

APPENDIX K

LOCAL OFFICIALS MEETINGS

AND PUBLIC MEETINGS

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LOCAL OFFICIALS MEETINGS AND PUBLIC MEETING

1

MEETING MINUTES

Project: US 31W /KY 446 Study
Warren County

Purpose: Local Officials Meeting #1 (9:00 AM CST)

Place: KYTC Highway District 3 Office – Bowling Green

Meeting Date: March 31, 2015

Prepared By: Tom Springer

Attendees:

Greg Meredith	CDE – KYTC D3	greg.meredith@ky.gov
Jeff Moore	KYTC D3	Jeff.Moore@ky.gov
Wes Watt	KYTC D3	Wes.Watt@ky.gov
Deneatra Henderson	KYTC D3 PLNG	Deneatra.Henderson@ky.gov
Steve Ross	KYTC CO. PLNG	Steve.Ross@ky.gov
Shane McKenzie	KYTC CO. PLNG	Shane.McKenzie@ky.gov
Mikael Pelfrey	KYTC CO. PLNG	Mikael.Pelfrey@ky.gov
Daniel Hulker	KYTC CO. PLNG	Daniel.Hulker@ky.gov
Travis Carrico	KYTC CO Design	travis.carrico@ky.gov
Nina Gann	Plum Springs	Janninagann@gmail.com
Bruce Wilkerson	Bowling Green	bruce.wilkerson@bgky.org
Kyle Hunt	City of Bowling Green	kyle.hunt@bgky.org
Steve Hunter	CCPC	Steve.Hunter@bgky.org
Karissa Grammer	CCPC	Karissa.Grammer@bgky.org
Rachel Hetzler	CCPC	Rachel.Hetzler@bgky.org
Mike Buchanon	Warren Fiscal Court	mike.buchanon@ky.gov
Josh Moore	Warren County Public Works	josh.moore@ky.gov
Jeremy Lukat	Qk4, Inc.	jlukat@qk4.com
Tom Springer	Qk4, Inc.	tspringer@qk4.com
Annette Coffey	Qk4, Inc.	acoffey@qk4.com

NOTE: CCPC – City-County Planning Commission of Warren County – BG-WC MPO

Following Introductions, Jeff Moore provided an overview of the project (see attached presentation), including other planned roadway projects under consideration, anticipated developments, the purpose and need, and the public meeting to be held later in the day from 4:00 to 7:00 PM . Mr. Moore also stated that the I-65/US 31W Connector is currently under construction and is 1.5 to 2 years from completion. In addition, today, Bristow & Moorman Lanes are offset;

however, they will be combined into one intersection with a traffic signal on US 31W with Item Number 03-200.00. The Bowling Green – Warren County Metropolitan Planning Organization has a project to make improvements to KY 1402 (Porter Pike) and the realignment of Parker Avenue onto Porter Pike will be included with that project.

Kyle Hunt gave an update of the project that would provide access to US 31W from the easternmost parking lot of Fruit of the Loom that will provide for queuing of vehicles in their parking lot during peak hours and also add a traffic signal on KY 446 at this location. This project was awarded to Scotty's Contracting and Stone LLC and is expected to be complete by this fall (120 day construction).

Annette Coffey lead the participants through the existing conditions of the area, including traffic, crash data, congestion, roadway drainage problems, lack of pedestrian or bicycle facilities or transit, and roadway geometric issues. The public will be asked the importance of each issue, to identify specific problems and potential solutions.

Steve Hunter noted the Planning Commission has zoned industrial an area on the west side of the railroad tracks directly across from Northgate Shopping Center. There are preliminary plans to add a fourth leg to the Northgate Shopping Center intersection (current signal in place), and with a railroad underpass/or overpass provide access to this the industrial property between US 31W and the river. He felt this proposal would encourage improved access management along US 31W. He felt this would remove truck traffic from Plum Springs Loop underpass.

Annette provided an overview of the environmental constraints, including the karst/sinkholes topography, historic sites, known hazardous materials, floodplains, and residential areas.

Steve Hunter noted that citizens have voiced a problem with turning left out of Old Porter Pike onto US 31W to travel southbound. On Porter Pike the residential development is very dense. There is confusion about whether U-turns are allowed along US 31W and access to businesses. He stated that left-hand deceleration lanes may be warranted along US 31W. Mr. Hunter also noted that although the crash data doesn't show there to be a problem at the SB US 31W to eastbound KY 446 left turn has experiences some violent crashes at this location.

Mayor Wilkerson hears almost daily the difficulty in turning left out of Old Porter Pike. People have requested a signal. He is also concerned over median cuts and businesses that aren't served by median cuts. Lots of people make U-turns from existing median cuts that do not line up with existing business entrances. There are a couple businesses that don't have access from opposite side of US 31W. He also asked if a fly over from SB US 31W to KY 446 could be added to eliminate the existing signal. He thought there were some very bad wrecks there and that people also run the signal.

Regarding the Plum Springs Loop underpass at the rail crossing, one option is to close it and improve KY 957 (Plum Springs Loop) up to US 31W. Another option would be to make Plum Springs a One-Way Road, either in or out. Steve Hunter believes closing the Plum Springs Loop existing underpass would be met with opposition. People that work at industries along Plum Springs Loop access US 31W at lunch from the US 31W/Porter Pike/Plum Springs Loop intersection.

Annette briefly noted some of the improvement options being considered, such as improvements to the existing interchange, a complete redesign of the interchange, making KY 446/US 31W a T-intersection/4-legged intersection or a roundabout, access management between Old Porter Pike and Porter Pike, realigning Corvette Drive, and other concepts.

Judge Buchanon is interested in improving access to Beach Bend Park, which has about 500,000 visitors a year. He felt it would be possible to expand the park if they had better access. One option would be to make one of the ramps cross over the railroad tracks.

Greg Meredith noted this corridor is a major gateway to Bowling Green and we should rebuild it to make it look and function as such. Greg also noted that some landscaping along KY 446 was funded by Lady Bird Johnson.

Local officials questioned whether a roundabout at US 31W/KY 446 would work with the amount of truck traffic in the corridor.

The meeting concluded and everyone was thanked for their attendance and encouraged to attend the public meeting and complete their paper surveys encouraging others to do the same.

END OF MINUTES

LOCAL OFFICIALS MEETINGS AND PUBLIC MEETING 1 SUMMARY

**SUMMARY OF TABLE MAPS AND SURVEY COMMENTS AT
PUBLIC MEETING #1/LOCAL OFFICIALS MEETING/INTERNET SURVEY**

LOCATION	COMMENTS	RED	YELLOW	TOTAL RED	TOTAL YELLOW	TOTAL
CORVETTE DRIVE - SOUTH SIDE		10	9			
1	Intersection with Hennessy Way			10	9	19
2	Turning vehicles onto US 31W cross paths					
3	Cannot turn left onto Corvette Drive from McDonalds					
4	Signal needs to be programmed					
5	Pedestrians need Crosswalk in front of Shell					
6	Need right turn lane on Corvette Drive to I-65*					
7	New Alignment - one-way in on south side of McDonalds to connect to Corvette Drive behind the liquor store					
CORVETTE DRIVE - NORTH SIDE						
1	Semis park along it	2		2	0	2
2	Semis U turn at corner turning to GM Plant*					
3	Semis inhibit vehicle traffic					
4	need right turn lane from General Motors to KY 446					
US 31W/KY 446 Interchange						
1	KY 446 W to US 31W Northbound merge - people do not want to yield and guardrail is too high	26	4	36	14	50
2	US 31W SB to I-65 - Need better lighting	1				
3	US 31W SB to I-65 - too short		5			
4	KY 446 W to US 31W Southbound slamming on brakes					
5	Need lighting cannot see at night or when raining					
6	Roundabout					
7	KY 446 W to US 31W southbound slamming on brakes	9	5			
US 31W North / KY 957		3	4			
1	Only has flashing yellow no dedicated left turn signal			3	4	7
2	Lighting					
3	Put stop signs at KY 957 toward US 31W and road parallel to West of Stone Lane coming out to turn onto US 31W. There is confusion as to who has right of way					
US 31W/Stone Lane			4			
1	Dump trucks pull out in front of everyone			0	4	4
2	Stone Lane residential area folks going to school turning north conflict with dump trucks					
US 31W/Porter Pike		6	2			
1	Rear ends 1/week			7	7	14
2	Congestion no turn lanes on Porter Pike		2			
3	Dahlia Way Intersection - Cannot get to businesses, once you are in Dahlia Way you cannot get out. You also almost get rear-ended when turning left into Plum Springs then right into Dahlia Way.	1	1			
4	New Alignment - Connect Porter Pike south of subdivision to Old Porter Pike & widen Old Porter Pike so it is an alternate route during peak hours.					
5	New Alignment - Realign Parker Avenue to line up with River Place		2			
Plum Springs Loop Underpass		9	5	9	5	14
River Place/Porter Pike						
1	Cannot get onto US 31W because of backup	2		2	1	3
2	Extend River Place to realigned Parker Avenue to the South		1			
Old Porter Pike		4	3			
1	Blind intersection			7	4	11
2	Would signal improve it					
3	Narrow not really used much					
4	People try to cross and get onto US 31W nearly impossible					
5	Pulling out of businesses on the north side is a mess					
6	Hard to turn onto US 31W	3	1			
New Connection at FOL						
1	New Alignment - Extend the new connector over to between AEP & Android and provide merge toward I-65 and cul de sac Willamette Lane			2	2	4
2	New Alignment - Add leg to the north as in 1 above and add right turn lane.					
3	New Alignment - Behind FOL there is an industry that owns adjacent to lot that could be used to connect Hennessy to Porter Pike	2	2			
4	Sharp curve headed between AEP & Android					
Access Management		1	1			
	At Funeral Home			1	1	2

* from Survey at Public Meeting

Themes from Boards

Interchange

- Traffic into Bowling Green backs up to KY446 flyover and makes it dangerous to motorist coming into Bowling Green. Apparently, when the light turns red at the Minute Mart, traffic coming into Bowling Green backs up just shy of the flyover bridge. The bridge blocks the sight distance so that other cars coming in don't see the stopped traffic until they get passed the bridge. Then they have to slam on the brakes and swerve to avoid hitting the stopped cars.
- Flyover traffic backs up and sight distance inadequacies cause people to lock up before rear ending vehicle in front of them.
- The interchange at KY 446 / US 31W needs lighting (street lights) as well as US 68/US 31W
- Flyover merge lane is scary
- KY 446 to US 31W ramp is scary
- The interchange at KY 446 / US 31W needs lighting (street lights)
- US 31W to KY 446 short ramp is too steep for small trailers (Hangs semis)
- KY 446 to I-65 signage not clear, weaving / merging happens
- Bad sight angle KY 446 to US 31W North
- Widen Railroad Bridge to extend, merge lane

Plum Springs Loop

- Need right turn lane onto Plum Springs Loop from US 31W - 3
- Need dedicated left turn light at Plum Springs going North on US31W, currently flashing yellow left.

Corvette Drive / KY446

- Right turn signalization @ Corvette
- Hennessy connector all the way across to Corvette
- Semi's parking and turning around on north Corvette Drive
- Need a crosswalk on KY 446 at Corvette drive - lots of pedestrian traffic here daily
- Fruit of the Loom traffic bad at Porter Pike and Corvette Drive

Porter Pike

- No left turn phasing @ Porter Pike (north)
- Fruit of the Loom traffic bad at Porter Pike and Corvette Drive
- In favor of new alignment of Parker Avenue

Old Porter Pike

- Full signal at Old Porter Pike

KY 957/US 31W N

- Confusion north on US 31W at KY 957 people turning into KY 957 and Stone Lane from same turn lane.
- Traffic in AM KY 957 turning left or right difficult

Other

- Willamette Dr. Sharp curve doesn't allow car and truck to pass each other (heavy truck traffic Android)
- Traffic in AM KY 957 turning left or right difficult
- Reduce traffic signals on US 31W or make US 31W priority - 2
- Any surplus property could be used for park and ride facilities or public transit

**BROUGHT UP AT PUBLIC MEETING HOWEVER ARE OUT OF THE STUDY AREA
OR BEYOND THE SCOPE OF THIS PROJECT:**

ISSUES ON EASEL BOARDS

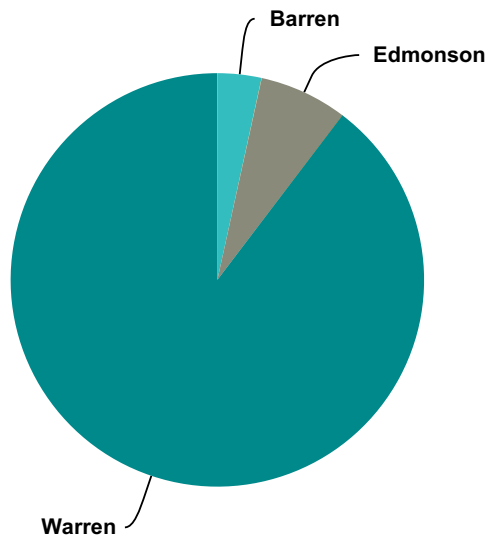
- KY 526 @ US31W – near Warren East High School ~ issue
- Moorman hard to get out toward High School or either way.
- KY 526 & Girkin Road – crashes at Y and mailbox – maybe identified.
- Need turn lane to allow school visitors to turn in.
- Willamette Dr. Sharp curve doesn't allow car and truck to pass each other (heavy truck traffic Android)
- Right turn bad from Moorman Lane onto US 31W
- Need to improve back GM Access Rd.
- Need right turn from KY 526 to US 31W south
- Widen Porter-Pike
- The interchange at US 68/US 31W needs lighting (street lights)

ON MAPS THAT ARE OUTSIDE STUDY AREA

- Please remove speed bumps on road behind BRADD office and traverses to Plum Springs Road
- Need to reopen Corvette Drive to GM Access Road
- I-65 off ramp from the north onto KY 446 – 1 yellow dot
- On ramp to I-65 southbound – 1 yellow dot
- KY 526 does not have right turn lane onto US 31W – 1 red and 1 yellow dot
- School entrance – 1 yellow dot

Q1 What is your county of residence?

Answered: 58 Skipped: 3

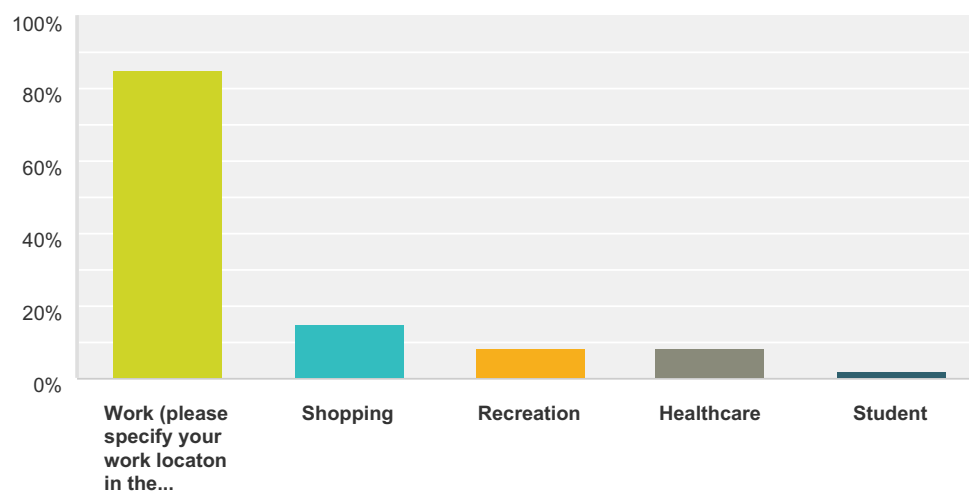


Answer Choices	Responses
Allen	0.00% 0
Barren	3.45% 2
Butler	0.00% 0
Edmonson	6.90% 4
Hart	0.00% 0
Logan	0.00% 0
Metcalf	0.00% 0
Monroe	0.00% 0
Simpson	0.00% 0
Warren	89.66% 52
Total	58

#	Other (please specify)	Date
1	Woodford	3/18/2015 11:41 AM

Q2 What is your primary reason for travel through the study area?

Answered: 47 Skipped: 14



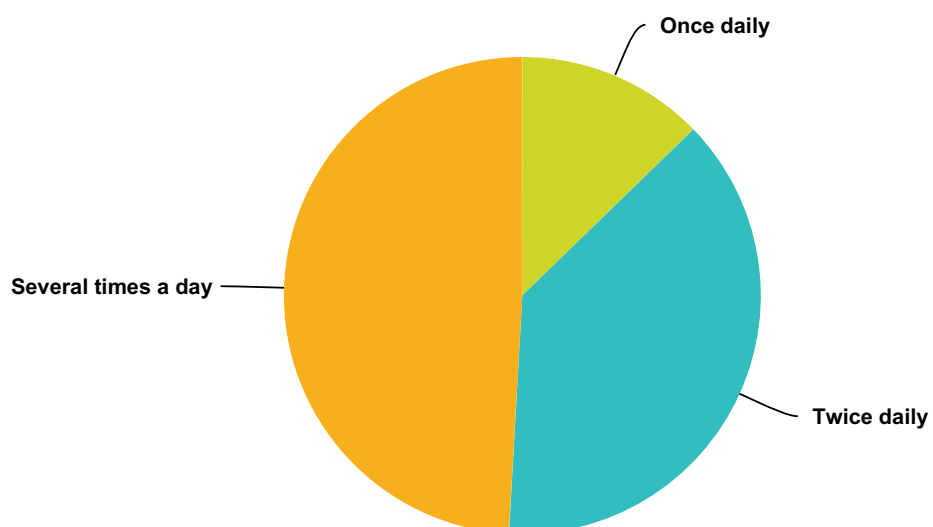
Answer Choices	Responses
Work (please specify your work location in the comment field)	85.11% 40
Shopping	14.89% 7
Recreation	8.51% 4
Healthcare	8.51% 4
Student	2.13% 1
Total Respondents: 47	

#	Other (please specify)	Date
1	Corvette Museum	4/13/2015 10:28 AM
2	X	4/13/2015 10:05 AM
3	residential	4/8/2015 10:24 AM
4	3 times wkly	4/8/2015 9:44 AM
5	Barren River Rd.	4/8/2015 9:42 AM
6	2 times a week	4/8/2015 9:33 AM
7	542 Plum Springs Loop, Southcentral Veterinary Services LLC	4/8/2015 8:16 AM
8	Resident / Farm	4/7/2015 4:36 PM
9	BG assembly plant / Corvette Museum	4/7/2015 4:32 PM
10	WKU	4/7/2015 4:26 PM
11	Live in area	4/7/2015 4:10 PM
12	Live in Plum springs	4/7/2015 4:04 PM
13	31W to Porter Pike	4/7/2015 3:06 PM

14	Fruit of the loom	4/7/2015 3:02 PM
15	Graham Ave.	4/7/2015 2:53 PM
16	State 57	4/7/2015 2:40 PM
17	WKU	4/7/2015 2:08 PM
18	31W to and from BG	4/7/2015 1:49 PM
19	Kelly Road	4/7/2015 12:47 PM
20	Kelly road	4/7/2015 11:06 AM
21	2 - 3 times a week	4/7/2015 10:51 AM
22	Corvette Assembly Plant	4/7/2015 10:19 AM
23	Live on Porter Pike	4/7/2015 10:07 AM
24	GM	4/7/2015 10:03 AM
25	BRADD office	4/7/2015 9:58 AM
26	BRADD	4/7/2015 9:27 AM
27	WKU Tower	4/7/2015 9:20 AM
28	BRADD	4/7/2015 9:12 AM
29	BRADD	4/7/2015 9:03 AM
30	BADA 759 Hennessy Way	4/7/2015 8:54 AM
31	and live here	4/6/2015 4:34 PM
32	Bluegrass Materials	4/6/2015 4:04 PM
33	I-65 Exit 22	4/6/2015 3:44 PM
34	BG Medical Ctr.	4/6/2015 3:00 PM
35	I-65 Access once per week	4/1/2015 1:09 PM
36	visiting with Fruit of the Loom- General Motors and Corvette Museum	4/1/2015 1:04 PM
37	County Government	4/1/2015 1:02 PM
38	City of Bowling Green	4/1/2015 1:00 PM
39	Other circled not specified though.	4/1/2015 12:57 PM
40	National Corvette Museum	3/31/2015 12:33 PM
41	National Corvette Museum	3/31/2015 11:21 AM
42	National Corvette Museum	3/31/2015 10:51 AM

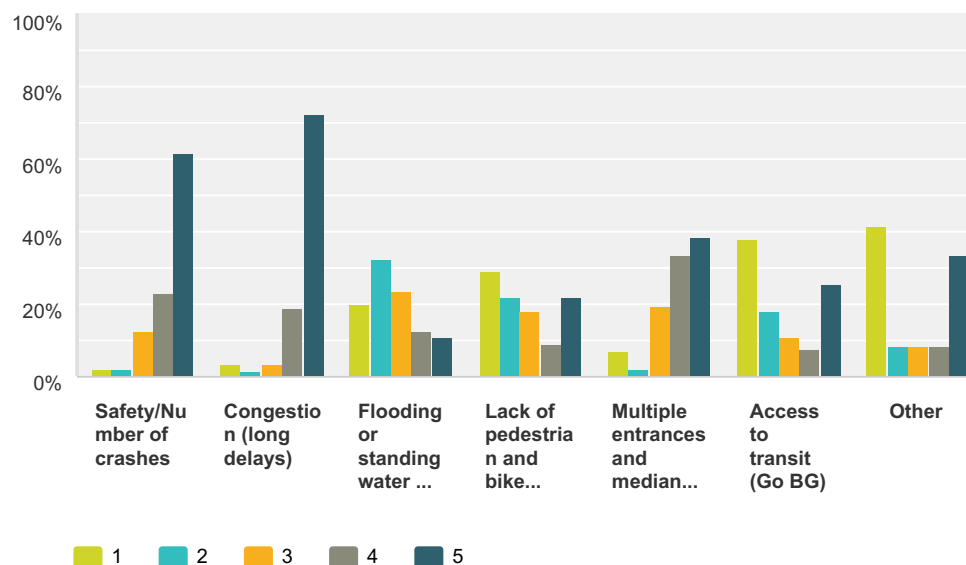
Q3 How often do you travel within the study area?

Answered: 55 Skipped: 6



Q4 Please rank, from 1 to 5, your level of concern regarding the following issues in the study area, with 1 being of least concern and 5 being of greatest concern.

Answered: 59 Skipped: 2



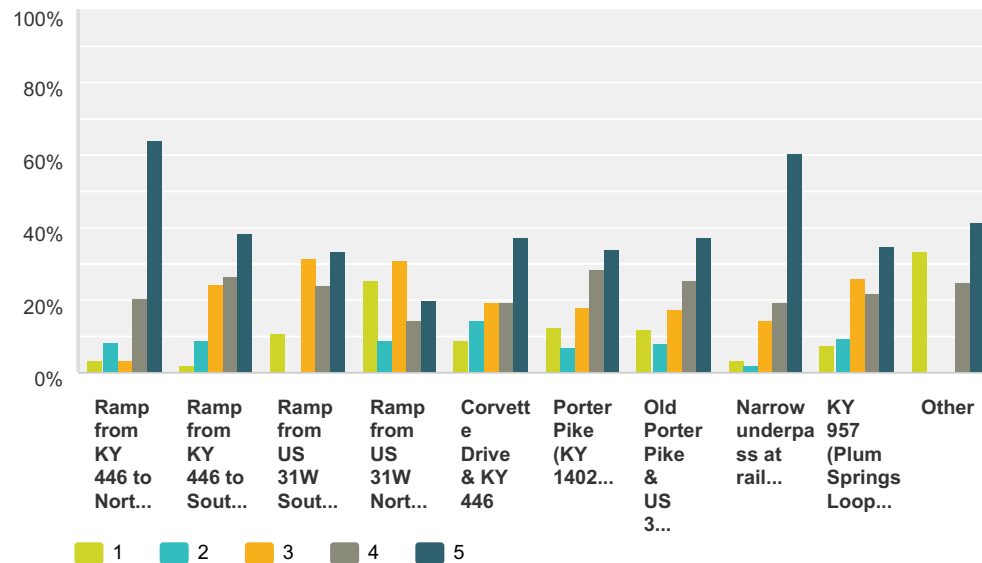
	1	2	3	4	5	Total	Weighted Average
Safety/Number of crashes	1.75% 1	1.75% 1	12.28% 7	22.81% 13	61.40% 35	57	4.40
Congestion (long delays)	3.45% 2	1.72% 1	3.45% 2	18.97% 11	72.41% 42	58	4.55
Flooding or standing water on the road	20.00% 11	32.73% 18	23.64% 13	12.73% 7	10.91% 6	55	2.62
Lack of pedestrian and bike connections (sidewalks)	29.09% 16	21.82% 12	18.18% 10	9.09% 5	21.82% 12	55	2.73
Multiple entrances and median crossovers on US 31W	7.02% 4	1.75% 1	19.30% 11	33.33% 19	38.60% 22	57	3.95
Access to transit (Go BG)	38.18% 21	18.18% 10	10.91% 6	7.27% 4	25.45% 14	55	2.64
Other	41.67% 5	8.33% 1	8.33% 1	8.33% 1	33.33% 4	12	2.83

#	Other (please specify)	Date
1	Very concerned about underpass at rail crossing!! A daily rush and ruel	4/8/2015 10:24 AM
2	We have no safe byways for pedestrian and bike paths. I see individuals riding bicycles to work each day.	4/8/2015 10:20 AM
3	Crosswalk by Shell, McDonalds and Hardee's	4/8/2015 9:42 AM
4	Congestion at access points and lack of visibility at some of those access points to 31-W is a big concern. More turning lanes at some of the intersections may help improve traffic flow. The railway over pass is major traffic concern from a congestion and safety standpoint.	4/8/2015 8:16 AM

5	Please address high crash count at 446 exit to N 31W. Please improve lighting at this interchange	4/7/2015 4:26 PM
6	Hard to get out from Dahlia Way to 31W	4/7/2015 3:59 PM
7	Only four bridges for traveling north and south in Warren co. I-65 Louisville Rd., Old Louisville Rd. and Richardsville Rd. Thus I-65 and 31W Main throughfares for North bound and south bound traffic in Warren County.	4/7/2015 2:08 PM
8	Semi's park in Corvette Drive north across from Hardee's impeding traffic. Semi's u turn in gate area of Corvette Plant hitting gates, protective posts, etc.	4/7/2015 10:19 AM
9	Frontage Roads are a problem on Hennessy road that needs to be addressed with backage roads asap before more development occurs.	4/7/2015 9:27 AM
10	This area has alot of congestion, too many cars on the road and roads can't handle.	4/7/2015 9:03 AM
11	Sight distances	4/1/2015 12:57 PM
12	Fruit of the Loom people have to wait long periods of time to get to turn left or right, people getting into and out of the Shell Station and or other business with no lanes marked just seem to not know what to do. People cutting through the liquor store lot as it has no posted drive and is wide open.	3/31/2015 12:33 PM

Q5 Please rank your level of difficulty making these maneuvers. 1 would be your least difficult and 5 would be the most difficult.

