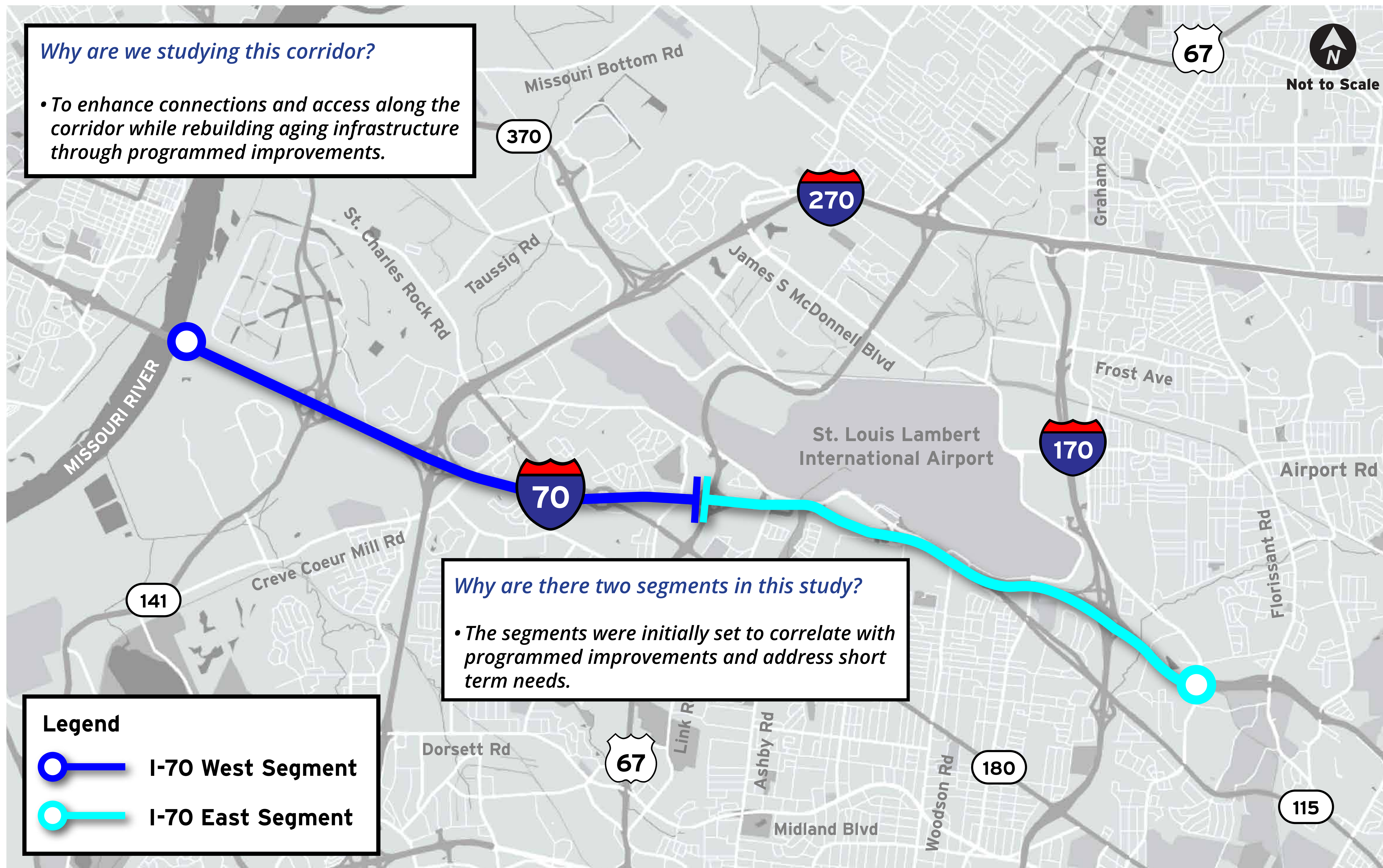


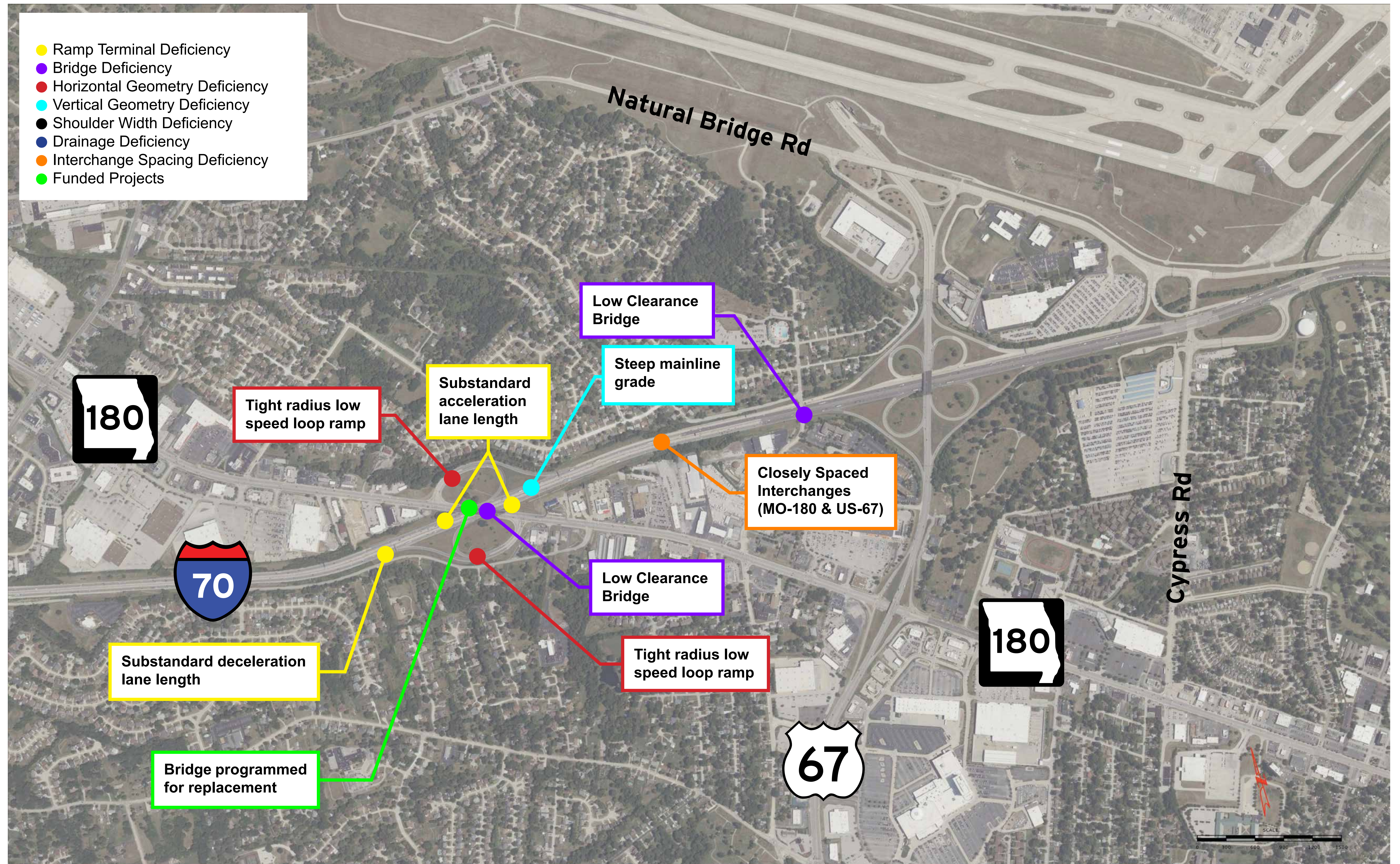
I-70 STL Conceptual Study Area



Identified Issues

- **Safety and mobility for all users.**
- **Existing and future traffic congestion due to ramp locations and weaving.**
- **Reliability of freight movement.**
- **Condition of existing infrastructure.**
- **Outdated geometric design features.**
- **Changes in Land-Use.**
- **Constrained Land-Uses.**
- **Limited multi-modal connections within and between communities and employment centers located on either side of the interstate.**

Existing Conditions



Project Timeline

I-70 PLANNING AND ENVIRONMENTAL LINKAGES (PEL) STUDY Final Report in 2018

Study to set a vision and strategic plan for the future of the I-70 corridor.



ALTERNATIVE DEVELOPMENT AND SCREENING Summer 2025

What are the social, economic and environmental impacts of the alternatives carried forward?



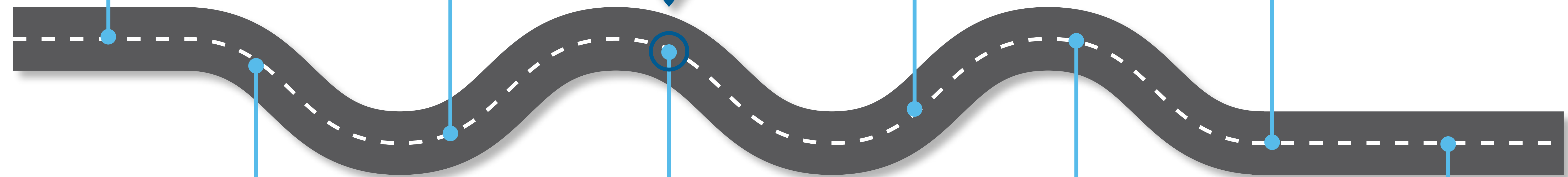
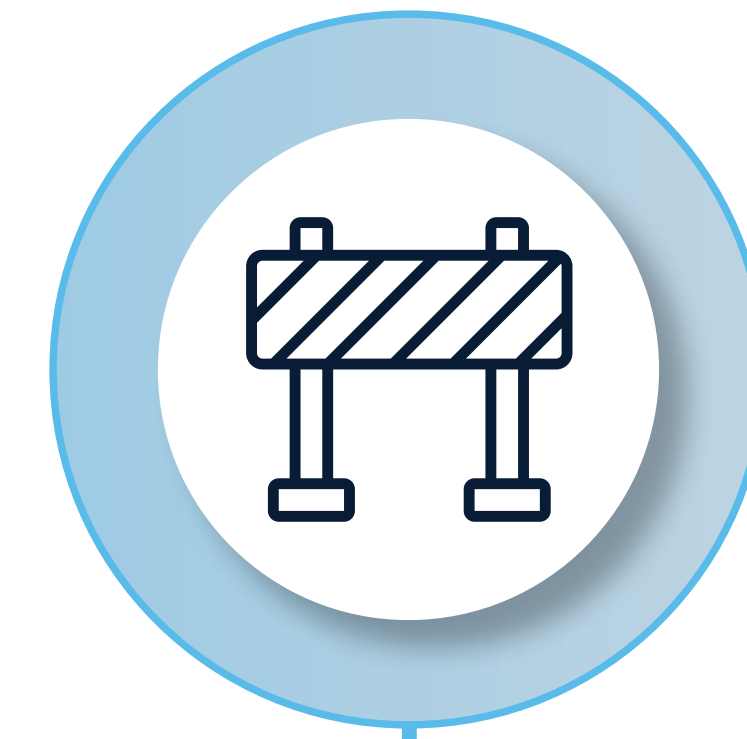
WE ARE HERE

CONCEPT STUDY COMPLETION Winter 2025/2026

Approval of the Conceptual Study used to coordinate key issues and associated improvements on the corridor.



CONSTRUCTION FUNDED PROJECTS 2029



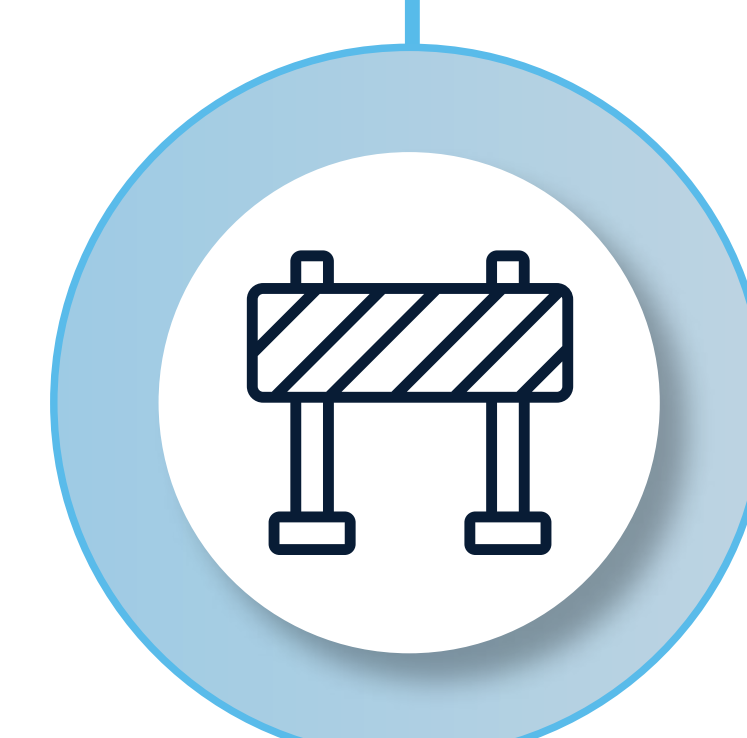
PURPOSE AND NEED
Fall 2023/ Winter 2024
Public Meeting #1
Outreach and data to identify purpose, needs and project goals.



