



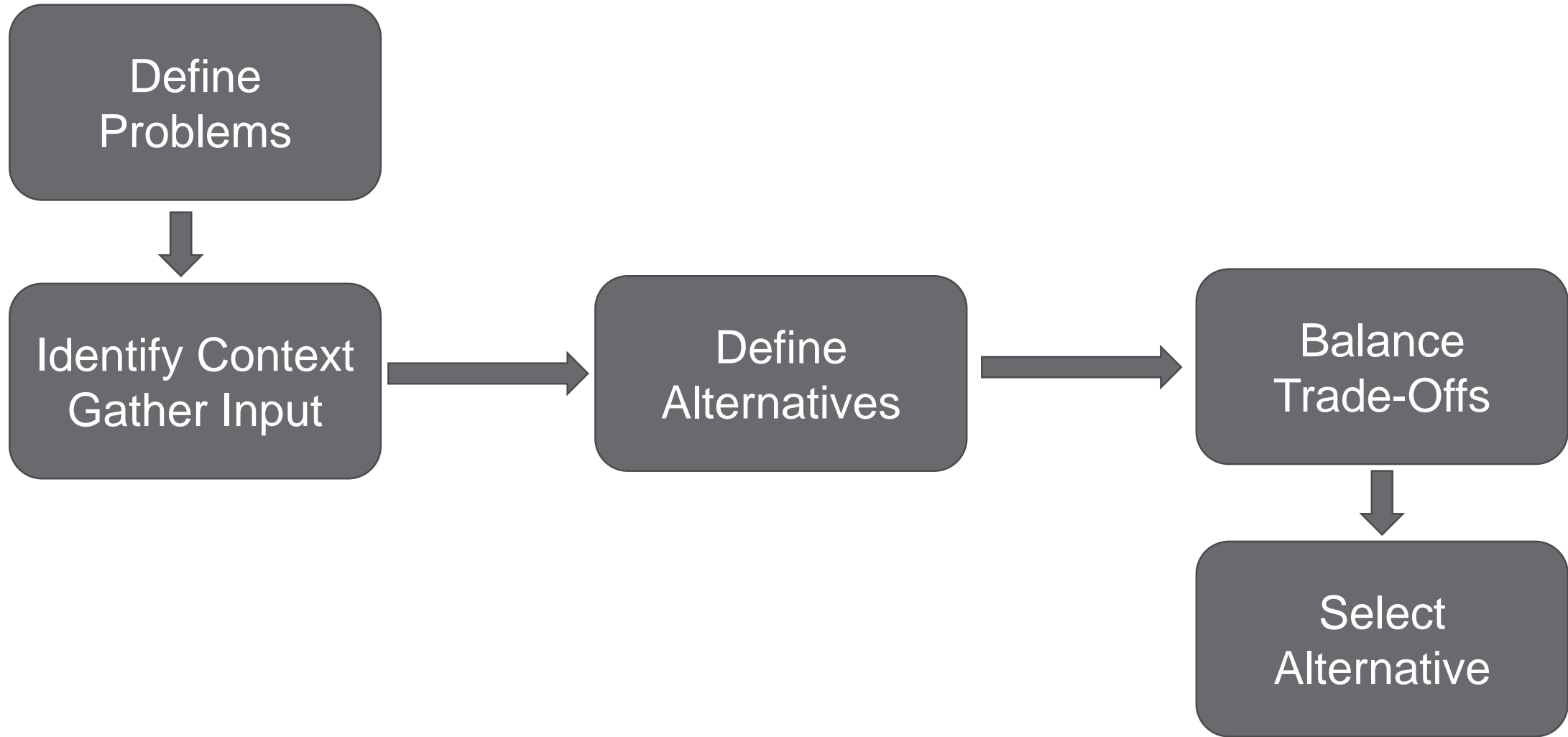
# **I-65/I-70 North Split Project**

Public Open House

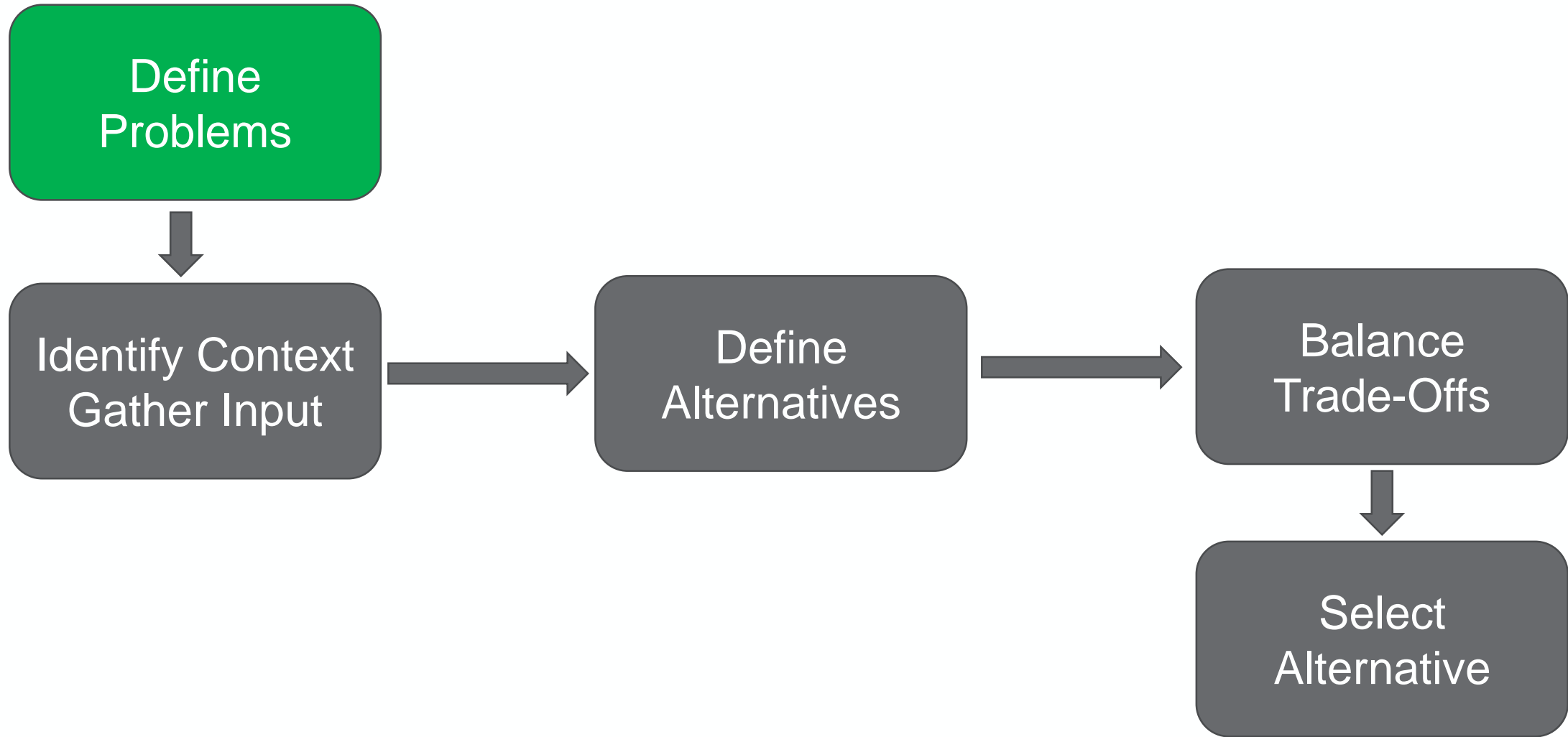
October 10, 2018



# Alternatives Development Process



# Alternatives Development Process



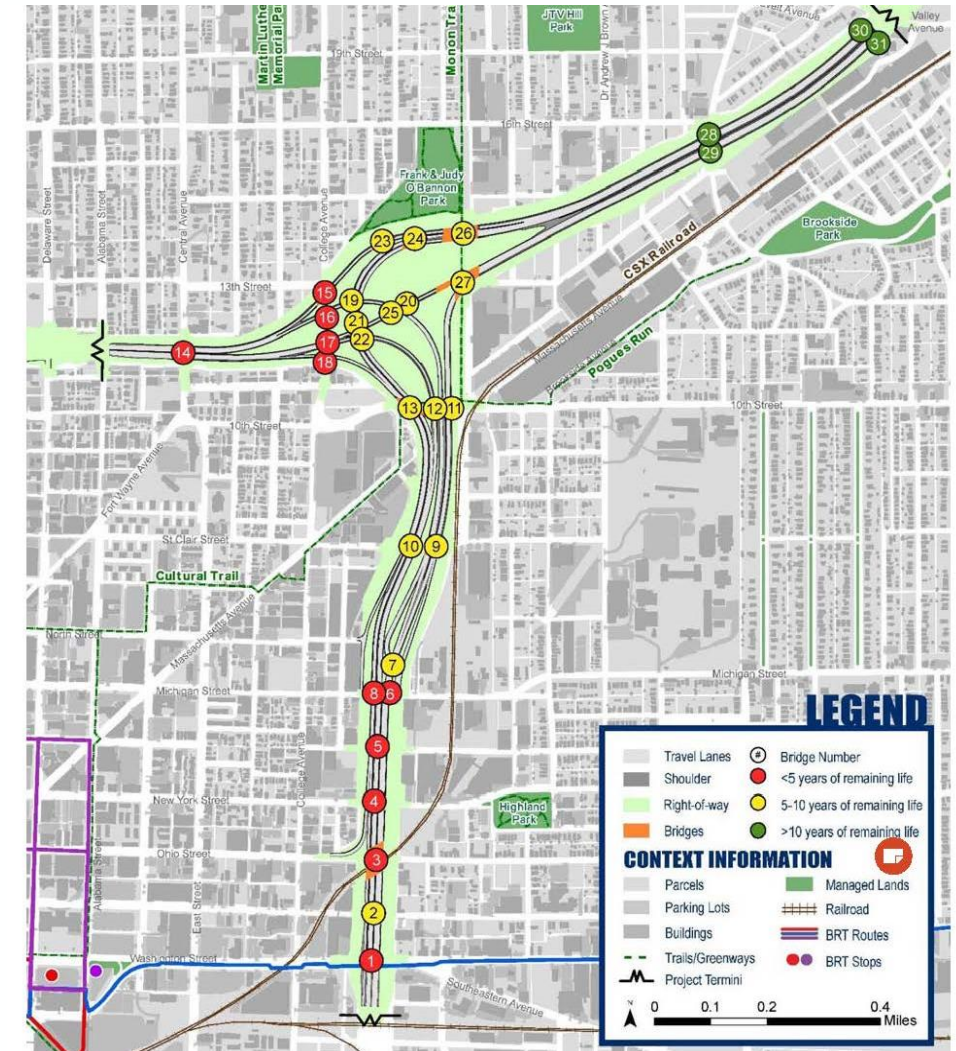
# Define Problems – Road and Bridge Conditions

Correct deteriorated pavement and bridge conditions.