Answered: 60 Skipped: 1

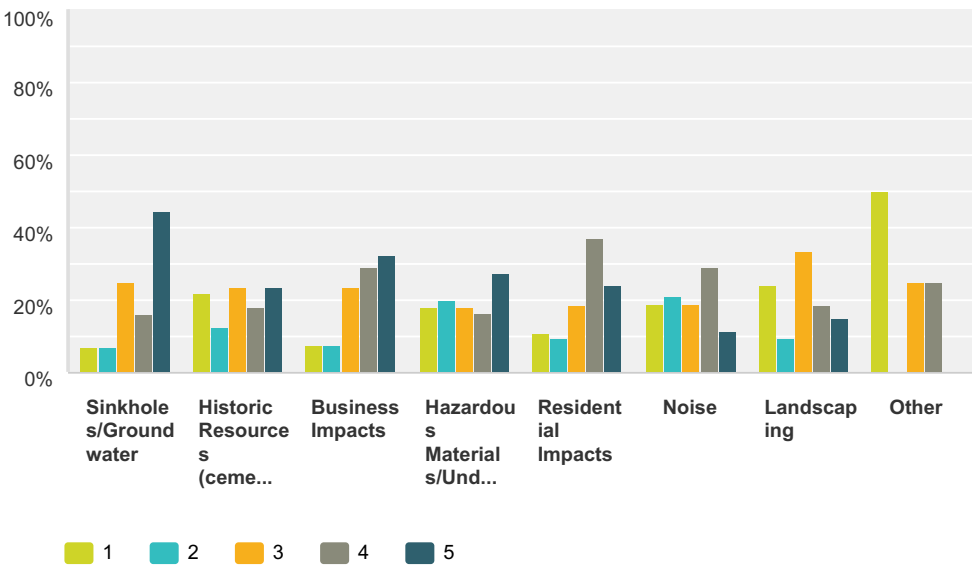


#	Other (please specify)	Date
1	Other Corvette Drive and Porter Pike	4/13/2015 10:28 AM
2	*KY 446/US 31W Interchange: I. Ramp from KY 446 to Northbound US 31W (toward Warren East High School) *Old Porter Pike & US 31W (flashing beacon) Moorman Lane Exit left onto 31W North - Most difficult	4/13/2015 10:13 AM
3	Not to remove, only reduce the number of speed bumps on north Graham and Easton circle.	4/8/2015 10:24 AM
4	Extend the problem area to turn off - east 68 - 80 to Smith's Grove and Glasgow. 526 is the only connecting highway that does not have a right turn lane entrance onto 31W south. Traffic is backed up on 526 most mornings past Fairview Methodist Church (Fairview Boiling Springs Road) - Road has traffic from Ephram White Park, Warren east, soccer, football, basketball, softball, baseball event, and track plus all traffic delivering students to and from east HS. and Middle school and employees from north side of B.G. Going to work at 31W north area.	4/8/2015 10:20 AM
5	The frontage road and the parking lot to the Minit Mart at the south intersection of 31W and Plum Springs Loop. The north intersection of Plum Springs Loop and 31W also poses some problems due to the alignment of Plum Springs Loop and intersection of side streets so close to the 31W intersection.	4/8/2015 8:16 AM
6	b. Corvette Drive and KY 446 needs smart lights improve road from corvette plant parking	4/7/2015 4:40 PM
7	Correct ramp to 446 southbound 31W backs up into traffic. Improve lighting, access road to Chuck's & S.C. Bank off Plum Springs Loop is impossible to get out of, need improvement.	4/7/2015 4:26 PM
8	Trying to come off of Old Porter Pike onto 31W is always tricky and sometimes almost impossible.	4/7/2015 4:14 PM
9	Dahlia Way exit	4/7/2015 3:59 PM
10	Hennessy Drive - extend Fay Street for another connection to Porter Pike	4/7/2015 3:37 PM
11	Stone Avenue onto 31W. Recycle trucks need room too and so when they travel south bound to merge, use median to build up speed, but thru is the traffic light @ Plum Springs Rd. and 31W. It turning onto Stone Ave. from 31W median most likely will be congested.	4/7/2015 2:08 PM

12	Ramp from KY 446 to Northbound US 31W (toward Warren East High School) Narrow underpass at rail crossing on Plum Springs Loop near South intersection with US 31W	4/7/2015 1:49 PM
13	Dont use this road often	4/7/2015 10:51 AM
14	Ramp from KY 446 to Southbound US 31W (toward downtown) is more issue with congestion. Merging from KY 446 onto US 31W is difficult during morning commute.	4/7/2015 9:58 AM
15	Coming off of 446 heading to WEHS is a problem area. If traffic is coming through, its very dangerous merging onto 31W.	4/7/2015 9:03 AM
16	Paint center line especially at underpass. People think there is not enough room for cars to pass through at same time. Lines at edge of road would be nice too. Need a green arrow to turn left at liquor store into Plum Springs Loop and Proctor Trail. Flashing yellow just isnt adequate for the volume of traffic. Why not try a different pattern signal at New Porter Pike, 31W and Plum Springs Loop. The sensor idea just doesnt seem to work. Possibly like the signal at 31W bypass and Broadway.	4/6/2015 4:34 PM
17	Parker Avenue access Road to Porter Pike	4/1/2015 12:57 PM

Q6 Please rank the level of environmental concern in the study area: 1 would be the least concern and 5 would be the greatest concern.

Answered: 58 Skipped: 3



	1	2	3	4	5	Total	Weighted Average
Sinkholes/Groundwater	7.14% 4	7.14% 4	25.00% 14	16.07% 9	44.64% 25	56	3.84
Historic Resources (cemeteries, old homes, etc.)	21.82% 12	12.73% 7	23.64% 13	18.18% 10	23.64% 13	55	3.09
Business Impacts	7.27% 4	7.27% 4	23.64% 13	29.09% 16	32.73% 18	55	3.73
Hazardous Materials/Underground Storage Tanks	18.18% 10	20.00% 11	18.18% 10	16.36% 9	27.27% 15	55	3.15
Residential Impacts	11.11% 6	9.26% 5	18.52% 10	37.04% 20	24.07% 13	54	3.54
Noise	19.23% 10	21.15% 11	19.23% 10	28.85% 15	11.54% 6	52	2.92
Landscaping	24.07% 13	9.26% 5	33.33% 18	18.52% 10	14.81% 8	54	2.91
Other	50.00% 2	0.00% 0	25.00% 1	25.00% 1	0.00% 0	4	2.25

#	Other (please specify)	Date
1	Subsurface ground water flow. I believe it flows to the north from the south.	4/7/2015 2:11 PM
2	Would like to see roundabout at interchange of Porter Pike and Plum springs Loop at 31W. Dahlia is a problem getting in and out	4/7/2015 9:31 AM
3	Good project, follow lead of neighbor and business owners. Curb, gutter and sidewal badly needed.	4/1/2015 1:10 PM

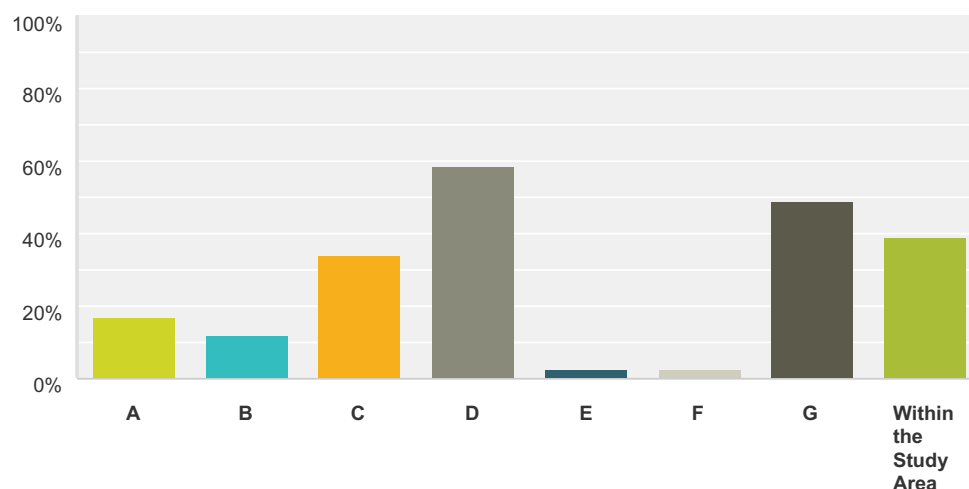
Q7 Additional Comments: Please use the space below to add anything else or explain rankings

Answered: 9 Skipped: 52

#	Responses	Date
1	Having Go BG transit pass out Louisville Rd. can really open doors for employment to those unable to drive. This can help address the employee shortage for industry and encourage new industry to come to BG.	4/8/2015 10:27 AM
2	Student crossing at Warren East High School. We are very, very lucky not to have had a fatality.	4/8/2015 10:20 AM
3	Reduce the number of traffic signals on 31W - they have multiplied too much over the past 20 years Traffic signals on 31W should have priority over side roads. no reason to be stopped when there is no cross or side road traffic.	4/7/2015 4:42 PM
4	This interchange needs complete overhaul to accommodate the heavy traffic and future tourism and industry	4/7/2015 4:28 PM
5	The congestion at the Porter Pike / 31W intersection is bad enough to make me avoid it altogether at peak traffic times.	4/7/2015 4:17 PM
6	Thank you for listening and making this a concern to us and yourself.	4/7/2015 2:11 PM
7	Thank you for addressing growing traffic concerns on the north side of Bowling Green. Great public meeting. Very good visuals!	4/7/2015 10:00 AM
8	Going through the train overpass is too narrow. When meeting others, especially cement trucks, its scary. Getting out at McDonalds intersection is difficult - need some traffic help.	4/7/2015 9:05 AM
9	We should check into access to Beach Bend better as well. I have seen when they have large events traffic backed up Louisville road from Beach Bend road until it went out of sight and backed up the By Pass for many many blocks.	3/31/2015 12:43 PM

Q8 Using the map above please select your usual route through the study area.

Answered: 41 Skipped: 20



Answer Choices	Responses
A	17.07% 7
B	12.20% 5
C	34.15% 14
D	58.54% 24
E	2.44% 1
F	2.44% 1
G	48.78% 20
Within the Study Area	39.02% 16
Total Respondents: 41	

#	Other (please specify)	Date
1	We travel 99% of study area for business (grocery, doctors, vet, recycle, restaurant, meetings, etc. on a monthly basis over different routes	4/8/2015 9:48 AM
2	Bad area in Plum Springs Loop Bad area and needs street lights at interchange	4/8/2015 9:38 AM
3	I normally travel I-65 to exit 28 and follow the 446 interchange to the south end of 31W. I normally access Plum Springs Loop at the Plum Springs Loop/Porter Pike/31W intersection. Due to work I utilize all of the routes listed but the intersection above is the one that I utilize the most.	4/8/2015 8:23 AM
4	Riverbend Landing	4/7/2015 4:21 PM
5	C to G and D	4/7/2015 12:51 PM
6	C to G D to E	4/7/2015 11:09 AM
7	Need right turn lane on Corvette Drive to I-65 Need right turn lane from GM to KY 446	4/7/2015 10:28 AM
8	C to within the study area	4/7/2015 10:09 AM

9	Within the study area to B	4/7/2015 9:22 AM
10	D to C	4/6/2015 3:51 PM
11	D to A and C	4/6/2015 3:40 PM
12	D to E	4/6/2015 3:15 PM
13	C to E	4/6/2015 3:02 PM

Q9 Please join our mailing list by providing the additional general information below.

Answered: 43 Skipped: 18

Answer Choices	Responses
Name	100.00% 43
Home Address (optional)	81.40% 35
Email Address (optional)	58.14% 25
Phone # (optional)	65.12% 28

#	Name	Date
1	Brenda Richards	4/13/2015 10:15 AM
2	Angelle' McDonald	4/13/2015 10:08 AM
3	Heath Ray	4/8/2015 10:30 AM
4	Edwin Moss	4/8/2015 10:21 AM
5	Connie Niccum	4/8/2015 9:49 AM
6	Ray Niccum	4/8/2015 9:39 AM
7	Eddy Grimes	4/8/2015 8:23 AM
8	John Beaver	4/7/2015 4:44 PM
9	Doug Johnson	4/7/2015 4:34 PM
10	Nita Rice	4/7/2015 4:29 PM
11	Jason D. wolfe	4/7/2015 4:22 PM
12	Charlie Capito	4/7/2015 4:12 PM
13	Charlie and Georgeanna Capito	4/7/2015 4:07 PM
14	Reeta Parelch	4/7/2015 4:00 PM
15	J. M. Yowell	4/7/2015 3:42 PM
16	Roy Tallent	4/7/2015 3:08 PM
17	Joe Morgan	4/7/2015 3:03 PM
18	David Stice	4/7/2015 2:52 PM
19	Kevin Cary	4/7/2015 2:17 PM
20	James L. Bond II	4/7/2015 1:49 PM
21	James Horschman	4/7/2015 1:42 PM
22	Mary Horschman	4/7/2015 1:12 PM
23	George Tarter	4/7/2015 12:54 PM
24	Eric D. Keown	4/7/2015 11:10 AM
25	Edward Whitehead	4/7/2015 10:45 AM
26	Jerry Potter	4/7/2015 10:10 AM

27	James Gleichauf	4/7/2015 10:05 AM
28	Leonard Dill	4/7/2015 9:22 AM
29	Kim Morrow	4/7/2015 9:18 AM
30	Phil Bourassa	4/7/2015 8:57 AM
31	Phil Mitchell	4/6/2015 4:34 PM
32	Randy Webb	4/6/2015 4:06 PM
33	Lloyd Ferguson	4/6/2015 4:02 PM
34	Cathy Rigdon	4/6/2015 3:52 PM
35	Michael D Jander	4/6/2015 3:41 PM
36	Sandra Finch	4/6/2015 3:17 PM
37	William Finch	4/6/2015 3:03 PM
38	Mary Horschman	4/6/2015 2:47 PM
39	Mike Buchanon	4/1/2015 1:08 PM
40	Bruce Wilkerson	4/1/2015 12:59 PM
41	Gary Cockriel	3/31/2015 12:43 PM
42	Vincent Perriello	3/31/2015 10:58 AM
43	Wendell Strode	3/31/2015 10:53 AM
#	Home Address (optional)	Date
1	5421 Louisville Road	4/13/2015 10:15 AM
2	1240 Huron Way	4/13/2015 10:08 AM
3	329 Easton Circle BG KY 42101	4/8/2015 10:30 AM
4	1891 Girkin - Boiling Spring Rd.	4/8/2015 9:49 AM
5	1891 Girkin Spring Rd	4/8/2015 9:39 AM
6	542 Plum Springs Loop	4/8/2015 8:23 AM
7	53 Treece Lane BG 42101	4/7/2015 4:44 PM
8	3348 Bow Dr. Bowling Green KY 42104	4/7/2015 4:34 PM
9	131 Northridge Dr. B.G. KY 42101	4/7/2015 4:29 PM
10	540 Coastal Avenue Bowling Green KY 42103	4/7/2015 4:22 PM
11	349 Plum Springs Rd. B.G.KY 42101	4/7/2015 4:12 PM
12	349 Plum Springs Rd.	4/7/2015 4:07 PM
13	3209 Steam Boat St B.G. KY 42103	4/7/2015 3:08 PM
14	400 Renfro Ray Rd. Smith Grove KY	4/7/2015 2:52 PM
15	120 Stone Mtn. Ct. B.G. KY 42101	4/7/2015 2:17 PM
16	2878 Glasgow Road Bowling Green KY 42101	4/7/2015 1:49 PM
17	126 Girkin Rd B.G.	4/7/2015 1:12 PM
18	2293 Chalybeate Rd Smith Grove 42171	4/7/2015 12:54 PM
19	2215 Garrett Hollow Road	4/7/2015 11:10 AM
20	1326 Lakemere Avenue Bowling Green KY 42103	4/7/2015 10:45 AM

21	3721 Porter Pike Bowling Green KY	4/7/2015 10:10 AM
22	1380 Calgary Way Bowling Green KY	4/7/2015 10:05 AM
23	316 Moorman Lane	4/7/2015 9:22 AM
24	304 Stone Ridge St Bowling Green KY 42101	4/7/2015 9:18 AM
25	564 proctor Trail Bowling Green, KY 42101	4/6/2015 4:34 PM
26	2317 Girkin Rd. Bowling Green KY 42101	4/6/2015 4:06 PM
27	1100 S. Park Dr. Bowling Green KY	4/6/2015 4:02 PM
28	5350 Louisville Rd. #19 Bowling Green KY 42101	4/6/2015 3:41 PM
29	176 Birch Ct. Bowling Green KY	4/6/2015 3:17 PM
30	176 Birch Ct. Bowling Green KY	4/6/2015 3:03 PM
31	126 Girkin Road	4/6/2015 2:47 PM
32	429 E. 10th Street, Bowling Green KY	4/1/2015 1:08 PM
33	1001 College Street - City of Bowling Green	4/1/2015 12:59 PM
34	250Huntrs Crossing Way	3/31/2015 12:43 PM
35	175 Talbott Dr Bowling Green 42103	3/31/2015 10:58 AM
#	Email Address (optional)	Date
1	heath.ray@fappes.wku.edu	4/8/2015 10:30 AM
2	edwinmoss18@msn.com	4/8/2015 10:21 AM
3	drgrimes@southcentralvet.com	4/8/2015 8:23 AM
4	jobeaver@hughes.net	4/7/2015 4:44 PM
5	doug.johnson@corvettemuseum.org	4/7/2015 4:34 PM
6	nita.rice@wku.edu	4/7/2015 4:29 PM
7	charileandgeorge@gmail.com	4/7/2015 4:07 PM
8	roytallent@yahoo.com	4/7/2015 3:08 PM
9	joe.morgan@fotline.com	4/7/2015 3:03 PM
10	dlstice52@hotmail.com	4/7/2015 2:52 PM
11	kevin.cary@wku.edu	4/7/2015 2:17 PM
12	ji.bond@twc.com	4/7/2015 1:49 PM
13	jimhorsch2000@yahoo.com	4/7/2015 1:42 PM
14	jerrypotter@twc.com	4/7/2015 10:10 AM
15	kmorrow@bradd.org	4/7/2015 9:18 AM
16	phil.bourassa@ammcoats.com	4/7/2015 8:57 AM
17	rwebb@bluegrassmaterials.com	4/6/2015 4:06 PM
18	cmrigdon@aol.com	4/6/2015 3:52 PM
19	Sandra.finch@edmons.kyschools.us	4/6/2015 3:17 PM
20	finchwe@att.net	4/6/2015 3:03 PM
21	mike.buchanon@ky.gov	4/1/2015 1:08 PM
22	bruce.wilkerson@bgky.org	4/1/2015 12:59 PM

23	gary @corvettemuseum.org	3/31/2015 12:43 PM
24	VPerriello@hotmail.com	3/31/2015 10:58 AM
25	strode@corvettemuseum.org	3/31/2015 10:53 AM
#	Phone # (optional)	Date
1	270-782-0430	4/13/2015 10:15 AM
2	Bowling Green KY 42101	4/13/2015 10:08 AM
3	270-999-1621	4/8/2015 10:30 AM
4	270-781-7221	4/8/2015 10:21 AM
5	270-842-9771	4/8/2015 9:39 AM
6	2702822564	4/8/2015 8:23 AM
7	270-991-6595	4/7/2015 4:44 PM
8	270-784-4716	4/7/2015 4:34 PM
9	270-875-3010	4/7/2015 4:29 PM
10	270-842-1974	4/7/2015 4:12 PM
11	270-842-1974	4/7/2015 4:07 PM
12	973-652-8558	4/7/2015 4:00 PM
13	270-843-3449	4/7/2015 3:08 PM
14	270-935-6887	4/7/2015 3:03 PM
15	270-303-6023	4/7/2015 2:17 PM
16	270-535-8053	4/7/2015 1:42 PM
17	270-996-5147	4/7/2015 12:54 PM
18	270-904-2536	4/7/2015 10:45 AM
19	270-202-5279	4/7/2015 10:10 AM
20	270-392-8959	4/7/2015 9:22 AM
21	270-792-0808	4/7/2015 9:18 AM
22	270-781-1013 x222	4/7/2015 8:57 AM
23	270-791-6324	4/6/2015 3:03 PM
24	779-6173	4/6/2015 2:47 PM
25	270-843-4146	4/1/2015 1:08 PM
26	270-392-0817	4/1/2015 12:59 PM
27	270-792-9140	3/31/2015 12:43 PM
28	270-393-9975	3/31/2015 10:58 AM

LOCAL OFFICIALS MEETINGS AND PUBLIC MEETING 1 PRESENTATION

US 31W/ KY 446 STUDY

OLD PORTER PIKE TO
PLUM SPRINGS LOOP (KY 957)
BOWLING GREEN
WARREN COUNTY

Public Meeting
March 31, 2015



Groundbreaking by Design.



