

October 18, 2022

NORTH  
**Dakota** | Transportation  
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THE CITY OF  
**Fargo**  
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# Public Input Meeting

Main Avenue (US 10) Reconstruction – 25<sup>th</sup> Street to University Drive  
NDDOT Project No. NHU-CPU-8-010(046)938, PCN 23199  
City of Fargo Project No. BR-23-A

**Apex**  
Engineering Group

**SRF**

**FLINT**  
GROUP

## Introductions – Presenters



Matt Kinsella  
Project Manager



Jacob Nordick  
SRF Task Manager



Sara Schmidt  
Traffic Analysis



# Project Team

## Agency Partners



## Consultant Team



## Getting Started

- Please Sign In
- Informational Handout
- Comment Form
- Title VI Public Participation Survey (Optional)
- 3D Visualizations & Interactive Sidewalk Station
- Live Polling at Conclusion: **PollEv.com**

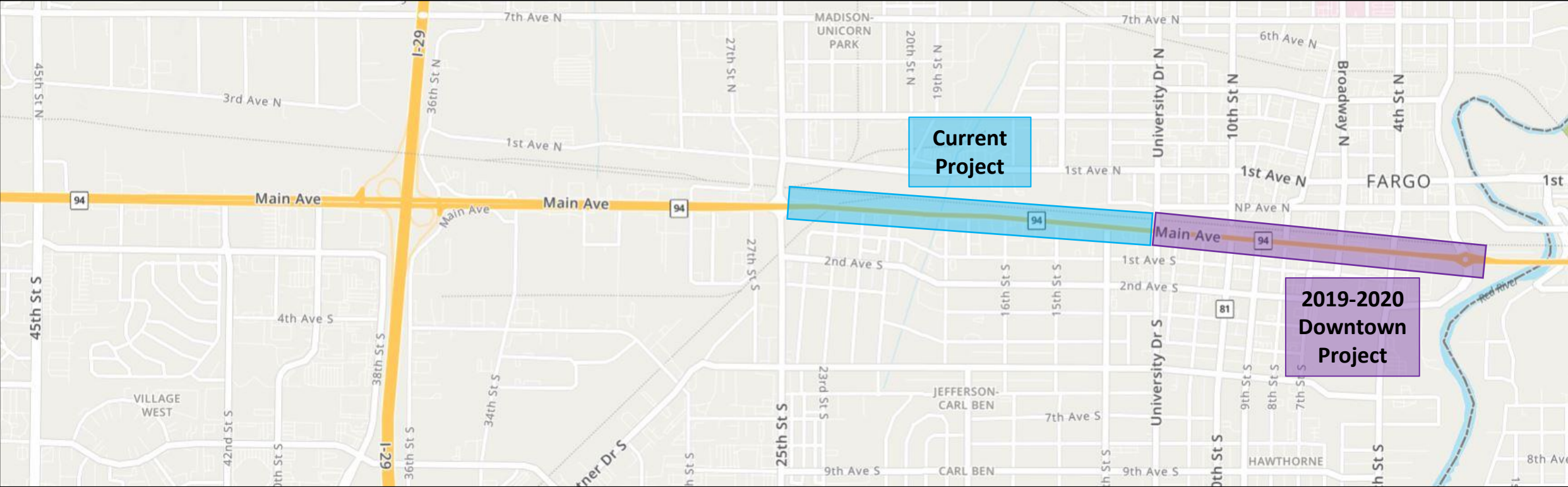
# Tonight's Agenda

- Project Overview
- Traffic Analysis and Alternative Development
- Proposed Alternatives
- Other Project Considerations
- Estimated Cost and Next Steps



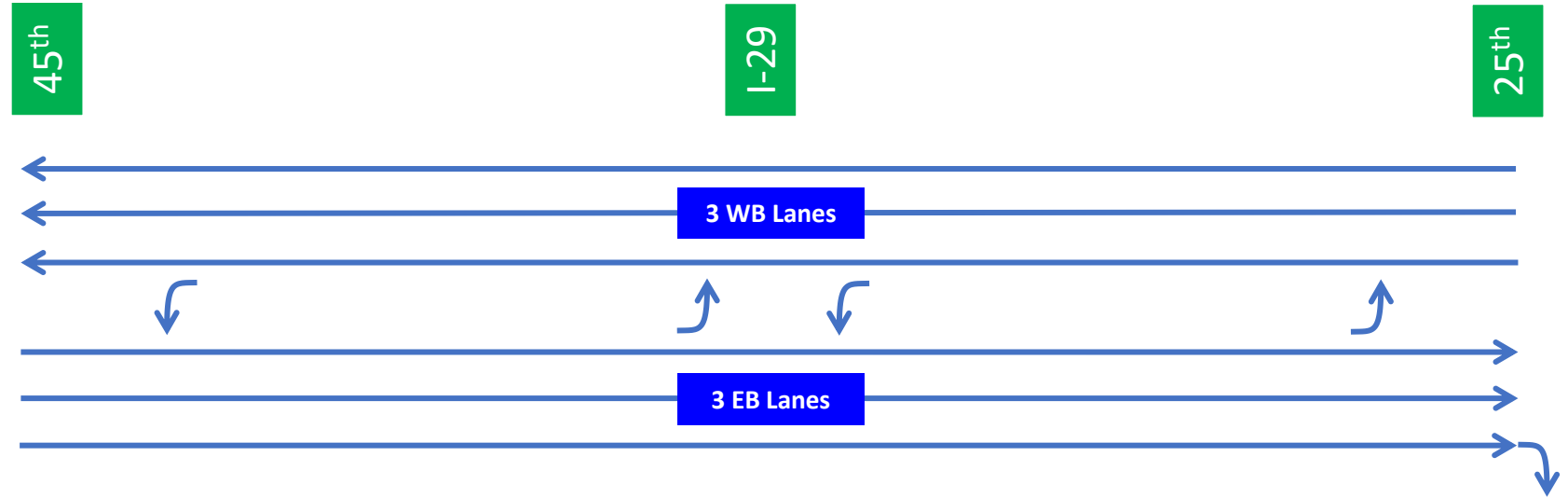
# Project Overview

# Project Location

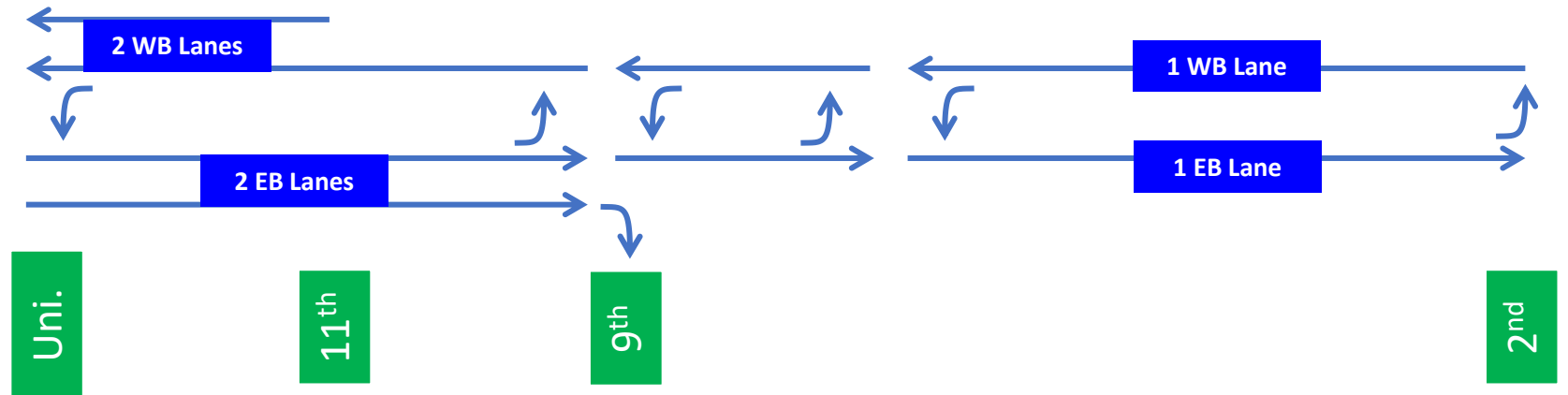


# Surrounding Corridor Context

45<sup>th</sup> Street to  
25<sup>th</sup> Street



University Drive  
to 2<sup>nd</sup> Street







**NORTHWEST AUTO BODY INC**

60'

**E-T-N**  
Exhaust  
Heat Exchanger

**AIR-VENT-GRILL**  
674

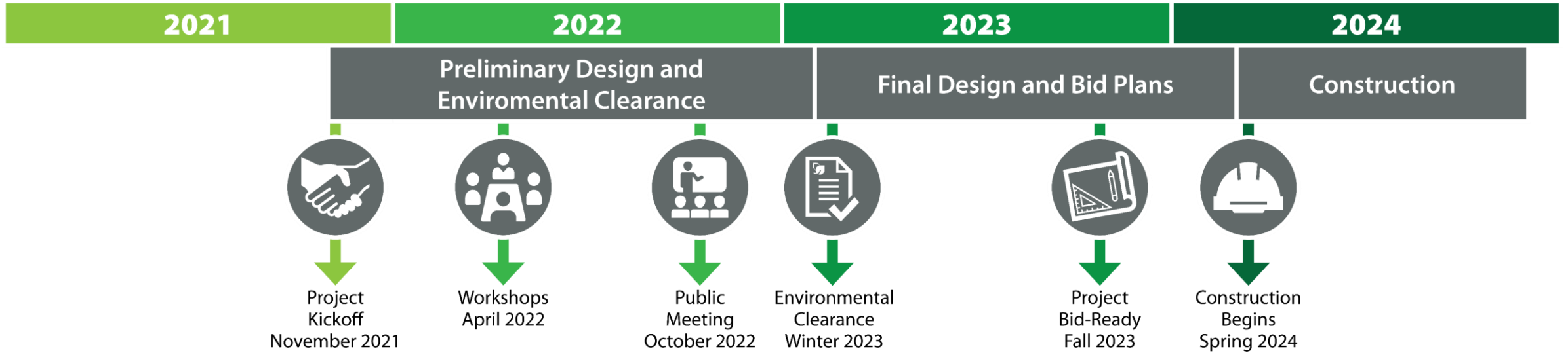
Custom Heat  
Exchangers  
1517

## Project Purpose and Need

- Replace aging corridor infrastructure (pavement and utilities)
- Improve pedestrian environment and upgrade ADA facilities
- Close or consolidate access points to address access management
- Support local and regional mobility



