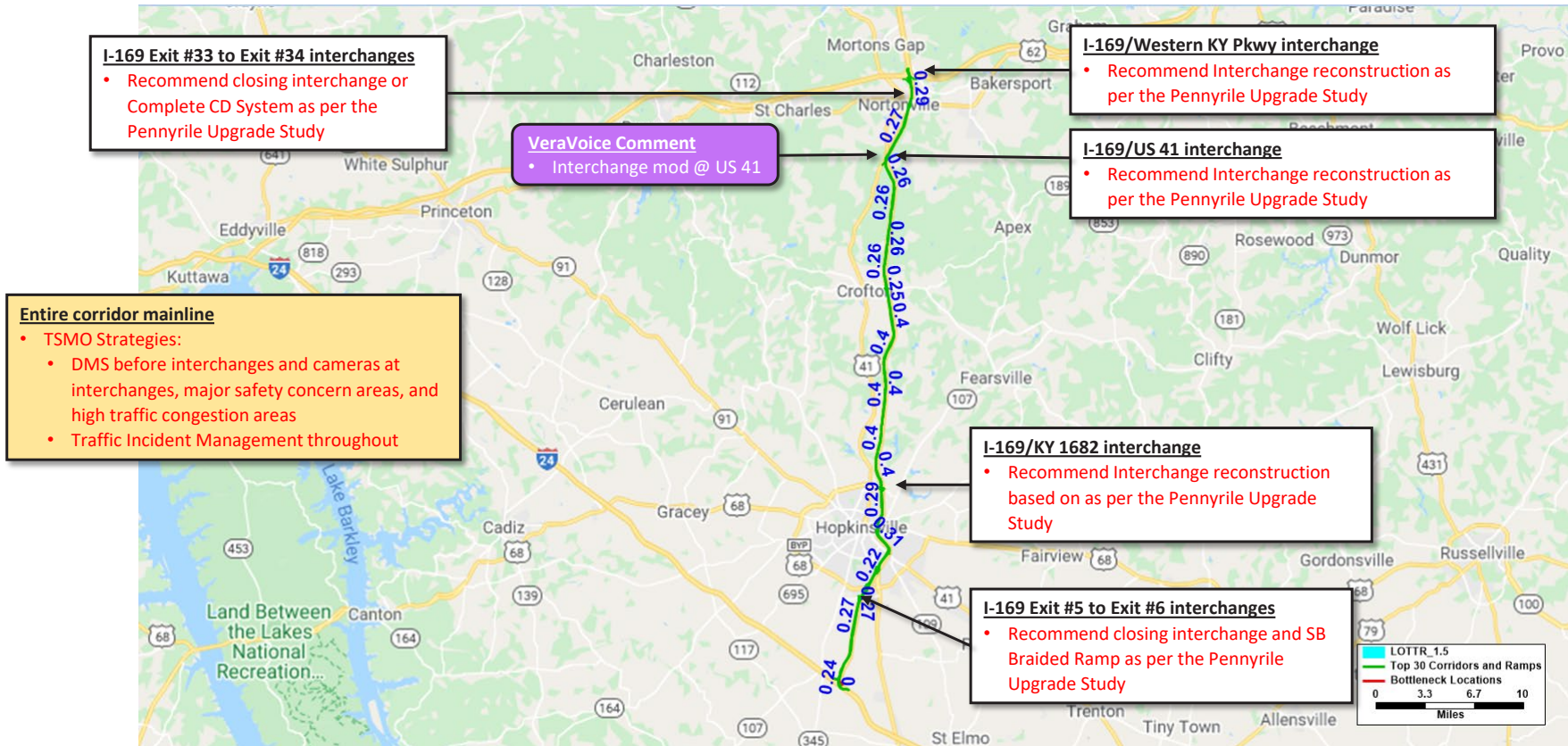
District

D2

15: Pennyriple Pkwy (Future I-169) (from I-24 to I-69/Western KY Pkwy)

Locations	Length (mi)	Number & Width of Lanes	Median Width	Shoulder Width	2019 AADT ¹	ROW	Area Type
Entire corridor	34.7	4, 12'	36'	10'	25,000	160-285'	Rural, Rural town/exurban

1) The highest traffic volume along the corridor based on KYSTMV19 data, rounded to the nearest thousand.





Linking Kentucky

Thank you!

Stephen De Witte, stephen.dewitte@ky.gov

Johnny Han, jhan@corradino.com