

# I-70 Section of Independent Utility 4 Re-evaluation

Community Advisory Group (CAG) Meeting #2

July 11, 2022

4PM – 6PM

Columbia ARC



# Agenda

- Introductions
- Re-Cap of CAG Meeting #1
- Design-Build Project Delivery
- Reasonable Alternatives
- Next Steps



# Introductions



# Please Introduce Yourself, Your Group, and/or Your Interest Area

- MoDOT Staff
- Consultant Staff
- Community Advisory Group Members

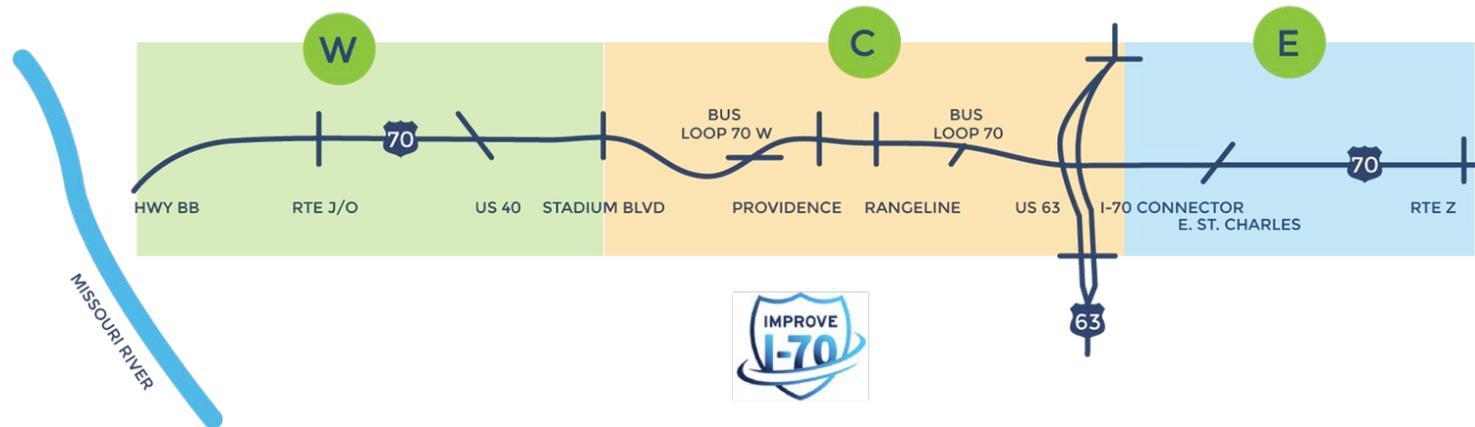


# Re-Cap of CAG Meeting #1



# CAG #1 Meeting Re-Cap

- 17 CAG members in attendance
- CAG roles and responsibilities
- NEPA basics
- Review of study corridor



17 miles long with 10 interchanges



# CAG #1 Meeting Re-Cap

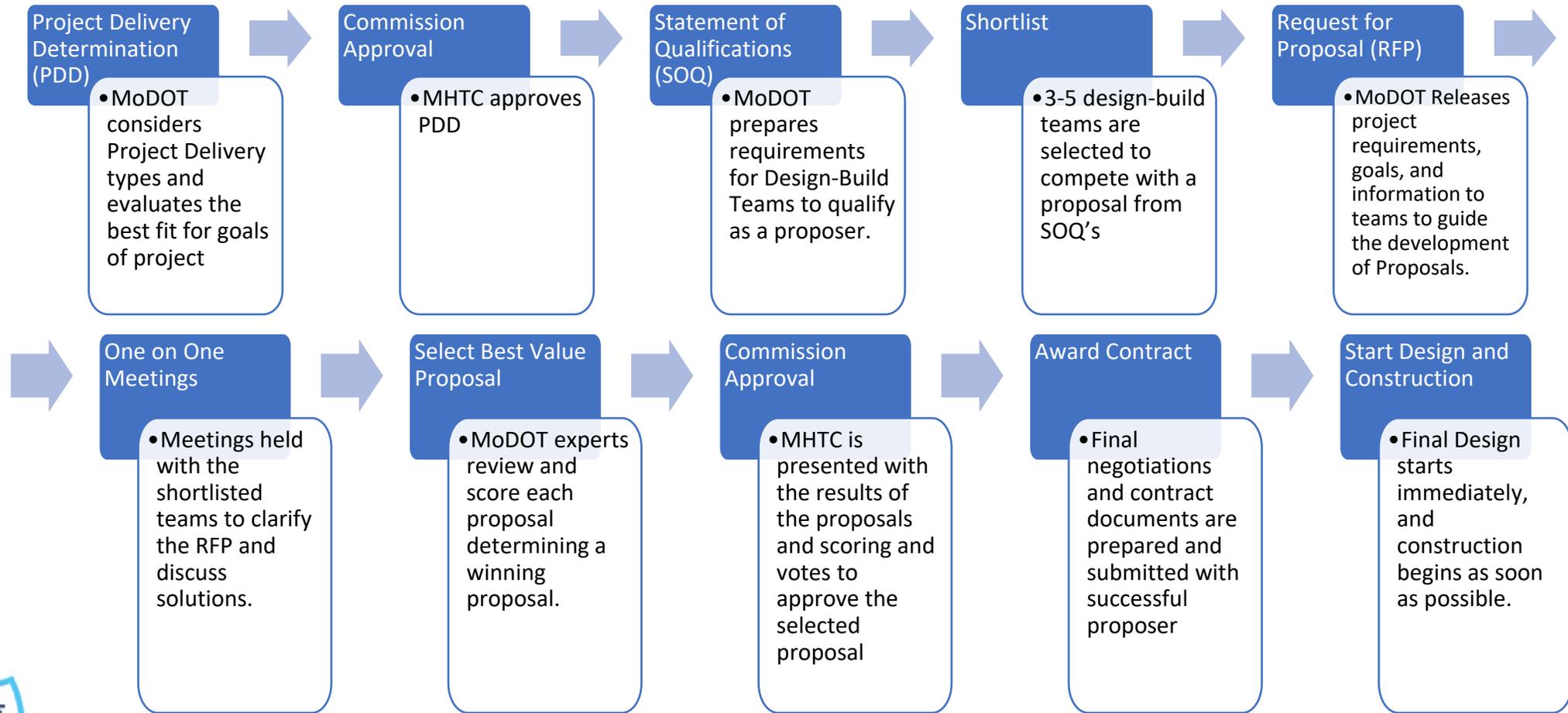
- Previous corridor studies
  - First Tier EIS
  - Second Tier EIS – SIU 4
- Purpose and Need
  - Accommodate existing and future traffic volumes on I-70
  - Improve outdated I-70 design elements
  - Accommodate all users of I-70; and
  - Improve user safety



# Design-Build Project Delivery



# MoDOT Design-Build Process



# The Design-Build Process

- Design-Build leverages private sector innovation to build on existing conceptual designs through a competitive process.
- Advantages of a Design-Build Project
  - Faster construction and reduced costs
  - Promotes innovation
  - Improves quality
- Typical Timeline