# Project Schedule



**WE ARE HERE**

*2023-2024 dates are tentative and subject to change*

# Project Background

## ■ 2013 Corridor Study

- Starting point for alternative development
  - Recommended a mix of 5-lane sections be carried forward to environmental process
- Project team requested fresh look at alternatives
  - Traffic changes post-COVID, and after downtown Main Avenue reconstruction
- Linear park concept on north side of Main Avenue – not carried forward

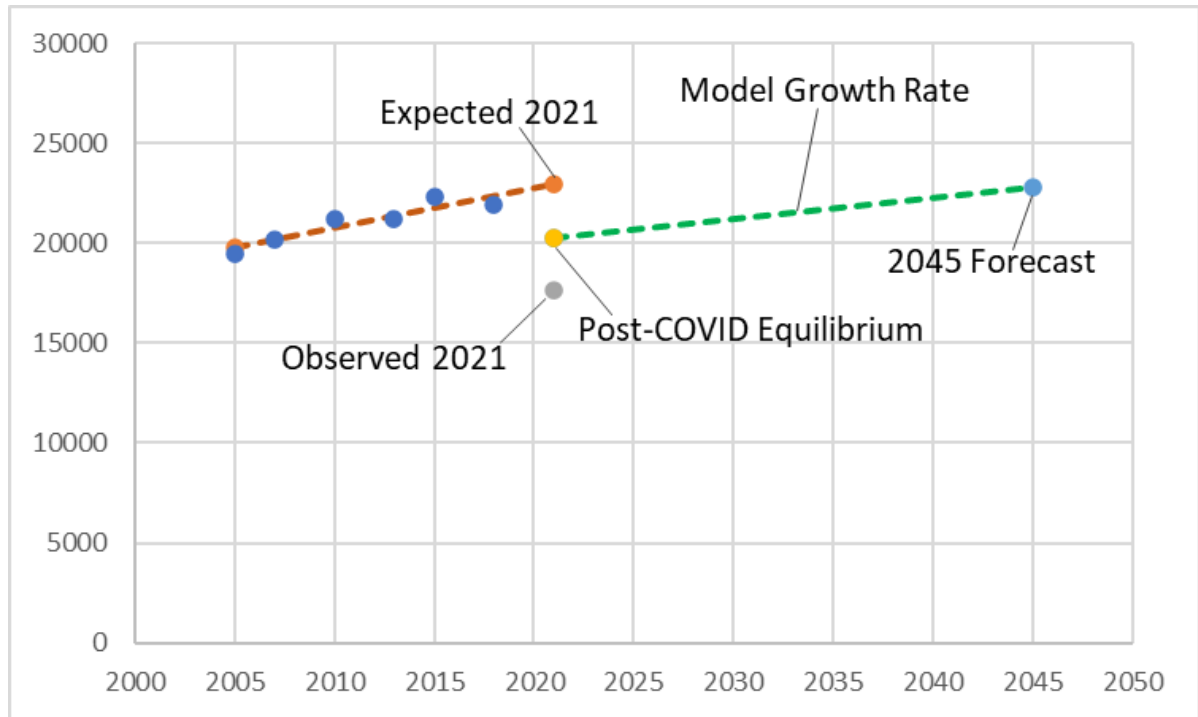




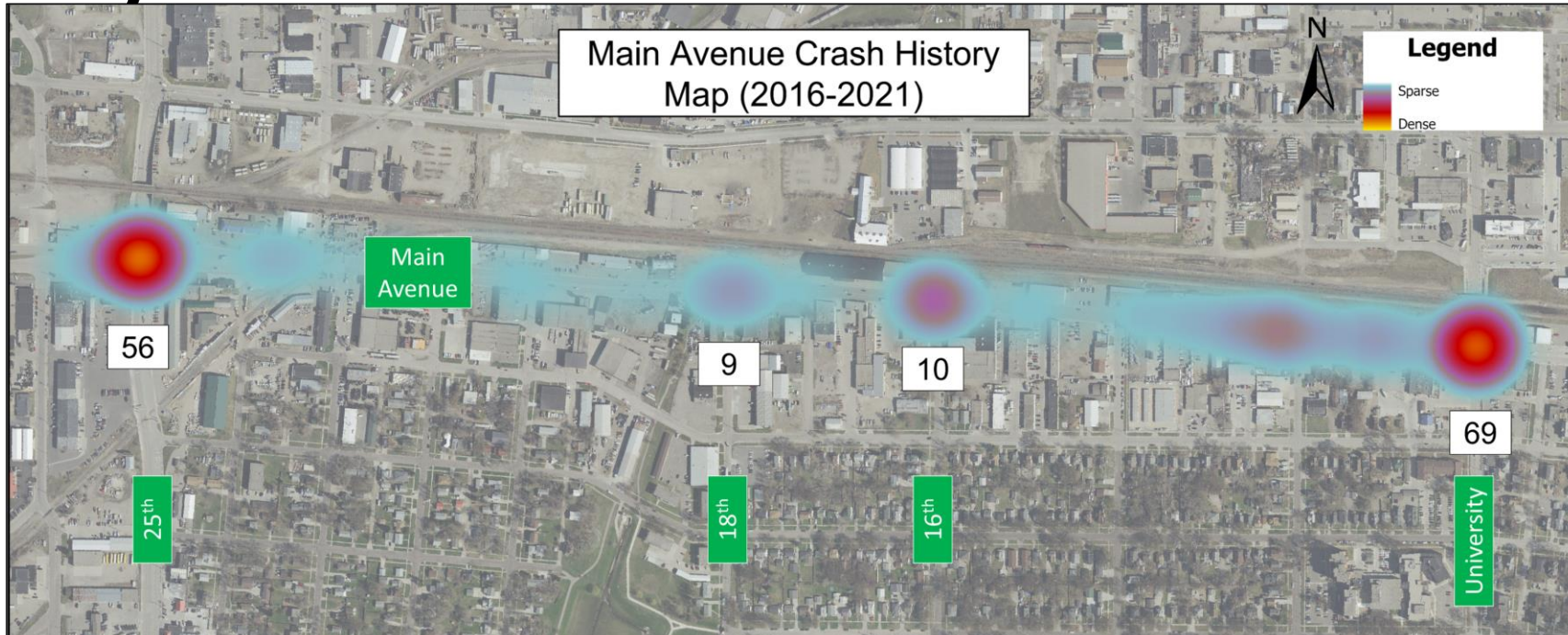
# Traffic Analysis and Alternative Development

**knight**  
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# 2045 Traffic Forecasts



# Crash Analysis

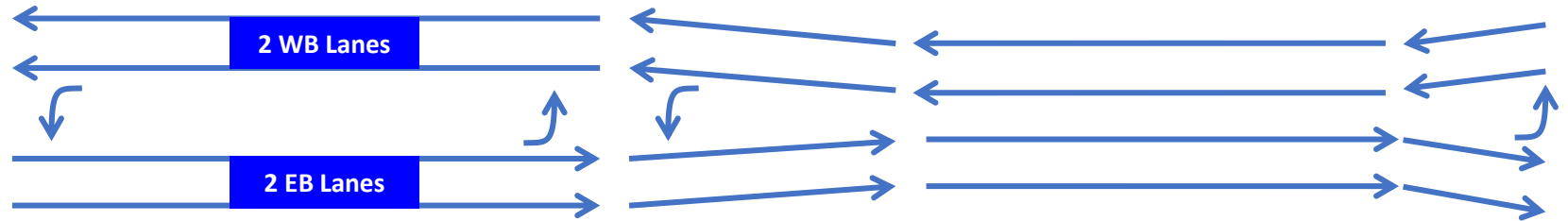


| Intersection   | Total Number of Crashes | Calculated Crash Rate (Million Entering Vehicles) | Average Crash Rate for Similar Intersections | Critical Crash Rate (Million Entering Vehicles) |
|--|-------------------------|---|--|---|
| Main Avenue & 25th Street  | 56                      | 0.73  | 0.70   | 0.96  |
| Main Avenue & University Drive                                       | 69                      | 1.02  | 0.70   | 0.97  |
| <i>Main Avenue &amp; University Drive<br/>Previous Configuration</i> | 45                      | 1.34  | 0.70   | 0.97  |
| <i>Main Avenue &amp; University Drive<br/>Current Configuration</i>  | 24                      | 0.71  | 0.70   | 0.97  |

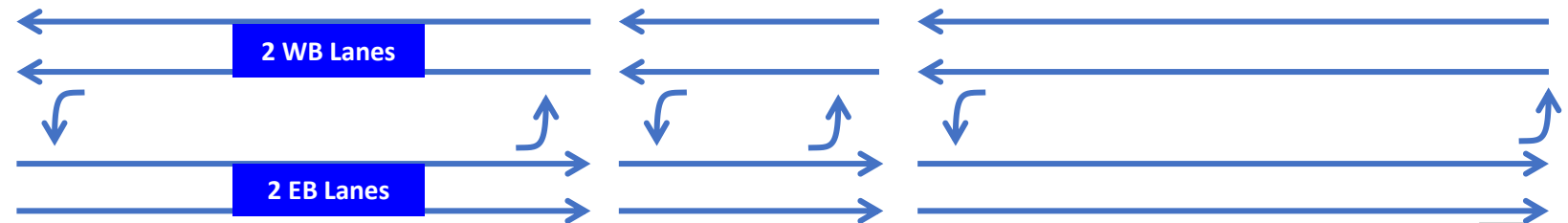
# Initial Corridor Concepts

- Corridor concepts developed
- Traffic operations analyzed with year 2045 forecasts