**PUBLIC MEETING #2
REASONABLE ALTERNATIVES**
Fall 2025
Receive public feedback on developed alternatives.

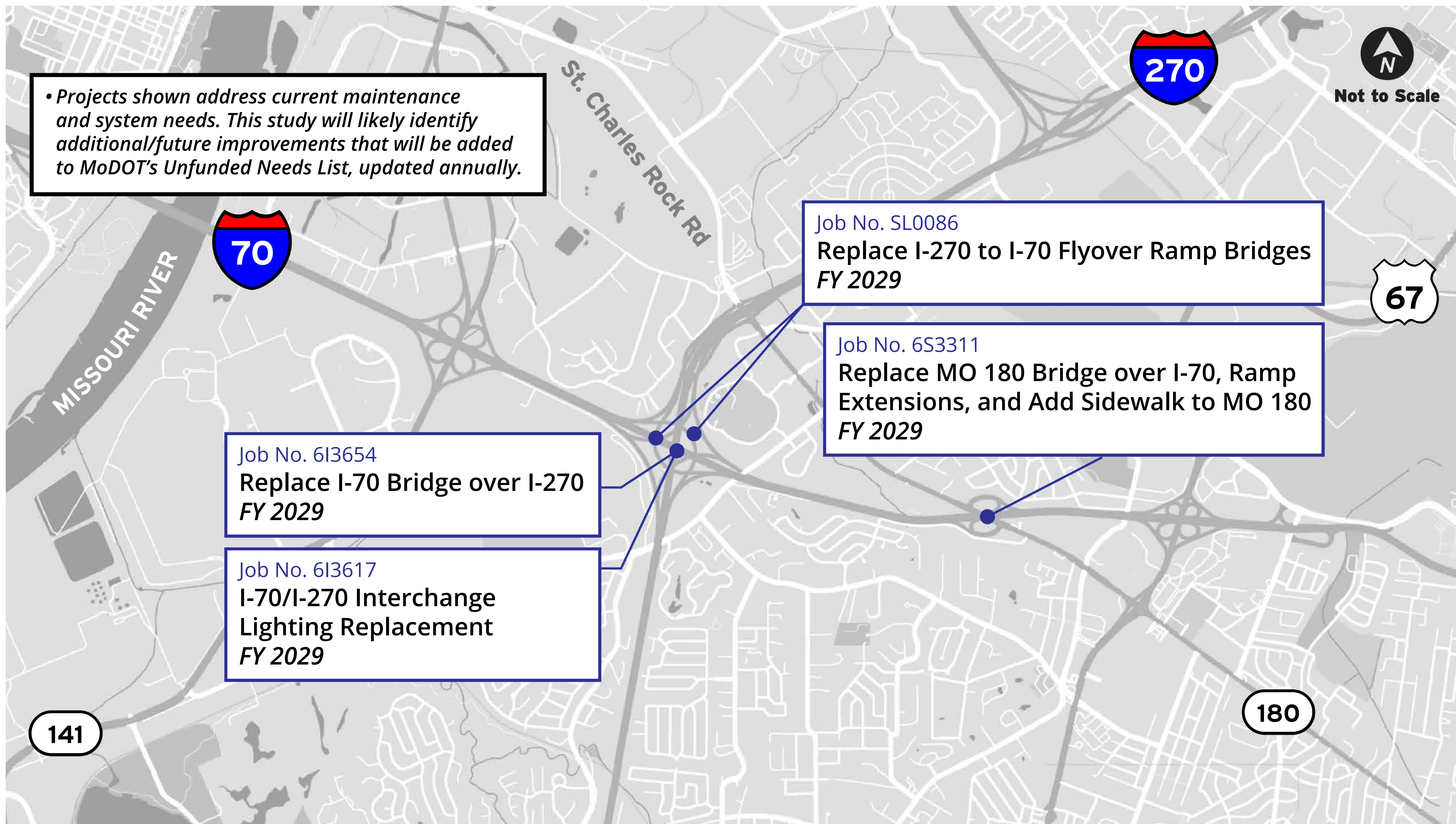


**ENVIRONMENT &
ENGINEERING**
2026 - 2029

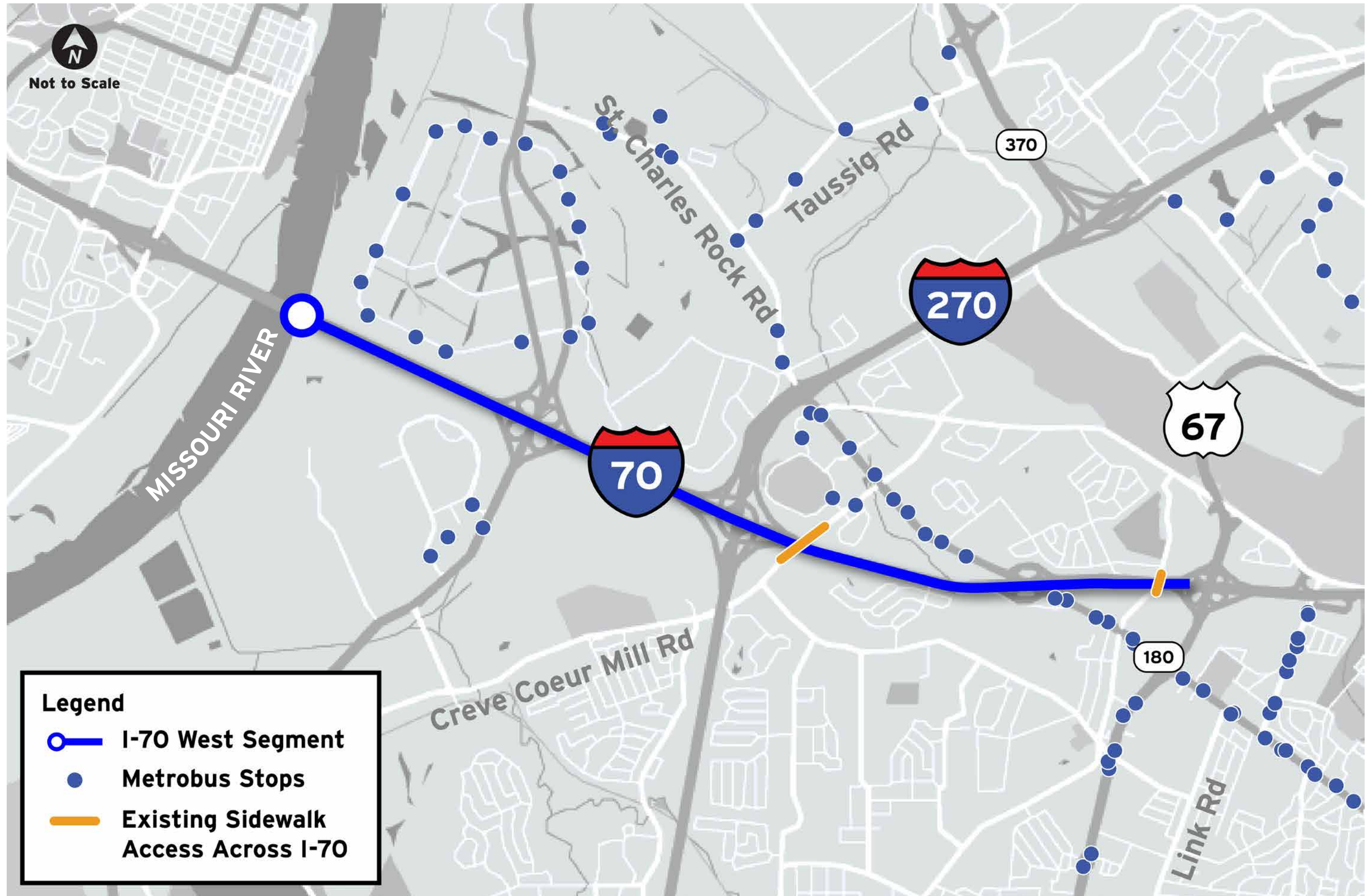


**CONSTRUCTION
FUTURE PROJECTS**
TBD (UNFUNDED)

Programmed Projects



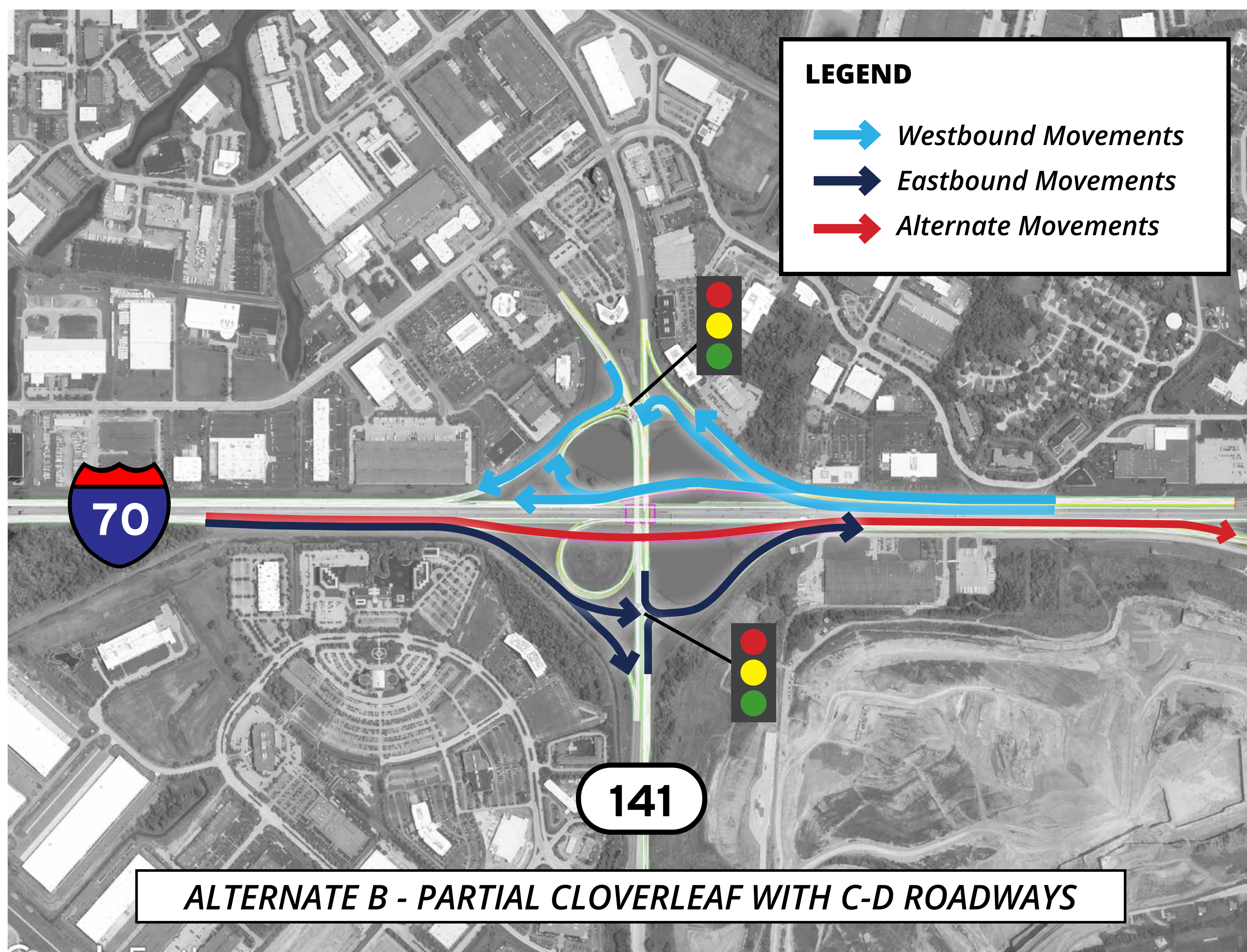
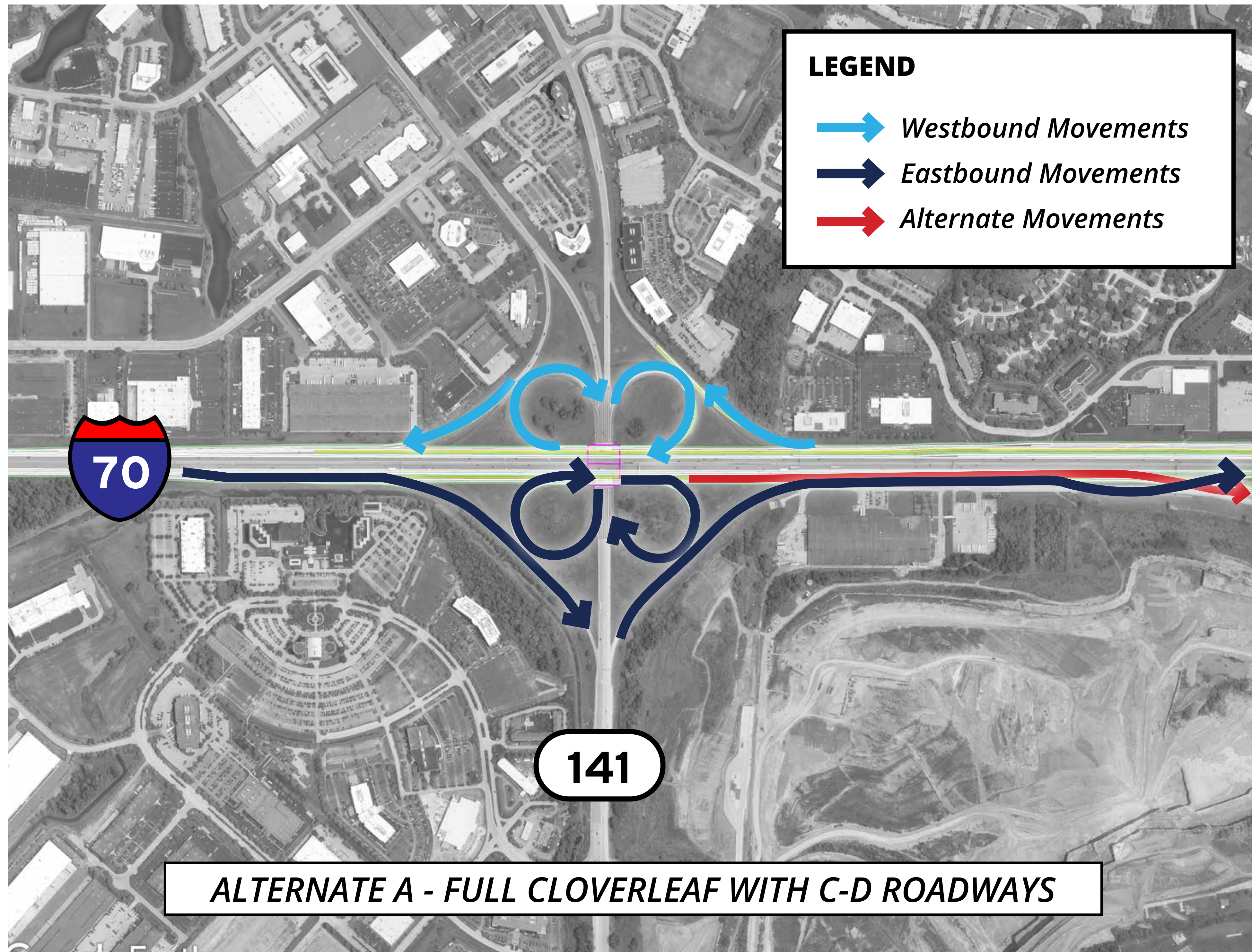
West Segment Multi-Modal Facilities