- Design-Bid-Build



- Design-Build



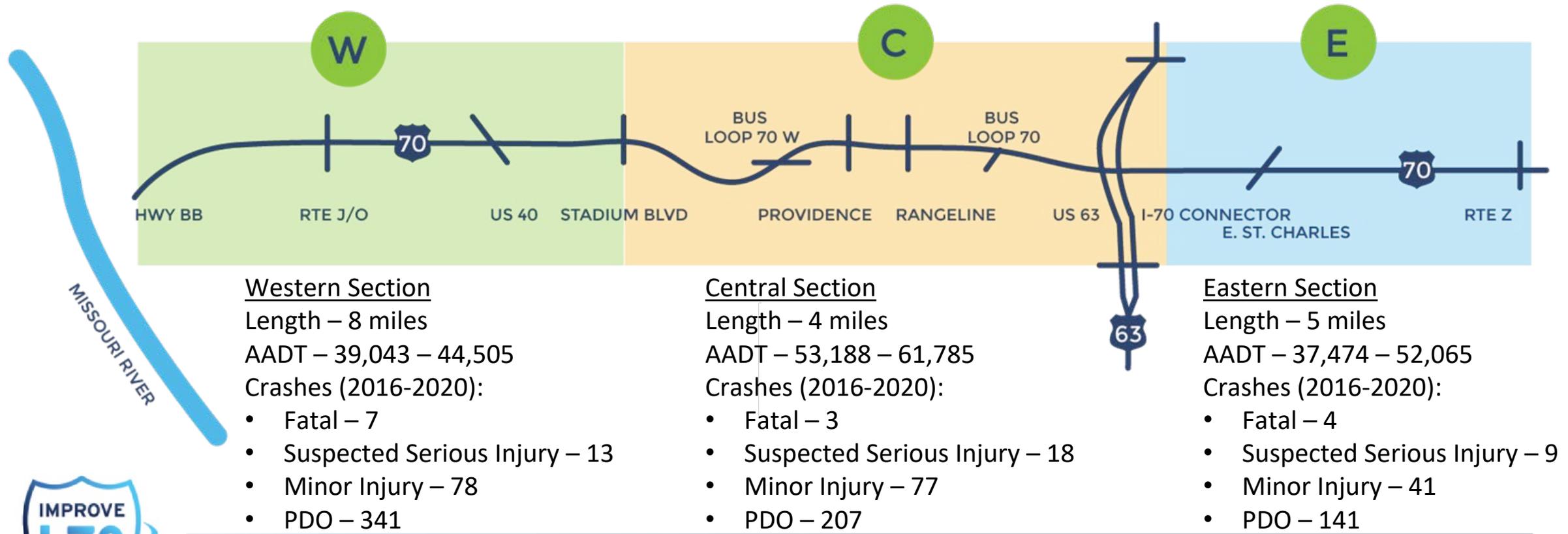
# Reasonable Alternatives



# I-70 SIU 4 Mainline Facts & Issues

17 miles long with 10 interchanges

One additional lane in each direction of I-70 (three lanes in each direction)



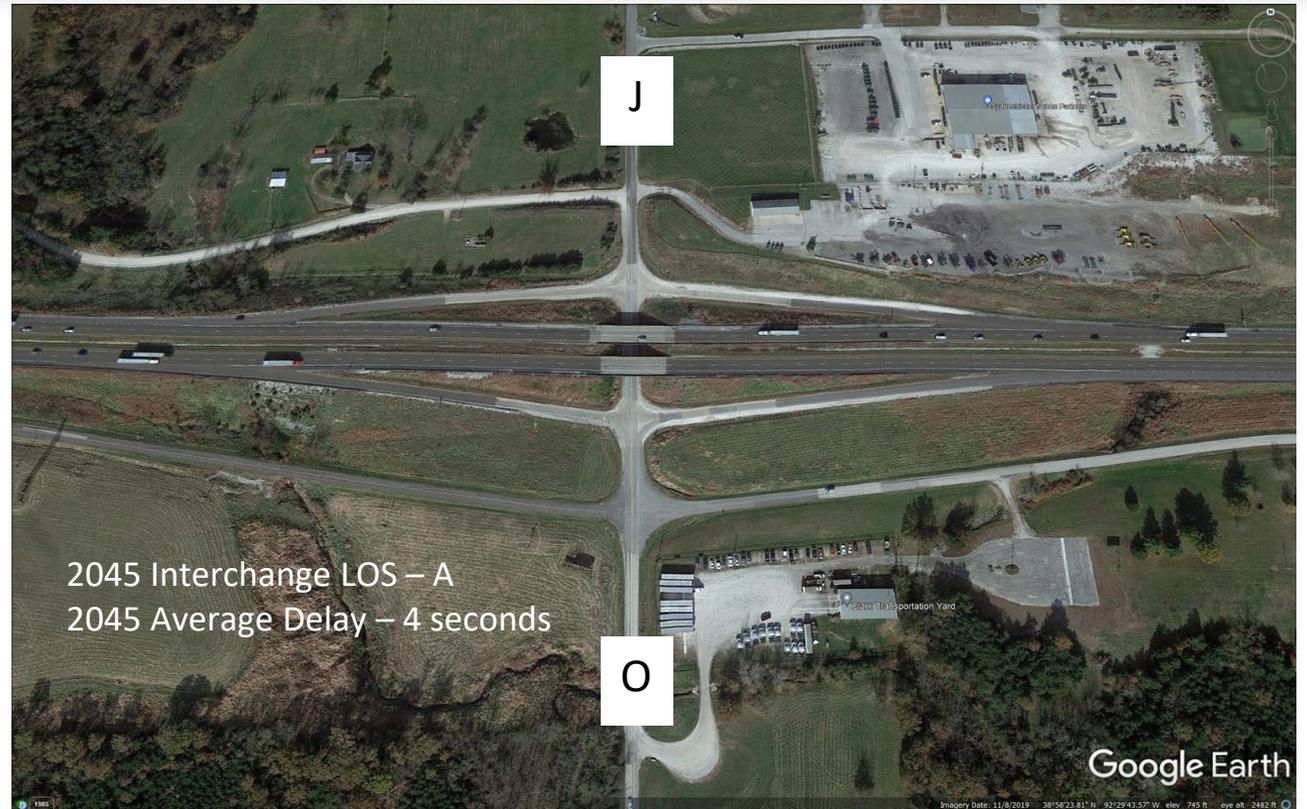
# Routes J/O

## Issues identified by study team

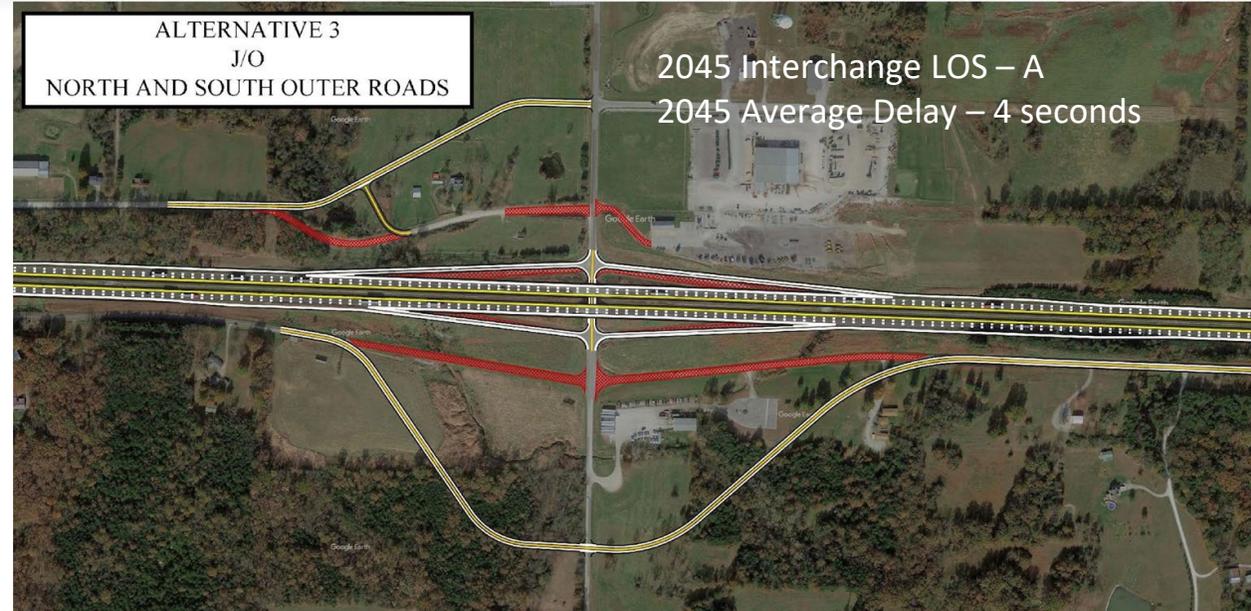
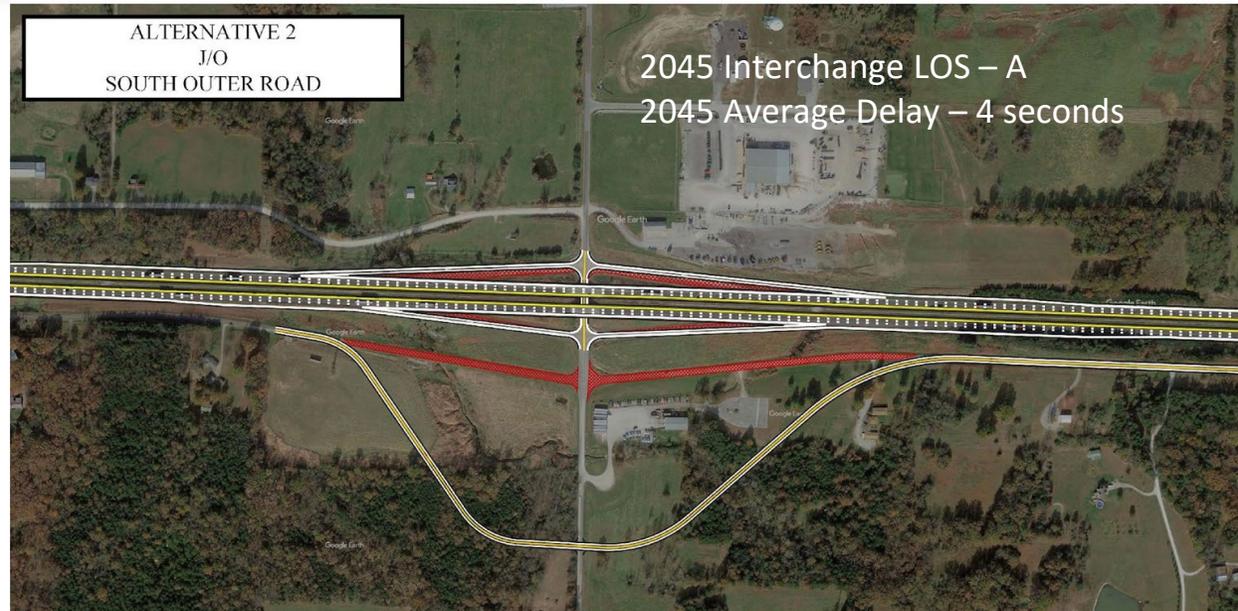
- Outer road spacing
- Ramps do not meet current design standards

