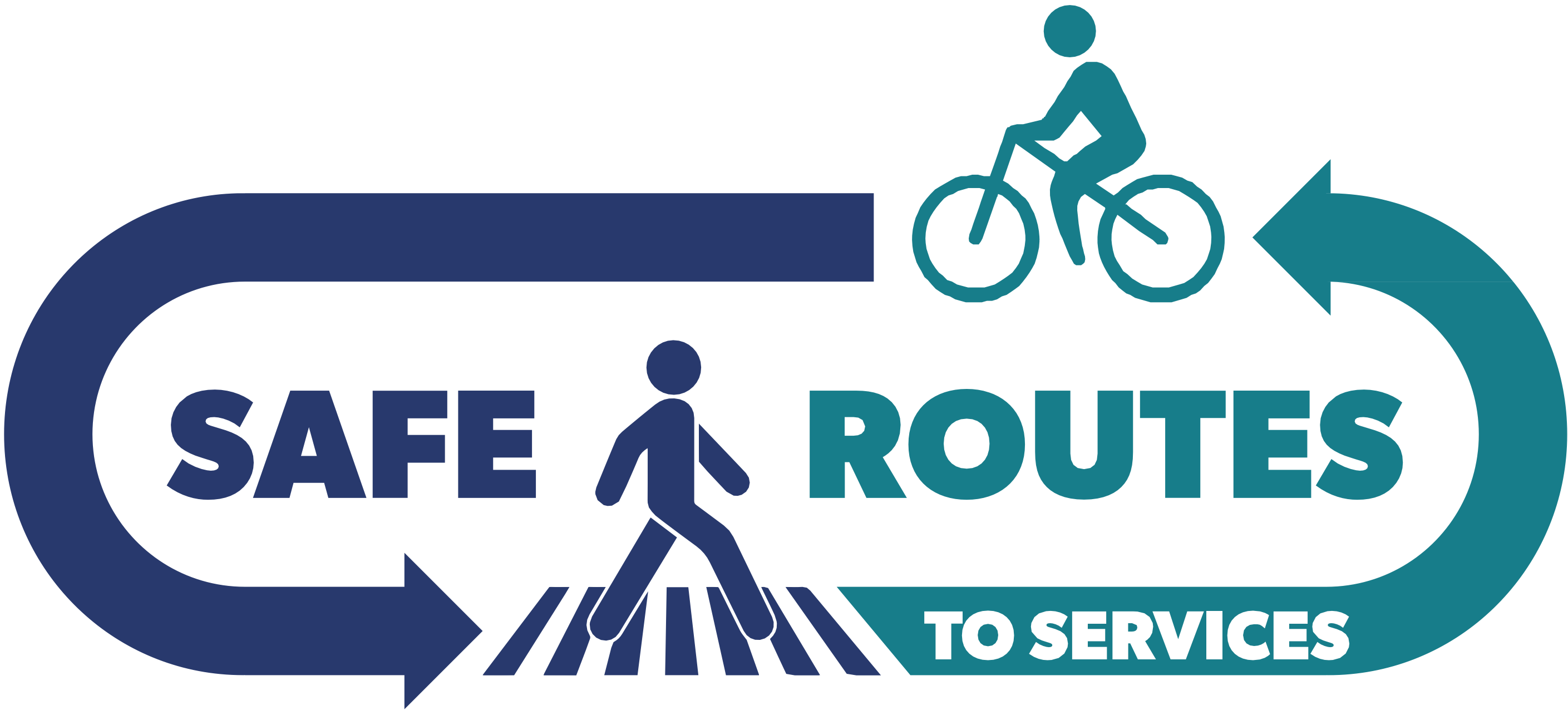


# 2024 Fall Bi-State MPO Workshop



Rachel Lukaszewski, Executive Director  
Bismarck-Mandan MPO  
(Slides by Bolton & Menk)



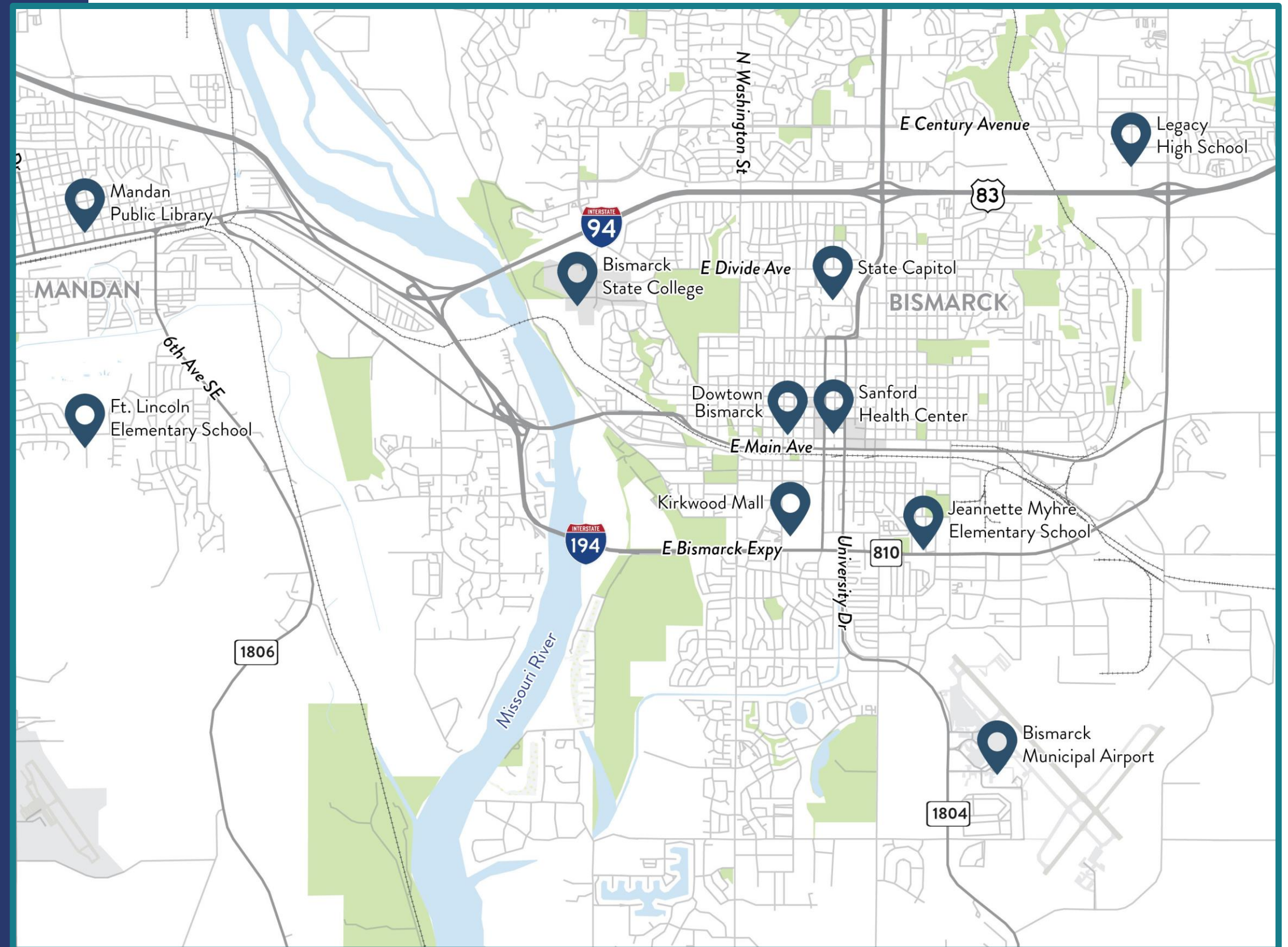
Learn more about the project by Scanning the QR code or visit: <https://arcg.is/1uOSqC>



# PROJECT OVERVIEW

The Bismarck-Mandan Metropolitan Planning Organization (MPO) embarked on an ambitious and crucial project: the Safe Routes to Services and Complete Streets Study. This initiative has focused on developing a transportation network that puts increased emphasis on the disadvantaged population of users, which is instrumental in ensuring safer travel within the community for all.

The study dove into various critical aspects such as safety, connectivity, and equity, with the goal of formulating effective recommendations. These recommendations encompass a range of areas including policies, transportation services, programs, procedures, and design standards/guidelines. The successful completion of this study is anticipated to significantly enhance the quality and safety of transportation within the community.