- Constructed in the 1960s and 1970s, the pavement is past its life expectancy
- Repairing pavement cracks and potholes leads to frequent lane closures
- Bridge conditions are poor and getting worse:

● Under 5 years of life (11 bridges)

● 5 - 10 years of life (16 bridges)

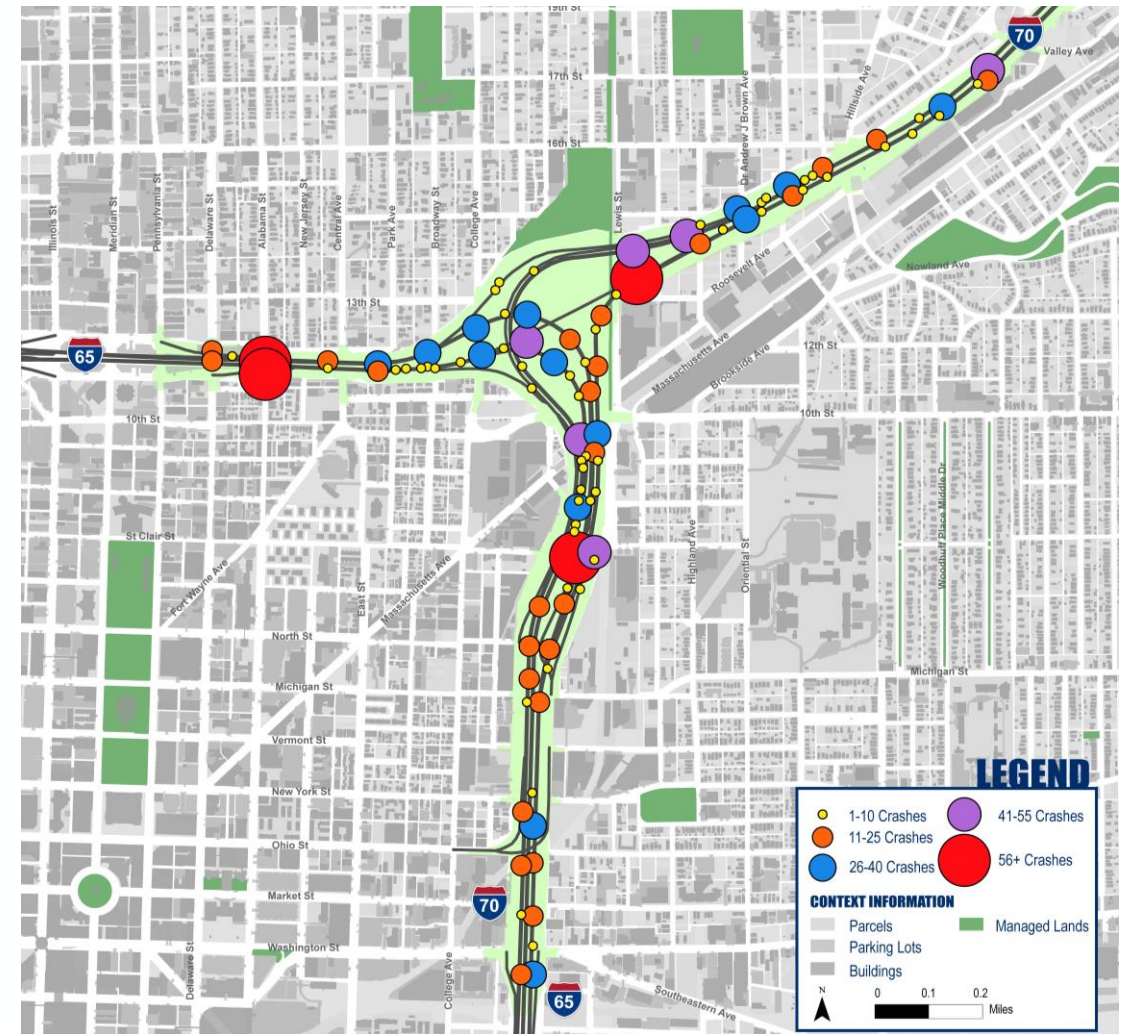
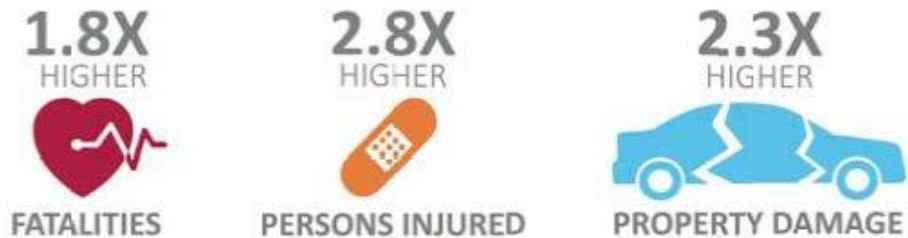


# Define Problems – Safety

## High Crash Rates

- Over 1,600 crashes from 2012 to 2016
  - Rear-end Crashes – due to congestion and stopped traffic
  - Sideswipe Crashes – due to congestion and weaving movements
- Higher than Indiana urban interstate rates

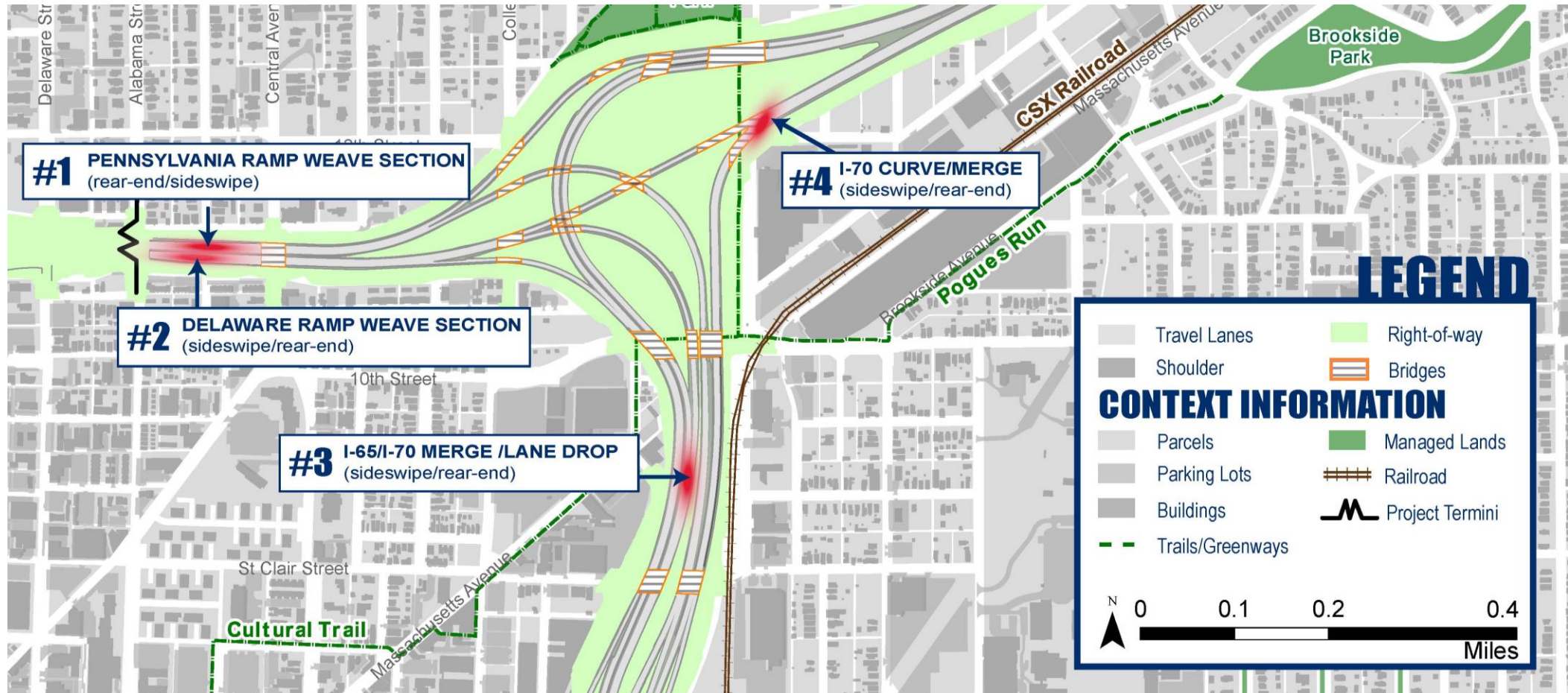
NORTH SPLIT 5-YEAR (2012-2016) CRASH RATE  
COMPARED TO INDOT URBAN INTERSTATE RATES





# Define Problems – Safety

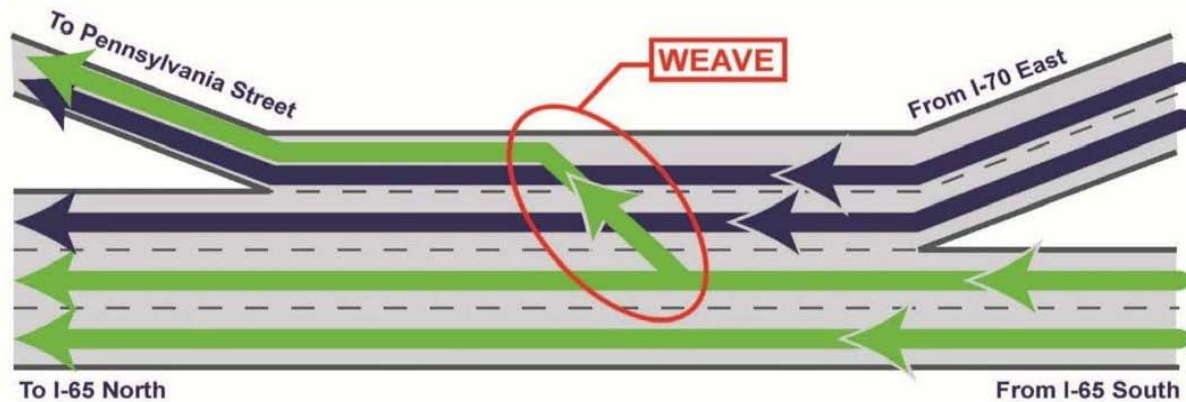
## Top 4 Crash Locations



# Define Problems – Weaving Areas

- Highest number of crashes are on west leg of the interchange, in weaving areas:

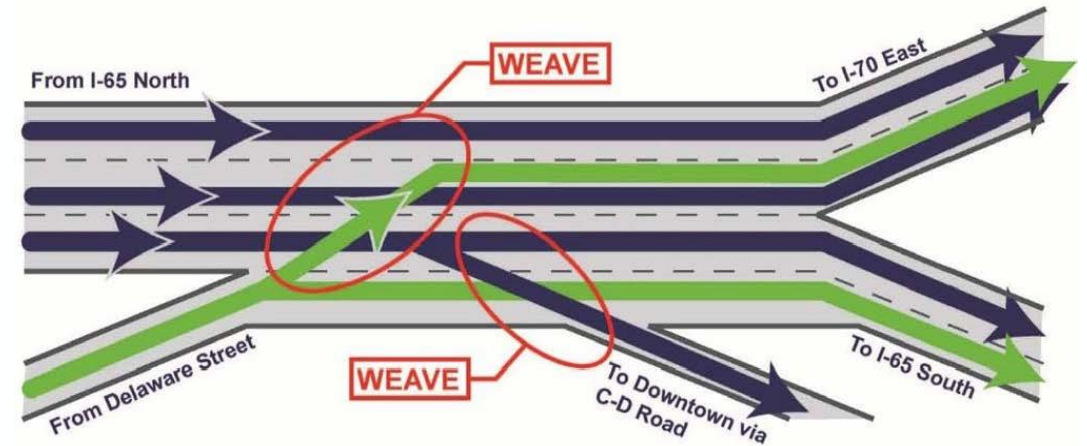
## Pennsylvania Street Exit Ramp



Most frequent crash type:

- Rear-end, followed by sideswipe

## Delaware Street Entrance Ramp



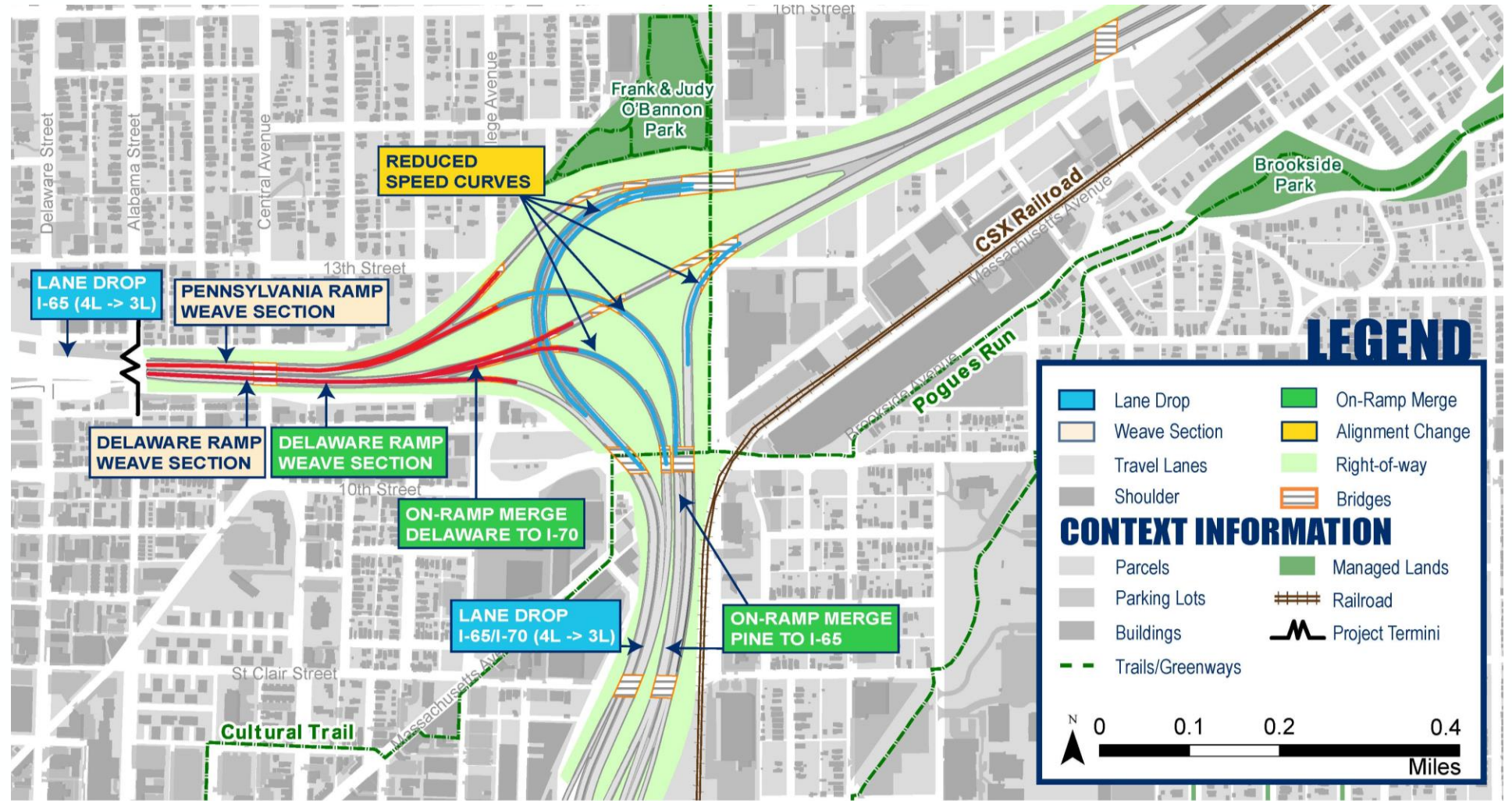
Most frequent crash type:

- Sideswipe, followed by rear-end



# Define Problems – Operations

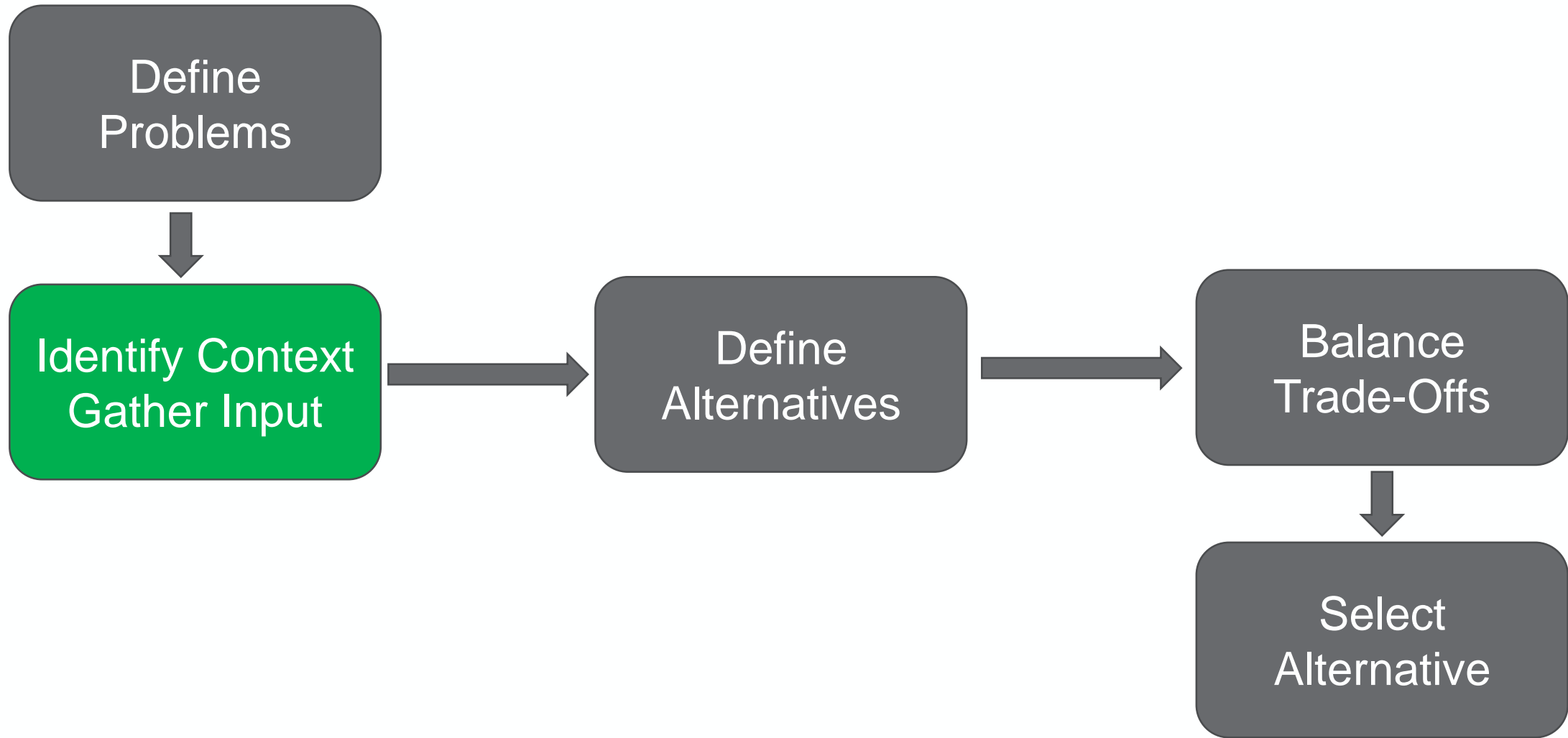
## North Split Bottlenecks





# Purpose and Need – Performance Measures

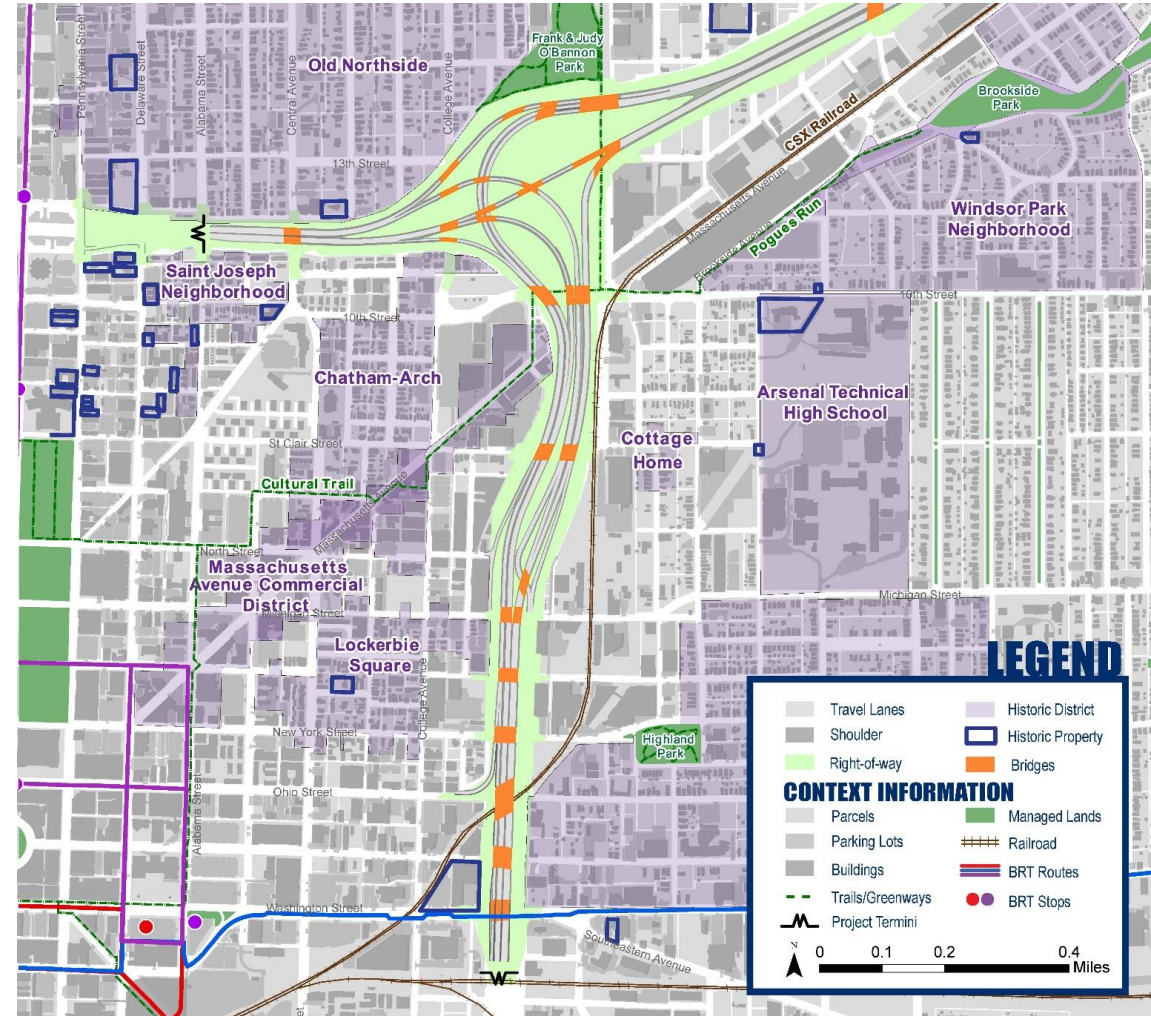
Project Need	Performance Measures
Correct Deteriorated Bridge Conditions	- Address deficient structural condition
Correct Deteriorated Pavement Conditions	- Address deficient pavement condition
Improve Safety	Alternative must address weaves on the west leg of the North Split: 1. Eliminate Meridian/Pennsylvania Street exit ramp weave 2. Eliminate Meridian/Delaware Street entrance ramp weave Alternative should include improvements at the following two crash locations: 3. Improve conditions at I-65 southbound/I-70 westbound merge point 4. Improve curvature on I-70 northbound to I-70 eastbound
Improve Interchange Operations and Reduce Congestion	- Improve Interstate level of service over no-build condition - Eliminate “big weave” on I-65/I-70 south of North Split



# Environmental Resources

## North Split Project Area Environmental Resources

- Historic Districts
- Park Property
- Monon Greenway
- Cultural Trail
- CSX Railroad





# Public and Agency Input

Public meetings, community groups, advisory committees, social media - ongoing

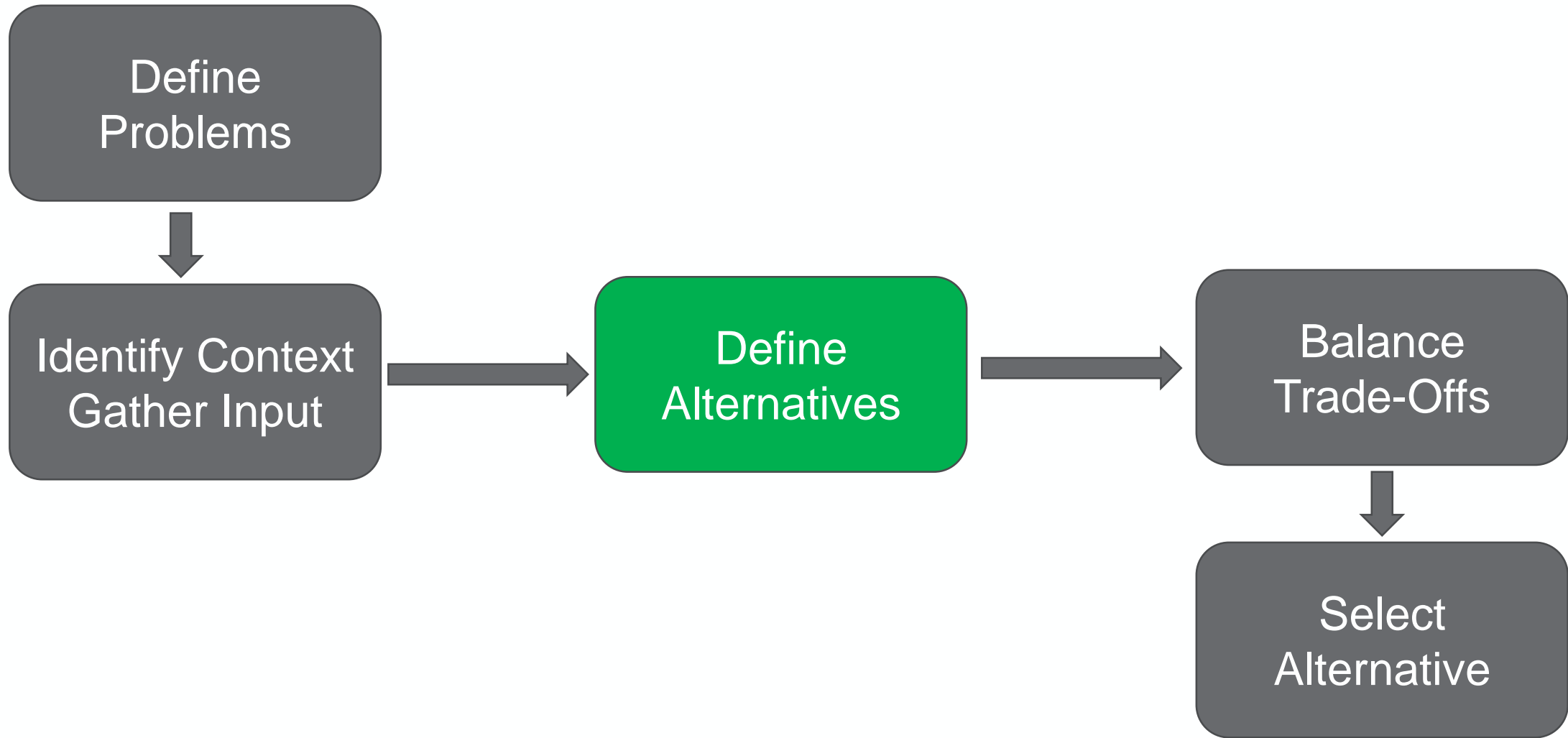
## Indianapolis Mayor Joe Hogsett - June 2018

- Make necessary bridge repairs to address valid safety concerns, but keep the interstate within the existing road bed
- Strike an appropriate balance between the needs of downtown residents and suburban commuters

## Indianapolis Chamber of Commerce - July 2018

- No above-grade walls in legs outside the North Split interchange;
- No expansion of the number of above-grade through lanes





# Eliminated Alternatives – Low Cost / Minimal

1. **No Build** – Leave the interchange as it is, with no replacement of pavement and bridges, and no safety or operational improvements
2. **Transportation System Management (TSM)** – Policy, strategy, and technology improvements, including traffic demand reduction or diversion
3. **Bridge and Pavement Replacement In-Kind** – Rehab or replace bridges and pavement at their current locations

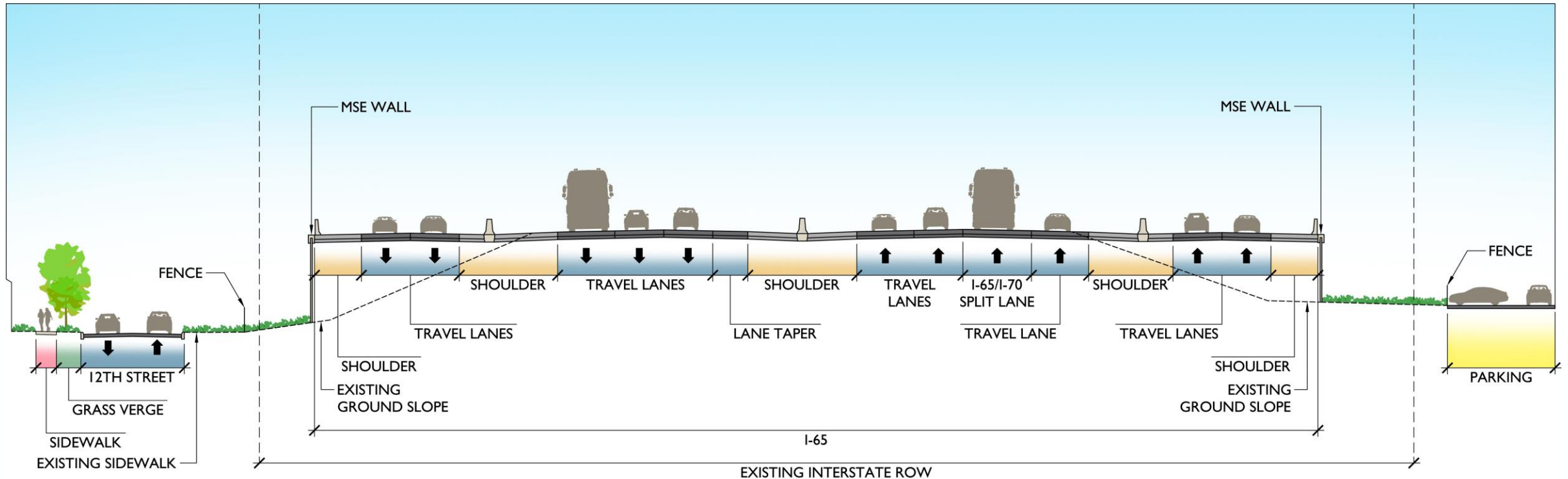
*Alternatives 1-3 Eliminated -- they do not meet project purpose and need.*





# Eliminated Alternative – Added Through Lanes

## 5. Full Interchange Reconstruction – *Eliminated due to added through lanes and large retaining walls near right-of-way lines*