## Issues identified by CAG

- Sight distances related to off ramps



# Routes J/O Reasonable Alternatives

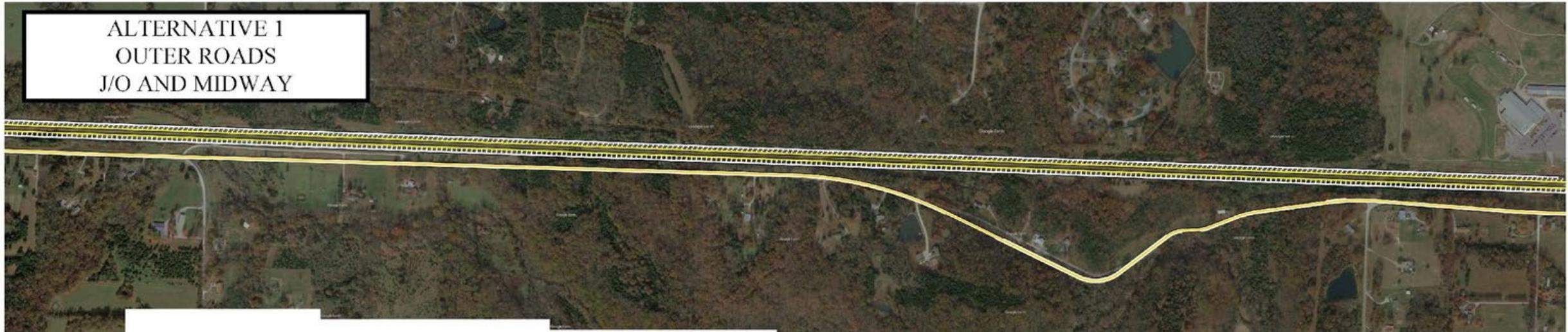


## Notes:

- Both alternatives reconstruct the diamond interchange with longer ramps. Alternative 2 includes improvements to the South Outer Road. Alternative 3 includes improvements to the North and South Outer Roads.
- Improvements shown are not on the Statewide Transportation Improvement Plan (STIP)
- Average Daily Traffic (ADT) on Routes J/O – 1,330 (2021) | 1,500 (2045)
- 2016-2020 Crash History at Interchange Intersections – 2 Property Damage Only



# Continuous Outer Road South of I-70



## Notes:

- Improvements shown are not on the Statewide Transportation Improvement Plan (STIP)
- 3.46 miles of outer road improvements
- Will require 1 bridge