Study Team

KYTC



QK4

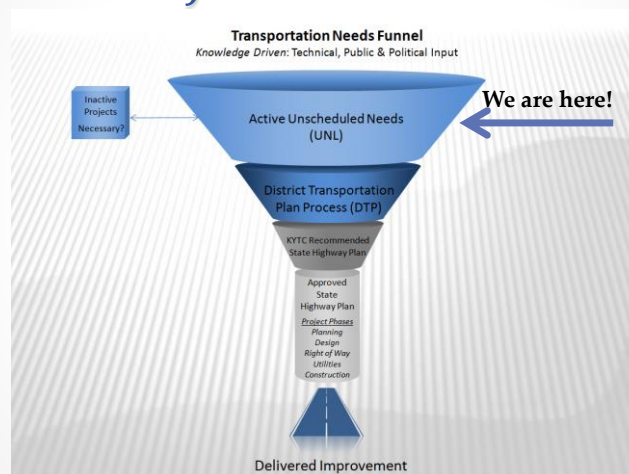


Purpose of this Meeting

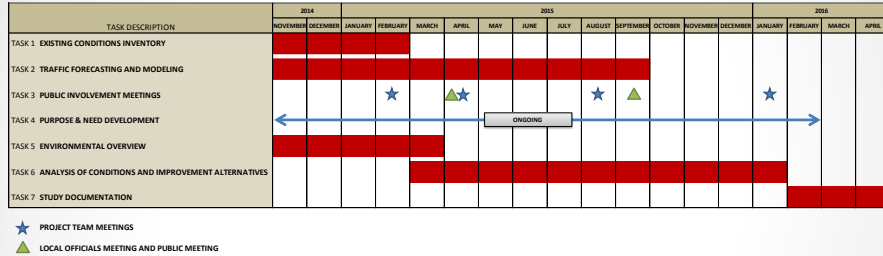
- Share Information About the Study Area
- Present Existing Conditions
- Validate the Purpose and Need for the Project
- Convey Project Schedule
- Listen to your Concerns within the Study Area
- **Obtain your Comments Through Surveys**

<http://Yourturn.transportation.ky.gov/>

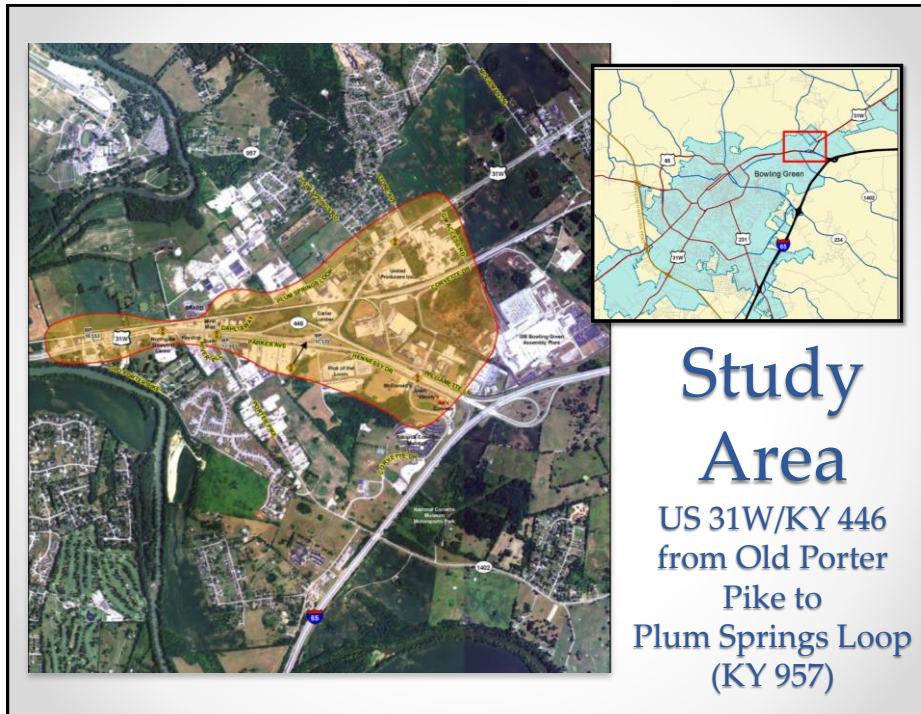
Where are We in the Project Process?



Study Schedule



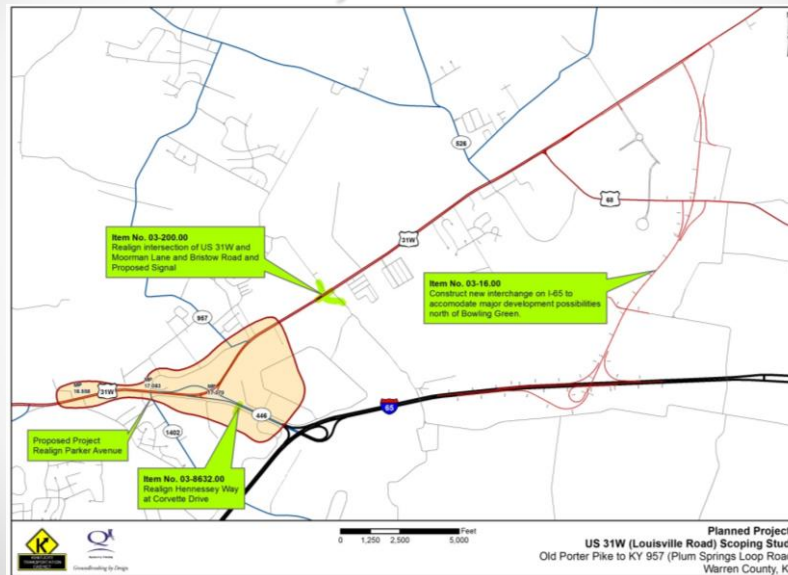
What are we Studying?



Study Area has a Rural Interchange in an Urban Setting



Current Projects in the Area



The National Corvette Museum Motorsports Park East of I-65



Drawing Furnished by National Corvette Museum

Draft Purpose and Need

The draft Purpose of this project is to **increase mobility and improve safety** in the US 31W / KY 446 Corridor. US 31W (Louisville Road) is a major urban and regional connection in Bowling Green, providing a gateway for southbound motorists entering Bowling Green from I-65 to access the Corvette Plant activities center, Beech Bend Park, and downtown Bowling Green.

The need stems from the following:

- A 1950's rural, high speed interchange design that has transitioned to more urban characteristics
- Multiple traffic signals
- New development has led to access/driveway issues
- Growth has traffic and crashes on the rise

Please Give us Your Input!

- Survey at this Meeting
- Sticker Dot Exercise
- Survey On-Line
<http://Yourturn.transportation.ky.gov/>

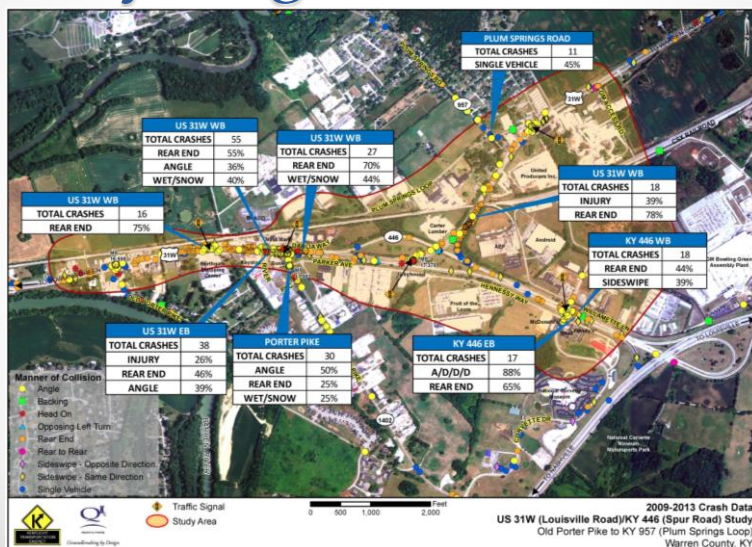
US 31W/KY 446 Study Area Considerations

Public Input

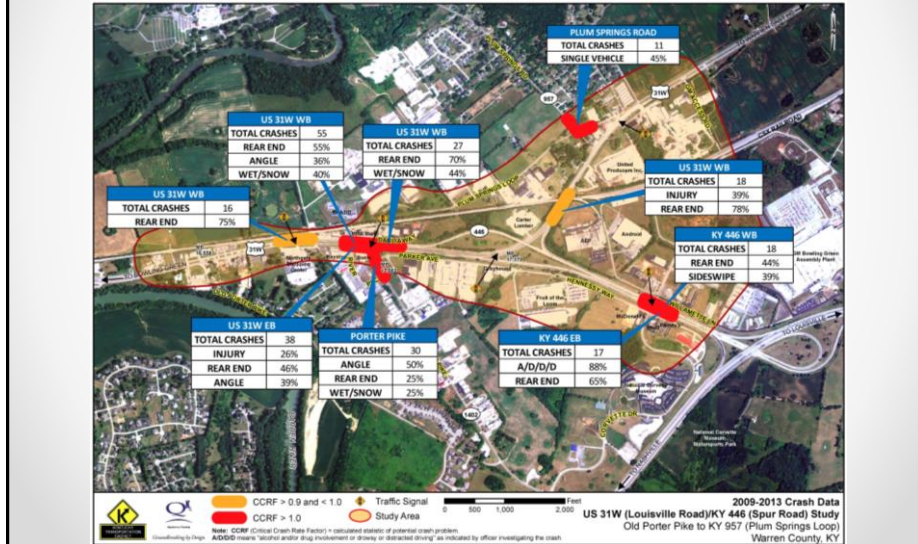
Survey Question Number 4

Please rank your **level of concern** in the study area from 1-5. 1 would be your least concern and 5 your greatest concern (*please circle*).

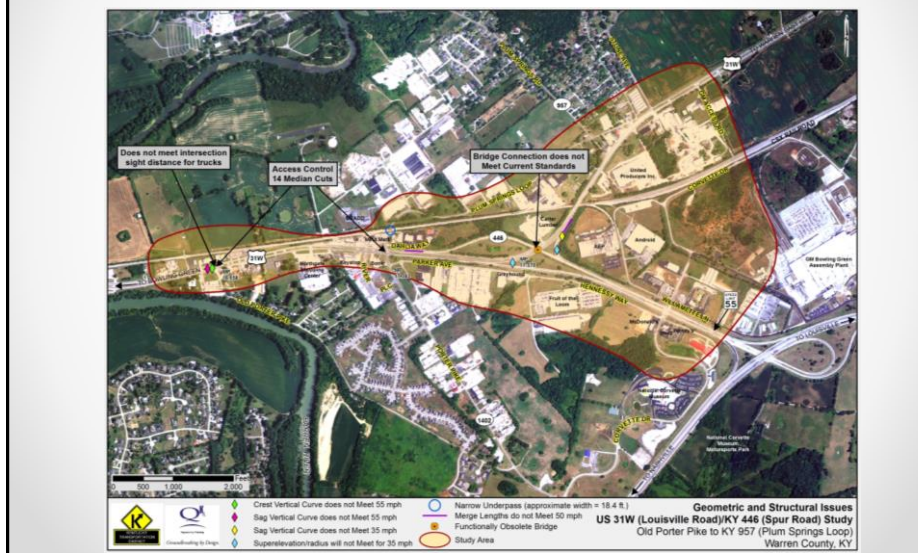
Crashes are Mainly Angle and Rear End



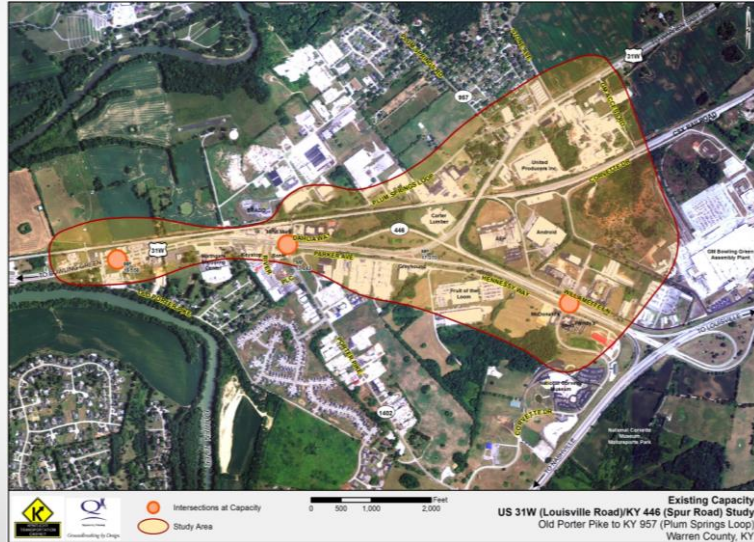
High Crash Locations



Identified Geometric Issues



Intersections at or Exceeding Capacity during the Peak Hour

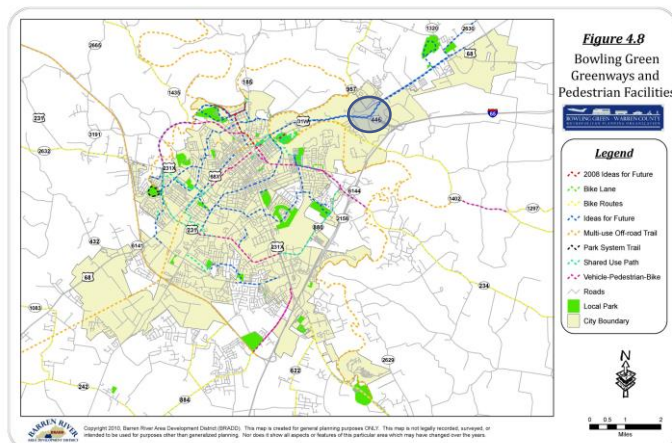


Please Take a
 Moment to
 Watch the
 Traffic Video

Drainage Issue across from Keystop



Pedestrian/Bicycle Facilities



Study Area

Multiple Driveways and Median Openings just South of Porter Pike



Greyhound is the Only Study Area Transit Provider



Survey Questions

Please rank your **level of concern** in the study area from 1-5. 1 would be your least concern and 5 your greatest concern (*please circle*).

	Level of Concern for the Following	Your Rank				
a.	Safety/Number of crashes	1	2	3	4	5
b.	Congestion (long delays)	1	2	3	4	5
c.	Flooding or standing water on the road	1	2	3	4	5
d.	Lack of pedestrian and bike connections (sidewalks)	1	2	3	4	5
e.	Multiple entrances and median crossovers on US 31W	1	2	3	4	5
f.	Access to transit (Go BG)	1	2	3	4	5
g.	Other	1	2	3	4	5

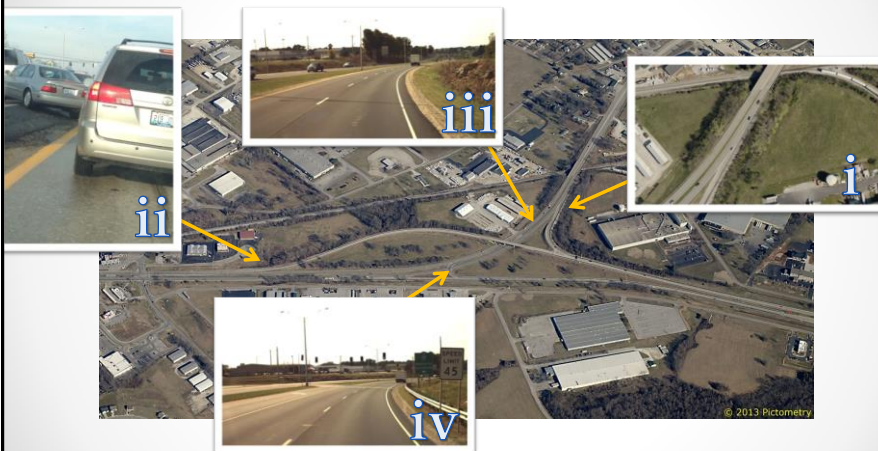
Public Input

Survey Question Number 5

Please rank the **level of difficulty** making these maneuvers. 1 would be your least difficult and 5 would be the most difficult (*please circle*).

US 31W/KY 446 Study Area Locations of Concern

US 31W/KY 446 Interchange



Letters on the map denote the survey reference for each ramp

Morning Backup of KY 446 East toward I-65



KY 446 Backup in the Mornings



Corvette Drive & KY 446



Porter Pike Backup Toward Bowling Green



Plum Springs Loop from Underpass to US 31W



Crest Curve at Old Porter Pike and US 31W



Plum Springs Loop – Narrow Underpass



KY 957 (Plum Springs Loop) & US 31W





Frontage Roads: Williamette Lane, Parker Avenue and Hennessy Way Congestion and Safety

Survey Questions cont.

Please rank your **level of difficulty** making these maneuvers. 1 would be your least difficult and 5 would be the most difficult (*please circle*).

Level of Difficulty for the Following		Your Rank				
a.	KY 446/US 31W interchange					
	i. Ramp from KY 446 to Northbound US 31W (toward Warren East High School)	1	2	3	4	5
	ii. Ramp from KY 446 to Southbound US 31W (toward downtown)	1	2	3	4	5
	iii. Ramp from US 31W Southbound to KY 446 (toward I-65 interchange)	1	2	3	4	5
	iv. Ramp from US 31W Northbound to KY 446 (toward I-65 interchange)	1	2	3	4	5
b.	Corvette Drive & KY 446	1	2	3	4	5
c.	Porter Pike (KY 1402) & US 31W	1	2	3	4	5
d.	Old Porter Pike & US 31W (flashing beacon)	1	2	3	4	5
e.	Narrow underpass at rail crossing on Plum Springs Loop near south intersection of US 31W	1	2	3	4	5
f.	KY 957 (Plum Springs Loop) and US 31W	1	2	3	4	5
g.	Other	1	2	3	4	5

Public Input

Survey Question Number 6

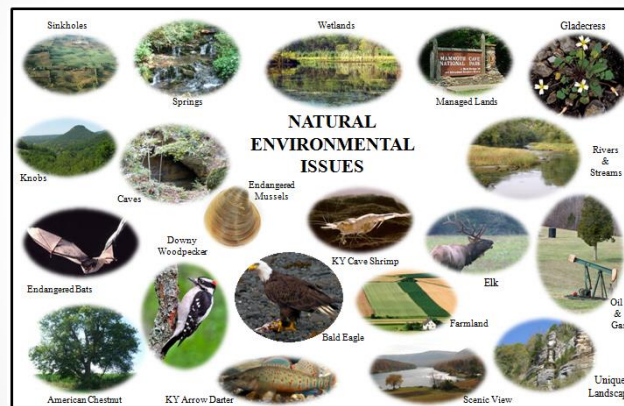
Please rank the **level of environmental concern** in the study area: 1 would be the least concern and 5 would be the greatest concern (*please circle*).

US 31W/KY 446 Study Area Environmental Considerations

Examples of Human Environmental Issues



Examples of Natural Environmental Issues



Study Area Environmental Issues



Survey Questions cont.

Please rank the level of environmental concern in the study area: 1 would be the least concern and 5 would be the greatest concern (*please circle*).

	Level of Environmental Concern	Your Rank				
a.	Sinkholes/Groundwater	1	2	3	4	5
b.	Historic Resources (cemeteries, old homes, etc.)	1	2	3	4	5
c.	Business Impacts	1	2	3	4	5
d.	Hazardous Materials/Underground Storage Tanks	1	2	3	4	5
e.	Residential Impacts	1	2	3	4	5
f.	Noise	1	2	3	4	5
g.	Landscaping	1	2	3	4	5
h.	Other	1	2	3	4	5

Please Give us Your Input!

- Survey at this Meeting
- Survey On-Line
<http://Yourturn.transportation.ky.gov/>
- Sticker Dot Exercise

Dot the map! Let us know the locations of your biggest concerns.

- **Red** – most important to you
- **Yellow** – somewhat important

US 31W/KY 446 PLANNING PROJECT MANAGER CONTACT INFORMATION



Jeff Moore, AICP
Kentucky Transportation
Cabinet, District 3
900 Morgantown Road
Bowling Green, KY 42101
Jeff.Moore@ky.gov
Phone: (270)746-7898



Groundbreaking by Design.

Annette Coffey, PE
QK4, Inc.
2225 Lawrenceburg
Road
Frankfort, KY 40601
acoffey@qk4.com
Phone: (502)352-2197

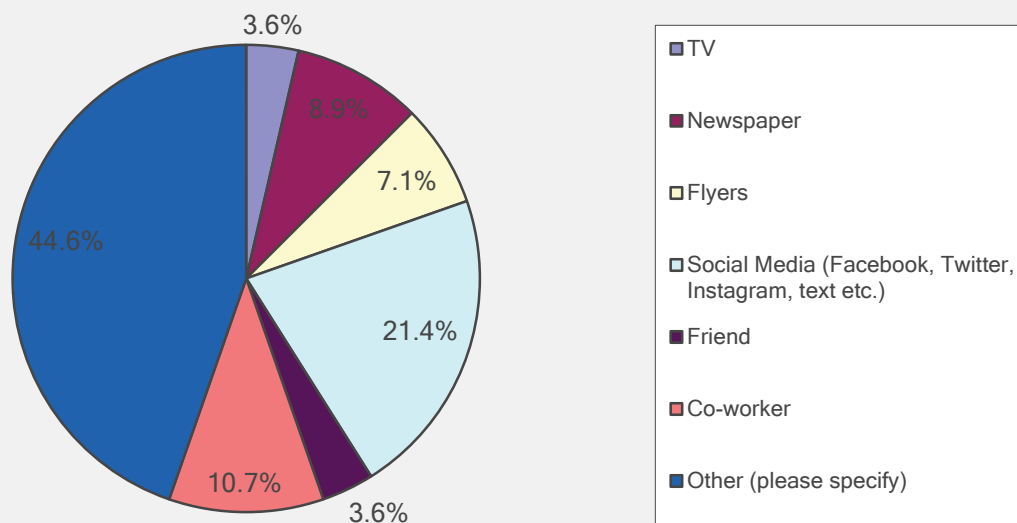
LOCAL OFFICIALS AND PUBLIC MEETINGS 2

US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

Where did you learn about this meeting or survey?

Answer Options	Response Percent	Response Count
TV	3.6%	2
Newspaper	8.9%	5
Flyers	7.1%	4
Social Media (Facebook, Twitter, Instagram, text etc.)	21.4%	12
Friend	3.6%	2
Co-worker	10.7%	6
Other (please specify)	44.6%	25
answered question		56
skipped question		0

Where did you learn about this meeting or survey?



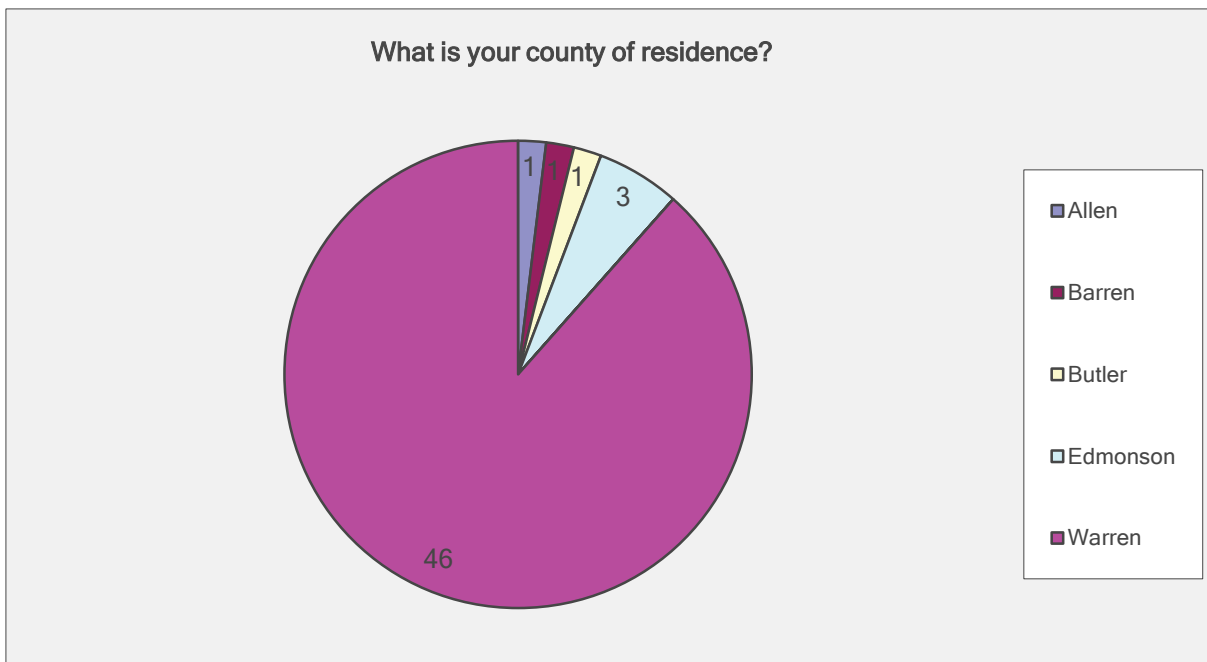
17 of 25 other were from the VMS

husband
 Jeff Moore Operation Pride -2
 Gmail
 Project Team
 Local Magistrate
 Mailing
 Transportation Department

US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

What is your county of residence?

