SHERMAN MINTON RENEWAL

ENVIRONMENTAL JUSTICE (EJ) LOUISVILLE COMMITTEE MEETING AGENDA

Date: Thursday, February 6
Time: 6 p.m. – 7:30 p.m.
Meeting: EJ Meeting #4
Location: Lincoln Elementary School

I. Welcome and introductions

II. Presentation

- Project update
- MOT options analysis
- Community Impact Assessment (CIA) & Environmental Justice (EJ) Analysis

III. Avoidance and minimization considerations

IV. Group discussions

IV. Reporting out from each group

V. Project schedule

VI. Final questions

Environmental Justice (EJ) Louisville Committee Meeting #4
Meeting Summary
Thursday, Feb. 6, 6:00 – 7:30 p.m.
Lincoln Elementary School

EJ Committee member attendees
Darnell Farris, First Gethsemane Baptist Church
Sam Jones, Goldberg Simpson
Stephanie Benson, Seven Counties Services

Presenters
Wendy Vachet, Michael Baker
Andrea Brady, C2 Strategic Communications

Project attendees
Ron Heustis, INDOT, project manager
Mary Jo Hamman, Michael Baker
Mary Pusti, Michael Baker
Craig Moore, Parsons
Alex Lee, Parsons
Toby Randolph, Parsons
Mindy Peterson, C2 Strategic Communications
Kaitlin Keane, C2 Strategic Communications

Meeting Minutes

I. Welcome

Andrea Brady welcomed EJ members. She indicated the goals of the meeting were to update the advisory group on maintenance of traffic (MOT) options and avoidance and minimization considerations while promoting group discussion and soliciting feedback to help inform technical documents.

II. Presentation

Since the last EJ meeting in July 2019, the Project Team has held open houses in Louisville and New Albany, shared a project survey, held small group meetings, continued technical analysis of MOT options and requested qualifications from contractor teams.

There were more than 3,000 survey responses. Most respondents crossed the bridge daily. The majority of respondents favored a longer construction period and fewer impacts/lane restrictions. MOT Options 1 and 2 were most favored and MOT Option 5 (full closure) was least favored.

MOT Options

Wendy Vachet provided an overview of the six MOT options ranging from two lanes remaining open on each deck to a full closure of the bridge. She added the goal of the project is to rehabilitate the bridge. Capacity is not being added and there is no new right of way. The Project Team will minimize impacts and manage traffic impacts as much as possible.

Preliminary recommendations are for MOT Options 1, 2 and 4 to move forward for further consideration, MOT Options 3 and 6 to be eliminated from consideration and to minimize the impacts of MOT Option 5 with a full closure for minimal days only. MOT Option 5 will be used in combination with other MOT options, based on constructability requirements.

MOT Options Analysis
An overview of the analysis was provided with a map showing existing congestion locations. Volumes for existing Ohio River bridges were also reviewed. The Sherman Minton Bridge carries around 90,000 vehicles daily (2018 AADT). The Clark Memorial Bridge is at capacity in the morning and evening.

A map highlighted general MOT diversion patterns, with more diversion seen (as expected) with more lane restrictions. About 7,400 vehicles are expected to divert if two lanes on each deck remain open. About 33,400 vehicles are expected to divert with one lane open on each deck and a full closure would result in diversion of around 90,000 vehicles. Most vehicles are diverting to I-65 and I-265.

Community Impact Assessment
An overview was provided of communities and neighborhoods in the project area including West Louisville, New Albany and Clarksville. The Project Team is required to look at census tracts to identify Environmental Justice (EJ) affected communities (low-income, minority and low-income and minority populations).

Traffic Diversions
A table was reviewed showing overall trips expected to be diverted, broken down by bridges traveled for each MOT option. Some trips shift from the at-capacity Clark Memorial Bridge to the I-65 bridges. Another table outlined expected traffic diversion by MOT option by bridge for EJ passenger vehicles. For example, with the expected 7,400 vehicles expected to divert daily with MOT Option 1, around 700 are expected to be EJ passenger vehicles diverting to tolled bridges.

Traffic analysis zones (TAZ) were used to track EJ and non-EJ zones to measure impacts. EJ trips were trips originating from an EJ TAZ in the Study Area.

MOT Options

An overview was provided of the “bookends” of MOT Options. MOT Options 1 (2 lanes open on each deck) had the lowest network congestion, the longest construction duration and the highest project cost. MOT Option 5 had the highest network congestion, the shortest construction duration and the lowest project cost.

The Project Team also looked at local congestion on the street network. MOT Options 5 and 6 create a high level of congestion (Option 6 is not moving forward).

Q: How do the areas of local congestion affect the New Albany street grid?
A: The scenario creating some of that congestion goes away with MOT Option 6 (which is an option that’s not moving forward).

Traffic Impacts
MOT Options 1, 2 and 4 maintain continuous travel on the Sherman Minton Bridge (SMB) in both directions. MOT Option 1 has the lowest diversion and congestion. MOT Option 5 has the highest diversion and congestion.

Transit (TARC)
More than 50% of TARC riders are minority, more than 30% are low income and nearly 75% do not own cars according to an on-board TARC survey in Feb. 2017. Riders would experience temporary impacts and potential detours during construction. The fixed nature of routes means buses have an even greater emphasis on reliability and on-time performance.

There are 3 TARC routes of particular interest in the area, but only one (Route 71) crosses the SMB. It creates a loop and uses both the SMB and Clark Memorial. MOT Option 5 would require a reroute of TARC Route 71.

Q: Do we know how the impact on TARC users crossing the bridge?
A: Route 71 is the only route using the SMB. It makes a loop using the SMB and Clark.
Q: Is only the one route express (TARC Express 65)?
A: Yes, only the I-65 route crossing the Kennedy and Lincoln.
Q: An attendee asked about actual ridership on cross-river routes.
A: It’s relatively low, but TARC could provide actual ridership numbers.

Economic Impacts
A table of economic impacts on all vehicles was reviewed. Each MOT option was considered for the full duration for analysis purposes, but that’s not expected to be the case. MOT Option 1 is lowest cost and MOT Options 5 and 6 are the highest.

The User Cost Methodology considers travel time, distance and tolls paid on a trip. A table was reviewed of average user cost for non-EJ and EJ Trips at peak hours.

Non-EJ trips tend to be longer trips while EJ trips are closer to the SMB. MOT 5 has some concerns in this regard, relative to EJ populations

Q: What's the base condition?
A: The base is what it is today. There's a longer trip time for non-EJ populations.
Q: Do you have information about workers carpooling for work?
A: Park and Ride numbers are relatively small, but TARC has this information.
Q: How will tolls be levied as a rider for a carpool situation? Tolls and ridesharing.
A: TARC and Ticket to Ride are exempt from tolls. Personal carpool situations can decide how to share toll expenses (one vehicle/one toll/each direction).

Economic Impacts
The Project Team heard from many groups including Develop New Albany, GLI and One Southern Indiana. The Team has heard the SMB is important and businesses depend on people crossing the river. The closer to the bridge, the larger the impact of the project. MOT Option 1 has the lowest economic impact, but the longest duration. MOT Option 5 disrupts cross-river commerce and has a higher economic impact.

Social Impacts
All MOT options will have temporary effects on affected communities. Quality of life issues include air and noise. Options that maintain two-way traffic have reduced congestion and are least disruptive.

Community Access, Mobility and Cohesion
SMB traffic restrictions, diversions and travel time increases will affect community mobility and access.

Q: Is there explanation as to why people cross the river to shop and for services?
A: (Another attendee) It's about access to quality goods and services.
Project Team: We've also heard about access to hospitals, medical care and schools.
(Another attendee): There are more options for eateries in southern Indiana than West Louisville and likely savings with major chain stores.
An attendee commented there's information available from Louisville Metro Housing Authority regarding West Louisville and access to goods and services.
The Project Team affirmed the analysis shows people are using the bridge to access goods and services.

Q: Could this project benefit from night closures like during the painting project on the Second Street Bridge?
A: Yes. We're looking at that and will discuss more.

Quality of Life
The project is included in KIPDA's transportation plan and is exempt from air quality conformity analysis. Noise and air impacts related to traffic are expected to be minor, since most of the traffic stays on the interstate.

Overall Social Impacts
MOT Option 1 is the least disruptive. MOT Options 2 and 4 are less disruptive by maintaining continuous travel in both directions. MOT Option 5 disrupts cross-river mobility and cohesion.

A table was reviewed to summarize Potential for Disproportionately High and Adverse Impacts to EJ Populations. MOT Options 1, 2 and 4 don't have the potential for disproportionately high and adverse impacts to EJ populations. MOT Options 3, 5 and 6 do, to some degree.

Q: An attendee asked if this information is also available online.
A: The entire presentation will be online in the morning and will be emailed to members with the meeting summary.
Q: An attendee asked if the time of travel is not affected.
A: It is, but it affects everyone, not just EJ populations.

Avoidance
W. Vachet said you can't avoid the problem because you can't avoid the necessity to rehab the bridge. Since you can't avoid, you want to minimize. Possibilities to minimize: minimize construction duration, determine what MOT combinations make sense, minimize number of lanes closed, incentivize contractors, temporarily restripe ramps, temporary use of shoulders, use lessons learned from 2011 closure, coordinate with local officials and rely on frequent communication.