# COMMUNITY INPUT: Your voice was heard!

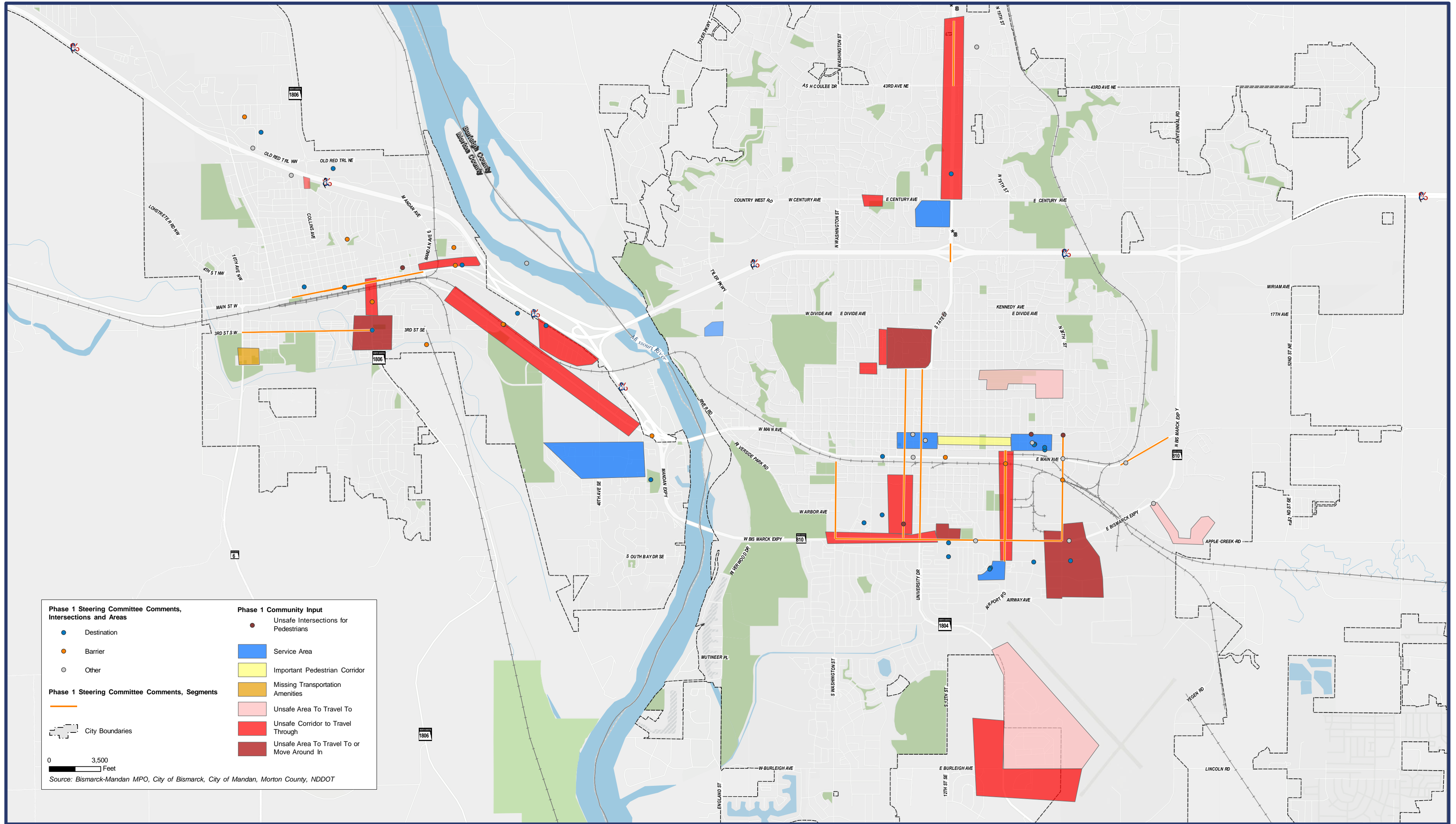
- **Snow Removal Issues:** Snow isn't cleared well, making pedestrians walk on streets, which can be dangerous and lead to harassment.
- **Need for Walking Paths:** There's a demand for better walking paths, especially between Ministry on the Margins and the Dream Center, with problems around limited access through a trailer park.
- **Bus System Problems:** High bus fares, limited service hours (late-night and Sundays), and lack of direct routes between Bismarck and Mandan are major concerns.
- **Bicycle Infrastructure:** Many people rely on bikes but struggle with few bike racks, maintenance issues, and theft. Suggestions include bike donations and maintenance workshops.
- **Dangerous Intersections:** Intersections like 26th/Rosser are seen as dangerous for pedestrians and need safety improvements.
- **Pedestrian Crosswalks:** Short crossing times at crosswalks, especially during icy conditions, are a big problem.
- **Hospital Discharge Transport:** Patients discharged from hospitals often lack transportation home, needing better transit support.
- **School Bus Policies:** School bus policies not covering students living within certain distances from schools affect safe routes for kids.
- **Public Transit Access:** Improve bus schedules to align better with peak times, reducing reliance on costly alternatives like Uber/Lyft.
- **Community vs. Business Focus:** There's concern that Bismarck's planning focuses too much on businesses and not enough on residents, especially in connecting low-income housing with jobs.



Learn more about the project by Scanning the QR code or visit: <https://arcg.is/1uOSqC>



# COMMUNITY INPUT MAP



Learn more about the project by Scanning the QR code or visit: <https://arcg.is/1uOSqC>





# AIRPORT ROAD CORRIDOR

## Existing Conditions

### Overview

The Airport Road Corridor extends from E Broadway Avenue and ends just south of Morrison Avenue. It spans approximately one mile in length and is intersected by I-94 Business Loop and the Bismarck Expressway. Land uses adjacent to the corridor include warehousing and commercial.

At the northern end of the corridor, there are **numerous human services centers** such as Heaven Helpers Soup Kitchen and Closet. Similarly, at the southern end of the corridor, the United Way Dream Center, **a community hub and service center**, houses its headquarters. Tatley-Eagles Park, located in the middle of the corridor, offers space for recreation and hosts the Capital Farmer's Market. These **destinations serve those who do not or cannot drive** and should be accessible by other modes, such as walking, rolling, and transit.

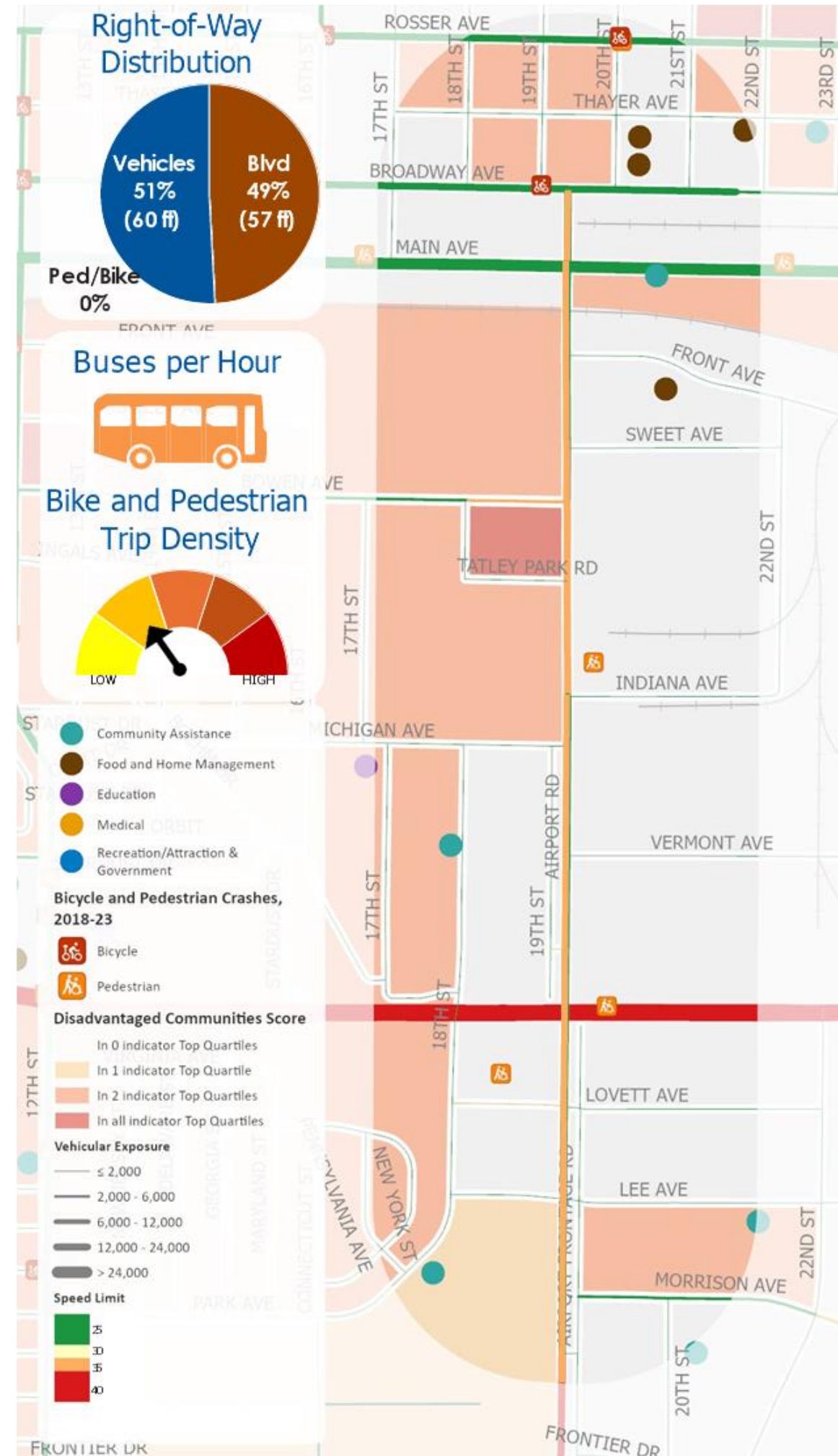
However, the **corridor currently lacks bicycle facilities and reliable sidewalks**. Despite its mile-long span, only two blocks feature sidewalks. While the intersection with I-94 Business Loop has push buttons and pedestrian crossing signals, it lacks painted facilities. Near the intersection with I-94 Business Loop, a railroad line crosses Airport Road without safe pedestrian or bicycle crossings.

Households in the area flag for all Disadvantaged Indicators which include: **BIPOC communities**, **Households with a Disability**, and less frequently, **Income Below 150% Federal Poverty Level**.

