

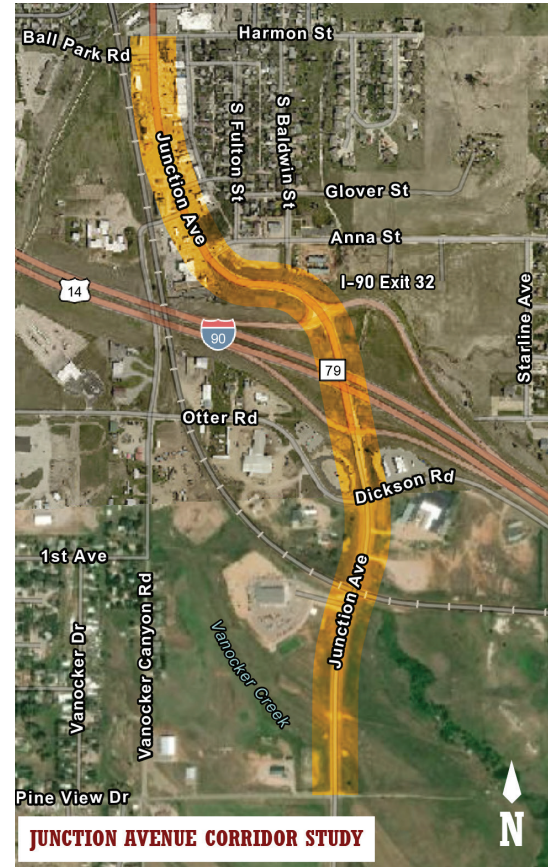
Junction Avenue Corridor Study

A corridor planning study is being performed for approximately 1.1 miles of Junction Avenue, between Pine View Drive and Harmon Street.

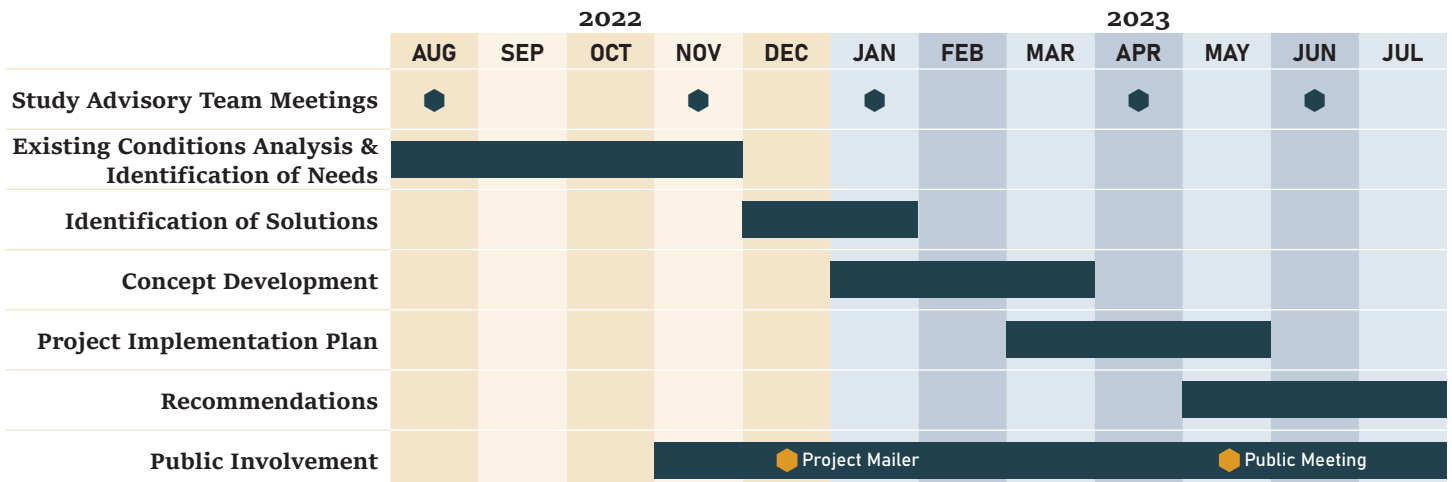
The purpose of the Junction Avenue Corridor Study is to evaluate existing and anticipated future conditions of the study area and determine potential near- and long-term improvements.

The planning project will:

- Evaluate existing and potential configurations for each of the intersections
- Evaluate the need for additional through and turning lanes
- Develop a cost-benefit based access management plan along the corridor
- Identify and prioritize potential improvements to support the next 30 years of growth and development
- Outline scope, limits, and timing of potential projects constructable within shortened construction seasons to minimize impacts to the annual motorcycle Rally



Work on the study began in August 2022, with completion anticipated in July 2023.