## Existing Conditions



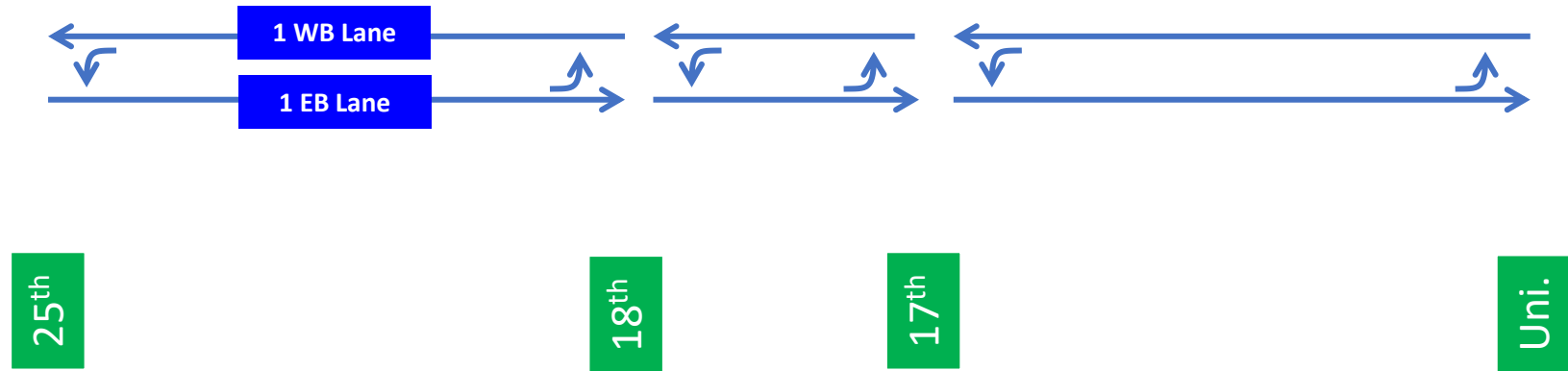
## 5-Lane





# Initial Corridor Concepts

## 3-Lane

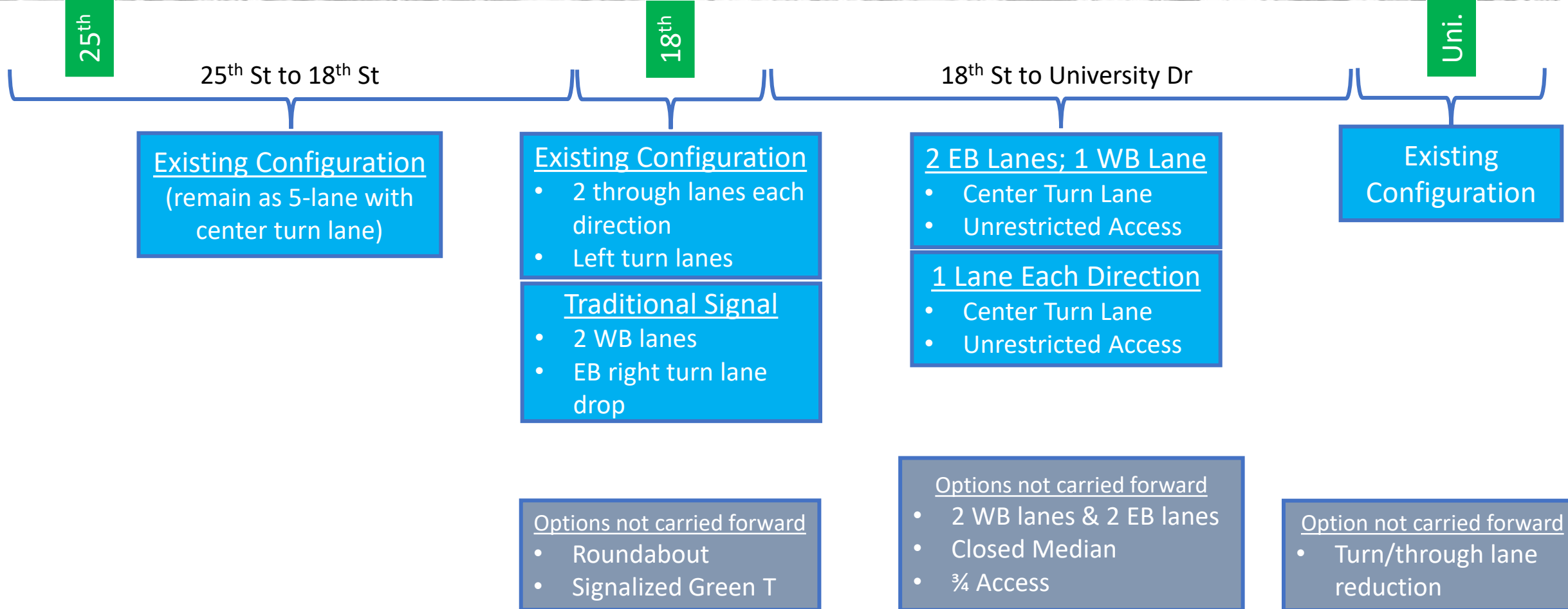
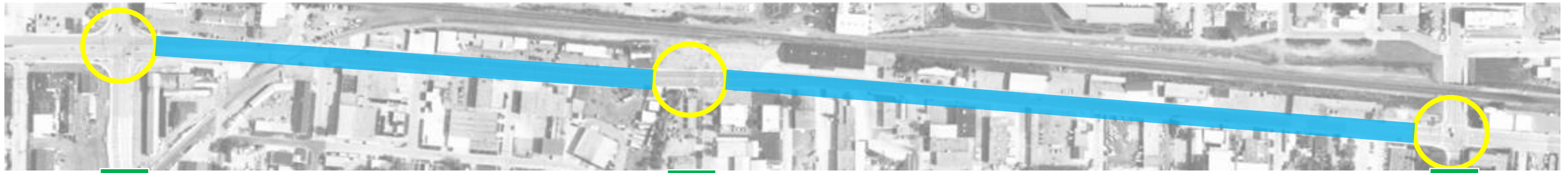


## 4-Lane



- No build and 5-lane concepts have acceptable operations and no congestion
- 3-lane and 4-lane concepts have poor operations, delays, and long queues

# Corridor Component Options



# Key Findings

## Traffic Analysis Findings

- Current capacity is adequate for 2045 traffic
  - Expansion not warranted
- Reduced lanes 18th St - University Dr and maintaining existing capacity 25th St - 18th St provides acceptable LOS
  - No traffic diversion expected
  - Some increased queue lengths

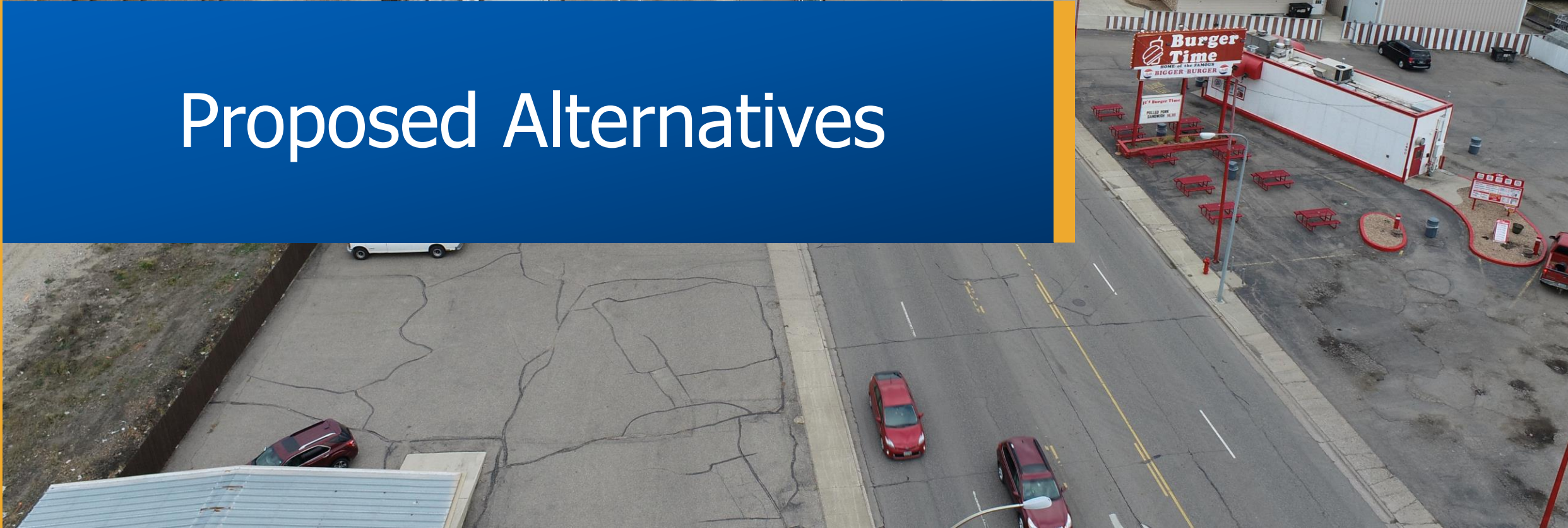
# Key Findings

## Other Traffic Recommendations

- **Crash history slightly higher than average but below critical**
  - Does not represent immediate safety needs
  - Roadway designs should seek to improve safety
  
- **High number of access points**
  - Recommend reducing private access points
  - Improve spacing from adjacent intersections
  