The group discussed recommended MOT Options, limiting use of MOT Option 5 and minimization strategies.

R. Heustis talked more about MOT Option 5. The Project Team will outline a maximum number of closure days allowed for each MOT option (one lane/each direction, 2 lanes/each direction, 3 lanes closed, full closure). Bidding teams will be scored and given credit for shorter durations of closures. Full closure would likely be limited to two dozen or fewer days. Constructability issues will require some days of full closure for safety of crews and public. The Project Team will determine how much of the necessary work can be done at night and on weekends. The Project Team is also considering whether to limit the number of closure days by season or for the full project.

The selected contracted is held to their bid of closure days as their contractual limit. Liquidated damages (LDs) will be charged if contractors run over on number of days or

duration of closures. LDs could be in 15-minute increments. LDs are not insignificant to avoid allowing the contractor to "buy time."

The Project Team must come up with final recommendation. The preferred alternative will likely be MOT Options 1, 2 and 4 with a minimum period of MOT Option 5. The recommendation will be presented at upcoming public hearings (one in Louisville, one in New Albany).

A Request for Qualifications (RFQ) for contractors is out and we're in the process of shortlisting proposers. Public hearings will follow.

Comment: People have spoken and want to maintain as much access as possible. The people in EJ zones are going to be concerned about how much it will cost them. There will also be concerns about access. R. Heustis responded that is why the Project Team is favoring keeping two lanes open in each direction as much as possible.

Q: Is MOT 5 an option because it's only necessary at certain times?
A: Yes. Closures could focus on nights and weekends to reduce impacts. We want to get the project done quickly, but not while increasing impacts.
Q: Who determines the number of allowable days of closure?
A: The Project Team will decide. Better value and less impact is incentivized through the bidding process for contractors.

W. Vachet commented that communication also matters to make sure drivers are aware and prepared. Information is powerful. D. Farris commended efforts and added the more you communicate, the better. He added safety issues have to be balanced with EJ issues. R. Heustis added that the Project Team has heard the length of construction is not the priority on either side of the river. The priority is on reducing impacts.

III. Project Schedule

W. Vachet said the environmental process will close this spring with a final agency coordination meeting, a briefing for elected officials, public hearings in Kentucky and Indiana and the final environmental document being submitted to FHWA. The RFP will be issued this summer. A contractor team is expected to be selected this fall and construction is expected to begin in early 2021.

Q: Is this a one-time bid?
A: We can decide if we adjust the RFP based on comments received from proposals.

R. Heustis added that information on allowable closures will be available at the public hearings and that the hearings will include public comments – written or oral. The environmental document will be submitted about two weeks before the public hearing.

IV. Final Questions

There were no final questions, A. Brady advised attendees to watch for updates on the website and the meeting adjourned at 7:30pm.

A bridge rehabilitation and painting project that will significantly extend the service life of the bridge.

SHERMAN MINTON BRIDGE

- First interstate bridge in Louisville
- Opened in 1962
- Unique double-decked design
- Carries six lanes of traffic (I-64 and US 150)
- Carries about 90,000 vehicles daily
- Long-term repairs needed to extend the life of the bridge
- Five bridge structures associated with the crossing

OVERVIEW

- $90+ million bridge rehabilitation
- Will add up to 30-years of service life to the bridge
- Replacement or refurbishment of all bridge decks
- Rehabilitation or replacement of structural steel elements and hanger cables
- New lighting
- Drainage repairs
- Painting of steel components

ENVIRONMENTAL PROCESS

- Study is required by law for federally-funded projects
- Analysis of temporary social, economic and environmental impacts
- Consideration of ways to avoid, minimize or mitigate temporary impacts
- Working with state, local and federal officials
- Public involvement is a key part of the study
- Project Team must identify best construction approach

CONSTRUCTION APPROACH

- INDOT and KYTC committed to safe and cost-effective project
- Working to minimize disruption to drivers
- No decisions have been made yet, multiple options will be explored
- Full closure = full access for construction and reduced timeline and costs, but would create more impacts to traffic
- Partial closure (lane restrictions) = maintain traffic, but would extend timeline and increase costs

FUNDING

- Fully funded through federal and state highway funds
- IN and KY will share the cost of the work
- There are no plans to toll the Sherman Minton Bridge

TIMELINE

Spring 2020

- Construction approach recommended in fall 2019
- Complete contract procurement, select design-build/best value contractor in fall 2020
- Construction expected to begin in early 2021
- Construction completed in two to three years

MAINTENANCE OF TRAFFIC OPTIONS

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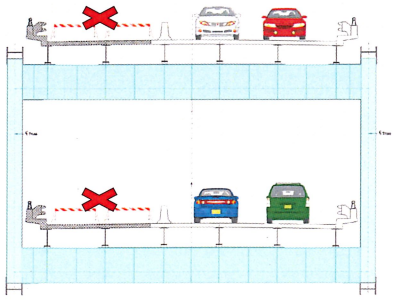
Two Lanes, Two Decks Open – Option 1

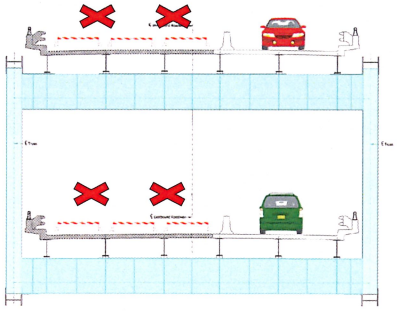


Estimated Duration:
- 21-37 Months

Access:
- 2 Lanes (EB & WB)
- Ramps
  - All open

Closures:
- 1 Lane (EB & WB)

One Lane, Two Decks Open – Option 2

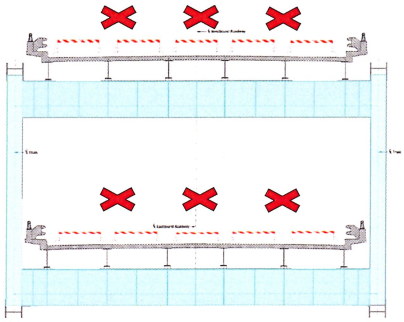


Estimated Duration:
- 18-28 Months

Access:
- 1 Lane (EB & WB)
- Ramps
  - All open

Closures:
- 2 Lanes (EB & WB)

Full Closure – Option 5

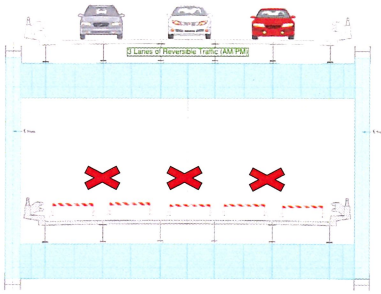


Estimated Duration:
- 15-23 Months

Access:
- None
- No ramps to bridge open

Closures:
- 6 lanes (Both decks)
- All ramps at bridge

One Deck Open (Alternating AM/PM) – Option 3

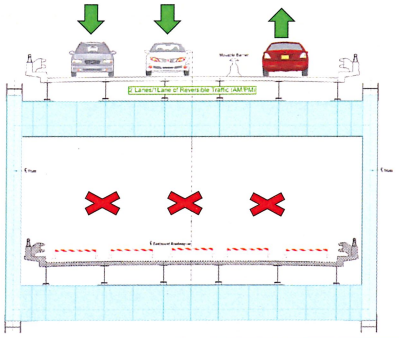


Estimated Duration:
- 26-38 Months

Access:
- 3 Lanes (EB) in AM
- 3 Lanes (WB) in PM
- Ramps – varies on deck & time of day

Closures:
- 3 Lanes (WB) in AM
- 3 Lanes (EB) in PM

One Deck Open (Reversible Lane AM/PM) – Option 4



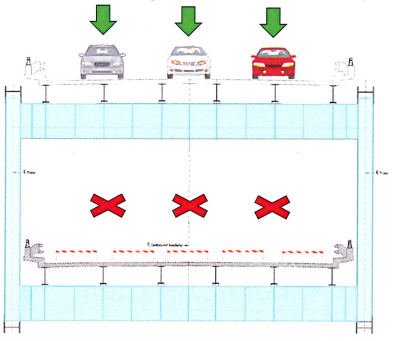
Estimated Duration:
- 26-38 Months

AM Access:
- 2 Lanes EB
- 1 Lane WB
- Ramps – varies based on deck

PM Access:
- 2 Lanes WB
- 1 Lane EB
- Ramps – varies based on deck

Closures:
- 3 Lanes (one deck)

One Deck Open (One Direction) – Option 6 (Phase 1 shown)



Estimated Duration:
- 26-38 Months

Access:
- Phase 1 Access: 3 Lanes WB
- Phase 2 Access: 3 Lanes EB
- Ramps – varies based on deck (phase)

Closures:
- 3 Lanes (one deck, two phases)

Phase 1 Closure: 3 Lanes EB
Phase 2 Closure: 3 Lanes WB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Environmental Justice (Louisville) Committee Meeting
February 6, 2020

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Meeting Goals

- Update advisory group
  - Maintenance of traffic options analysis
  - Avoidance and Minimization Considerations
- Solicit feedback to help inform technical documents
- Provide opportunity for discussion