↑
WE ARE HERE

Junction Avenue Corridor Study

EXISTING CONDITIONS

Technical evaluation and public comment revealed several concerns regarding existing conditions:

- The intersection at Ballpark Road has recurring crashes, though 80% are minor in severity.
- There are gaps, or all-together missing sidewalks/trails.
- Where sidewalk exists, its proximity to the roadway makes it feel unsafe.
- With 20 private driveways, there is a high density of access points between Anna Street and Harmon Street.
- Turning left from, or onto Junction Avenue is sometimes difficult and feels unsafe.
- Two locations where two t-intersections are in close proximity but not aligned east-west. This creates non-standard turning patterns.
- Visitors parking and walking to Welcome to Sturgis sign creates safety concerns.



Sidewalk adjacent to street



Crosswalk present, no ramp



Left turns can feel difficult, unsafe



A popular photo opportunity

FUTURE CONDITIONS

Future growth and development anticipated for this area presents potential operational and safety challenges:

- Future traffic volumes suggest potential operational deficiencies at intersection of Junction Avenue and Anna Street.
- Lack of connectivity to city's existing trail network.
- Need for sidewalk or trail connectivity to the proposed Sturgis Adventure Park.

CORRIDOR FACTS:

- Approximately 1.1 miles
- 9 intersections
- One of two entrances to the city via I-90
- 3 lanes throughout (center turn lane)



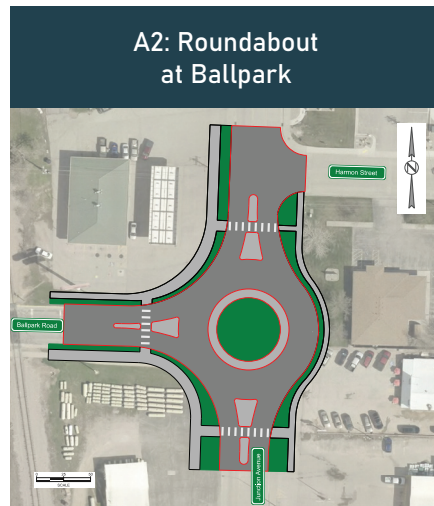
INTERSECTIONS OF BALLPARK ROAD AND HARMON STREET

The project team identified six alternatives to address:

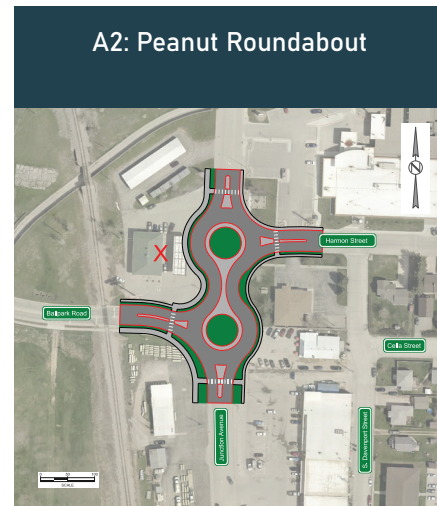
- Recurring crashes at Ballpark Road intersection.
- Non-standard turning pattern resulting from the close proximity of Ballpark Road and Harmon Street intersections.
- Delays of Harmon Street traffic accessing southbound Junction Avenue.