### Existing Conditions



### Corridor Context



### Bicycle, Pedestrian & Transit Infrastructure





# AIRPORT ROAD CORRIDOR

## Alternative Solutions

### Short-Term Improvements

- » **4-lane to 3-lane road diet and spot access improvements**
  - » Restripe the roadway to include a buffered bike lane or shared bus/bike lane in the right-most lane. The addition of bicycle lanes can reduce crashes by up to 49%.



#### Install Rectangular Rapid Flashing Beacons (RRFB)

- » Rectangular Rapid Flashing Beacons are traffic control devices that use flashing lights to increase visibility of pedestrians crossing a street. They can be installed on roadways at mid-block locations or trail crossings and have been proven to reduce pedestrian crashes by 47%. The beacons can be triggered by a pedestrian push button, or else they remain "dark" and allow for a continued flow of vehicle traffic.

RRFBs  
can reduce  
crashes up to  
47% for  
pedestrian  
crashes

### Long-Term Improvements

#### 4-lane to 2-lane road diet

- » Reducing 7th Street and 9th Street from 4-lanes to 2-lanes provides opportunities to increase the safety of the corridors, while still meeting their capacity needs.

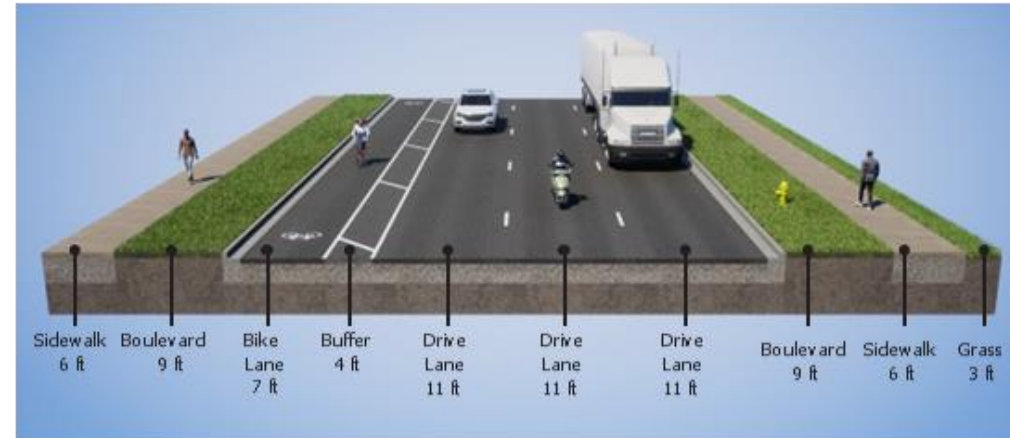
Bismarck's previous corridor study of 7th Street and 9th Street showed that vehicular traffic could be accommodated with 2-lanes on each corridor. This road diet would provide space for new shared use paths along both corridors, dedicated turn lanes at warranted intersections, reduced crossing distances for pedestrians, and opportunities for bus pullouts. Road diets are a proven safety countermeasure with crash reductions of up to 47%.

Road diets  
may reduce  
crashes by up  
to 47%

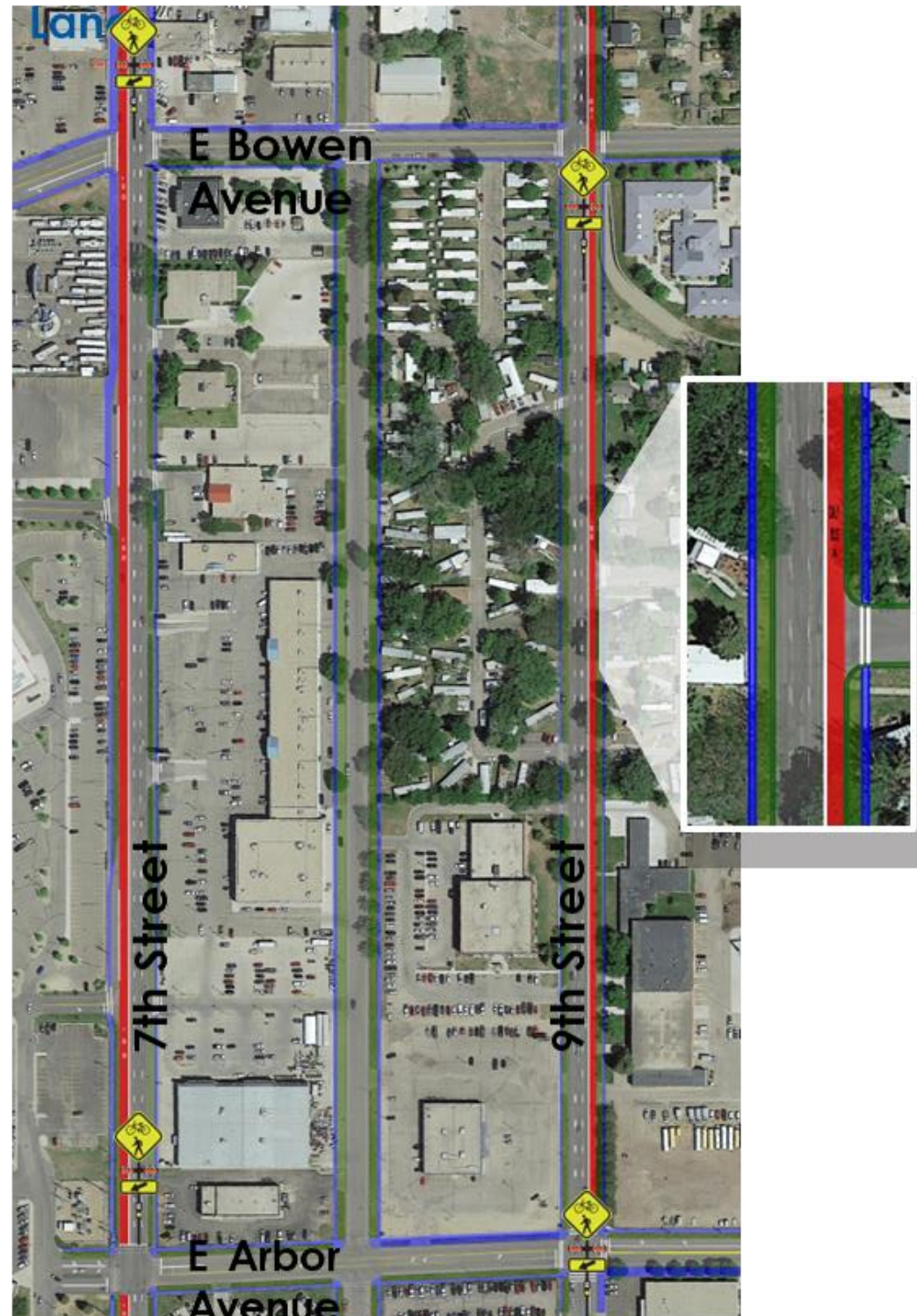
### Implementation Opportunities

- » **Impacts:** Curbline impacts along east and west side of both 7th Street and 9th Street for long-term improvements, no right-of-way acquisition
- » **Programmed Projects:** No programmed improvements
- » **Potential Funding Sources:**
  - » Transportation Alternatives: sidewalk and ADA improvements
  - » SS4A Demonstration (if on high-injury network): bike lanes and pedestrian hybrid beacons
  - » RAISE and Reconnecting Communities: 4-lane to 2-lane road diet

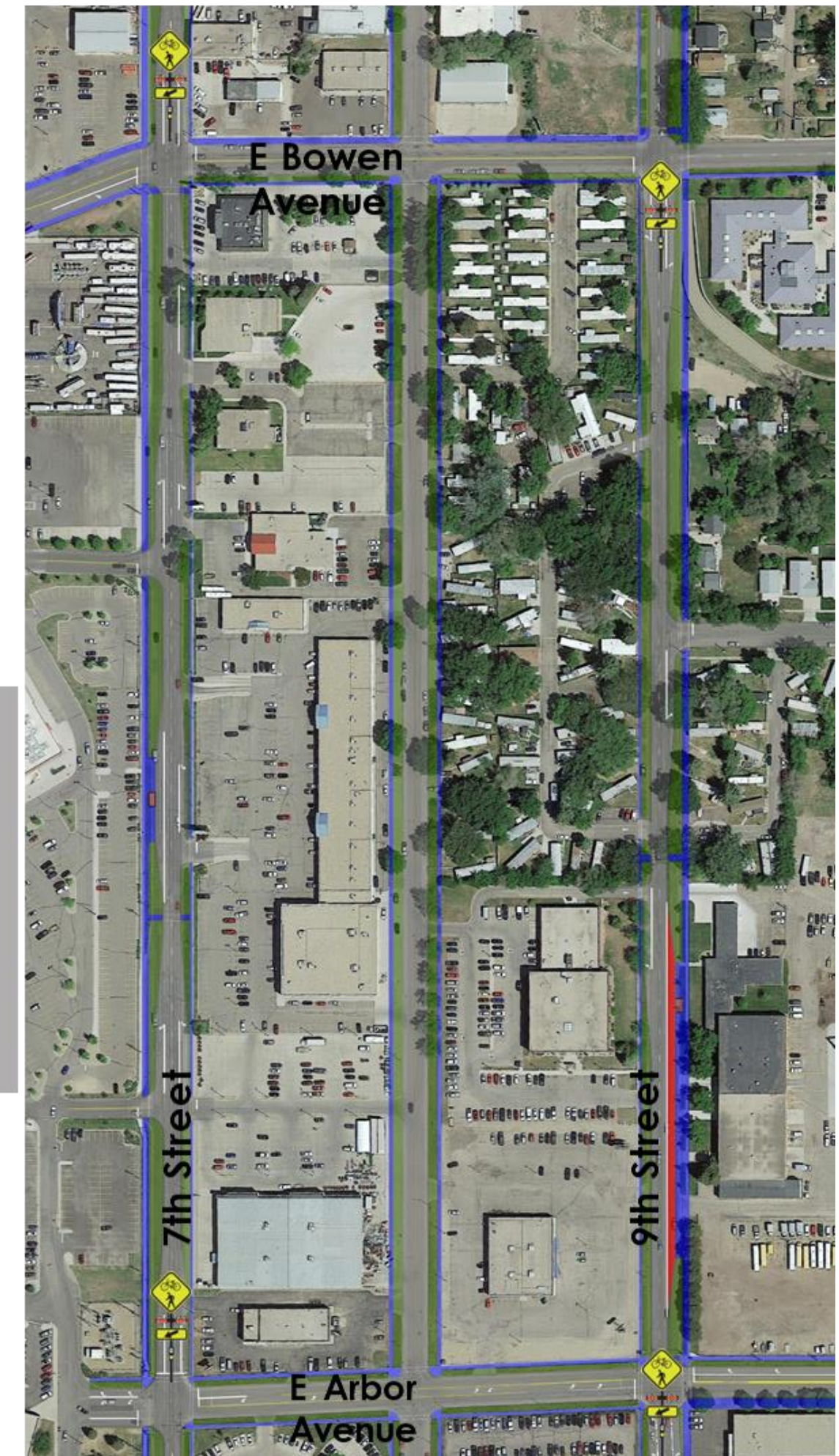
### Short-Term (7th Street)



