

What is a Safety Action Plan?



The City of Waverly, Nebraska has initiated the process of developing a Comprehensive Safety Action Plan. Since then, a draft plan that aims to eliminate fatal crashes and dramatically reduce serious injury crashes for all users of Waverly’s highway, street, sidewalk, and trail transportation network.

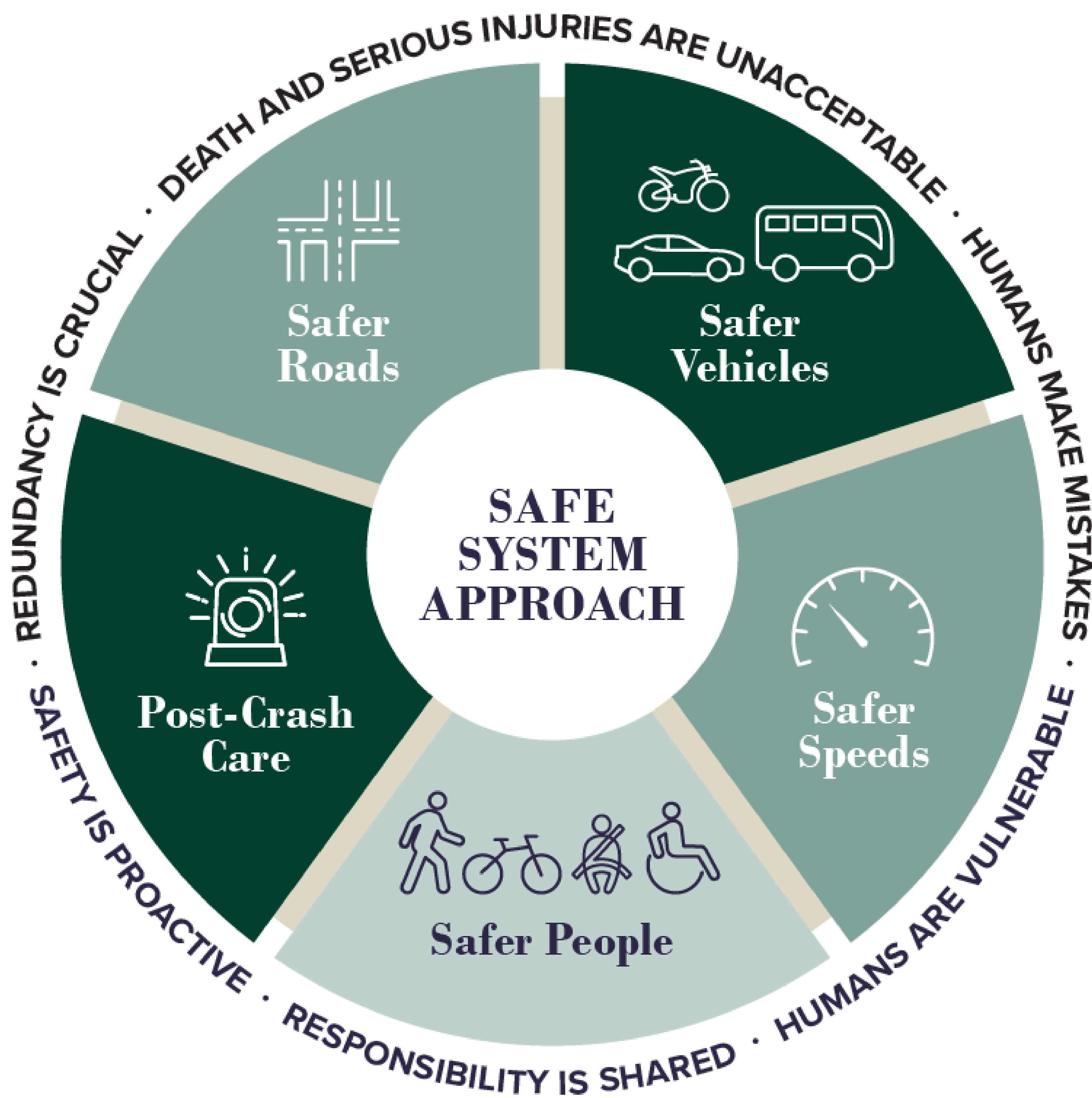
The Plan will provide an overview of:

- Historical crash data for the city of Waverly
- Development of applicable countermeasures
- Supporting effective transportation access and use solutions
- Focused pedestrian/bicycle improvements

WHAT IS A COMPREHENSIVE SAFETY ACTION PLAN?