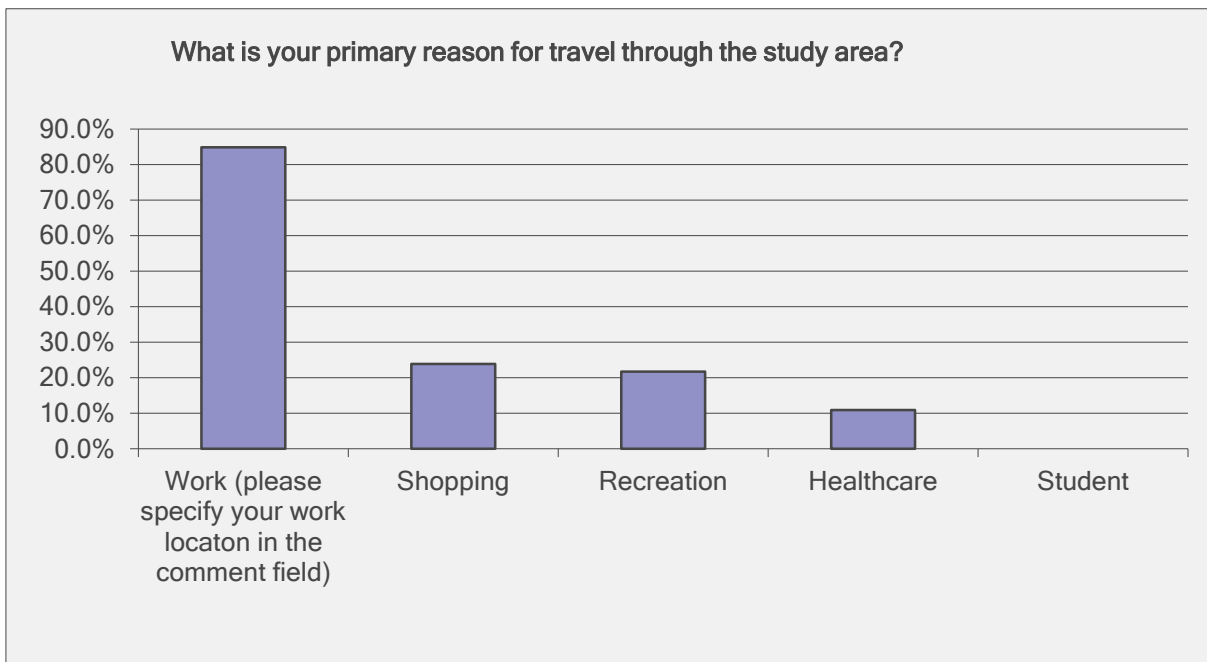
Answer Options	Response Percent	Response Count
Allen	1.9%	1
Barren	1.9%	1
Butler	1.9%	1
Edmonson	5.8%	3
Hart	0.0%	0
Logan	0.0%	0
Metcalfe	0.0%	0
Monroe	0.0%	0
Simpson	0.0%	0
Warren	88.5%	46
Other (please specify)		0
answered question		52
skipped question		4



US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

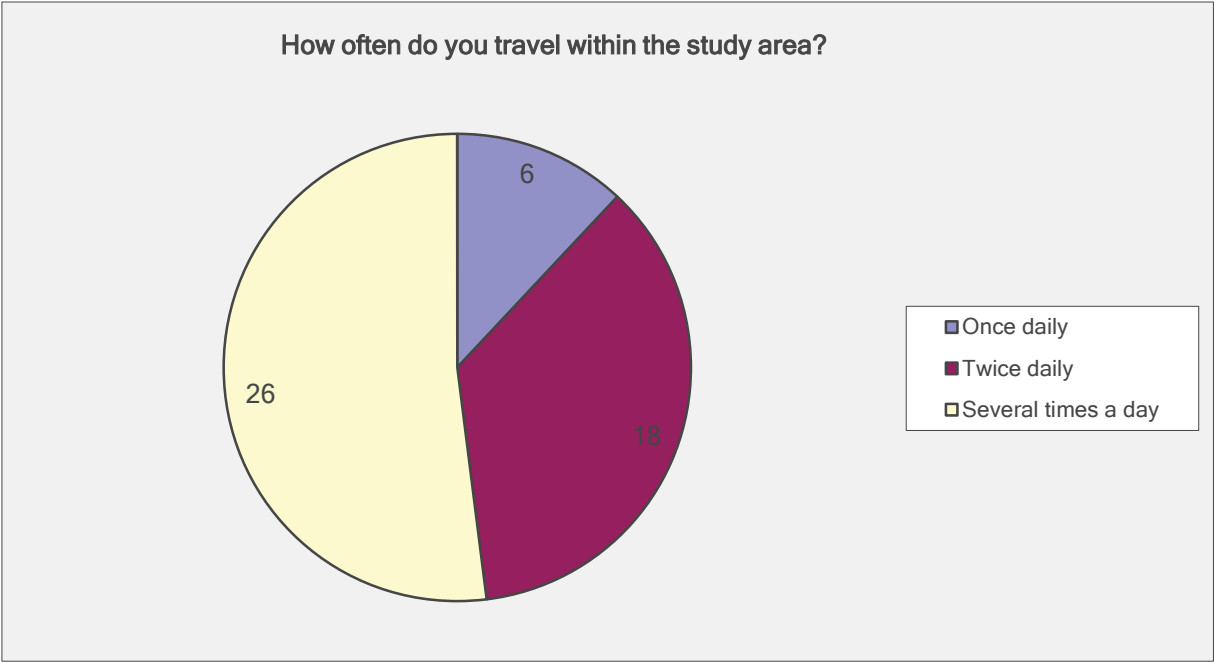
What is your primary reason for travel through the study area?

Answer Options	Response Percent	Response Count
Work (please specify your work locaton in the comment	84.8%	39
Shopping	23.9%	11
Recreation	21.7%	10
Healthcare	10.9%	5
Student	0.0%	0
Other (please specify)		37
<i>answered question</i>		46
<i>skipped question</i>		10



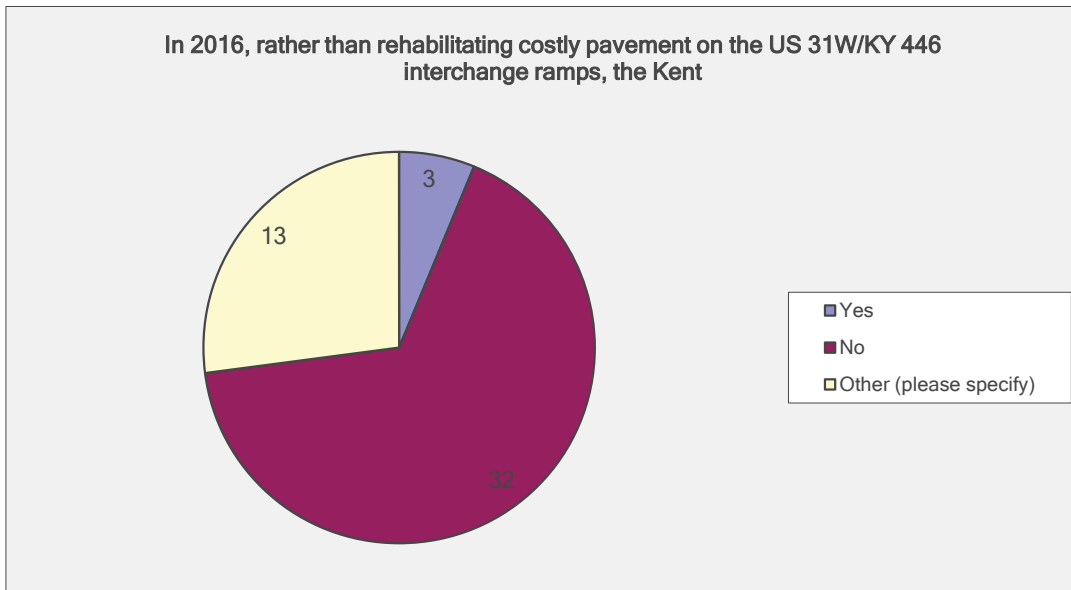
US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

How often do you travel within the study area?		
Answer Options	Response Percent	Response Count
Once daily	12.0%	6
Twice daily	36.0%	18
Several times a day	52.0%	26
<i>answered question</i>		50
<i>skipped question</i>		6



US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

Answer Options	Response Percent	Response Count
Yes	6.3%	3
No	66.7%	32
Other (please specify)	27.1%	13
<i>answered question</i>		48
<i>skipped question</i>		8



1 Congestion Delay 10/5/2015 5:04 PM

2 Traffic Tie Up 10/5/2015 5:02 PM

3 Traffic Tie-Up 10/5/2015 5:01 PM

4 Longer Ramps Wide Roads 10/5/2015 4:53 PM

5 Break up of traffic and wrecks 10/5/2015 4:32 PM

6 More Traffic tie up 10/5/2015 4:30 PM

7 Light optimization at Corvette Drive especially during construction. 10/5/2015 3:06 PM

8 No more traffic. 10/5/2015 3:03 PM

9 Yes. Noisde and excess traffic flow to North. 10/5/2015 2:43 PM

10 Please allow for pedestrian traffic as well, a true "urban" plan would include sidewalks or bike path 9/30/2015 1:59 PM

11 KYDOT just slowed traffic in the area by adding a new light. Now removal of a bridge that encourages non stop movement doesn't sound good.9/30/2015 12:46:00 PM

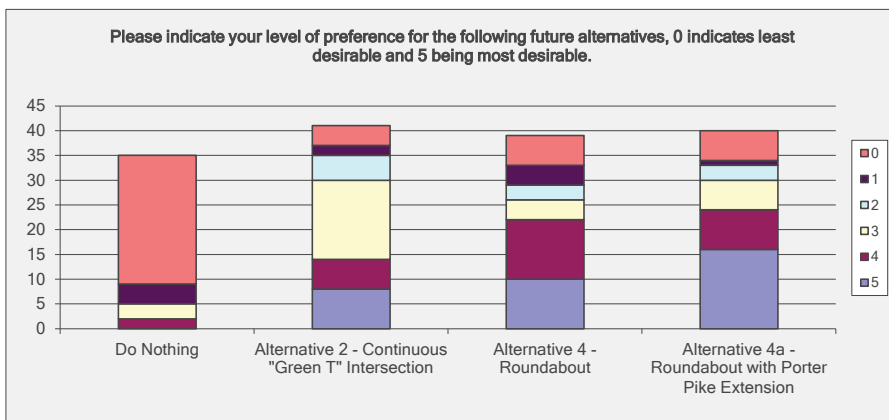
12 Should be a green T intersection to minimize delays 9/30/2015 12:02 PM

13 The backlog of traffic exiting I-65 plus the ones exiting area businesses will be backed up past both of the existing traffic lights and will likely back up onto I-65 at times. Major concern.9/30/2015 10:50:00 AM

US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

Please indicate your level of preference for the following future alternatives, 0 indicates least desirable and 5 being most desirable.

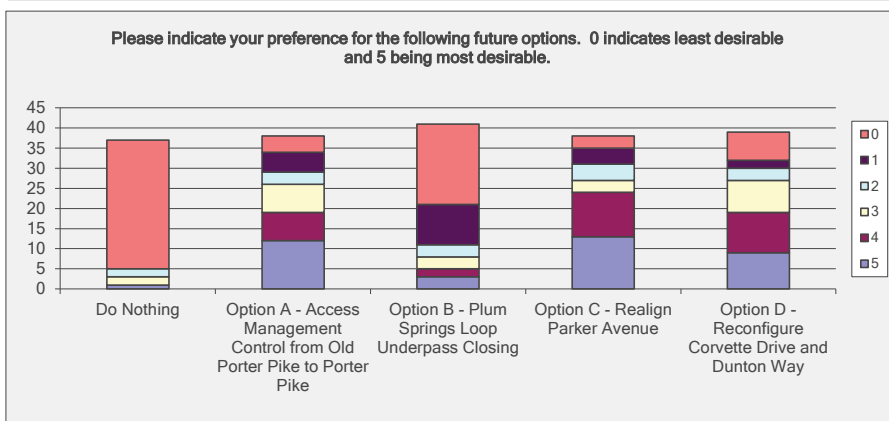
Answer Options	0	1	2	3	4	5	Response Count
Do Nothing	26	4	0	3	2	0	35
Alternative 2 - Continuous "Green T" Intersection	4	2	5	16	6	8	41
Alternative 4 - Roundabout	6	4	3	4	12	10	39
Alternative 4a - Roundabout with Porter Pike Extension	6	1	3	6	8	16	40
<i>answered question</i>							44
<i>skipped question</i>							12



US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

Please indicate your preference for the following future options. 0 indicates least desirable and 5 being most desirable.

Answer Options	0	1	2	3	4	5	Response Count
Do Nothing	32	0	2	2	0	1	37
Option A - Access Management Control from Old Porter	4	5	3	7	7	12	38
Option B - Plum Springs Loop Underpass Closing	20	10	3	3	2	3	41
Option C - Realign Parker Avenue	3	4	4	3	11	13	38
Option D - Reconfigure Corvette Drive and Dunton Way	7	2	3	8	10	9	39
<i>answered question</i>							46
<i>skipped question</i>							10



US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

Additional Comments (please use the space below to add anything else or explain rankings)

Answer Options	Response Count
	16
<i>answered question</i>	16
<i>skipped question</i>	40

- 1 AEP - we transfer inventory on my day from plant thru 446 / 31W (N) interchange concerned about an interruption of business during construction.10/5/2015 5:00:00 PM
- 2 AEP needs to ensure no access issues to our offsite warehouse on Scotty's Way 10/5/2015 4:57 PM
- 3 Widen the road where ramps are together. 10/5/2015 4:55 PM
- 4 There is really only 1 way to get from BG city to the corvette plant which is IGS. This is because of river crossings and exits from Highway - need more exits and river crossings.10/5/2015 4:49:00 PM
- 5 You have had approximately one year to develop this design and you give us a few minutes to comment on it. Deserve further study.10/5/2015 4:46:00 PM
- 6 As a resident / property owner within a mile of this area I'm glad changes are coming out this way. Just please don't add all the feeder roads like Scottsville Road. I feel they create more of an issue than help. I think Alternative 3 is a step in the right direction.10/5/2015 4:35:00 PM
- 7 A full signal at Old Porter Pike would be very helpful. New housing and apartments have made this a very busy intersection. I prefer the "selected alternative" T interchange for the KY446 / U.S. 31W realignment.10/5/2015 4:19:00 PM
- 8 Realignment of Parker may increase accidents if not signaled. Need sidewalk to and from bus station and local businesses - also for the area between old and new Porter Pike.10/5/2015 4:15:00 PM
- 9 I have been doing Wendy's marketing for almost 30 years now. If you take away the front access directly from the Hwy and require drivers to go "the long way round the back" and not be able to see how to enter Wendy's from the highway, this will literally kill this site. There will be a significant drop in sales deeming this site not profitable, and a closure. This would be a severe negative financial impact on the owners.10/5/2015 3:55:00 PM
- 10 1 - Plum Springs Loop closure eliminates redundancy increasing emergency services response times. 2 - Doing a traditional backage road would be more legible with fewer business impacts. 3 - Realignment of KY0957 would be beneficial because the skewed intersection is an issue.10/5/2015 3:47:00 PM
- 11 Need deeper backage roads while the property is not developed would provide better access options. 10/5/2015 3:38 PM
- 12 Consider the traffic impacts of Corvette Drive and GM Plant through traffic at an optimized light and intersection especially considering the acceptance of the Option D to reconfigure Corvette Drive. This area and route could potentially add traffic flow if it moves more effectively than alternative routes. Alternative 4A would be recommended to future intersection with I65 here from hearing other people. Optimize or provide entrance access earlier to Wendy's and C.D. depending on property owned by them there may be a l pt to provide an entrance of road access / turn lane into their properties being cut off. Analyze travel time for stop condition is one way flows along. CD new option into Wendy's and Shell. Also existing left turns out and off shell and Wendy's with traffic are bad especially if traffic is stopped at the light.10/5/2015 3:21:00 PM
- 13 On Option B I like the part Plum Springs it extend to 31 W. 10/5/2015 2:58 PM
- 14 Pleas change the signal at Plum Springs Loop and 31W at the liquor store to a left-hand protect. Cars do not break in traffic to allow easy, quick turns safely.10/5/2015 2:40:00 PM
- 15 any changes should include features for pedestrian and bike safety 9/30/2015 2:01 PM
- 16 While a roundabout may help the traffic flow too many people don't know how to properly use them and I think it will increase likelihood of accidents.9/30/2015 9:40:00 AM

US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

Please join our mailing list by providing the additional general information below.

Answer Options	Response Percent	Response Count
Name	100.0%	36
Home Address (optional)	77.8%	28
Email Address (optional)	61.1%	22
Phone # (optional)	55.6%	20
<i>answered question</i>		36
<i>skipped question</i>		20



Q8 Additional Comments (please use the space below to add anything else or explain rankings)

Answered: 16 Skipped: 40

#	Responses	Date
1	AEP - we transfer inventory on my day from plant thru 446 / 31W (N) interchange concerned about an interruption of business during construction.	10/5/2015 5:00 PM
2	AEP needs to ensure no access issues to our offsite warehouse on Scotty's Way	10/5/2015 4:57 PM
3	Widen the road where ramps are together.	10/5/2015 4:55 PM
4	There is really only 1 way to get from BG city to the corvette plant which is IGS. This is because of river crossings and exits from Highway - need more exits and river crossings.	10/5/2015 4:49 PM
5	You have had approximately one year to develop this design and you give us a few minutes to comment on it. Deserve further study.	10/5/2015 4:46 PM
6	As a resident / property owner within a mile of this area I'm glad changes are coming out this way. Just please don't add all the feeder roads like Scottsville Road. I feel they create more of an issue than help. I think Alternative 3 is a step in the right direction.	10/5/2015 4:35 PM
7	A full signal at Old Porter Pike would be very helpful. New housing and apartments have made this a very busy intersection. I prefer the "selected alternative" T interchange for the KY446 / U.S. 31W realignment.	10/5/2015 4:19 PM
8	Realignment of Parker may increase accidents if not signaled. Need sidewalk to and from bus station and local businesses - also for the area between old and new Porter Pike.	10/5/2015 4:15 PM
9	I have been doing Wendy's marketing for almost 30 years now. If you take away the front access directly from the Hwy and require drivers to go "the long way round the back" and not be able to see how to enter Wendy's from the highway, this will literally kill this site. There will be a significant drop in sales deeming this site not profitable, and a closure. This would be a severe negative financial impact on the owners.	10/5/2015 3:55 PM
10	1 - Plum Springs Loop closure eliminates redundancy increasing emergency services response times. 2 - Doing a traditional backage road would be more legible with fewer business impacts. 3 - Realignment of KY0957 would be beneficial because the skewed intersection is an issue.	10/5/2015 3:47 PM
11	Need deeper backage roads while the property is not developed would provide better access options.	10/5/2015 3:38 PM
12	Consider the traffic impacts of Corvette Drive and GM Plant through traffic at an optimized light and intersection especially considering the acceptance of the Option D to reconfigure Corvette Drive. This area and route could potentially add traffic flow if it moves more effectively than alternative routes. Alternative 4A would be recommended to future intersection with I65 here from hearing other people. Optimize or provide entrance access earlier to Wendy's and C.D. depending on property owned by them there may be a l pt to provide an entrance of road access / turn lane into their properties being cut off. Analyze travel time for stop condition is one way flows along. CD new option into Wendy's and Shell. Also existing left turns out and off shell and Wendy's with traffic are bad especially if traffic is stopped at the light.	10/5/2015 3:21 PM
13	On Option B I like the part Plum Springs it extend to 31 W.	10/5/2015 2:58 PM
14	Pleas change the signal at Plum Springs Loop and 31W at the liquor store to a left-hand protect. Cars do not break in traffic to allow easy, quick turns safely.	10/5/2015 2:40 PM
15	any changes should include features for pedestrian and bike safety	9/30/2015 2:01 PM
16	While a roundabout may help the traffic flow too many people don't know how to properly use them and I think it will increase likelihood of accidents.	9/30/2015 9:40 AM

US 31W (Louisville Road) / KY446 (Spur Road) Study Old Porter Pike to Plum Springs Loop Warren County

Sunday, August 30, 2015

Powered by  SurveyMonkey

61

Total Responses

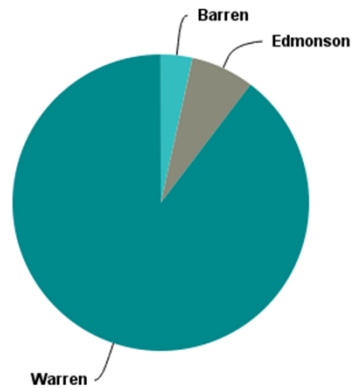
Date Created: Tuesday, February 24, 2015

Complete Responses: 61

Powered by  SurveyMonkey

Q1: What is your county of residence?

Answered: 58 Skipped: 3



Powered by SurveyMonkey

Q1: What is your county of residence?

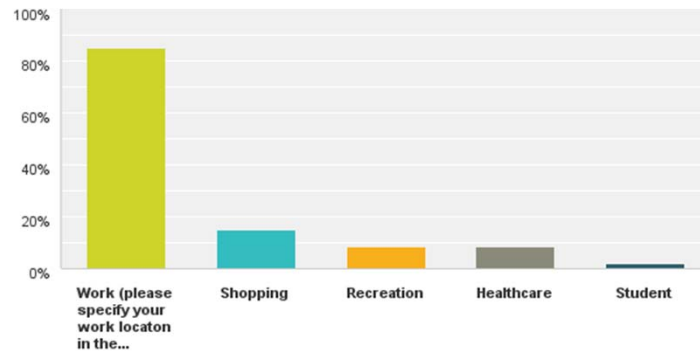
Answered: 58 Skipped: 3

Answer Choices	Responses	
Allen	0.00%	0
Barren	3.45%	2
Butler	0.00%	0
Edmonson	6.90%	4
Hart	0.00%	0
Logan	0.00%	0
Metcalfe	0.00%	0
Monroe	0.00%	0
Simpson	0.00%	0
Warren	89.66%	52
Total		58

Powered by SurveyMonkey

Q2: What is your primary reason for travel through the study area?

Answered: 47 Skipped: 14



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Q2: What is your primary reason for travel through the study area?

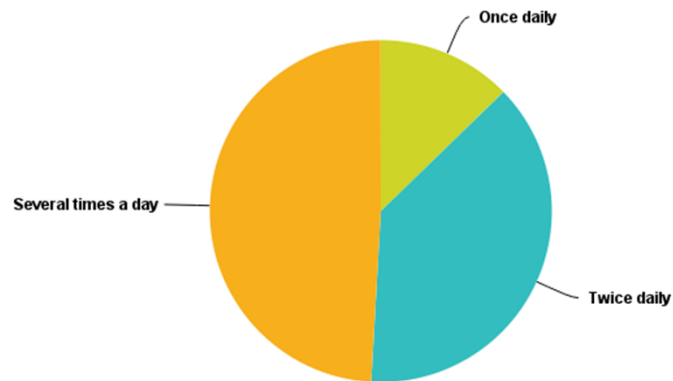
Answered: 47 Skipped: 14

Answer Choices	Responses	
Work (please specify your work location in the comment field)	85.11%	40
Shopping	14.89%	7
Recreation	8.51%	4
Healthcare	8.51%	4
Student	2.13%	1
Total Respondents: 47		

Powered by SurveyMonkey

Q3: How often do you travel within the study area?

Answered: 55 Skipped: 6



Powered by  SurveyMonkey

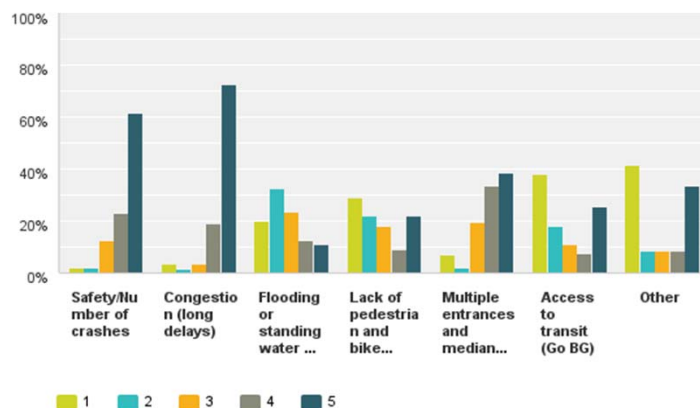
Q3: How often do you travel within the study area?

Answered: 55 Skipped: 6

Powered by  SurveyMonkey

following issues in the study area, with 1 being of least concern and 5 being of greatest concern.

Answered: 59 Skipped: 2



Powered by SurveyMonkey

following issues in the study area, with 1 being of least concern and 5 being of greatest concern.

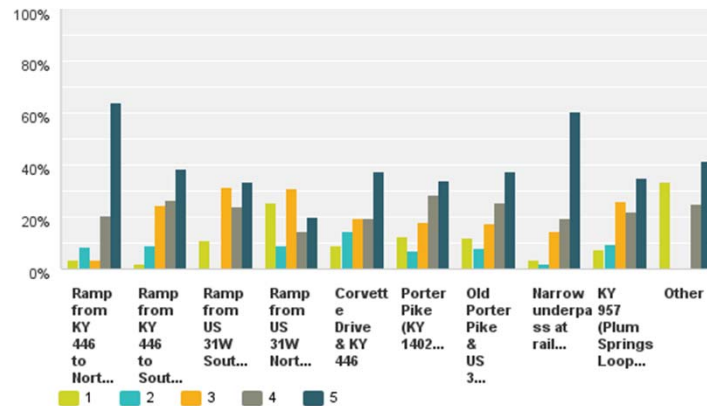
Answered: 59 Skipped: 2

	1	2	3	4	5	Total	Weighted Average
Safety/Number of crashes	1.75% 1	1.75% 1	12.28% 7	22.81% 13	61.40% 35	57	4.40
Congestion (long delays)	3.45% 2	1.72% 1	3.45% 2	18.97% 11	72.41% 42	58	4.55
Flooding or standing water on the road	20.00% 11	32.73% 18	23.64% 13	12.73% 7	10.91% 6	55	2.62
Lack of pedestrian and bike connections (sidewalks)	29.09% 16	21.82% 12	18.18% 10	9.09% 5	21.82% 12	55	2.73
Multiple entrances and median crossovers on US 31W	7.02% 4	1.75% 1	19.30% 11	33.33% 19	38.60% 22	57	3.95
Access to transit (Go BG)	38.18% 21	18.18% 10	10.91% 6	7.27% 4	25.45% 14	55	2.64
Other	41.67% 5	8.33% 1	8.33% 1	8.33% 1	33.33% 4	12	2.83

Powered by SurveyMonkey

Q5: Please rank your level of difficulty making these maneuvers. 1 would be your least difficult and 5 would be the most difficult.