### Shared Bus/Bike



### Long-Term Improvements





# SHADY ACRES

## Existing Conditions

### Overview

The Shady Acres neighborhood is located between three large barriers: Interstate 94 to the east, E Main Street to the south, and a railway line to the west. The neighborhood is composed of **some commercial and approximately seventy single family homes**. The area has a park located adjacent to the rail line and many of the streets end at the park.

While the residential streets have sidewalks, they do not connect onto the collector street or sidewalk that travels along E Main Street. This connection travels under the rail line and into Downtown Mandan. Additionally, the neighborhood has a multi-use path that travels north along Missouri Drive to Mandan Avenue, but it begins at the very north of the area and is not safely accessible by the majority of residents.

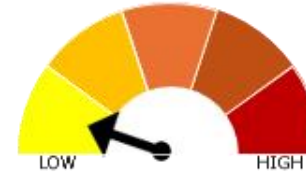
They are also not able to cross E Main Street to the south as no marked crosswalks exist across numerous lanes of accelerating and decelerating traffic to the interstate.

Households in the area score in the top quartile for incomes below 150% of the Federal Poverty Level which underscores the need for improvements to biking and walking facilities and additional connectivity.

### Buses per Hour



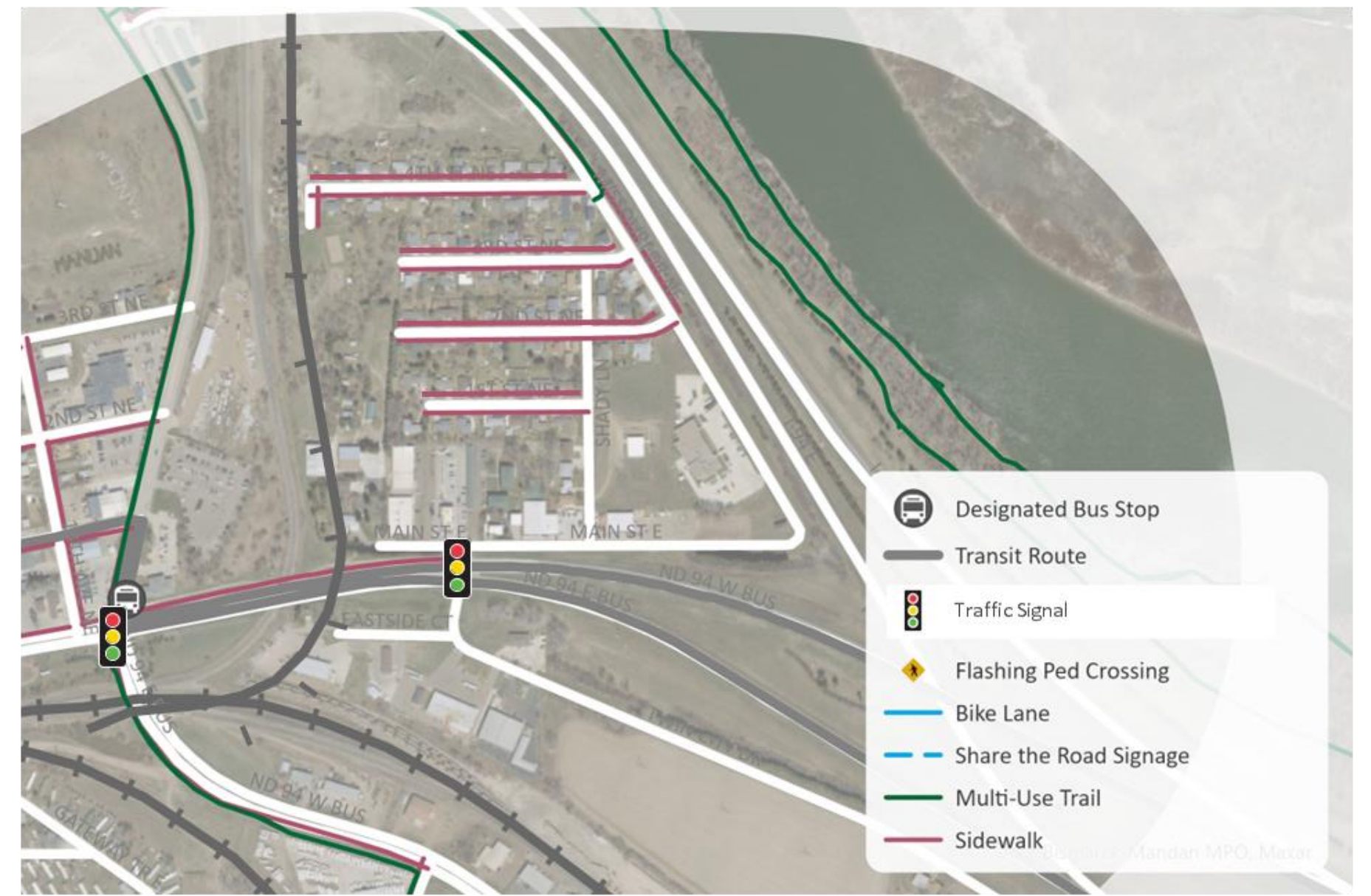
### Bike and Pedestrian Trip Density



### Corridor Context



### Bicycle, Pedestrian & Transit Infrastructure





# SHADY ACRES

## Alternative Solutions

### Short-Term Improvements

#### A Complete the pedestrian network

- » The Shady Acres neighborhood generally has a strong east-west pedestrian network, however it currently lacks north-south connections on Shady Lane and Missouri Drive. In addition, East Main Street is missing sidewalks. Filling the sidewalk gaps will improve overall connectivity for residents in this area who are already burdened with major travel barriers such as the BNSF railroad, Main Street, and I-94.

### Long-Term Improvements

#### B Pedestrian overpass of BNSF railroad to connect to the shared-use path on Mandan Avenue

- » A pedestrian overpass would provide improved accessibility to Shady Acres residents and provide a new connection to an existing multi-use trail.



### Implementation Opportunities

- » **Impacts:** Business impacts for sidewalk improvements in the Riverbend Centre, park impacts and railroad agreements for the overpass
- » **Programmed Projects:** No programmed improvements
- » **Potential Funding Sources:**
  - » Transportation Alternatives: sidewalk and ADA improvements
  - » Reconnecting Communities: pedestrian overpass

### Improvement Locations





# 7TH & 9TH ST CORRIDOR

## Existing Conditions

### Overview

The 7th and 9th Street Corridors form a **one-way pair** traveling North to South throughout Bismarck. This specific corridor area examines Main Avenue south, to the Bismarck Expressway. The corridors are **primary hubs for many civic buildings** including the state capital, city hall, and the Civic Center. Along the corridor are also **human services facilities** as well as **locations with higher density of lower paying jobs**.

Residential along the corridor includes mobile homes, high density multi-family, and single family housing. Households in the area flag for all Disadvantaged Indicators which include: **BIPOC communities, Income Below 150% Federal Poverty Level, and Households with a Disability**.

The area is dominated by automobile use with **curb-cuts impacting sidewalks and creating ample opportunities for conflicts**. There are **no bicycle facilities** on either roadway although commercial areas are within biking distances for many people.

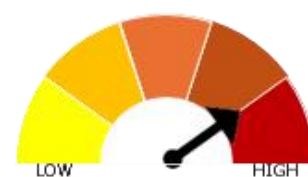
**Transit has been intentionally routed away from these corridors** as it has been deemed unsafe to stop due to high traffic volumes and speeds. Although transit runs along the corridor, there are no designated stops.