- **Corridor meets lighting warrants**
  - Include lighting in project design



# Proposed Alternatives



# Alternative Design Criteria

|                                  |  |
|----------------------------------|--|
| <b>All Alternatives Provide:</b> | 5-lane section west of 18 <sup>th</sup> Street   |
|                                  | ADA compliance & improved pedestrian environment |
|                                  | Over 7,950 ft of sidewalk replacement            |
|                                  | Continuous center left-turn lane                 |
|                                  | WB Thru-Lane Drop west of University Drive       |
|                                  | Access Management                                |

| Design Element   | Acceptable Standard                           |
|------------------|---|
| Lane Widths      | 11' width                                     |
| Center Left-Turn | 12' width                                     |
| Sidewalk         | Minimum 6' width                              |
| Boulevards       | Minimum 4' width<br>Stamped, colored concrete |

## Corridor Alternatives

### ■ Alternatives:

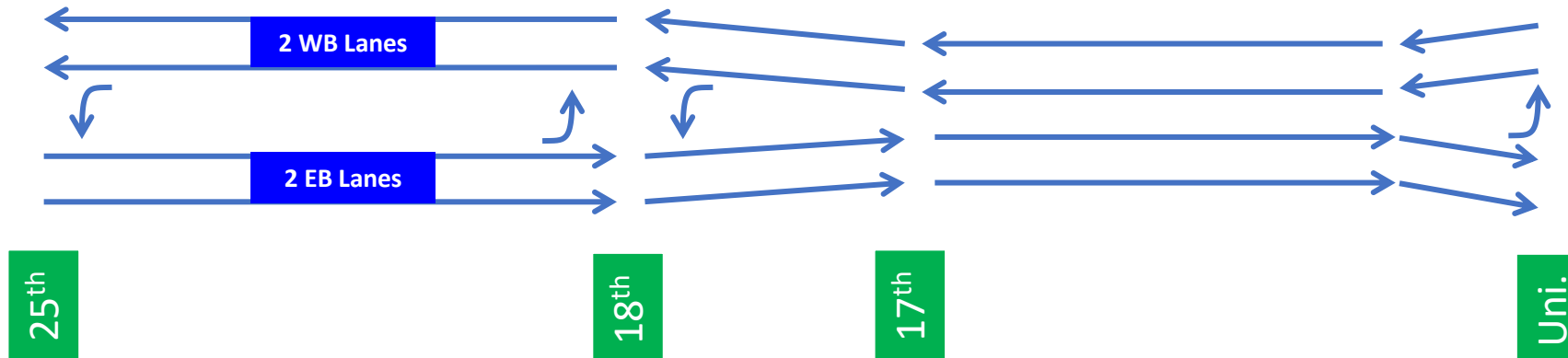
- Alt A: No Build
- Alt B: 5-Lane – Not moving Forward
- Alt C1: 4-Lane
- Alt C2: 4-Lane w/ modified design criteria
- Alt D: 3-Lane

### ■ Options:

- Option 1: Bike Facility Connections
- Option 2: 17th Street Raised Median
- Option 3A: WB Lane Drop at University Drive – Reconstruction
- Option 3B: WB Lane Drop at University Drive – Pavement Markings

# Corridor Alternatives

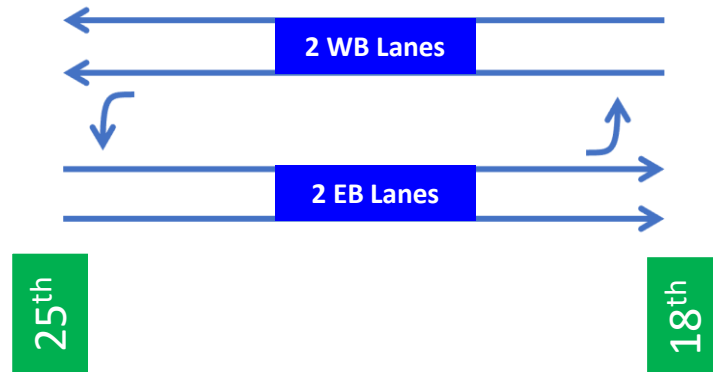
- Alt A: No Build
  - Corridor remains same – no improvements





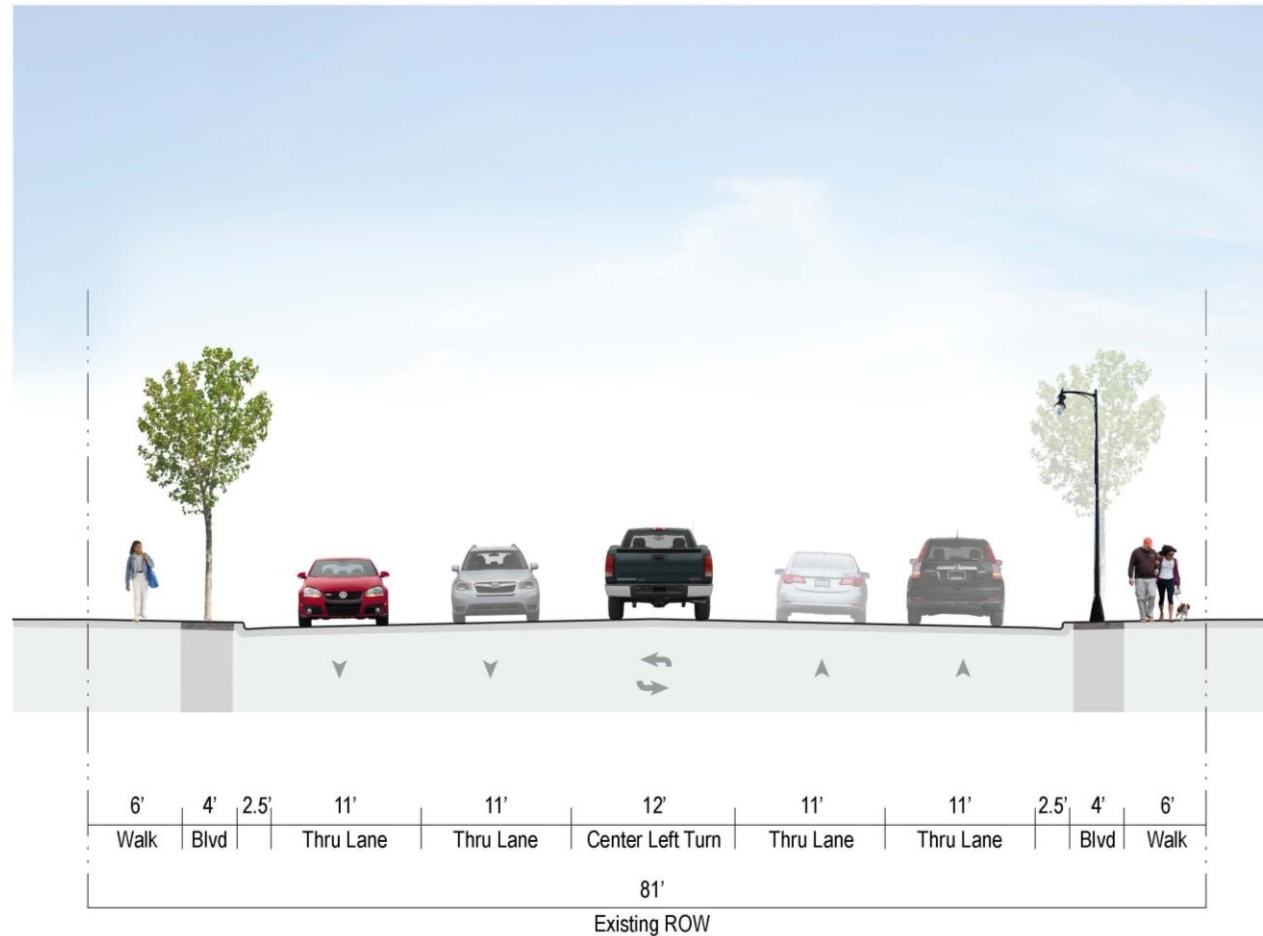
## Corridor Alternatives

- 25<sup>th</sup> Street to 18<sup>th</sup> Street
  - 2 lanes EB & WB with center left turn lane
  - All Alternatives utilize this section
  - Improvements within existing right-of-way
    - ▶ 80' – 84' Right of Way