Meeting Agenda

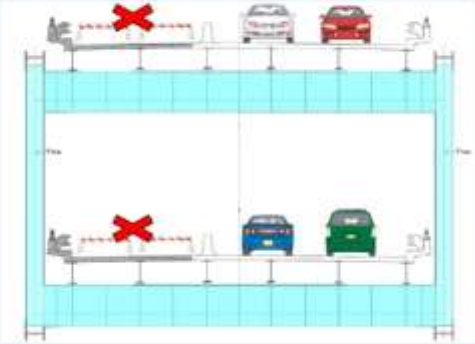
- What's Been Accomplished Since Meeting #3
- Maintenance of Traffic (MOT) Option Analysis
- Avoidance and Minimization Considerations
- Group Discussion and Report Out
- Project Schedule

What's Been Accomplished Since Meeting #3

- Open Houses in Louisville & New Albany
- Project Survey and Feedback
- Small Group Meetings
- Request for Qualifications from Contractor Teams
- Technical Analysis of MOT Options

MOT Options

Two Lanes, Two Decks Open – Option 1

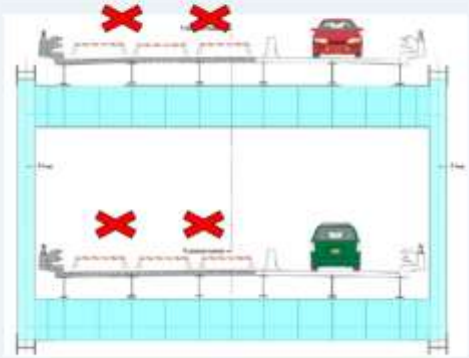


Estimated Duration:
- 21-37 Months

Access:
- 2 Lanes (EB & WB)
- Ramps
  - All open

Closures:
- 1 Lane (EB & WB)

One Lane, Two Decks Open – Option 2



Estimated Duration:
- 18-28 Months

Access:
- 1 Lane (EB & WB)
- Ramps
  - All open

Closures:
- 2 Lanes (EB & WB)

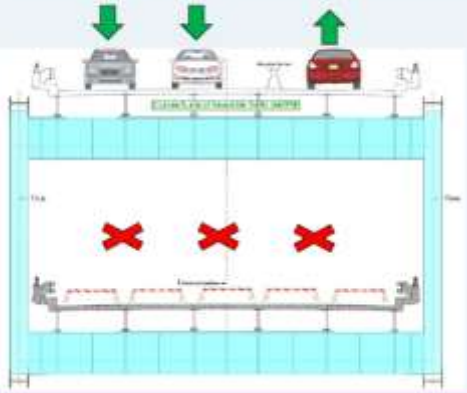
One Deck Open (Alternating AM/PM) – Option 3

Estimated Duration:
- 26-38 Months

Access:
- 3 Lanes (EB) in AM
- 3 Lanes (WB) in PM
- Ramps – varies on deck & time of day

Closures:
- 3 Lanes (WB) in AM
- 3 Lanes (EB) in PM

One Deck Open (Reversible Lane AM/PM) – Option 4



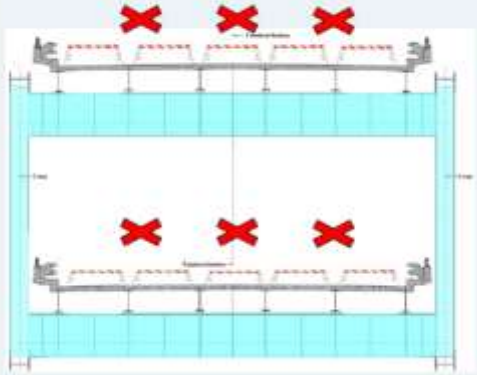
Estimated Duration:
- 26-38 Months

AM Access:
- 2 Lanes EB
- 1 Lane WB
- Ramps – varies based on deck

PM Access:
- 2 Lanes WB
- 1 Lane EB
- Ramps – varies based on deck

Closures:
- 3 Lanes (one deck)

Full Closure – Option 5

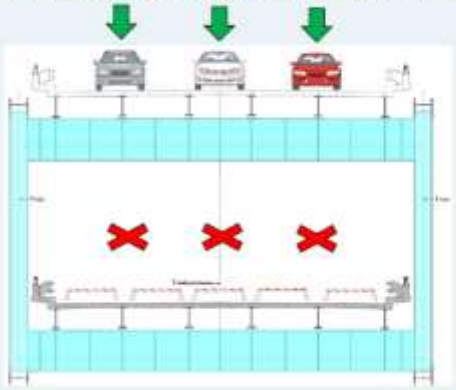


Estimated Duration:
- 15-23 Months

Access:
- None
- No ramps to bridge open

Closures:
- 6 lanes (Both decks)
- All ramps at bridge

One Deck Open (One Direction) – Option 6 (Phase 1 shown)



Estimated Duration:
- 26-38 Months

Access:
- Phase 1 Access: 3 Lanes WB
- Phase 2 Access: 3 Lanes EB
- Ramps – varies based on deck (phase)

Closures:
- 3 Lanes (one deck, two phases)

Phase 1 Closure: 3 Lanes EB
Phase 2 Closure: 3 Lanes WB

Preliminary Recommendations

- Preferred: MOT Options 1, 2 and 4
- Eliminate: MOT Options 3 and 6
- Minimize: MOT Option 5 (minimal days only)
  - In combination with other preferred options
  - Based upon constructability requirements
  - Additional discussion to follow
- MOT Options may vary per deck

MOT Options Analysis

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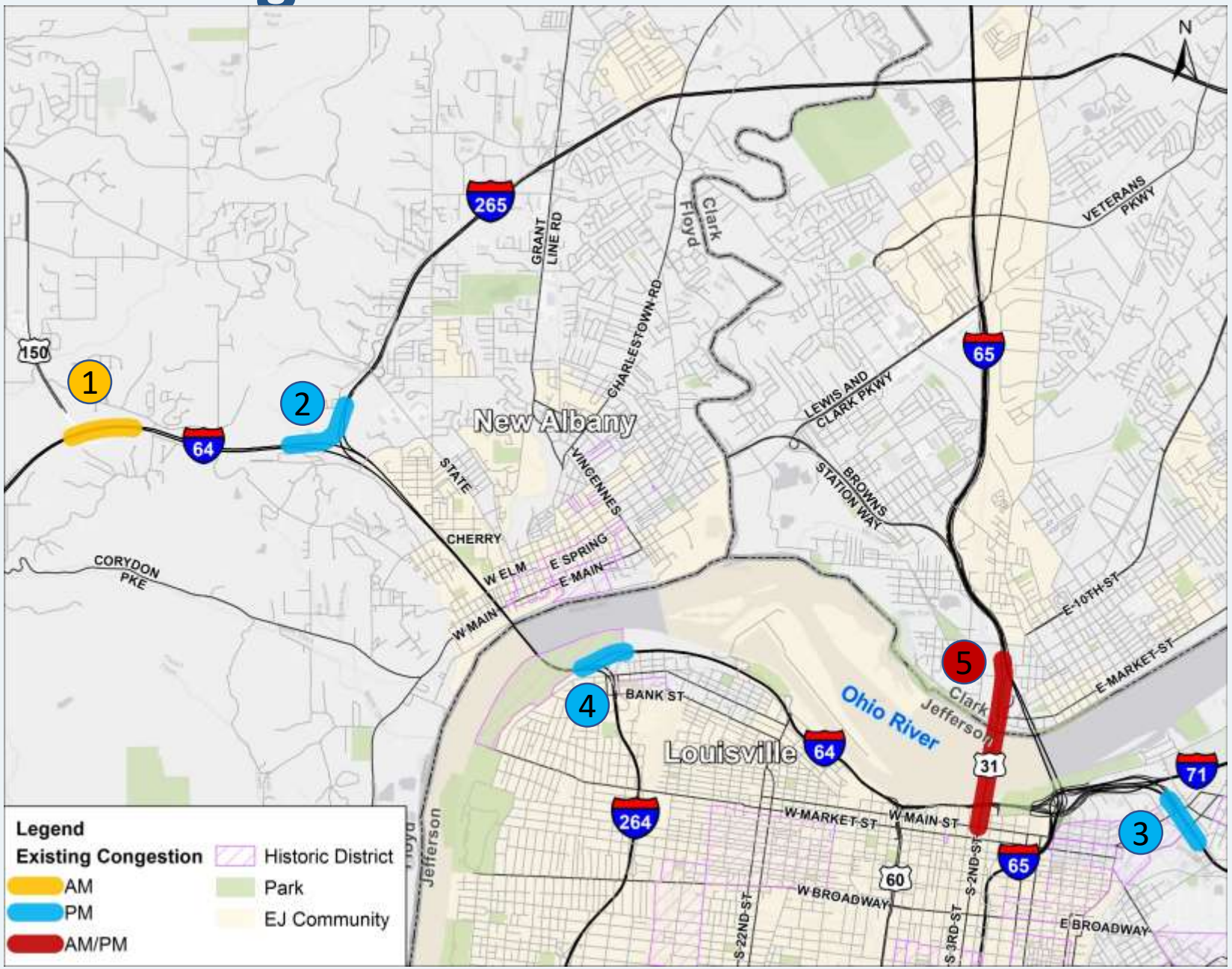
Existing Network