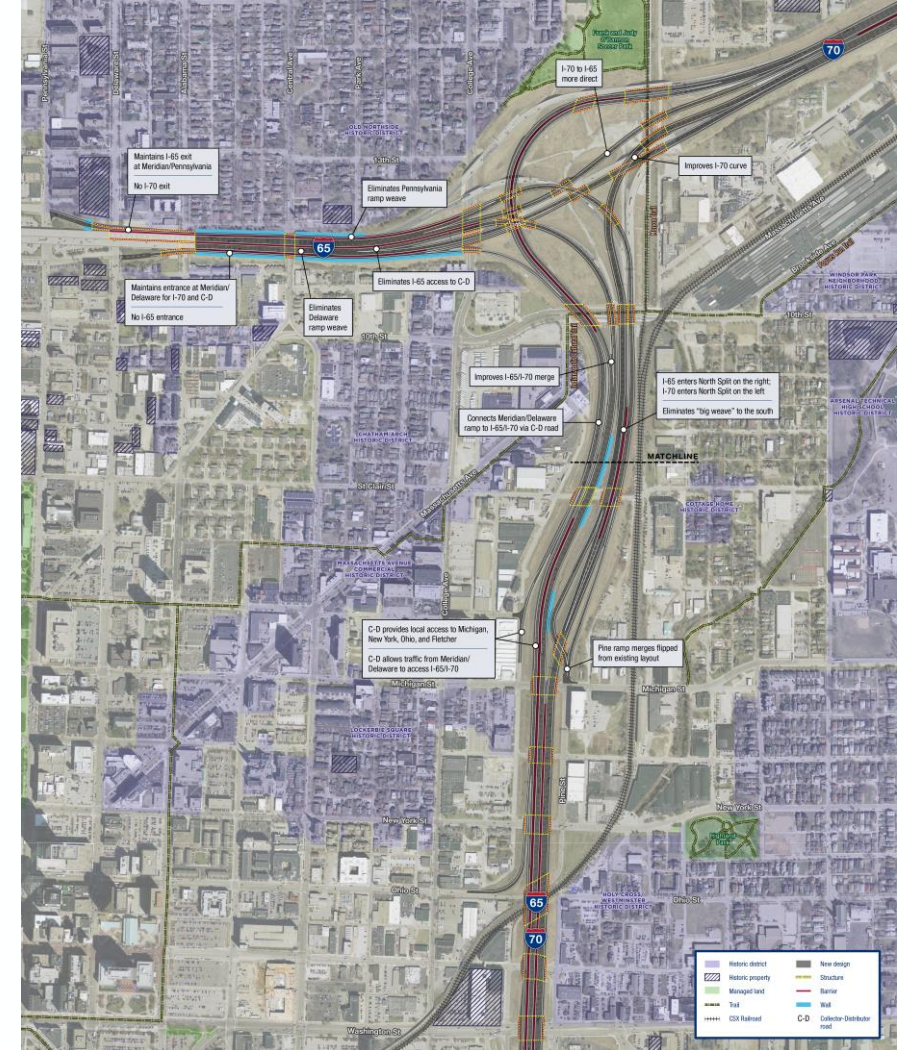
# Alternative 4 – Options a, b, and c

## 4. Efficient Interchange Reconstruction

Reconfigure interchange with no added through lanes

Three options to meet purpose and need by:

- Replacing pavement and bridges
- Addressing major safety problems
- Eliminating bottlenecks and improving level of service





# Alternative 4 – Common Features of Options

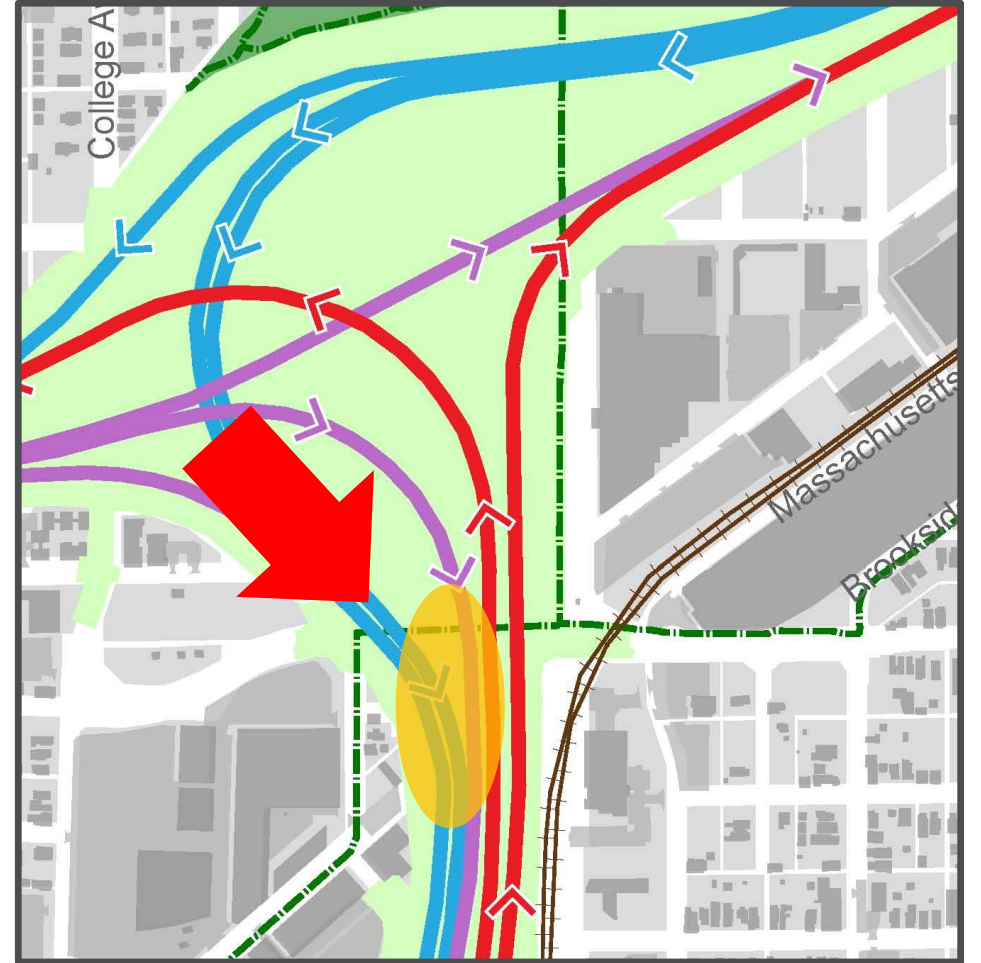
## Common Features

- Smaller footprint and modernized design features
- Increase safety at top four crash locations
  - Two weaves, the merge and the curve
- Improve bottlenecks
- Eliminate “big weave” on I-65/I-70
- Opportunities to improve aesthetics and connectivity



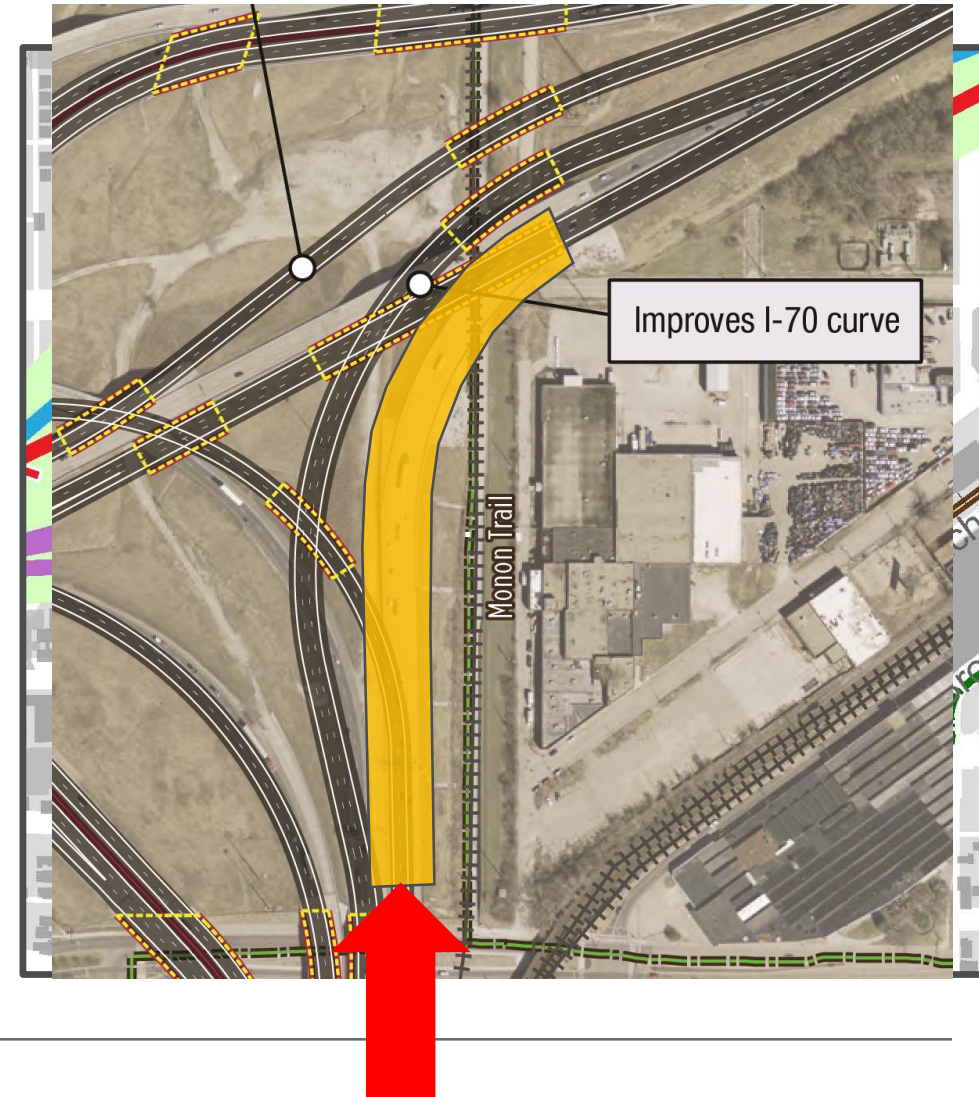


# Alternative 4 – Improve I-65 / I-70 Merge





# Alternative 4 – Improve I-70 Curve





# Alternative 4 Options

Where do the options differ?