### Buses per Hour



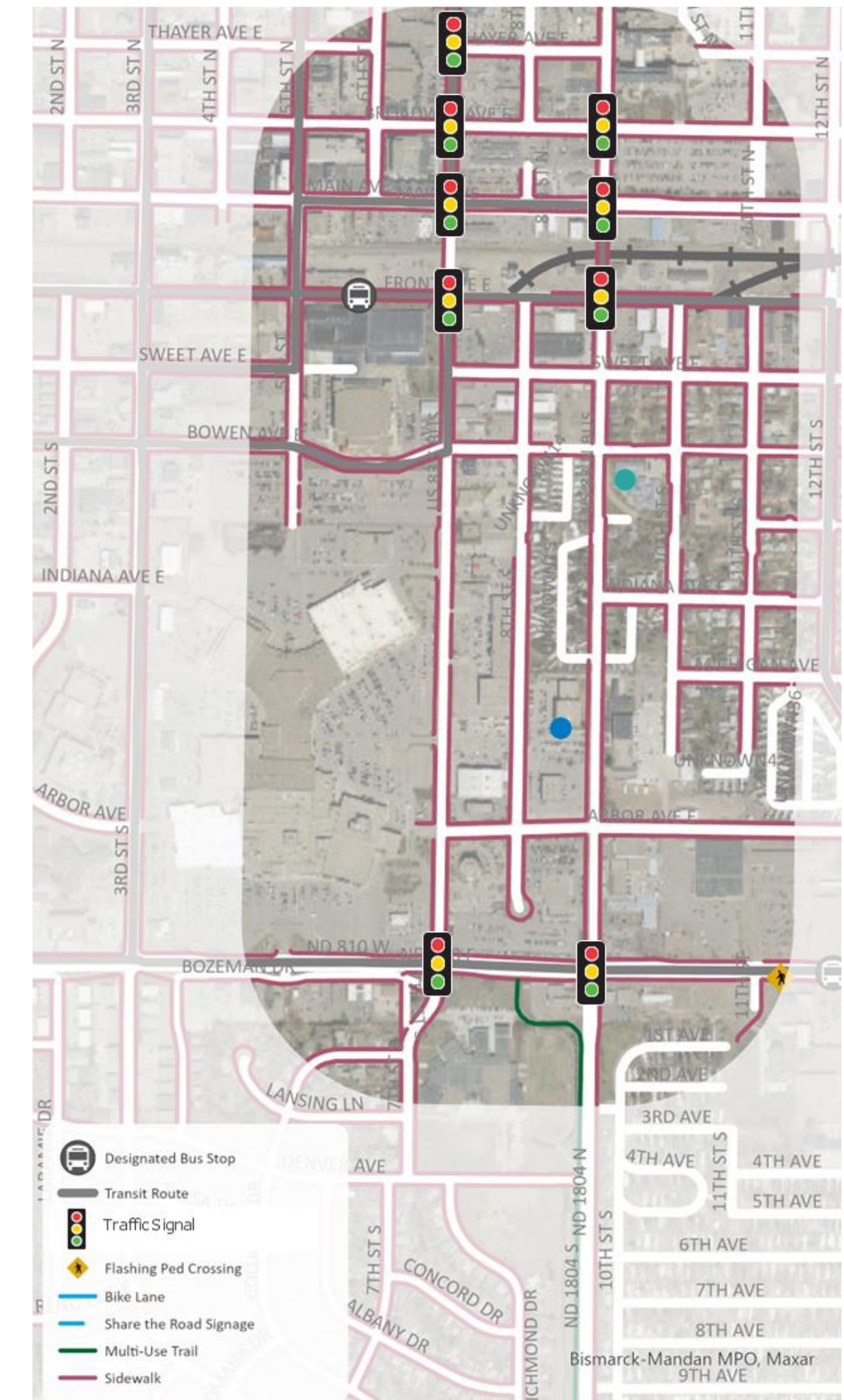
### Bike and Pedestrian Trip Density



### Corridor Context



### Bicycle, Pedestrian & Transit Infrastructure





# 7TH & 9TH ST CORRIDOR

## Alternative Solutions

### Short-Term Improvements

- » **4-lane to 3-lane road diet and spot access improvements**
  - » Restripe the roadway to include a buffered bike lane or shared bus/bike lane in the right-most lane. The addition of bicycle lanes can reduce crashes by up to 49%.

- » **Install Rectangular Rapid Flashing Beacons (RRFB)**

- » Rectangular Rapid Flashing Beacons are traffic control devices that use flashing lights to increase visibility of pedestrians crossing a street. They can be installed on roadways at mid-block locations or trail crossings and have been proven to reduce pedestrian crashes by 47%. The beacons can be triggered by a pedestrian push button, or else they remain "dark" and allow for a continued flow of vehicle traffic.

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### Long-Term Improvements

#### 4-lane to 2-lane road diet

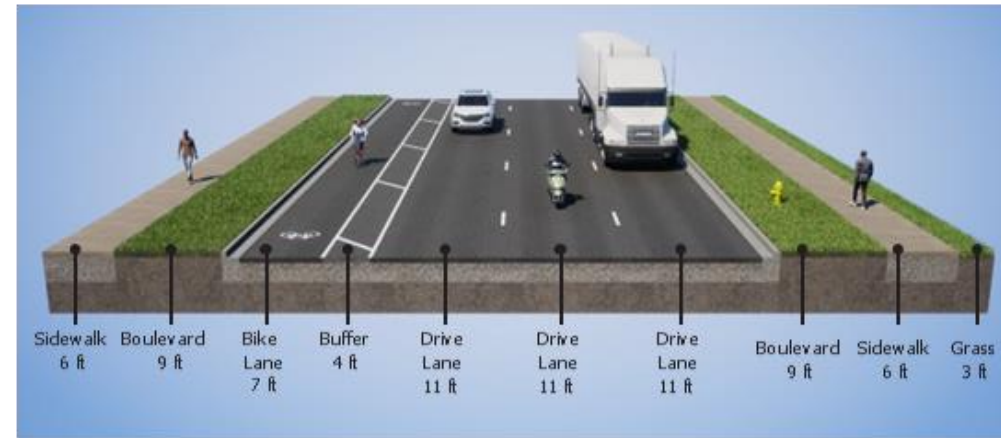
- » Reducing 7th Street and 9th Street from 4-lanes to 2-lanes provides opportunities to increase the safety of the corridors, while still meeting their capacity needs. Bismarck's previous corridor study of 7th Street and 9th Street showed that vehicular traffic could be accommodated with 2-lanes on each corridor. This road diet would provide space for new shared use paths along both corridors, dedicated turn lanes at warranted intersections, reduced crossing distances for pedestrians, and opportunities for bus pullouts. Road diets are a proven safety countermeasure with crash reductions of up to 47%.

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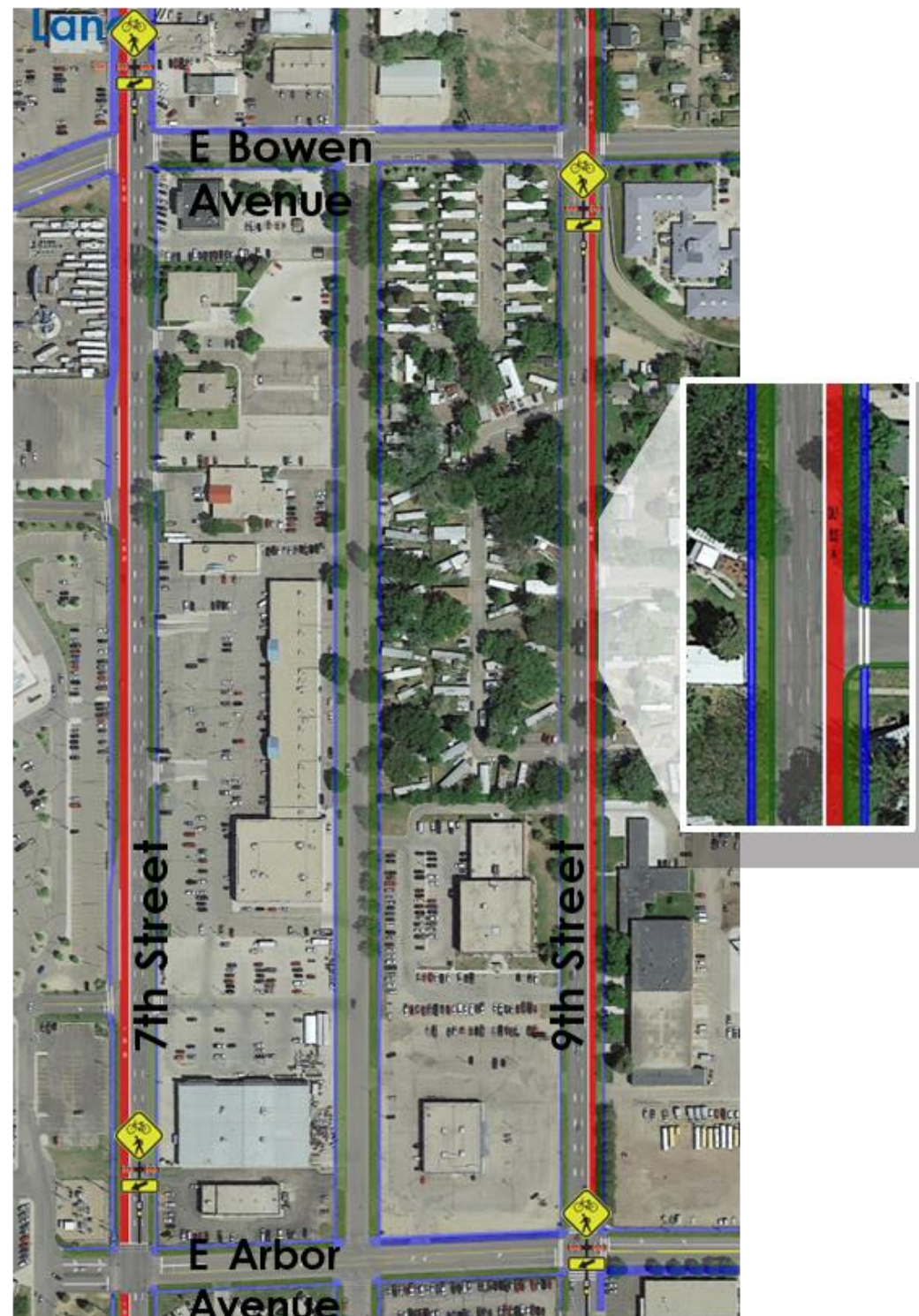
### Implementation Opportunities