Existing Congestion Locations

- **AM Congestion:**
  1. EB I-64 at US 150
- **PM Congestion:**
  2. WB I-265 to WB I-64 ramp
  3. EB I-64
  4. WB I-64 at WB I-264
- **AM & PM Congestion:**
  5. Clark Memorial Bridge

With no mitigative strategies considered

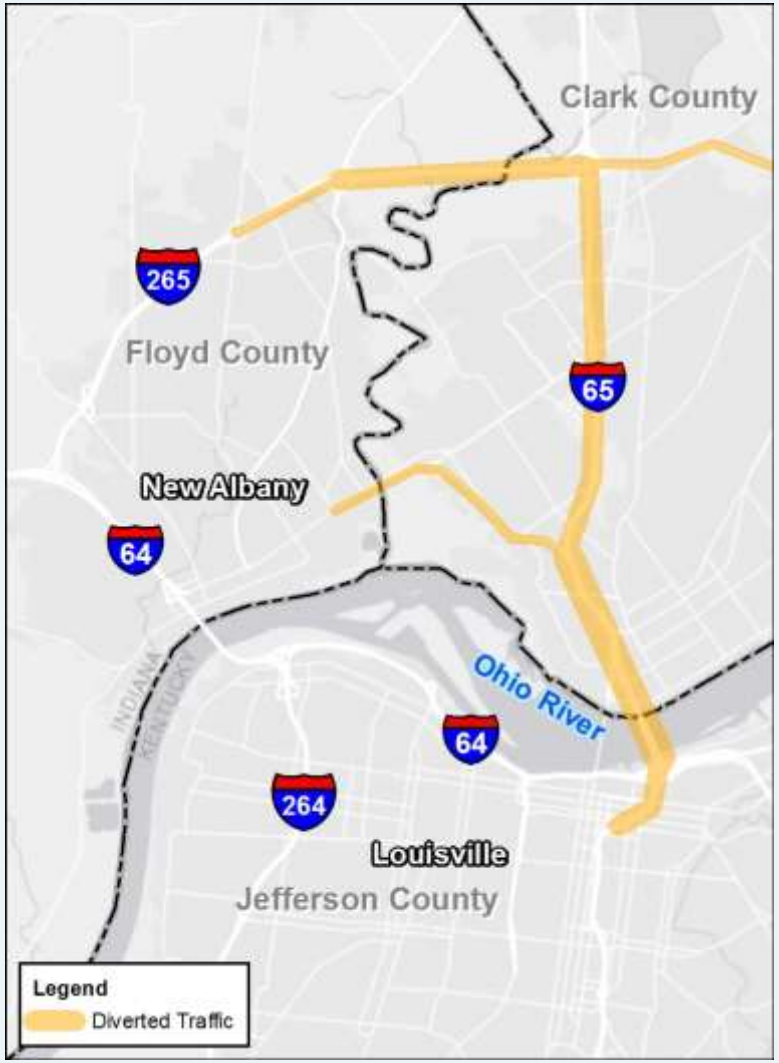
Existing Ohio River Bridge Volumes

BRIDGE CROSSING	2018 AADT	TRUCK %
I-64, Sherman Minton	90,000	11%
US 31, Clark	44,800	4%
I-65, Kennedy/Lincoln	64,200	24%
IN - SR 265, Lewis & Clark	21,200	17%
TOTAL	**220,200**	**14%**

Source: KIPDA and 2020 SMRP Traffic and MOT

* AADT - Average Annual Daily Traffic

General MOT Diversion Patterns



2 Lanes / 2 Decks Open

7,400 vehicles (8%)

1 Lane / 2 Decks Open

33,400 vehicles (37%)

Full Closure

90,000 vehicle(100%)

Community Impact Assessment (CIA)
&
Environmental Justice (EJ) Analysis

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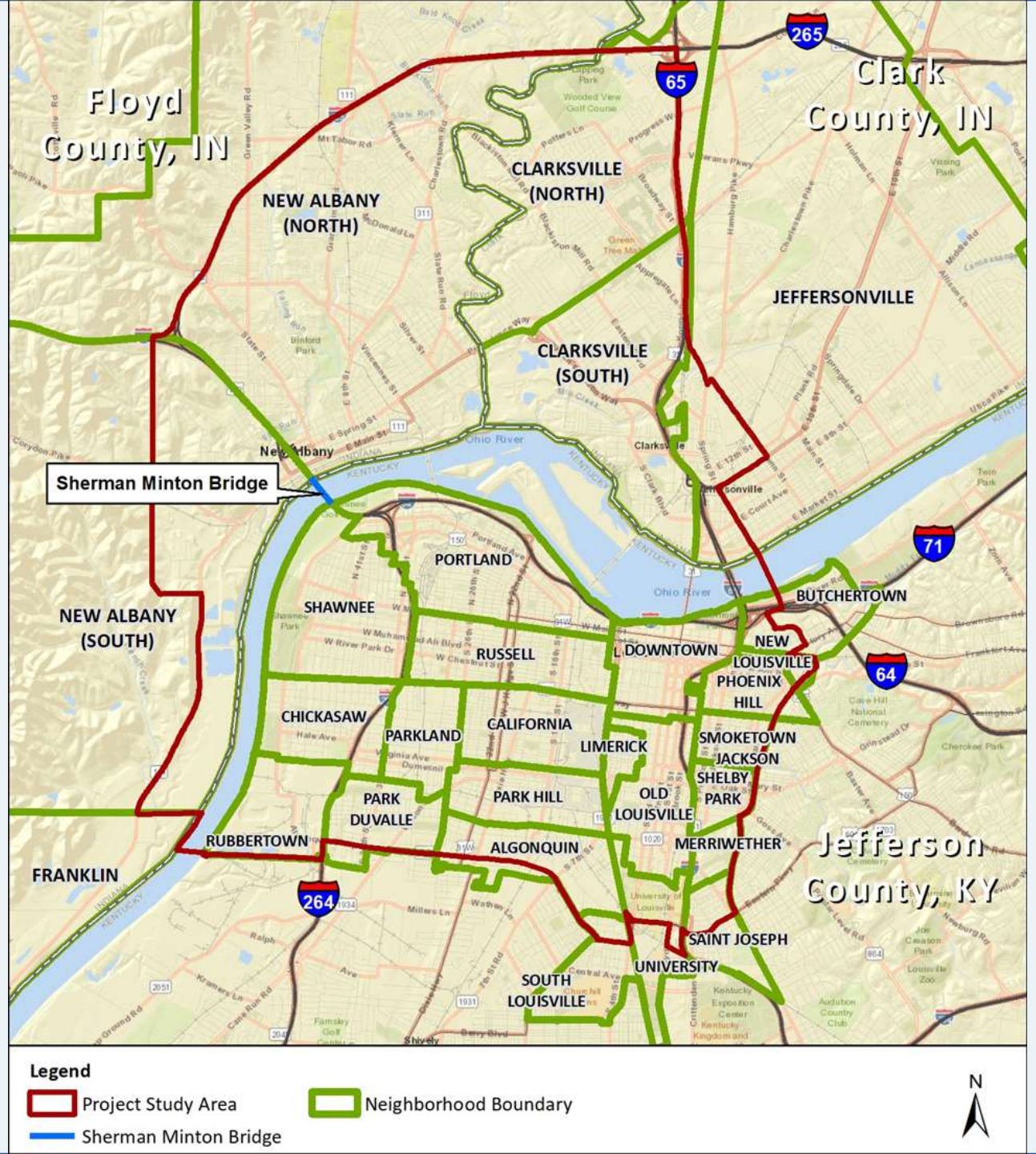
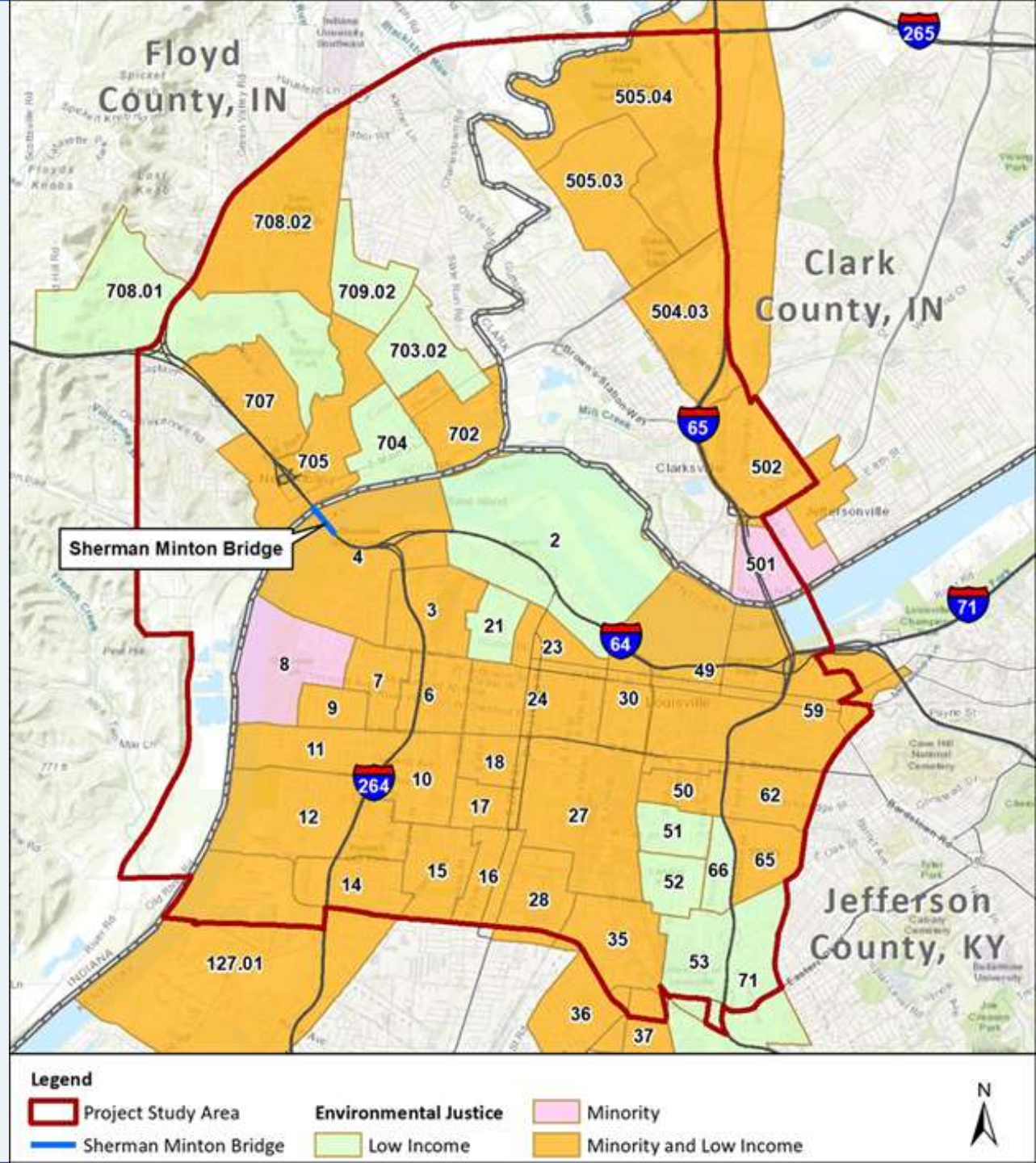
Communities and Neighborhoods