- West leg of interchange differs
- East and south legs same

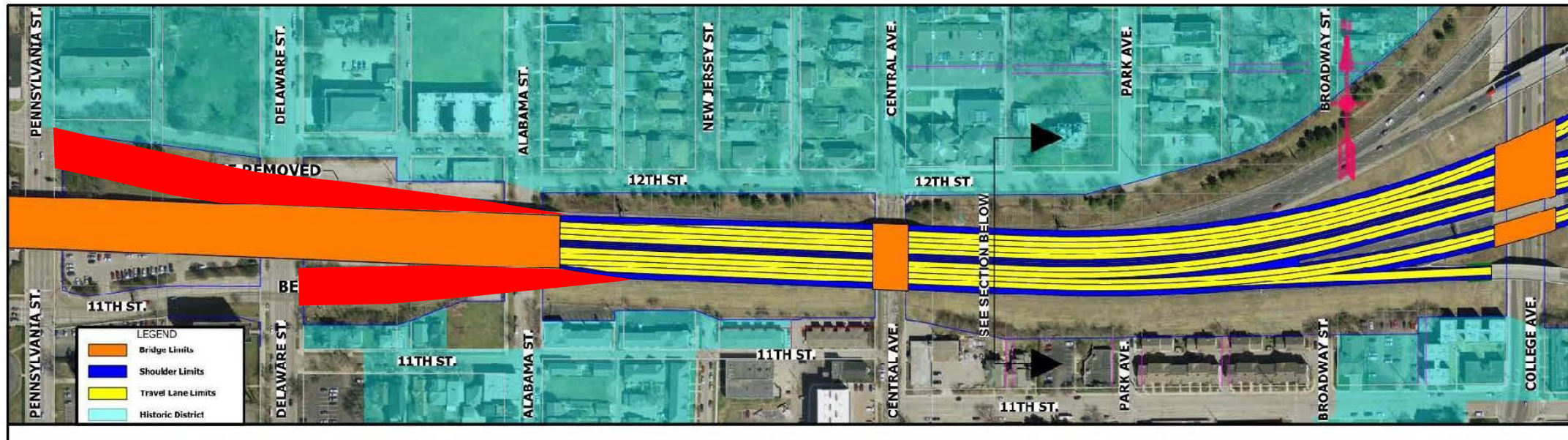
Three ways to eliminate weaves on the west leg





# Alt. 4a: Pennsylvania and Delaware Ramps Closed

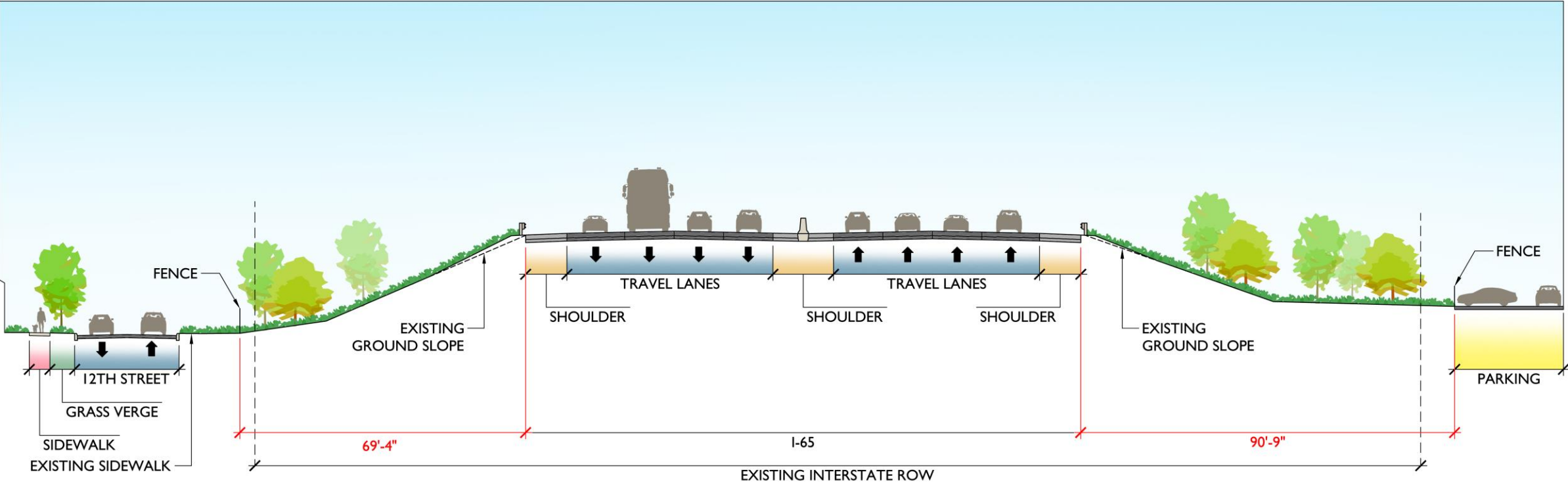
- West Leg of North Split
  - Eliminate existing weaving movements
  - Close Pennsylvania Street exit ramp and Delaware Street entrance ramp
  - Minimal pavement widening and no retaining walls





# Alt. 4a: Pennsylvania and Delaware Ramps Closed

I-65 Cross Section View near Central Avenue (looking east)



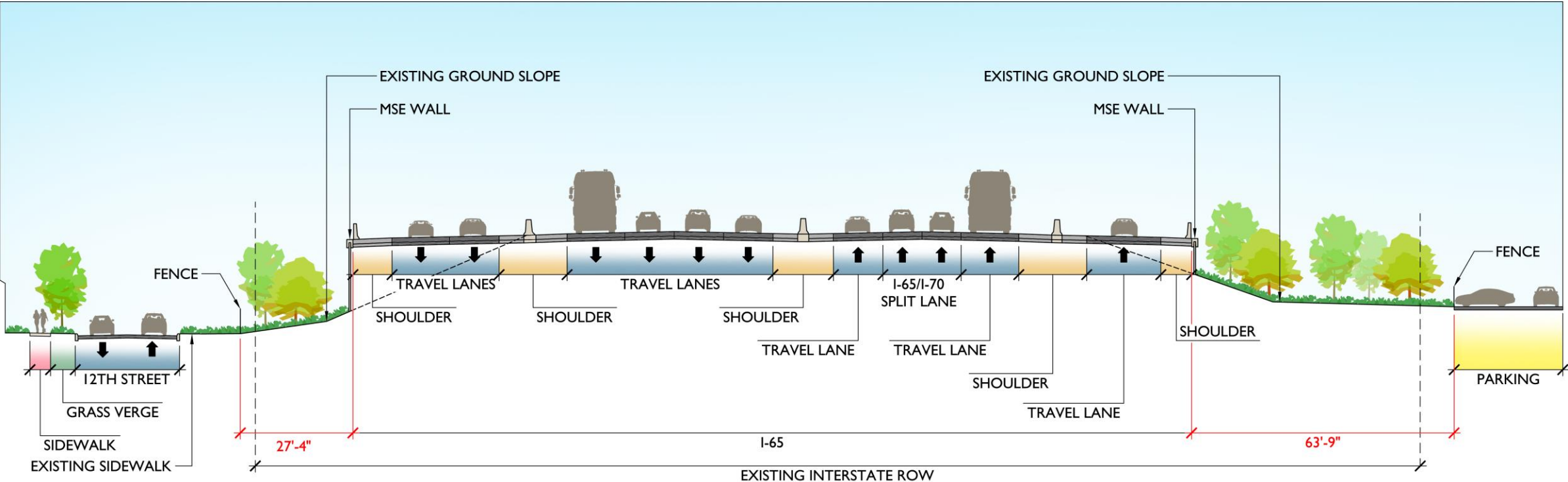
# Alt. 4b: Pennsylvania and Delaware Ramps Open

- West Leg of North Split
  - Eliminate existing weaving movements
  - Maintain full access at Pennsylvania Street exit ramp and Delaware Street entrance ramp
  - Install retaining walls up to 18 feet high north and up to 33 feet high south



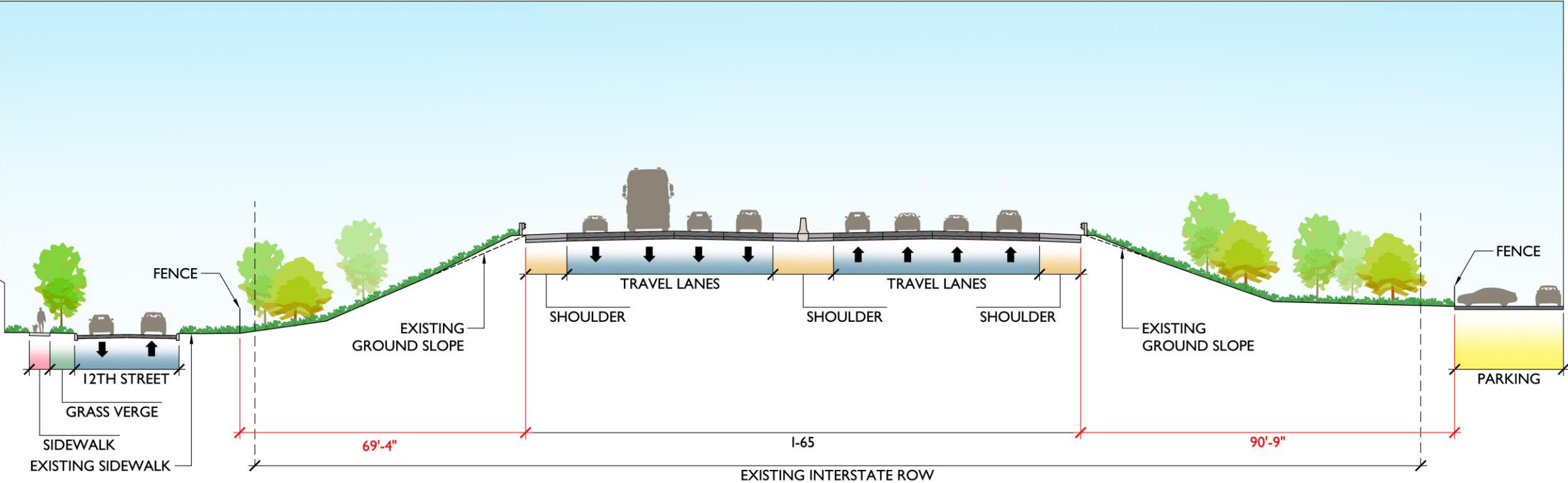
# Alt. 4b: Pennsylvania and Delaware Ramps Open

I-65 Cross Section View near Central Avenue (looking east)



