July 16, 2019 City Council Workshop

# City of Northfield TH246 & Jefferson Parkway Roundabout Project





# History & Schedule

#### 2016:

Approved Intersection Control Evaluation & Traffic Impact Analysis City Council adopted roundabout as preferred option.

### 2017/2018:

Acquired funding from:

MnDOT's Local Parnership Program (\$483,480)

MnDOT's Local Road Improvement Program (\$900,000)

#### 2019:

Adopted Mill Town Regional Trail Route Feasibility Study / Design

### 2020:

Construction





# TH 246 at Jefferson Parkway

- From Intersection Study
  - Current All-way stop
    - Traffic operation will continue to worsen
    - Level of Service (LOS)
      - -A = free flow conditions
      - F = stopped, congested flow
    - Currently LOS D and delay of 28 sec/veh
    - Projected LOS F and delays continue to increase
    - Driver confusion with multiple lanes and traffic legs





# TH 246 at Jefferson Parkway

From Intersection Study

### Roundabout

- Best for traffic flow (operates at higher level of service than a stop sign or signal)
- LOS B in 2040 with delay of 10 sec/veh
- Fewer vehicle crashes and less severe
- Single lane have been found safe for pedestrians and bicyclists
- Reduces confusion that exists at the all-way stop
- Reduces speeds Increased Safety





# Roundabout Safety

## Pedestrian / Bike

No serious injury or fatalities at any roundabout in Minnesota in the last 10 years.

## Vehicles

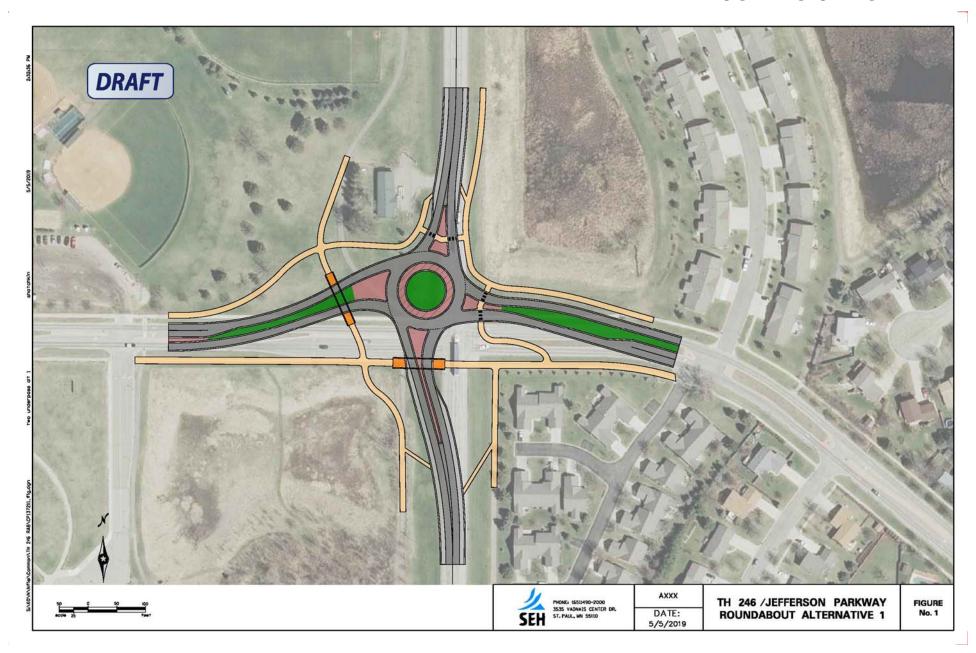
In comparison to a traffic signal:

- 78% reduction in severe crashes; and
- 48% reduction in overall crashes.

