200 East: 450 North to 1250 North

Intersection and Roadway Improvements
Project Overview

**1000 NORTH TO 1250 NORTH**
- Meet vehicle capacity needs for the next 20 years
- Improve safety
- Limit impacts to businesses and residents
- Maintain bicycle corridor

**1000 NORTH**
- Maintain or improve pedestrian safety
- Maintain bicycle corridor
- Meet vehicle capacity needs for the next 20 years

**MT. LOGAN MIDDLE SCHOOL**
- Improve pedestrian safety
- Minimize conflicts between motor vehicles and pedestrians

**700 NORTH**
- Improve pedestrian safety
- Preserve vehicular capacity of the roadway

**500 NORTH**
- Maintain pedestrian safety
- Meet needs of CVTD Transit Center
- Maintain bicycle corridor
- Meet vehicle capacity needs for the next 20 years
500 North Intersection

Goals

- Maintain pedestrian safety
- Meet needs of the CVTD Transit Center
- Maintain bicycle corridor
- Meet vehicle capacity needs for the next 20 years

Alternatives Evaluated

- 4-Way Stop
- Traffic Signal
- Single-Lane Roundabout
500 North Intersection

Recommended Alternative: Single Lane Roundabout

• Maintains pedestrian safety
• Meets CVTD’s needs
• Maintains bicycle corridor
• Provides more of a neighborhood feel than a traffic signal
• Less right-of-way impact than a traffic signal
• Majority of the comments from open house favor a roundabout
• Meets vehicle capacity needs for next the 20 years
700 North Intersection

Goals

• Improve pedestrian safety
• Preserve vehicle capacity of the roadway

Alternatives Evaluated

• Bulbouts
• Improved signage
• Improved lighting
• Flashing beacons
• Raised crosswalk
Recommended Alternative: Bulbouts, lighting and signage improvements, and colored/patterned crosswalk

- Improves pedestrian safety – shortens crossing distance
- Requires less maintenance than a median (specifically snow removal)
- Maintains parking
- Colored/patterned crosswalk helps with aesthetics of neighborhood
- Improved lighting will make pedestrians more visible at night
Mount Logan Middle School

Goals
• Increase pedestrian safety
• Minimize conflicts between pedestrians and vehicles

Alternatives Evaluated
• Bus Stop Location
  – 870 North
  – 900 North
  – 1000 North
• Median
  – No median, retain as is
  – Add median and retain parking on both sides of the road
  – Add median and eliminate parking on the east side of the road
Mount Logan Middle School

Recommended Alternative:
Bus Stop at 900 North

- Majority of the comments from open house in favor of crossing just north of 900 North
- Provides a safer crossing as bus users exit and proceed to a crossing behind the bus
Recommended Alternative: Median with parking only on the west side of the roadway

- Increases pedestrian safety and minimizes conflicts between pedestrians and vehicles by:
  - Providing a refuge island for pedestrians
  - Reducing conflicts with pedestrians and buses
  - Allows for a separate left turn lane for buses
1000 North Intersection

Goals
- Maintain pedestrian safety
- Maintain bicycle corridor
- Meet vehicle capacity needs for the next 20 years

Alternatives Evaluated
- Existing signalized intersection (retain as is)
- Improvements to the signalized intersection
- Double-lane roundabout
1000 North Intersection

Recommended Alternative: Double-Lane Roundabout

- Maintains pedestrian safety by reducing speed and providing refuge islands
- Maintains bicycle corridor
- Meets capacity needs for the next 20 years and beyond
- The future average delay during peak hours is anticipated to be half that of a traffic signal (17 sec vs 34 sec)
- Provides more of a neighborhood feel than a traffic signal
- Helps to establish a consistent corridor with roundabouts at 500 North, 1000 North and 1800 North
1000 North to 1250 North

Goals

• Meet vehicle capacity needs for next the 20 years
• Improve safety
• Limit impacts to businesses and residents
• Maintain bicycle corridor

Alternatives Evaluated

• No On-Street Parking
• Parking on east side only
• Parking on both sides
1000 North to 1250 North

Recommended Alternative: Parking on both sides

- Meets capacity needs for the next 20 years
- Dedicated bicycle lanes provided
- Provides for future improvements without the need for additional right-of-way
- Can be modified to a 5-lane roadway to mitigate declining level-of-service
1000 North to 1250 North

Parking on both sides

- Impacts 7 homes and 1 business
1000 North to 1250 North

Parking on East Side only

- Minimizes impacts to homes on the east side of the roadway from 1100 North to 1250 North
  - By retaining the curb and sidewalk in the same location on the east side
- Changing from a 3-lane to 5 lane section in the future would require the acquisition of 7 homes
- A 3-lane roadway is expected to operate at a level-of-service D in 20 years
Additional Resources

- Maryland Department of Transportation
  [http://www.roads.maryland.gov/Pages/Roundabouts.aspx](http://www.roads.maryland.gov/Pages/Roundabouts.aspx)
- Arizona Department of Transportation
- New York Department of Transportation
- Federal Highway Administration (FHWA)
- Insurance Institute For Highway Safety
  [http://www.iihs.org/research/topics/roundabouts.html](http://www.iihs.org/research/topics/roundabouts.html)
- Iowa Department of Transportation
  [http://www.iowadot.gov/roundabouts/roundabouts_links.htm](http://www.iowadot.gov/roundabouts/roundabouts_links.htm)
- Oregon Department of Transportation
- Kansas Department of Transportation
- Wisconsin Department of Transportation
- Institute of Transportation Engineers
  [http://www.ite.org/safety/roundabouts.asp](http://www.ite.org/safety/roundabouts.asp)
Questions