

Trunk Highway 246 Scoping Study

City Council Meeting

September 19, 2023

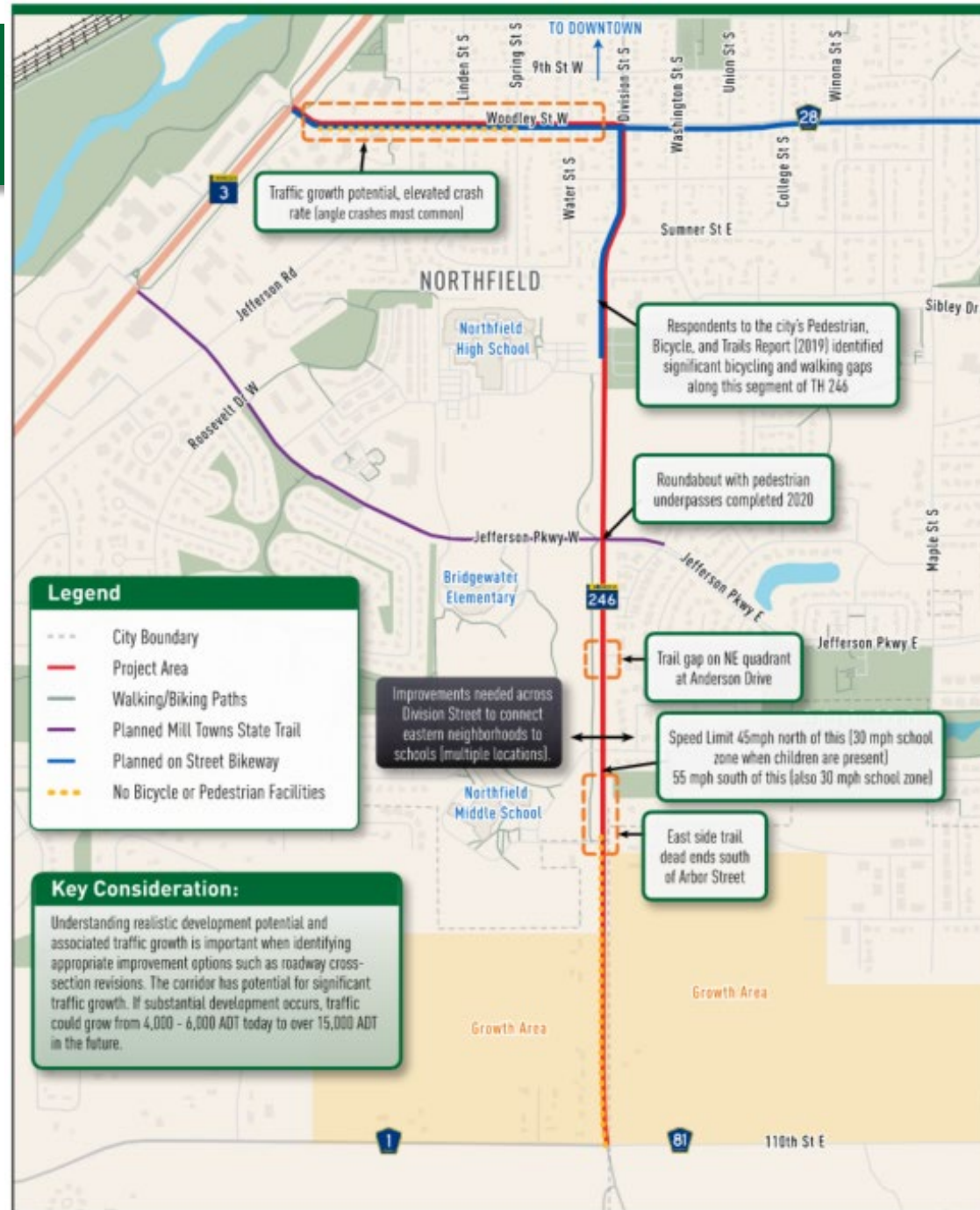
Project Limits

Woodley St

- TH 3 to TH 246/Division St

Division St

- TH 246/CSAH 28 (Woodley St) to CSAH 1/CR 81 (110th St)