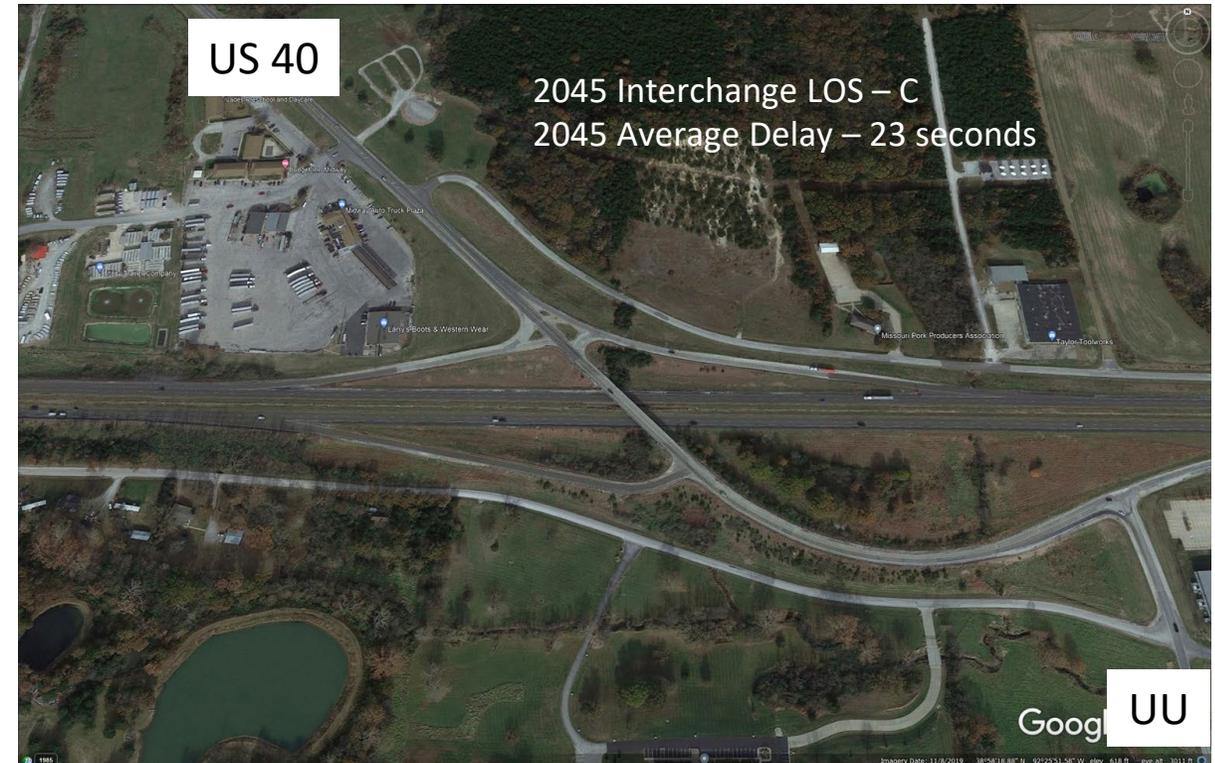
# US 40/Midway

## Issues identified by study team

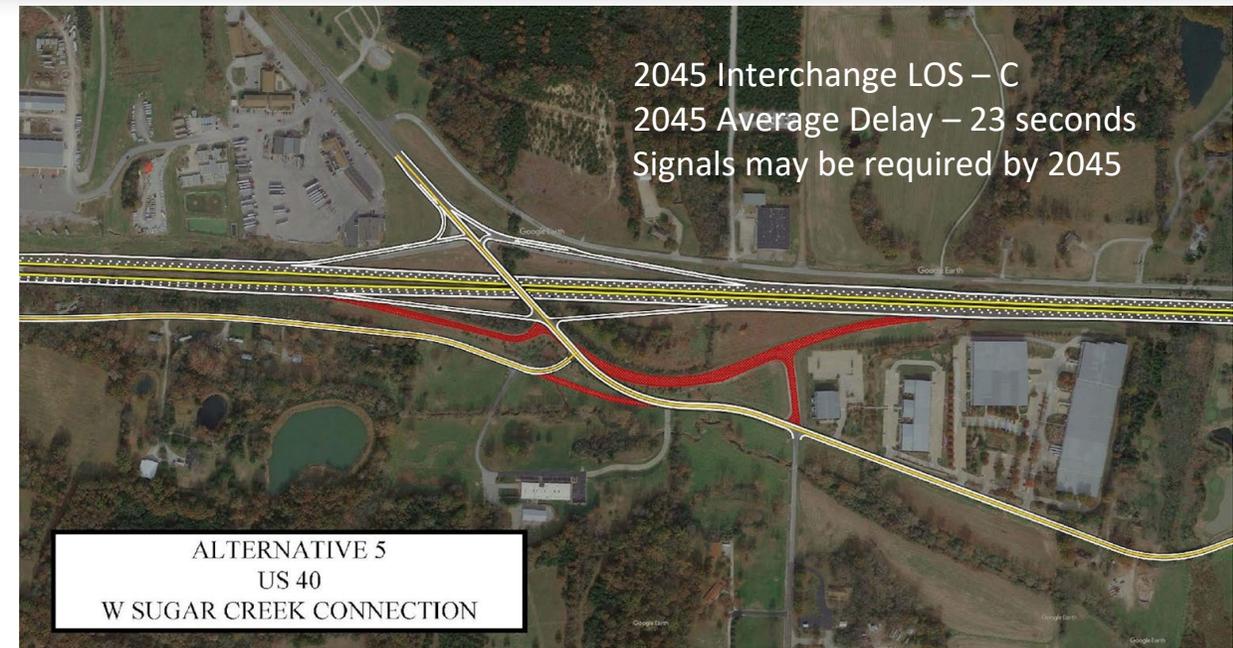
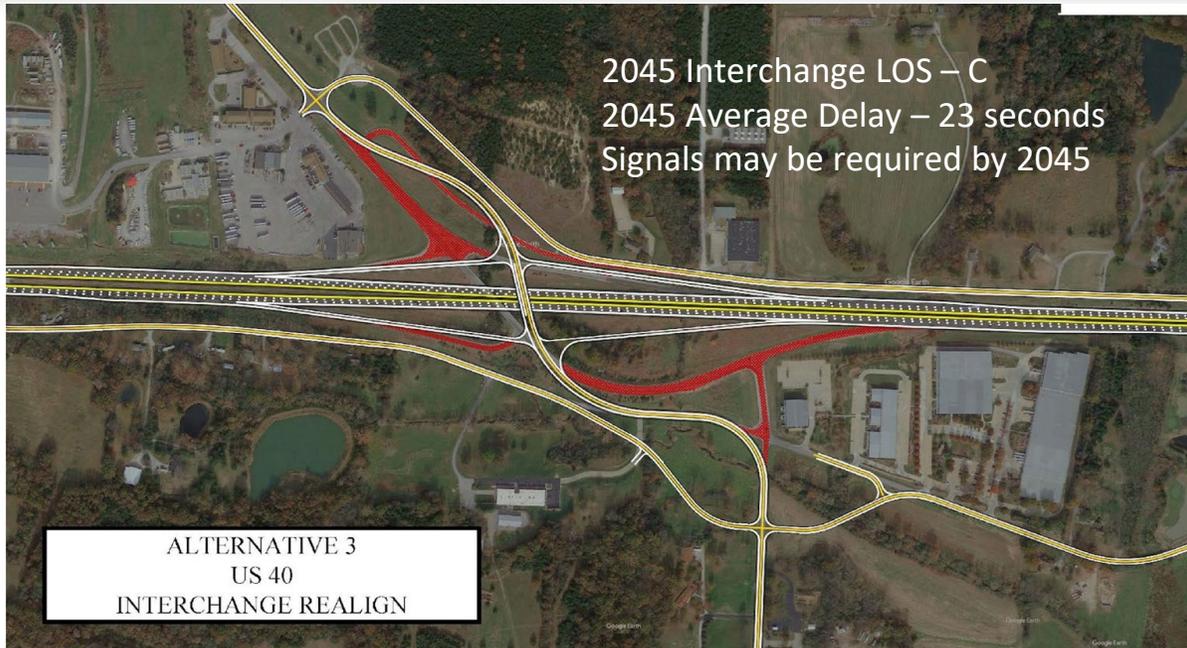
- Non-traditional configuration (SB to EB on ramp)
- Safety issues at Route UU intersection
- Safety issues due to skewed interchange

## Issues identified by CAG

- New school traffic
- Need for continuous outer road to Stadium Blvd.
- Coordinate with Boone County Scott Blvd. interchange plans
- Improvements needed to Route UU to allow better access to south Columbia



# US 40/Midway Reasonable Alternatives



- Alternative 3 realigns US 40 to remove the skew. US 40 ties into Route UU to the south.
- Alternative 5 keeps the exiting skew and US 40 ties into Sugar Creek Road to the south.
- Improvements shown are not on the STIP
- ADT – 11,400 (2021) | 12,850 (2045)
- 2016-2020 Crash History at Interchange Intersections – 10 Minor Injury, 17 Property Damage Only



# Continuous Outer Road on North Side of I-70



## Notes:

- Provides outer road connection across Perche Creek and improves existing outer road north of I-70
- Improvements shown are not on the STIP
- 3.03 miles of outer road improvements
- Will require 1 bridge



# Continuous Outer Road on South Side of I-70



## Notes:

- Provides outer road connection across Perche Creek and improves existing outer road south of I-70
- Improvements shown are not on the STIP
- 3.24 miles of outer road improvements
- Will require 2 bridges



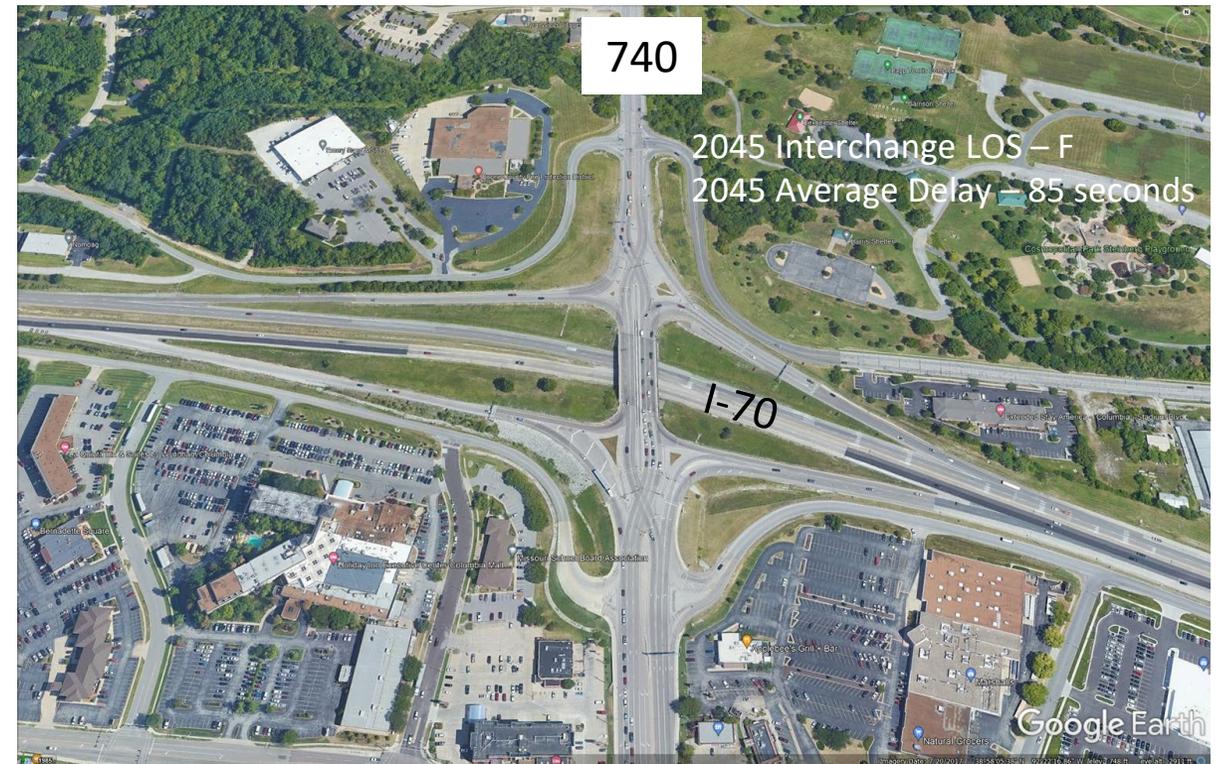
# Stadium Boulevard

## Issues identified by study team

- Interchange improvements in 2014
- Traffic congestion on Stadium Blvd.
- WB off ramp backups
- Closely spaced intersections to interchange

## Issues identified by CAG

- NB backups due to lane reconfiguration
- Lack of pedestrian access to the park on NE side at Stadium Blvd.