The U.S. Department of Transportation (USDOT) established the Safe Street and Roads for All (SS4A) discretionary program in 2022 with \$5 billion appropriated over five years (2022-2026). The City of Waverly successfully obtained SS4A grant dollars in early 2024 and officially kicked off the project in Fall 2024.

The SS4A program follows the Safe System Approach to achieve the goal of zero roadway deaths and reduce serious injury crashes in a community.



PRINCIPLES OF A SAFE SYSTEM APPROACH

A Safe System Approach incorporates the following principles:

- 1 Death and Serious Injuries are Unacceptable
- 2 Humans Make Mistakes
- 3 Humans Are Vulnerable
- 4 Responsibility is Shared
- 5 Safety is Proactive
- 6 Redundancy is Crucial

OBJECTIVES OF A SAFE SYSTEM APPROACH

The Safe System Approach principles also complement five critical objectives that will be achieved through the adoption of Waverly’s Comprehensive Safety Action Plan:

- Safer Vehicles
- Safer Speeds
- Safer People
- Post-Crash Care
- Safer Roads

Prioritized Street Segments



Location	Overall Priority Scoring
1 US-6; 130th Street to Canongate	High
2 US-6; Canongate Road to N 141st Street	High
3 Canongate Road; US-6 to Jamestown Street	High
4 N 141st Street; US-6 to Mansfield Street	High
5 US-6; N 141st Street to N 148th Street	High
6 Amberly Road; N 140th Street to N 148th Street	Moderate
7 Oldfield Street; Canongate Road to N 141st Street	Moderate
8 US-6; I-80 Ramp to N 130th Street	Moderate
9 Amberly Road; US-6 to N 140th Street	Moderate

Location	Overall Priority Scoring
10 N 148th Street; I-80 to Heywood Street/Bluff Road	Moderate
11 N 141st Street; Mansfield Street to Waverly Road	Lower
12 Canongate Road; Amberly Road to US-6	Lower
13 Canongate Road; Jamestown Street to N 134th Street	Lower
14 Heywood Street; N 141st Street to N 148th Street	Lower
15 N 148th Street; Heywood Street/Bluff Road to US-6	Lower
16 N 148th Street; US-6 to Waverly Road	Lower
17 N 134th Street; Canongate Road to Waverly Road	Lower

Prioritized Intersections



Location	Overall Priority Scoring
1 US-6 and N 141st Street	High
2 Amberly Road and Canongate Road	High
3 US-6 and N 148th Street	High
4 US-6 and Amberly Road	High
5 US-6 and Guildford Street	High
6 N 141st Street and Kenilworth Street	Moderate
7 Amberly Road and N 143rd Street	Moderate
8 Amberly Road and N 140th Street	Moderate
9 Amberly Road and N 148th Street	Moderate
10 Canongate Road and Jamestown Street	Moderate
11 N 148th Street and Castlewood Street	Moderate
12 Heywood Street/Bluff Road and N 148th Street	Moderate

Location	Overall Priority Scoring
13 US-6 and N 130th Street	Lower
14 Folkstone Street and 151st Street	Lower
15 Amberly Road and N 134th Street	Lower
16 N 142nd Street and Folkstone Street	Lower
17 Amberly Road and N 145th Street	Lower
18 N 148th Street and Waverly Road	Lower
19 N 141st Street and Oldfield Street	Lower
20 N 148th Street and Folkstone Street	Lower
21 N 138th Street and Guildford Street	Lower
22 US-6 and N 120th Street	Lower
23 US-6 and Deep Park Road	Lower
24 Jamestown Street and N 137th Street	Lower

Proven Safety Countermeasures



Crosswalk Visibility Enhancements

Three main crosswalk visibility enhancements help make crosswalks and the pedestrians, bicyclists, wheelchair and other mobility device users, and transit users using them more visible to drivers. These include high-visibility crosswalks, lighting, and signing and pavement markings.



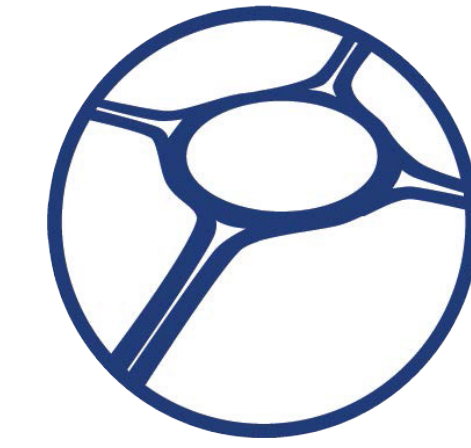
Corridor Access Management

Access management refers to the design, application, and control of entry and exit points along a roadway. This includes intersections with other roads and driveways that serve adjacent properties. Thoughtful access management along a corridor can simultaneously enhance safety for all modes, facilitate walking and biking, and reduce trip delay and congestion.