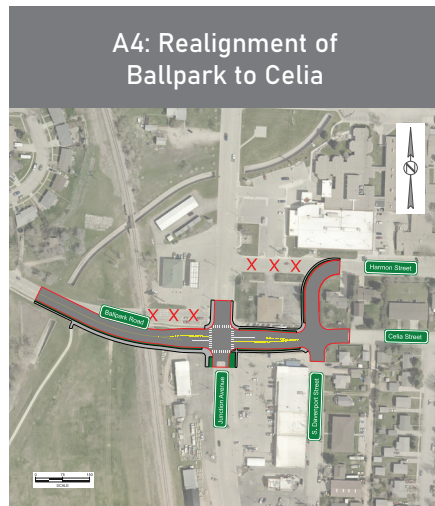
A1: Signal Reconstruction at Ballpark



A2: Roundabout at Ballpark

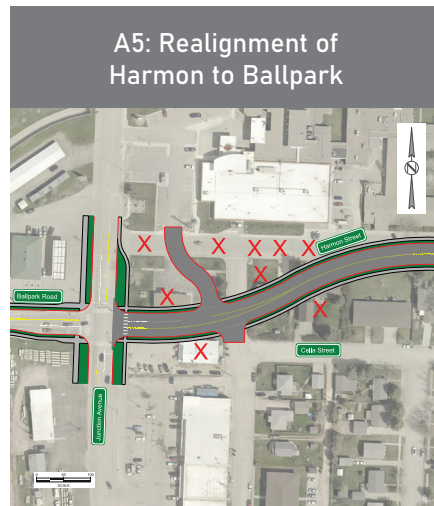


A2: Peanut Roundabout at Ballpark



A4: Realignment of Ballpark to Celia

*Intersection could be signal or roundabout



A5: Realignment of Harmon to Ballpark

*Intersection could be signal or roundabout



A6: Realignment of Ballpark to Harmon

*Intersection could be signal or roundabout

Three alternatives were eliminated from consideration due to significant property impacts. Three alternatives advanced to further evaluation, as summarized below:

Legend	No Build	A1	A2	A3	A4	A5	A6
<p>● Good</p> <p>● Neutral</p> <p>● Poor</p>							
<p>Operations</p> <p>Motorist delay</p>	●	●	● Harmon Ballpark	●	Not evaluated due to property impacts	Not evaluated due to property impacts	Not evaluated due to property impacts
<p>Safety</p> <p>Vehicle crashes/conflicts</p>	●	●	● Harmon Ballpark	●			
<p>Pedestrian Friendliness/Safety</p>	●	●	● Harmon Ballpark	●			
<p>Property Impacts</p> <p>Right-of-way acquisition</p>	●	●	●	●	!!!	!!!	!!!
<p>Project Implementation Cost</p> <p>Design, construction, ROW, utilities</p>	NA	\$850,000	\$1,820,000	\$3,850,000	Signal: \$3,700,000 Roundabout: \$3,620,000	Signal: \$6,430,000 Roundabout: \$6,190,000	Signal: \$6,780,000 Roundabout: \$6,600,000
<p>Maintenance Cost</p> <p>Ongoing cost for life of project</p>	●	●	●	●	Not evaluated	Not evaluated	Not evaluated
<p>Other</p>		Harmon traffic would still experience delays when turning left onto Junction Includes construction of accessible ramps	Unconfirmed impacts to traffic conditions during annual motorcycle Rally need to be considered	Unconfirmed impacts to traffic conditions during annual motorcycle Rally need to be considered			

CORRIDOR AND AESTHETICS

The project team identified two potential street configurations to address:

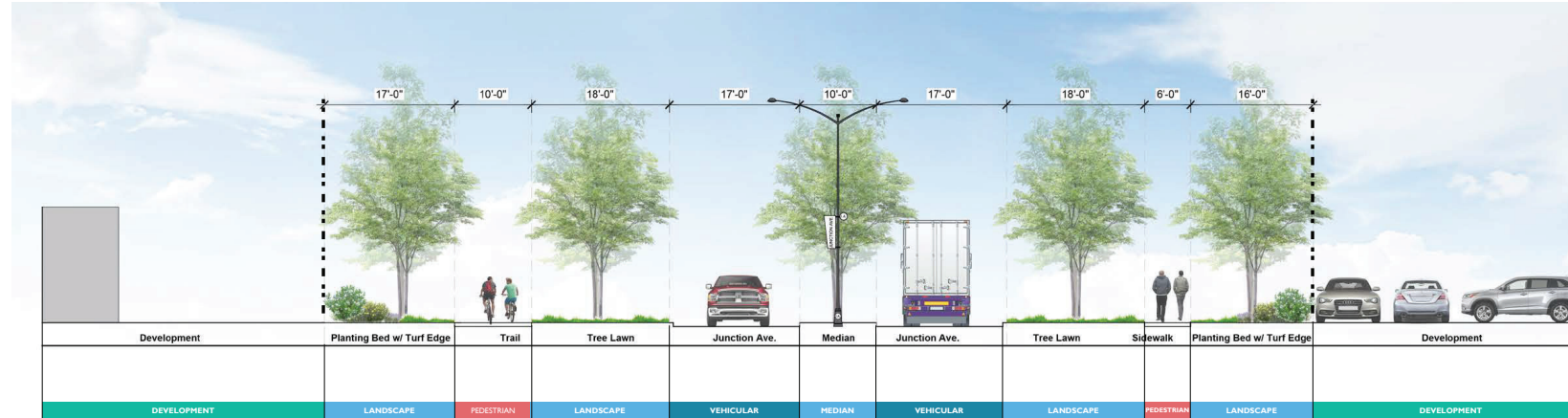
- Lack of sidewalks, non-accessible sidewalks, limited pedestrian crossings, lack of connectivity to bike paths.
- Concerns related to left-turns throughout corridor, as expressed in public comments.
- High density of private driveways in commercial corridor, which can contribute to abrupt changes in traffic flow.