# Alt. 4a: Pennsylvania and Delaware Ramps Closed

## I-65 Cross Section View near Central Avenue (looking east)





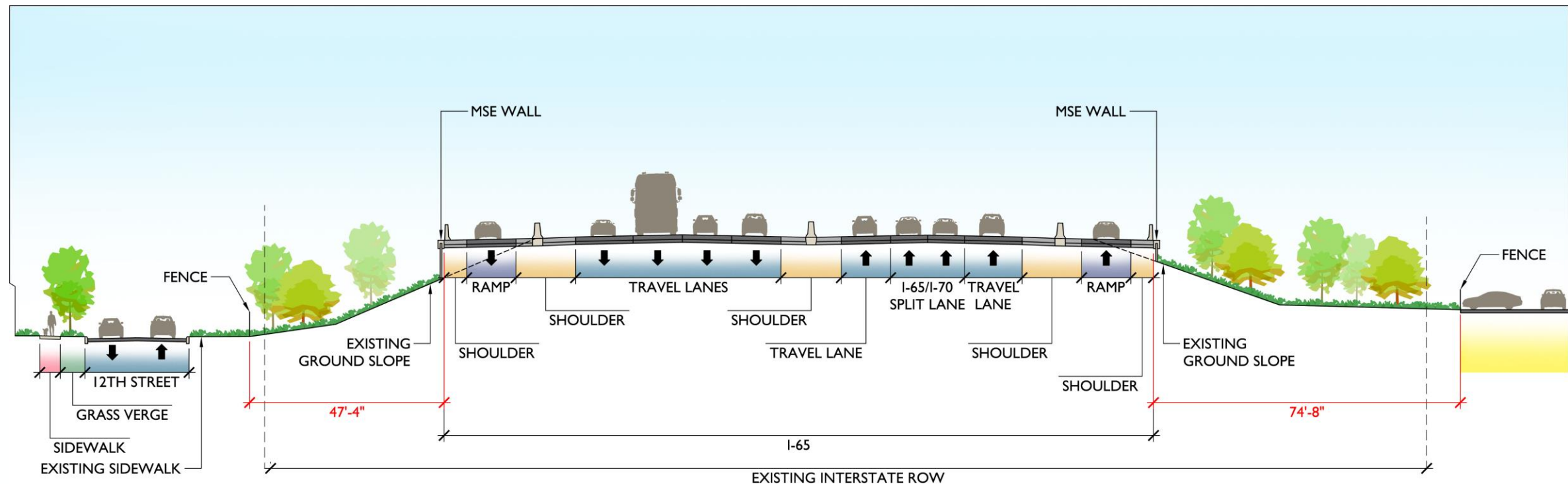
# Alt. 4c: Selected Ramp Access Restrictions

- West Leg of North Split
  - Eliminate existing weaving movements
  - Maintain Pennsylvania Street exit ramp and Delaware Street entrance ramp, except:
    - Eliminate I-70 exit to Pennsylvania Street
    - Eliminate I-65 exit to ramps serving Michigan and Ohio Streets
  - Install retaining walls up to 11 feet high north and 7 feet high south



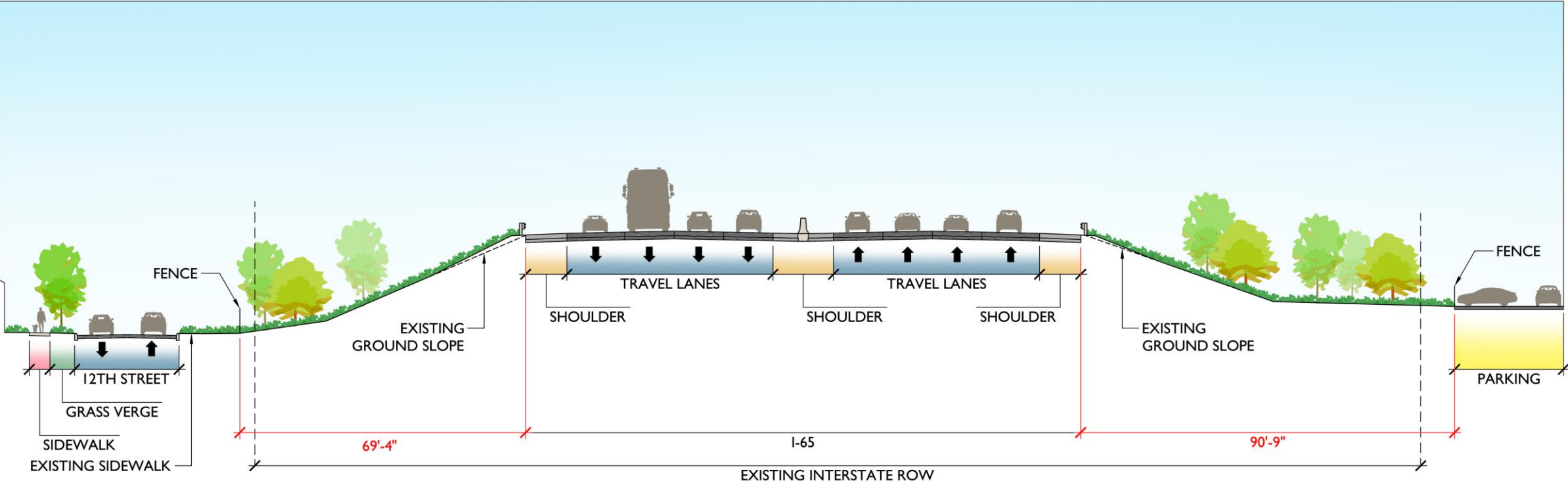
# Alt. 4c: Selected Ramp Access Restrictions

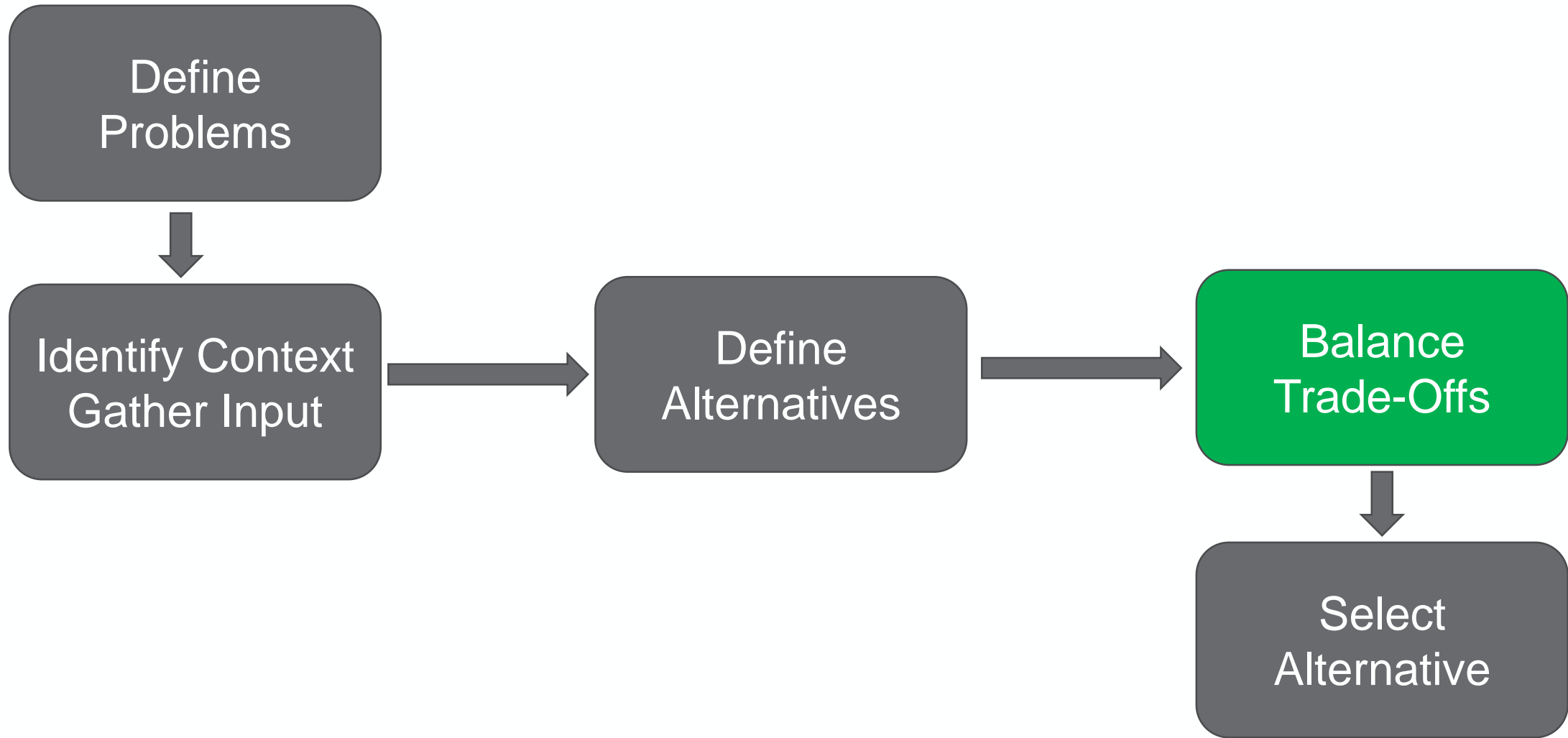
I-65 Cross Section View near Central Avenue (looking east)



# Alt. 4a: Pennsylvania and Delaware Ramps Closed

I-65 Cross Section View near Central Avenue (looking east)