Signal Enhancements

Modernizing traffic signals and implementing PROWAG (Public Rights-of-Way Accessibility Guidelines) improvements significantly enhance roadway safety and accessibility. Updated signals with features like countdown timers, audible cues, and adaptive signal control help reduce crashes and ensure that pedestrians, cyclists, and drivers can navigate intersections more predictably and efficiently. PROWAG improvements, such as accessible curb ramps, detectable warning surfaces, and properly aligned crosswalks, provide access for individuals with disabilities and ensure compliance with federal accessibility standards.



Roundabouts

Roundabouts feature channelized, curved approaches that reduce vehicle speed, entry yield control that gives right-of-way to circulating traffic, and counterclockwise flow around a central island that minimizes conflict points.



Dedicated Left and Right-Turn Lanes at Intersections

Auxiliary turn lanes—either for left turns or right turns—provide physical separation between turning traffic that is slowing or stopped and adjacent through traffic at approaches to intersections. Turn lanes can be designed to provide for deceleration prior to a turn, as well as for storage of vehicles that are stopped and waiting for the opportunity to complete a turn.



Appropriate Speed Limits for All Road Users

States and local jurisdictions should set appropriate speed limits to reduce the significant risks drivers impose on others—especially vulnerable road users—and on themselves. Addressing speed is fundamental to the Safe System Approach to making streets safer, and a growing body of research shows that speed limit changes alone can lead to measurable declines in speeds and crashes.



Rectangular Rapid Flashing Beacons (RRFBs)

To enhance pedestrian conspicuity and increase driver awareness at uncontrolled, marked crosswalks, transportation agencies can install a pedestrian actuated Rectangular Rapid Flashing Beacon (RRFB) to accompany a pedestrian warning sign.



Trail Connectivity & Walkways

With more than 6,200 pedestrian fatalities and 75,000 pedestrian injuries occurring in roadway crashes annually, it is important for transportation agencies to improve conditions and safety for pedestrians and to integrate walkways more fully into the transportation system. Research shows people living in low-income communities are less likely to encounter walkways and other pedestrian-friendly features.



Converting a Rural Street to an Urban Section

Converting a rural street to an urban section with curb, gutter, and sidewalk enhances pedestrian safety by providing a designated walking area separated from vehicle traffic. The addition of curb, gutter, and center turn lanes tends to reduce travel speeds and reduce the risk for injury or fatal crashes.

Real-Life Proven Safety Countermeasures



RADAR Detector

Is an electronic device used to detect the presence of vehicles to operate signals more efficiently and provide vehicles with safer clearance of the intersection.



Countdown Pedestrian Signals

Provide pedestrians with how much time they have to cross the street and therefore make safer decisions as to when to cross.



Auxiliary Left and Right Turn Lanes

Is a lane, distinct from the main through lanes, designed for vehicles intending to make a turn at an intersection or driveway. It helps by allowing vehicles to slow down and prepare to turn without impeding the flow of traffic, which can reduce the chance of a rear end crash.



Single Lane Roundabout

Is a circular intersection with a single lane of traffic entering and exiting at each approach road, and one lane for traffic circulating around the center island. Slower operating speeds and the elimination of left-turn movements reduce crash severity.



Curb Extension

A curb extension, also known as a bulb-out or bump-out, is a section of the sidewalk or curb that extends into the roadway at intersections or mid-block locations. Curb extensions enhance pedestrian visibility and reduce pedestrian exposure to vehicle traffic.



Urban Street Section

Is a portion of street with typical urban features such as paved surfaces, curbs, sidewalks, street lighting, and often a piped storm sewer system. Urban sections provide pedestrian facilities and can also calm traffic speeds.



Left Turn Yield On Flashing Yellow

A flashing yellow left-turn arrow indicates that left turns are permitted, but drivers must first yield to oncoming traffic and pedestrians. Flashing yellow arrows have been shown to reduce left-turn related crashes.

Areas in Need of Improvement in Waverly, NE



US-6 and N 141st Street (intersection):

Existing traffic signal and lane geometry at the intersection can be modernized for improved safety and operations.



US-6; N 141st Street to N. 148th Street:

Current rural, 3-lane cross-section is wider than desirable and provides opportunity for additional urban street characteristics.



US-6 and N 148th Street (intersection):

Current intersection control, lack of adequate turn lanes, and pedestrian facilities, provides opportunities for improvement in this high growth area.



N 148th Street; I-80 to Heywood Street/Bluff Road:

Rural highway section lacks urban street lane geometrics and pedestrian sidewalk/trail facilities adjacent residential development in this high growth area.



Oldfield Street; Canongate Road to N. 141st Street:

Rural gravel road section provides opportunity to pave an urban street with sidewalks and green space with pedestrian crossing facilities adjacent Lawson Park.



Amberly Road and Canongate Road (intersection):

Current intersection control and lane geometry contributes to delays and vehicle conflicts.



Canongate Road; US-6 to Jamestown Street:

This entire segment of Canongate Road (including these limits and beyond) lacks critical pedestrian facilities, separated from vehicular traffic.



US-6; Canongate Road to N. 141st Street:

Rural highway transition segment lacks urban street lane geometrics and pedestrian facilities, promoting higher vehicle speeds.

Additional Safety Considerations



Beyond built projects, the Waverly Comprehensive Safety Action Plan also recommends potential partnerships, programs, and policies as strategies to help further improve safety conditions in the community.

Partnerships

- Waverly Schools
- Waverly Public Library
- Waverly Parks
- Vikes on Bikes
- Leadership Waverly
- Nebraska Department of Transportation
- Lancaster County or Lancaster County Sheriff

Policies

- Access Management Policy Implementation
- Land Use and Development Policy for Safe Pedestrian Mobility
- Neighborhood Traffic Calming Policy
- Complete Streets Policy Implementation

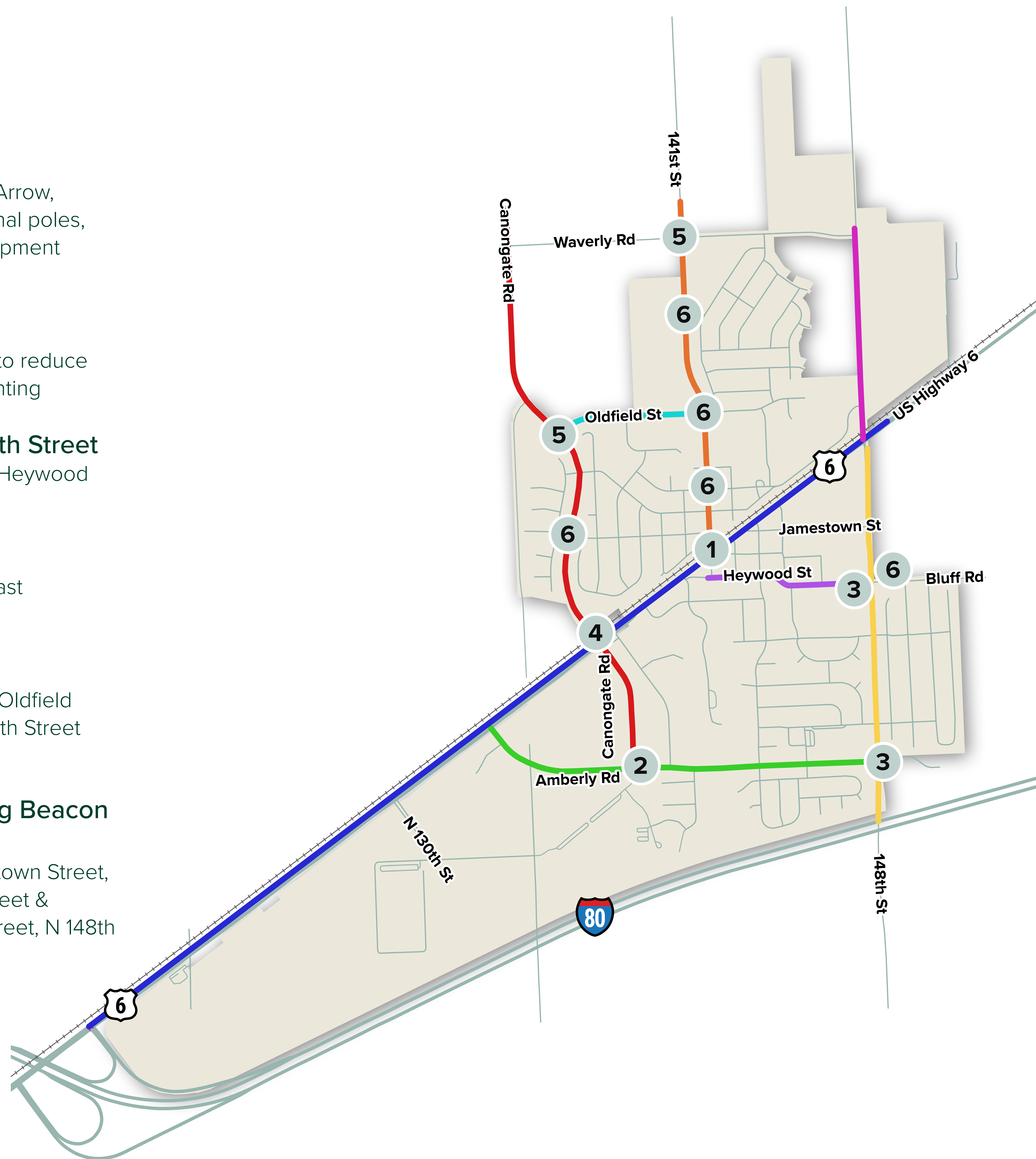
Programs

- Sidewalk Improvement Program
- Commercial Vehicle Noise and Routing Enforcement Initiative
- Traffic Signal Optimization
- Truck Traffic and Jake Brake Compliance Program
- City Wide Trails Enhancements
- Safe Routes to Schools Initiatives
- Bicycle and Pedestrian Safety Campaigns
- Distracted Driving and Impaired Driving Prevention Programs
- Enforcement and Engagement Programs
- Municipal Golf Cart Code Enforcement Program

Potential Project Board

INDIVIDUAL PROJECTS

- 1 US-6 & N 141st Street Intersection**
Signal upgrades including Flashing Yellow Arrow, Count Down Pedestrian Heads, update signal poles, signal heads, detection, and controller equipment
- 2 Amberly Road & Canongate Road Intersection**
Convert from stop control to a roundabout to reduce speeds and out of town truck traffic and lighting
- 3 Possible Roundabouts Along N 148th Street**
Candidates include the Amberly Road and Heywood Street/Bluff Road intersections
- 4 Canongate Road Bridge over US-6**
Widen the bridge to include a trail on the east or west side
- 5 Potential Roundabout Locations**
Possible Roundabouts: Canongate Road & Oldfield Street, N 141st Street & Waverly Road, N 148th Street & Waverly Road
- 6 Possible Rectangular Rapid Flashing Beacon (RRFB) Locations**
Possible RRFBs: Canongate Road & Jamestown Street, N 141st Street & Mansfield Street, N 141st Street & Oldfield Street, N 141st Street & St Ronan Street, N 148th Street & Heywood Street/Bluff Road



CORRIDOR PROJECTS

- US-6 Corridor**
Convert to an urban section by adding a sidewalk on the south side and adding curb and gutter. Fill in lighting where needed. Replaced painted medians with raised medians, increase left/right-turn lanes storage lengths, and review the need for a signal at 148th Street.
- Amberly Road Corridor**
Convert to an urban section, by adding lighting, sidewalk, curb, and gutter on both sides of the street, and a trail connection from 140th Street to Canongate Road. Raised medians and curb extensions could be considered at some locations.
- Canongate Road Corridor**
Convert to an urban section, by adding lighting, curb and gutter on both sides of the street and a trail on the east side connecting Amberly Road to Lawson Park (Oldfield Street). Widen the US-6 overpass to include a grade-separated trail connection between north and south Waverly. Widen to a three-lane section, including one lane in each direction and a center turn lane north and south of the bridge.
- N 141st Street Corridor**
Extend the raised median north of the railroad tracks, Jamestown Street, add parking spot striping, and curb extensions at Kenilworth Street, Lancashire Street, and Mansfield. Convert to an urban section from Mansfield Street to Waverly Road with lighting, sidewalk, curb, and gutter.
- North and South Leg of N 148th Street Corridor**
Convert to an urban section by adding a lighting, sidewalk, curb, and gutter on both sides. Could consider a trail on the east or west side instead of the sidewalk. Widen to a three-lane section, including one lane in each direction and a center turn lane.
- Oldfield Street Corridor**
Convert from gravel to a paved urban section with lighting, sidewalk, curb, and gutter on both sides. Widen to include a three-lane section with one through lane in each direction and a center turn lane.
- Heywood Street Corridor**
Stripe a three-lane section including one through lane in each direction and a center turn lane. Add curb extensions and lighting at 141st Street, 143rd Street, and 146th Street.