East Segment Multi-Modal Facilities



I-70 & MO-141



I-70 & MO-141

ALTERNATE A - FULL CLOVERLEAF WITH C-D ROADWAYS

- ▶ *Features*
 - *Maintains cloverleaf configuration*
 - *No added signals on MO-141*
 - *Creates new collector-distributor (C-D) roadways along I-70 to separate merging/diverging from mainline traffic and reduce weaving/congestion*

- ▶ *Safety*
 - *Moves Loop Ramp Weaving to a C-D Road*
 - *Enhances Safety with Braided Ramps*

- ▶ *Tradeoffs*
 - *Maintains Low-Speed Loop Ramps*

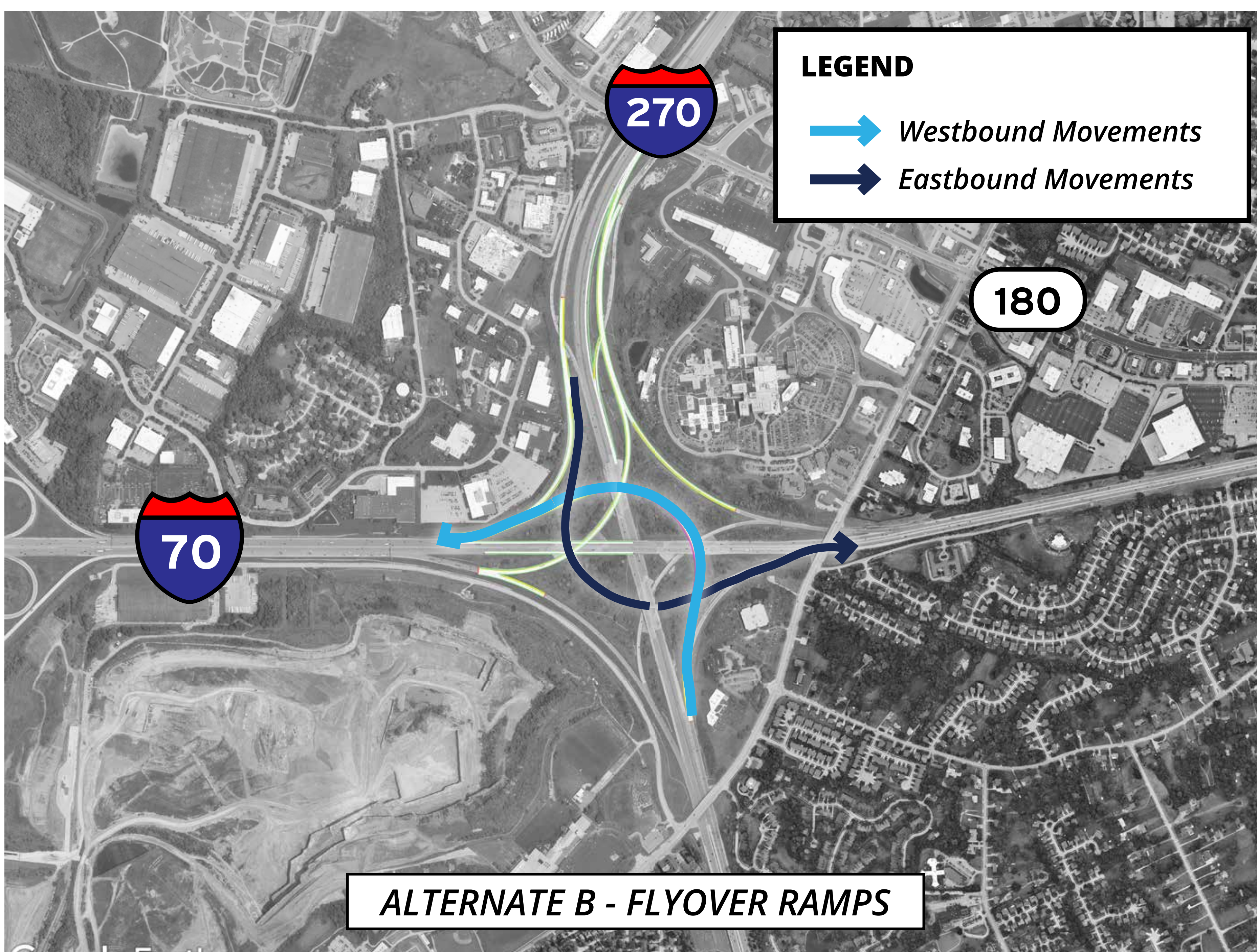
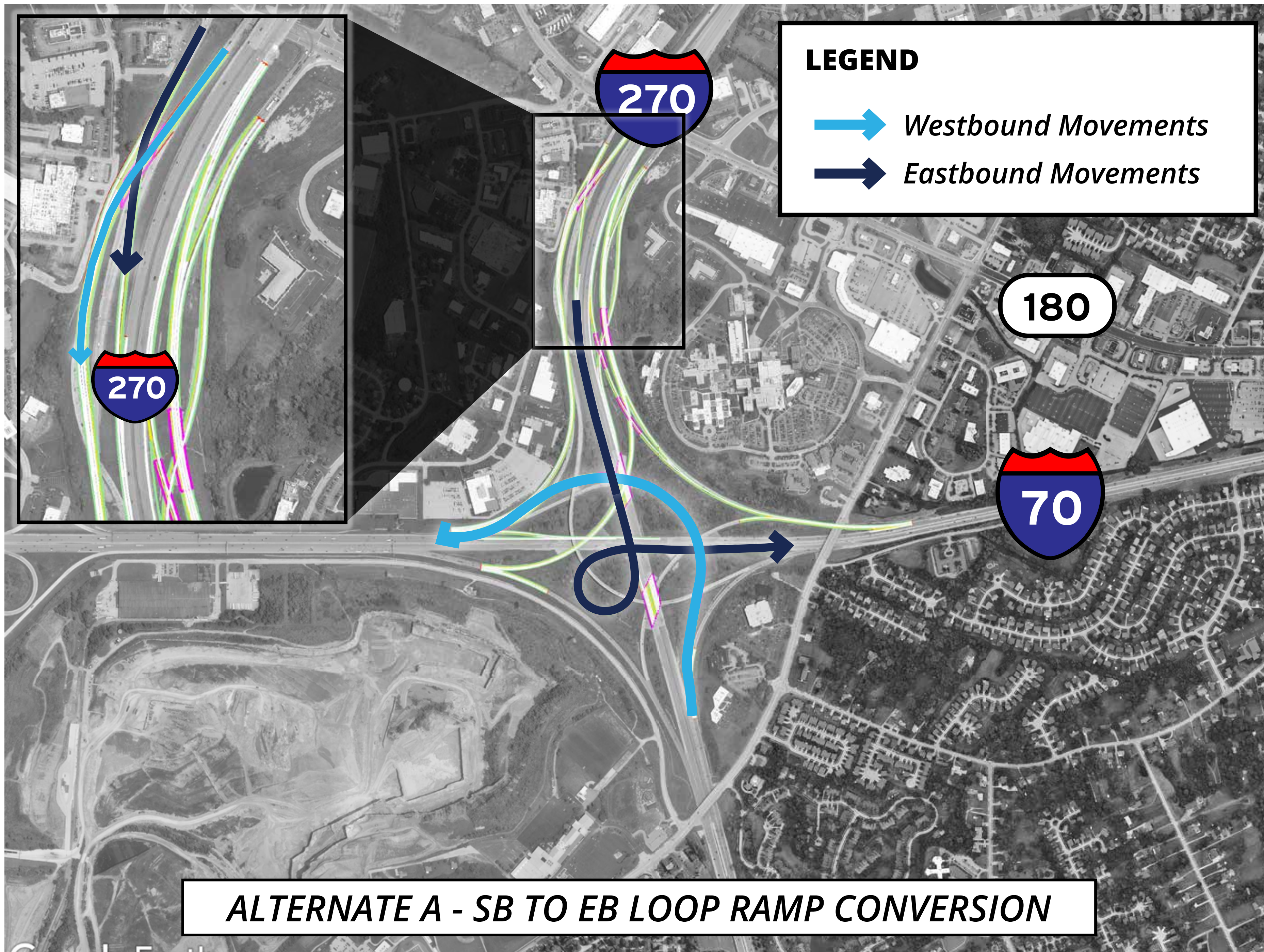
ALTERNATE B - PARTIAL CLOVERLEAF WITH C-D ROADWAYS

- ▶ *Features*
 - *Removes cloverleafs on east side of the interchange in favor of signalized ramp terminals on MO-141 (LOS B/C), which will add stops for north-south traffic*
 - *Creates new collector-distributor roadways along I-70 to separate merging/diverging from mainline traffic and reduce weaving/congestion*

- ▶ *Safety*
 - *Eliminates Loop Ramp Weaving of I-70 Traffic*
 - *Eliminates NB 141 weaving entirely*
 - *Replaces NB 141 to WB I-70 Loop Ramp with Direct Ramp*

- ▶ *Tradeoffs*
 - *Additional/Increased Bridge Costs*

I-70 & I-270



NOTE: INCLUDES FUNDED MoDOT PROJECTS: 613654, 613617 and SL0086

I-70 & I-270

ALTERNATE A - SB TO EB LOOP RAMP CONVERSION

- ▶ *Features*
 - *Removes low volume SB I-270 to EB I-70 flyover and replaces with loop ramp*
 - *Adds second lane to EB I-70 to NB I-270 and NB I-270 to WB I-70 ramps for increased capacity and reduced congestion*
 - *More intuitive ramp configurations and directional movements along I-270 between I-70 and MO-180 will improve traffic flow*