Answered: 60 Skipped: 1



Powered by SurveyMonkey

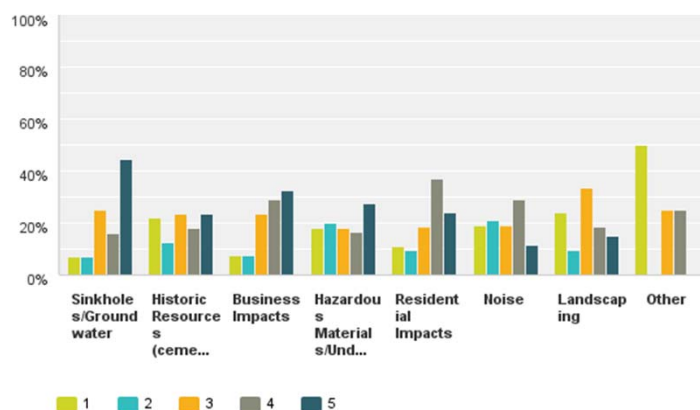
Q5: Please rank your level of difficulty making these maneuvers. 1 would be your least difficult and 5 would be the most difficult.

Answered: 60 Skipped: 1

Powered by SurveyMonkey

area: 1 would be the least concern and 5 would be the greatest concern.

Answered: 58 Skipped: 3



Powered by SurveyMonkey

area: 1 would be the least concern and 5 would be the greatest concern.

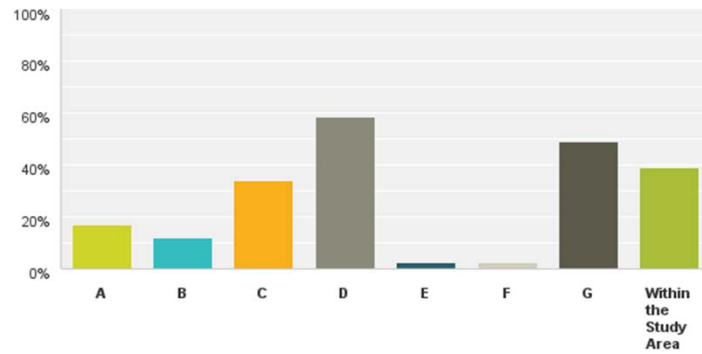
Answered: 58 Skipped: 3

	1	2	3	4	5	Total	Weighted Average
Sinkholes/Groundwater	7.14% 4	7.14% 4	25.00% 14	16.07% 9	44.64% 25	56	3.84
Historic Resources (cemeteries, old homes, etc.)	21.82% 12	12.73% 7	23.64% 13	18.18% 10	23.64% 13	55	3.09
Business Impacts	7.27% 4	7.27% 4	23.64% 13	29.09% 16	32.73% 18	55	3.73
Hazardous Materials/Underground Storage Tanks	18.18% 10	20.00% 11	18.18% 10	16.36% 9	27.27% 15	55	3.15
Residential Impacts	11.11% 6	9.26% 5	18.52% 10	37.04% 20	24.07% 13	54	3.54
Noise	19.23% 10	21.15% 11	19.23% 10	28.85% 15	11.54% 6	52	2.92
Landscaping	24.07% 13	9.26% 5	33.33% 18	18.52% 10	14.81% 8	54	2.91
Other	50.00% 2	0.00% 0	25.00% 1	25.00% 1	0.00% 0	4	2.25

Powered by S

Q8: Using the map above please select your usual route through the study area.

Answered: 41 Skipped: 20



Powered by SurveyMonkey

Q8: Using the map above please select your usual route through the study area.

Answered: 41 Skipped: 20

Answer Choices	Responses	
A	17.07%	7
B	12.20%	5
C	34.15%	14
D	58.54%	24
E	2.44%	1
F	2.44%	1
G	48.78%	20
Within the Study Area	39.02%	16
Total Respondents: 41		

Powered by SurveyMonkey

US 31W/KY 446 Study – Warren County
Summary of Written Responses or E-mails:

Comments coordinated through Intergovernmental Agency Review:

- Division of Water: There are no Outstanding State Resource Waters, Wild Rivers or known Exceptional Waters within the project area. However, the site is underlain by karst and therefore located in a groundwater region that is highly sensitive to groundwater contamination from surface activities. There are sinkholes located within the footprint of the proposed construction/highway realignment and there are groundwater wells and springs within a one mile radius of site activities. There are activities associated with the project's construction and road realignment that will require a Groundwater Protection Plan so it is recommended that these specific activities be identified. A stream construction permit will not be required.
- Division of Waste Management: All solid waste generated by this project must be disposed at a permitted facility. If underground storage tanks are encountered, they must be properly addressed. If asbestos, lead paint, and/or other contaminants are encountered during this project, they must be properly addressed.
- Division of Air Quality: Comply with KARs regarding fugitive emissions and open burning.
- Kentucky Heritage Council: Pro-forma response: No major issues based on preliminary review. (Though in a separate pro-forma response, they say "We are indeed concerned that the proposed undertaking will have impacts to historic resources, though the specific properties and the full scope and scale of those effects have not yet been determined.")

Independent Letters or e-mails:

- FAA: No anticipated impact on BG Airport
- Kentucky Airport Zoning Commission: All structures below the height of surrounding trees (overhead signs, traffic signals, non-high mast lighting) are exempt from KAZC permitting. Structures that do exceed the height of surrounding trees (high-mast lighting, construction cranes) must secure a KAZC permit.
- U.S. Fish and Wildlife Service: Provided a list of potential threatened or endangered species.
- Kentucky Department of Fish and Wildlife: Also listed T & E species, as well as pointing out issues with Karst topography.
- U. S. Coast Guard: No permit required.
- U.S Department of Agriculture-Natural Resources Conservation Service: Included a map of four areas within project study area that may still be considered farmland.
- No Comments: Kentuckians for Better Transportation; Kentucky Education Cabinet; Albert Mirus (formerly with Kentucky Household Goods Carrier Association);



2501 Crossings Boulevard Suite 300

Bowling Green, KY 42104

Jeff,

I want to personally thank you for taking time out of your busy schedule to review with me the proposed improvements to the US 31W(Louisville Rd.)/KY 446 (Spur Rd.) corridor. As a representative of Wendy's of Bowling Green I feel I need to share with you our position on the option to reconfigure Corvette Drive and Duntov Way.

As our Wendy's is located on Duntov Way , and under the proposal traffic would be directed away from our restaurant, we strongly oppose any efforts to reconfigure Corvette Drive. We feel it would adversely affect our business by not allowing our customers direct access to our restaurant. If traffic exiting from I-65 cannot see how to access Wendy's from the front entryway, it very well could reduce our sales to an unprofitable level and cause us to close this location. If local traffic is required to make a 360 degree trip requiring them to travel past the National Corvette Museum, our customer counts would drastically decrease. This would be a loss of business income, as well as a significant devaluation in the property value given its based on retail sales potential. Furthermore the economic benefits our restaurant provides to the tax base for both sales and property tax in Warren County would be severely affected by a reduction in business.

In closing Jeff please know we appreciate the efforts of the KTC and all you do to make our City and County roads more efficient and safer.

Best regards,

A handwritten signature in blue ink, appearing to read "Eric Sack". The signature is stylized with a large, looping "E" and a long, sweeping "S".

Eric Sack

VP Development

CC: John Hughes

CC: Mike O'Malley

From: [Rice, Nita](#)
To: [Coffey, Annette](#)
Cc: jeff.moore@ky.gov
Subject: Louisville Rd.
Date: Tuesday, October 06, 2015 3:03:36 PM

Thank you both for your time and concern relating to the upcoming improvements on Louisville Road. I had an idea that I think might help with some of the accidents and congestion accessing the businesses on the access road opposite the minute mart at Plum Springs loop (Chuck's, bank, restaurants). It looks as though part of the existing southbound ramp from KY 446 and existing right or way could be used to connect this access road with the entrance to Kight Lumber and that would eliminate the excess traffic coming onto plum springs loop from those businesses and provide both a way in and out of this road. I hope this makes sense.

Thanks again for all your hard work and for taking the time to have the informational meetings.

Sincerely

Nita Rice

From: [Moore, Jeff \(KYTC-D03\)](#)
To: [Coffey, Annette](#)
Cc: [McKenzie, Shane \(KYTC\)](#)
Subject: FW: 31-W and Spur Road
Date: Monday, October 12, 2015 11:58:59 AM

Please add these emails to the Public Involvement Notebook.

Thanks,

Jeff Moore, AICP

Division of Planning

Kentucky Transportation Cabinet, District 3

From: Meredith, Greg (KYTC-D03)
Sent: Monday, October 12, 2015 10:44 AM
To: Wendell Strode
Cc: Moore, Jeff (KYTC-D03); acoffey@qk4.com
Subject: RE: 31-W and Spur Road
Wendell,

Sorry for the delayed response but I took off last week for Fall Break. I hope your family enjoyed the nice weather, also!

Thanks again to you and your talented staff for providing the venue and the technical and logistic support for our second public meeting for this project! We are proud of the work that Qk4 and our staff accomplished in preparation for this meeting. The carefully crafted displays of the possible interchange alternatives and other improvement options show the public how seriously we take this endeavor to provide an efficient transportation connection of KY 446 and US 31W.

I understand your concerns about traffic moving toward Bowling Green from KY 446. You are correct on your understanding of both movements. The traffic travelling northbound from KY 446 to US 31W would have to merge into the existing traffic or wait until there was a green light at the signal to make this right turn. The benefit of this movement is that there will be more room to merge into the existing Northbound US 31W traffic than there currently exists with the ramp to US 31W Northbound. In the four-way signalized intersection, the traffic movement from KY 446 to US 31W Southbound would turn left from the signal using dual left turning lanes which will provide storage and mobility for this major traffic movement toward the city of Bowling Green.

You are correct that if this signal at the new 4-way intersection doesn't address this traffic flow and account for it in the signal progression and operational programming, it could be an issue. It is our opinion that we can manage this conflict and adjust the signal timing to what is appropriately required for the mobility of each of the four legs of the intersection. Our goal is to minimize impacts throughout the US31W and KY 446 corridors by properly anticipating traffic through the operational programs that we use for individual signals.

Please be assured that we will strive to make this situation the best to address the safety and congestion issues within this area.

As this process moves forward, please let us know if you have additional comments or questions. We will do our best to address them.

Thanks,

Greg Meredith, PE
Chief District Engineer

District 3 - Bowling Green
Office (270) 746-7898
Fax (270) 746-7643

IMPORTANT: This transmission is sent on behalf of Kentucky Transportation Cabinet and may be privileged, proprietary or confidential. It is only for the intended recipient. If you are not the intended recipient or a person responsible for delivering this transmission to the intended recipient, you shall not disclose, copy or distribute this transmission or take any action in reliance on it. If you have received this transmission in error, please notify us immediately by telephone at (270) 746-7898, or by reply e-mail, or by facsimile transmission at (270) 746-7643. Please dispose of and delete this transmission. Thank you

From: Wendell Strode [<mailto:Strode@corvettemuseum.org>]

Sent: Wednesday, September 30, 2015 10:20 AM

To: Meredith, Greg (KYTC-D03); Moore, Jeff (KYTC-D03); acoffey@gk4.com

Subject: 31-W and Spur Road

Good Morning everyone. I hope things went well. I had to leave early for a conference call on the Motorsports Park noise issues (we may be close to an agreement).

I do not have a great ability to look at diagrams and have a good grasp on exactly what is being planned. So some of my thoughts come more from what was said during the presentation than the diagrams (although I am looking at it right now).

My concern is the planned immediate action. If I understand correctly, traffic exiting I-65 and also traffic leaving area businesses that are just off Spur Road (HWY 446) would travel to 31-W and would come to a traffic light. It looks like traffic going north would have a short merge/acceleration lane. It looks like traffic going south would approach the light and wait until the light turned green to make their left turn.

If this is correct, then in my opinion this will create a significant backlog at times that will extend past both traffic lights (new Fruit one and Corvette Drive one) and may at times extend onto I-65 (especially I-65 south traffic).

That new traffic light must also accommodate south bound 31-W traffic turning onto Spur Road --- north bound 31-W traffic turning into old Carter Lumber. This could add to even more delays.

Even without Beech Bend high volume traffic I have seen the south bound traffic backed up to about where the Fruit traffic light is. Factoring in large Beech Bend events and it could easily extend farther, including onto I-65.

If my assumptions are correct, then this would be a greater challenge than what is currently faced. Most of the time Spur Road south bound traffic onto 31-W is a slow continuous movement when it is backed up. Most of the time, drivers on 31-W are considerate to those exiting onto 31-W from Spur Road.

What am I missing?

BTW, we do love replacing the concrete with new asphalt.

Wendell Strobe

Executive Director

www.corvettemuseum.org

www.motorsportspark.org

270-467-8814

Stay up to date by signing up for NCM eNews - [CLICK HERE!](#)

LOCAL OFFICIALS AND PUBLIC MEETINGS 2 DOTTED BOARDS

DRAFT

ALTERNATIVE 4a - ROUNDABOUT WITH EXTENSION TO PORTER PIKE

A - ACCESS MANAGEMENT CONTROL FROM OLD PORTER PIKE TO PORTER PIKE

TO BOWLING GREEN

THE INFORMATION LAYOUT HAS BEEN DEVELOPED FOR THE PURPOSE OF PRESENTING THE BEST ALTERNATIVE FOR THE PROJECT. THE INFORMATION IS BASED ON THE BEST AVAILABLE INFORMATION AND IS NOT A GUARANTEE OF ANY KIND OR A REPRESENTATION OF FACT.

COST \$21,300,000

PINK - NOT PREFERRED

ORANGE - SOMEWHAT PREFERRED

GREEN - PREFERRED

B - PLUM SPRINGS LOOP UNDERPASS CLOSING

Plum Springs Loop

Commerce St

ESTIMATED RW 0.41 AC

C - REALIGN PARKER AVENUE

Parker Ave

ESTIMATED RW 7.11 AC

Corvette Drive

Hennessey Way

ESTIMATED RW 25.11 AC

PORTER PIKE CONNECTION

Porter Pike

Parker Ave

Hennessey Way

CONNECT TO HENNESSY ROAD

CSX Railroad

CSX Railroad

31W

31W

446

65

Q

K

DRAFT

ALTERNATIVE 2 – CONTINUOUS GREEN TEE INTERSECTION



ALTERNATIVE 4 – ROUNDABOUT

A = ACCESS MANAGEMENT CONTROL
FROM OLD PORTER FMS TO PORTER FMS

8 - PLUMB SPRINGS LOCK
UNDERPASS CLOSED

Commerce St.

ESTIMATED RPP 0.43 AC

TO: SCHWAB AND GREEN

— 884 —

Parker Ave.

12-21-2004 11:00 AM 0.20 AC

© 2004 Blackwell Publishing Ltd *Journal of Internal Medicine* 255: 105–112

Old Porten Place

Corvette Drive



Dunbar, May

ULTIMATE: 800-826-8000

Hannuway Way

Porter Pike



1997年10月1日 星期一

Parkway Ave.

— 258 —

Significance: 0.000

CUA DE BANC

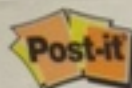
TOTAL COST	\$13,800,000
------------	--------------

PINK - NOT PREFERRED

ORANGE - SOMEWHAT PREFERRED

GREEN - PREFERRED





Easel Pad
Tableau à feuilles mobiles
Block de Hojas Repositables

Super Sticky
Super Adherent
Super Adhesivos



12 1/2" x 18 1/2" x 1/8" (31.75" x 46.875" x 3.175" mm)
3.25" x 5.5" x 1/8" (8.25" x 13.875" x 3.175" mm)
Cant. 1 Block de 30 Hojas

Need left turn arrow @
Plum Springs N. now when
flashing yellow light. Traffic
SR3 into cattle place/livestock
place block view too. (x7000)

MASOR EVENT Traffic Signalized Intersect

- * Re-time "Fruit-of-the-loam" light so it only stops traffic on 31W when someone is leaving the Fruit. Turn light to flashing on wkend. when no employees are working.

LOCAL OFFICIALS MEETINGS AND PUBLIC MEETING 1 PRESENTATION

US 31W/ KY 446 STUDY

OLD PORTER PIKE TO
PLUM SPRINGS LOOP (KY 957)
BOWLING GREEN
WARREN COUNTY

Public Meeting
September 29, 2015



Engineering Planning

Groundbreaking by Design.



Study Area

Purpose and Need



Scope of Work

The Major Focus

US 31W/KY 446 Interchange

- New interchange configuration
- At grade intersection
- Roundabout

Additional Tasks

- Improvements to Existing Interchange
- Spot Improvements
- Access Management in Project Corridor

What We Heard

- Safety and Congestion are of the greatest concern
- Greatest Areas of Concern
 - KY 446 to US 31W NB (most dots at first public meeting)
 - KY 446 to SB US 31W
 - Narrow Underpass
 - Porter Pike / US 31W intersection
- List of Threatened & Endangered species
- Karst topography
- Four areas that may still be considered farmland;
- “Concerned that the proposed undertaking will have impacts to historic resources...”;
- Sinkholes, groundwater wells, and springs within a one mile radius;
- Define the height of existing trees as project progresses

Additional Stated Needs/Concerns

- **US 31W/KY 446 interchange**
 - o The interchange needs lighting (street lights)
 - o KY 446 to I-65 signage not clear
- **Plum Springs Loop**
 - o Right turn lane on US 31W to Plum Springs Loop
- **Corvette Drive/KY 446**
 - o Right turn signalization @ Corvette
 - o New Hennessy Way connector should connect to Corvette Drive
 - o Semi's parking and turning around on north Corvette Drive
 - o Crosswalk on KY 446 at Corvette Drive
 - o Fruit of the Loom traffic bad at Porter Pike and Corvette Drive
- **Porter Pike/US 31W**
 - o No left turn signal phasing @ Porter Pike (north)
- **Old Porter Pike/US 31W**
 - o Need full signal at Old Porter Pike
- **KY 957/US 31W N**
 - o Confusion north on US 31W at KY 957 people turning into KY 957 and Stone Lane from same turn lane.
 - o Dedicated left turn phase at Plum Springs going North on US 31W, currently flashing yellow
- **Other**
 - o Willamette Dr. sharp curve doesn't allow car and truck to pass each
 - o Heavy truck traffic at Android
 - o Any surplus property could be used for park and ride facilities or public transit

Developed potential
solutions with your input
...

Do Nothing

- Do not make any improvements and maintain what is there.

Build Options

1) Options

- A. Access Control from Porter Pike to Old Porter Pike;
 - i. Sight distance issue at Old Porter Pike
- B. Plums Springs Underpass closure & realignment of KY 957
- C. Realignment of Parker Avenue
- D. Reconfigure Corvette Drive/Duntov Way

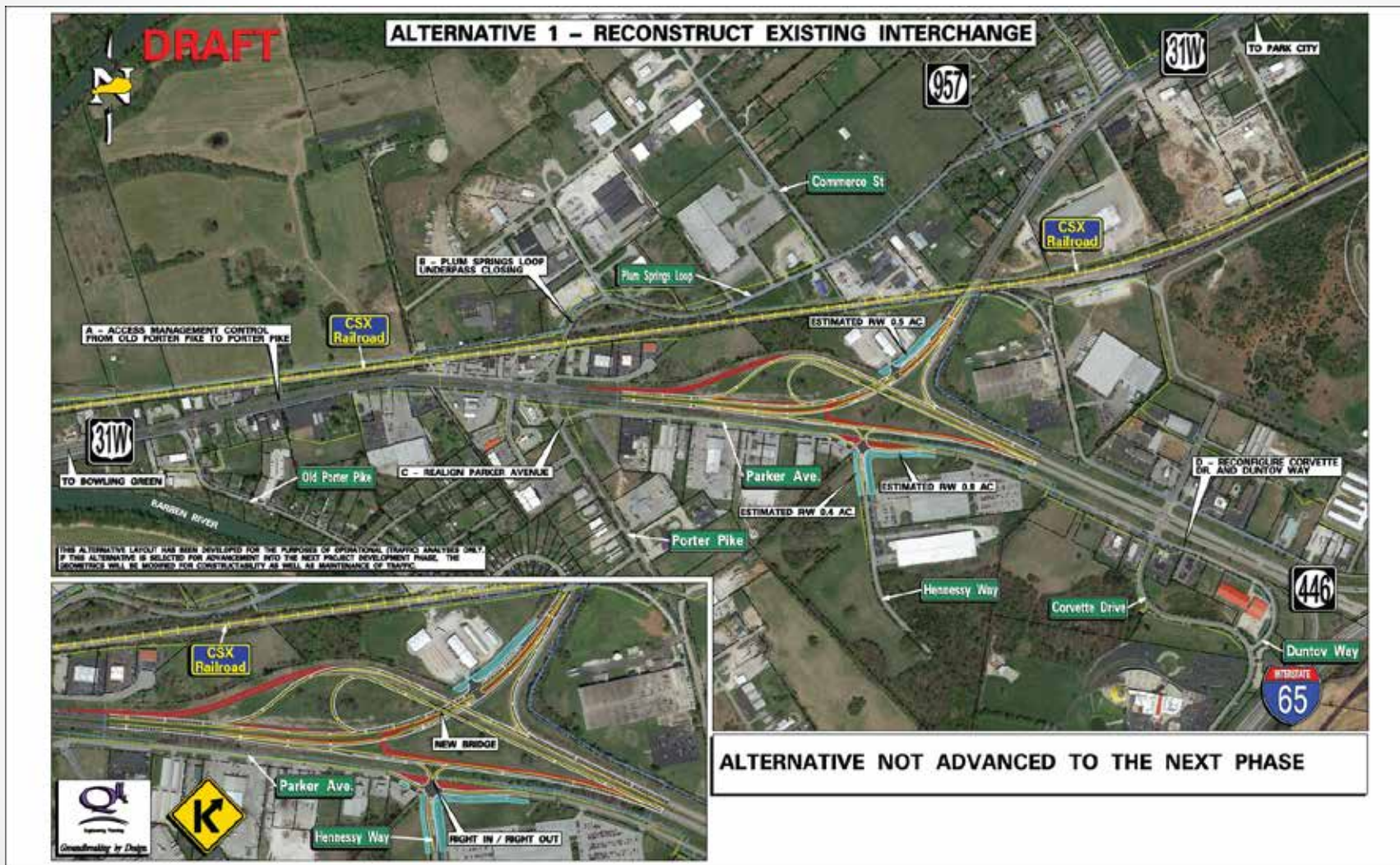
Options



Interchange Alternatives

1. Interchange Reconstruction
2. At Grade “Green T” intersection
3. At Grade “4-Way” intersection
4. Roundabout
- 4a. Roundabout with KY 1402 Porter Pike Extension