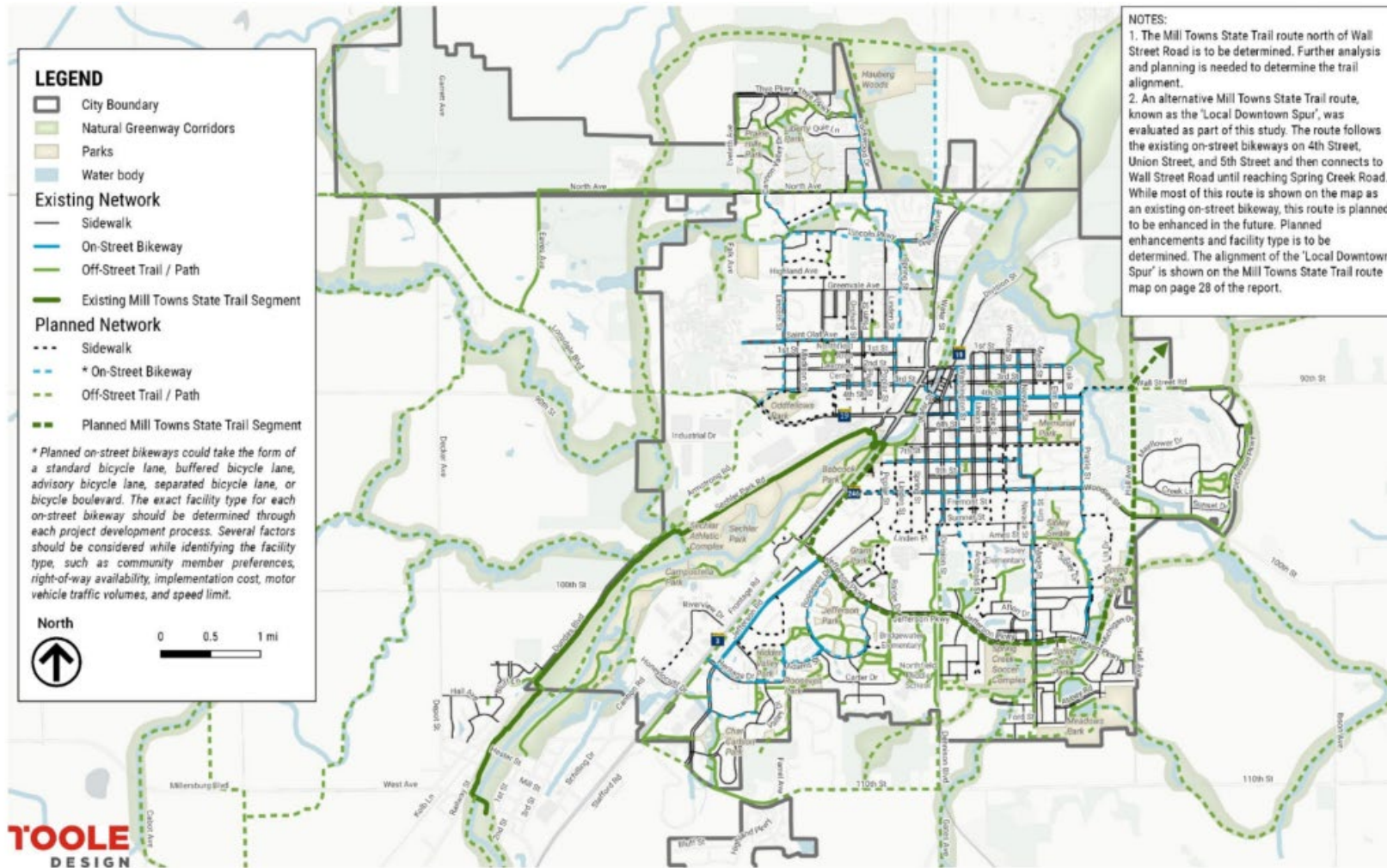
| Study Goals

- Improve the safety and mobility of the TH 246 corridor
 - Ensure proposed pedestrian and bicycle facilities meet the needs of the area, nearby schools, and regional network
- Develop a corridor vision for the TH 246 corridor
 - Integrate past planning and analysis efforts in the vision
 - Accommodate future growth and development while right-sizing the vision

Study Goals

- Provide opportunities for community and stakeholder input
 - Engage the public and stakeholders to understand issues and needs
 - Receive public and stakeholder input to influence the vision
- Develop a guide for implementation of the corridor vision
 - Summarize the study process and findings
 - Determine potential turnback requirements and opportunities

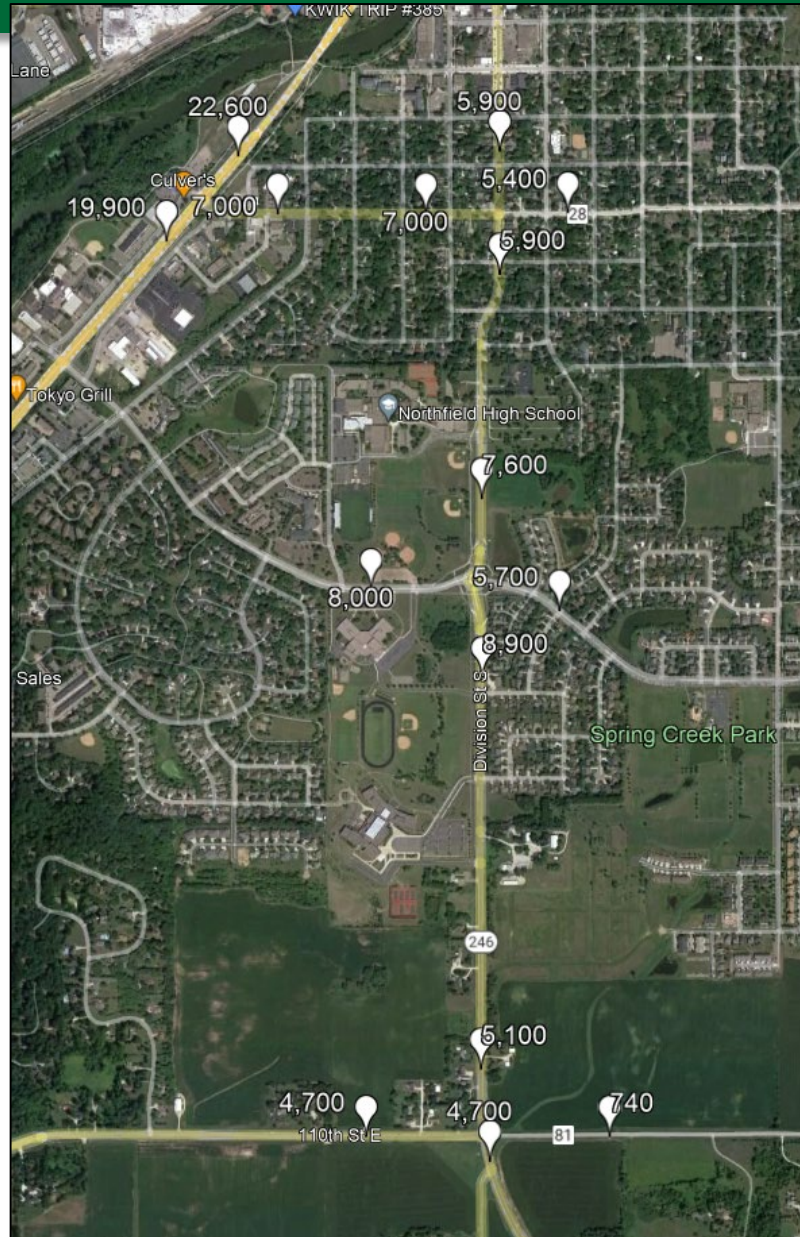
Planned Walking and Bicycling Network



School Connections



2023 Estimated Daily Traffic Volume



Current Operations

Generally good traffic flow, however a few operational issues

- AM peak at Woodley St/Division St intersection
- AM peak at TH 246/north middle school access - outbound from school
- After school peak at TH 246/high school access - outbound from school

Corridor Performance

EXISTING CORRIDOR EVALUATION

VEHICLE



- Generally good traffic flow on Woodley Street and Division Street

GOOD

BICYCLE



- No bike facilities on Woodley Street
- No bike facilities on Division Street north of Northfield High School
- 6'-8' wide trail between Northfield High School and Northfield Middle School

FAIR

PEDESTRIAN



- No sidewalks on Woodley Street between Highway 3 and Spring Street
- No sidewalks south of Northfield Middle School
- Sidewalks or trails present elsewhere, however not always on both sides of the corridor

BUS



- Red Route buses serve the corridor every 45 minutes between 6 am and 6 pm

POOR

BIKE LEVEL OF TRAFFIC STRESS

1



Strong separation from all except low speed, low volume traffic. Simple crossings. Suitable for children.



BIKE STRESS LEVEL

BETWEEN NORTHFIELD HIGH SCHOOL & NORTHFIELD MIDDLE SCHOOL

2



Separate lane limits traffic interaction to crossings easy for adults to negotiate. Tolerated by "interested but concerned" bicyclists.



3



Narrow bicycle lane. Interaction with moderate speed or multi-lane traffic and parked vehicles. Tolerated by "enthused & confident" bicyclists.



4



No bicycle lane on a busy street with higher speed traffic. Direct interaction with multi-lane traffic. Tolerated by "strong & fearless" bicyclists.



BIKE STRESS LEVEL

FOR MAJORITY OF STUDY AREA

Future Operations

Projected 2035

- Breakdown at multiple intersections in the AM and After School peaks
 - Woodley St/Division St intersection
 - TH 246/high school access – outbound from school
 - TH 246/north middle school access - outbound from school
 - TH 246/CSAH 1/CR 81

Projected 2045

- Breakdown expanded in the AM and After School peaks
 - TH 246/elementary school access/Anderson Dr
 - TH 246/north middle school access/Arbor St

Safety Review

Crash concern locations (2018 to 2022)

- **TH 3 and Woodley St (traffic signal)**
 - 34 crashes: 28 rear-end, 1 bicyclist involved, 4 right-angle
 - 1 serious injury, 2 minor injury, 2 possible injury
- **Division St and Woodley St (all-way stop)**
 - 12 crashes: 4 right-angle, 1 bicyclist involved, 1 pedestrian involved
 - 2 minor injury
 - Critical Index 0.95
- **Division St and CSAH 1/CR 81 (two-way stop)**
 - 6 crashes: 4 right-angle
 - 1 serious injury, 2 possible injury
 - Critical Index 1.23
 - Fatal and Serious Injury Critical Index 1.07

Corridor Vision Overview



Identify a future roadway design that is compatible with local and regional transportation needs.



Provide efficient, reliable, and safe mobility for all users of the corridor.



Prioritize the improvement and expansion of bicycle and pedestrian facilities



Support community planning and development goals



Establish short-term and long-term traffic control needs at intersections



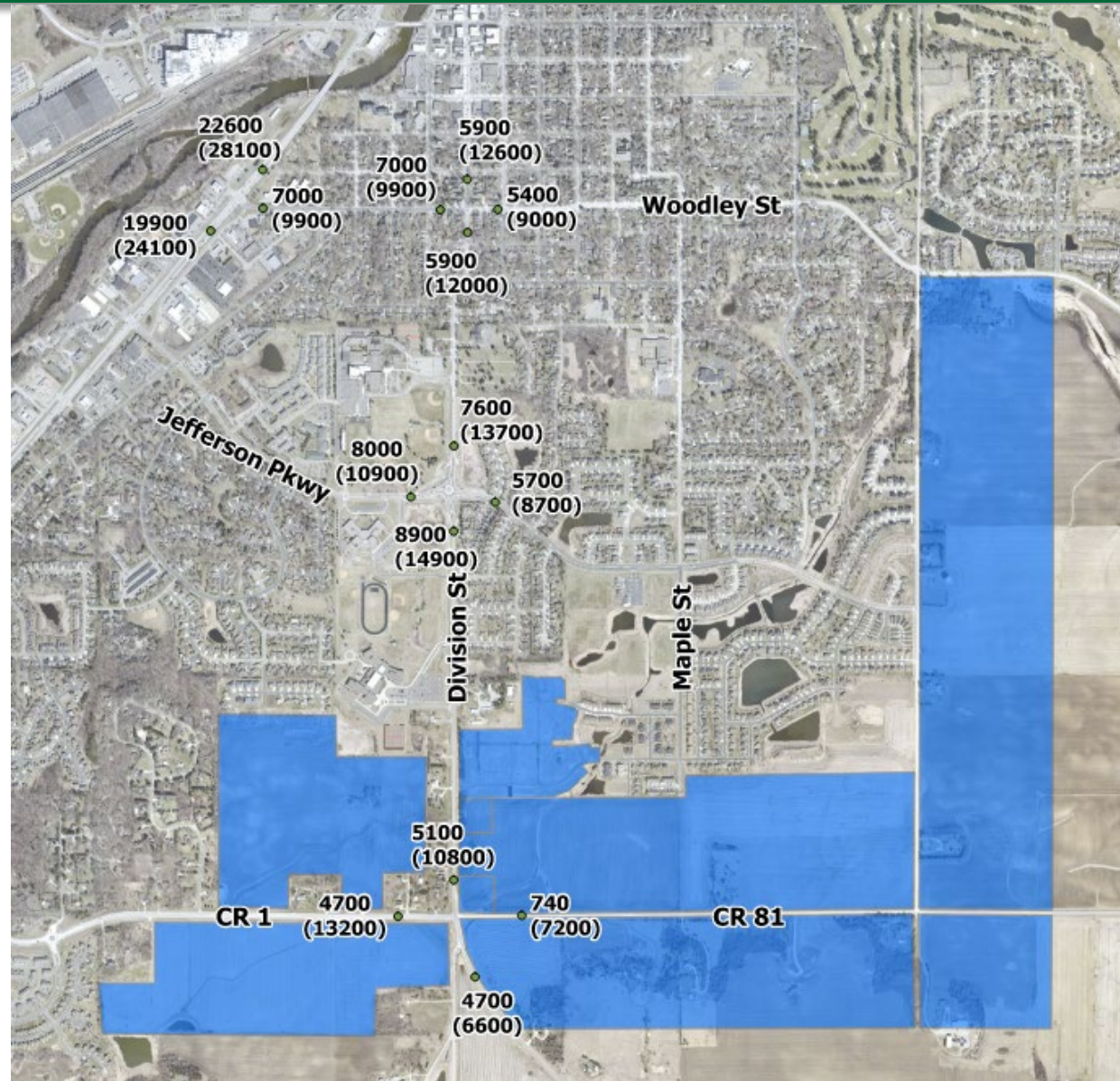
Emphasize safe walking and biking routes to Bridgewater Elementary School, Northfield Middle School, and Northfield High School

Traffic Forecasts

20-year Forecasts (2045)

Forecasts equate to approximately 28,500 population growth, in-line with other community planning efforts.

The growth areas are generally considered to be 90% built-out.



Roadway Typical Capacity Ranges

2-lane Roadway

- 10-14,000 vehicles per day

3-lane Roadway

- 15-19,000 vehicles per day
- Up to 22,000 vehicles per day possible

Engagement Efforts

On-line Engagement

- Study overview
- Identify current issues and concerns
- Present existing conditions
- Corridor concepts

<https://www.northfieldmn.gov/1576/TH-246-Corridor-Study---Division-Street->



Visit bit.ly/northfield-246 to learn more and provide input

Engagement by the Numbers



900

INPUTiD Interactions**

***Includes comments, responses,
likes, and dislikes*



39

Open House Written &
Verbal Comments



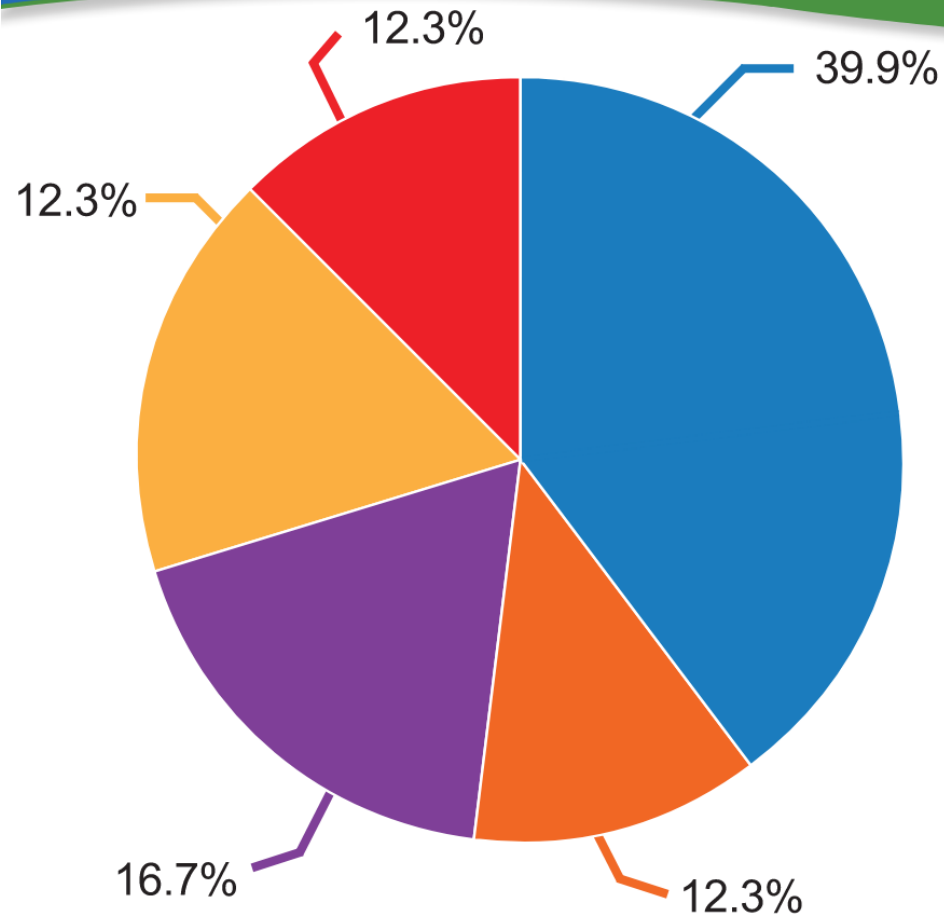
461

Website Views

Engagement Topics

HIGHWAY 246

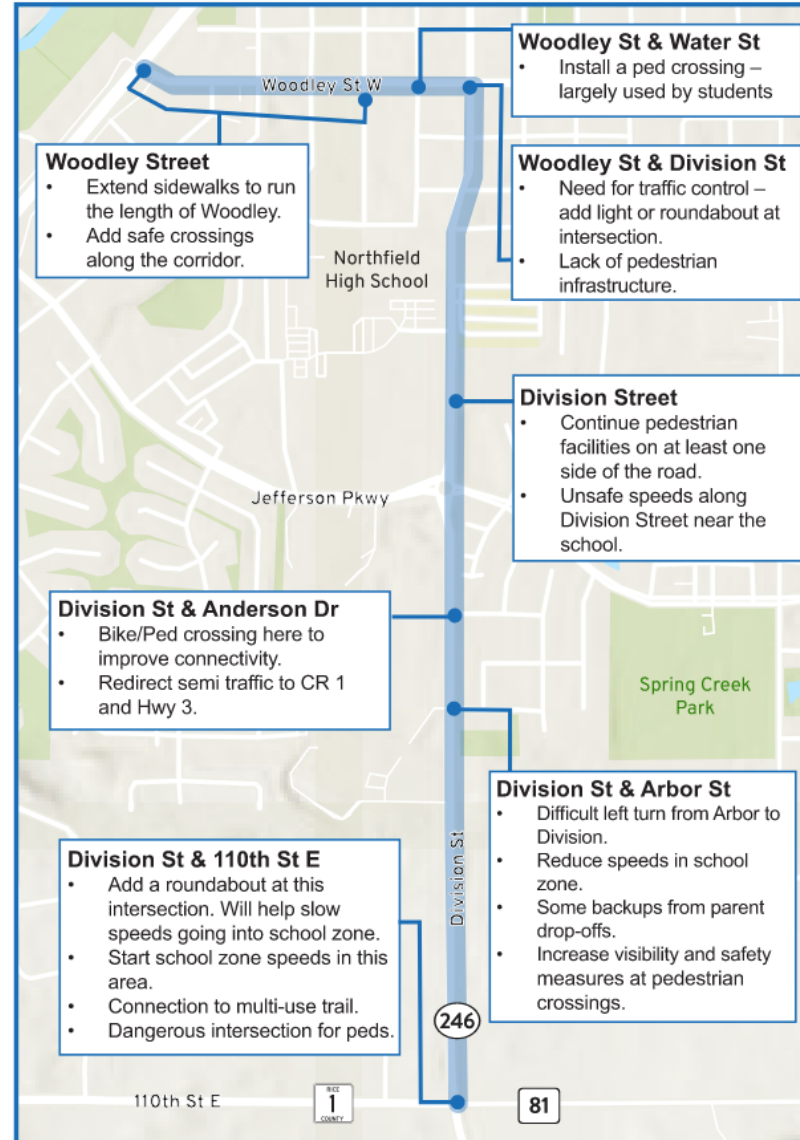
Woodley Street & Division Street



Number of Comments & Comment Replies by Topic

- 57 Bicycle/pedestrian safety concerns
- 24 Concerns with high speeds of traffic
- 23 Suggested traffic configuration changes
- 17 Desire for roundabouts
- 17 Other

Engagement Results

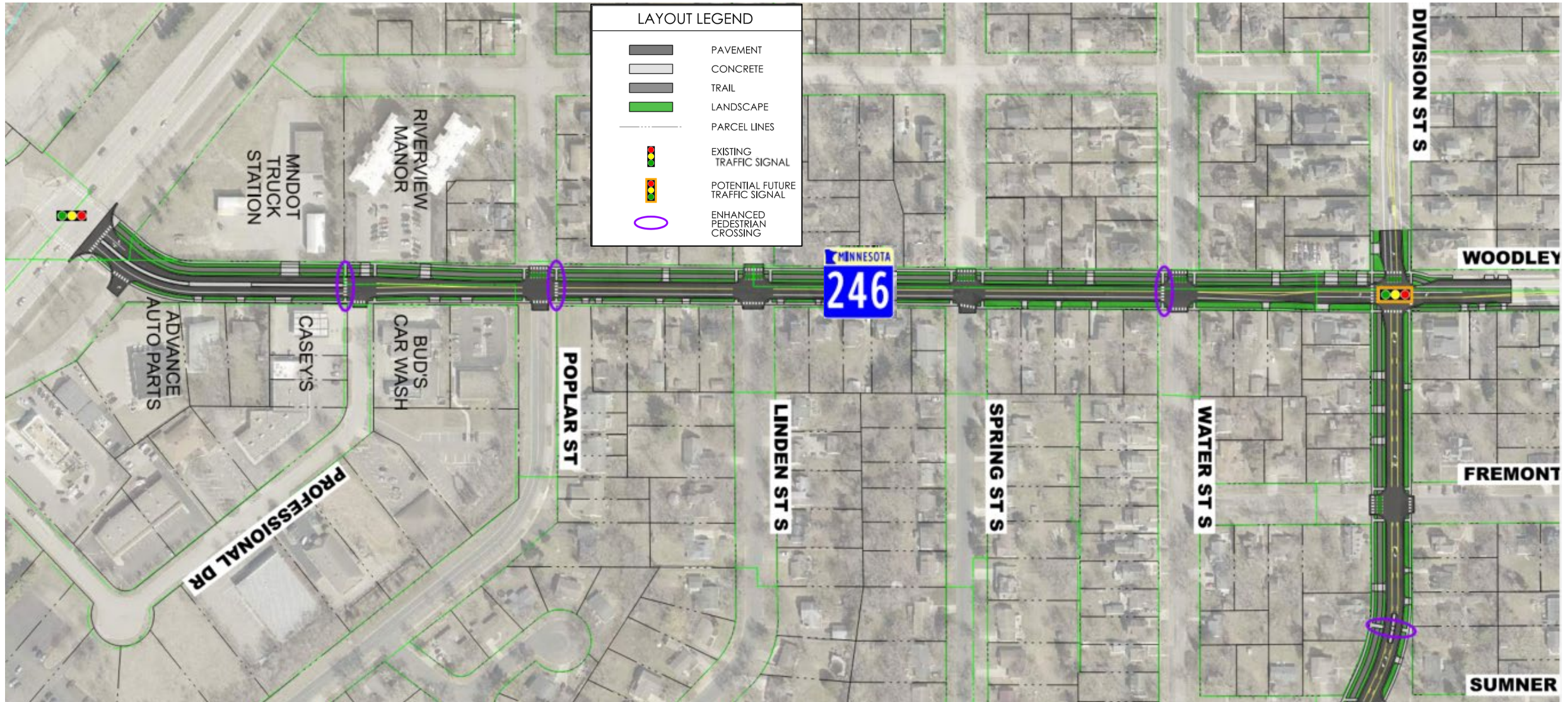


MAP COMMENTS

The INPUTID™ interactive map provides the opportunity for residents to leave comments and react to other comments on transportation issues within the project study area. Users choose the category that closely applies to their feedback and drop comments in specific locations on the map. Category options are likes, dislikes, ideas/opportunities, concerns, and general comments.

There have been 36 original comments, 102 comment replies and 762 interactions (like and dislikes) as of August 2023. The map is available in a digital format via the project website.

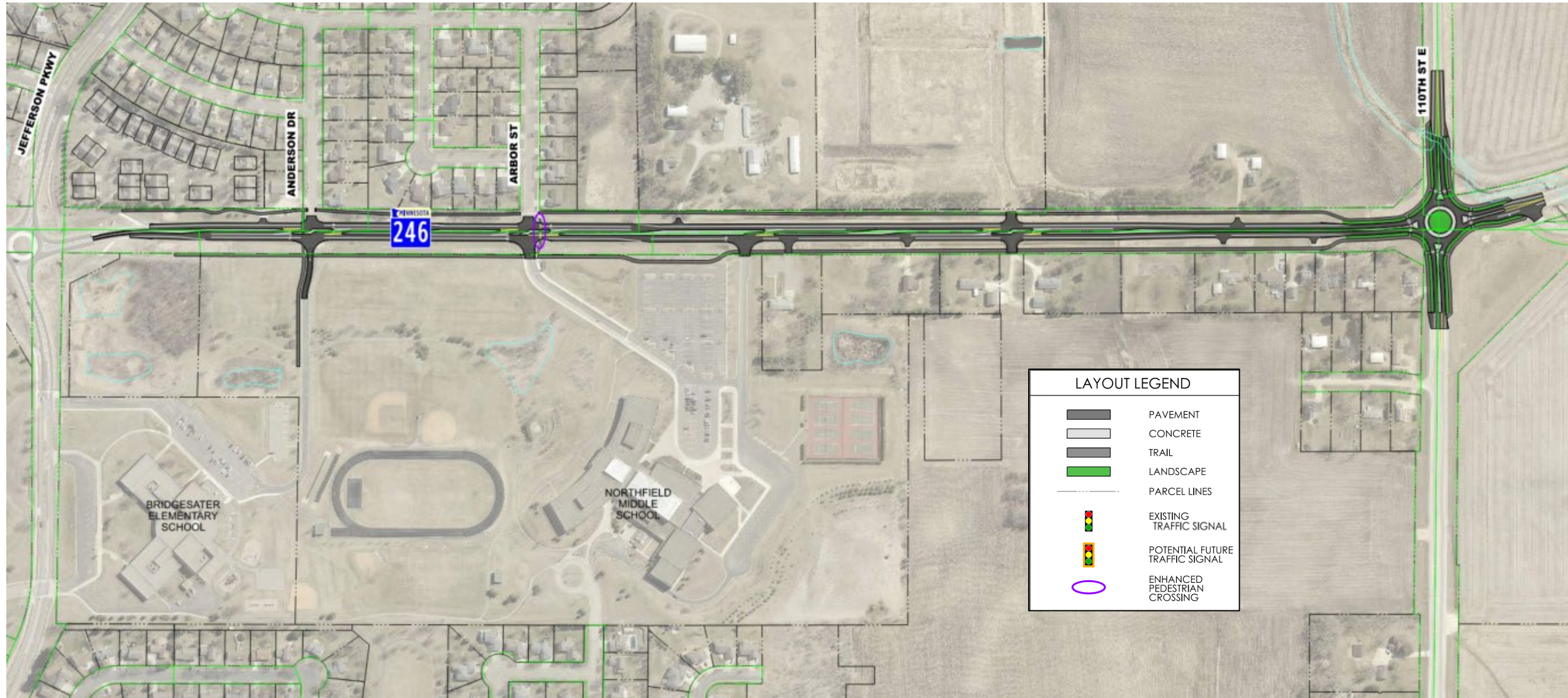
Corridor Concept 1 – Woodley Street



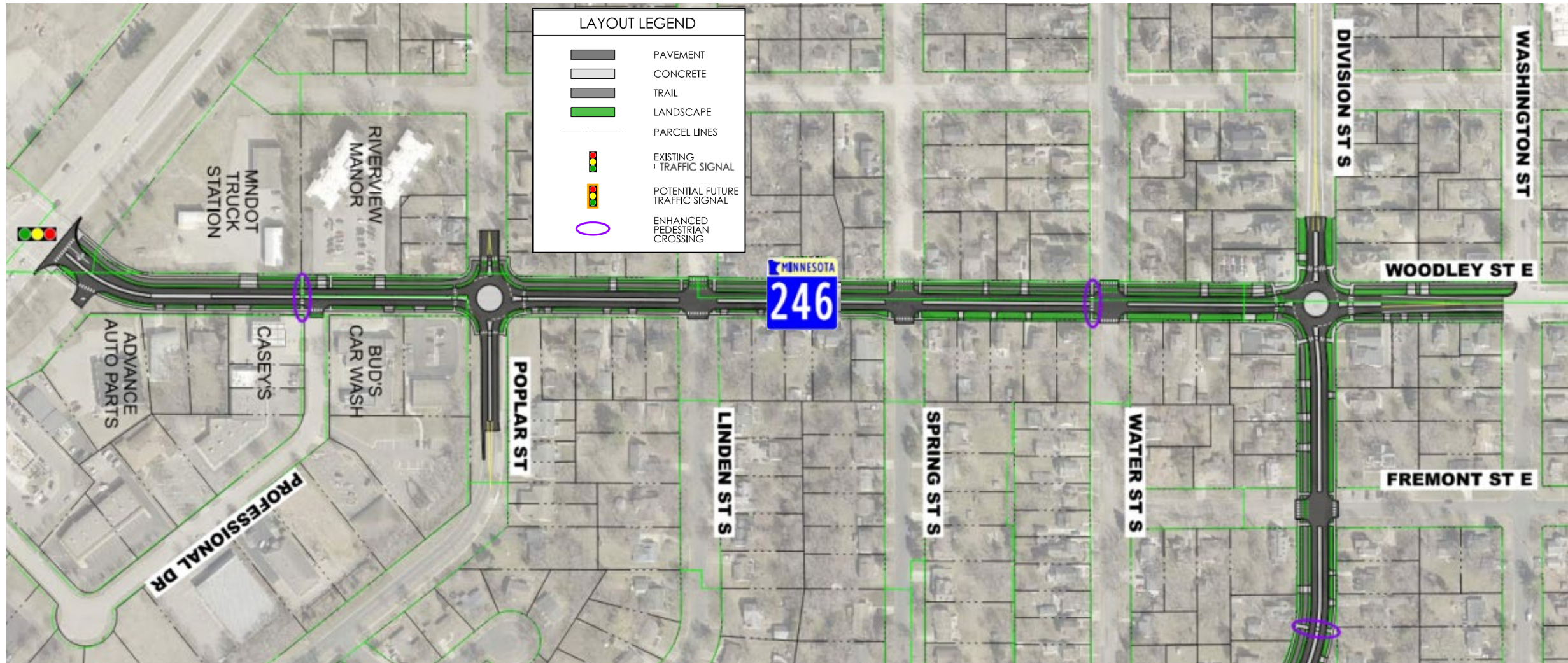
Corridor Concept 1 – Division Street



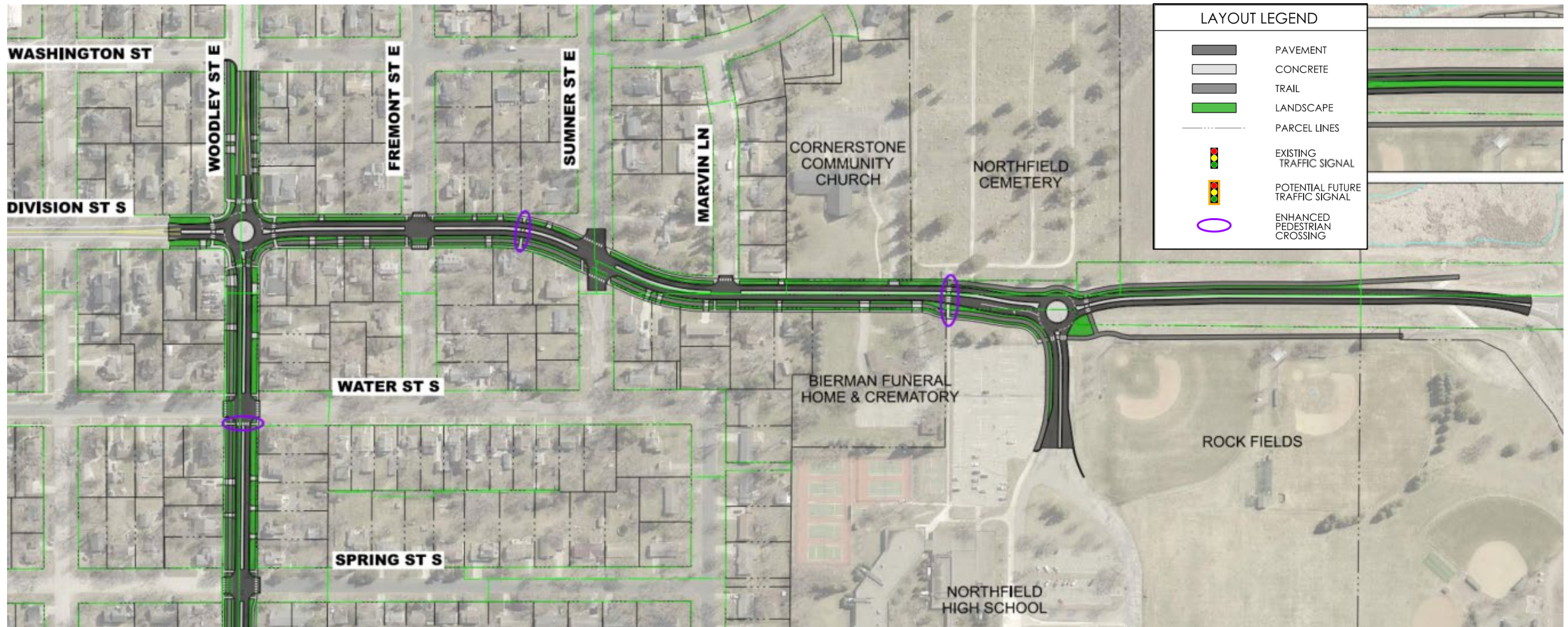
Corridor Concept 1 – Division Street



Concept 2 – Woodley Street



Concept 2 – Division Street



Concept 2 – Division Street



Corridor Concept 2B – Division Street



Concept Operations (2045)

Concept 1

- AM peak acceptable
- After School peak has some concerns with $\frac{3}{4}$ accesses
 - TH 246/CSAH 1/CR 81 – some u-turns to be accommodated

Concept 2 and 2B

- AM peak acceptable
- After School peak acceptable

Draft Evaluation Matrix

Alternative	Mobility			Safety		Maintains or Improves Corridor Access	Maintains Parking	Minimize Additional ROW Needs
	Vehicles	Pedestrian	Bicycle	Vehicles	Pedestrians & Bicyclists			
No Build	-	O	-	-	-	O	O	+
Concept 1: Signals and 3/4 Accesses	O	+	+	O	+	-	O	O
Concept 2: Roundabouts	+	+	+	+	+	+	-	-
Concept 2B: Roundabouts and Wider Median on Division	+	+	+	+	+	+	-	-
Notes + = best/improved o = moderate/no change - = poor/gets worse	Considers traffic operations analysis results for projected 2045	Considers size and condition of pedestrian facility and pedestrian crossing length	Considers available space designated for Bicyclists	Considers Vehicle Conflict Points and Separation of Movements	Considers space between pedestrians and vehicles and conflict points	Considers property and street access	Considers potential parking available on Woodley	Considers needed impacts outside the existing ROW

Potential Turnback

Legislative Requirement

- Requires legislative action
- Route related requests submitted in August each year
- Turnback Municipal funding request submitted in August 2023
 - Soonest available is January 2025

Cost Eligibility

- MnDOT will follow Cost Participation Manual
- Turnback funding based on application of MN Rules 8820
- Existing cost estimate completed in 2018, updated to 2023 using Construction Cost Index

Project Schedule

- May 15 – July 15 Online Public Input Map is Open to Collect Issues/Concerns from Public
- July 19, 2023 NTAC Meeting
 - Present to Committee; traffic data, intersection capacity analysis, public Input Summary on Corridor Issues, approach to corridor Ped/Bike/Crossing Facilities
- Sept. 15 – Oct. 15, 2023 Online Public Input on Corridor Concepts
- Sept. 19, 2023 City Council update on project
- Oct 18, 2023 NTAC Meeting
 - Present to the Committee; public input on corridor concepts layouts, intersection recommendations, concept evaluation criteria, costs & 20-year operation cost
- Nov 1, 2023 Public Meeting Share corridor study recommendations
- Jan 17, 2024 NTAC Final Corridor/Turnback Study Recommendations
- Feb 6, 2024 Council Accepts Corridor/Turnback Study

| Questions