- ▶ *Safety*
 - *Removes the short weave segment on NB I-270*

- ▶ *Tradeoffs*
 - *Introduces Low-Speed Loop Ramp*

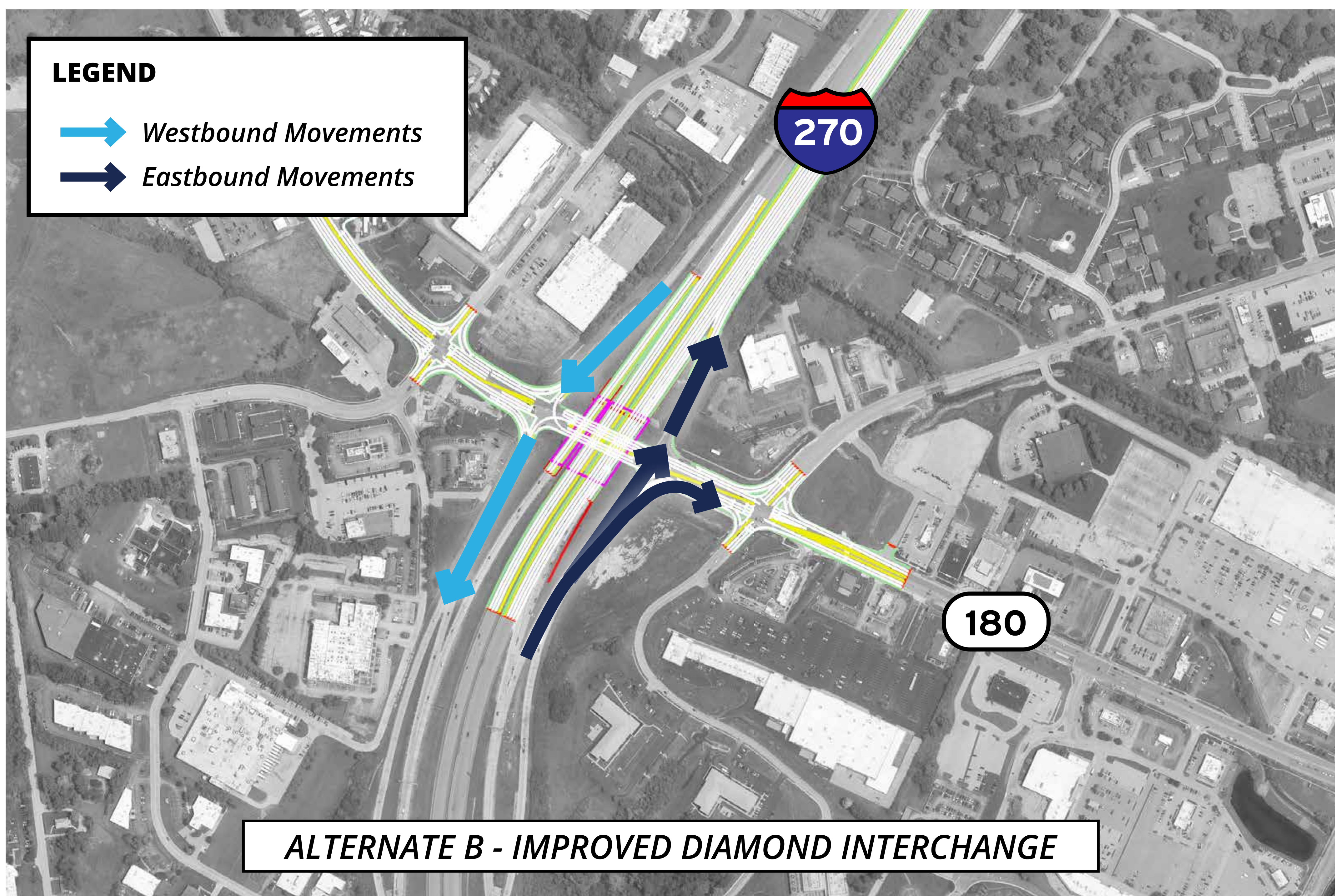
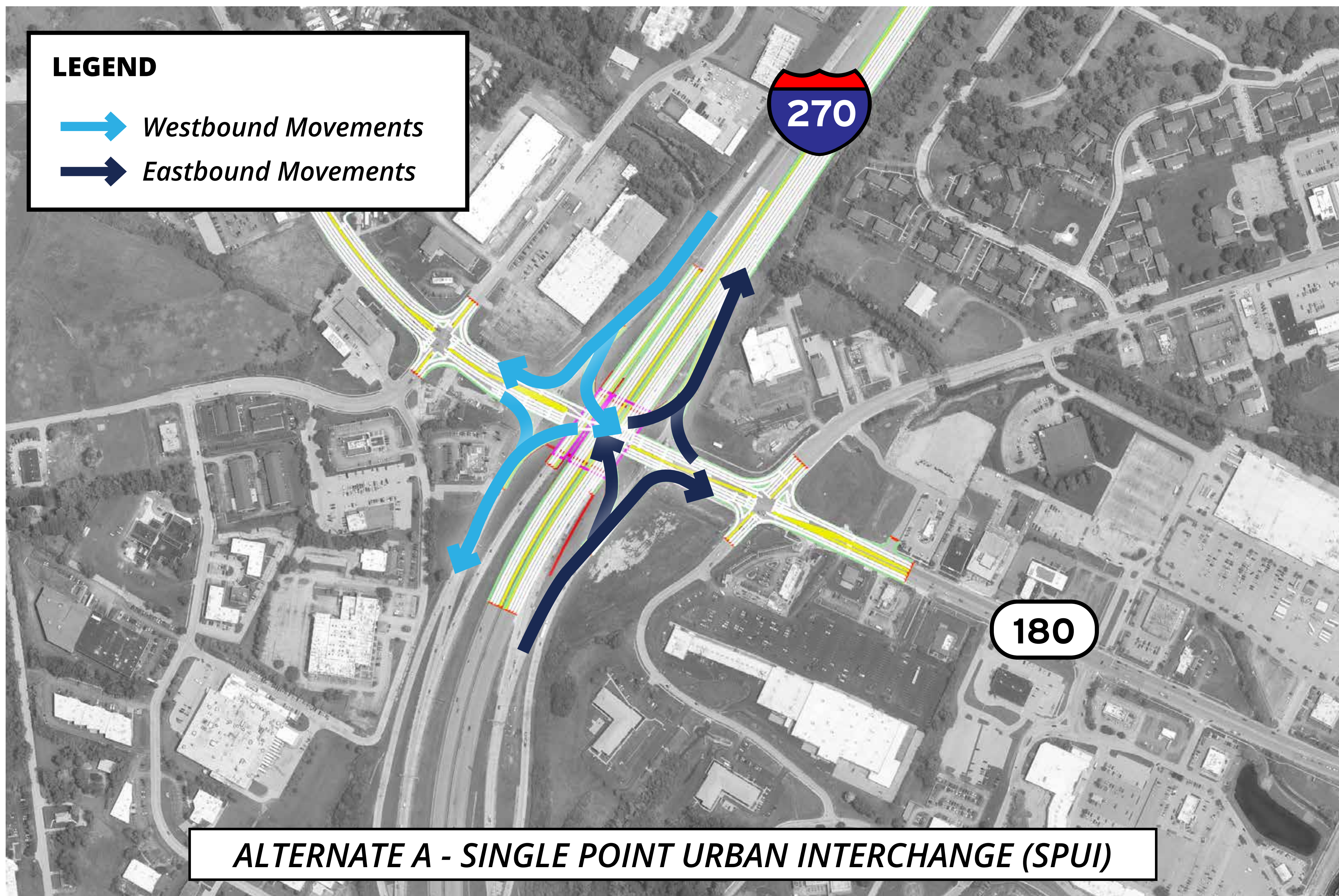
ALTERNATE B - FLYOVER RAMPS

- ▶ *Features*
 - *Adds second lane to EB I-70 to NB I-270 and NB I-270 to WB I-70 ramps for increased capacity and reduced congestion*
 - *Generally retains existing ramp and C-D Road configuration*

- ▶ *Safety*
 - *Improves I-270NB to I-70WB merge*

- ▶ *Tradeoffs*
 - *Introduces Short-length merge*
 - *Does not improve all lane change distances and directional movements*

I-270 & MO-180



I-270 & MO-180

ALTERNATE A - SINGLE POINT URBAN INTERCHANGE (SPUI)

- ▶ *Features*
 - *Single-Point Urban interchange (SPUI)*
 - *Replaces two signals with one.*
 - *Less Traffic Delay*
 - *Moves left turning traffic efficiently*
 - *Increases separation of I-270 Ramps from adjacent intersections of Natural Bridge and Pennridge*

- ▶ *Safety*
 - *Eliminates Left Turning conflicts associated with existing intersections*

- ▶ *Tradeoffs*
 - *Larger Intersection Footprint and higher bridge construction cost*
 - *More challenging for pedestrian crossing MO-180*

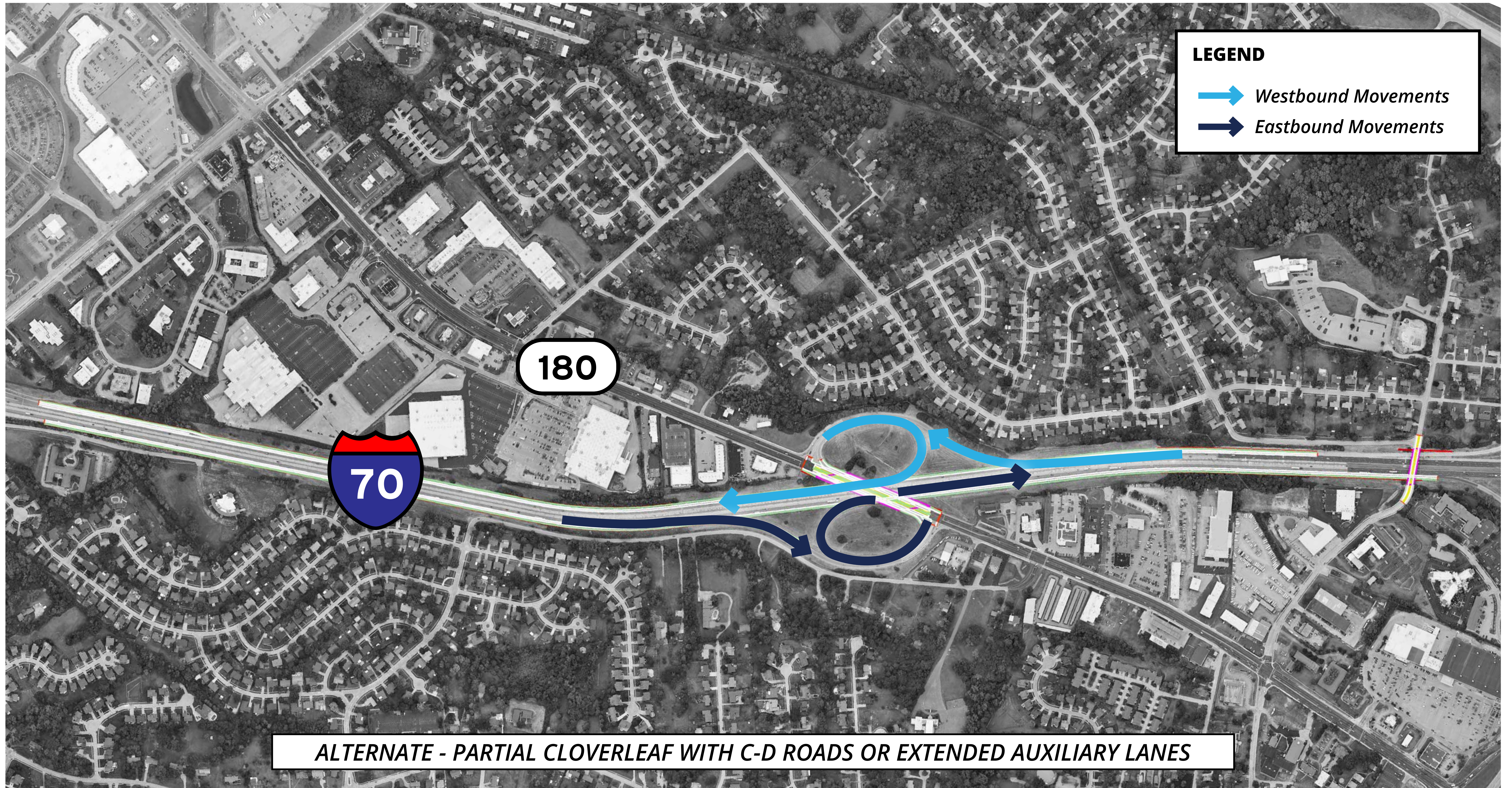
ALTERNATE B - IMPROVED DIAMOND INTERCHANGE

- ▶ *Features*
 - *Improved Diamond Interchange*
 - *Added Turn Lanes and Storage*
 - *Familiar Layout*
 - *Provides Pedestrian Access across I-270*
 - *Lower Cost / Exist. Infrastructure*