# Stadium Blvd. Reasonable Alternative (Outer Road at Existing Location)

## Notes:

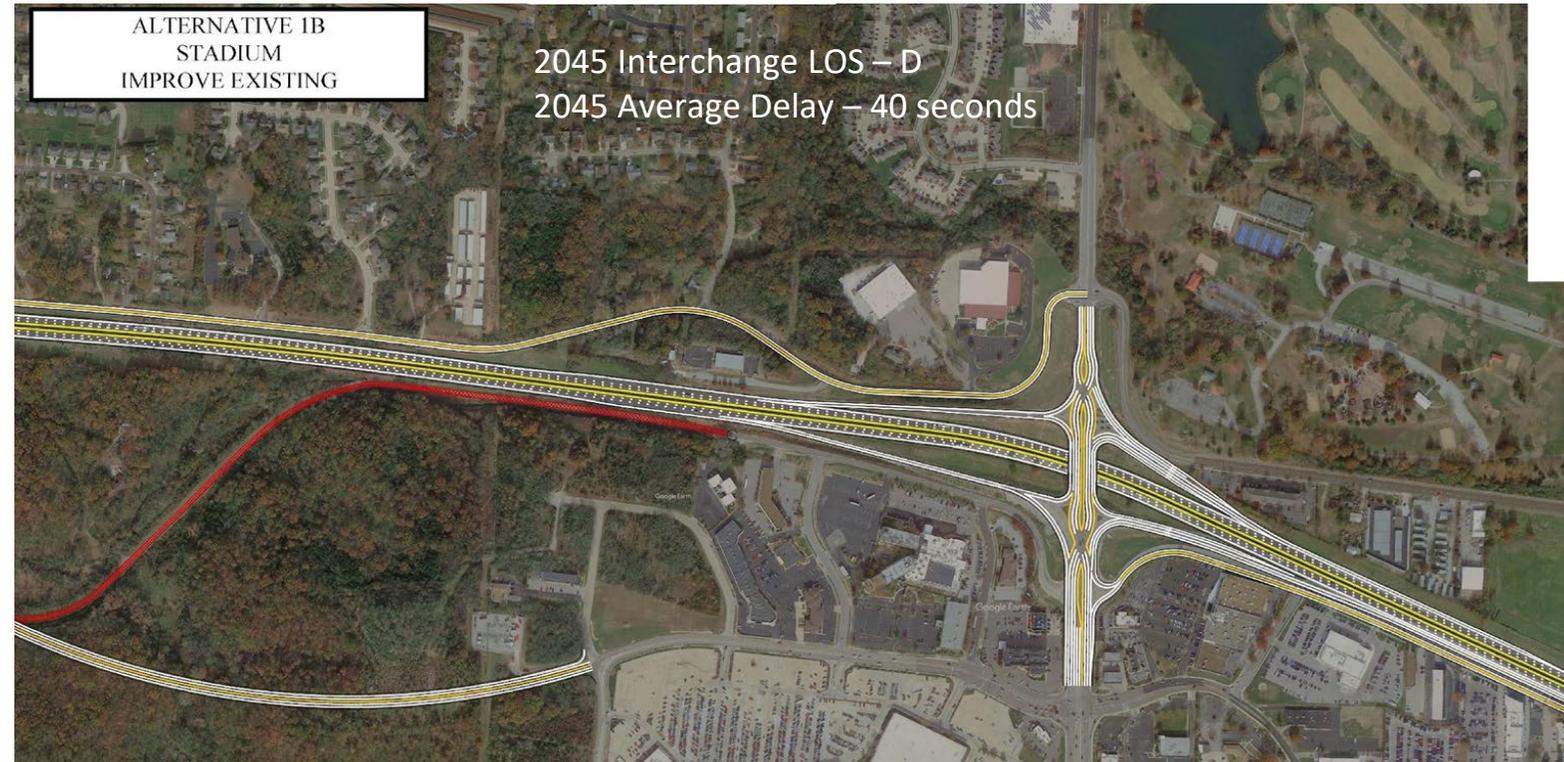
- Provides capacity improvements to the WB off ramp (triple left, dual right), and lengthens merging distances on the EB on ramp
- South outer road remains at existing location
- ADT – 41,400 (2021) | 51,180 (2045)
- 2016-2020 Crash History at Interchange Intersections –  
11 Minor Injury,  
21 Property Damage Only



# Stadium Blvd. Reasonable Alternative (Outer Road at Bernadette)

## Notes:

- Provides capacity improvements to the WB off ramp (triple left, dual right), and lengthens merging distances on the EB on ramp
- South outer road realigned to the south to connect to Bernadette Dr
- ADT – 41,400 (2021) | 51,180 (2045)
- 2016-2020 Crash History at Interchange Intersections –  
11 Minor Injury  
21 Property Damage Only



# Business Loop 70 West

## Issues identified by study team

- Interchange improvements in 2017
- Operational issues at EB off and on ramps
- Operational issues at WB BL 70 and eastern roundabout
- Five-legged EB roundabout with tight turning radii

## Issues identified by CAG

- Disability community has difficulty getting to Aldi
- Pedestrians are system users also



# Business Loop 70 West Reasonable Alternative

## Notes:

- Provides a slip ramp for WB Business Loop to the EB I-70 on ramp
- ADT – 11,900 (2021) | 14,700 (2045)
- 2016-2020 Crash History at Interchange Intersections -  
2 Suspected Serious Injury  
7 Minor Injury  
15 Property Damage Only



# Providence/Rangeline

## Issues identified by study team

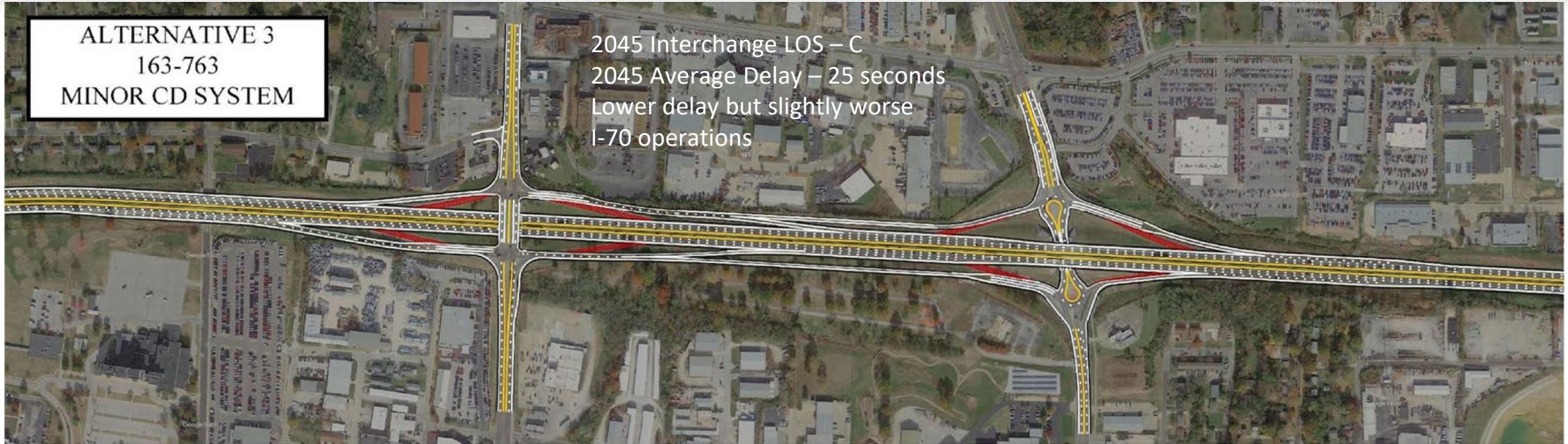
- Rangeline improvements in 2017
- Closely spaced interchanges create weaving issues

## Issues identified by CAG

- Sidewalks could be widened
- First responders noted that shoulders and added lanes along I-70 would help alleviate traffic and safety concerns