The conceptual figures to the right depict some consolidation of access points. Additional evaluation for access management would be necessary prior to recommendation or implementation of such changes.

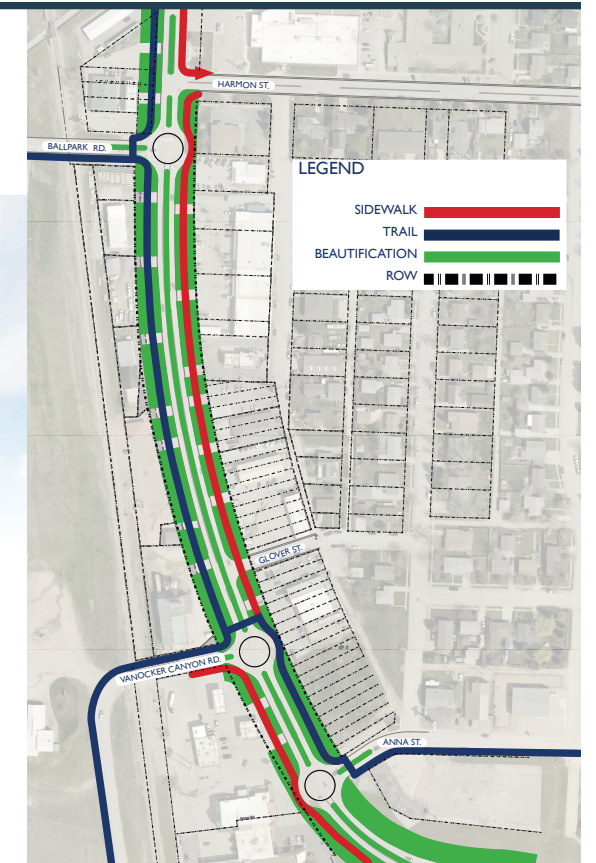
- Opportunities to enhance the look and feel of the corridor including a “gateway” to Sturgis via Interstate 90 Exit 32.

Alternative 1: Divided Median

This concept establishes a raised median, reclaims existing right-of-way for streetscaping, establishes consistent pedestrian/bike facilities, and could maintain existing access points.