- ▶ *Safety*
 - *Safety remains relatively unchanged with this alternative*

- ▶ *Tradeoffs*
 - *Less improvement to Safety or Mobility*

I-70 & MO-180



NOTE: INCLUDES FUNDED MoDOT PROJECT 6S3311

I-70 & MO-180

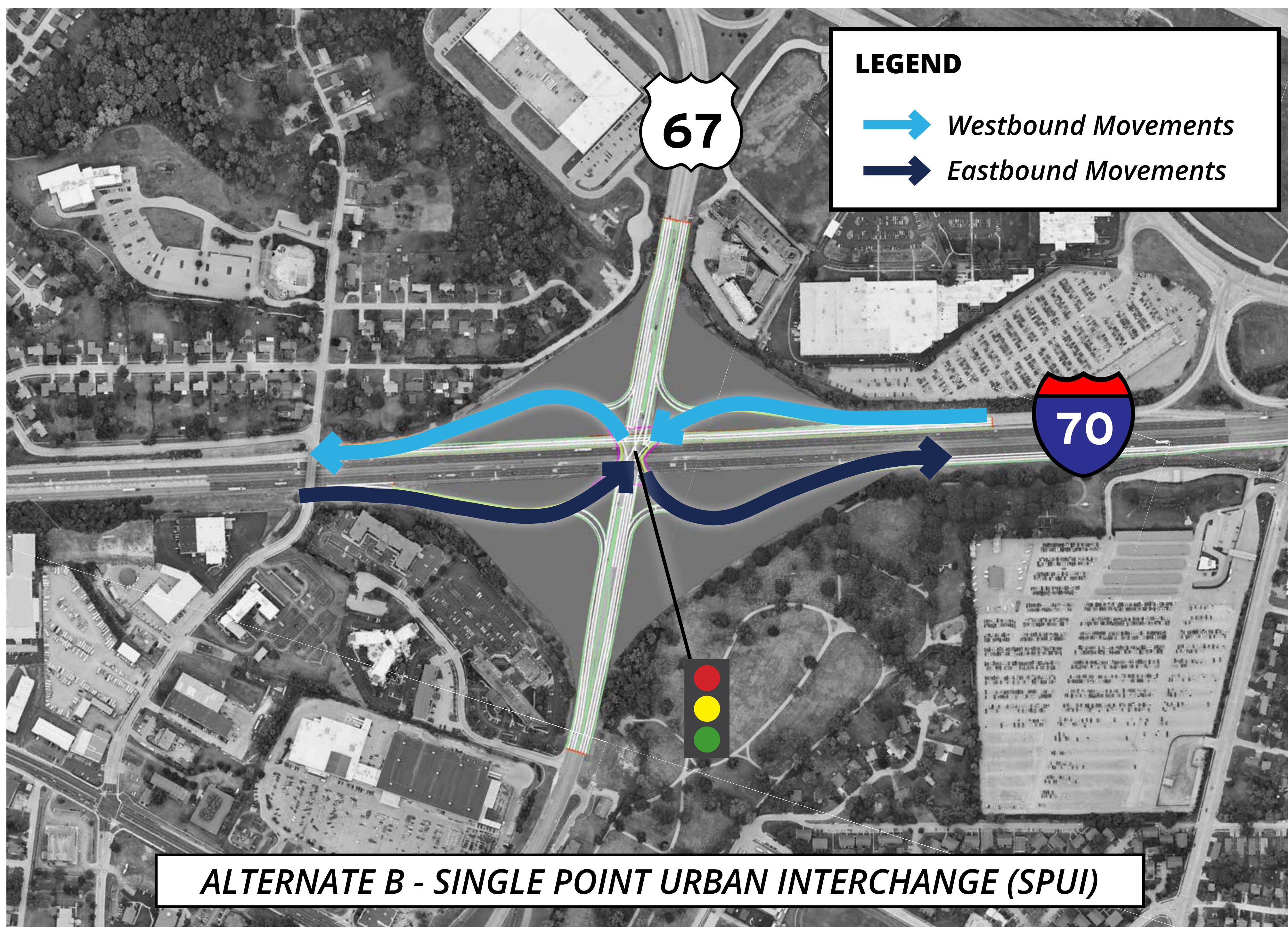
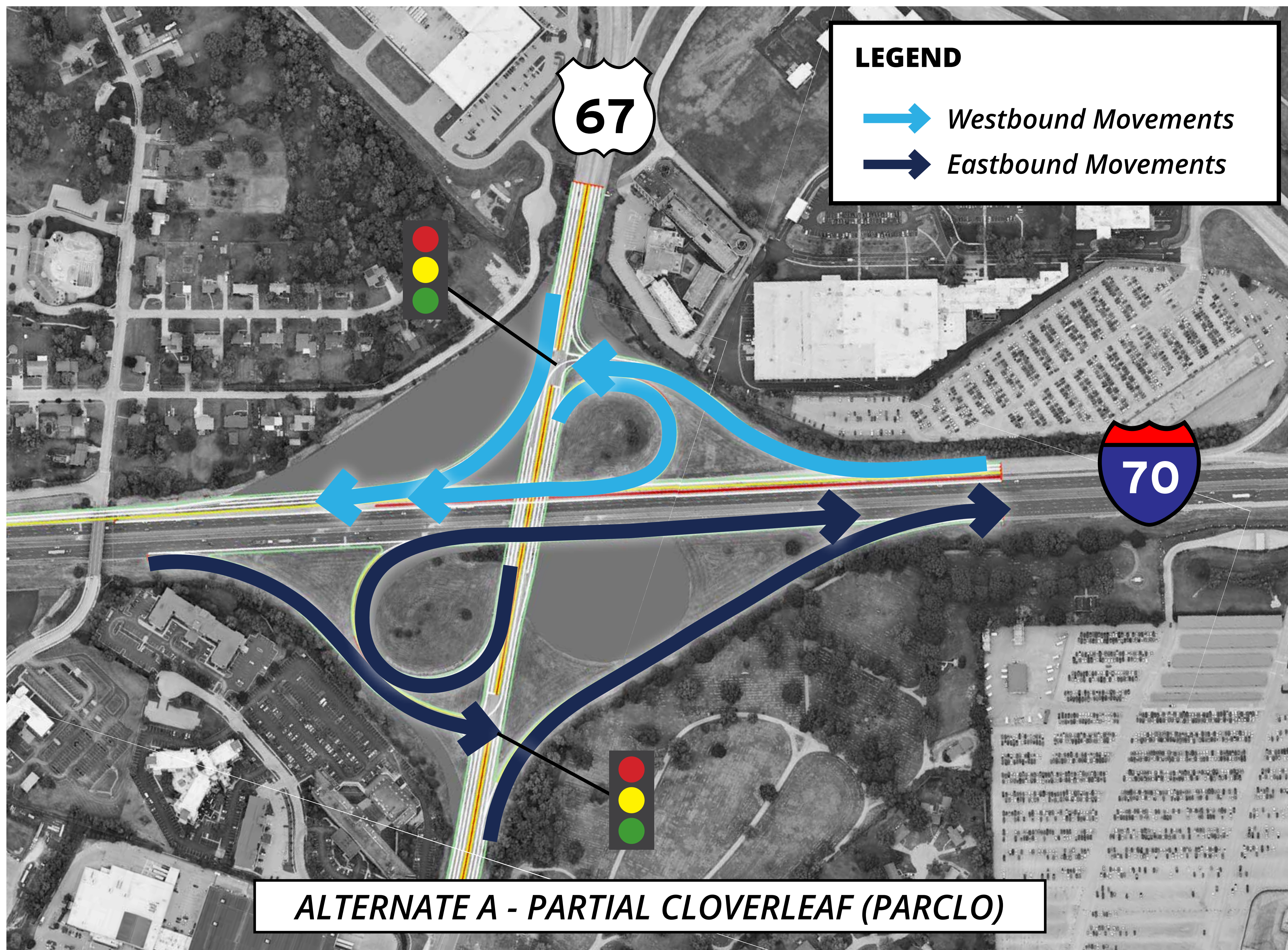
ALTERNATE - PARTIAL CLOVERLEAF WITH C-D ROADS OR EXTENDED AUXILIARY LANES

- ▶ *Features*
 - *Adds one auxiliary lane in each direction of I-70 to reduce traffic congestion*
 - *No changes to interchange configuration at MO-180*
 - *Pedestrian Access across I-70*

- ▶ *Safety*
 - *Extension of WB C-D road to Lindbergh provides additional room for lane -changes*
 - *Similar benefits to Alternative "A"*

- ▶ *Tradeoffs*
 - *Low-Speed Loop Ramps*

I-70 & U.S. 67 (Lindbergh Blvd.)



I-70 & U.S. 67 (Lindbergh Blvd.)

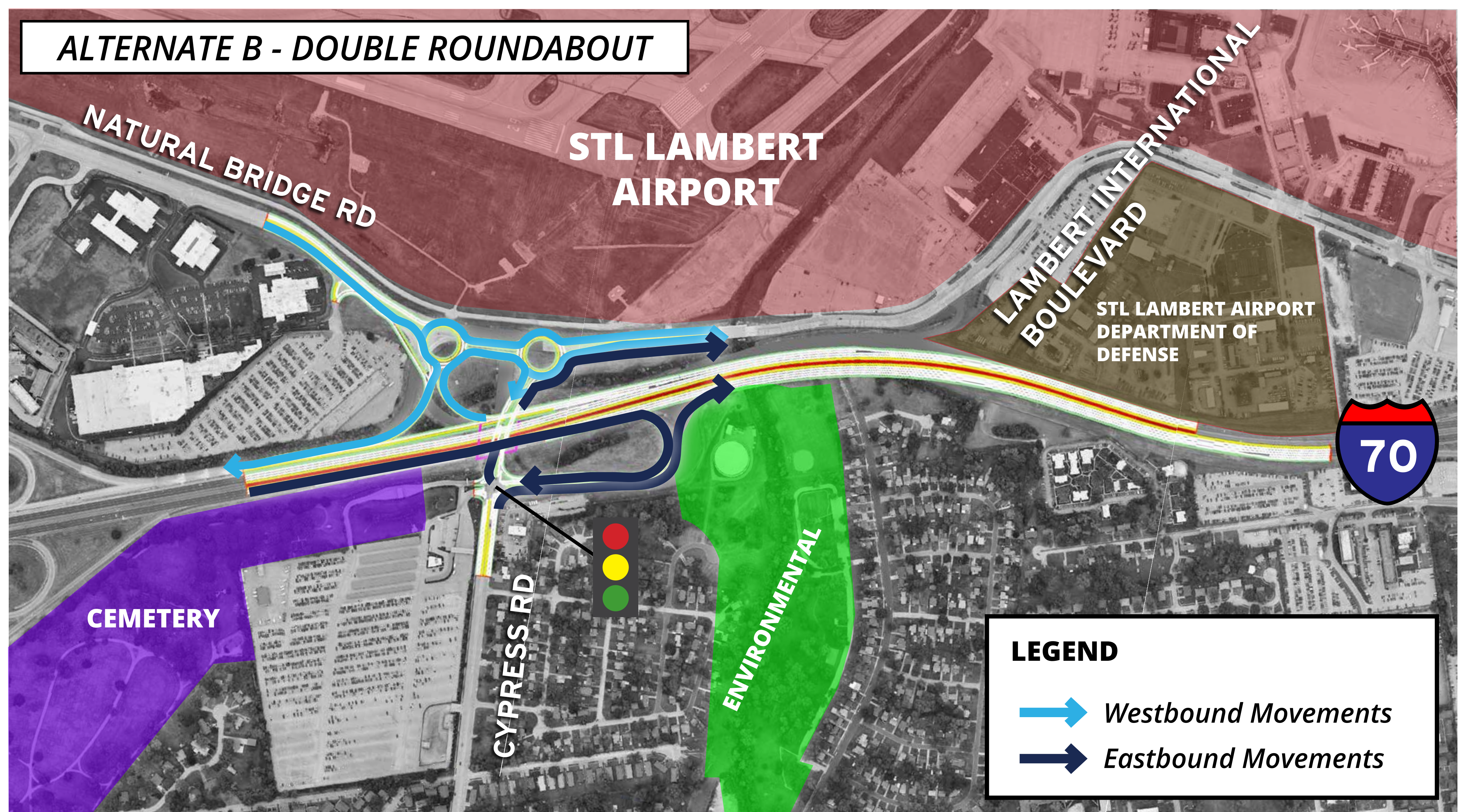
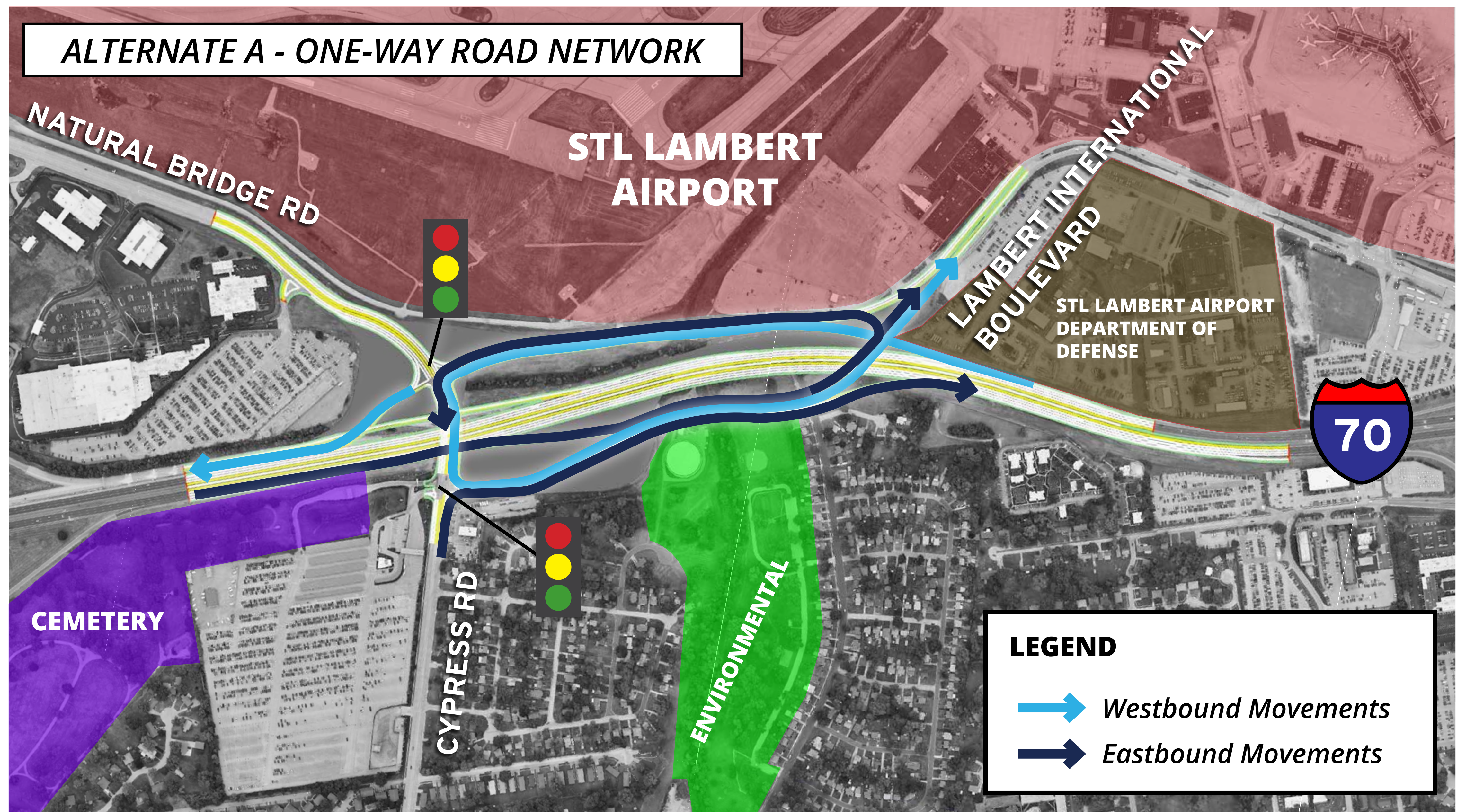
ALTERNATE A - PARTIAL CLOVERLEAF (PARCLO)

- ▶ *Features*
 - *Removes two cloverleaf ramps to eliminate weaving and improve traffic flow*
 - *Connects I-70 exit ramps to US-67 via two new signals (LOS B), which will add stops for north-south traffic*
 - *Provides a WB collector-distributor roadway on I-70 to separate diverging/merging from the mainline and improve traffic flow between Cypress and MO-180*
- ▶ *Safety*
 - *Replaces two (2) Loop Ramps with direct ramps*
 - *Reduces Weaving conflicts*
- ▶ *Tradeoffs*
 - *Keeps two (2) Loop Ramps*
 - *Adds Two (2) Signals to Lindbergh Blvd.*

ALTERNATE B - SINGLE POINT URBAN INTERCHANGE (SPUI)

- ▶ *Features*
 - *Consolidates all ramp left-turns at single signal (LOS B), which improves spacing to adjacent intersections along US-67*
 - *Provides a WB collector-distributor roadway on I-70 to separate diverging/merging from the mainline and improve traffic flow between Cypress and MO-180*
- ▶ *Safety*
 - *Reduces merging, diverging and weaving on I-70*
 - *Increases separation of I-70 Ramps from adjacent intersections/driveways on Lindbergh*
- ▶ *Tradeoffs*
 - *Adds a Signal to Lindbergh*
 - *Higher Bridge Cost*

I-70 & Cypress



I-70 & Cypress

ALTERNATE A - ONE-WAY ROAD NETWORK

- ▶ *Features*
 - *Accommodates future traffic as proposed STL Lambert Front Door*
 - *Creates a split-diamond type interchange with Cypress and LIB*
 - *One-way outer roads between Cypress and LIB facilitate efficient traffic flows*
 - *U-turn maneuvers are required for some movements, which may not be intuitive*