# Corridor Alternatives

- 25<sup>th</sup> Street to 18<sup>th</sup> Street



# Corridor Alternatives

- 25<sup>th</sup> Street to 18<sup>th</sup> Street

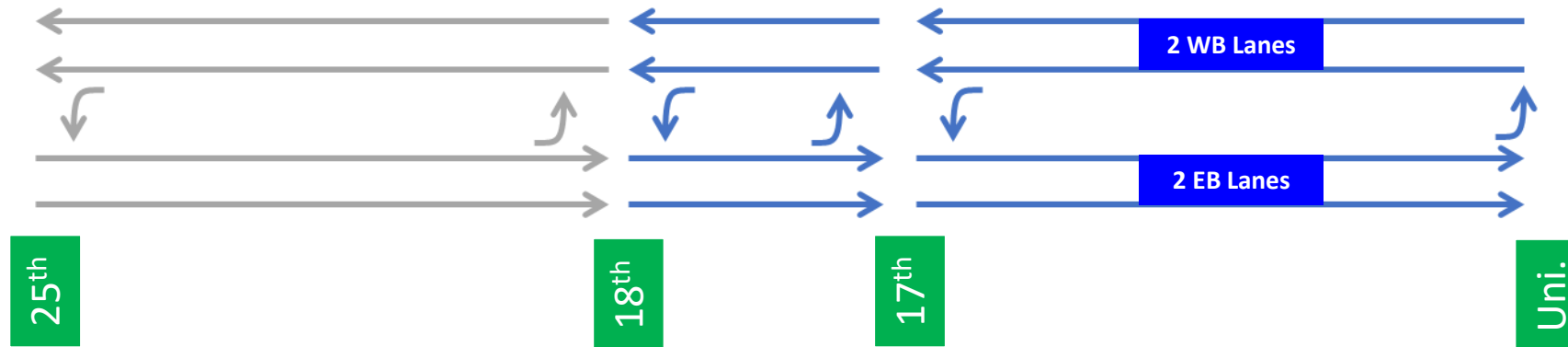


# Corridor Alternatives

- Alt B: 5-Lane

- 2 lanes EB & WB with center left turn lane

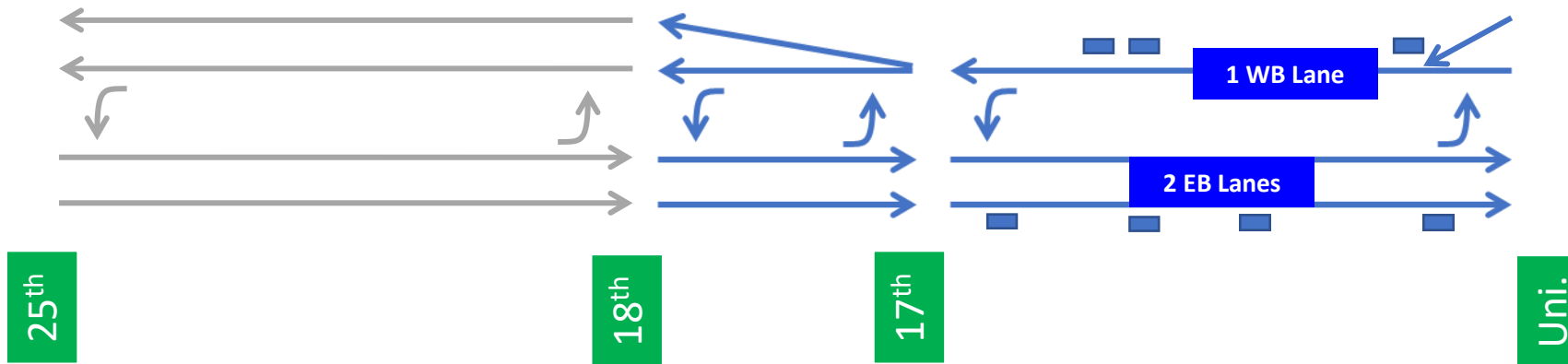
- **Alternative Considered but not moved Forward**



# Corridor Alternatives

## Alt C1: 4-Lane

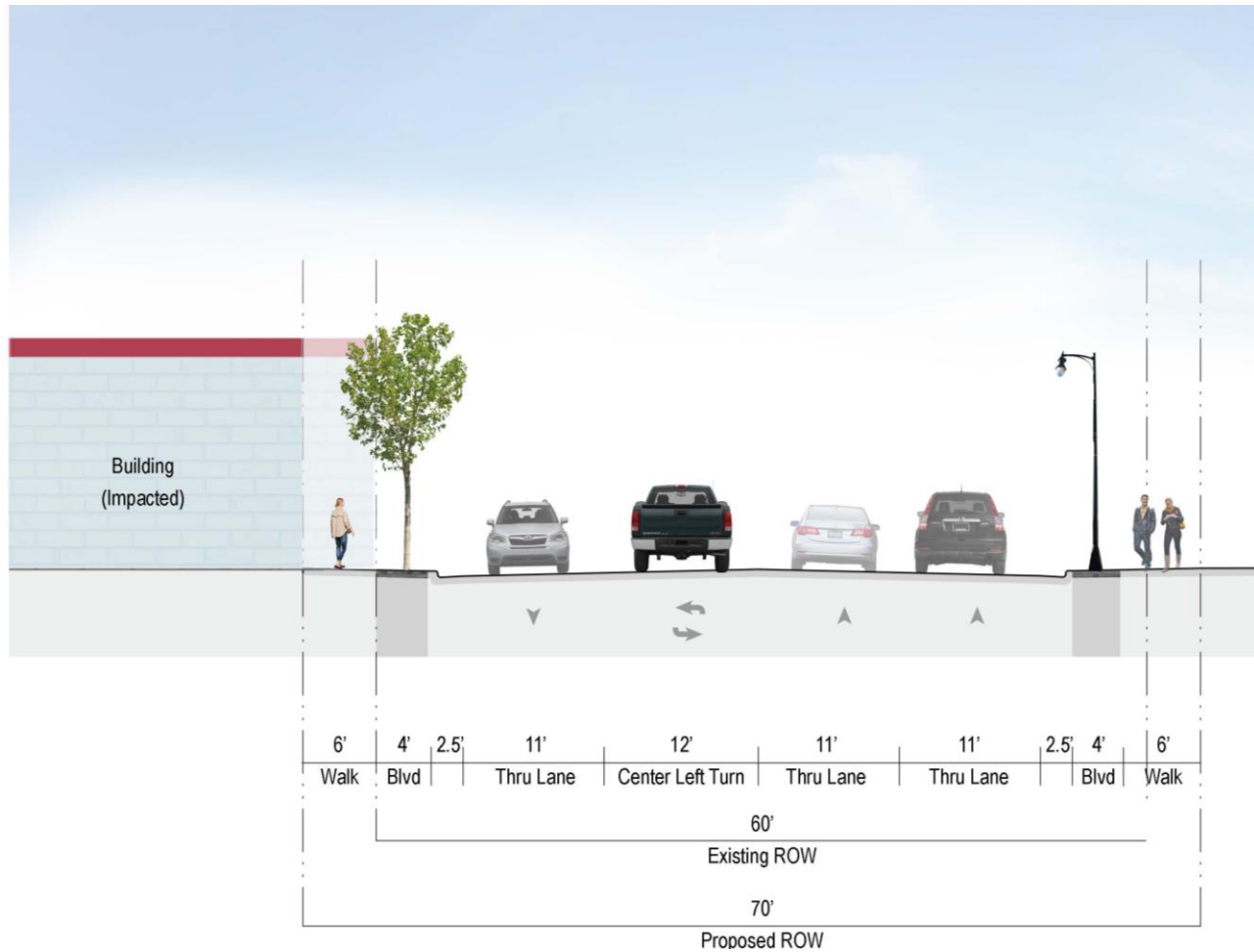
- 2 EB lanes, 1 WB lane, center left turn lane
- Existing Right of Way: 60' (Typical)
- Proposed Right of Way: 70'



| Likely Impacts | Buildings | Parcels | Right of Way Needed |
|----------------|-----------|---------|---------------------|
|                | 7         | 23      | 22,027 SF           |

# Corridor Alternatives

- Alt C1: 4-Lane



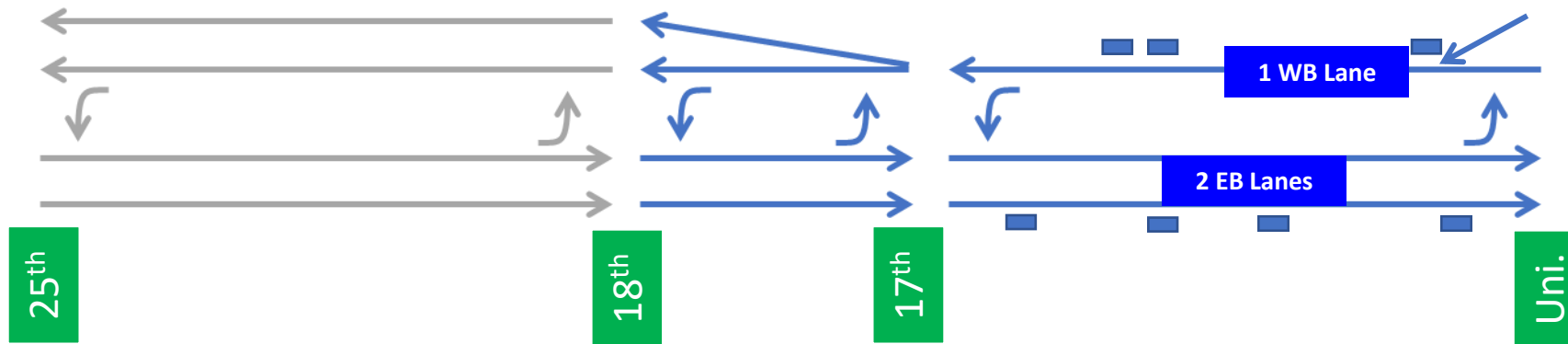
# Corridor Alternatives

- Alt C1: 4-Lane



## Corridor Alternatives

- Alt C2: 4-Lane w/ modified design criteria (no building impacts)
  - 2 EB lanes, 1 WB lane, center left turn lane
  - Existing Right of Way: 60' (Typical)
  - Proposed Right of Way: 68' – Reduced at Building Front



| Likely Impacts | Buildings | Parcels | Right of Way Needed |
|----------------|-----------|---------|---------------------|
|                | 0         | 22      | 17,246 SF           |

