

# WELCOME! Public Information Open House

Thank you for joining the meeting for the Bismarck-Mandan Arrive 2050 Metropolitan Transportation Plan (MTP)!

April 29, 2024















# Open House #1 Recap

#### **ARRIVE 2050**

METROPOLITAN
TRANSPORTATION PLAN



Open House #1 included two events, with one held in Bismarck and one in Mandan, on November 9th, 2023.

These events sought to inform the public of plan development process for Arrive 2050 and solicit feedback on plan priorities and existing issues and needs facing the Bismarck-Mandan region's multimodal transportation system.

# **Key Themes**

Arrive 2050 should prioritize:



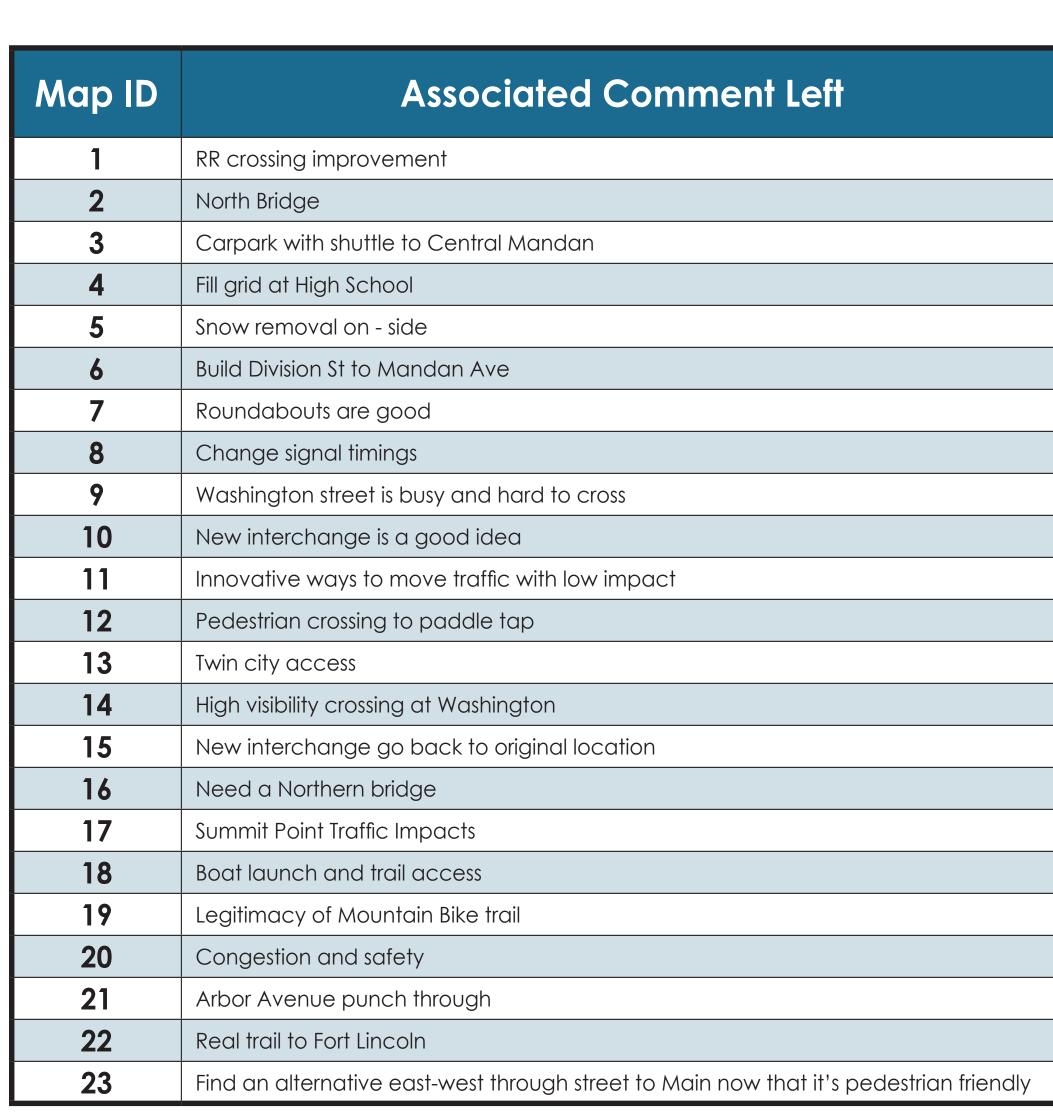
Safety

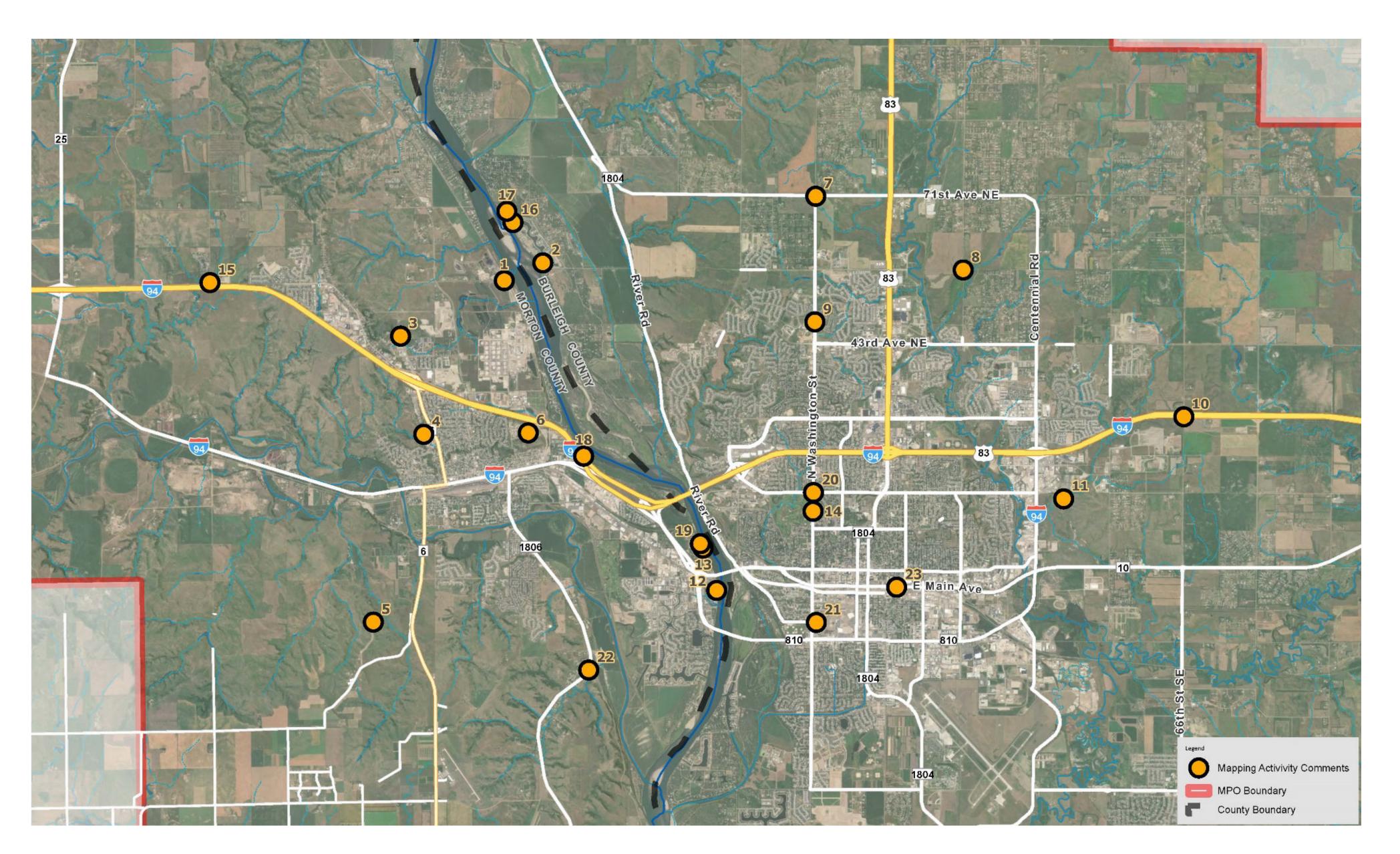


Active Transportation



Efficiency and Reliability















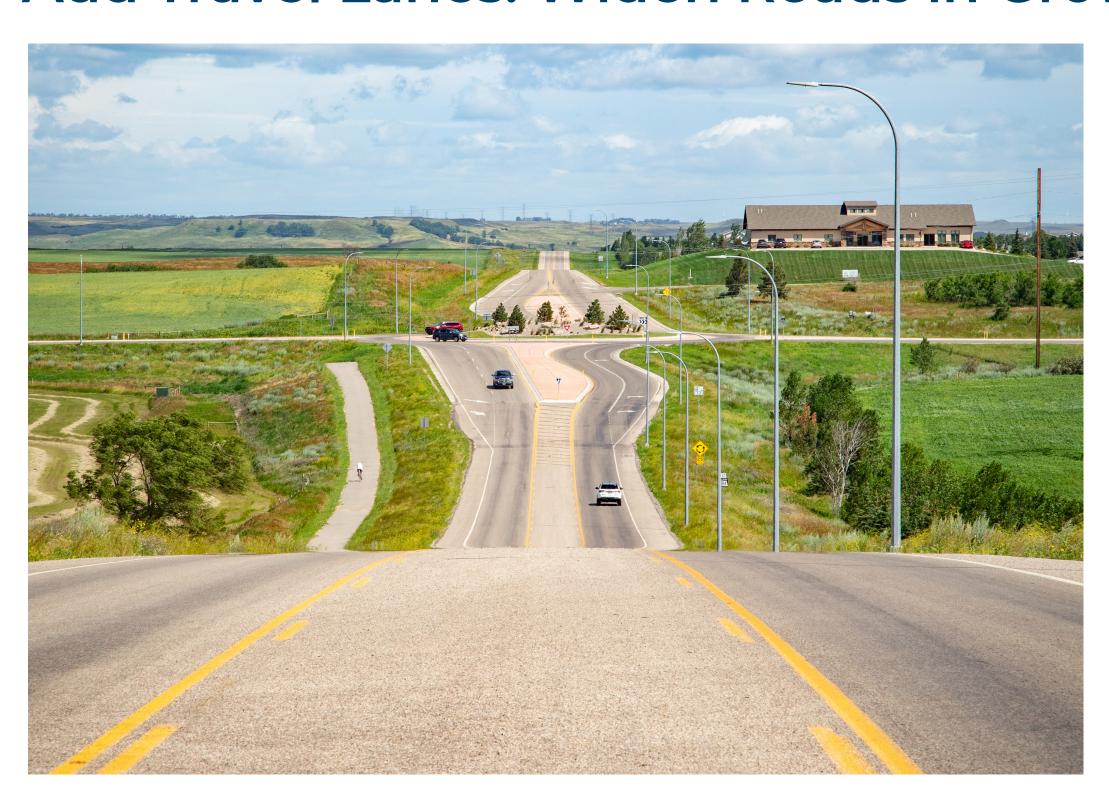


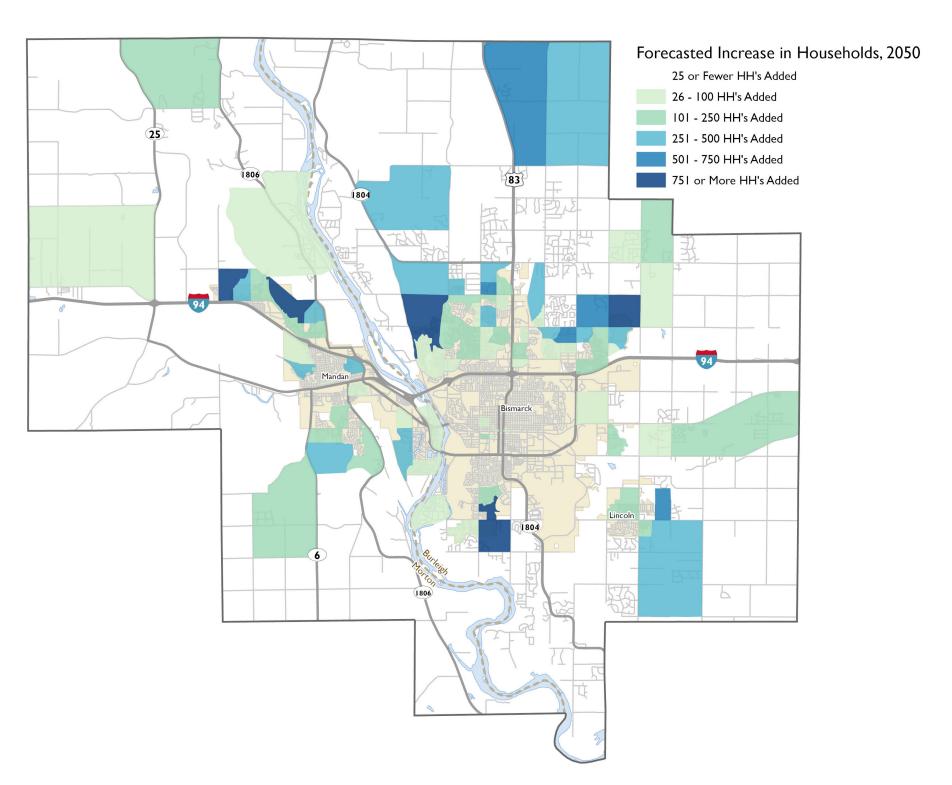


# Strategies:

Add Travel Lanes: Widen Roads in Growth Areas Manage Existing Roads

#### Add Travel Lanes: Widen Roads in Growth Areas





## **Strategy Purpose**

Many of the existing roadways in the Bismarck-Mandan region's growth areas are currently 2-lanes. Given the growth anticipated for these areas through 2050 that could result in an increase in traffic congestion, a potential strategy to address this growth is to construct additional travel lanes on the existing roadways.

#### **Pros**

- Additional lane capacity can reduce travel delays, resulting in improved traffic operations during peak hour travel periods.
