

Project Purpose

The purpose of this project is to address safety concerns, reduce existing delays, and plan for future growth at the CH 91 (Natchez Ave)/CSAH 2 (Main St) intersection.

Project Benefit

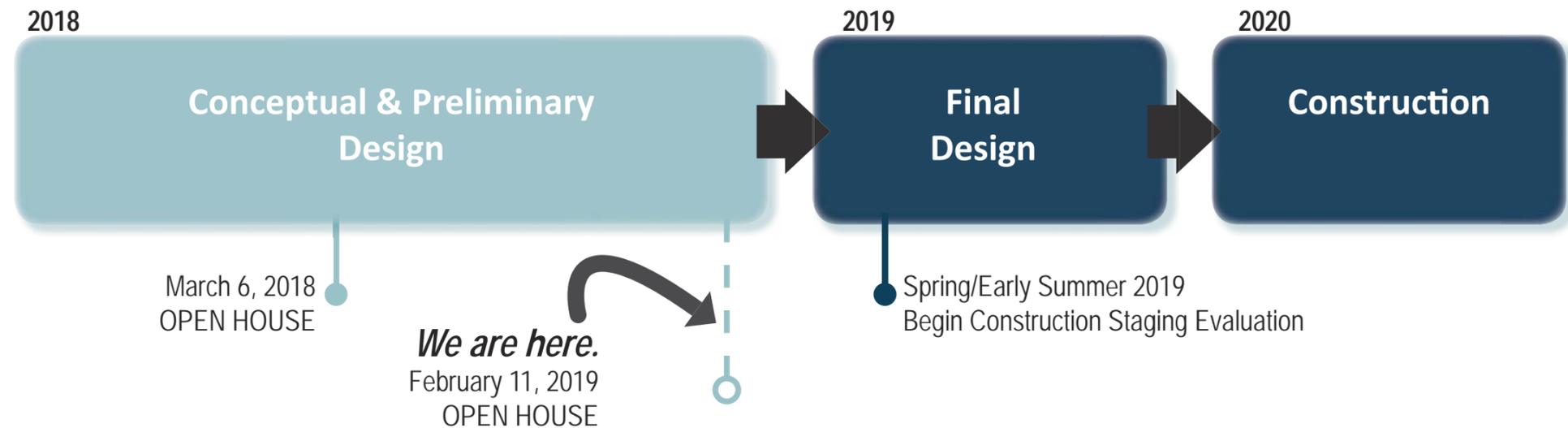
- Traffic calming (slow traffic)
- Eliminate risk of right-angle and head on crashes
- Increased mobility for peak conditions and future growth
- All single-lane legs of roundabout expandable as needed in the future
- *Opportunity for the community to explore the character of the roadway leading into and out of the city!*

How do I Stay Informed?

Visit the City's Planning & Zoning webpage for project updates & background information:

<https://www.ci.enm.mn.us/planningandzoning>

Project Timeline



Where Have We Been?

- Property Owner Meetings February 22, 2018
- Business Advisory Meeting February 28, 2018
- Open House March 6, 2018
- City Council Meeting March 22, 2018



Existing Conditions: Looking down CSAH 2 towards Downtown.



Current Volumes

Dominant AM movement: eastbound right-turn from CH 91
Dominant PM movement: westbound thru traffic from CSAH 2



Projected Volumes

Dominant AM movement: eastbound right-turn from CH 91
Dominant PM movement: southbound left-turn from CSAH 2



Safety First!

- High speed intersection
- Traffic levels increasing
- Long history of crashes
 - Six recorded crashes for last three-year period
 - Four injury crashes

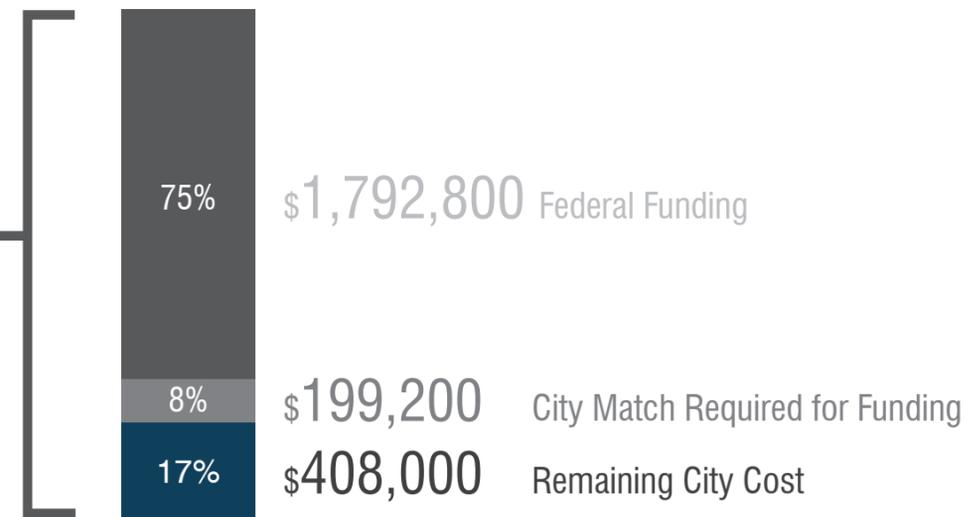
Roundabouts solve these problems!