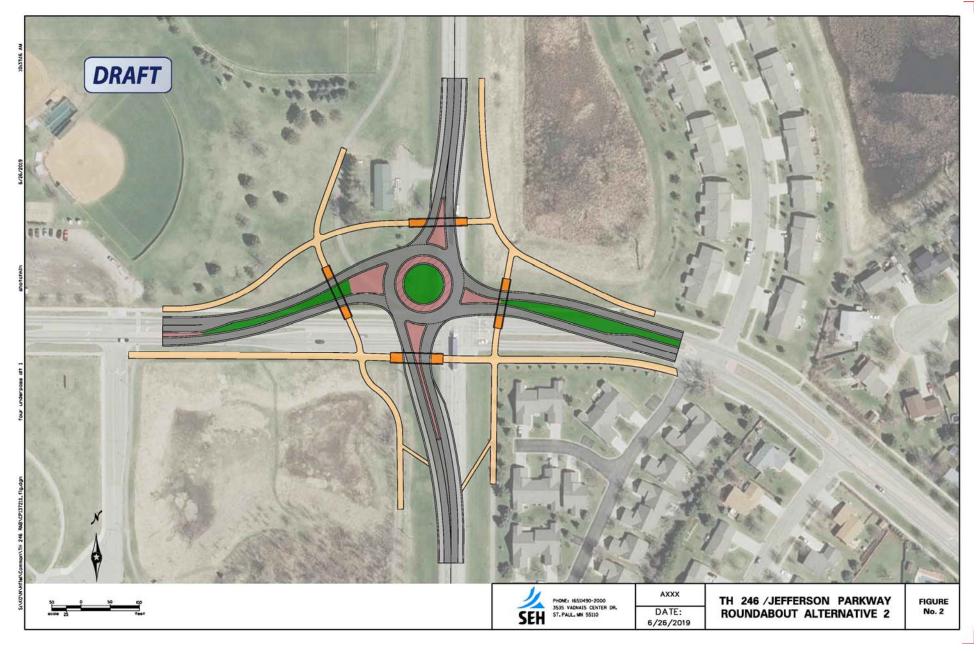




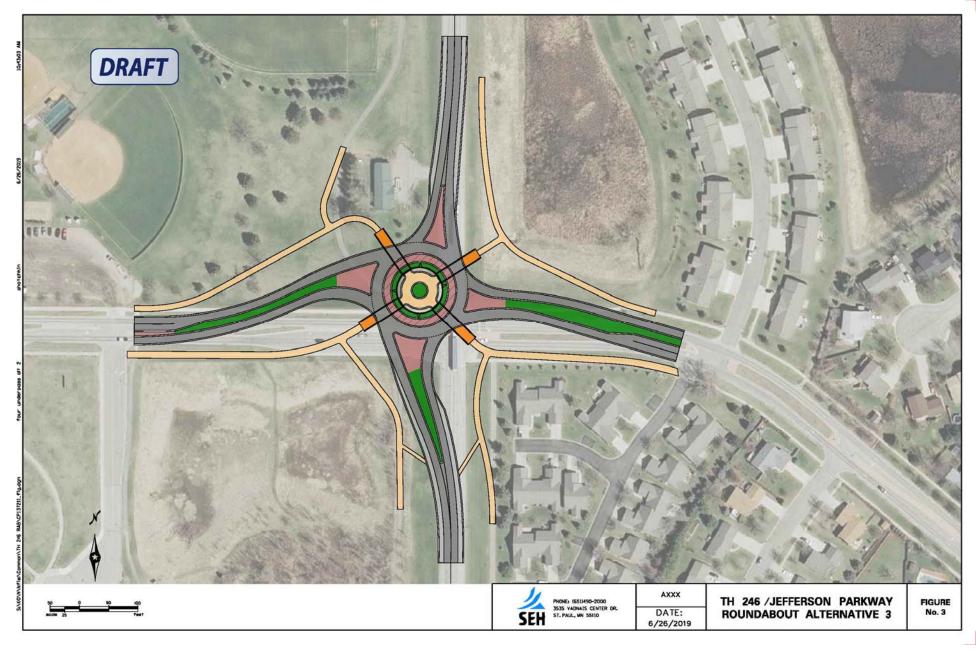
## Alternative 1



# Alternative 2



# Alternative 3



## Costs

### <u>ALTERNATIVE</u>

**PROJECT COST** 

\$ 2,970,000

2 \$ 3,325,000

\$ 3,368,000

#### **PROJECT FUNDING**

MnDOT's Local Partnership Program \$483,480
MnDOT's Local Road Improvement Program \$900,000
City Municipal State-Aid \$500,000
Total Funding \$1,883,480





## Schedule

- August 21: Open House/Public Input
- September 3: City Council Approves preferred alternative
- September: MnDOT Level 1 Design Approval
- November / December: Final Design
- January / February: Bidding
- May / June: Construction start





## **Questions / Comments**

Thank you