EJ Affected Communities



Community and EJ Impact Categories

- Traffic Diversions, Congestion, and Travel Time
- Transit (*Transit Authority of River City -TARC*)
- Economic
- Social

Traffic Diversions – Total Average Daily Volumes

Average Annual Daily Traffic	Base	MOT 1		MOT 2		MOT 3*		MOT 4		MOT 5		MOT 6	
Sherman Minton Bridge: Remaining Vehicles	**90,000**	**82,600**	**92%**	**56,600**	**63%**	49,400	55%	**70,300**	**78%**	**0**	**0%**	43,400	48%
Diverted to Other Bridges: Total Vehicles	**0**	**7,400**	**8%**	**33,400**	**37%**	40,600	45%	**19,700**	**22%**	**90,000**	**100%**	46,600	52%
*Clark Memorial / 2nd St. Bridge***	*0*	*700*	*9%*	*4,200*	*13%*	*7,500*	*18%*	*3,400*	*17%*	*11,800*	*13%*	*6,400*	*14%*
Kennedy/Lincoln Bridges (toll)	*0*	*5,700*	*77%*	*23,600*	*71%*	*27,500*	*68%*	*13,500*	*69%*	*64,000*	*72%*	*33,500*	*72%*
Lewis & Clark Bridges (toll)	*0*	*1,000*	*14%*	*5,600*	*16%*	*5,600*	*14%*	*2,800*	*14%*	*13,200*	*15%*	*6,700*	*14%*

**Does not account for twice a day 90-minute closures for direction change*

***Clark Memorial Bridge is at capacity resulting in a nearly an equivalent amount of traffic shifting to Kennedy/Lincoln bridges*

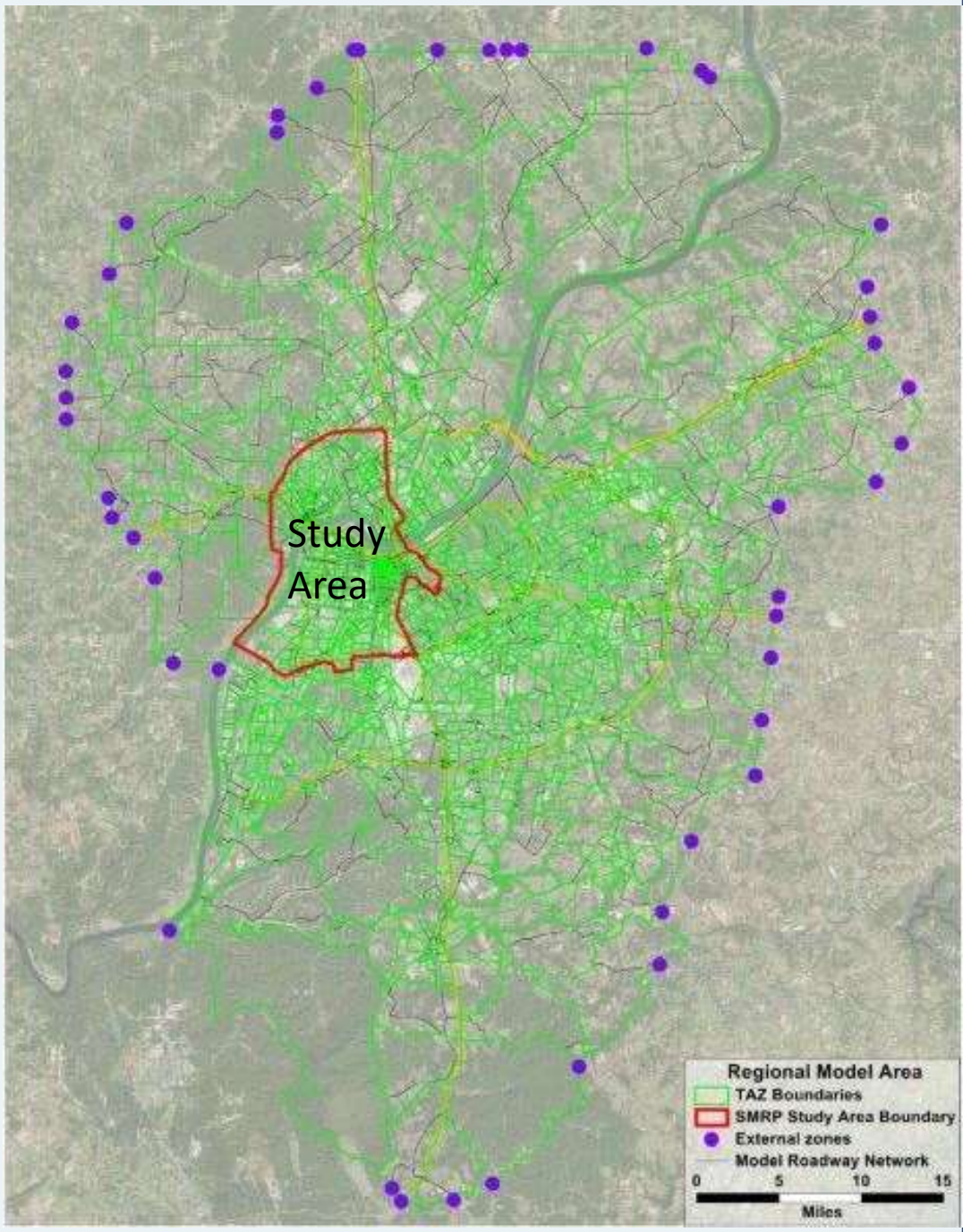
Traffic Diversions – EJ Average Daily Volumes

Average Annual Daily Traffic	Base	MOT 1		MOT 2		MOT 3*		MOT 4		MOT 5		MOT 6	
Sherman Minton Bridge: Remaining Vehicles	**90,000**	**82,600**	**92%**	**56,600**	**63%**	49,400	55%	**70,300**	**78%**	**0**	**0%**	43,400	48%
Diverted to Other Bridges: Total Vehicles	**0**	**7,400**	**8%**	**33,400**	**37%**	40,600	45%	**19,700**	**22%**	**90,000**	**100%**	46,600	52%
Diverted to Other Bridges: EJ Passenger Vehicles	0	1,400	19%	7,000	21%	11,500	28%	5,200	26%	16,400	18%	9,600	21%
Diverted to a Tolled Bridge: EJ Passenger Vehicles	0	700	50%	2,700	39%	900	8%	1,800	35%	7,100	43%	3,100	32%

**Does not account for twice a day 90-minute closures for direction change*

Traffic

- Traffic Analysis Zone (TAZ)
  - Non-EJ and EJ TAZs (KIPDA)
- AM Peak Period
  - Basis for Non-EJ and EJ comparisons
- EJ Trip
  - Originating from EJ TAZ in Study Area
- Non-EJ Trip
  - Originating from any other TAZ