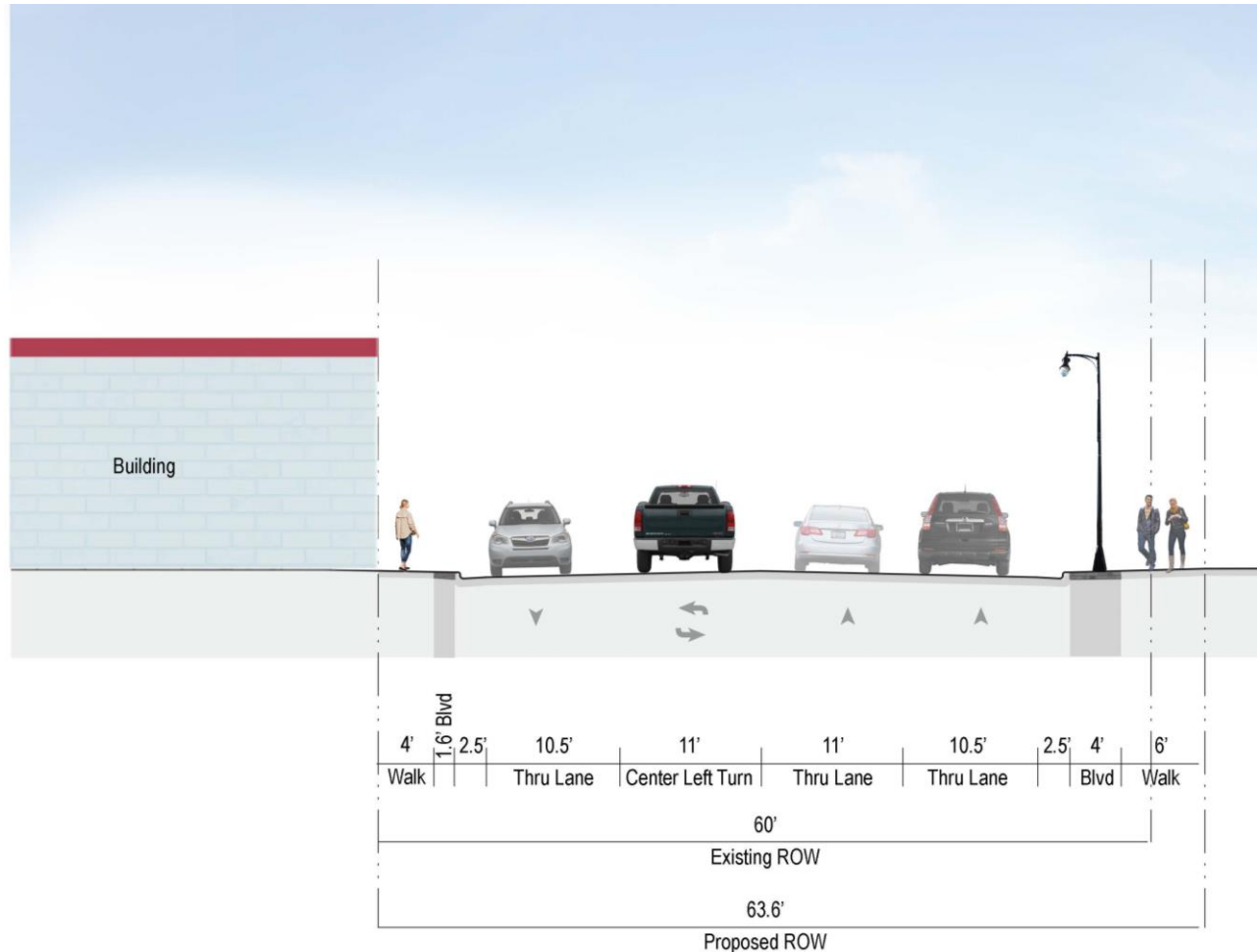


# Alt C2 Modified Design Criteria

| Criteria                       | Acceptable Standard   |
|--------------------------------|---|
| Lane Widths                    | <del>11' width</del> 10.5' width  |
| Center Left-Turn               | <del>12' width</del> 11' width  |
| Sidewalk Adjacent to Buildings | <u>500' of the 7,950' is reduced width (only 6% of all sidewalk)</u><br>Lengths of reduction ranges from 30' – 141' along building face |
| Sidewalk                       | Minimum 6' width Minimum 4' width at Buildings  |
| Boulevards                     | Minimum 4' width 2' width ( <i>One instance of 1.5'</i> ) at Buildings<br>Stamped, colored concrete                                     |

# Corridor Alternatives

- Alt C2: 4-Lane w/ modified design criteria (no building impacts)



# Corridor Alternatives

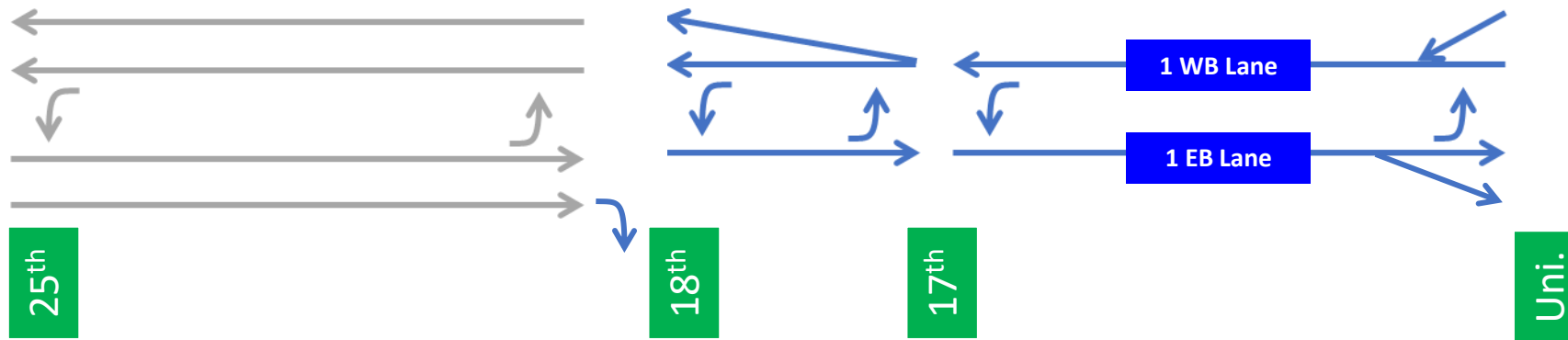
- Alt C2: 4-Lane w/ modified design criteria (no building impacts)



# Corridor Alternatives

## Alt D: 3-Lane

- 1 EB & WB lane, center left turn lane
- EB thru-lane drop at 18th Street intersection
- Existing Right of Way: 60' (Typical)



| Likely Impacts | Buildings | Parcels | Right of Way Needed |
|----------------|-----------|---------|---------------------|
|                | 0         | 1       | 312 SF              |

# Corridor Alternatives

- Alt D: 3-Lane



# Corridor Alternatives

- Alt D: 3-Lane



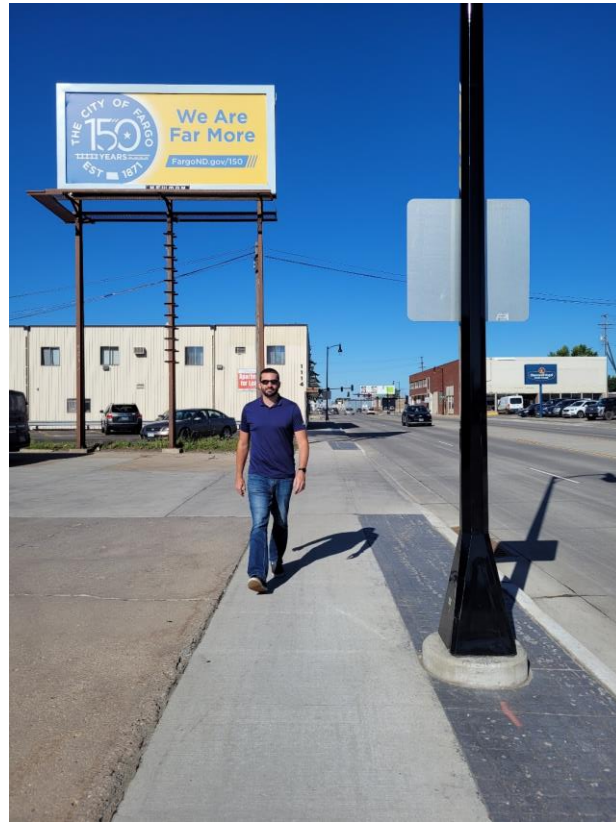
# Sidewalk/Boulevards



7.3' Spacing with 2' Blvd and Adjacent Structure



8.5' Spacing with 4' Blvd and Adjacent Structure



9' Spacing with 4' Blvd



10' Spacing with 2' Blvd and Adjacent Structure

# Sidewalk/Boulevards



7.3' Spacing with 2' Blvd and Adjacent Structure



8.5' Spacing with 4' Blvd and Adjacent Structure



9' Spacing with 4' Blvd



10' Spacing with 2' Blvd and Adjacent Structure



# Streetscaping Opportunities

- Tree plantings
  - Billboard Restriction Areas
    - 4' x 4' tree grates
    - 3' x 5' in constrained areas
- Planting beds
  - 8'-4" minimum boulevard width
- Parking Lot Separation
  - Raised curb
  - Decorative fencing



# Alternative Comparison and Access Management

## Likely Property Impacts

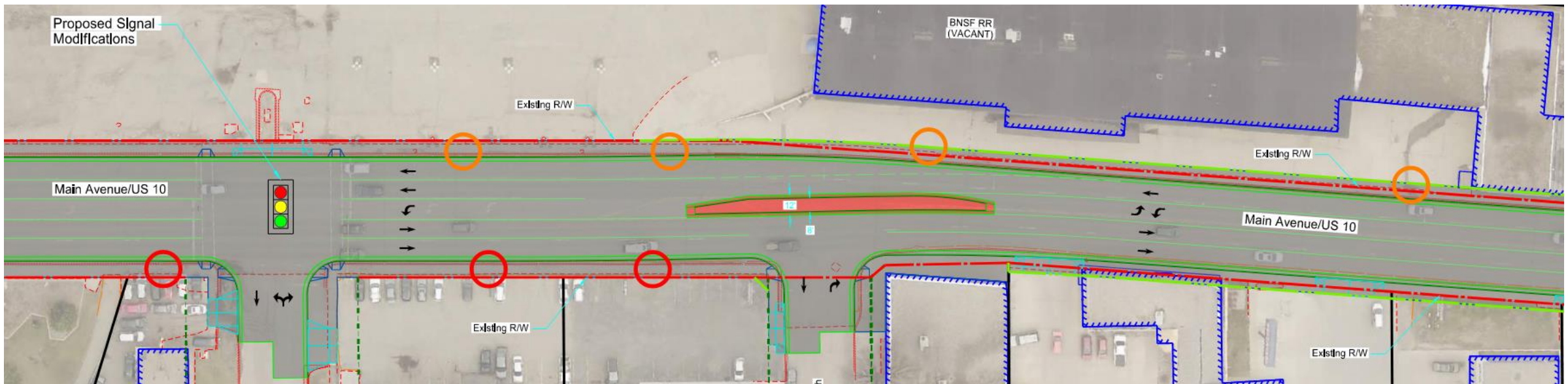
| Alternative                        | Building Impacts | ROW Parcels | ROW SQ FT | BNSF Property |
|------------------------------------|------------------|-------------|-----------|---------------|
| Alt C1 (4-Lane)                    | 7                | 23          | 22,027 SF | 3             |
| Alt C2 (4-Lane w/ no bldg impacts) | 0                | 22          | 17,246 SF | 3             |
| Alt D (3-Lane)                     | 0                | 1           | 312 SF    | 0             |