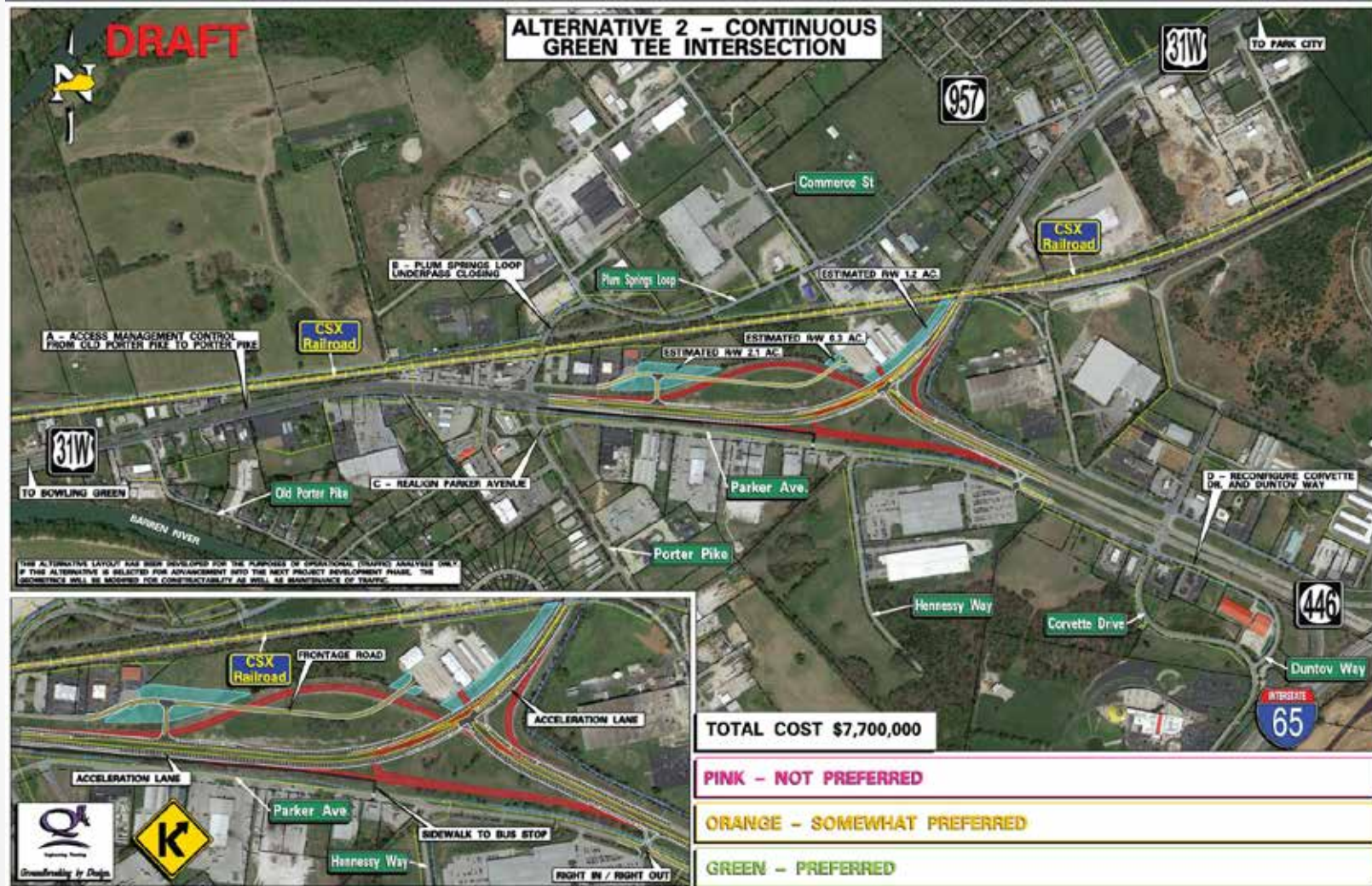
Alternative 1



Alternative 1 Description

- Removes US 31W southbound to KY 446 eastbound short ramp and provides 25 mph loop
- Provides over 600 feet of additional merge length for the movement from KY 446 WB to SB US 31W toward Bowling Green at the Porter Pike / US 31 W intersection.
- Eliminates the merge from KY446 WB to US 31W NB
- Eliminates signal at US 31W SB Ramp to KY 446 EB (or I-65)

Alternative 2



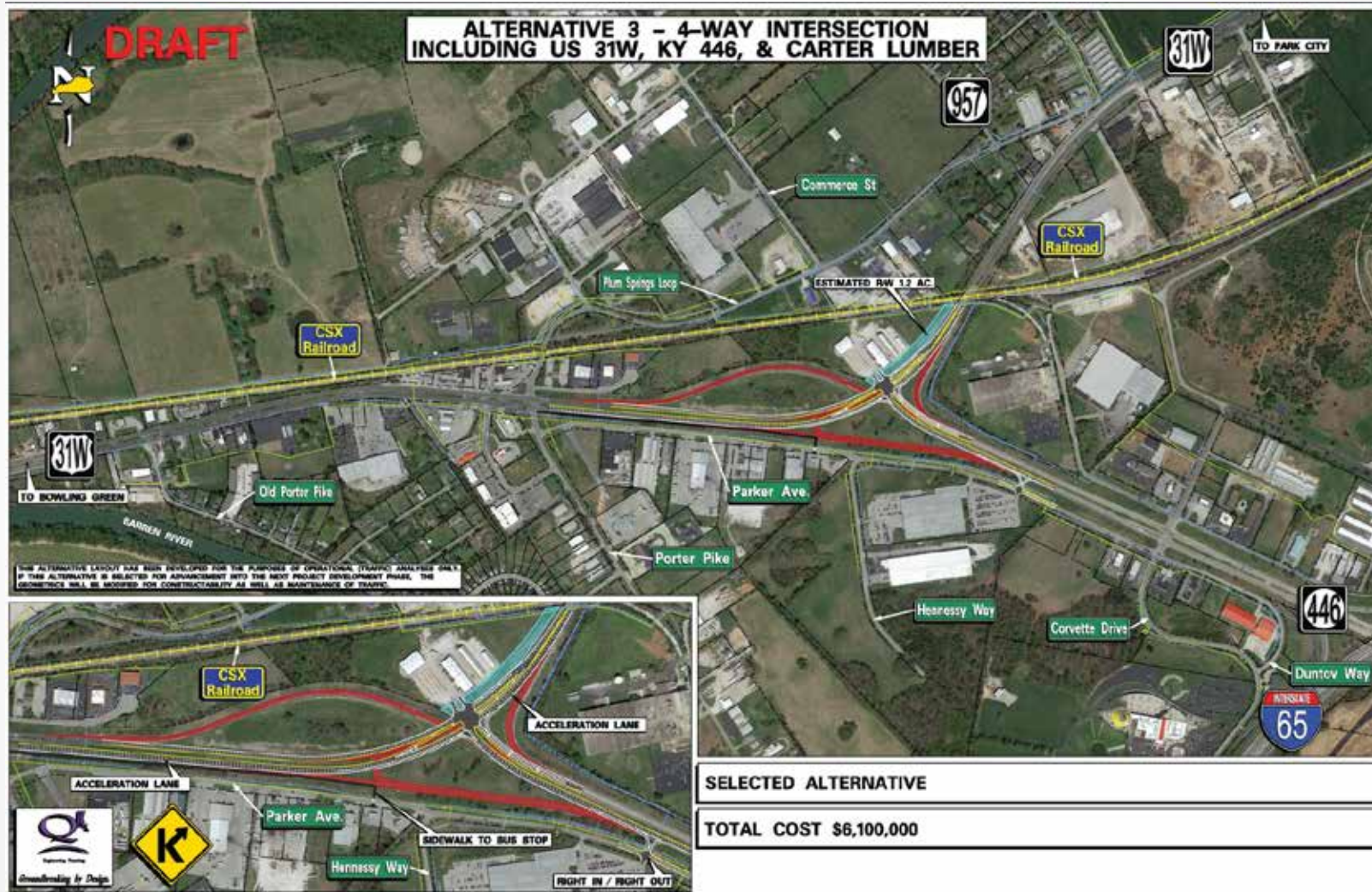
Alternative 2 Close-up



Alternative 2 Description

- US 31W is the through movement
- An acceleration lane for motorists traveling WB on KY 446 to NB US 31W
- Modified access to US 31W for Carter Lumber closer to Porter Pike
- Modified connection to Dahlia Way from US 31W
- Carter Lumber may have right in / right out North of existing intersection

Alternative 3



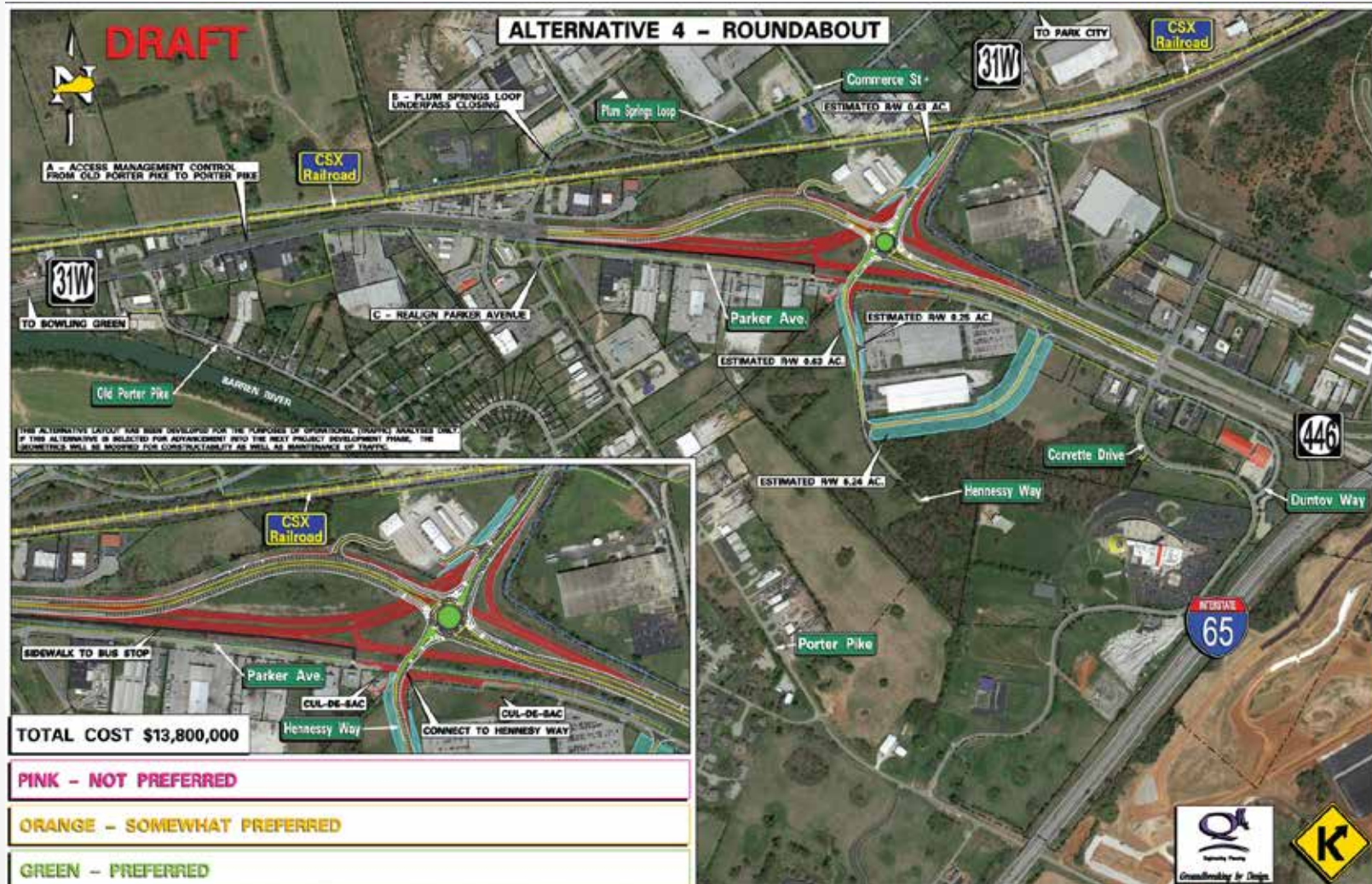
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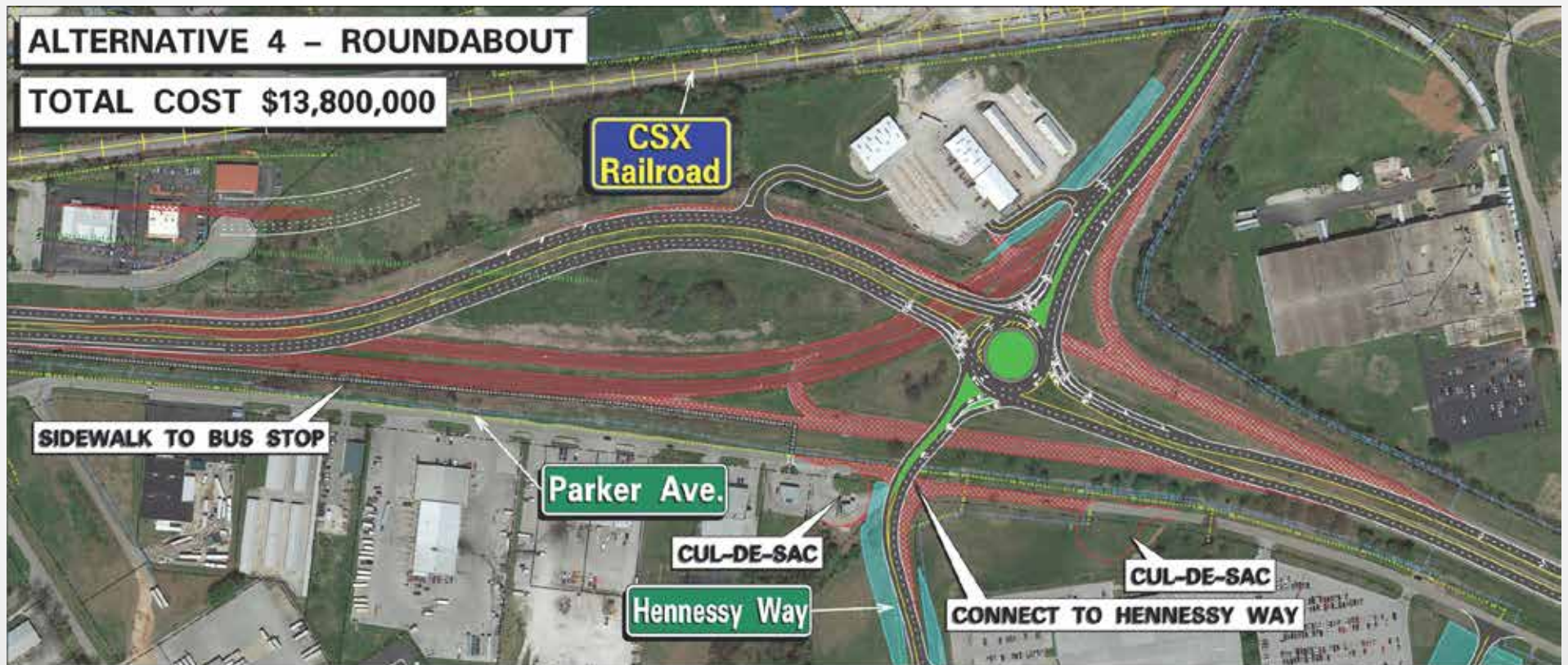
Alternative 3 Description

- Takes advantage of the existing infrastructure.
- US 31W is the through movement.
- Provides full access to Carter Lumber.
- Improves the movement from KY446 WB to US 31W NB by providing a 180' long parallel acceleration / merge lane
- Provides right in / right out for Fruit of the Loom.

Alternative 4



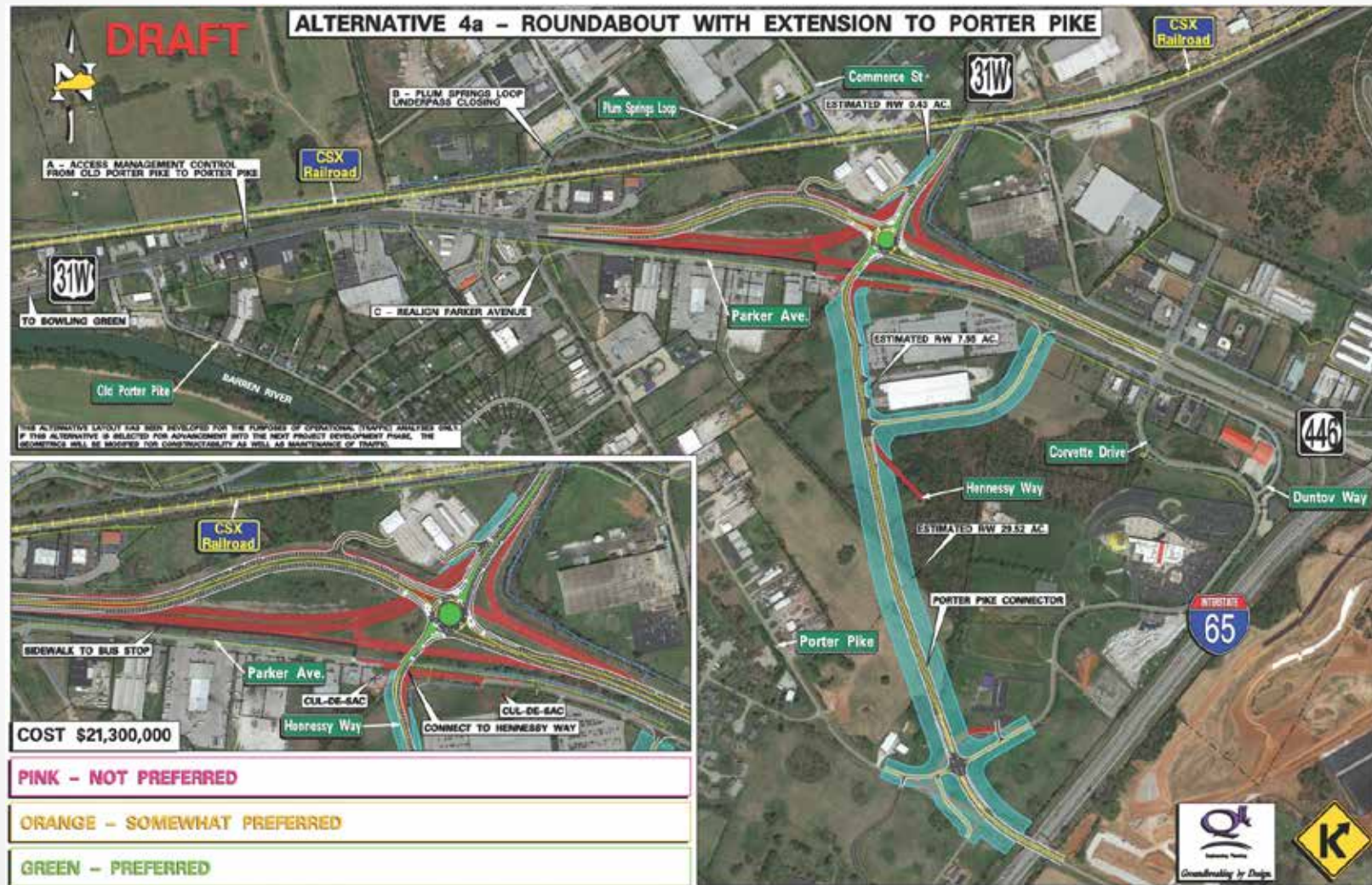
Alternative 4 Close-up



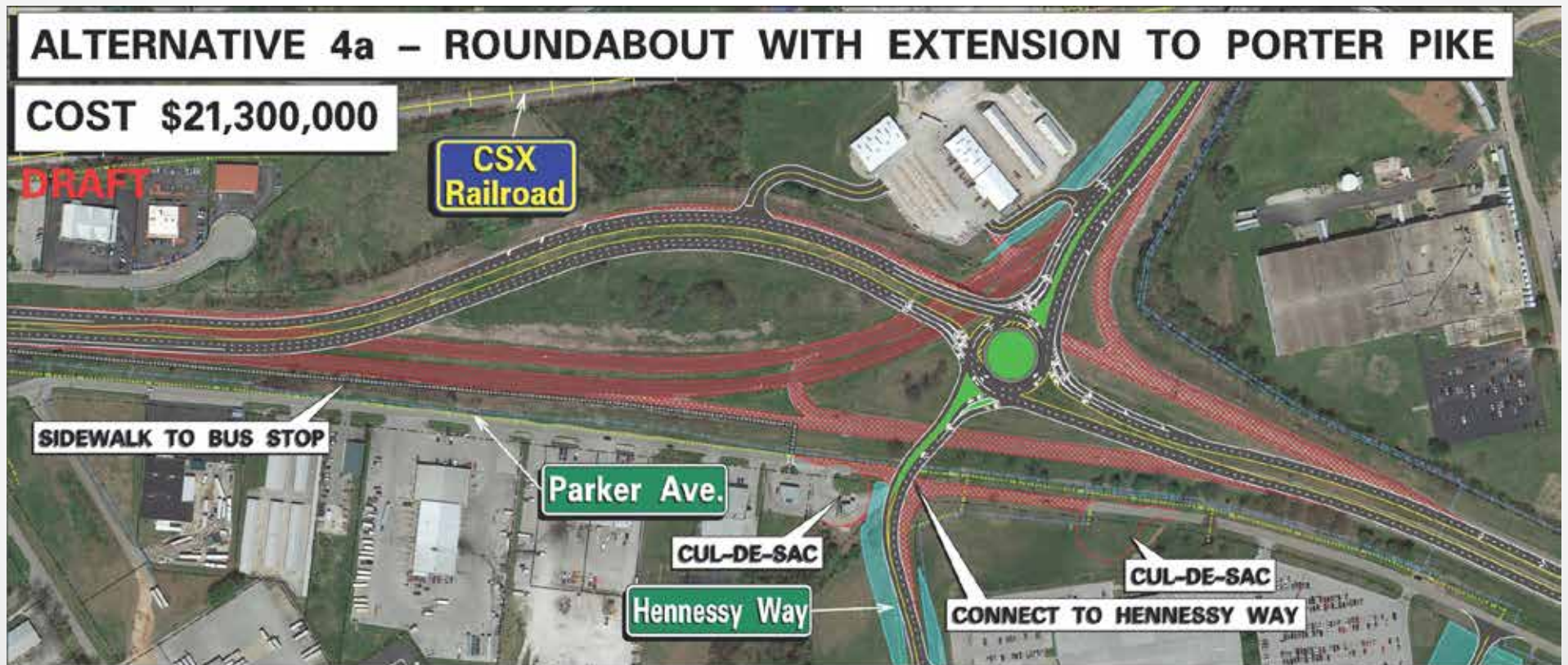
Alternative 4 Description

- Utilizes continuous lanes for US 31W SB to US 31W WB and KY 446 EB to US 31W NB. Utilizes partial right turn slip lanes for US 31W EB to Proposed Entrance and from Proposed Entrance to KY 446 where traffic yields to conflicting exiting traffic.
- Provides for three lanes on US 31W from Porter Pike to the roundabout.
- Prohibits Parker Avenue access to Hennessy Way
- Carter Lumber access may require modification.
- Eliminates two major safety concerns (merge from US 31W SB to Porter Pike)

Alternative 4a



Alternative 4a Close-up



Alternative 4a Description

- Same as Alternative 4 but extends the southern leg to Porter Pike.

Timely Opportunity

- CONCRETE PAVEMENT IS 50 YEARS OLD –
 - o KYTC Pavement Rehabilitation Project (scheduled & funded) includes:
 - KY 446
 - US 31W / KY 446 ramps, and
 - I-65 ramps at Exit 28.

Opportunity / Decision Point

- Rehabilitation has been funded and scheduled (\$3 million in the next year and includes the US 31W / KY 446 interchange in this study. We could
 - o Build an at-grade intersection now for less or equal money
 - o Replace Pavement Now (\$3,000,000).....then in the near future, tear out the replaced pavement and build a selected alternative.

OR

- Opportunity - within 2016 we can have new pavement and an implemented alternative for the US 31W/ KY 446 interchange.

Recommendation

Quick Win

- We do not want to lose this investment and a decision was necessary to take advantage of this opportunity.
- RECOMMENDATION: IN THE COMING YEAR, BUILD AN AT-GRADE INTERSECTION OF KY 446 & US31W WITHIN THE PAVEMENT REHAB PROJECT !

Selected Alternative 3 4 Way Intersection



Selected Alternative

- This design is draft, but the alternative will look very similar to Alternative 3 in this study.
- Takes advantage of the existing infrastructure
- US 31W is the through movement
- Discussion:
 - o Sight distance issues on US 31W coming SB on the sweeping curve. The current speed limit on US 31W southbound is 55 mph and the intersection would be 45 mph (the speed differential and sight distance may be an issue to address depending upon the final design)
 - o This will necessitate slowing motorists down

What are the benefits?

- Benefits
 - o Intersection fits in urban context!
 - o Driver expectations are now consistent.
 - o Speed is consistent within study area.
 - o 2 major safety concerns addressed
 - KY 446 to US 31W Northbound Ramp
 - KY 446 to Bowling Green Ramp
 - o Does not prevent future alternatives or options.
- Cons
 - o Some delay will be experienced
 - o More conflict points over the existing interchange

WHAT DOES THIS MEAN
FOR OUR STUDY?
DO WE STOP THE
STUDY?

...

No

Planning is a conversation.
So what is there still to talk
about? - future long-term
solutions---

...