- Almost 90% reduction in injury crashes
- Increased safety benefits over existing traffic control and traffic signals

Project Components → **Total Intersection Project Cost** → Funding Breakdown

\$2 million Estimated Construction Costs
+ \$400,000 Design/Administration Costs

= \$2.40M



\$607,200
Total city cost for intersection project

Tax Impact for Typical Home:
~\$36/year for 15 years

Please Note:

Current project cost estimates are based on full closure for construction.

What does this mean for me?

The annual debt service levy for the typical home* for costs included in this project can be estimated as follows:

\$100k of city costs



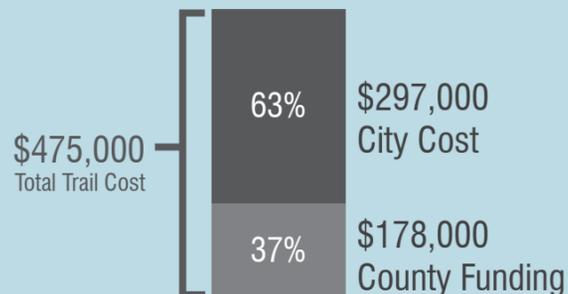
property tax increase of
~\$5.50-6.50 annually

* A typical home is valued at approximately \$280,000.

All additional project elements outside of the intersection improvements as identified in the federal funding application will be costs borne by the City.

Additional Proposed Corridor Improvements

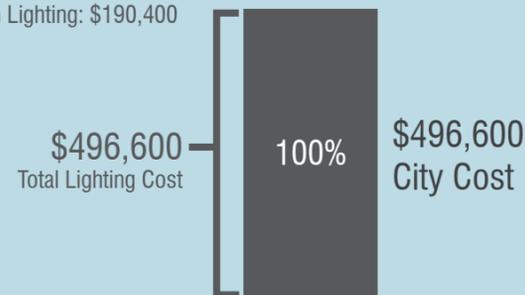
Trail Connections



Tax Impact for Typical Home:
~\$18/year for 15 years

Continuous Lighting

- Continuous Lighting: \$306,200
- Downtown Lighting: \$190,400



Tax Impact for Typical Home:
~\$30/year for 15 years

\$793,600

Total city cost for additional corridor improvements

Tax Impact for Typical Home:
~\$48/year for 15 years

Trail Connections

CSAH 2 & CH 91 Roundabout



Cost Estimates

CSAH 2 Trail

Total Estimated Cost \$255,000 (construction, right-of-way, and 'soft costs')

CH 91 Trail

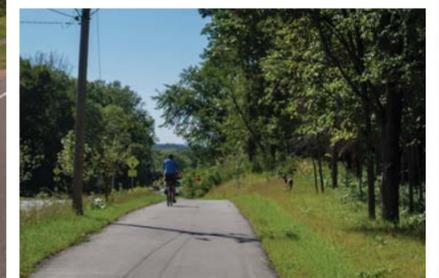
Total Estimated Cost \$220,000 (construction, right-of-way, and 'soft costs')

Note: The County has included \$178,000 towards the trail improvements in their Transportation Improvement Plan

What will the trails look like?



Extension to existing trail south of Aaron Drive



Trail Examples

Lighting Layout



 **Continuous Lighting**

 **Downtown Lighting**

 **Roundabout Lighting**

The proposed decorative lighting would extend from the roundabout along Main Street (CSAH 2) through the downtown.

- This lighting type is a continuation of lighting identified in **Downtown Improvement Committee** lighting plan (conduit for lighting is already installed in the downtown area).
- Light poles will include banner arm and flagpole attachments. These can be switched out seasonally or as desired.
- Light poles along Main St will create a sense of rhythm and continuation of streetscape elements to draw visitors into downtown from the roundabout. **Decorative lighting is also anticipated to contribute to traffic calming and creating a sense of place.**

Estimated Cost:

\$306,200 - CSAH 2 Continuous Lighting (between roundabout and Downtown)

\$190,400 - Downtown Lighting

Total Estimated Cost: \$496,600

What else was considered?

A continuation of the functional lighting (similar to that shown at the roundabout) as well as more decorative lighting styles were explored in the concept development. The acorn lighting style (left) was determined to achieve the best balance between cost and aesthetic character.

This is considered a safety feature and is included in the base cost of the roundabout.

Estimated Cost: \$80,000 (included in base roundabout project cost)



Staging Considerations

- Key Routes (regional and local)
- Access in/out of area
- Public safety
- Space for contractor to work safely and efficiently
- Specific business needs
- Emergency services
- Community events
- Cost to construct

Schedule Considerations

- Duration of construction is based on production rates and probable working days
- May thru October is “normal” construction season
- 5 day working weeks, not including holidays

Please Note:
Current project cost estimates are based on full closure for construction.