# Providence/Rangeline Reasonable Alternative

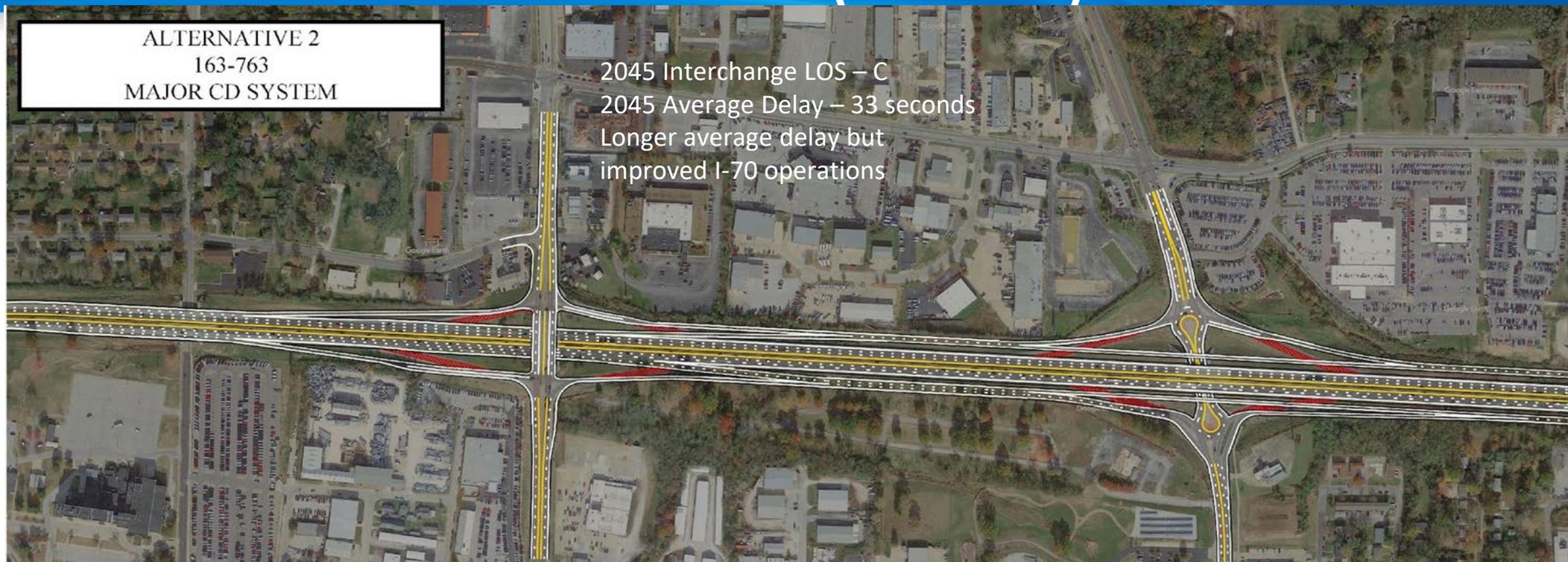


## Notes:

- Provides Collector-Distributor (C-D) roads between Providence and Rangeline. The WB off ramps and EB on ramps are combined, therefore Rangeline traffic to/from the west must go through the signals at Providence.
- ADT – Providence: 22,600 (2021) | 27,940 (2045)      Rangeline: 14,700 (2021) | 16,570 (2045)
- 2016-2020 Crash History at Providence Interchange Intersections – 1 Fatal, 16 Minor Injury, 45 Property Damage Only (PDO)
- 2016-2020 Crash History at Rangeline Interchange Intersections – 1 Suspected Serious Injury, 11 Minor Injury, 21 PDO



# Providence/Rangeline/Parker Reasonable Alternative (Part 1)



## Notes:

- Provides C-D roads between Providence, Rangeline and a new interchange at Parker. Grade separations are provided so that any combined ramps are not required to go through additional signals.
- ADT – Providence: 22,600 (2021) | 27,940 (2045)      Rangeline: 14,700 (2021) | 16,570 (2045)
- 2016-2020 Crash History at Providence Interchange Intersections – 1 Fatal, 16 Minor Injury, 45 Property Damage Only (PDO)
- 2016-2020 Crash History at Rangeline Interchange Intersections – 1 Suspected Serious Injury, 11 Minor Injury, 21 PDO



# Providence/Rangeline/Parker Reasonable Alternative (Part 2)



Notes:

- ADT – Providence: 22,600 (2021) | 27,940 (2045)      Rangeline: 14,700 (2021) | 16,570 (2045)
- 2016-2020 Crash History at Providence Interchange Intersections – 1 Fatal, 16 Minor Injury, 45 Property Damage Only (PDO)
- 2016-2020 Crash History at Rangeline Interchange Intersections – 1 Suspected Serious Injury, 11 Minor Injury, 21 PDO



# I-70/US 63 Connector

## Issues identified by study team

- Traffic congestion on 63 Connector through the interchange area
- Heavy traffic between Clark and Conley in addition to I-70 traffic
- Heaviest movements are to/from south and west
- Intersections too close to interchange

## Issues identified by CAG

- Often there are backups on the EB exit ramp
- A flyover should be considered at this location
- Large number of pedestrians in the area with very few facilities
- This is a hot spot for pedestrian deaths
- There are merge issues onto Broadway
- Columbia is building multi-use paths and MoDOT should coordinate improvements with the City



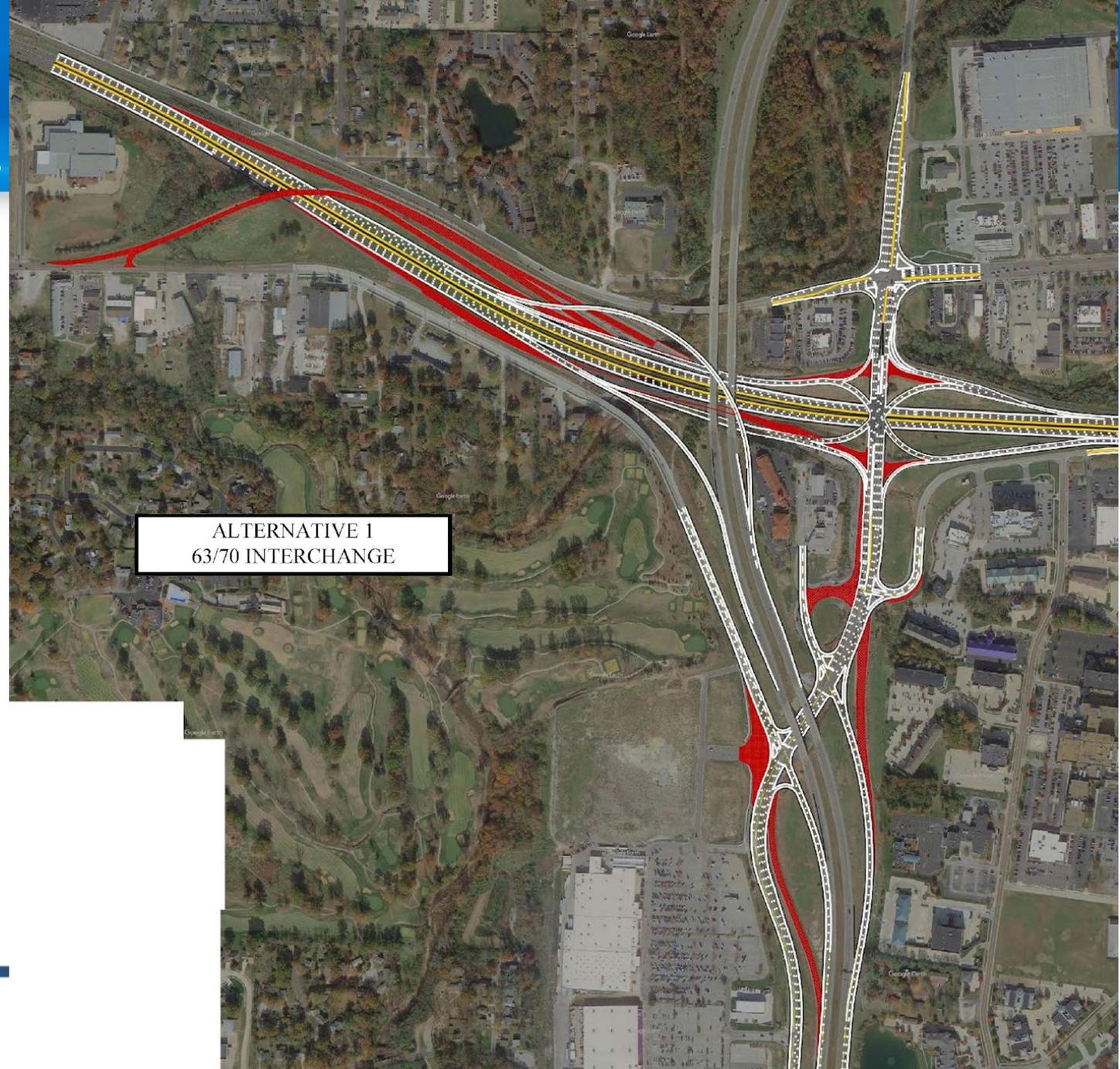
# I-70/US 63 Connector Reasonable Alternative 1

## Notes:

- Improvements at the Connector and I-70 pavement improvements east of Stadium to the Connector are included on the STIP
- Provides
  - NB US63 to WB I70 & EB I70 to SB US 63 flyover ramps
  - Single Point Urban Interchange (SPUI)
  - Additional intersection at Conley & US63
  - Improvements at Clark Lane & US63
  - Improvements at Bus. Loop & Conley
- 2016-2020 Crash History –
  - 3 Suspected Serious Injury
  - 66 Minor Injury
  - 118 Property Damage Only