- ▶ *Safety*
 - *Eliminates a Signalized Intersection*
 - *Decreases Conflict Points on Cypress*
 - *Removes Low-Speed Loop Ramps*

- ▶ *Tradeoffs*
 - *Property Impacts*
 - *Environmental Impacts*

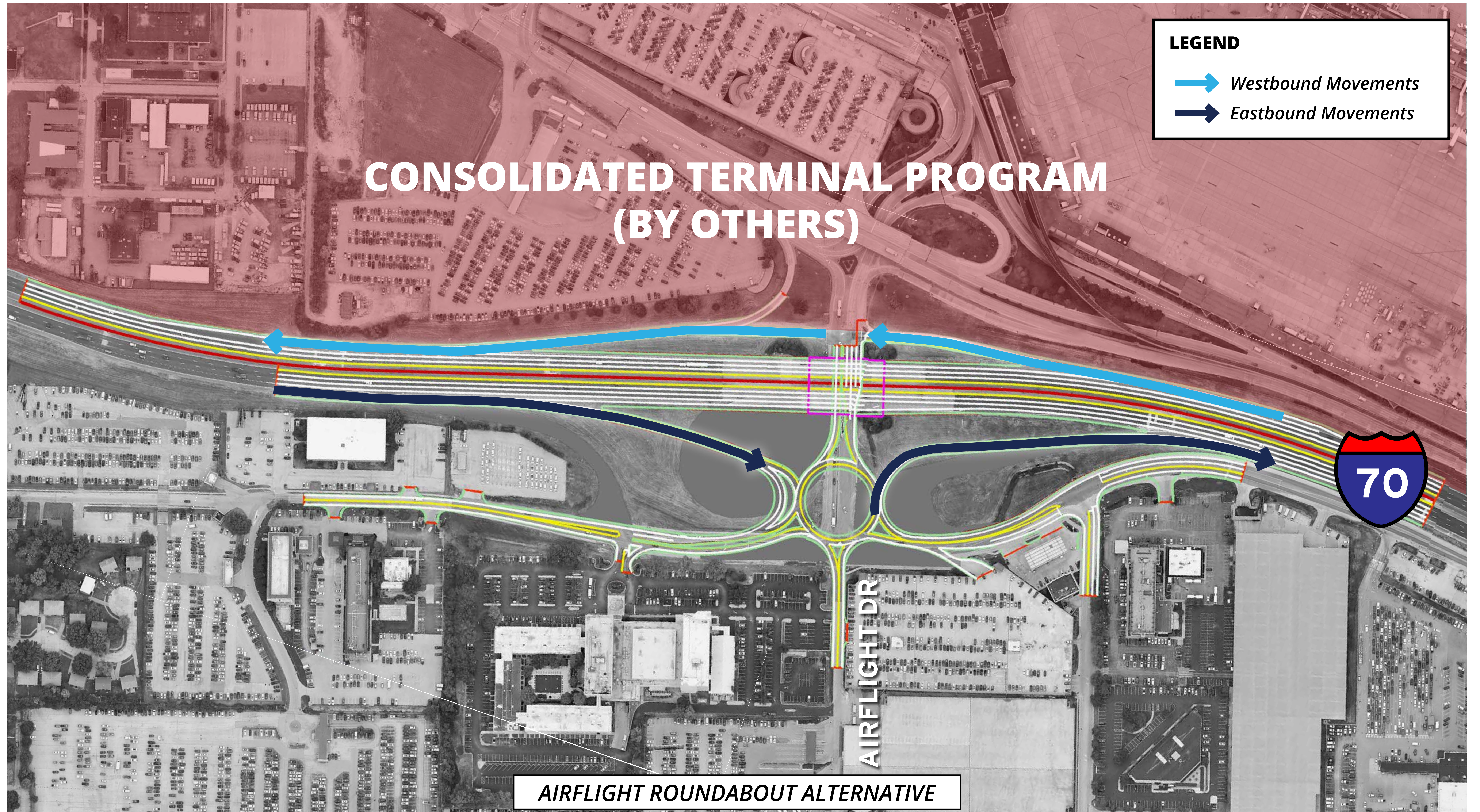
ALTERNATE B - DOUBLE ROUNDABOUT

- ▶ *Features*
 - *Accommodates future traffic as proposed STL Lambert Front Door*
 - *Maintains interstate access at Cypress*
 - *Dual roundabout configuration operates efficiently (LOS A/B) but the close spacing poses a concern for wayfinding and queue management*
 - *Preserves current I-70 EB ramps, which have tight geometry*

- ▶ *Safety*
 - *Removes Signalized Intersections*
 - *Utilizes Roundabouts*
 - *Decreases Conflict Points on Cypress*

- ▶ *Tradeoffs*
 - *Maintains Closely Spaced Interchange*
 - *Maintains Low-Speed Interstate Ramps*
 - *2050 Volumes are challenging*

I-70 & Airflight



I-70 & Airflight

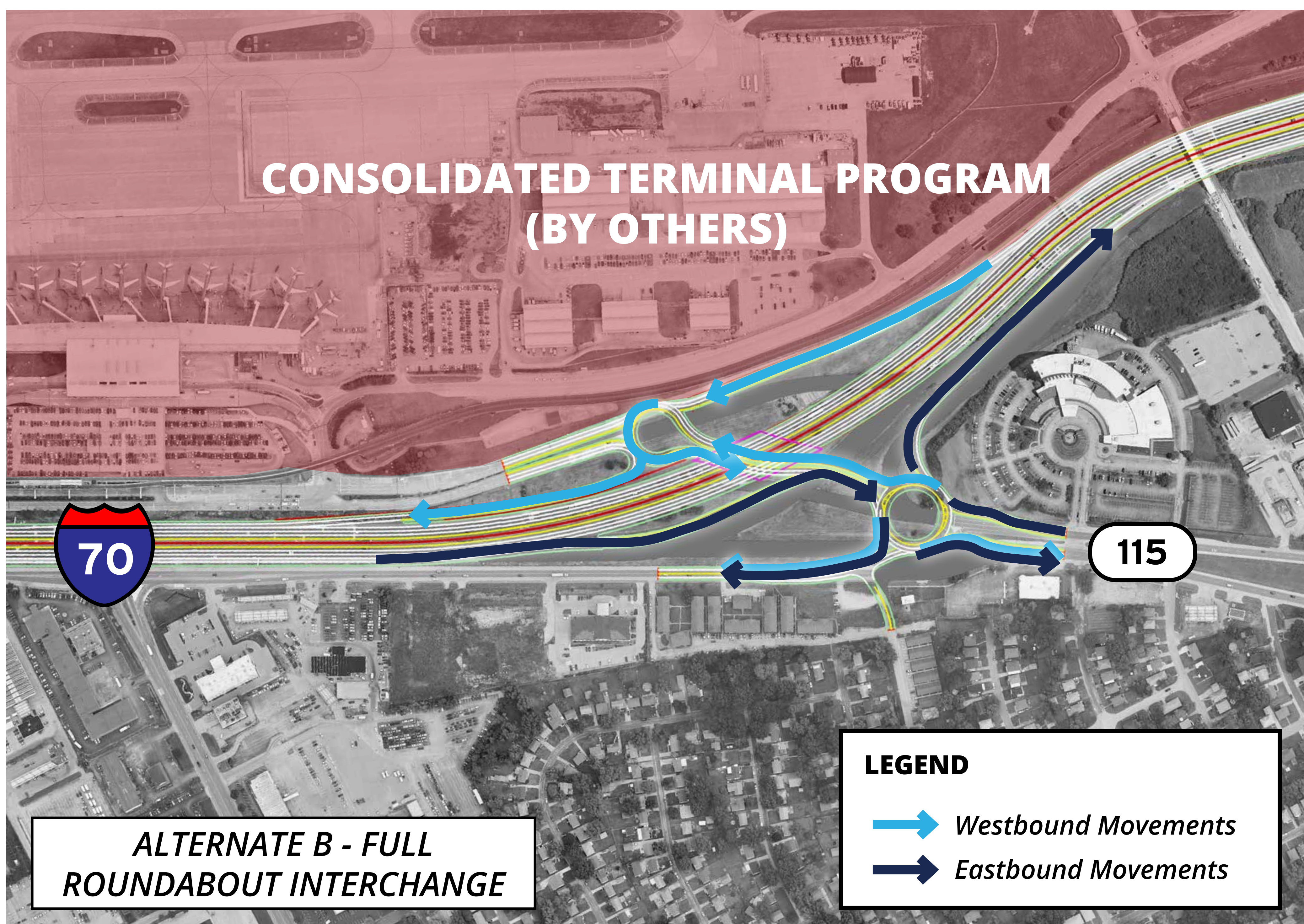
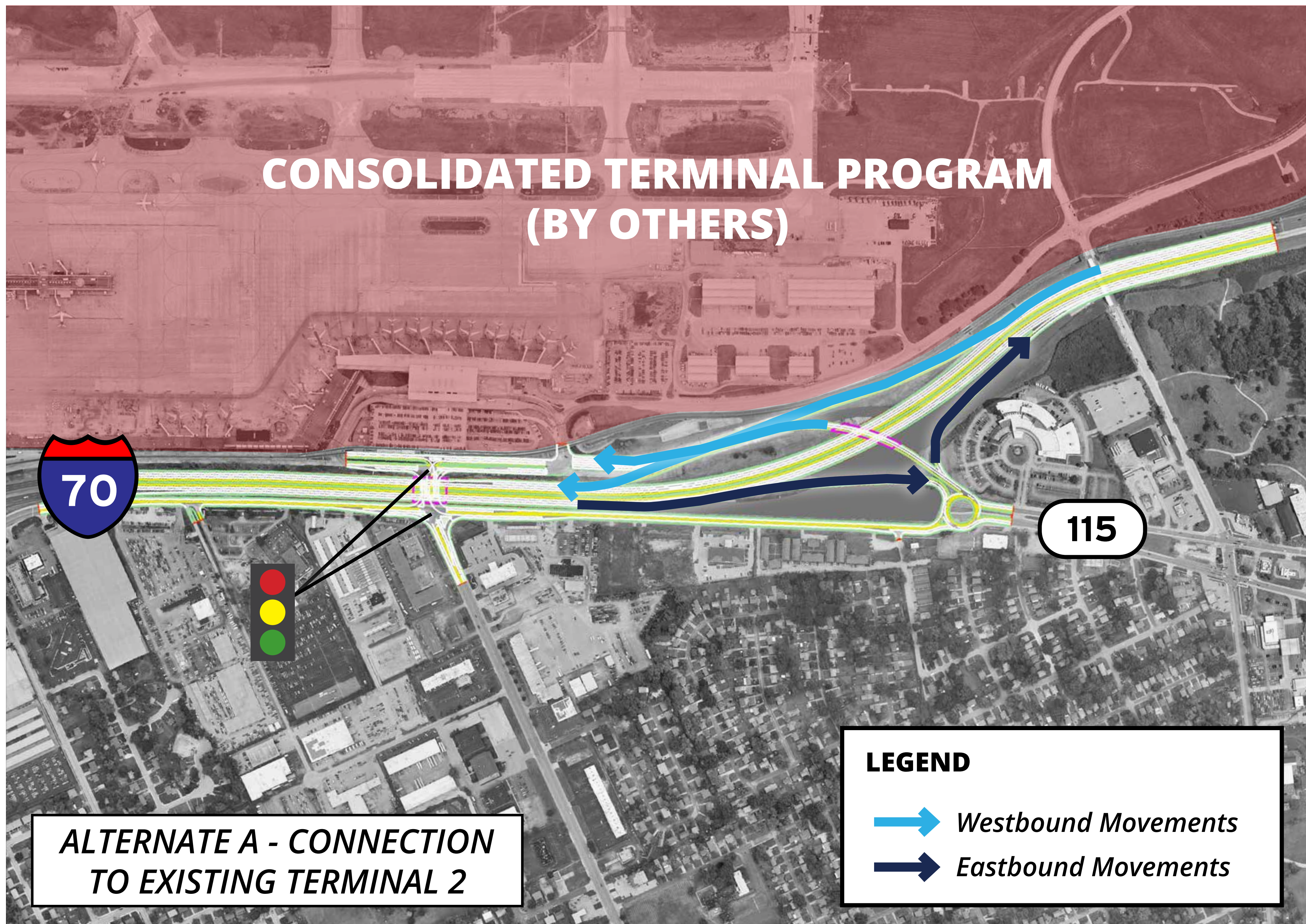
ALTERNATE A - ROUNDABOUT ALTERNATIVE

- ▶ *Features*
 - *MoDOT Maintains full access to/from I-70*
 - *Access to STL Lambert Terminal subject to change (CTP Program)*
 - *Consolidates outer roads and I-70 EB ramps in a single lane roundabout, which improves traffic flows (LOS A)*
 - *Maintains I-70 WB ramps in their current configuration with signalized intersection at Airflight*
 - *Pedestrian access across I-70*

- ▶ *Safety*
 - *Reduces conflict points*
 - *Reduces potential for wrong way drivers*

- ▶ *Tradeoffs*
 - *CTP Design Ongoing*

I-70 & MO-115



I-70 & MO-115

ALTERNATE A - CONNECTION TO EXISTING TERMINAL 2

- ▶ *Features*
 - *Extends Woodson Rd across I-70 to improve local connectivity to the interstate*
 - *Rebuilds Natural Bridge interchange with improved ramp and I-70 mainline geometries*
 - *Pedestrian access across I-70*
- ▶ *Safety*
 - *Reduces conflict points on I-70*
 - *Simplifies intersection at MO-115*
 - *Relocates I-70 WB On-Ramp to Right Side*
- ▶ *Tradeoffs*
 - *I-70 impacts*
 - *Utility impacts*
 - *Intersection spacing*
 - *Largest cost - \$\$\$*