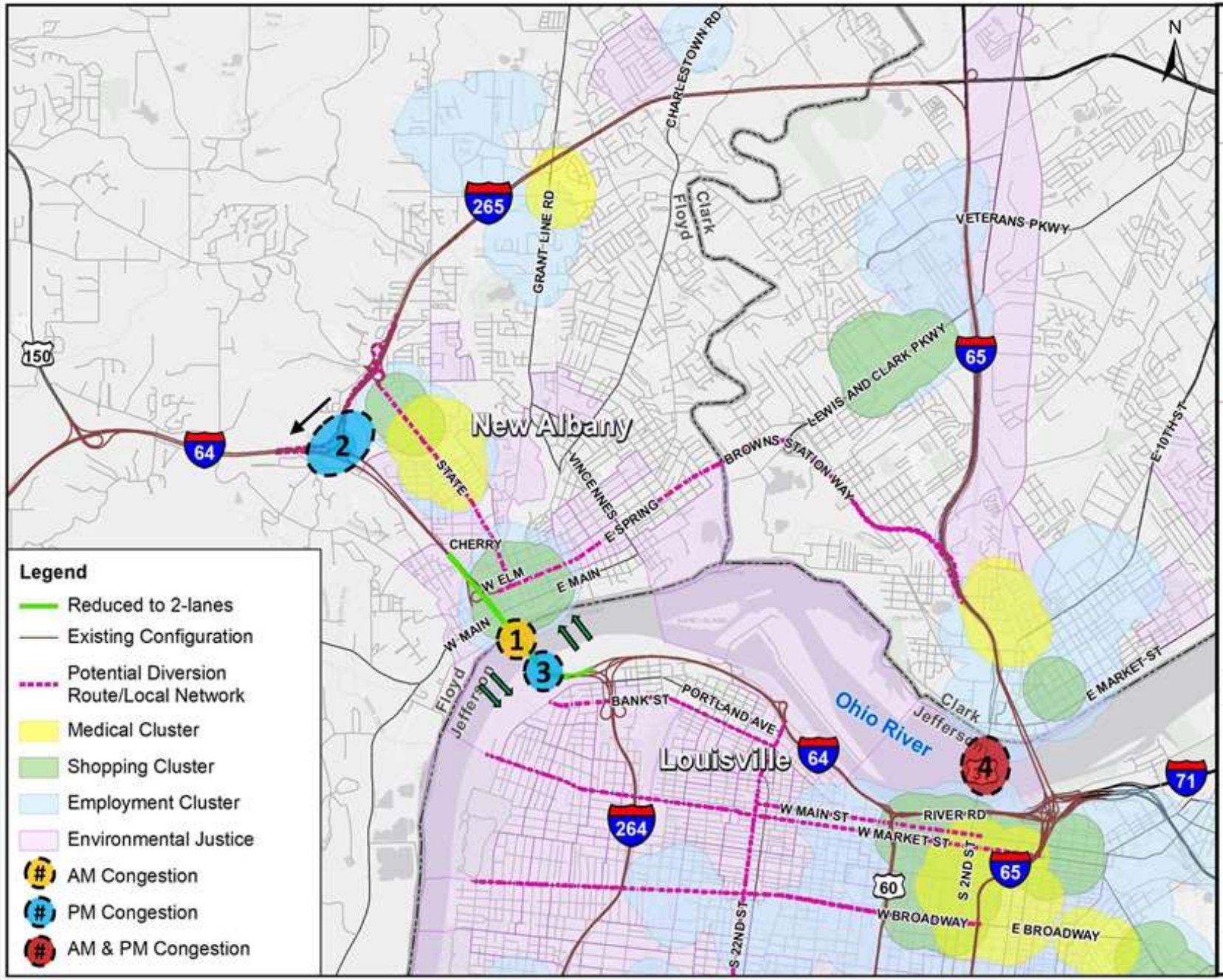


MOT Option 1

Lowest Network Congestion

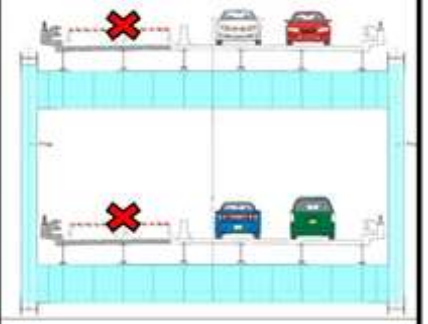
Longest Duration

Highest Cost



MOT Option 1

- Two Lanes, Two Decks Open
- Single Lane Closure EB and WB



ESTIMATED DURATION:

- 21-37 Months
- 7-12 Months Each Phase

ACCESS:

- 2 Lanes EB and WB

CLOSURES:

- 1 Lane EB and WB

PEAK CONGESTION:

- **AM Congestion:**
  1. EB I-64 (Bridge)
- **PM Congestion:**
  2. WB I-265 to WB I-64*
  3. WB I-64 (Bridge)
- **AM & PM Congestion:**
  4. Clark Memorial Bridge*

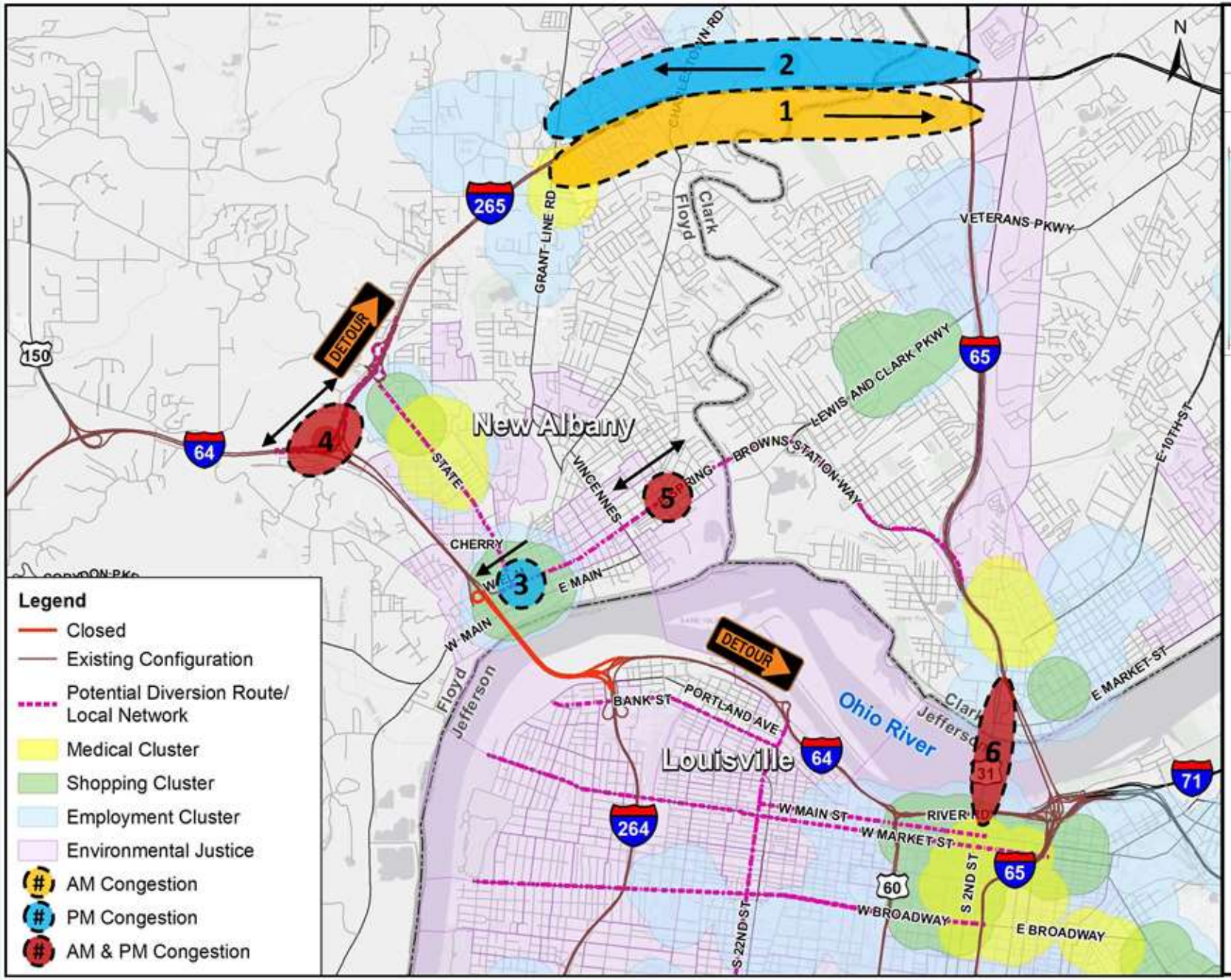
*Has Existing Congestion

MOT Option 5

Highest Network Congestion

Shortest Duration

Lowest Cost



MOT Option 5

- Full Closure

ESTIMATED DURATION:

- 15-23 Months

ACCESS:

- None

CLOSURES:

- 6 Lanes (Both Decks)

PEAK CONGESTION:

- **AM Congestion:**
  1. EB I-265 to SB I-65
- **PM Congestion:**
  2. WB I-265
  3. WB Spring Street (Downtown New Albany)
- **AM & PM Congestion:**
  4. EB I-64 to EB I-265 / WB I-265 to WB I-64*
  5. EB and WB Spring Street
  6. Clark Memorial Bridge*

*Has Existing Congestion

Local Congestion

- Select Street Network
- Peak Hour Traffic

New Albany, IN - Downtown				
MOT Option	Westbound: Spring Street		Eastbound: Elm Street	
	AM	PM	AM	PM
Base Condition	650	730	270	490
MOT 1	550	740	280	380
MOT 2	410	740	330	200
MOT 3	740	470	170	560
MOT 4	540	650	280	400
MOT 5	450	950	500	250
MOT 6	740	1,100	570	560

New Albany, IN - East				
MOT Option	Westbound: Spring Street		Eastbound: Spring Street	
	AM	PM	AM	PM
Base Condition	540	710	430	580
MOT 1	470	750	470	470
MOT 2	450	930	720	420
MOT 3	810	710	480	850
MOT 4	520	780	580	540
MOT 5	740	1,210	1,080	710
MOT 6	810	1,240	1,100	850

Highlighting		
Low	Under Capacity	Less than 920 Vehicles
Medium	Near Capacity	920 to 1,030 Vehicles
High	At Capacity	More than 1,030 Vehicles

Traffic Impacts

- MOT Options 1, 2 and 4 maintain continuous travel on SMB in both directions
  - MOT Option 1: Lowest diversions and congestion
  - MOT Options 2 and 4: Lower diversions, but offsets diversion and congestion
- MOT Options 5: Higher diversions and congestion

Transit (TARC)

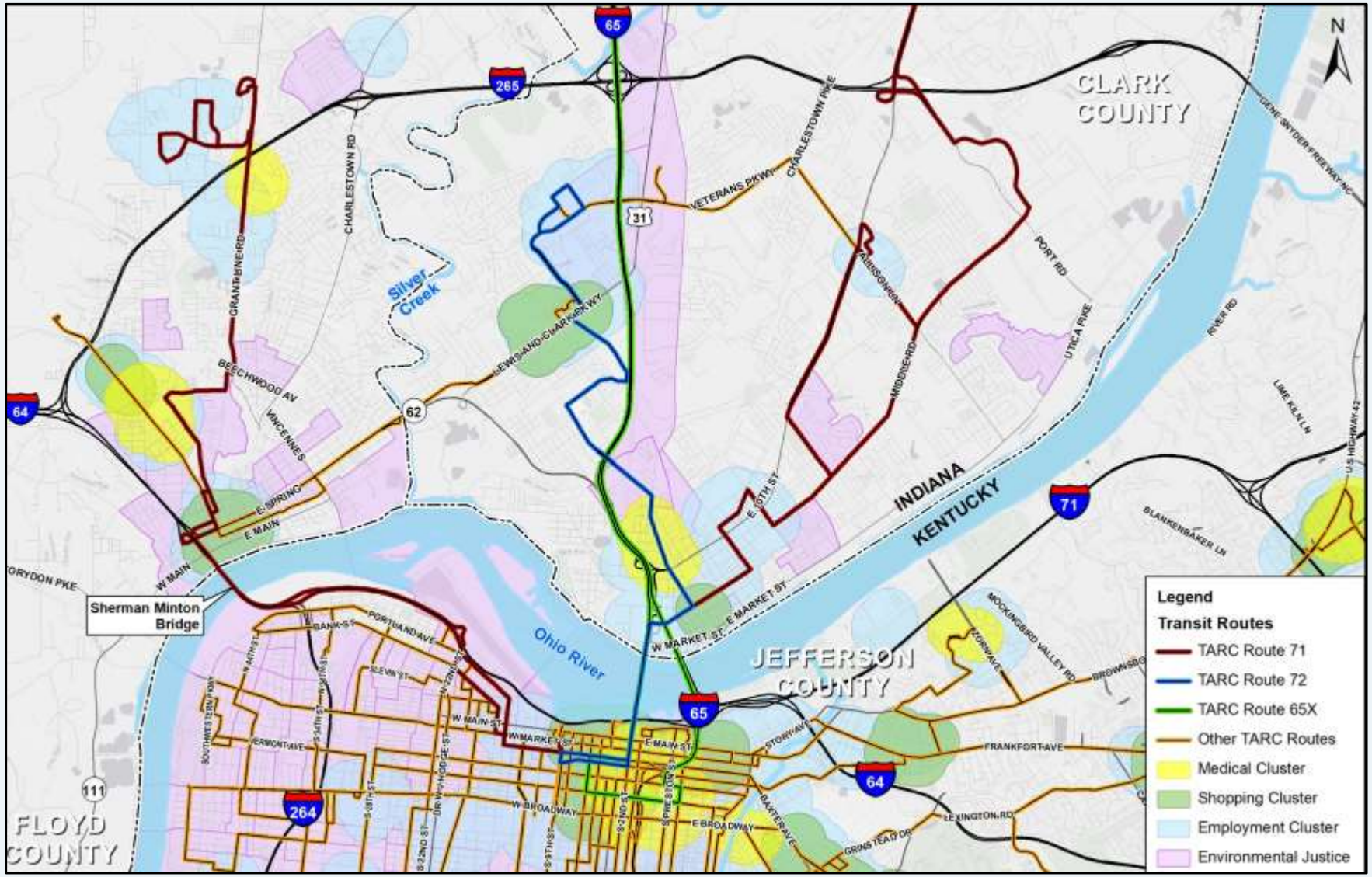
- TARC User Profile*:
  - 50+% minority
  - 30+% are low-income
  - Nearly 75% do not own cars

- Transit users would experience temporary impacts and potential detours (varying by MOT Option)
- Due to fixed-route nature of transit, there's greater emphasis on reliability and on-time performance

*TARC Profile source: IQS Research for TARC. *General Onboard Riders: Ridership and Impact Analysis*. February 2017. Page 4.

Transit Access and Community Clusters

- TARC Route 71
  - SMB
  - Clark/2nd St.
- TARC Route 72
  - Clark/2nd St.
- TARC Express 65
  - Clark/2nd St.
  - I-65/Kennedy



Overall Transit Impacts

- MOT Options 1, 2 and 4 maintain continuous travel on SMB in both directions and would be less disruptive
- MOT Option 5 (full closure) would require rerouting of TARC Route 71

Economic Impacts

- All vehicles for project duration
- Average User Costs: Non-EJ & EJ Trips
  - Average Trip Length
  - Average Trip Travel Time
  - Average Tolls
- Local Businesses

Economic Impacts: All Vehicles

ECONOMIC IMPACTS TO DRIVERS (All Vehicles For Project Duration)							
CRITERIA	Base	MOT 1	MOT 2	MOT 3	MOT 4	MOT 5*	MOT 6
Additional User Costs Per Trip	NA	$0.02	$0.09	$0.10	$0.06	$0.26	$0.14
Trips Per Day (million trips)	2.453	2.453	2.453	2.453	2.453	2.453	2.453
Duration of MOT Option (years)	NA	3	2	2.5	2.5	1.5	2.5
Total Additional Driver User Costs (millions)	NA	$41.06	$121.47	$165.71	$95.58	$251.06	$218.04
Overall River Crossing Trip Cost	NA	Low	Medium	Medium	Low	High	High

Source: SMRP TDM outputs in the 2020 SMRP Traffic and MOT; some differences due to rounding

*MOT 5 calculated for a Full Duration construction period.

User Cost Methodology

- Base Average All Non-EJ Cross-River Trips (AM period)
  - User Cost = (Travel Time x Value of Time) + (Distance x Operating Cost) + Toll Paid
- *Example*
  - User Cost = (35.0 min x $0.3771/min) + (20.3 miles x $0.22/mile) + $1.06
  - User Cost = $13.55 + $4.46 + $1.06 = $19.07

- Source of Data
  - **Value of Time** *($/min)* - based on a % of regional median income *(US Census)*
  - **Operating Cost** *($/mile)* - includes fuel, maintenance, repair and tires

    (American Automobile Association 2018)
  - **Toll Paid** ($) - is based on current toll rates

    (Provided by Riverlink for vehicle type/transponder/account type)

Average User Cost[1] (*AM Peak Period*): Non-EJ and EJ Trips

MOT Option	Non-EJ Trips			EJ Trips			Difference between Non-EJ to EJ	
	Average Trip Cost $	Increase		Average Trip Cost $	Increase			
		$	%		$	%	$	Change in %
Base Condition	$19.07	-	--	$11.84	-	--	$7.23	37.9%
MOT 1	$19.59	$0.52	2.7%	$12.25	$0.41	3.5%	$7.34	0.4%
MOT 2	$20.44	$1.37	7.2%	$13.02	$1.18	10.0%	$7.42	1.6%
MOT 3*	$19.64	$0.57	3.0%	$13.16	$1.32	11.1%	$6.48	4.9%
MOT 4	$19.75	$0.68	3.6%	$12.72	$0.88	7.4%	$7.03	2.3%
MOT 5	$21.84	$2.77	14.5%	$14.82	$2.98	25.2%	$7.02	5.8%
MOT 6**	$20.50	$1.43	7.5%	$13.40	$1.56	13.2%	$7.10	3.3%

Source: SMRP TDM outputs included in the 2020 SMRP Traffic and MOT; some differences due to rounding

Notes: **Non-EJ Trip** – those trips originating outside of a Study Area EJ TAZ

EJ Trip – those trips originating from within a Study Area EJ TAZ

User Cost – Based cost per mile, travel time, and if there are toll costs for the TDM trips

* MOT 3 - AM Peak does not account for closed reverse direction or daily 90-minute closures for AM/PM change

** MOT 6 - AM Peak does not account for closed reverse direction during each construction phase

[1] *Includes toll values*

Economic Impacts

- Local businesses closest to SMB that rely heavily on cross-river patronage will be most affected
- Impacts vary by MOT Option:
  - MOT Option 1: Lowest economic impact, longest duration
  - MOT Options 2 and 4: Continuous two-way SMB travel lanes, but offsets diversion and congestion
  - MOT Options 5: Disruption of cross-river commerce and higher economic impact

Social Impacts

All of the MOT options will have varying degrees of temporary effects for affected communities, services, and facilities based on:

- Community Access, Mobility and Cohesion
- Quality of Life

MOTs that maintain two-way travel over the SMB and reduced congestion have lower social impacts.