## Access Management

| Total Driveways | Confirmed Closures | Potential Closures | Total Proposed Driveway Closures |
|-----------------|--------------------|--------------------|----------------------------------|
| 80              | 21                 | 8                  | 29 (36% Reduction)               |

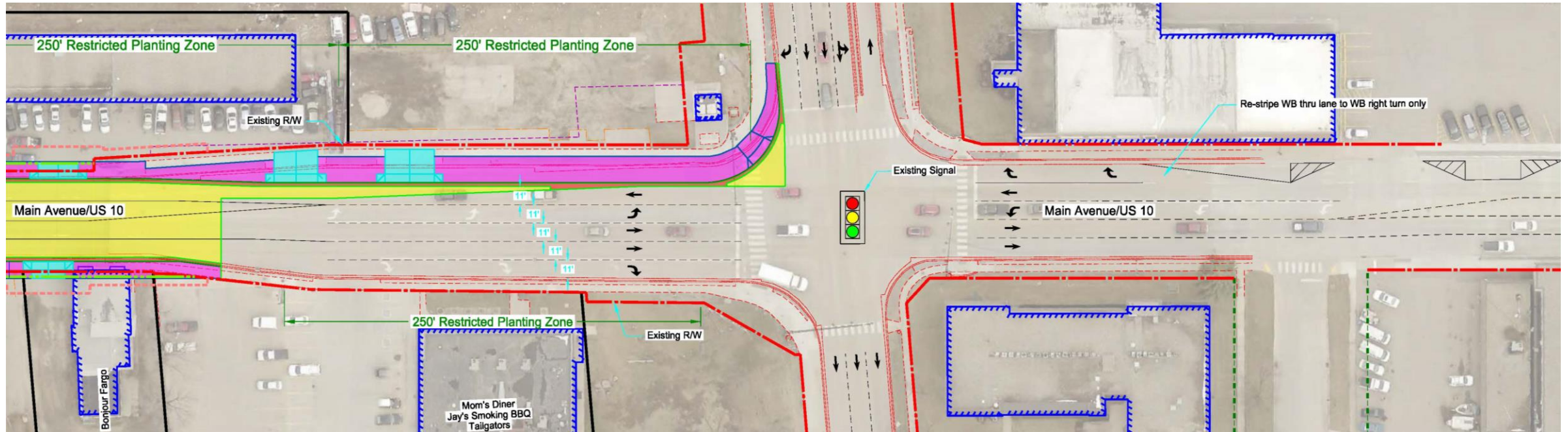
# Corridor Options

- Option 2: 17th Street Raised Median



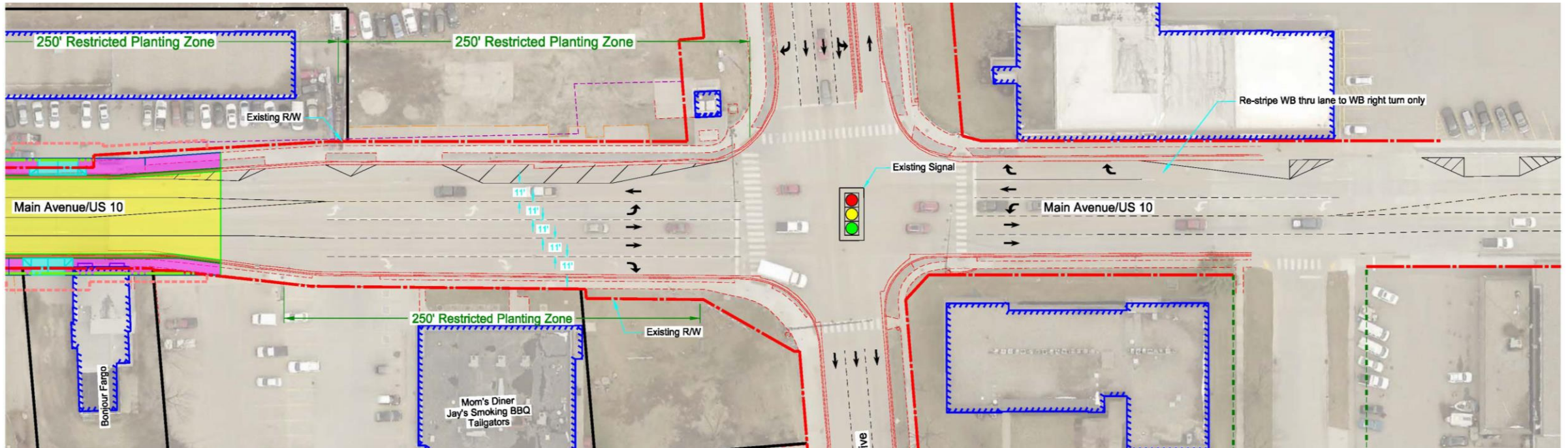
# Corridor Options

- Option 3A: WB Lane Drop at University Drive - Reconstruction



# Corridor Options

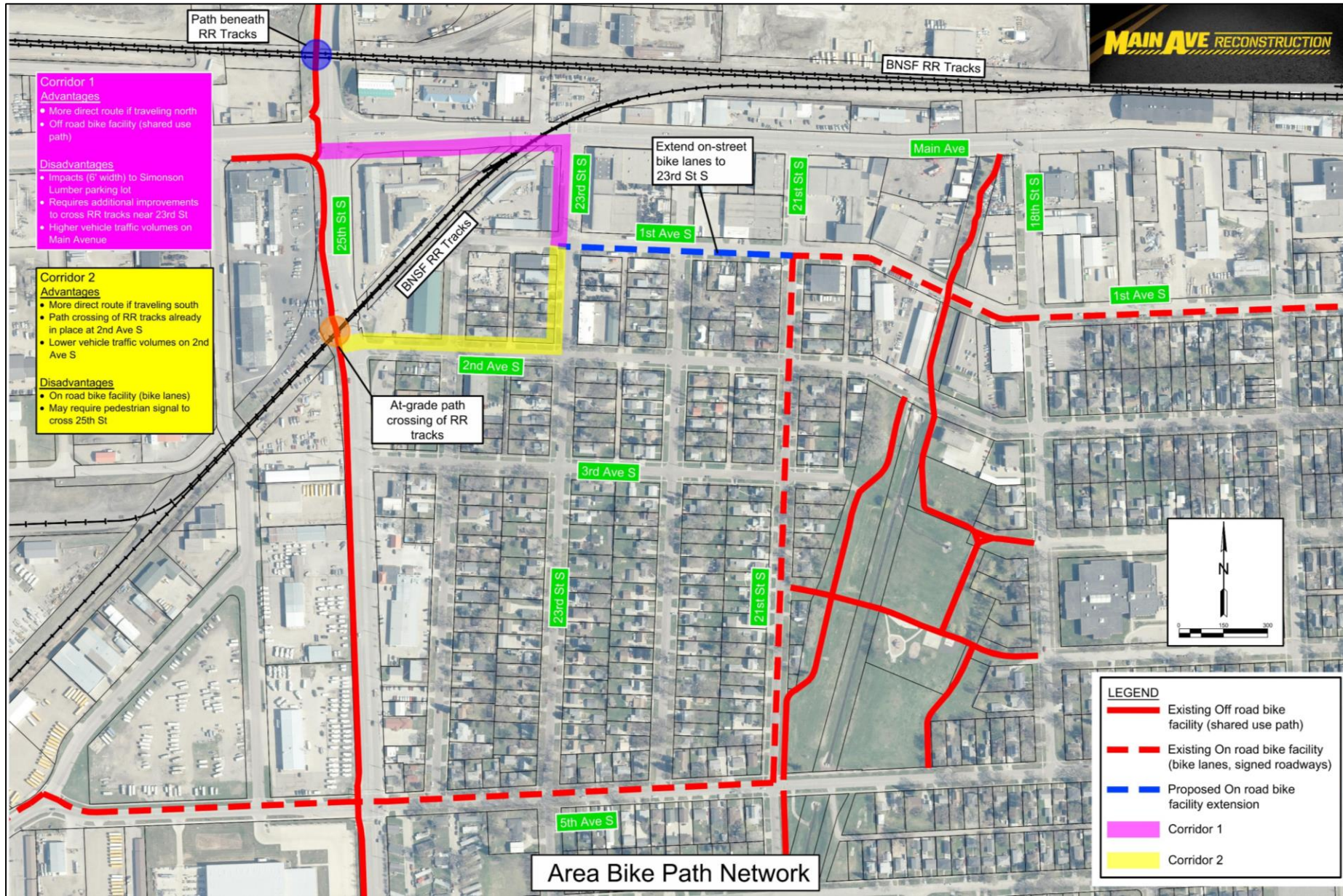
- Option 3B: WB Lane Drop at University Drive – Pavement Markings