- » **Impacts:** Curbline impacts along east and west side of both 7th Street and 9th Street for long-term improvements, no right-of-way acquisition
- » **Programmed Projects:** No programmed improvements
- » **Potential Funding Sources:**
  - » Transportation Alternatives: sidewalk and ADA improvements
  - » SS4A Demonstration (if on high-injury network): bike lanes and pedestrian hybrid beacons
  - » RAISE and Reconnecting Communities: 4-lane to 2-lane road diet

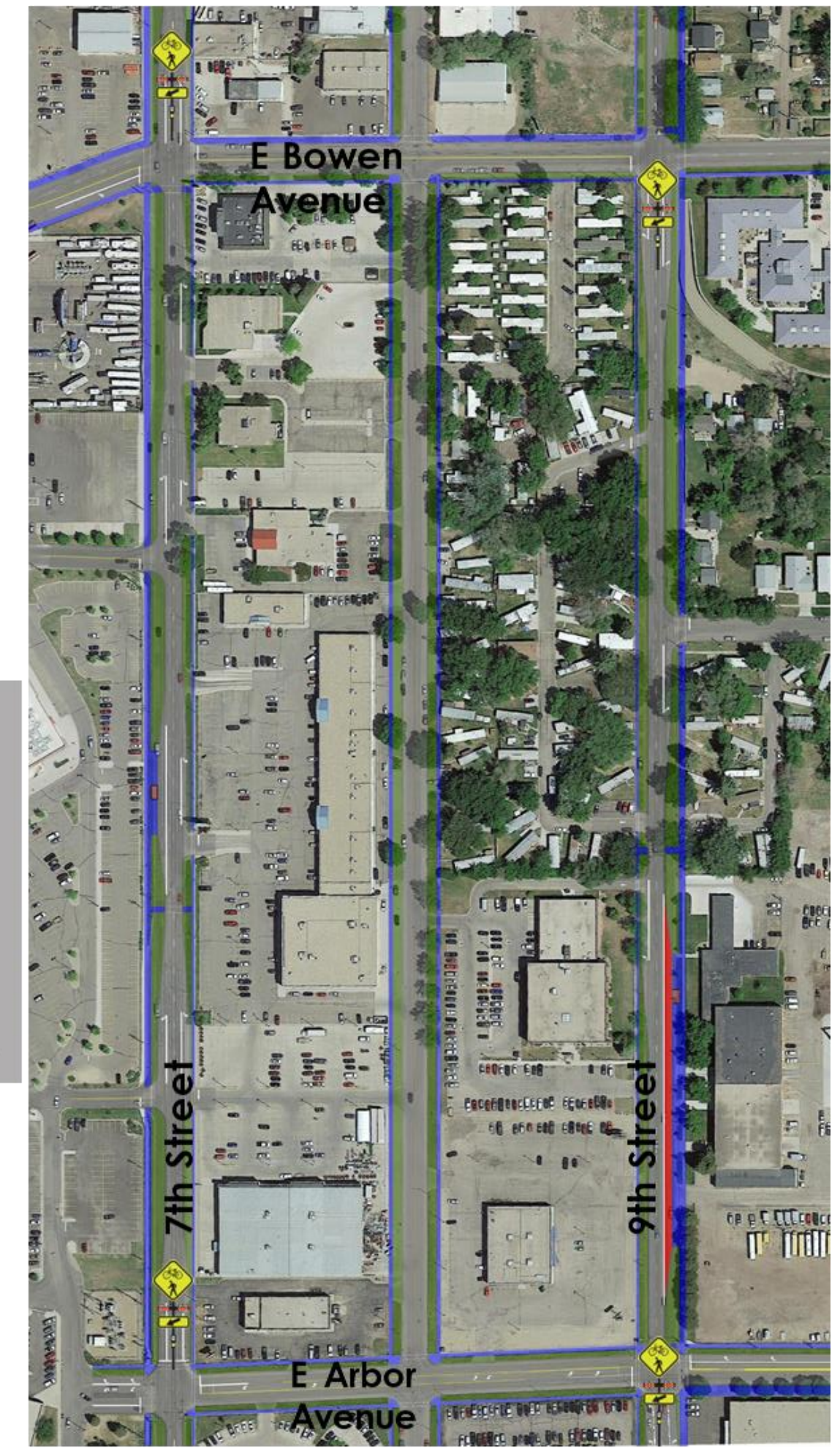
### Short-Term (7th Street)



### Shared Bus/Bike



### Long-Term Improvements





# 3RD ST CORRIDOR

## Existing Conditions

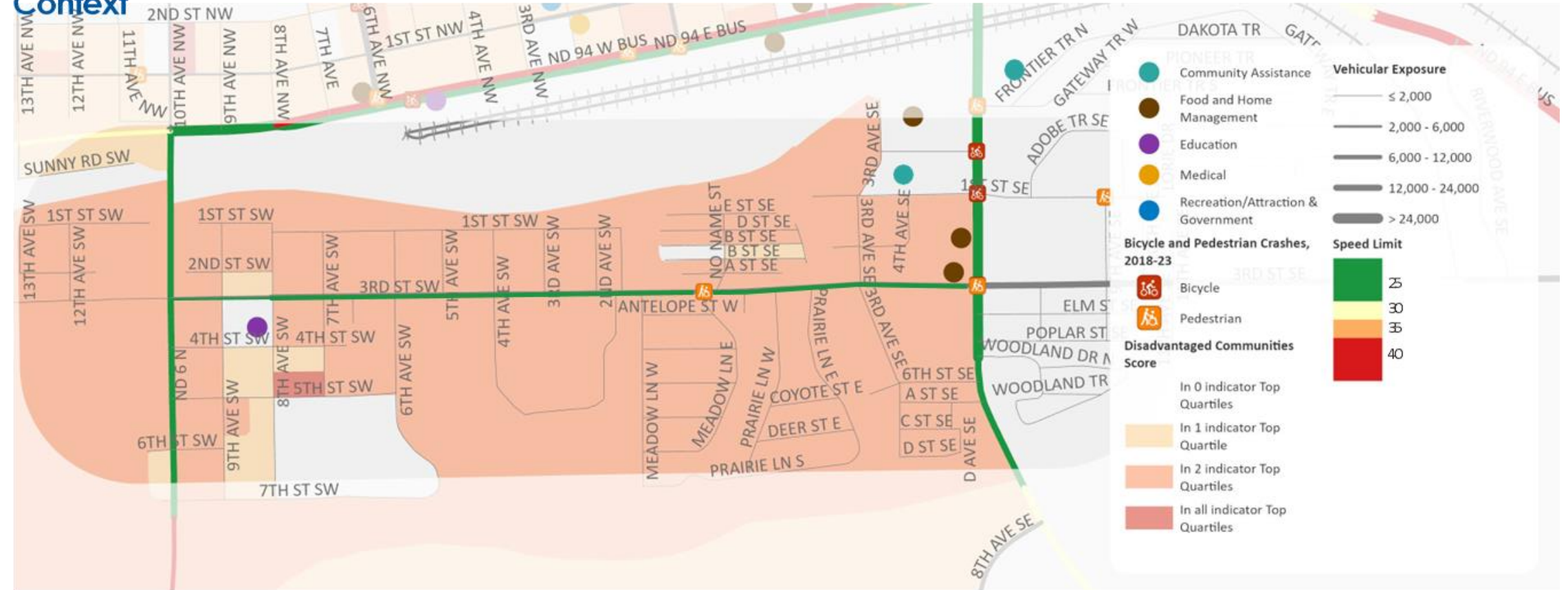
### Overview

The 3rd Street Corridor **connects low income housing with some commercial** at the intersection of 3rd Street and 6th Ave SE, while also traveling through multiple green spaces and parks. This corridor also contains the **most direct access to primary services in the Mandan area** such as Centre, Inc. and Western Plains Public Health.

The roadway features one lane in each direction and lanes for parking on each side. On the south side of 3rd Street, there is a sidewalk adjacent to the roadway, which transitions into a multi-use path on the east side of 6th Avenue. Although there is **no sidewalk on the north side of the street**, there is a desire line through the grass. At the intersection of 3rd and 6th, there is a controlled pedestrian crossing. The **corridor lacks bicycle infrastructure** but is **served by the Purple Route** which runs every two hours.

Households in the area score in the top quartile for **incomes below 150% of the Federal Poverty Level**. Areas with more than one indicator flag for households with a disability.