Community Access, Mobility, and Cohesion

- SMB traffic restrictions, diversions, and travel time increases will affect community mobility and access
- Community cohesion would be affected by all MOT Options and is completely disrupted by the full duration of MOT Option 5; especially EJ populations

Quality of Life

- Air Quality:
  - The Project is included in KIPDA's current and conforming transportation plan and is exempt from air quality conformity analysis
- Noise Impacts:
  - Not anticipated to be adverse for Non-EJ or EJ residents

Overall Social Impacts

- MOT 1 is least disruptive, but has the longest durations
- MOT 2, and MOT 4 are less disruptive by maintaining continuous travel on SMB in both directions and offsets local access closures
- MOT 5 completely disrupts cross-river mobility and cohesion

Potential for "Disproportionately High" and "Adverse" Impacts to EJ Populations

TEMPORARY IMPACT CATEGORY	SUB-CATEGORY	MOT 1		MOT 2		MOT 3		MOT 4		MOT 5		MOT 6	
		Disp. High	Adv.	Disp. High	Adv.	Disp. High	Adv.	Disp. High	Adv.	Disp. High	Adv.	Disp. High	Adv.
Traffic	Diversions										X		
	Access & Congestion										X		X
	Travel Distance												
	Travel Time												
Transit	TARC Riders*					X	X			X	X	X	X
Economic	Diversion to Tolls		X		X		X		X		X		X
	User Costs - Network		X		X		X		X		X		X
	User Costs - Local						X				X		X
	Local Businesses**						X		X		X		X
Social	Access, Mobility, Cohesion						X		X	X	X		X
	Quality of Life (Air/Noise)												
Overall Potential (Yes/No)		**No**		**No**		**Yes**		**No**		**Yes**		**Yes**	

* Applies primarily to cross-river riders on TARC Route 71

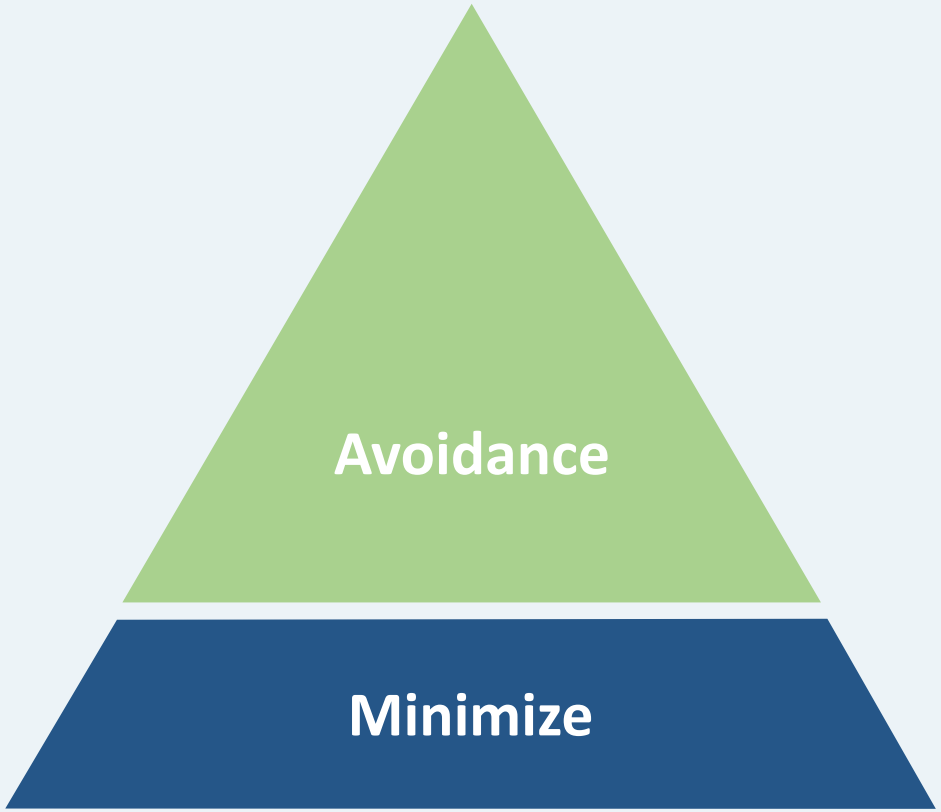
** Applies primarily to businesses in downtown New Albany

Avoidance and Minimization Considerations

SHERMAN MINTON RENEWAL

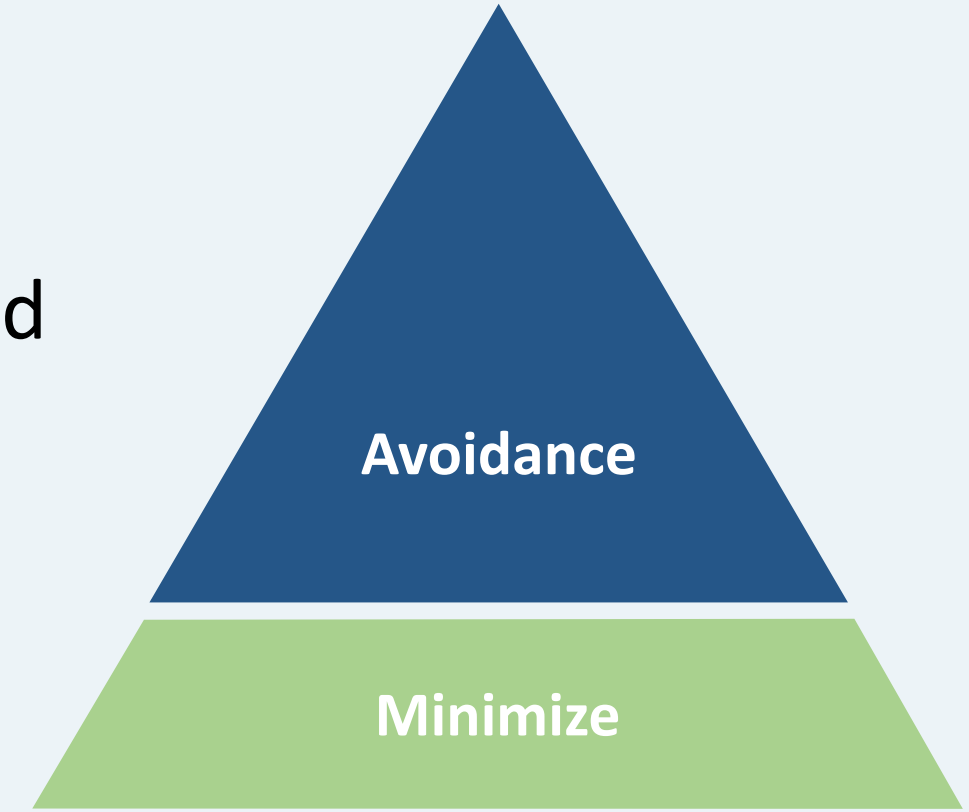
Avoidance

- Stay within existing Right-of-Way (ROW)
- Rehabilitate existing structures
- No added capacity



Minimize

- Shorten closure durations
- Minimize the number of lanes closed
- Additional temporary ramp lanes
- Coordinate with local officials
- Frequent communications
- Use of Intelligent transportation system (ITS)



Group Discussion

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Feedback Requested

- Recommended MOT Options
- Limiting Use of MOT Option 5
- Minimization Strategies

Preliminary Recommendations

- Preferred: MOT Options 1, 2 and 4
- Eliminate: MOT Options 3 and 6
- Minimize: MOT Option 5 (minimal days only)
  - In combination with other preferred options
  - Based upon constructability requirements
  - Additional discussion to follow
- MOT Options may vary per deck

Project Schedule: What's Next?

SHERMAN MINTON RENEWAL

Project Schedule

Spring 2020

- Final Agency Coordination Meeting
- Brief Elected Officials
- Public Hearings (KY & IN)
- Finalize Environmental Document and submit to FHWA

Summer 2020

- Request for Proposals (RFP) Issued

Fall 2020

- Contractor Team Selected

Early 2021

- Construction Begins

Thank You

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