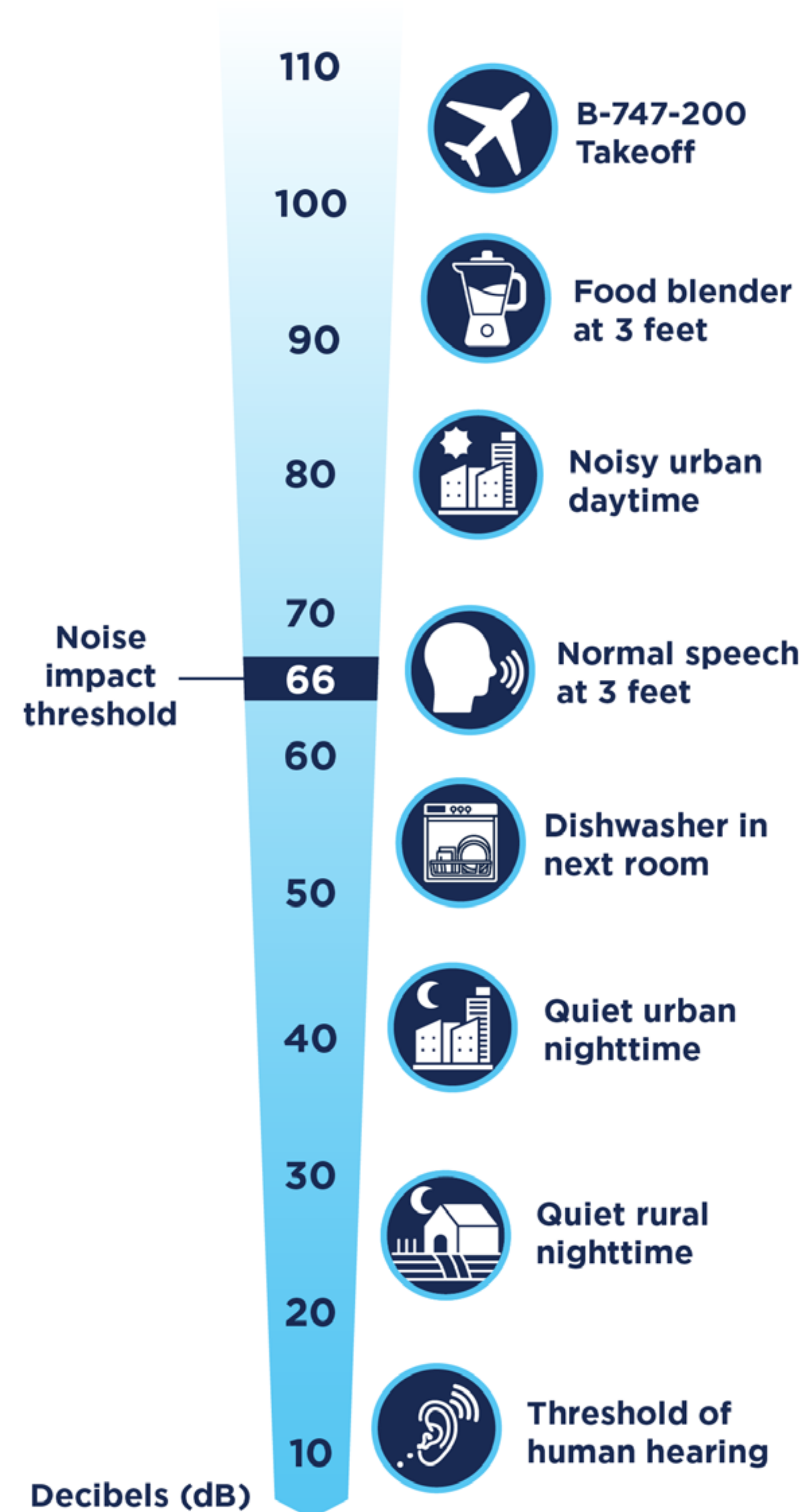
ALTERNATE B - FULL ROUNDABOUT INTERCHANGE

- ▶ *Features*
 - *Connects LIB and Natural Bridge with a full access interchange*
 - *Roundabout ramp terminals operate efficiently at LOS A/C*
 - *Improves connectivity to the interstate for uses on both the north and south sides*
 - *Pedestrian access across I-70*
- ▶ *Safety*
 - *Reduces conflict points on I-70*
 - *Simplifies intersection at MO-115*
 - *Relocates I-70WB entrance ramp to right side*
- ▶ *Tradeoffs*
 - *Pedestrian access further from Metrolink*

Noise

As part of the Environmental Assessment, MoDOT conducted a noise study to determine if noise walls would be feasible and cost-effective.

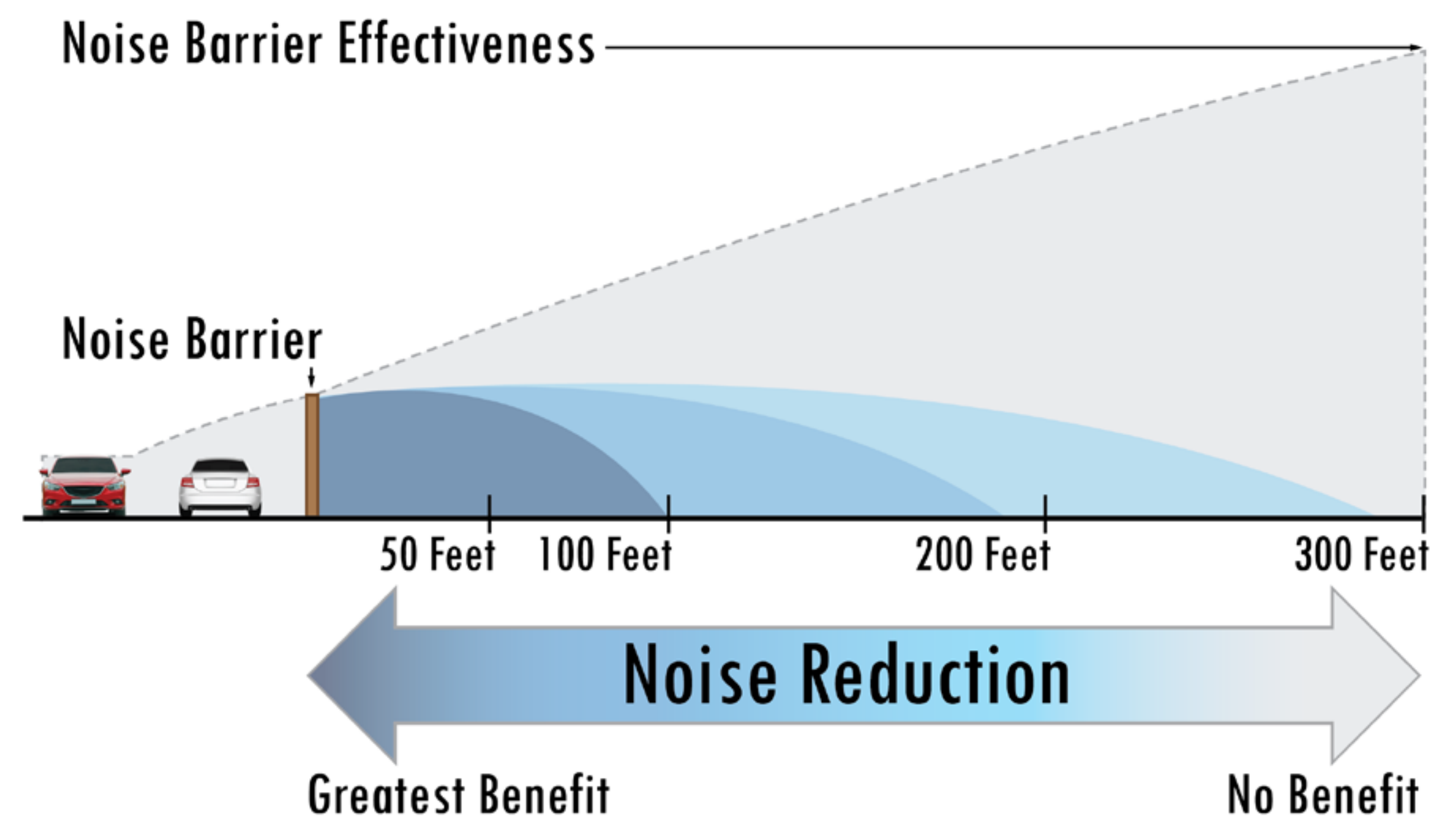
What is noise?



Noise Study Process

1. Identifying Noise Impacts: A detailed software model, validated with field measurements, is used to assess existing noise and predict future noise levels.

2. Evaluating Noise-Reduction Strategies: Where noise impacts are identified, noise-reduction strategies will be evaluated. Noise walls are the most common strategy on a corridor like I-70. Noise walls must meet certain criteria in order to be recommended for construction.



Per MoDOT and Federal Highway Administration (FHWA) noise policies, noise abatement strategies are considered feasible and reasonable if:

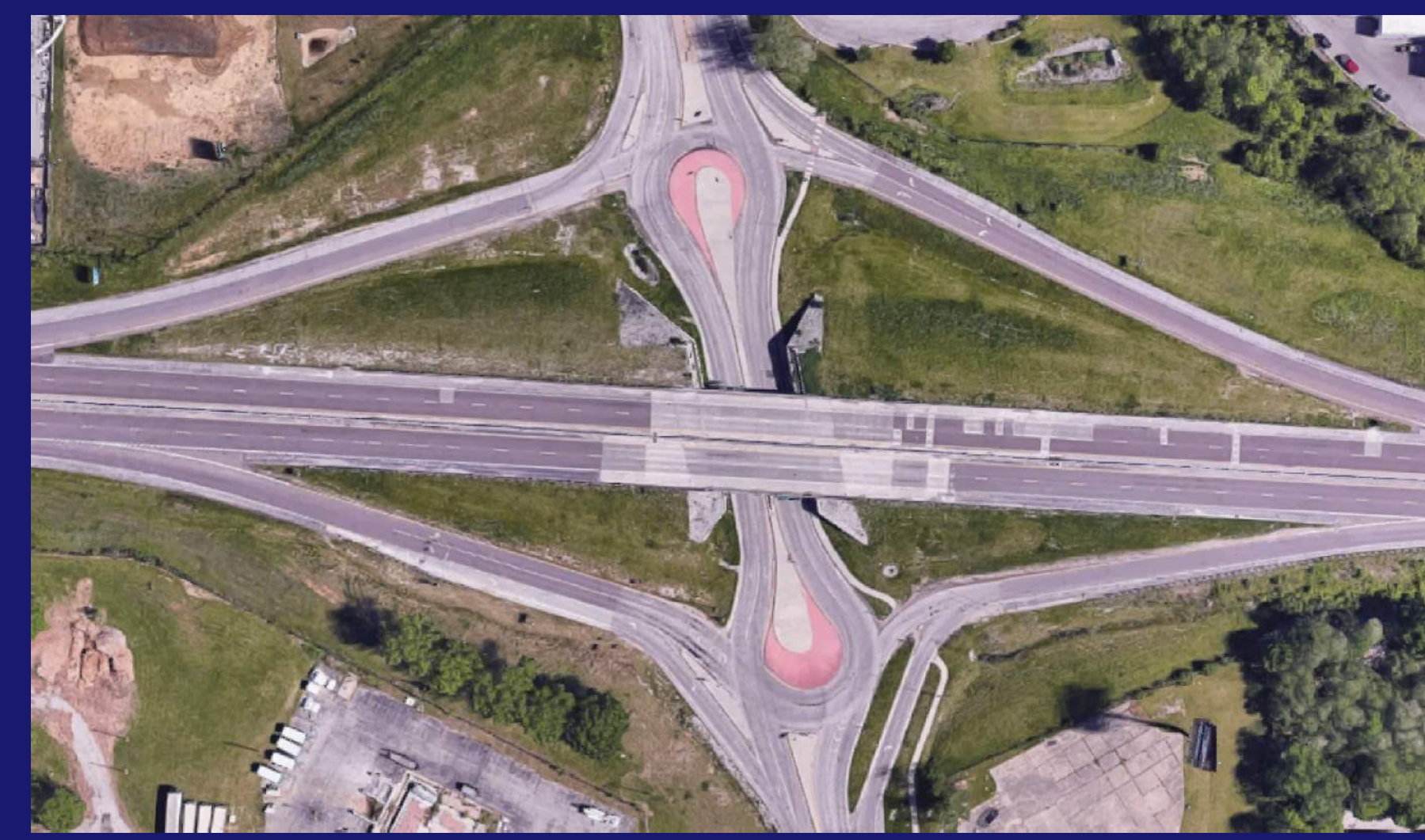
- They are physically constructible without significantly impacting maintenance, safety, drainage, etc.
- They do not exceed 1,300 square feet of wall per residence that would benefit from the wall. A benefit is defined as a 7 decibel reduction.
- They are desired by the owners and residents of the properties that would benefit



All About ROUNDAABOUTS

A handful of roundabouts may be shaped into more of an oval than a circle and the number of entry and exit points may vary. Pictured to the right are two unique examples.

Despite several different looks, how you navigate through a roundabout never changes.



According to a study by the Insurance Institute for Highway Safety, compared to a common signalized crosswalk, roundabouts reduce...