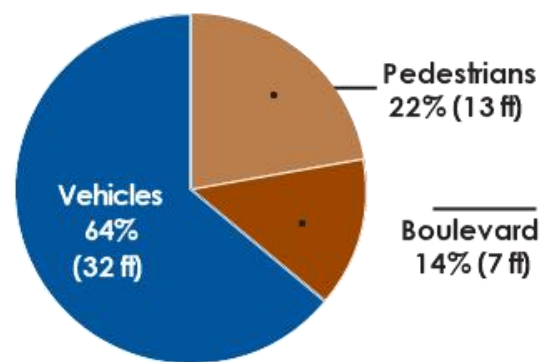
### Corridor Context



### Existing Conditions



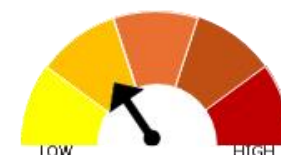
### Right-of-Way Distribution



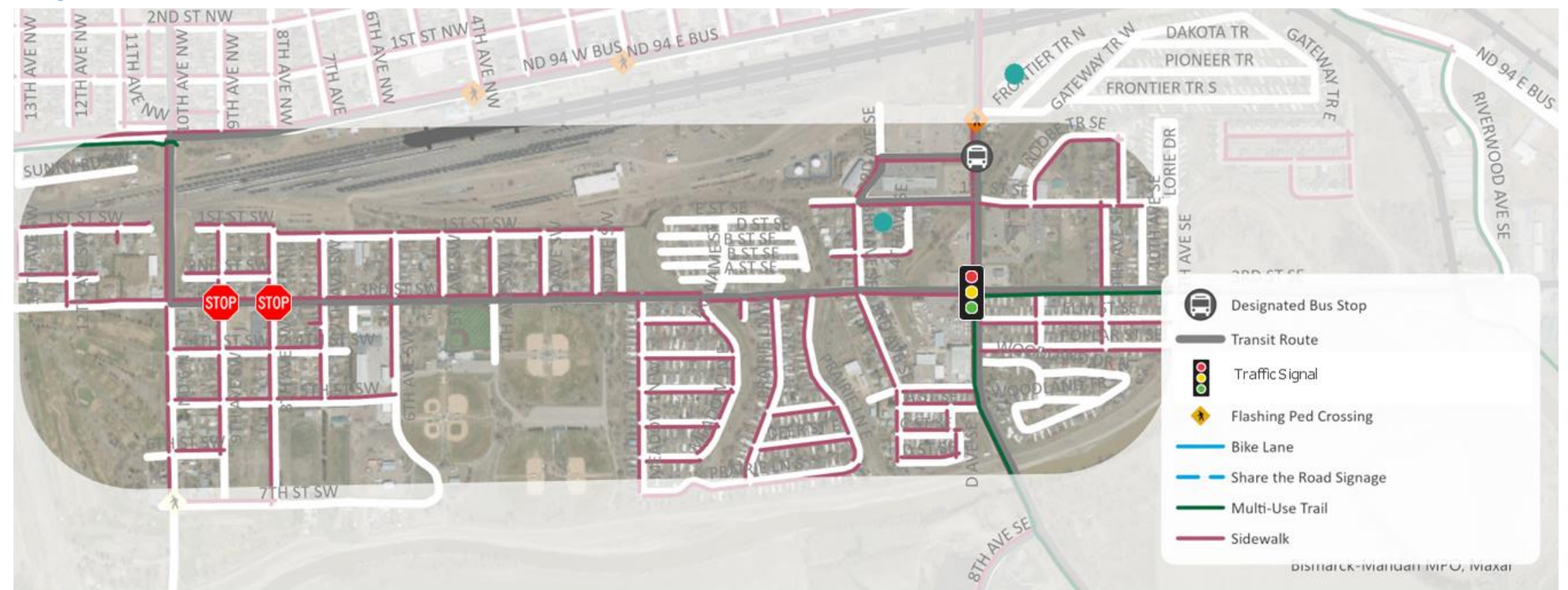
### Buses per Hour



### Bike and Pedestrian Trip Density



### Bicycle, Pedestrian & Transit Infrastructure





# 3RD ST CORRIDOR

## Alternative Solutions

### Short-Term Improvements

#### A Temporary bulb-outs at intersections

» Bulb-outs on 3rd Street will extend the sidewalk into the parking lane, reducing the amount of roadway that pedestrians and bicyclists will cross while increasing their visibility. Improvements will also slow turning traffic.

#### B Fill sidewalk gaps

» Filling sidewalk gaps on the east end of 3rd Street will improve overall connectivity for residents in this area and provide increased accessibility to public transit, the Burlington Street Plaza, and the Family Fare Supermarket.

### Temporary Bulb-Out Example



### Improvement Locations



### Long-Term Improvements

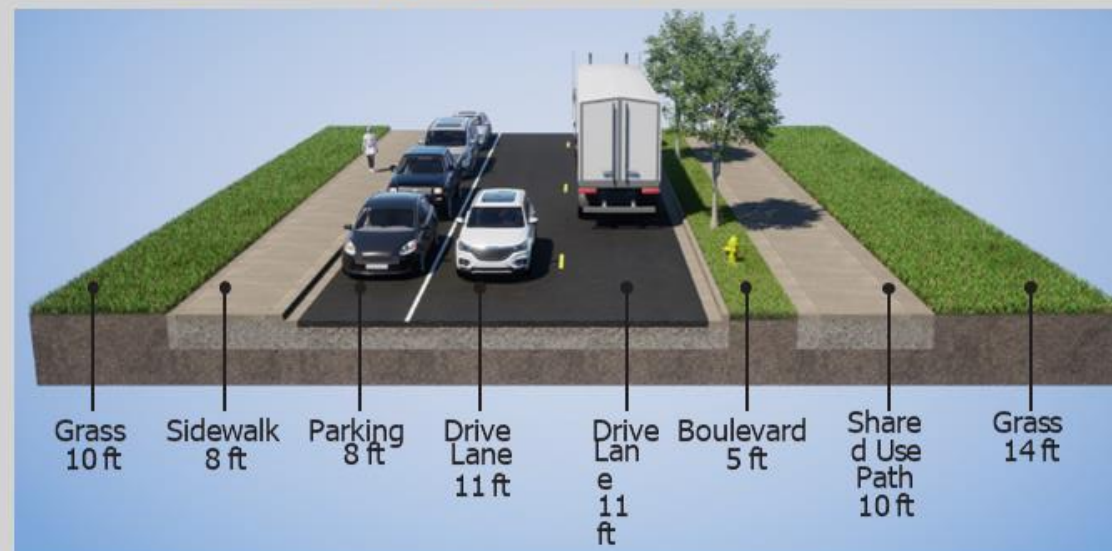
#### » Alternative One

- » Create on-street parking and widen the existing 5-foot sidewalk to a 10-foot multi-use path
- » Permanent bump-outs will be constructed at intersections to improve pedestrian safety and calm traffic

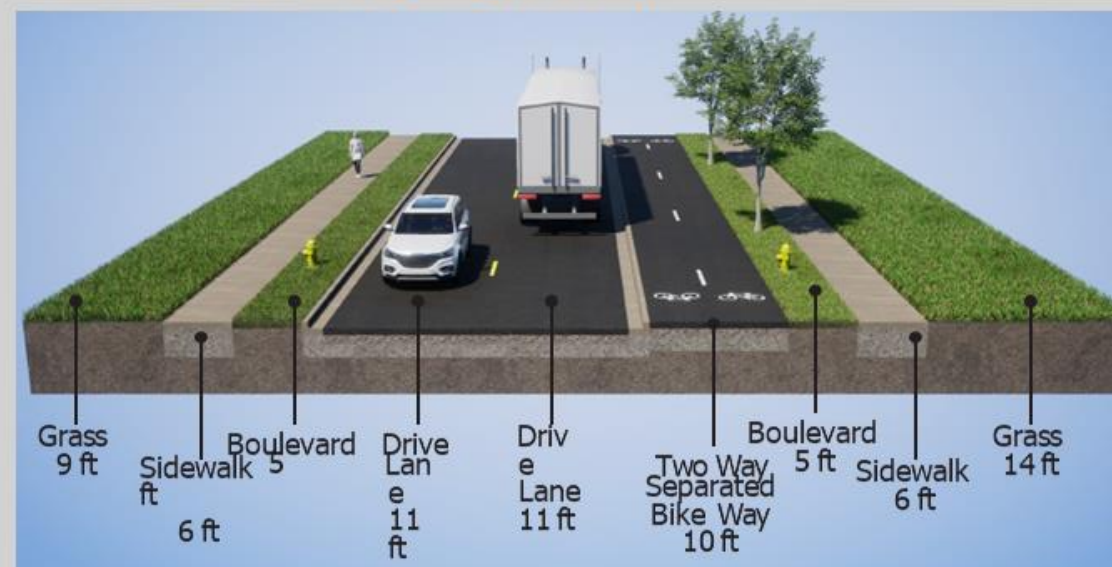
#### » Alternative Two

- » Widen both sidewalks to a minimum of six feet
- » Create a two-way separated bikeway by reducing the total width of all drive lanes

### Alternative One (Long-Term)



### Alternative Two (Long-Term)



### Implementation Opportunities

- » **Impacts:** Removal of parking
- » **Programmed Projects:** Potential alignment with economic development study for housing and transportation improvements
- » **Potential Funding Sources:**
  - » Transportation Alternatives: sidewalk and ADA improvements
  - » SS4A Demonstration (if on high-injury network): temporary bulb-outs