Staging Alternatives

Alternative 1

Construct Under Traffic | Build in Multiple Stages

If your priority is: **ACCESS**
(Maintain access between downtown and I-35W at all times)

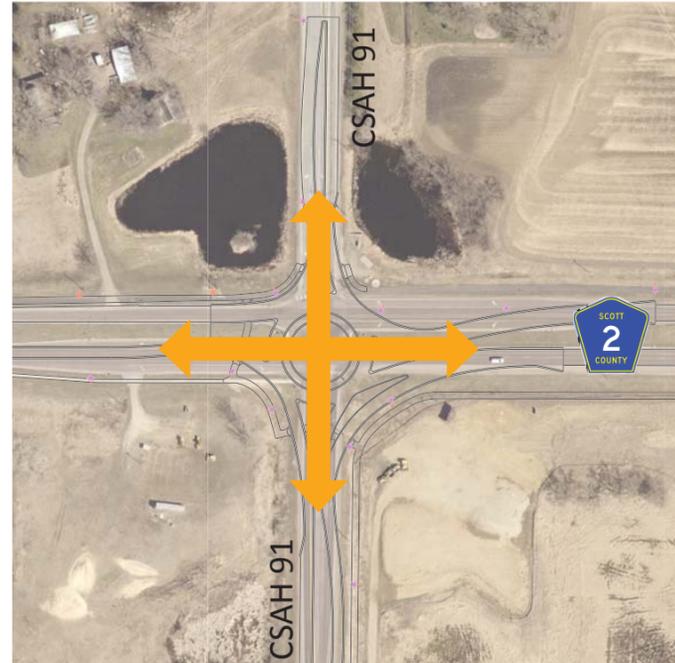
Estimated Construction
12-18 Weeks

- Takes more time to construct
- **Considerable additional cost** due to longer, more complicated construction
- Construction time-frame varies with level of access needed to remain open

Maintain CSAH 2 Traffic



Maintain All Traffic



Alternative 2

Full Closure | Detour Traffic

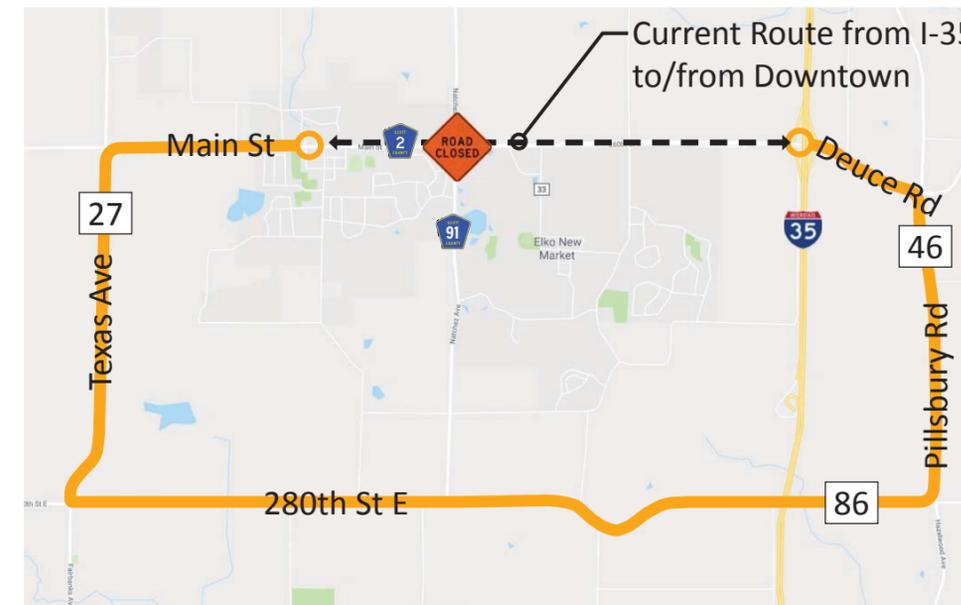
If your priority is: **SHORTEST TIME FRAME**
(shortest and least expensive construction, but requires detour route for intersection improvements)

Estimated Construction
6-8 Weeks

- Two-way detour route designated
- Contractor can be more efficient and complete work with less time

Proposed detour route:

I35W <> CSAH 2 (Deuce Rd) <> CSAH 46 (Pillsbury Rd) <> CSAH 86 (280th St E) <> CSAH 27 (Texas Ave) <> CSAH 2 (Main St)



Detour Routes Estimated Time

- Current Route: 4 minutes, 2.7 miles
- Proposed Detour Route: 14 minutes, 10.9 miles

Detour Routes Rules of Thumb

- 1/3 follow detour
- 1/3 find different route or change trip
- 1/3 local trips (local origin and destination)