I-70 SIU 4 Re-evaluation



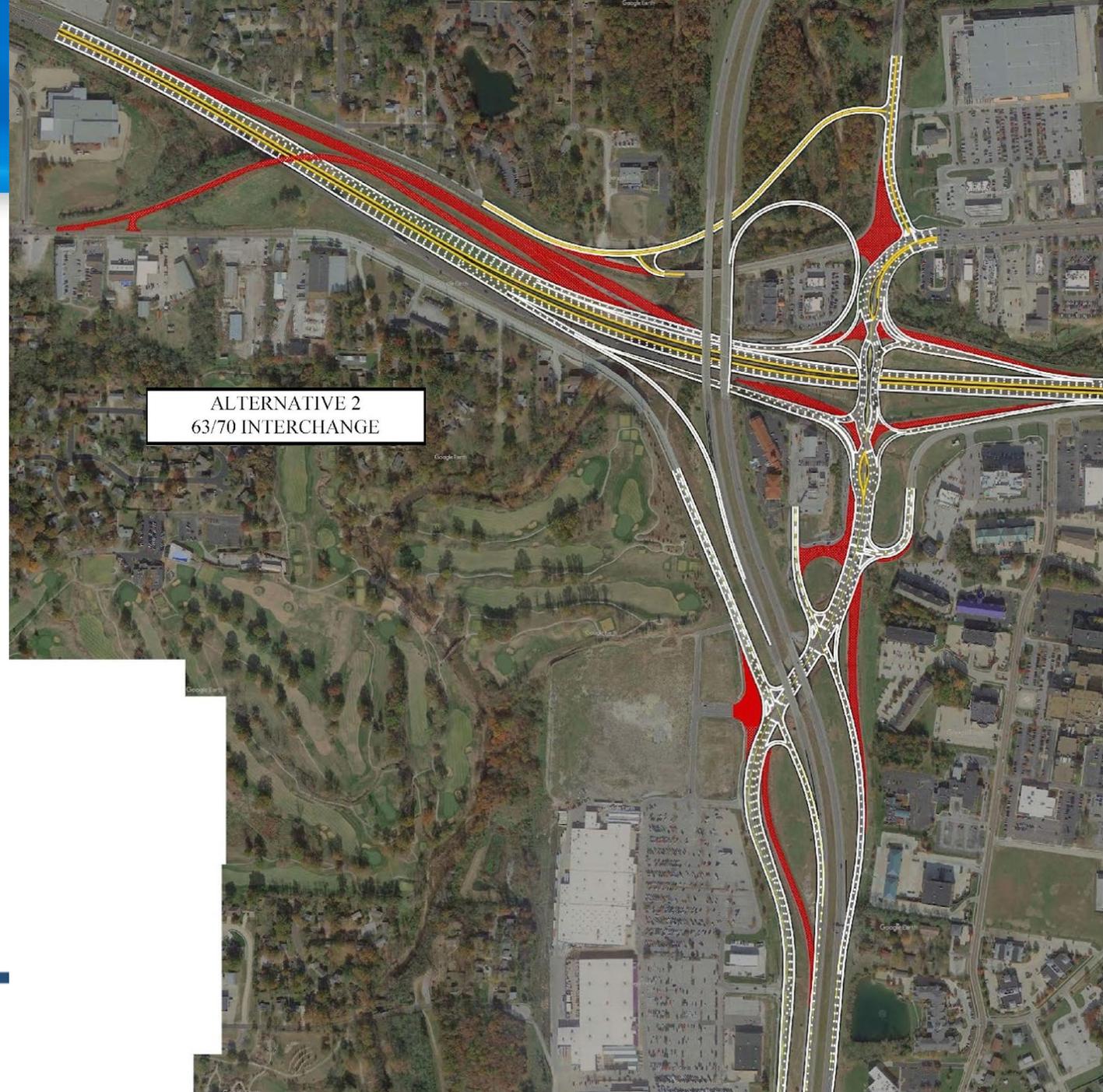
# I-70/US 63 Connector Reasonable Alternative 2

## Notes:

- Improvements at the Connector and I-70 pavement improvements east of Stadium to the Connector are included on the STIP
- Provides:
  - Diverging Diamond Interchange
  - NB US63 to WB I70 loop ramp
  - EB I70 to SB US 63 flyover ramp
  - Additional intersection at Conley & US63
  - Improvements at Clark Lane & US63, makes Clark Lane primary movement
  - Improvements at Bus. Loop & Conley



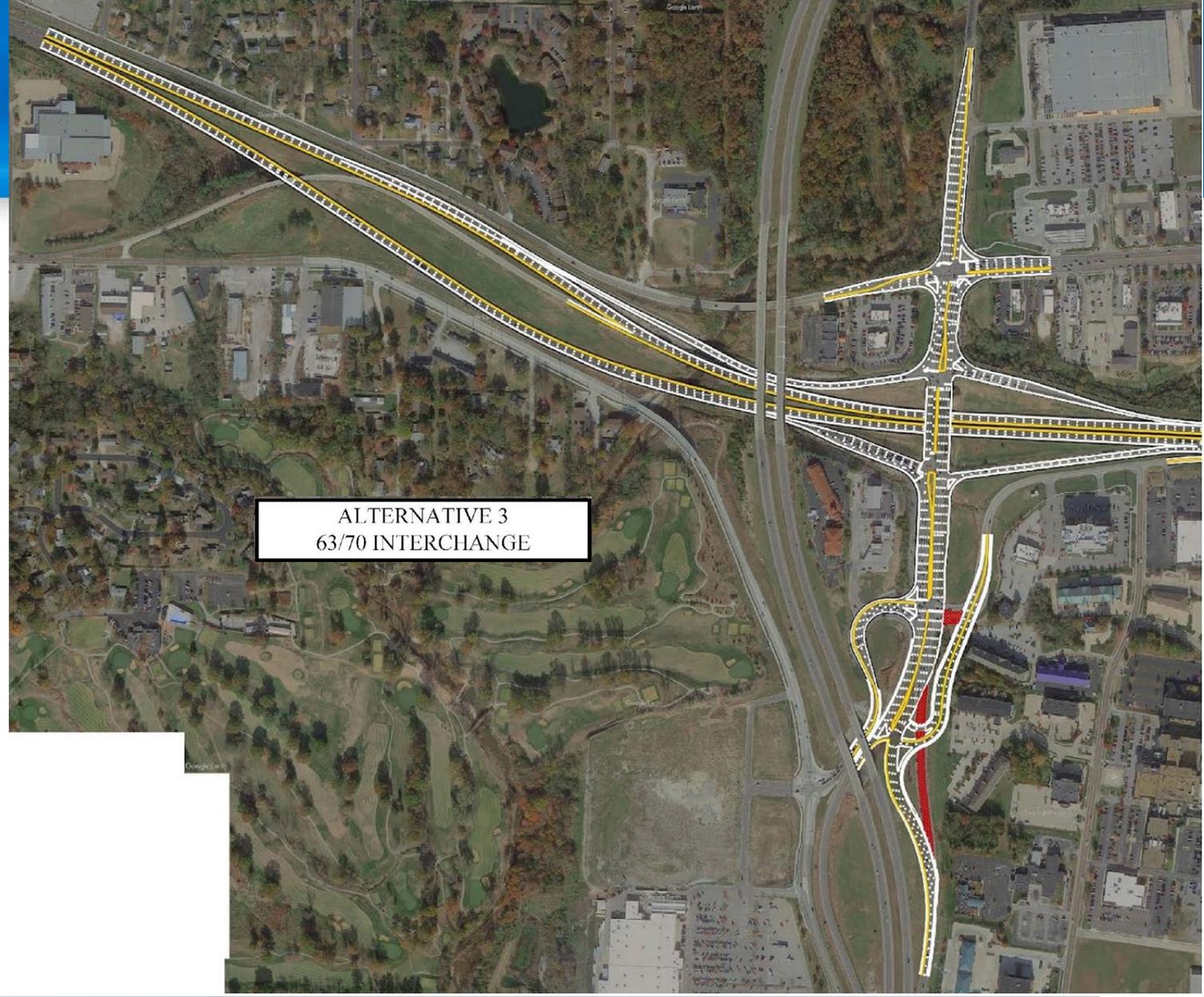
*I-70 SIU 4 Re-evaluation*



# I-70/US 63 Connector Reasonable Alternative 3

## Notes:

- Improvements at the Connector and I-70 pavement improvements east of Stadium to the Connector are included on the STIP
- Provides:
  - Lane reconfiguration through Connector
  - Additional intersection at Conley & US63
  - Improvements at Clark Lane & US63



# St. Charles/Lake of the Woods

## Issues identified by study team

- Heavy traffic flows to/from the west
- High growth area expected
- Future operation issues at interchange without improvements
- Closely spaced outer road in southwest side

## Issues identified by CAG

- Outer road has turns that are too tight for truck traffic
- Traffic volumes will continue to increase around this intersection
- A back-age road to the north could help concerns on the frontage road
- Concern if 3 lanes on I-70 will fit under this overpass as it was recently constructed