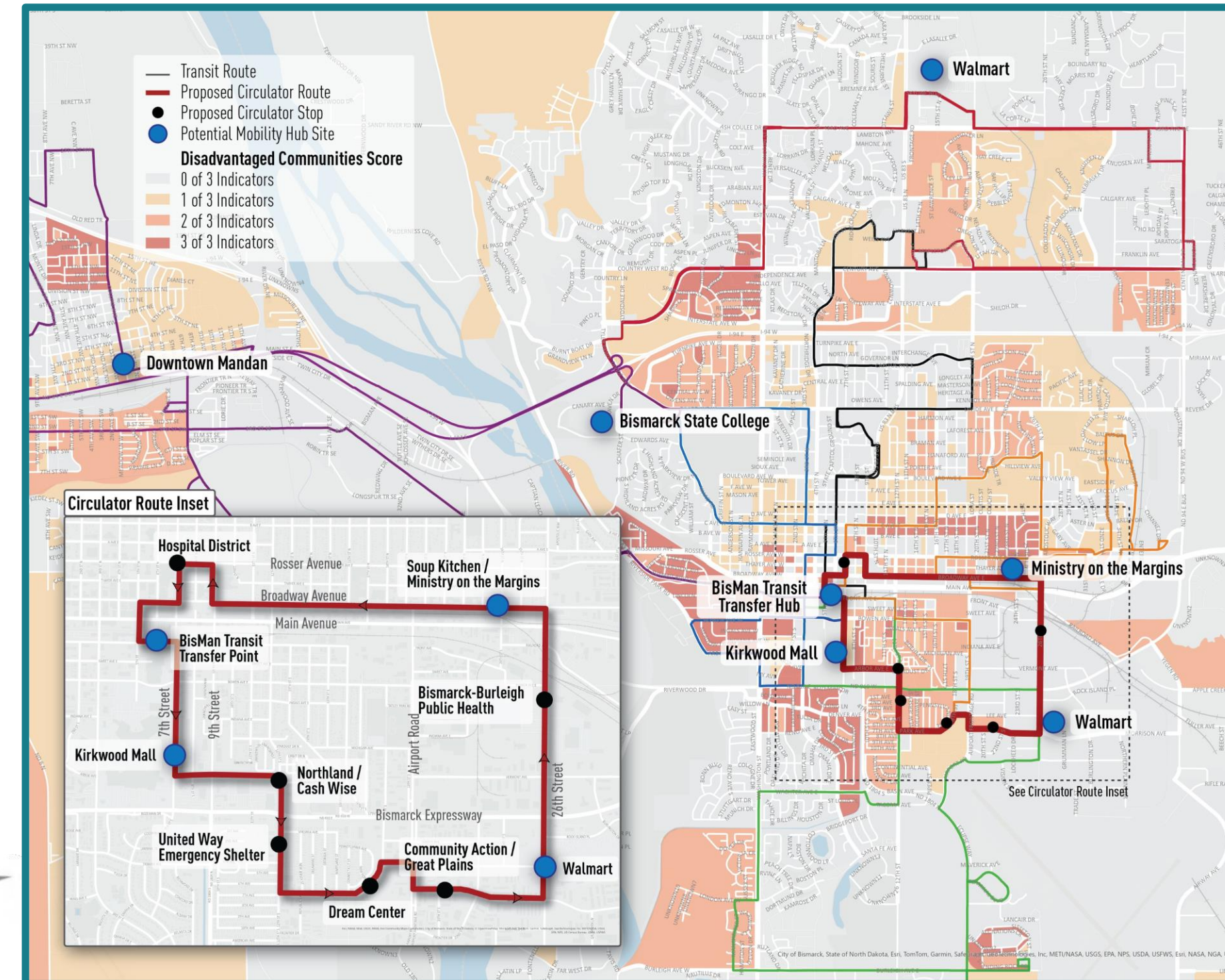
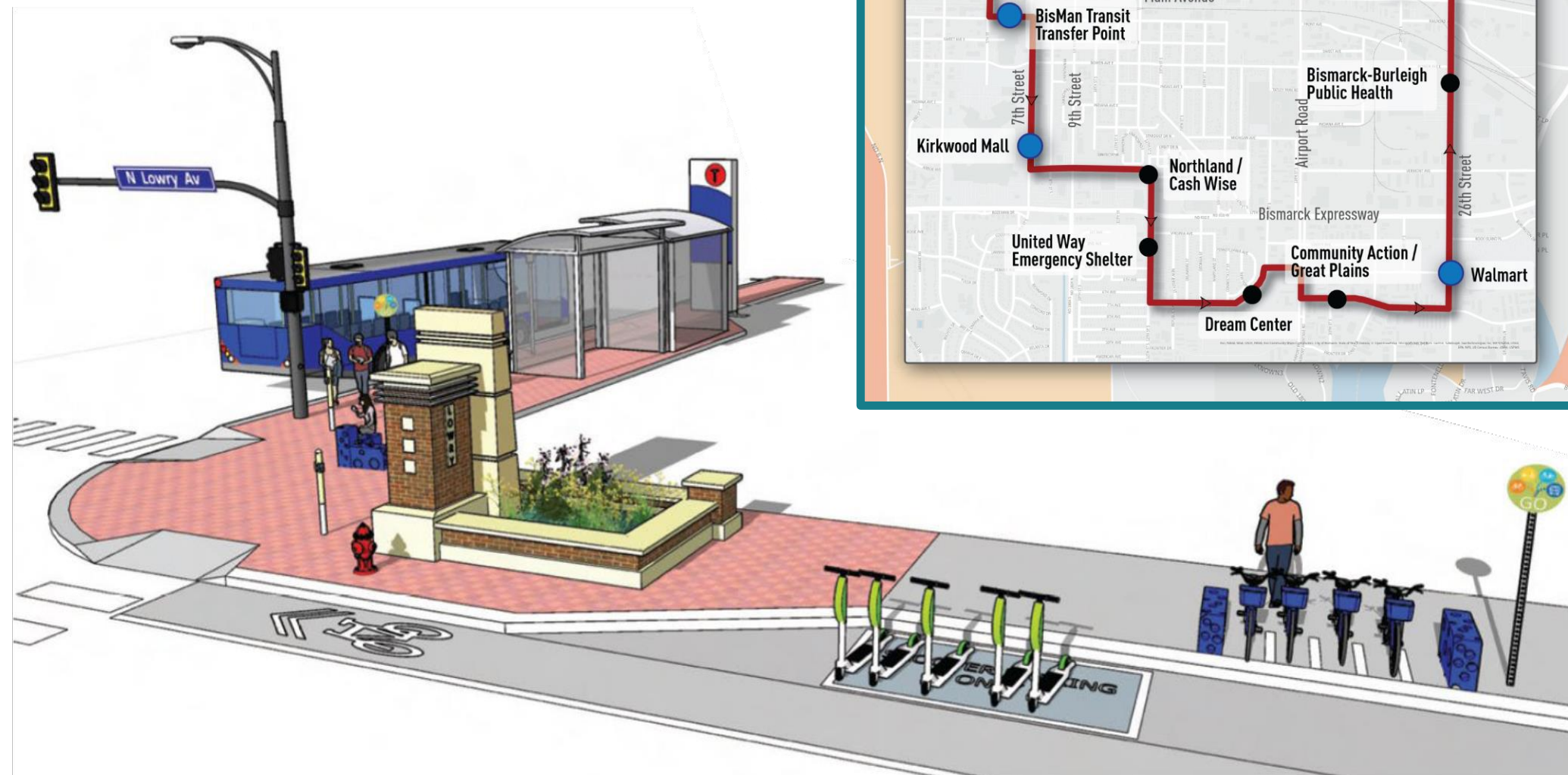
# TRANSIT IMPROVEMENTS & MOBILITY HUBS

## Proposed Transit Improvements

- **Circulator Route:** Similar to how the Orange-5 Route operates today, this proposed route would provide key connections to a wide variety of services, as seen in the map. With an increased frequency of 30-minutes, this route would improve overall accessibility and provide timely connections with existing transit routes at BisMan Transit's Transfer Point.
- **Designated Stops:** A phased installation of designated bus stops with signs would allow transit customer to know where they can board a bus. Designated stops can improve accessibility through the use of concrete pads and provide safer and more reliable experiences for customers.
- **Microtransit:** As an alternative approach to a circulator route, a new microtransit service could provide similar accessibility improvements to key services in the Bismarck-Mandan area. This on-demand style service provides curb-to-curb services and can expand the coverage of existing transit routes.

## Mobility Hubs

- Centers that connect multiple transportation modes (buses, bikes, scooters, car-share, etc.)
- Designed to be accessible for all community members
- Enhances convenience and ease of mobility for users
- Scalable based on needs of surrounding area
- Small scale mobility hubs can include minor additions to existing bus stops while large scale mobility hubs may include climate-controlled buildings with additional amenities.





# Take Aways

Both Communities have started to take action on the plan's ideas. This has been a study that ties well with issue that are public health, and

Bismarck is looking at incorporating community lockers (Com Dev and Public Health) and build-up to a community wide system

Suggested to look at RIASE grants to develop 3 hubs with a curricular route/Mobility Hub, start big since funding is available.

Could continue with a pilot project, possibly with and near Ministry on the Margins

Mandan is participating in a Building Blocks for Sustainable Communities

Micro-mobility – free bike rentals (Grand Forks Example)



Learn more about the project by Scanning the QR code or visit: <https://arcg.is/1uOSqC>





# Contact



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Bismarck-Mandan MPO

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