# Trade-Offs: Alternative 4 Options and Alternative 5

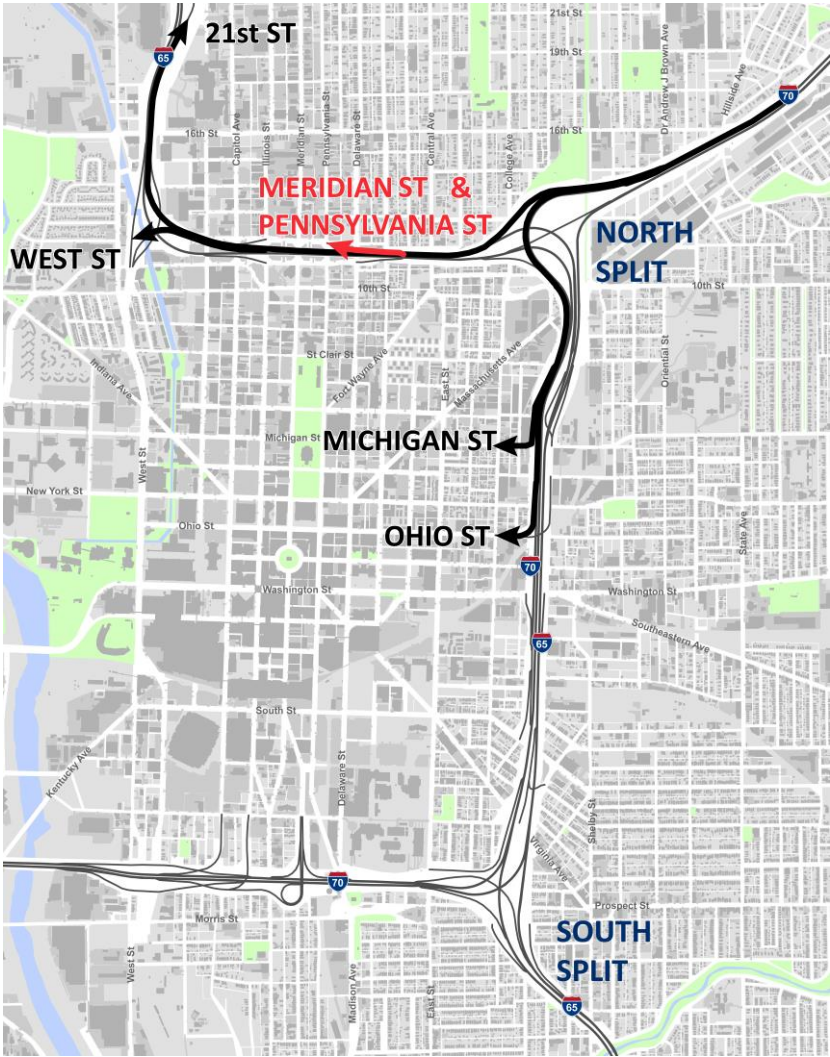
Alternative	To Pennsylvania Street Ramp		From Delaware Street Ramp		To Ohio/Michigan Ramps (via C-D Road*)		Approximate Maximums Wall Height (distance from R/W line)		Added Through Lanes	Estimated Cost
	I-65	I-70	I-65	I-70	I-65	I-70	North of West Leg	South of West Leg		
Alternative 4a: All Ramps Closed	✗	✗	✗	✗	✓	✓	None	None	No	\$215 M to \$265 M
Alternative 4b: All Ramps Open	✓	✓	✓	✓	✓	✓	18 feet (27 feet)	33 feet (64 feet)	No	\$270 M to \$330 M
Alternative 4c: Selected Ramps Closed	✓	✗	✓	✓	✗	✓	11 feet (47 feet)	7 feet/ (75 feet)	No	\$225 M to \$275 M
Alternative 5: All Ramps Open + added Through Lanes	✓	✓	✓	✓	✓	✓	30 feet (17 feet)	37 feet (32 feet)	Yes	\$305 M to \$370 M

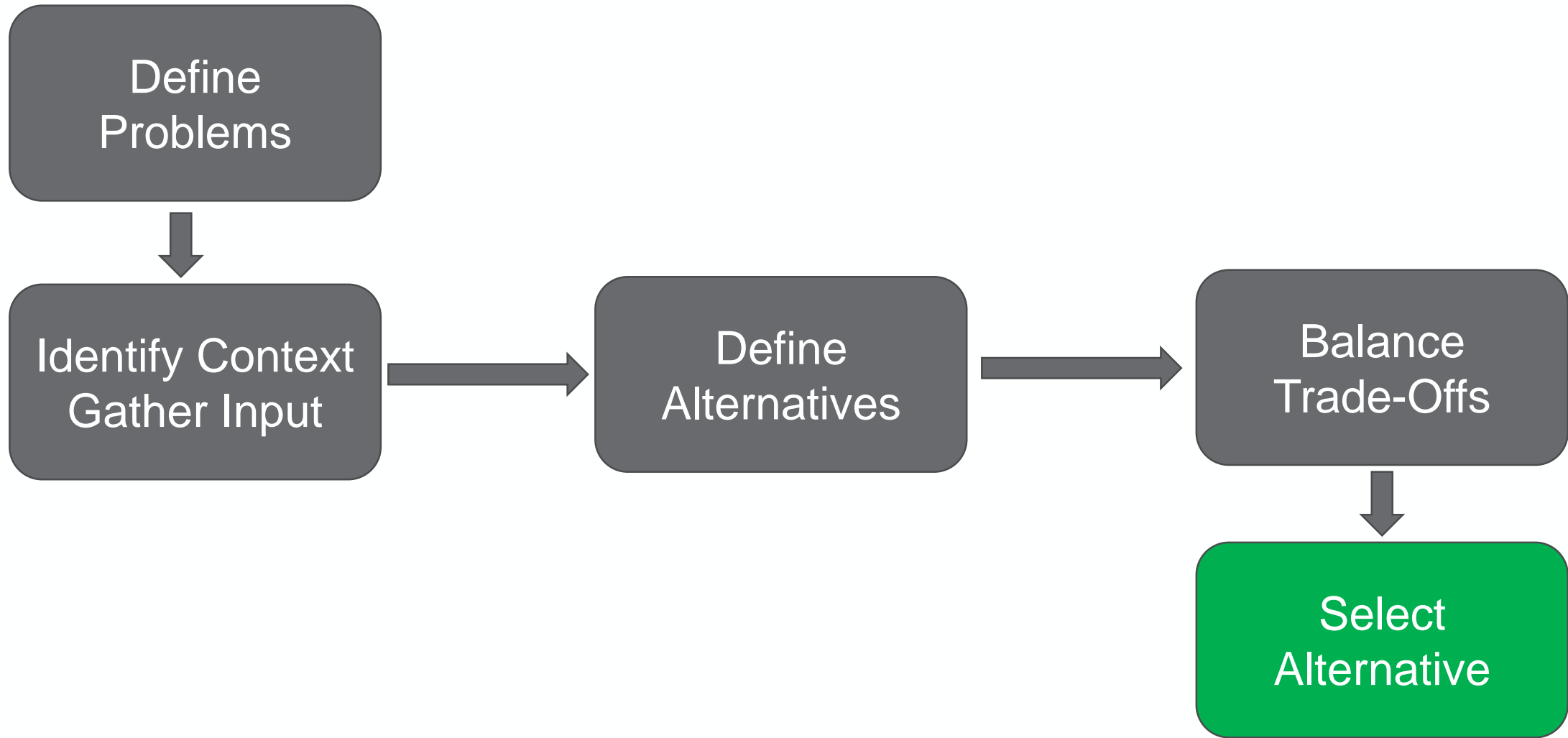
# Trade-Offs: Alternative 4c Exits

From  
I-65 SB



From  
I-70 WB

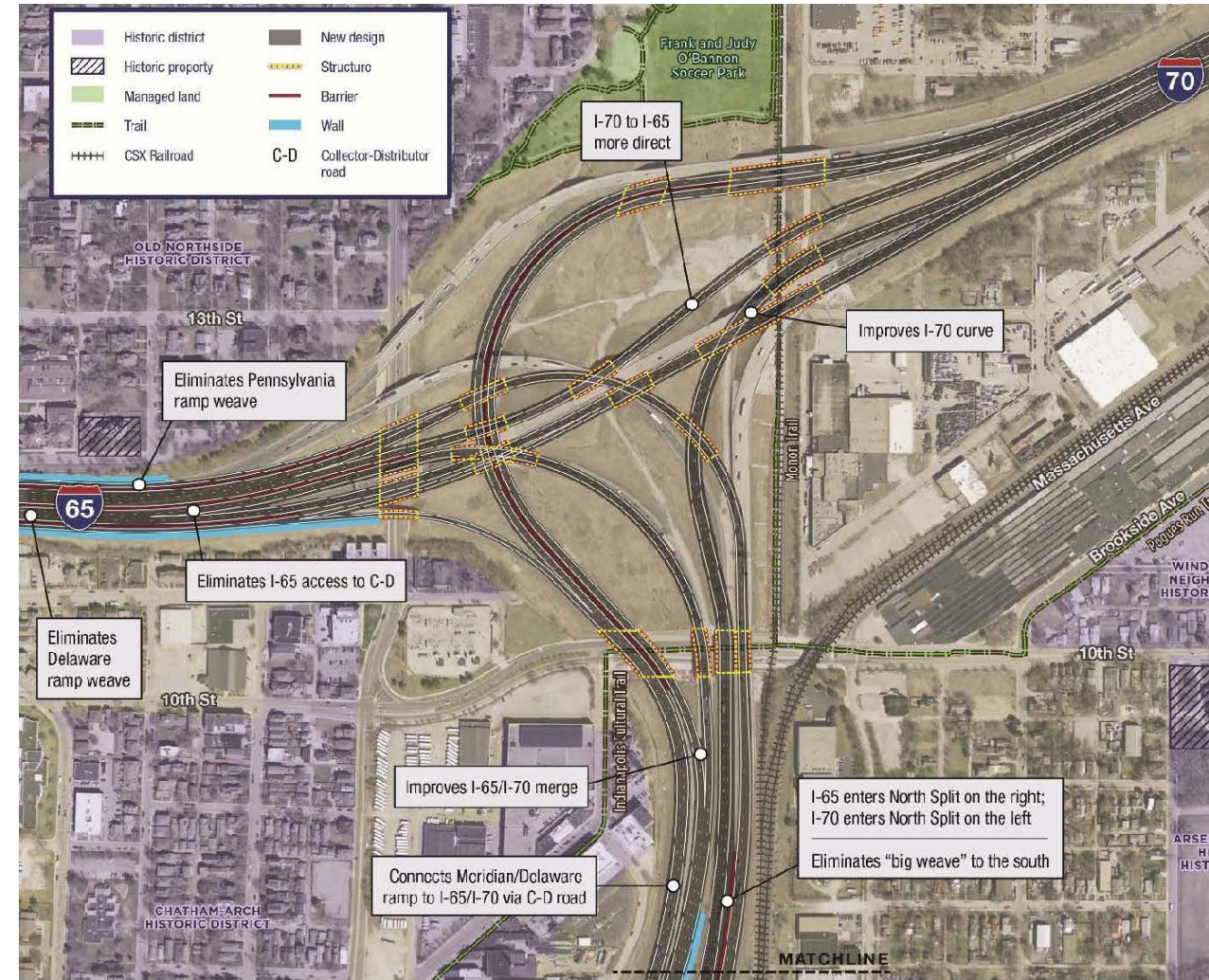






# Alternative 4c: Preliminary Preferred Alternative

- Improves safety at the most hazardous locations
- Removes the worst bottlenecks
- Does not add through lanes
- More compact interchange
- Within existing right-of-way
- Minimizes exterior retaining walls on west leg
- Avoids exterior retaining walls on the east and south legs
- Meets project purpose and need



# Next Steps

# Next Steps

- Gather feedback on preliminary preferred alternative through October 29
- Refine preliminary preferred alternative
- Continue public involvement and feedback
- Analyze impacts in the Environmental Assessment (EA)
- Publish EA in early 2020





Report Available: [www.northsplit.com/alternatives-screening-report](http://www.northsplit.com/alternatives-screening-report)

Submit Comments: [info@northsplit.com](mailto:info@northsplit.com)

Comments due October 29, 2018

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