- Can improve roadway safety by reducing vehicular crash occurrences.

#### Cons

- Widening roads may require additional right of way, which could impact adjacent properties.
- Wider roads can reduce safety for pedestrians and bicyclists.

# Manage Existing Streets





## **Strategy Purpose**

Address current and potential future safety issues and traffic congestion through using technology and policy solutions, such as intelligent transportation signal (ITS) systems, travel demand management, traffic incident management, dynamic messaging signs, and access management. This strategy aims to reduce congestion while avoiding expensive capital investments.

#### **Pros**

- Manage traffic operations through costeffective means that avoid capital-intensive improvements.
- A broad suite of strategies is available and can be tailored to match local conditions.

#### Cons

- Technology and policy solutions are not always as effective at addressing congestion as adding lane capacity.
- Standalone technology or policy solutions often have limited benefits to vehicle throughput.















# Strategies:

Prioritize Preservation of Existing Roadways and Bridges New Missouri River Bridge Crossing

# Prioritize Preservation of Existing Roadways and Bridges





## **Strategy Purpose**

Focus future transportation dollars on managing and preserving the roadway pavement and bridges we have today while limiting investments that expand the roadway network.

#### **Pros**

 Investments that prioritize preservation of existing transportation infrastructure can reduce long-term maintenance costs, improve lifespan of pavement and bridge structures.

#### Cons

 Prioritizing preservation over system expansion can be less effective at mitigating congestion arising from future growth and associated increases in travel demand.

# New Missouri River Bridge Crossing





## **Strategy Purpose**

Construct a new bridge over the Missouri River to connect Mandan and Bismarck, resulting in enhance connectivity between the communities. This strategy would provide a new route for travelers while increasing the transportation systems accessibility.

#### **Pros**

 Improve system accessibility and traveler mobility by constructing a new crossing over the Missouri River.

#### Cons

 High capital cost for construction, increased long-term expenditures for bridge maintenance.















# Strategies:

Roundabouts New Missouri River Bridge Crossing

## Roundabouts





## **Strategy Purpose**

Construct roundabouts at intersections in growth areas transitioning from rural to urban in nature rather than focusing on implementing signalized or stop-controlled intersections.

#### **Pros**

 Supports efficient through traffic movements at intersection locations while reducing vehicular crash severities compared to conventional signalized intersections.

#### Cons

- Roundabouts require additional right of way for construction when compared to a signalized intersection design.
- Some intersection designs, such as
   T-intersections and intersections with variable
   flow and speed limits, support more efficient
   traffic flows compared to roundabouts.

# Integrate Complete Streets into Future Roadway Improvements





#### **Strategy Purpose**

Implement Complete Streets elements in future roadway projects to balance the needs of all transportation users safely and efficiently. Complete Streets elements include sidewalks, on-street bicycle facilities, curb extensions, narrower vehicular travel lanes, and on-street parking. The integration of Complete Streets is considered a process rather than a singular approach to roadway design.

#### Pros

- The Complete Streets process can provide safer roadways for all users while supporting efficient traffic flows.
- Complete Streets design can improve the vibrancy and pedestrian-friendliness of an environment in key destinations such as downtown Bismarck and Mandan.

#### Cons

 Integrating Complete Streets into roadway design can result in additional expenditures for infrastructure due to the need to retrofit facilities like bike lanes and curb extensions, speed limits, support more efficient traffic flows compared to roundabouts.















# Next Steps

Scan the QR code to visit the project website!