# Other Considerations

# Bike Facility Connections



## Right of Way/BNSF Coordination

- Narrow 60' Existing ROW east of 18<sup>th</sup> Street
- Encroachments
  - 39 identified – mostly signs and awnings
- BNSF Coordination
  - RR spur crossing near 23<sup>rd</sup> Street
  - BNSF-owned properties on north side (4 total)





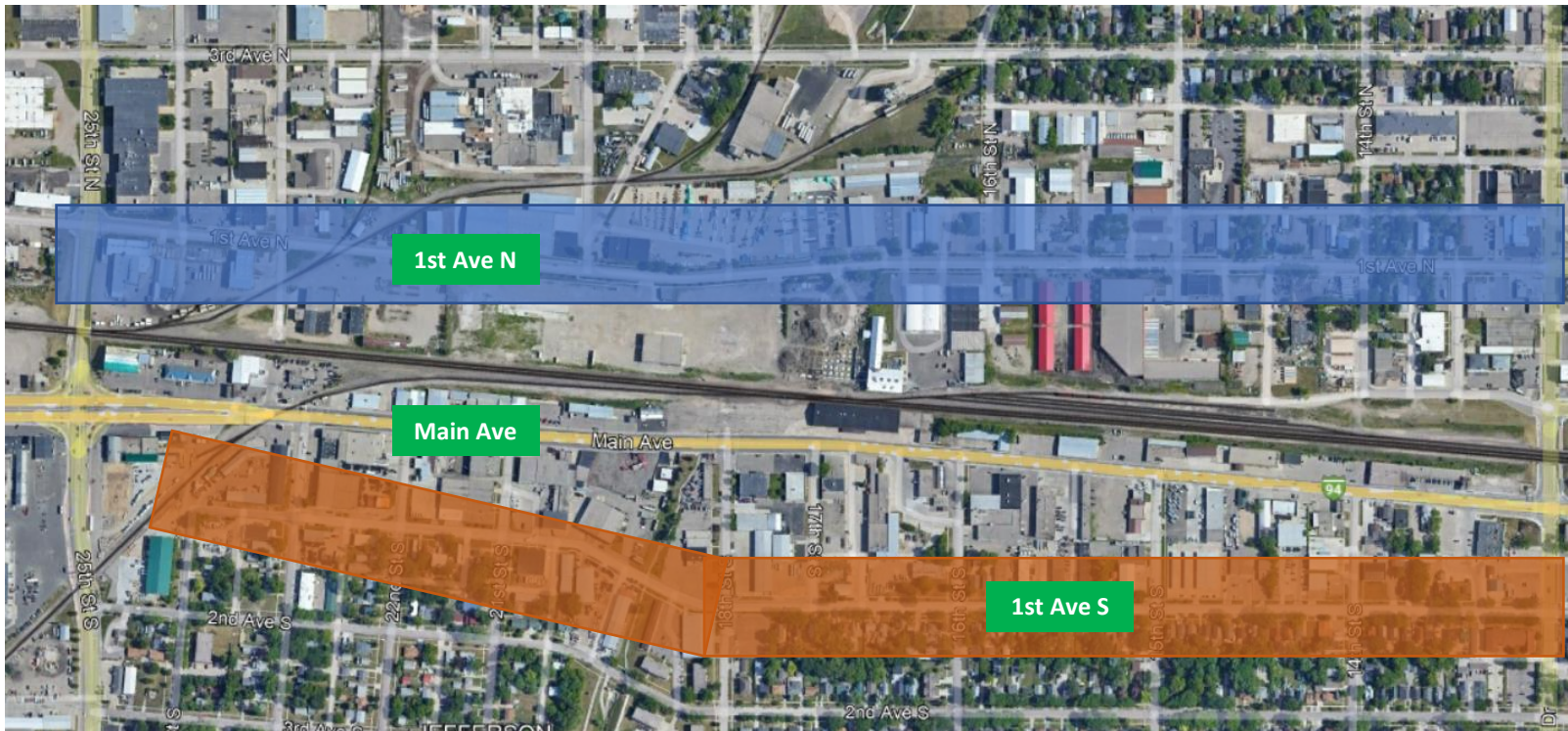
# Environmental

- Cultural
  - No Historic Properties Affected
- Section 4(f)
  - Teamsters Park – temporary occupancy
- Phase I Environmental Site Assessment
  - 65 Sites with Medium Potential for Contamination
  - 8 Sites with High Potential for Contamination
- Environmental Justice
  - Refer to exhibit display for more information

# Construction

- Anticipated construction plan

- 1 or 2 construction seasons – still evaluating timeline
- Detour thru traffic (few blocks at a time), maintain business access
  - ▶ Same as previous downtown Main Avenue reconstruction projects





# Estimated Cost and Next Steps

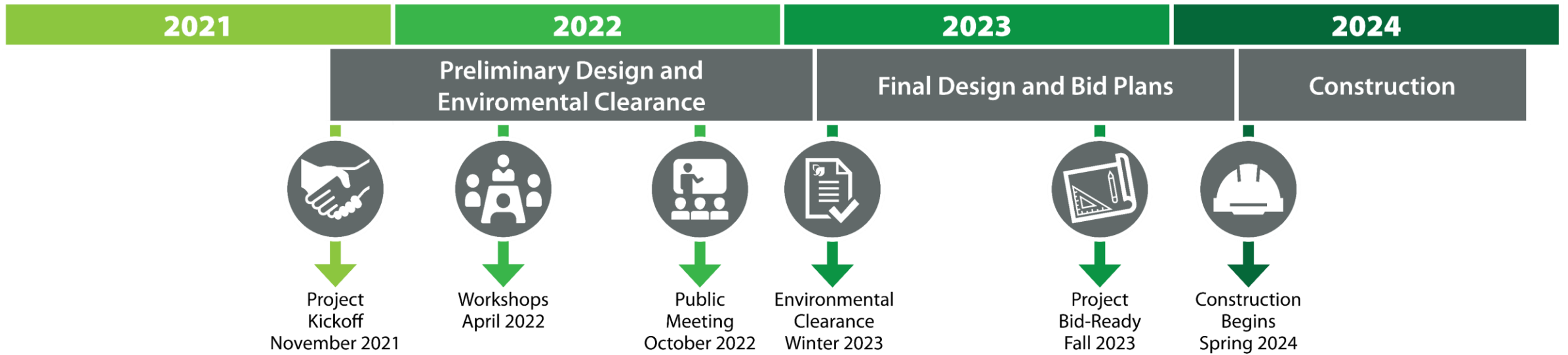
# Estimated Cost and Funding

|   | Preliminary Construction & Engineering Costs | Preliminary Land Acquisition & Building Impact/Relocation Costs | Preliminary Total Anticipated Costs |
|---|--|---|-------------------------------------|
| <b>Alternative C1: 4-Lane</b>                       | \$29.7 M                                     | \$10.5 - \$12.5 M   | \$40.2 - \$42.2 M                   |
| <b>Alternative C2: 4-Lane (no building impacts)</b> | \$29.6 M                                     | \$0.4 - \$1.2 M   | \$30.0 - \$30.8 M                   |
| <b>Alternative D: 3 Lane</b>                        | \$29.2 M                                     | \$0.1 - \$0.6 M   | \$29.3 - \$29.8 M                   |

## Estimated Cost and Funding

- Funding: Combination of Federal, State, and City funds
  - Federal Share = \$17.6 - \$27.3 M
  - State Share = \$2.0 - \$3.1 M
  - City Share = \$9.8 - \$11.0 M
    - ▶ Assessments
    - ▶ City Sales Tax Dollars

# Next Steps



**WE ARE HERE**

*2023-2024 dates are tentative and subject to change*

## We Want Your Input!

- Email: [matt.kinsella@apexenggroup.com](mailto:matt.kinsella@apexenggroup.com)
- Fill out Comment Forms – leave here or mail in
- Live Polling after Q&A
- Survey – Online or Written
- Interactive Comment Map
- **Comments Due November 2<sup>nd</sup>**



# Questions and Discussion

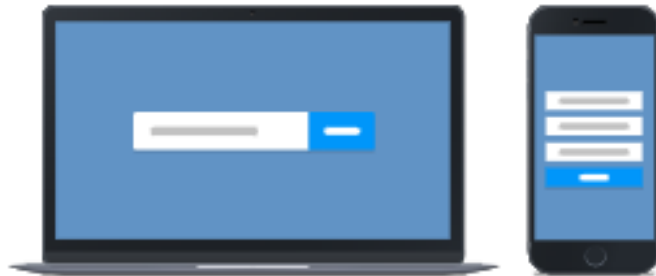
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**Dakota** | Transportation  
Be Legendary.

THE CITY OF  
**Fargo**  
FAR MORE



## How to join

Web



- 1 Go to **PollEv.com**
- 2 Enter **BRENTM300**



# What is your primary mode of transportation on Main Avenue

Car/Truck/SUV

Walking/Bicycling

Freight/Delivery Truck

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Start the presentation to see live content. For screen share software, share the entire screen. Get help at [pollev.com/app](https://pollev.com/app)

# How do you typically use Main Avenue?

Travel through without  
stopping

Access businesses/properties  
along the corrior

Access the neighborhood or  
area where you live

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# What are your top concerns with the Main Avenue corridor? (select all that apply)

Vehicle traffic moves too slow

Vehicle traffic moves too fast

Safely arriving to and departing from  
businesses on the corridor

It isn't comfortable to walk or bike on Main  
Avenue

It is hard to cross Main Avenue as a pedestrian

There isn't enough streetscaping/landscaping

Other

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# Which improvements are needed the most on Main Avenue? (select all that apply)

Separate left turn lane from 17th  
Street to University Drive

Wider sidewalks and boulevards

Additional streetscaping/lands  
caping

Intersection capacity/signal timing

Other

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# Which alternative would you like selected?

Alternative A: No Build

Alternative C1: 5-lane to  
4-lane

Alternative C2: 5-lane to  
4-lane (no building impacts)

Alternative D: 5-lane to  
3-lane

Other

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