# St. Charles/Lake of the Woods Reasonable Alternatives

ALTERNATIVE 2  
ST. CHARLES ROAD  
TIGHT DIAMOND

2045 Interchange LOS – C  
2045 Average Delay – 23 seconds

ALTERNATIVE 3  
ST. CHARLES ROAD  
DIAMOND OUTER ROADS

2045 Interchange LOS – C  
2045 Average Delay – 23 seconds

- Alternative 2 replaces and widens overpass for additional lanes
- Alternative 3 replaces and widens overpass for additional lanes and relocates EB ramps and south outer road.
- Improvements shown are not on the STIP
- ADT – 14,000 (2021) | 22,000 (2045)
- 2016-2020 Crash History at St. Charles Interchange Intersections – 7 Minor Injury, 14 Property Damage Only



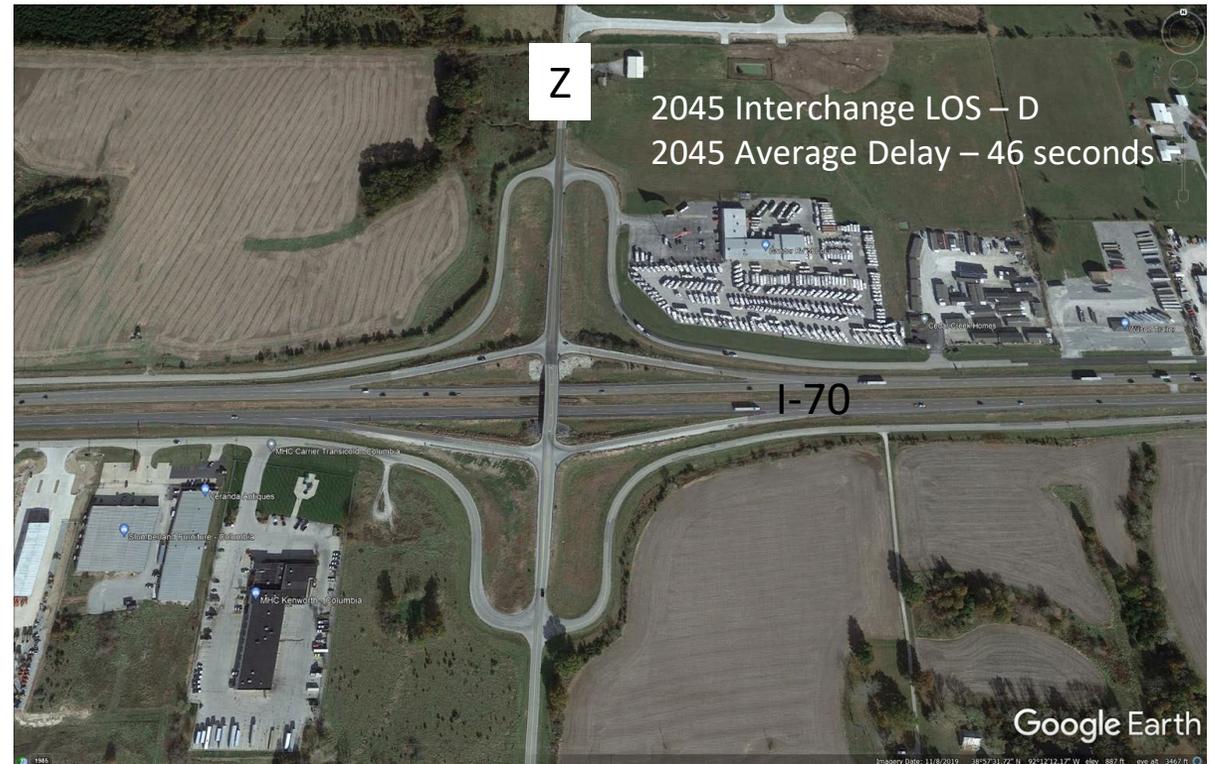
# Route Z

## Issues identified by study team

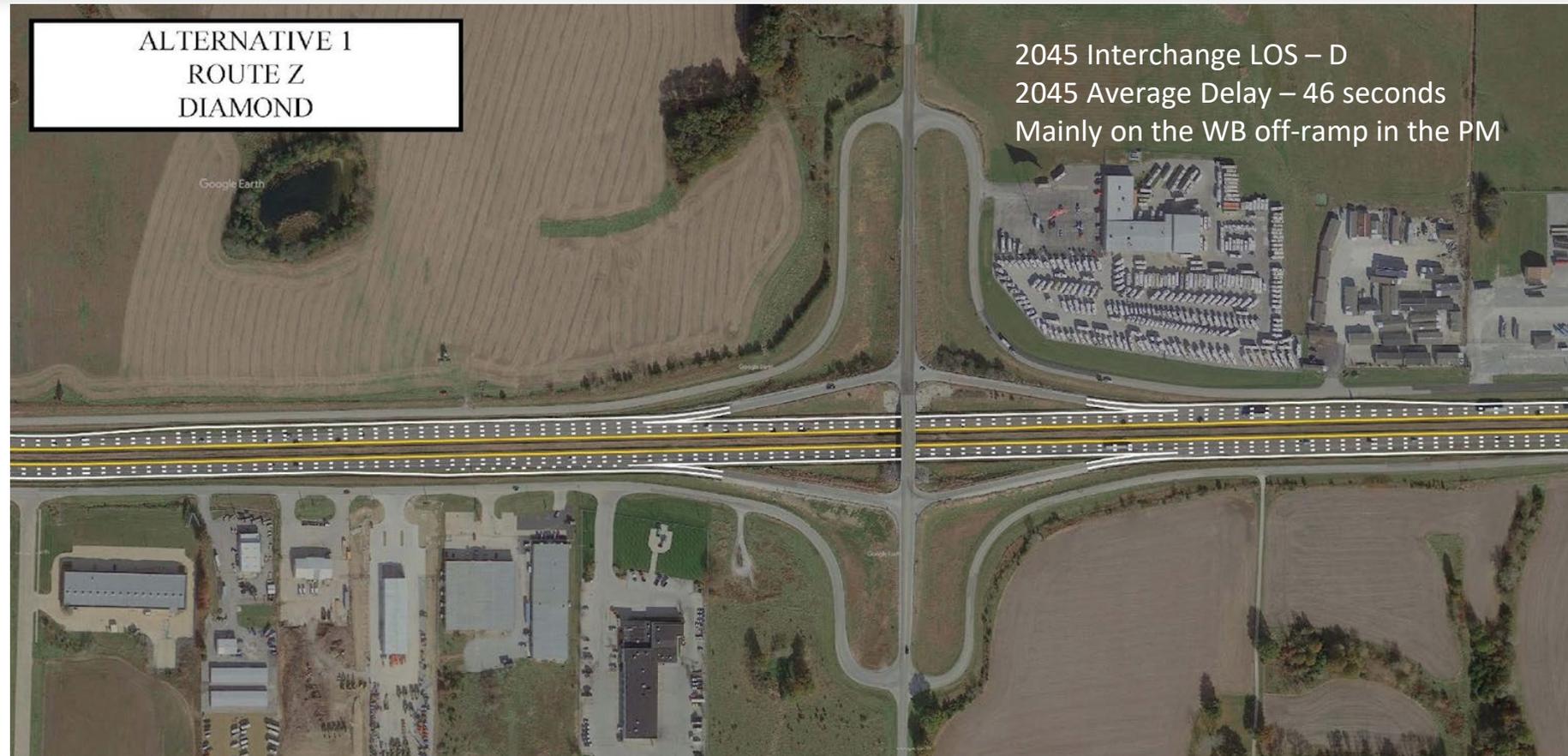
- Outer road separation is adequate
- Bridge over I-70 built in 2013

## Issues identified by CAG

- Outer road curves are too tight for truck traffic
- Traffic volumes will continue to increase around this intersection
- A back-age road to the north could help concerns on the frontage road
- Concern if 3 lanes on I-70 will fit under this overpass as it was recently constructed



# Route Z Reasonable Alternatives



## Notes:

- Improvements shown are not on the STIP
- ADT – 1,700 (2021) | 2,330 (2045)
- 2016-2020 Crash History at Route Z Interchange Intersections –  
4 Minor Injury  
13 Property Damage Only



# Next Steps



# Schedule

- October 2021 – Re-evaluation begins
- May 24, 2022 – CAG #1 – Confirm Purpose and Need
- July 11, 2022 – CAG #2 – Reasonable Alternatives
- July 21, 2022 – PIM #1 – Reasonable Alternatives
- August/September 2022 – CAG #3 & PIM #2 – Preferred Alternative
- Fall 2022 – Prepare Re-evaluation Document
- Late 2022 – Anticipated Re-evaluation Document Approval
- 2023 – Begin Design-Build Procurement



# Thank You for Your Time and Participation