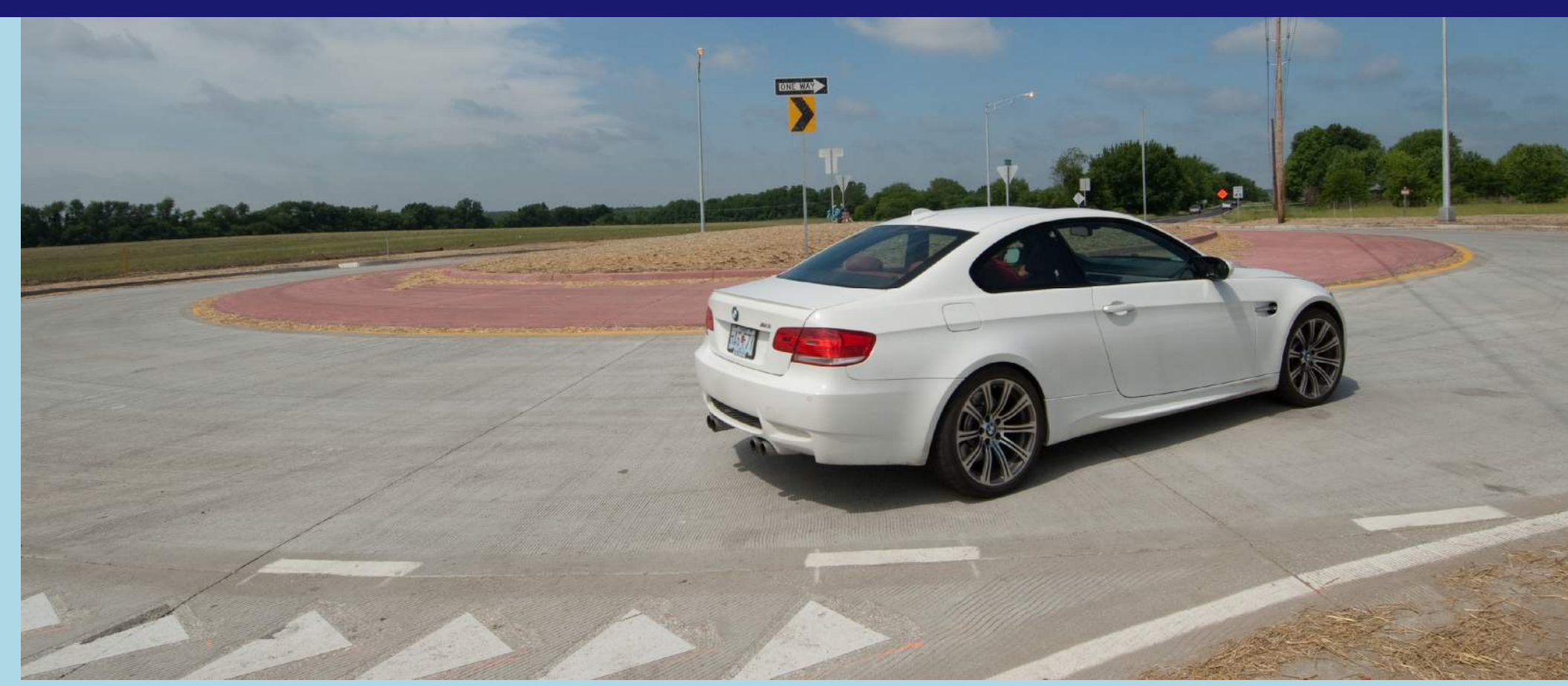
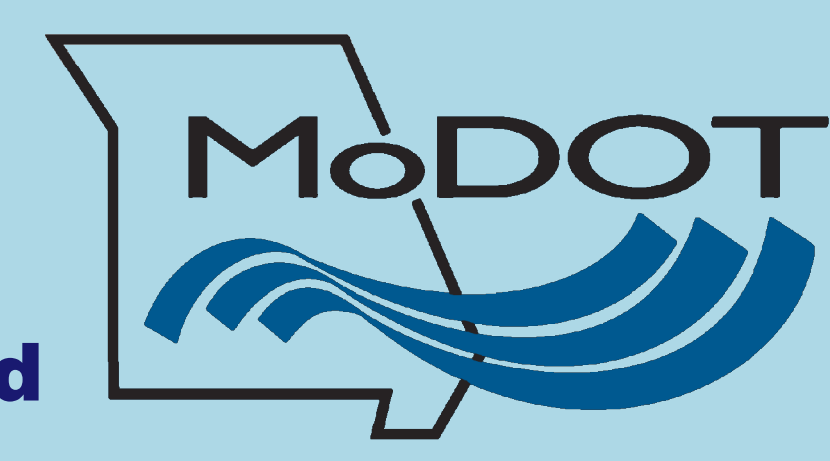
Navigating a Roundabout

- 1 When approaching a roundabout, you will see a dashed white line and a yield sign at each entry point. Slow down, look for oncoming cars, pedestrians, and bicyclists.
- 2 When you see a safe opening, proceed into the roundabout. Follow the circle of traffic until you see the road you want to turn onto, then exit out of the roundabout.
- 3 When entering a roundabout, remember, all vehicles already within the roundabout have the right of way.
- 4 It's important to know that all roundabouts work the same, but they may not look the same. Some offer single lane traffic, while others may have multiple lanes.
- 5 When navigating a multi-lane roundabout, observe roadside signs and pavement markings. These will direct you in the correct lane. Do not change lanes within a roundabout.
- 6 Do not enter a roundabout if an emergency vehicle is approaching a roundabout. If an emergency vehicle approaches while you are in a roundabout, exit immediately and pull over to the right side of the road.
- 7 Never turn left when entering a roundabout. When exiting, be sure to use your right turn signal.

MODOT.ORG
888-ASK MODOT (275-6636)

Roundabouts are a form of circular intersection that may be used as an alternative to signalized and all-way stop intersections. They're designed to safely get a lot of traffic through an intersection without much waiting.

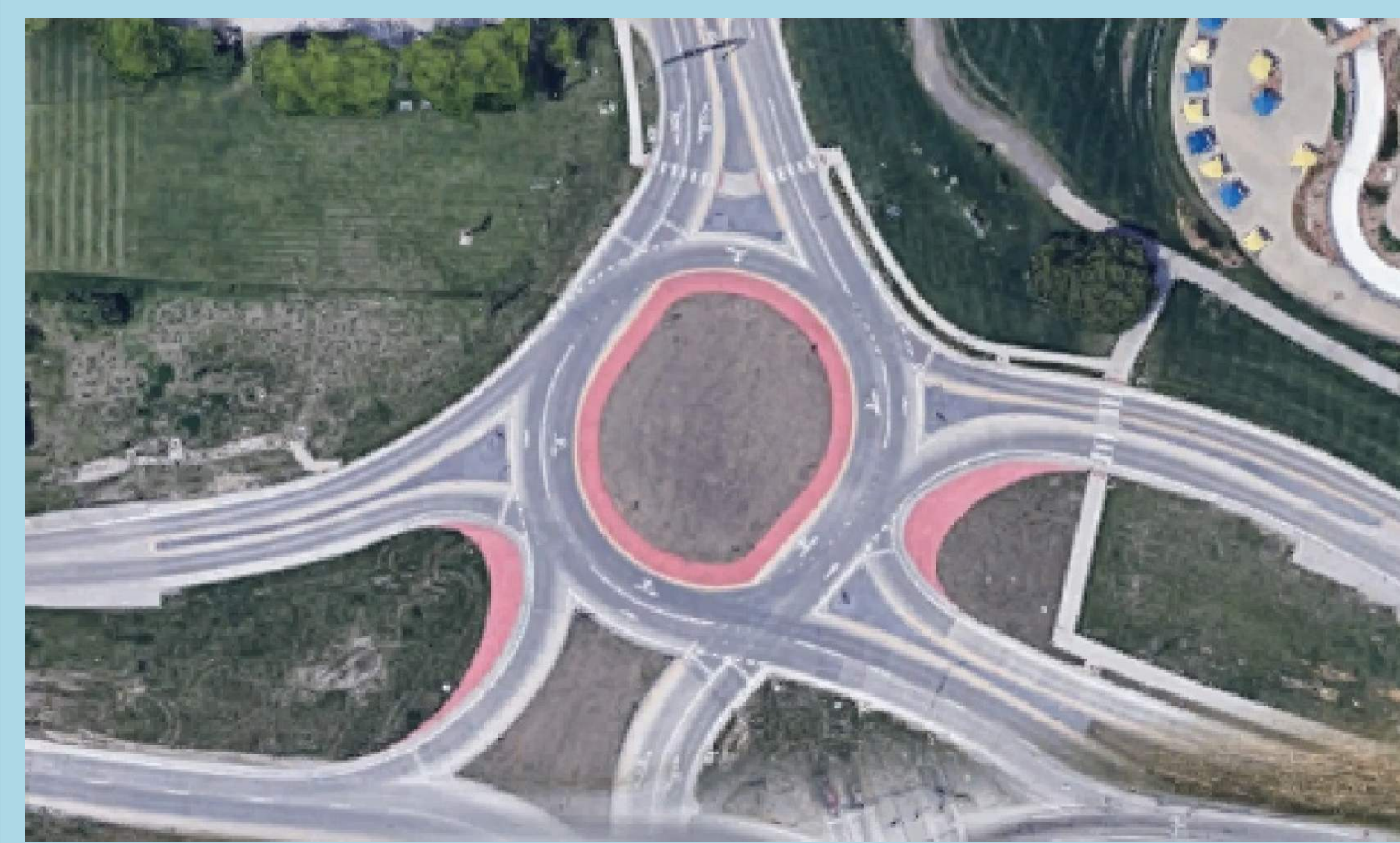
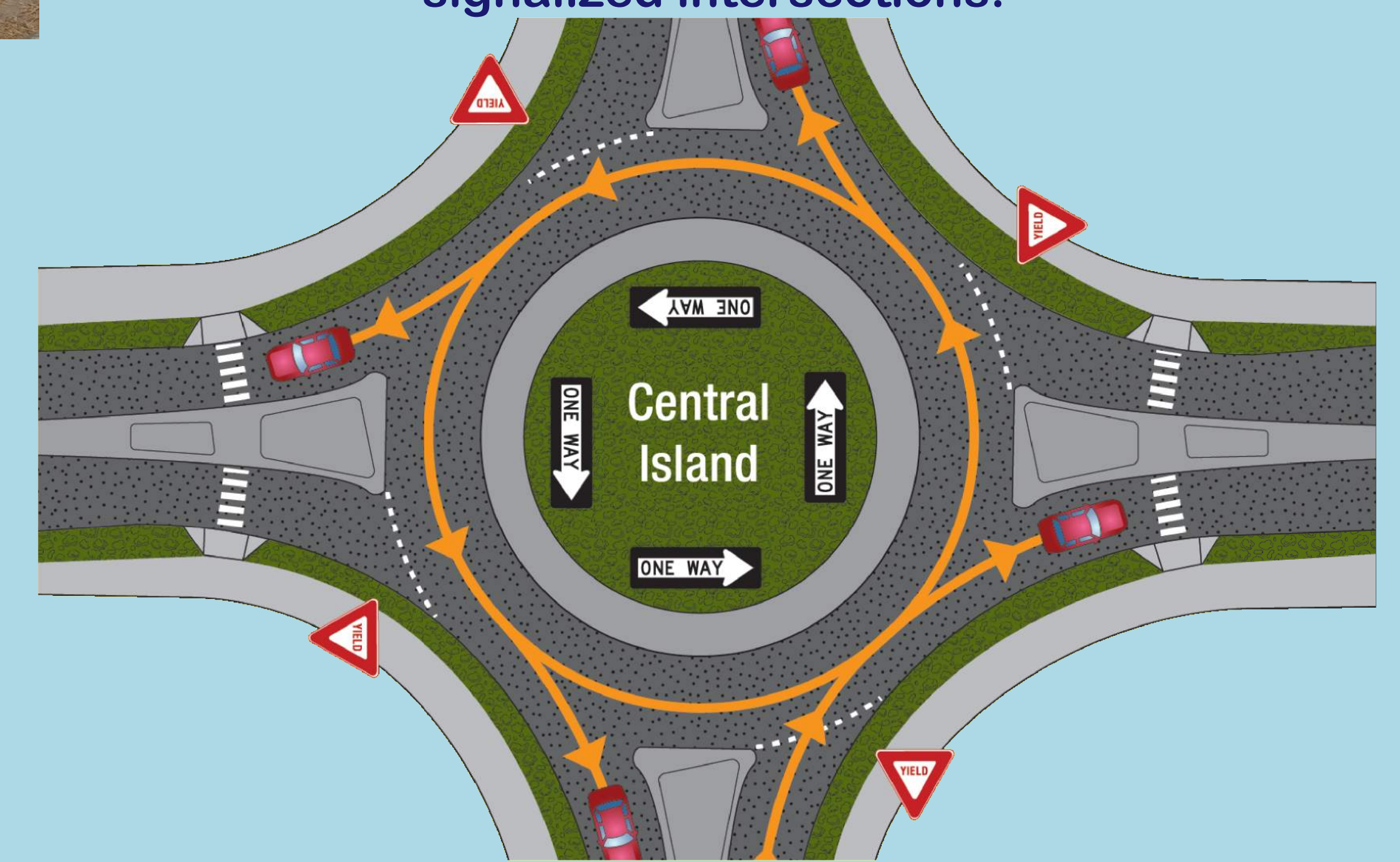
As of 2022, we have implemented roundabouts in 356 locations statewide.



A roundabout is a one-way circle of traffic with yield signs at each entry point.

An entry point is where a driver will yield into the roundabout, which allows traffic to flow with little to no stopping, reducing fuel use and air pollution in the process.

They're easy to navigate through, and more importantly, safer to use than traditional traffic signalized intersections.



LARGE VEHICLE FEATURES of a roundabout

Most roundabouts are designed with a truck apron to accommodate large vehicles like school buses, semi-trucks, or farm equipment. This raised section of pavement around the central island is the truck apron. It allows for the back wheels of an oversized truck to ride up as they circle around, helping them to maneuver through. Large trucks and trailers require special consideration when driving through roundabouts. Give them plenty of room, they may need to use more than one lane to successfully make it through a roundabout.

Next Steps

- *Complete Public Engagement Survey*
- *Future Public Engagement Opportunities during design*
- *Reasonable Alternative Selection*
- *Identify Additional \$200M in Funding*
- *Environmental Investigations*
- *Preliminary, Right-of-way and Final Design*

For questions or comments please contact:

MoDOT

✉: Jamie.Rana@modot.mo.gov

☎: 1-888-275-6646

<https://www.modot.org/improve-i-70-stl-conceptual-study>

Visit the Project website:

