



Box Elder 2025 Master Transportation Plan

With this updated plan, the City will ensure roads, sidewalks and trails effectively serve growth through 2030 and beyond.



Plan Goals & Context

Transportation: A Big Challenge!

Box Elder's new Comprehensive Plan identified transportation as one of the largest and most important challenges for the city's future growth.

Box Elder Master Transportation Plan

This Plan will guide future infrastructure investments to support growth through 2030 and beyond.

With help from the public, the City identified the following goals:

Improved Access: Better connections to Ellsworth AFB and major roadways.

Safer School Routes: Addressing traffic flow near the Douglas School District.

Smart Growth: Supporting business expansion and residential development.

Enhanced Mobility: Exploring multi-modal (sidewalks, trails) improvements.

New Roadways: Identify needed roadway improvements and new connections.



Other Box Elder plans:

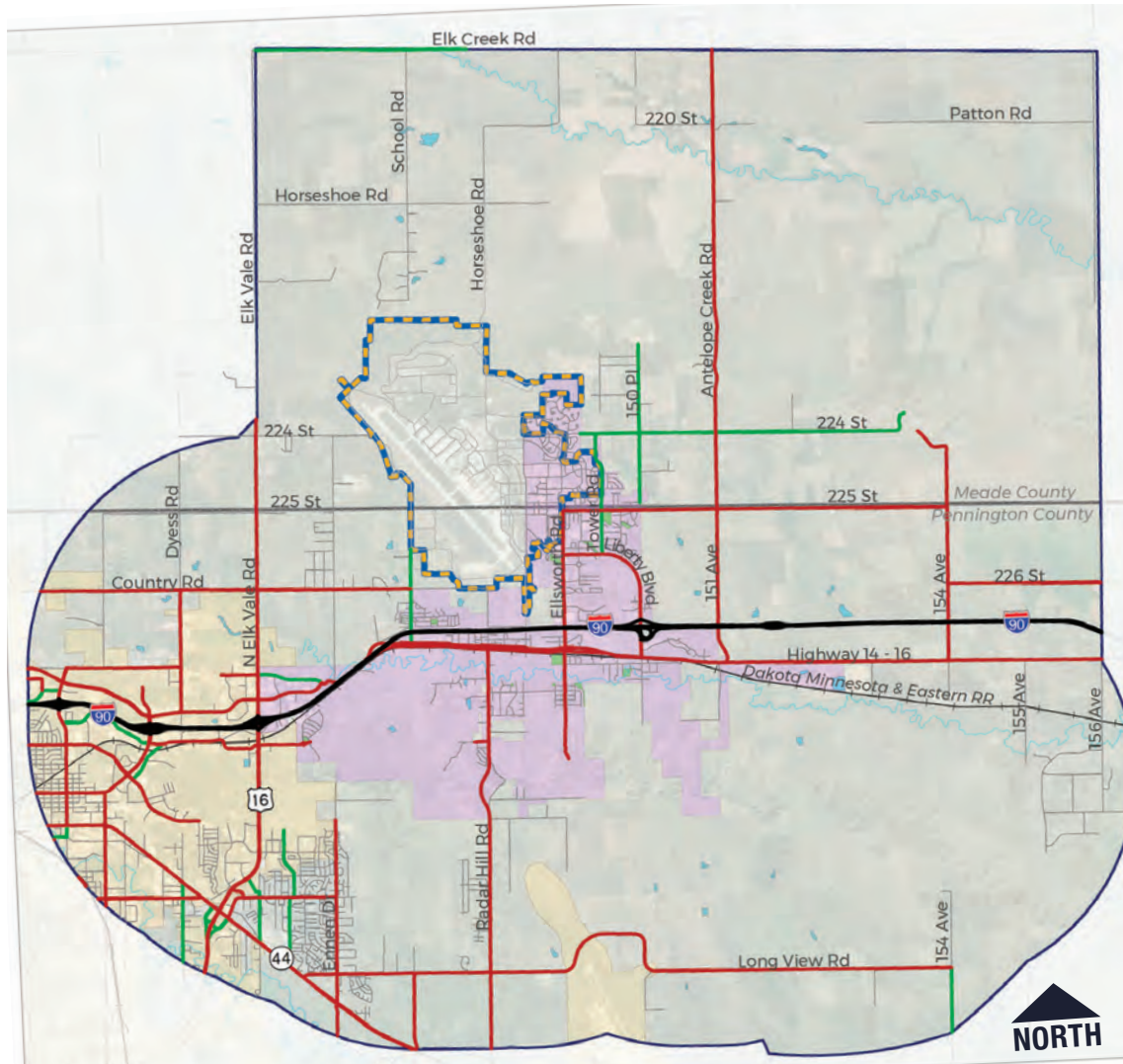
- Comprehensive Plan | 2025
- Safety Action Plan | 2024
- Hwy. 14-16 Corridor Plan | 2024
- Water Plan | 2025
- Stormwater Plan | 2025
- Parks Plan | 2022
- and many more!



Master Transportation Plan

Study Area and Road Network

Legend



Study Area

Box Elder has grown to 15,000 residents and 15 square miles

The study area includes the surrounding region to ensure continuity

Road Classification

Box Elder's road classification system categorizes roads into:

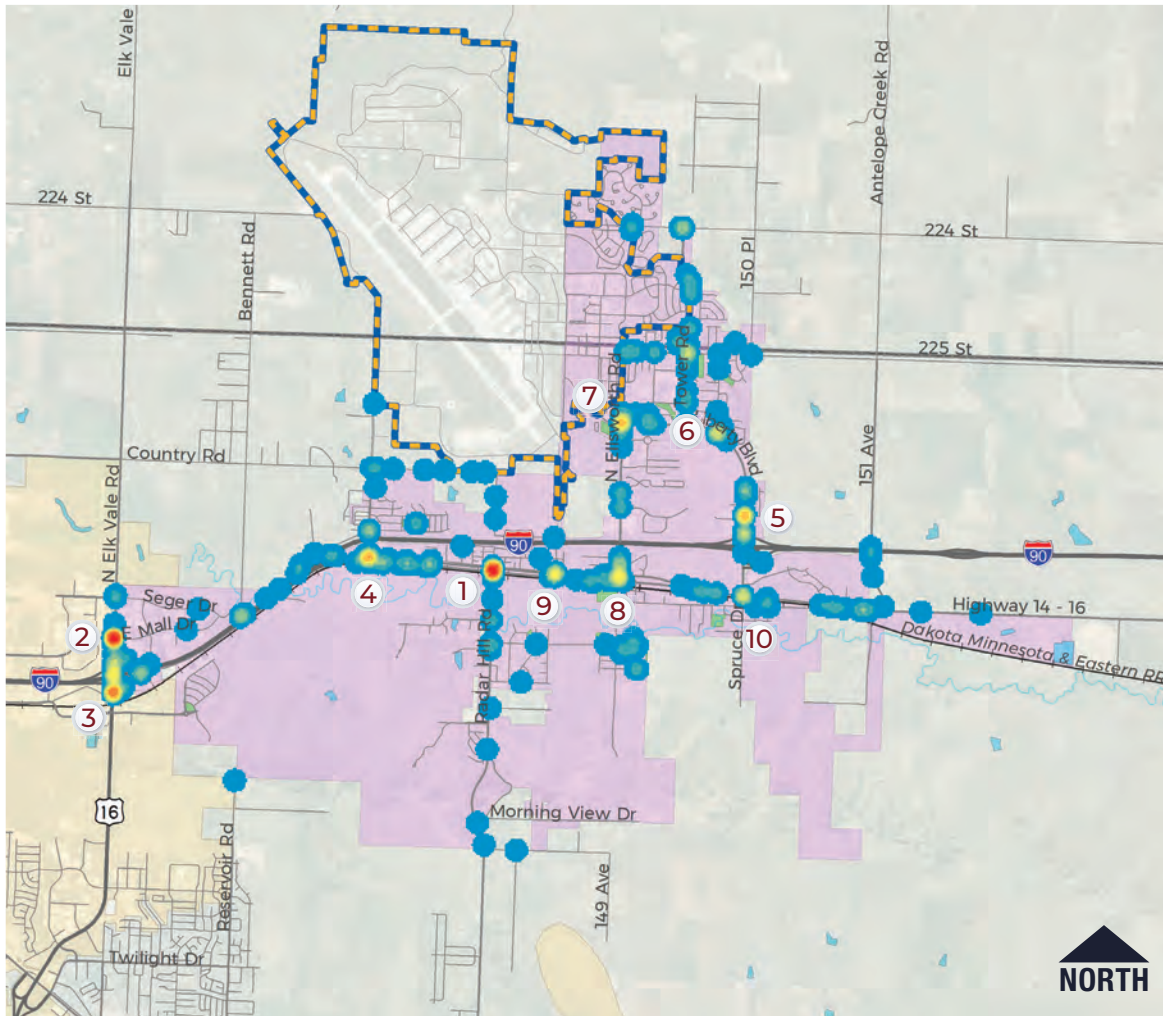
Arterials move vehicles over longer distances at higher speeds
(e.g. Liberty Blvd, Radar Hill Rd)

Collectors Transition trips from local to arterial roads
(e.g. Tower Rd, Seger Dr)

Locals provide property access at low speeds
(e.g. Partridge Ln, Falcon Dr)

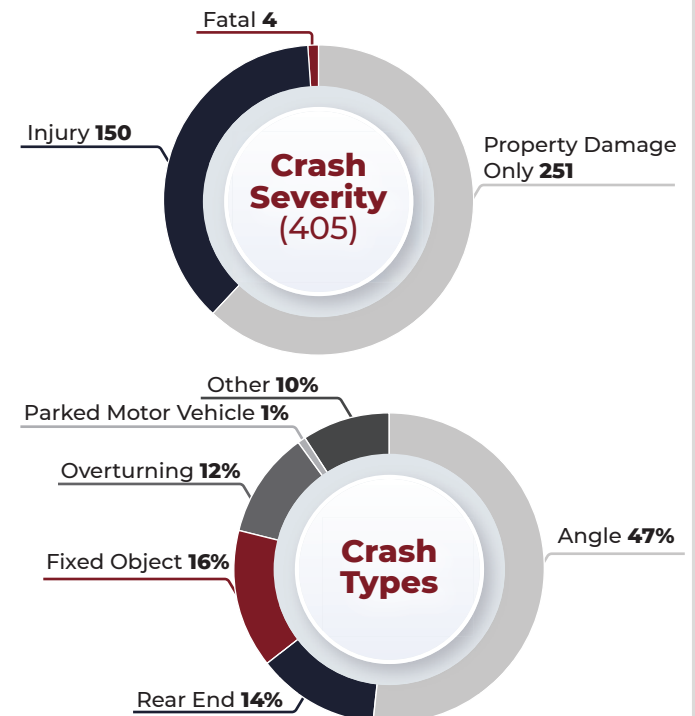
2020-2024 Transportation Safety Conditions (City Limits)

Legend

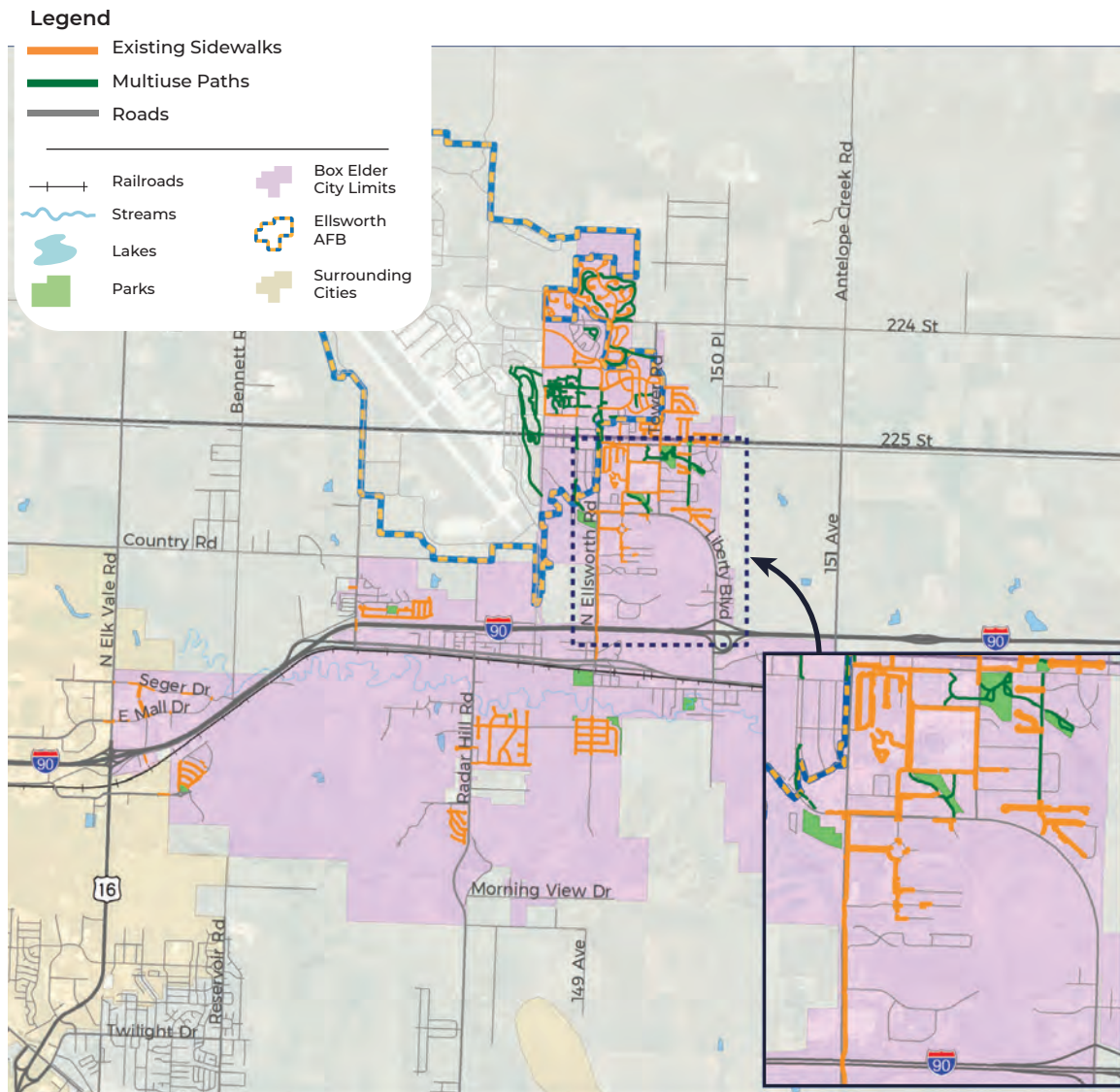


Intersection Crash “Hot Spots”

- 1 Highway 1416/Radar Hill Rd (43)
- 2 Elk Vale Rd/Mall Dr (38)
- 3 Elk Vale Rd/S Frontage Rd (35)
- 4 Highway 1416/Westgate Rd (27)
- 5 Liberty Blvd/Reagan Ave (16)
- 6 Liberty Blvd/Tower Rd (14)
- 7 Liberty Blvd/Ellsworth Rd (13)
- 8 Highway 1416/Ellsworth Rd (13)
- 9 Highway 1416/S Gate Dr (11)
- 10 Highway 1416/Liberty Blvd-Spruce Dr (8)



Existing Sidewalks and Trails



Sidewalks and trails help provide better connectivity between north and south Box Elder, are more accessible for school children and those who are unable to drive, and promotes a healthier community by providing safe, comfortable facilities for physical activity.

- Comprehensive Plan



Master Transportation Plan

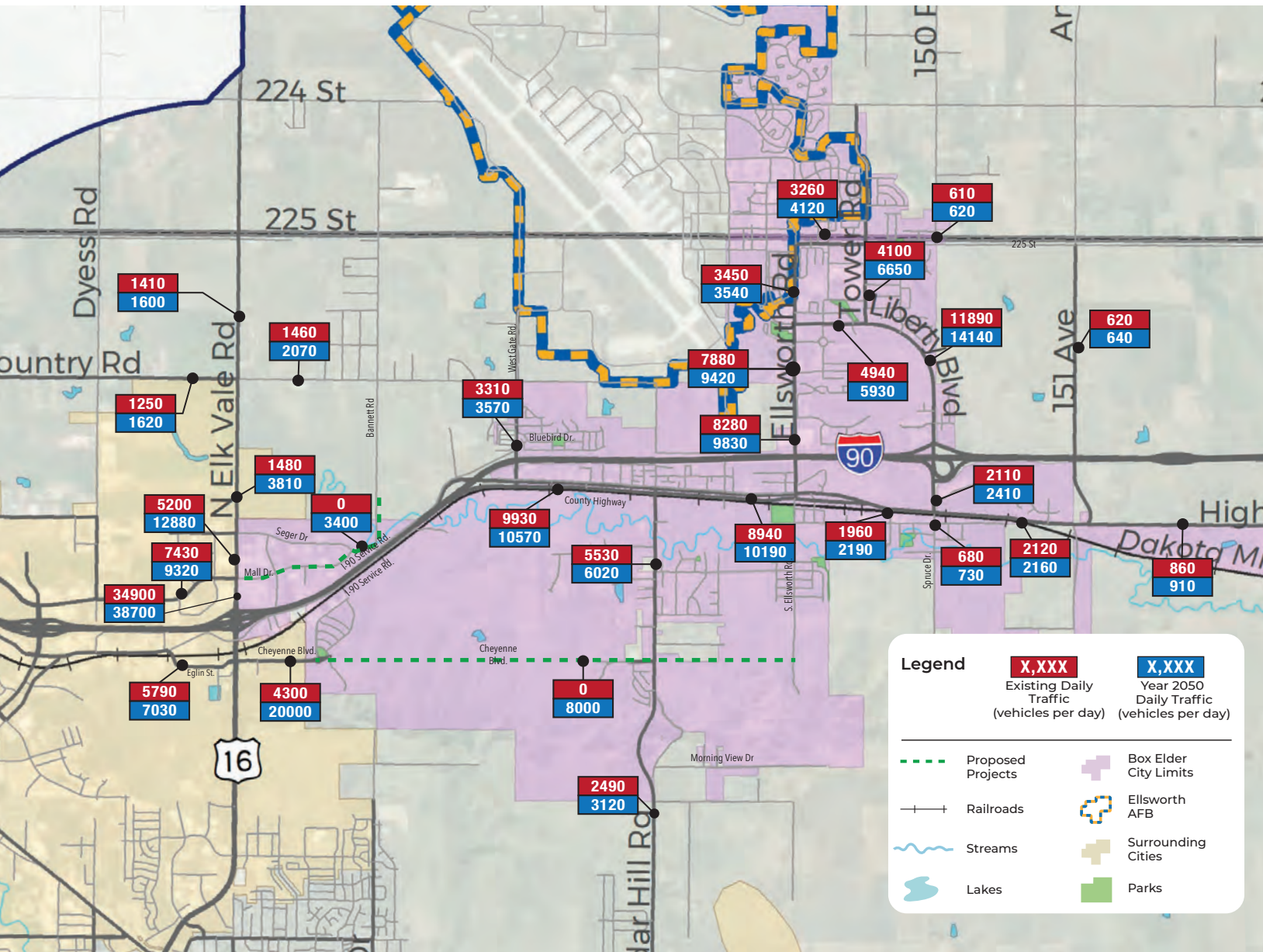


Traffic Volumes and System Capacity

Road Capacity Review:

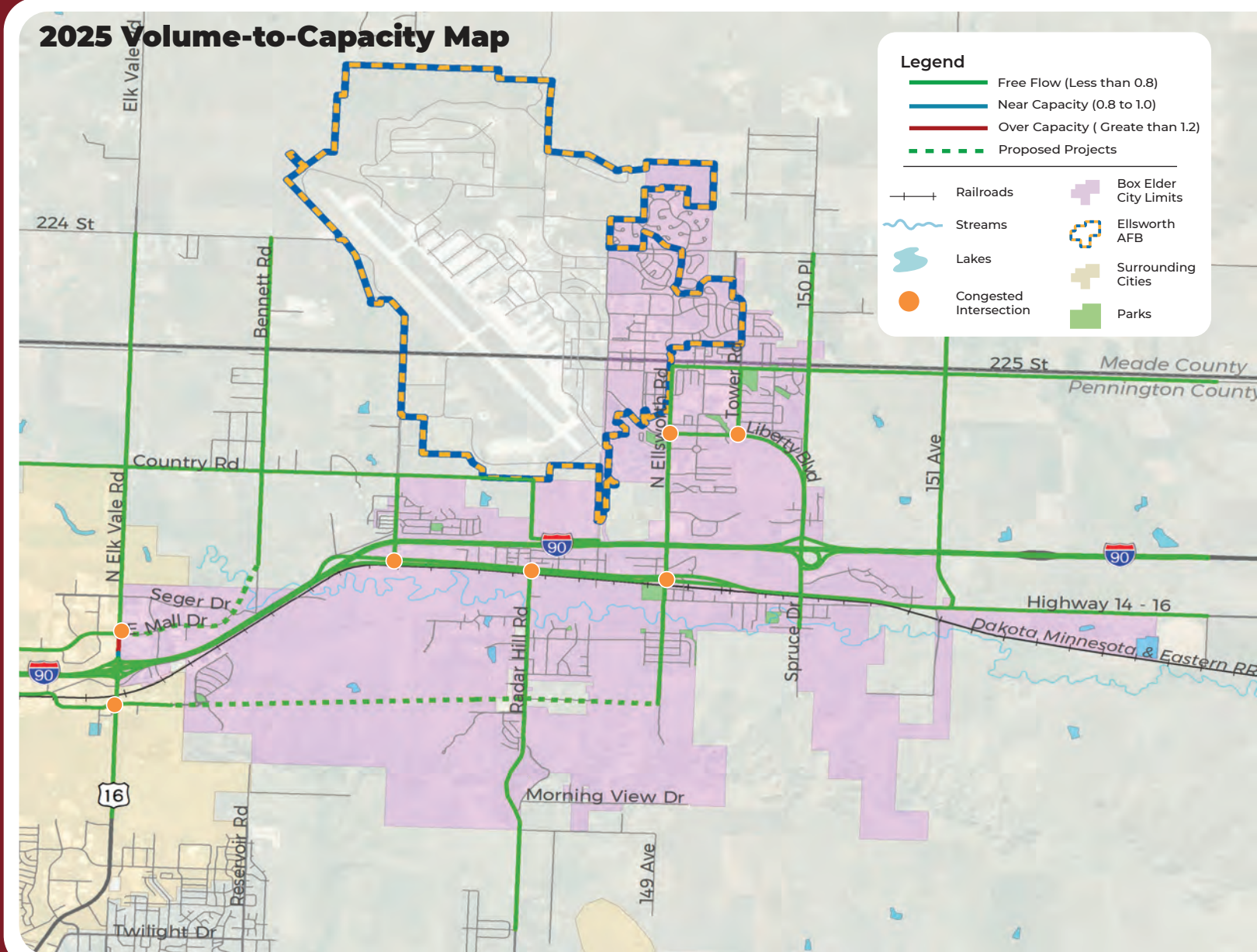
- 1. Current road link capacity is generally adequate for year 2050 forecast **daily** traffic volumes
- 2. **Peak hour** conditions introduce congestion at intersections noted on the graphic

2025 and 2050 Daily Traffic Volumes



Where do you experience heavy traffic?

Place a sticker on the map where you experience heavy traffic.



What We Heard

April – May 2025 Community Feedback At-a-Glance

Your input helps shape the order of improvements that support safety, mobility, and quality of life.

What's Working (Strengths)

- ✓ Low noise in most areas
- ✓ Clear signage & navigation
- ✓ Easy access to key destinations

What's Not Working (Weaknesses)

- ✗ Congested intersections
- ✗ School pick-up/drop-off challenges
- ✗ Unsafe walking & biking conditions
- ✗ Poor I-90 access & connectivity
- ✗ Lack of turn lanes, sidewalks, signals
- ✗ Heavy truck traffic near homes

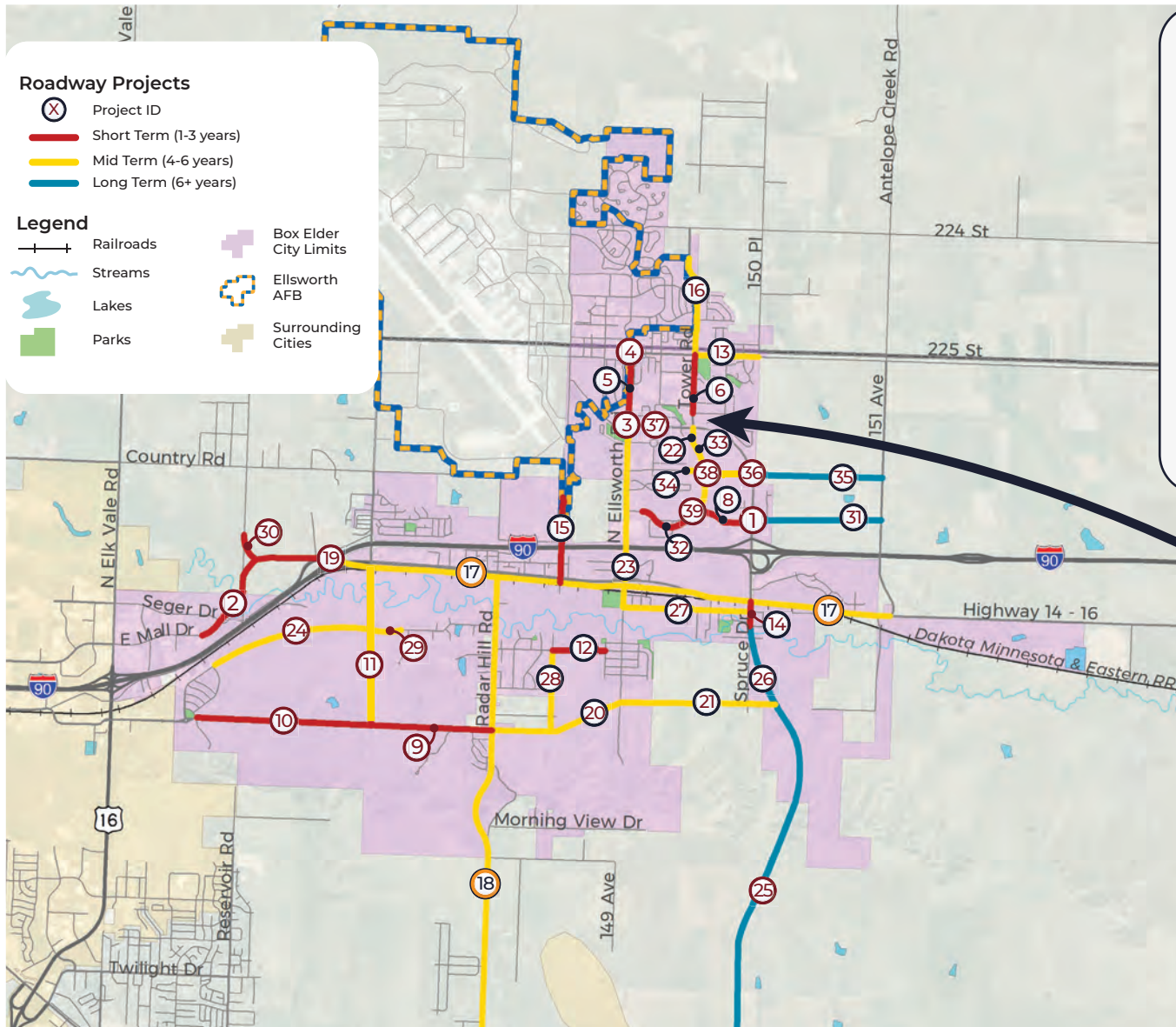
Regional Challenges

- Gaps in bike/ped trails
- Limited I-90 access points
- Inconsistent truck routes
- No public transit to Rapid City
- Poor regional coordination

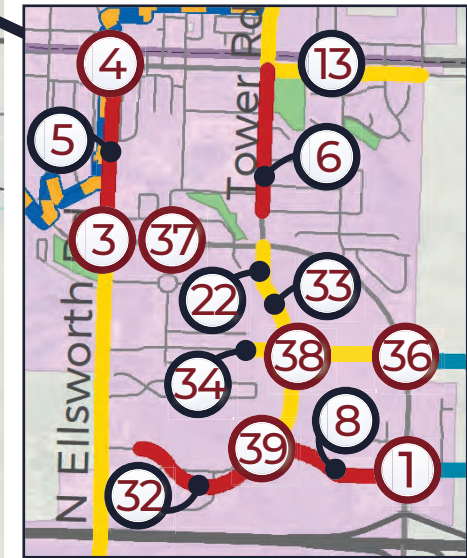
Looking Ahead (Top Priorities)

-  Plan for growth
-  More local services
-  Secure infrastructure funding
-  Align transportation & land use
-  Update road design & codes

Recommended Roadway Project Map



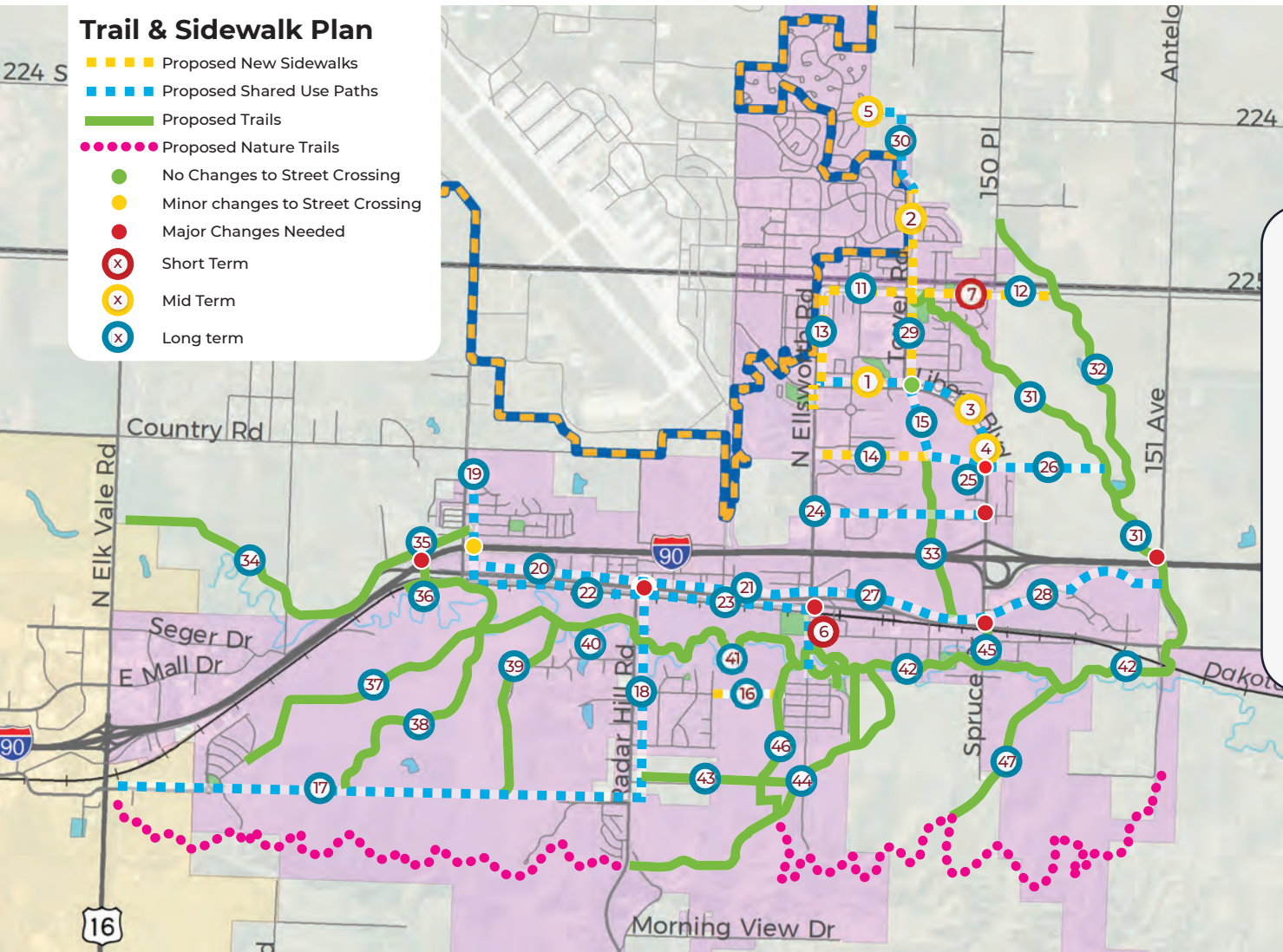
**What are
your
Roadway
Project
Priorities?**



Recommended Roadway Project Priorities

Project Street Location	Priority: Please place a dot on your top 5 Priorities!
INTERSECTION	
① Liberty Road & Reagan Avenue	
③ N. Ellsworth Road & Liberty Blvd.	
④ N. Ellsworth Road & 225th St.	
③⑥ Liberty Blvd & New Constructed roadway to 151 Ave	
③⑦ Liberty Blvd & Main St	
③⑧ Frontage Rd / Liberty Blvd & Yelner Dr	
③⑨ Frontage Rd & Cimarron Dr	
NEW CONSTRUCTION	
② E. Mall Drive Extension From Seger to realign with Bennett Rd.	
⑧ Cimarron Dr. Extension Chisholm Dr. to Reagan Ave.	
⑨ Cheyenne Blvd. From W. Gate Road to Radar Hill Rd.	
⑩ Cheyenne Blvd. From Northern Lights Blvd. to W. Gate Rd.	
⑪ W. Gate Rd. Hwy 1416 to Cheyenne Blvd.	
⑫ Creekside Connector From Coyote Trail to Morgan Rd.	
②⑩ Cheyenne Blvd. Extension From Radar Hill Rd. to Ellsworth Rd.	
②① Cheyenne Blvd. Extension From Ellsworth Rd. to 151 Ave.	
②② Tower Road Extension From Cimarron Blvd. to Liberty Blvd.	
②④ Northern Lights Blvd. From Denali Dr. to W. Gate Rd./Sunnydale	
②⑤ Airport Connector From Cheyenne Blvd to Airport	
②⑥ Spruce Drive (Realigned) From Harmony Rd to Cheyenne Blvd	
②⑧ Thompson Dr From Creekside Dr to Cheyenne Blvd. Extension	
②⑨ Northern Lights Blvd From Alpha Ave to Westgate Rd/Sunnydale	
③⑩ Bennett Road From existing Bennett Rd to E Mall Dr extension (#2)	
③① Reagan Ave From Dorchester Ave to 151 Ave	
③② Cimarron Dr From Chisholm Dr to W of Liberty Blvd	
③③ Tower Rd From Frontage Rd to Liberty Blvd	
③④ Yelner Dr From Donald Smith St to the new roadway, between Frontage Rd and Liberty Blvd	
③⑤ New Road From Liberty Blvd to 151 Ave	
RECONSTRUCTION	
⑤ N. Ellsworth Road From Liberty Blvd. to 225th St.	
⑥ Tower Road From Liberty Blvd. to 225th St.	
⑬ 225th St. From Tower Rd. to 150 Ave.	
⑭ Spruce Dr. Hwy 1416 to Harmony Rd.	
⑮ Repair Haul Roads Repair Haul Roads	
⑮⑥ Tower Road 225th Street to 224th Street	
⑮⑦ Highway 1416 - Mega-Project From W. Gate Rd to 151 Ave.	
⑮⑧ Radar Hill Road - Mega-Project From Hwy 1416 to (Hwy 44?)	
⑮⑨ I-90 Exit 63 (SDDOT)	
②③ Ellsworth Road From Hwy 1416 to Liberty Blvd.	
②⑦ Line Rd/Ellsworth Rd From Ellsworth & Hwy 1416 to Line Rd. at Spruce Dr.	

Recommended Trails & Sidewalks Project Map

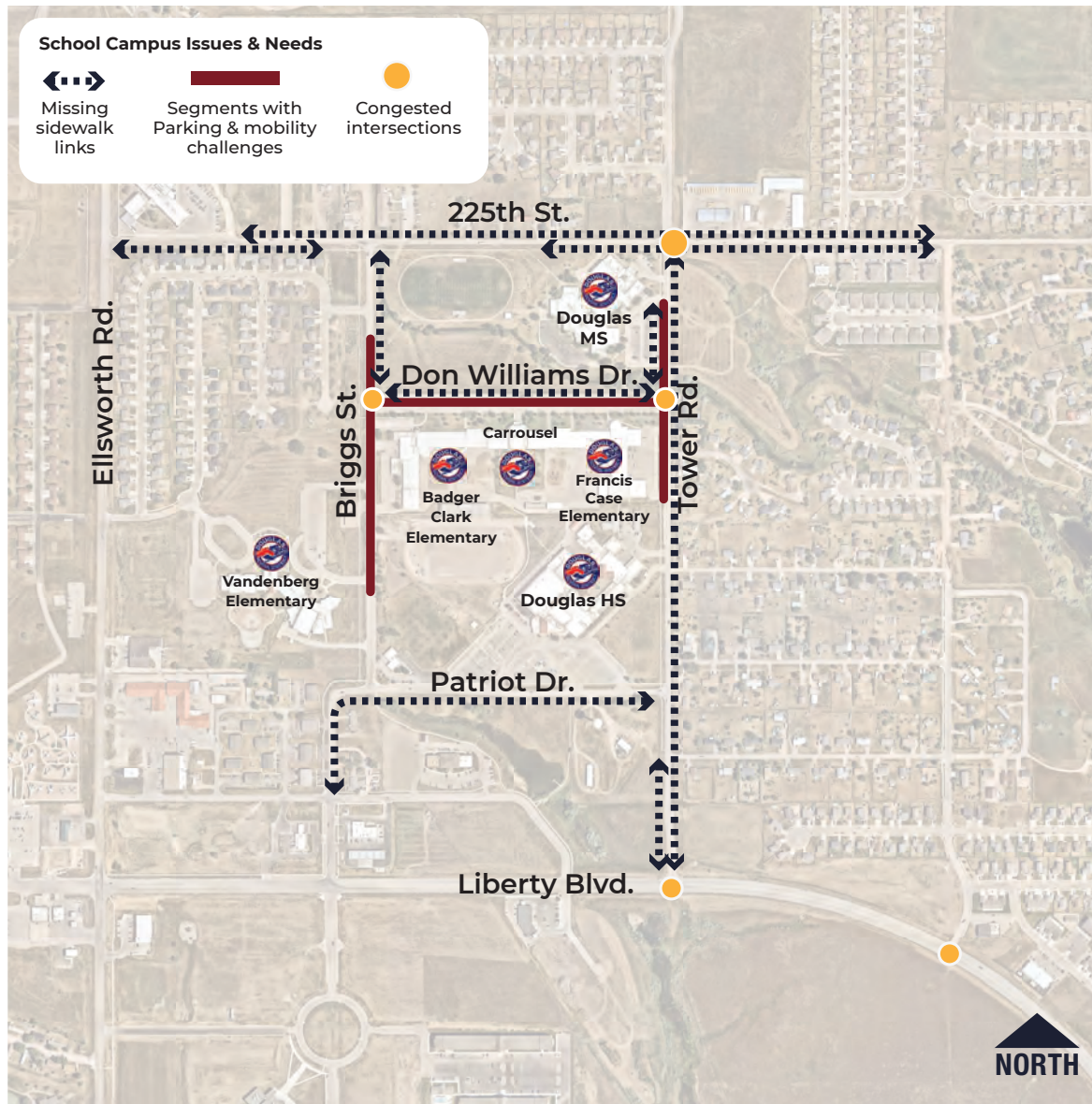


**What are
your Trail
and
Sidewalk
Priorities?**

Recommended Trails & Sidewalks Projects Priorities

Project Street Location	Priority: Please place a dot on your top 5 Priorities!
SHARED USE PATH	
1 Liberty Blvd From Main Street to Tower Road (north side), connect to walk on west side of Tower	
3 Liberty Blvd From Tower Road to Prairie Road (north side), connect to walk on west side of Prairie	
4 Liberty Blvd From Prairie Road to Reagan Ave (north and east side), connect to walk on Reagan (to east)	
6 S. Ellsworth From Prairie View neighborhood to Hwy 1416 (currently being designed)	
7 225th From Tower to Westwind (in design)	
17 Cheyenne Blvd. (Future) From Elk Vale Rd. to Radar Hill Rd.	
18 Radar Hill Rd. From Cheyenne Blvd. (Future) to Hwy. 1416	
19 W. Gate Rd. From Cheyenne Blvd. (Future) to Hwy. 1416	
20 Highway 1416 From W. Gate Rd. to Radar Hill Rd.	
21 Highway 1416 From Radar Hill Rd. to Ellsworth Rd.	
22 Line Road From W. Gate Rd. to Radar Hill Rd.	
23 Line Road From Radar Hill Rd. to Ellsworth Rd.	
25 Cimarron Rd. From Tower Rd. Extension to Liberty Blvd.	
26 New Roadway From Liberty Blvd. to Trail	
27 Highway 1416 From Ellsworth Rd. to Liberty Blvd.	
28 Highway 1416 From Liberty Blvd. to Trail (Future)	
29 Tower Rd. From Liberty Blvd. to 225th St.	
30 Tower Rd. From Bull Run to 224th St.	
43 Cheyenne Blvd. (Future) From Radar Hill Rd. to Creek	
45 Spruce Dr. From Box Elder Creek Trail to Hwy 1416	
SIDEWALK	
2 Tower Road From Ballista to Bull Run (west side)	
5 224th Street From Tower Rd. to Antelope Ridge (not all in current city limits)	
11 225th Street From N. Ellsworth Rd. to Tower Rd.	
12 225th Street From Westwind to Creek east of 150 Pl.	
13 N. Ellsworth Rd. From Liberty Blvd. to 225th St.	
14 Cimarron Rd. From Ellworth Rd. to Tower Road Extension	
16 Creekside Connector From Coyote Trail to Morgan Rd.	
24 N. Ellsworth Rd. From Liberty Blvd. to Terrace on the Greens	
TRAIL	
15 Tower Road Extension (Creekside) From Cimarron Rd. to Liberty Blvd.	
31 New Trail From Foxborough Trail near Prairie Rd. to hwy. 1416	
32 New Trail (East Side) From 150th Ave. to New Trail Connection	
33 Tower Road South Extension From Cimmaron Rd. to Hwy 1416	
34 Box Elder Creek trail From Elk Vale Rd. to W. Gate Rd.	
35 new I-90 Crossing From Line Rd. to Bennet Rd.	
36 Box Elder Creek Trail From east of I-90 to W Gate. Rd.	
37 Southwest Trail From Cheyenne Blvd. (Future) to Creek	
38 New Creekside Trail From Cheyenne Blvd (Future) to Creek	
39 New Trail From Cheyenne Blvd. (Future) to Creek	
40 Box Elder Creek trail From Creek to Radar Hill Rd.	
41 Box Elder Creek trail From Radar Hill Rd. to Ellsworth Rd.	
42 Box Elder Creek trail From Ellsworth Rd. to Eastern Creek Nexus	
44 Southern Creekside Trail From Radar Hill Rd. to Box Elder Creek	
46 New Trail From Southern Trail (Future) to Box Elder Creek Trail	
47 New Trail From Southeast Limits (future) to Box Elder Creek Trail	

School Needs



Campus Transportation Concerns:

- Inadequate curb space for student drop off and pick up leads to hazardous maneuvers along Tower Rd and Briggs St
- Facility limitations that cause inconsistencies in school plans within the campus and a lack of designated areas for curbside drop and parent “walk-in”, etc.
- Don Williams Drive plays many roles – visitor and staff parking lot, bus lane, through traffic, student drop off and pickup, etc. This lack of identity leads to congestion and safety concerns

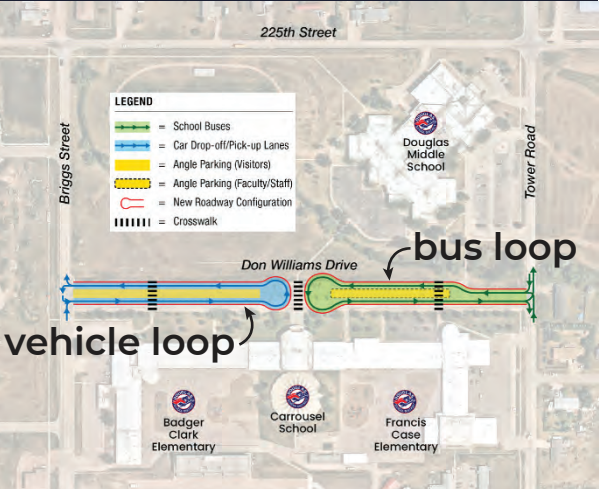
School Campus Recommendations

The planning team worked with the Douglas School District to identify solutions that can be implemented over time to improve traffic flow and safety surrounding the schools. Project completion is subject to availability of funding.

Near-term (2-5 yrs)

- 1** Reconfigure Don Williams Drive to better serve the campus

Top Option:



- ✓ Separates bus and vehicular traffic
- ✓ Minimizes need for student crossings
- ✓ Provides dedicated pick up and drop off curb space

- 2** Reconstruct Tower Rd to provide:

- 3-lane section
- Sidewalks
- Curb & gutter

- 3** Provide westbound right turn lane at Prairie Rd/Liberty Blvd intersection

- 4** Add sidewalk from Tower to Westwind Dr

Long-term (5 yrs)

- 5** Consider potential added connections and/or parking north of Don Williams Drive

- 6** Improve Briggs St to provide wider sidewalks, consistent road section and curb & gutter

- 7** Add Sidewalk to 225th Street from Tower to Ellsworth

General: Make ongoing investments to improve sidewalk and trail width and connectivity within and adjacent to the campus



Plan Contents & Next Steps

What Happens Next?

This is a marathon, not a sprint. The Plan sets the roadmap for the next 20 years—and your input helps shape the order of improvements that support safety, mobility, and quality of life.



The full Draft Master Transportation Plan will be published for public review and comment by **November 2025**.

The Final Master Transportation Plan would be ready for consideration by the City in **December 2025**.