Remaining Alternatives

- **Do Nothing** - no future investment

Future Build Alternatives

- **Alternative 2** - the Green T intersection
- **Alternative 4** -Roundabout
- **Alternative 4a** –Extension to Porter Pike

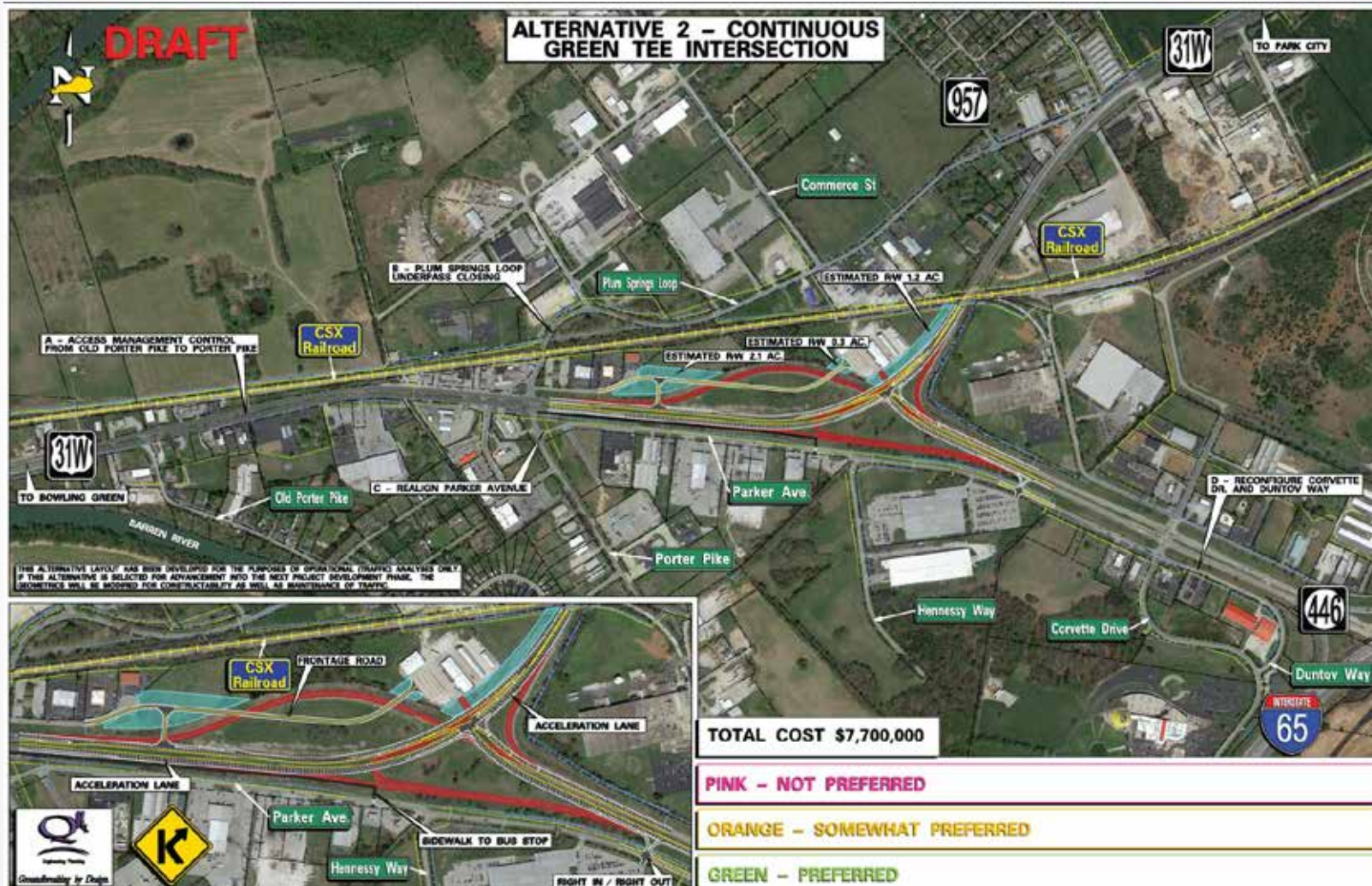
All Build Alternatives include:

- o Parker Avenue realignment
- o Sidewalk from Porter Pike to Bus Station utilizing the existing roadbed
- o May not include the new signal at Fruit of the Loom.
- o Access Management from Porter Pike to Old Porter Pike

Do Nothing

- Do nothing beyond the 4-way intersection that will be built with the pavement rehabilitation project.

Future Alternative 2 Green Tee Intersection



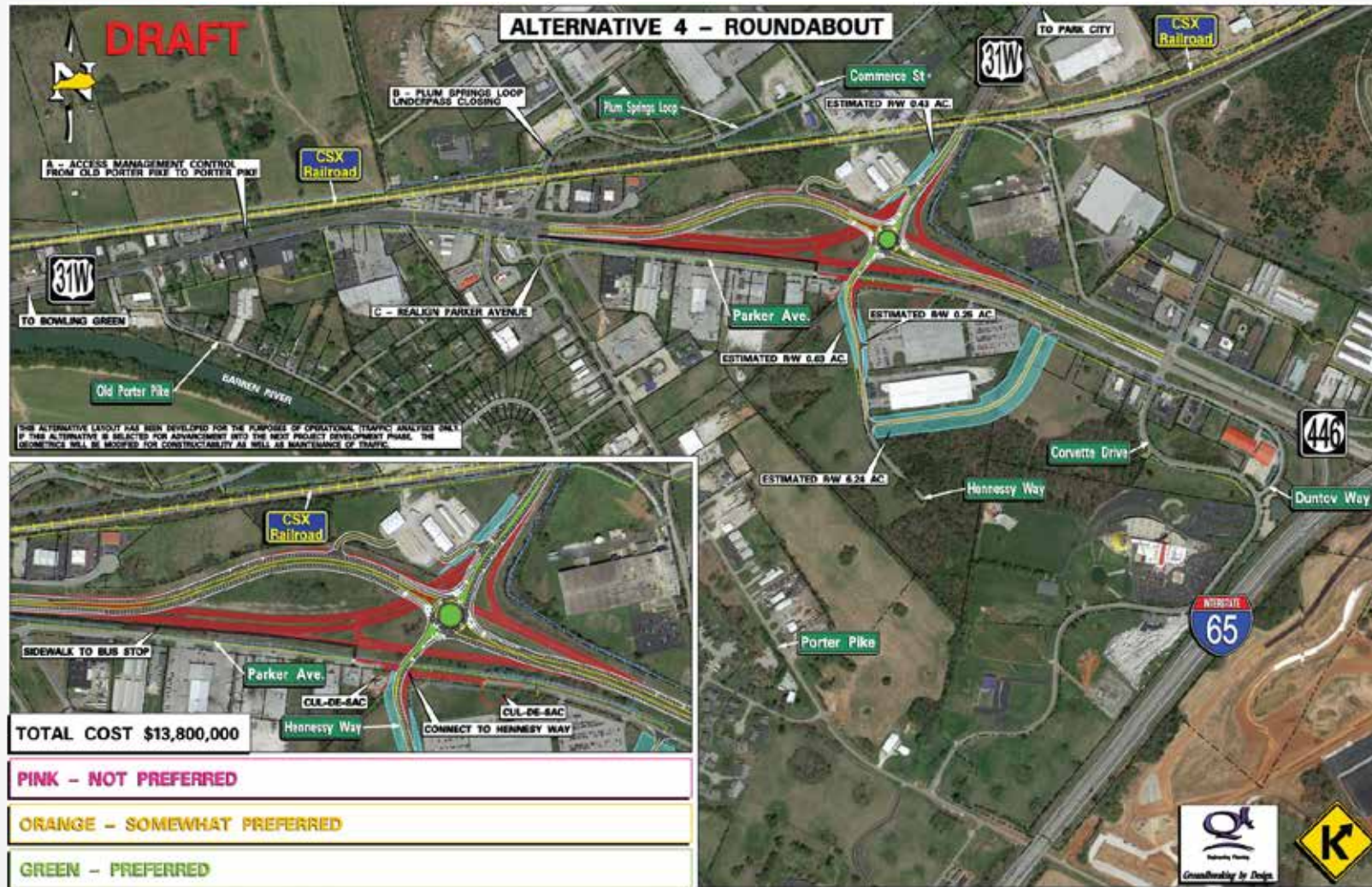
Alternative 2 – Green Tee Intersection

- Benefits
 - o Provides urban context
 - o Slows motorist down
 - o US 31W SB to Bowling Green is continuous (heaviest movement)
 - o Continuous right turn from US 31W to KY446
 - o 330 feet of additional merge length for the movement from US 31W SB to Bowling Green at the Porter Pike / US 31W intersection.
 - o Improves the movement from KY446 WB to US 31W NB by providing a 180' long parallel acceleration / merge lane
 - o Less conflict points than a 4-way intersection (Alternative 3)
 - o Has less total delay than Alternative 3
 - o Eliminates two major safety concerns (merge from US 31W SB to Porter Pike and US 31W NB from KY 446 EB)

Alternative 2

- Cons
 - o The continuous traffic flow along US 31W SB could potentially be moving at a higher rate of speed causing safety concerns for the KY 446 WB merging traffic
 - o WB KY 446 to BG merges from the left and may be in a slight curve. Southbound traffic from the north will be on a downgrade. This movement also backs up during peak hour
 - o KY 446 WB to US 31W SB (toward Bowling Green) is one of the highest volume movements the single left turn lane here would cause traffic to back up onto KY 446 prior to the signal

Future Alternative 4 Roundabout



Future Alternative 4 Roundabout

- Benefits
 - o Least total delay of other options except Alternative 1
 - o Urban Context
 - o Keeps everyone moving
 - o Reduces speeds
- Cons
 - o Complex and may be confusing to drivers
 - o Most expensive
 - o Fruit of the Loom does back up in PM peak hour due to motorist “finding” gaps in traffic to head North on US 31W or South on US 31W toward Bowling Green. Therefore the newly installed signal may need to be left in place

DRAFT

ALTERNATIVE 4a – ROUNDABOUT WITH EXTENSION TO PORTER PIKE

CSX Railroad

Plum Springs Loop

Commerce St

ESTIMATED RW 2.43 AC

31W

A – ACCESS MANAGEMENT CONTROL FROM OLD PORTER PIKE TO PORTER PIKE

CSX Railroad

B – PLUM SPRINGS LOOP UNDERPASS CLOSING

TO BOWLING GREEN

31W

Old Porter Pike

BARREN RIVER

C – REALIGN PARKER AVENUE

Parker Ave

ESTIMATED RW 7.30 AC

Corvette Drive

Hennessy Way

ESTIMATED RW 29.52 AC

446

Duntov Way

Porter Pike

PORTER PIKE CONNECTOR

INTERSTATE 65

CSX Railroad

Sidewalk to Bus Stop

Parker Ave

CUL-DE-SAC

Hennessy Way

CONNECT TO HENNESSY WAY

COST \$21,300,000

PINK – NOT PREFERRED

ORANGE – SOMEWHAT PREFERRED

GREEN – PREFERRED

Q&A Engineering & Design

K

Future Alternative 4a

- Benefits

- o Least total delay of other options
- o Urban Context
- o Keeps everyone moving
- o Reduces speeds
- o Provides an extension south to Porter Pike

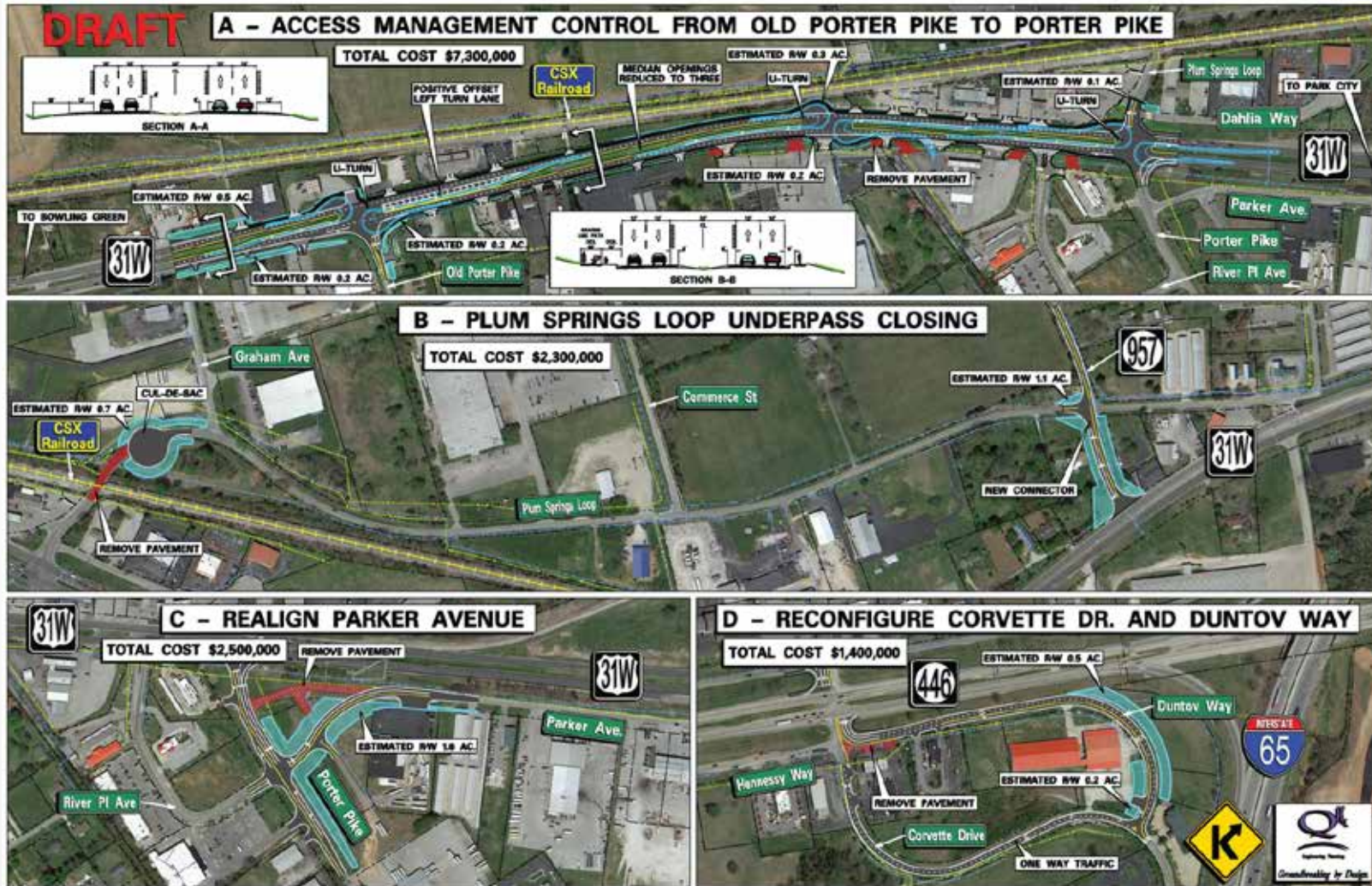
- Cons

- o Roundabout is complex and may be confusing to drivers
- o Most expensive
- o Fruit of the Loom does back up in PM peak hour due to motorist “finding” gaps in traffic to head North on US 31W or South on US 31W toward Bowling Green. Therefore the newly installed signal may need to be left in place

Remaining Options

- Options A, B, C, D are standalone projects and need your input.
 - o Option A – Access Management from Old Porter Pike to Porter Pike
 - o Option B – Closing of Plum Springs Loop and the realignment of KY 957
 - o Option C – Parker Avenue Realignment
 - o Option D – Reconfigure Corvette Drive and Duntov Way to one-way.

Future Options



Option A – Access Management from Old Porter Pike to Porter Pike

- Pros
 - o Reduces conflicts
 - o Expected to reduce crashes 17%
 - o Improves sight distance at Old Porter Pike
 - o Channelizes some business access / parking lots
 - o Helps with drainage
- Cons
 - o Changes driver expectation
 - o Removes median access to some businesses
 - o US 31W/Old Porter Pike intersection may have to be signalized

Option B - Closes Plum Springs Loop Underpass

- Pros
 - o Relieves some congestion at US 31W / Porter Pike and Porter Pike / Dahlia Way intersections
 - o Eliminates cost of widening railroad bridge
 - o Realigns Plum Springs Loop and KY 957 at the US 31W North end
- Cons
 - o Additional travel time for industry
 - o Additional travel time for emergency vehicles if a removable barricade is not used

Option C – Realign Parker Avenue

- Pros
 - o Additional 550 feet of queue length on Porter Pike Hennessy Way to Porter Pike
 - o Aligns Parker Avenue with River Place / Porter Pike intersection
- Cons
 - o Expensive right of way costs

Option D – Reconfigure Corvette Drive & Duntov Way

- Pros
 - o Reduces conflicts from Hennessy Way and businesses very close to KY 446
 - o Channelizes business entrances
 - o Moves shell entrance to Corvette Drive.
 - o Moves prior “Liquor Store” entrance to moved Hennessy Way”
 - o Improves travel flow at the KY 446 / Corvette Drive intersection.
- Cons
 - o Additional travel for business patrons

Please Give us Your Input!

- **Survey at this Meeting**
- **Survey On-Line**

<http://transportation.ky.gov/YourTurn/Pages/US-31W-Corridor-and-KY-446-Ramps-Study.aspx>

- **Sticker Dot Exercise**

Please Walk Around

- Staff will be there to answer your questions
- Begin on the left facing the back of the room
- Look for people with name tags to answer any questions you may have.
- Don't forget to fill out your survey!

Dot the map!

Let us know your thoughts.

- **Pink** – not preferred
- **Orange** – somewhat preferred
- **Green** - most preferred

US 31W/KY 446 PLANNING PROJECT MANAGER CONTACT INFORMATION

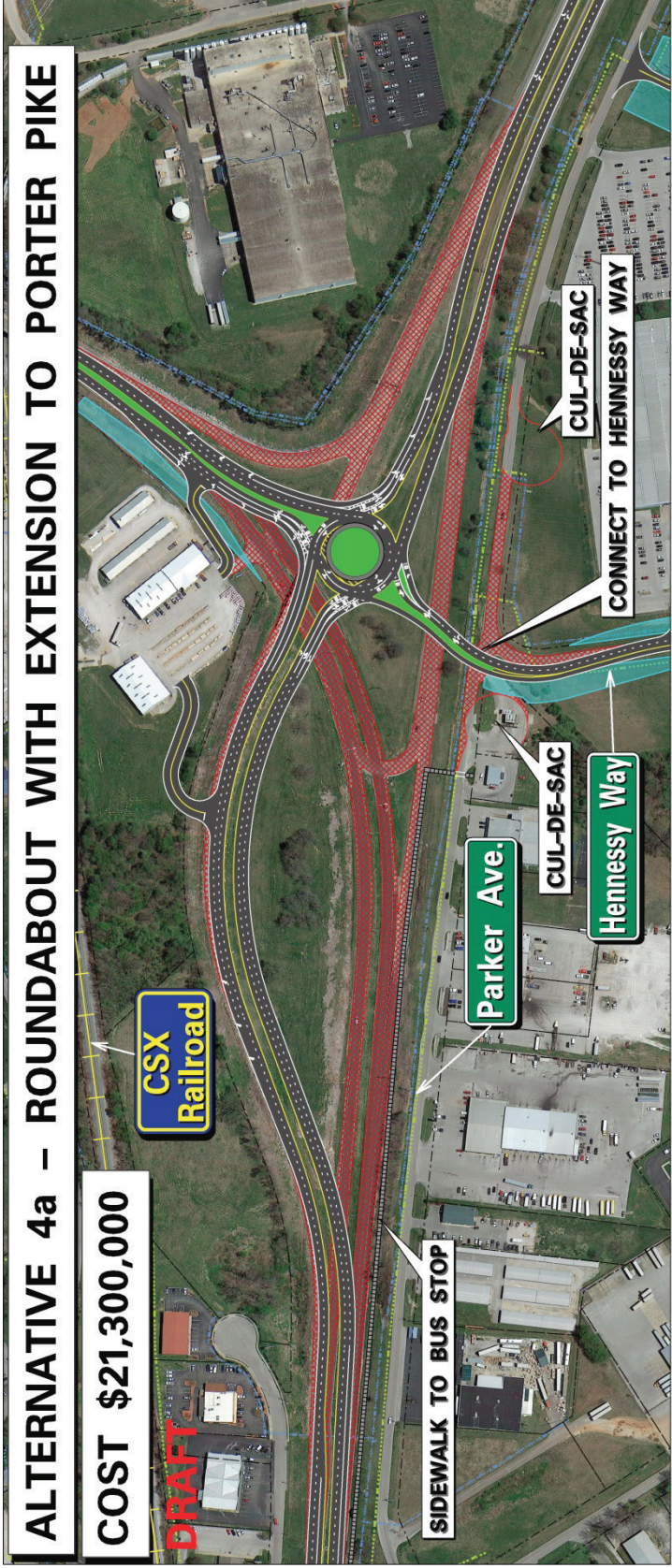


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Bowling Green, KY 42101
Jeff.Moore@ky.gov
Phone: (270)746-7898



Groundbreaking by Design.

Annette Coffey, PE
QK4, Inc.
2225 Lawrenceburg
Road
Frankfort, KY 40601
acoffey@qk4.com
Phone: (502)352-2197



For more details visit the following web site: <http://transportation.ky.gov/YourTurn/Pages/US-31W-Corridor-and-KY-446-Ramps-Study.aspx>

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The Kentucky Transportation Cabinet in cooperation with QK4, Inc. is conducting a planning study for US 31W from Old Porter Pike to KY 957 (Plum Springs Loop) in Warren County. We are seeking your input for improvements in the US 31W / KY 446 study area. Your input will be used to assist the project team in prioritizing proposed future alternatives and options within that study area. Please take a moment to review the future alternatives and options and complete the following survey which will take approximately 5 minutes to complete. We thank you in advance for your response. As a reminder, the Purpose and Need for the project is located below.

Draft Purpose and Need

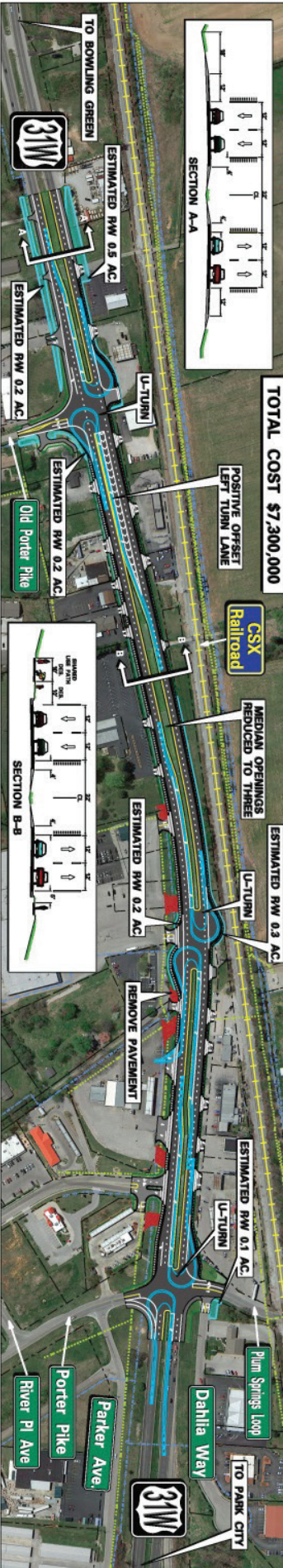
The draft Purpose of this project is to increase mobility and improve safety in the US 31W / KY 446 Corridor. US 31W (Louisville Road) is a major urban and regional connection in Bowling Green, providing a gateway for southbound motorists entering Bowling Green from I-65 to access the Corvette Plant activities center, Beech Bend Park, and downtown Bowling Green.

The need stems from the following:

- A 1950's rural, high speed interchange design that has transitioned to more urban characteristics
- Multiple traffic signals
- New development has led to access/driveway issues
- Growth has traffic and crashes on the rise



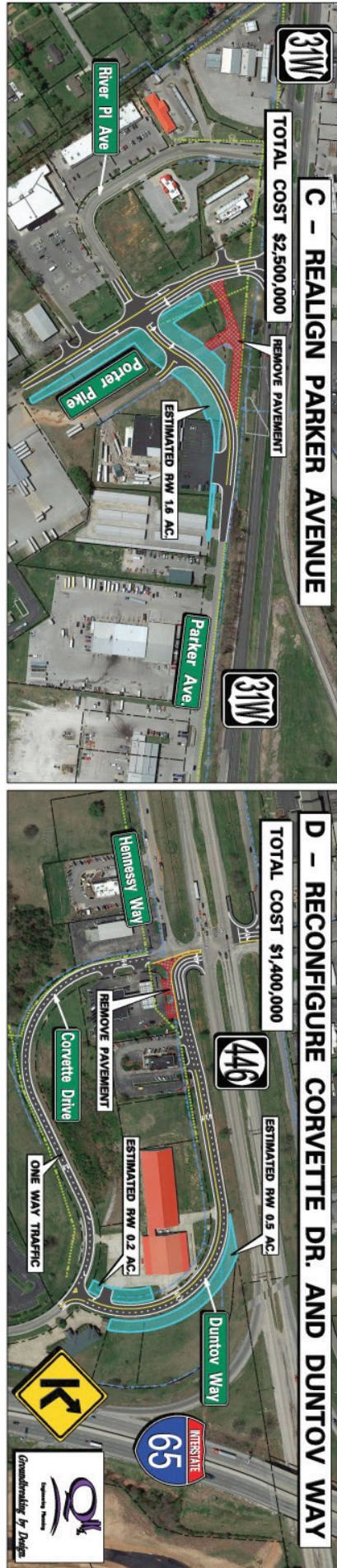
DRAFT **A – ACCESS MANAGEMENT CONTROL FROM OLD PORTER PIKE TO PORTER PIKE**



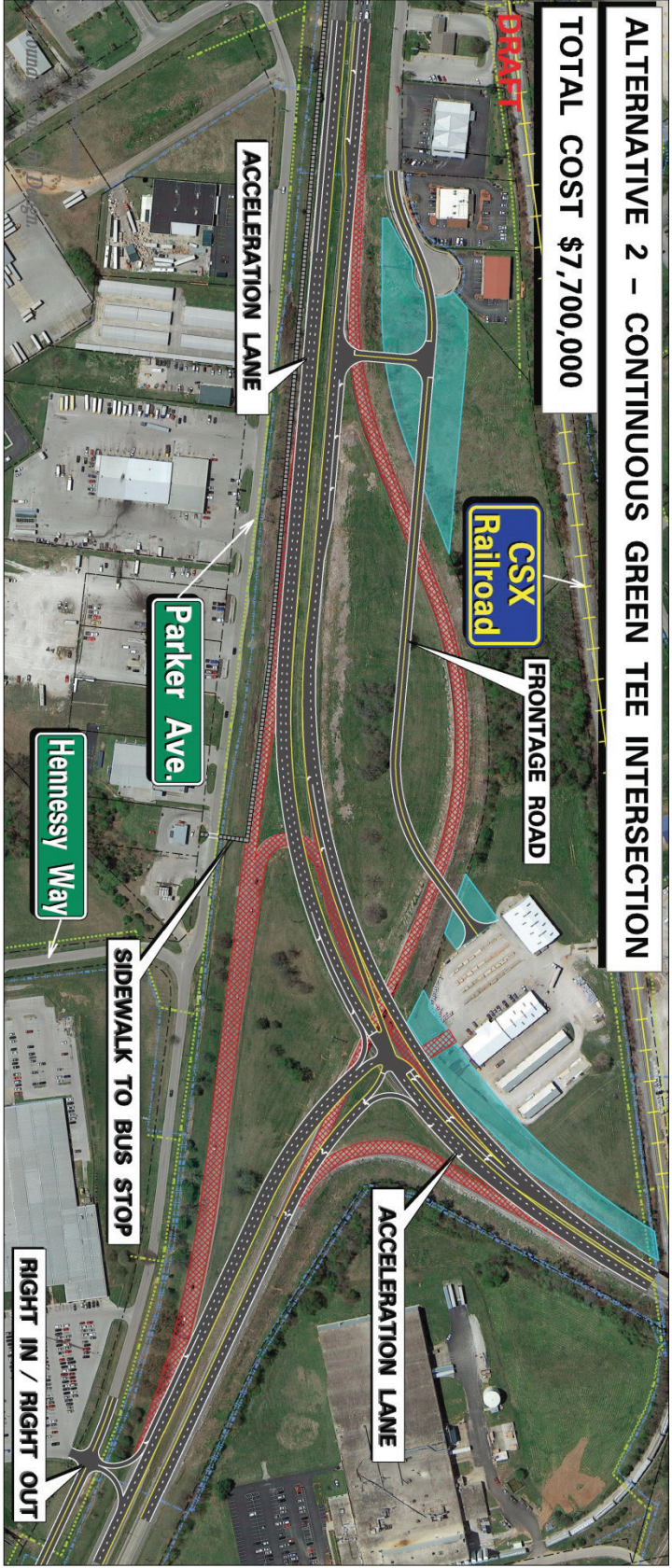
B – PLUM SPRINGS LOOP UNDERPASS CLOSING



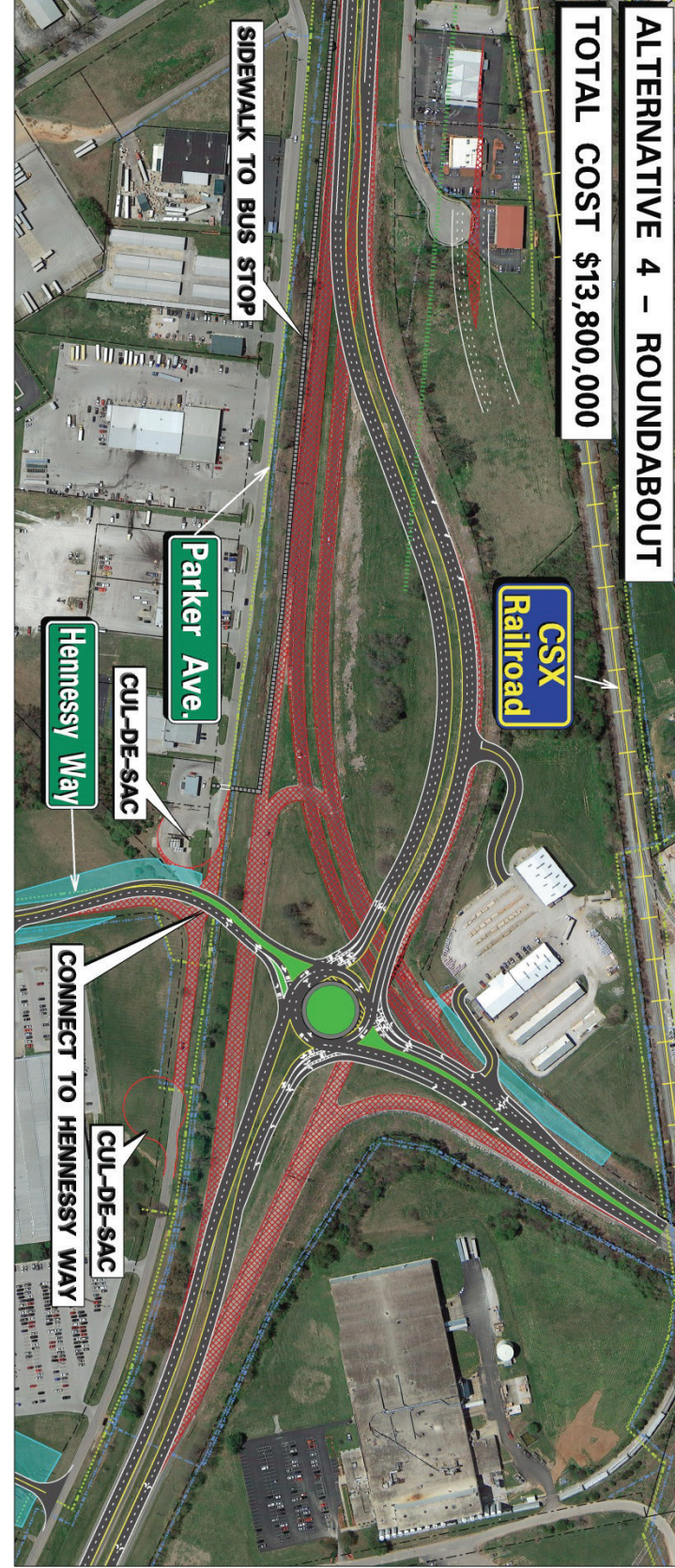
C – REALIGN PARKER AVENUE



ALTERNATIVE 2 – CONTINUOUS GREEN TEE INTERSECTION



ALTERNATIVE 4 – ROUNDABOUT



US 31W/ KY 446 STUDY

OLD PORTER PIKE TO
PLUM SPRINGS LOOP (KY 957)
BOWLING GREEN
WARREN COUNTY

Public Meeting
September 29, 2015



Engineering Planning

Groundbreaking by Design.



Study Area

Purpose and Need



Scope of Work

The Major Focus

US 31W/KY 446 Interchange

- New interchange configuration
- At grade intersection
- Roundabout

Additional Tasks

- Improvements to Existing Interchange
- Spot Improvements
- Access Management in Project Corridor

What We Heard

- Safety and Congestion are of the greatest concern
- Greatest Areas of Concern
 - KY 446 to US 31W NB (most dots at first public meeting)
 - KY 446 to SB US 31W
 - Narrow Underpass
 - Porter Pike / US 31W intersection
- List of Threatened & Endangered species
- Karst topography
- Four areas that may still be considered farmland;
- “Concerned that the proposed undertaking will have impacts to historic resources...”;
- Sinkholes, groundwater wells, and springs within a one mile radius;
- Define the height of existing trees as project progresses

Additional Stated Needs/Concerns

- **US 31W/KY 446 interchange**
 - o The interchange needs lighting (street lights)
 - o KY 446 to I-65 signage not clear
- **Plum Springs Loop**
 - o Right turn lane on US 31W to Plum Springs Loop
- **Corvette Drive/KY 446**
 - o Right turn signalization @ Corvette
 - o New Hennessy Way connector should connect to Corvette Drive
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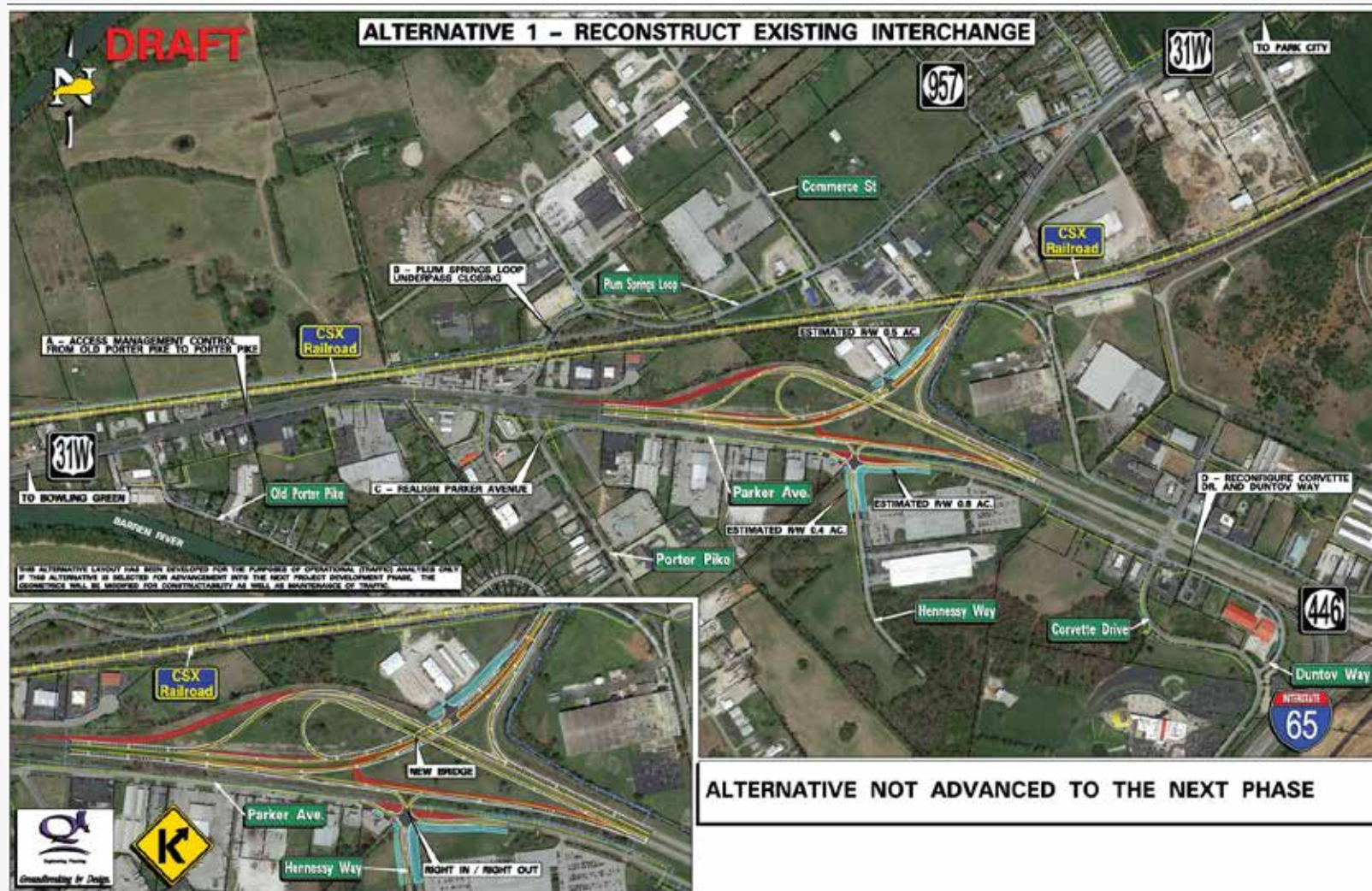
Options



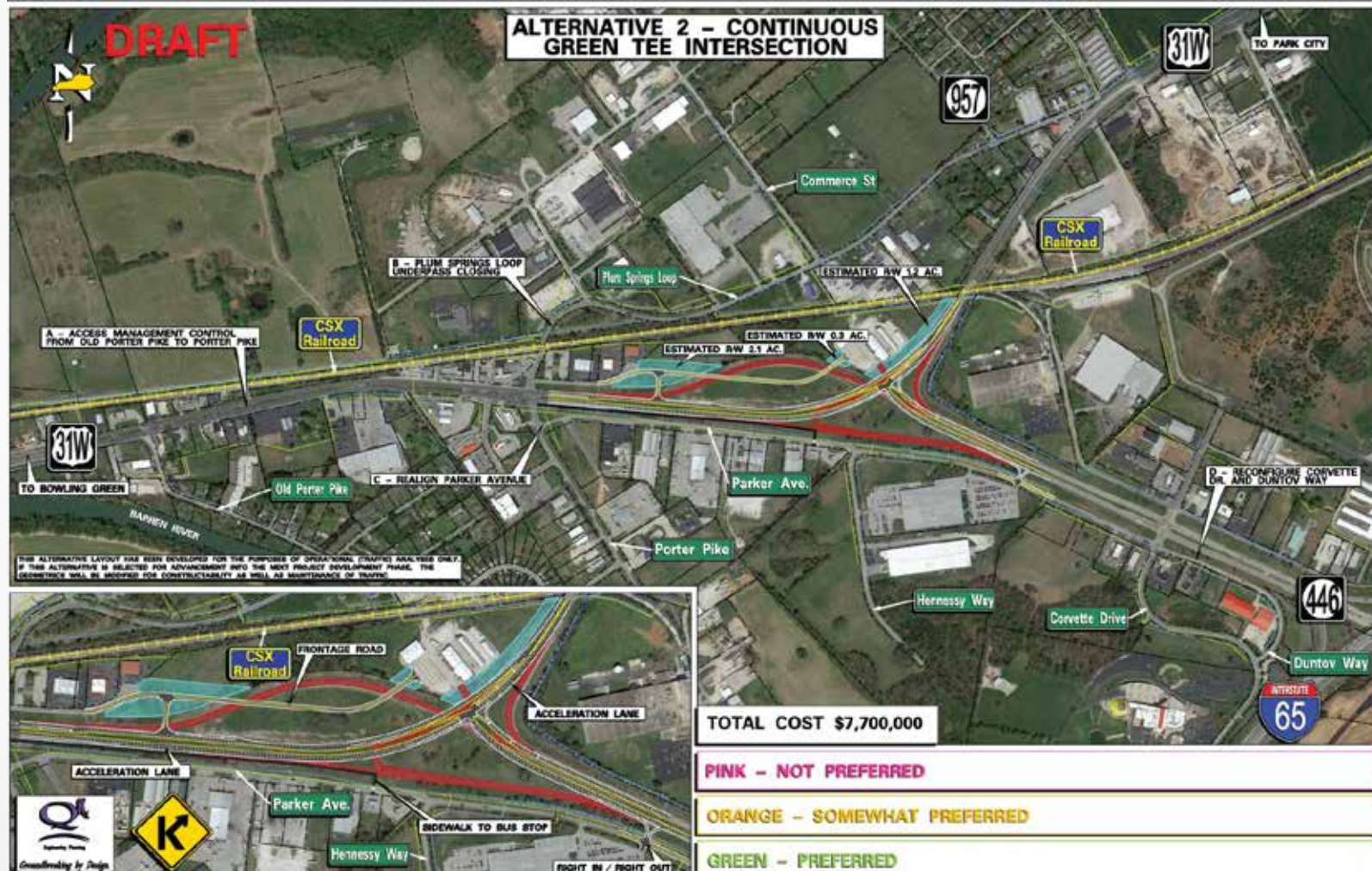
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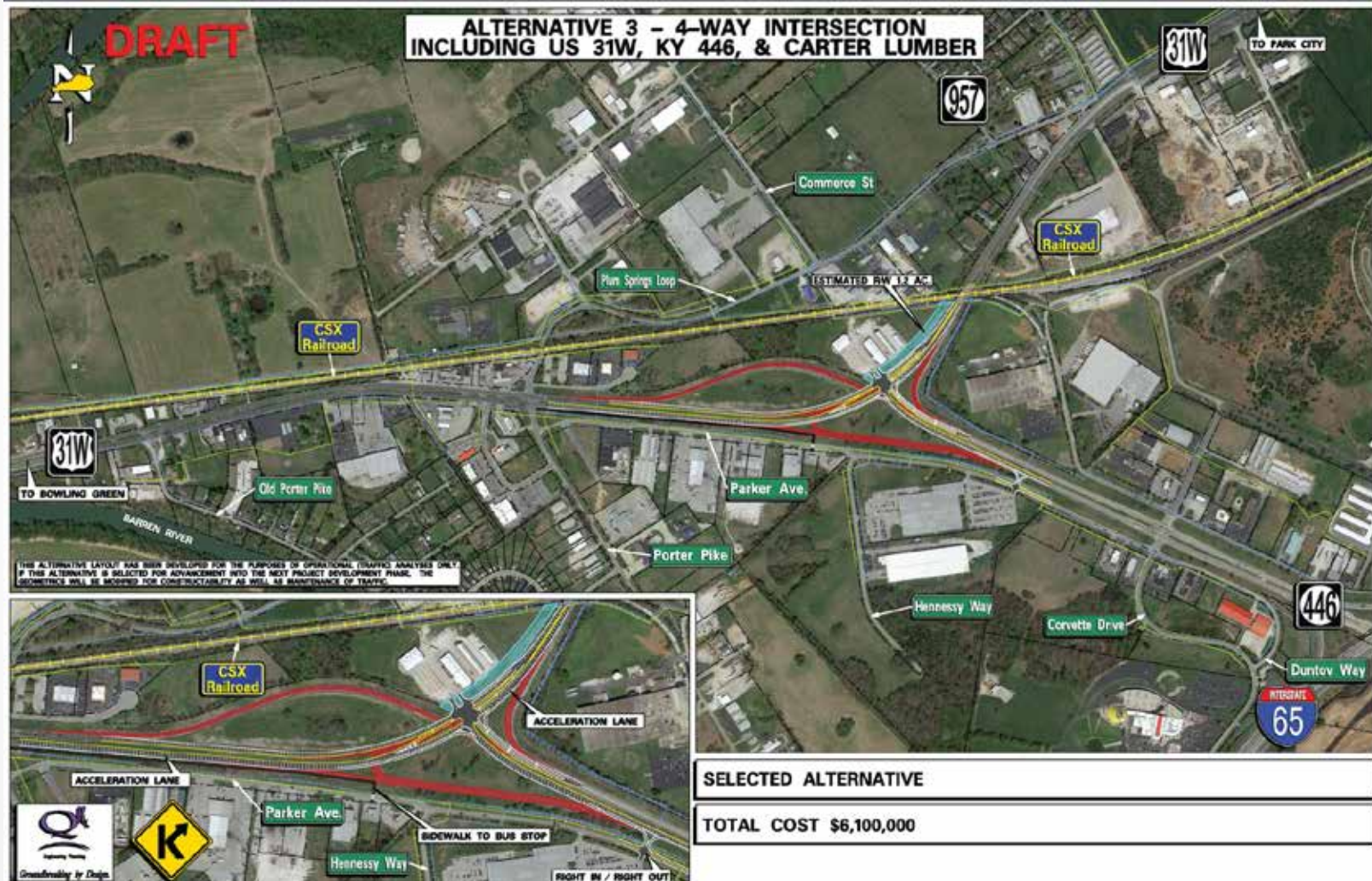
Alternative 1



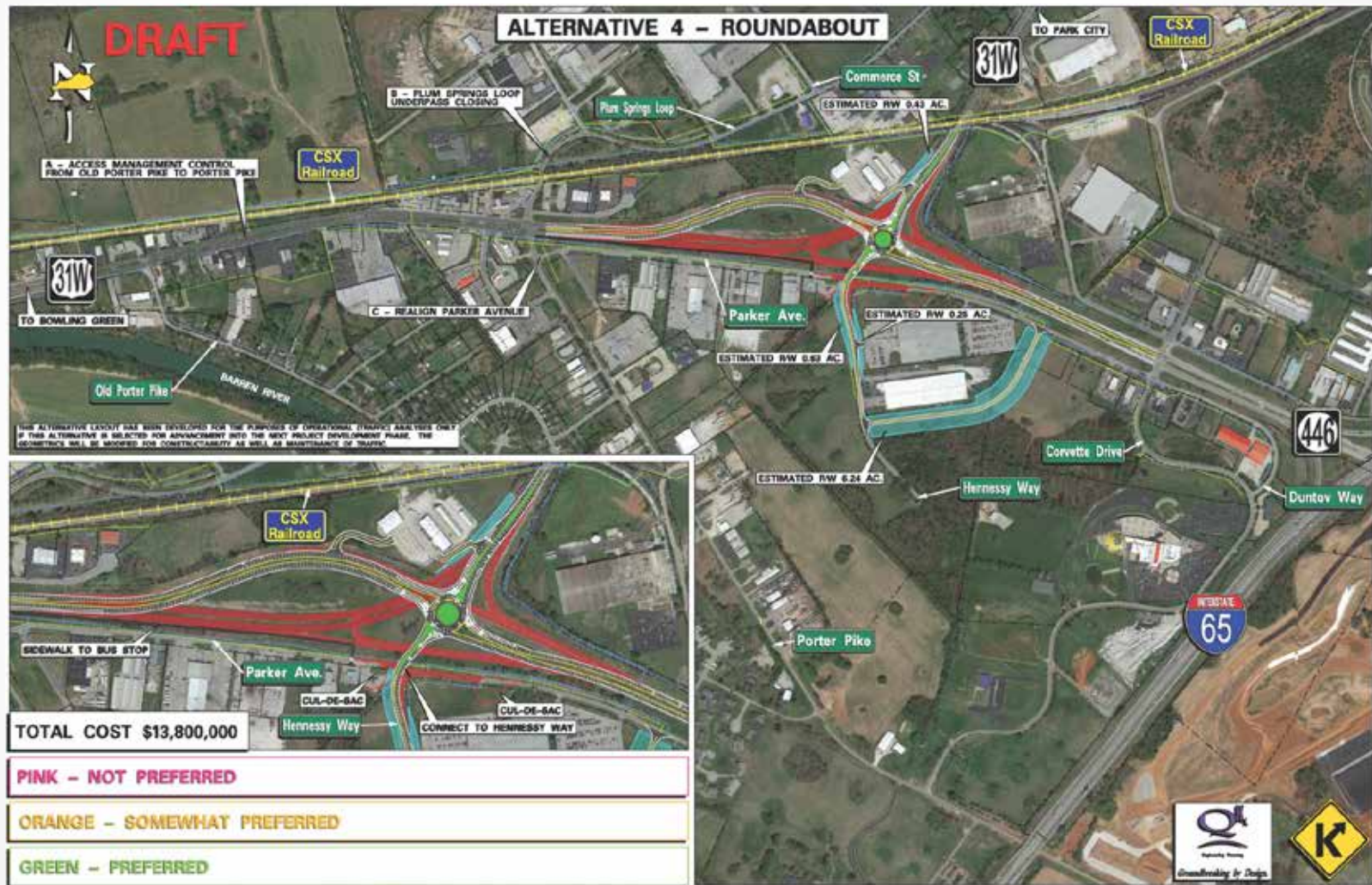
Alternative 2



Alternative 3



Alternative 4



Alternative 4a



Timely Opportunity

- CONCRETE PAVEMENT IS 50 YEARS OLD –
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 - US 31W / KY 446 ramps, and
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Recommendation – Quick Win

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- RECOMMENDATION: IN THE COMING YEAR, BUILD AN AT-GRADE INTERSECTION OF KY 446 & US31W WITHIN THE PAVEMENT REHAB PROJECT !

Selected Alternative

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...

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So what is there still to talk
about? - future long-term
projects---

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Remaining Alternatives

- **Do Nothing** - no future investment
- **Alternative 2** - the Green T intersection
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All Alternatives include:

- o Parker Avenue realignment
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Dot the map!

Let us know your thoughts.

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