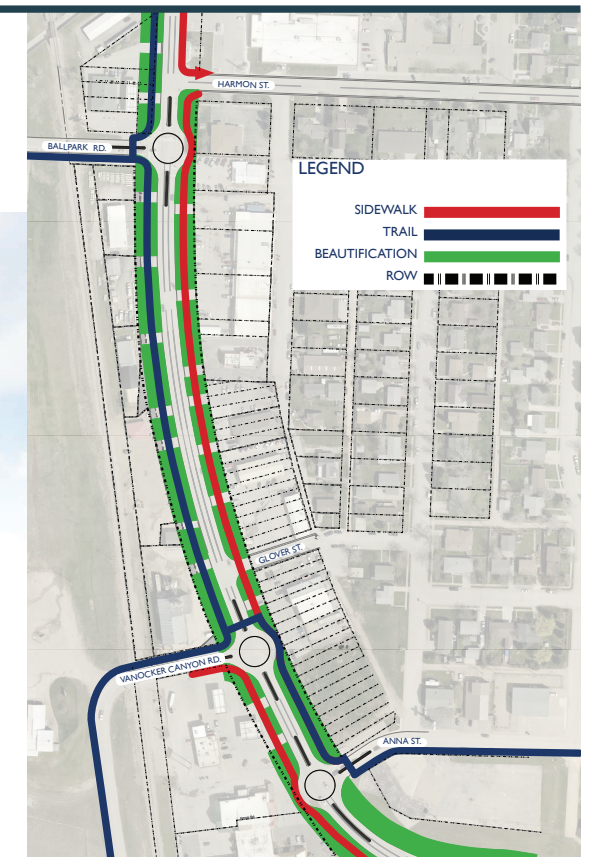
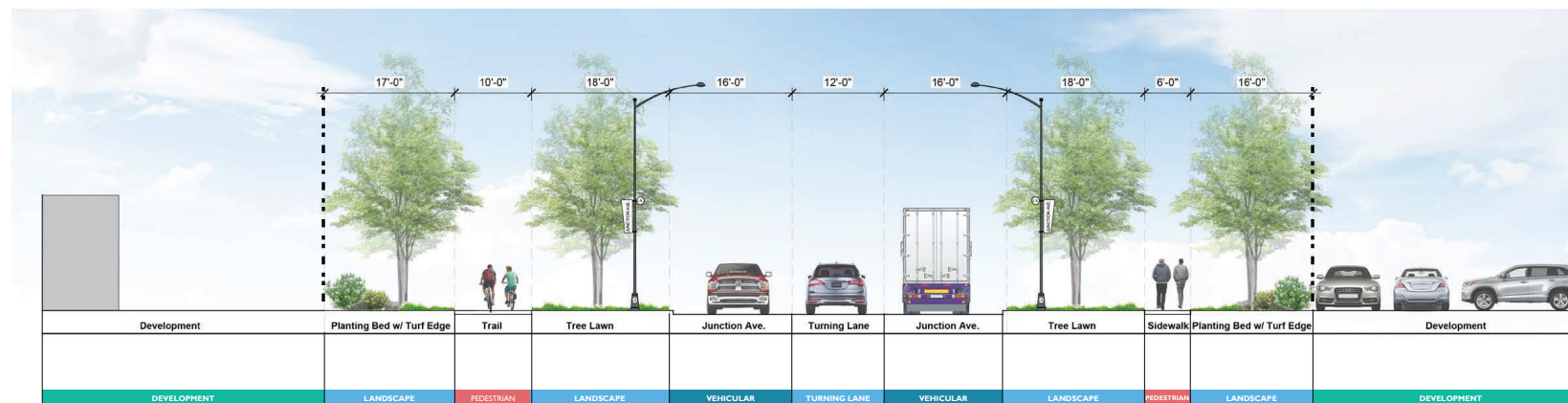
Paved medians reduce the likelihood of head-to-head collisions and conflicts from left-turns into oncoming traffic.



Both alternatives would relocate the Welcome to Sturgis sign to the southeast corner of Junction Avenue & Anna Street.

Alternative 2: Two-Way Left-Turn Lane

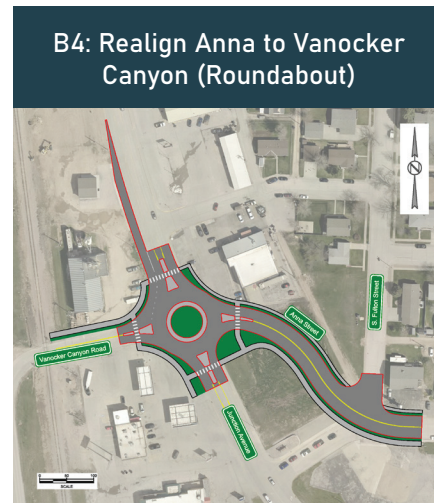
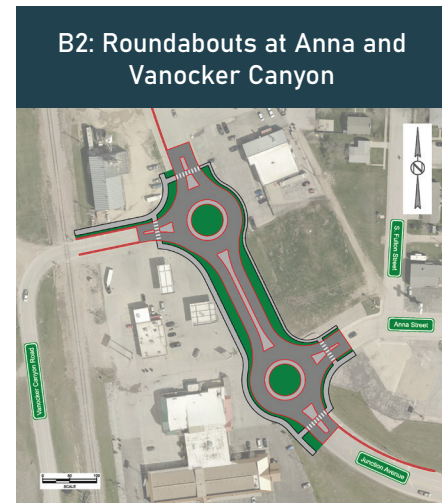
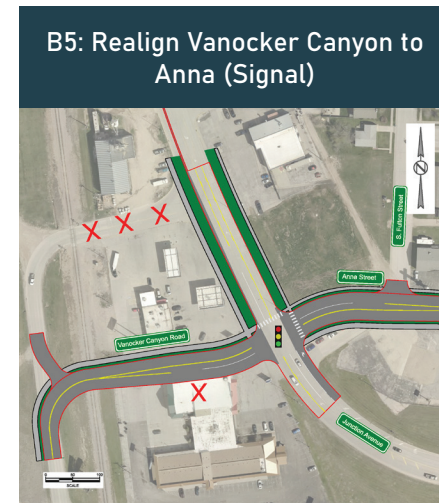
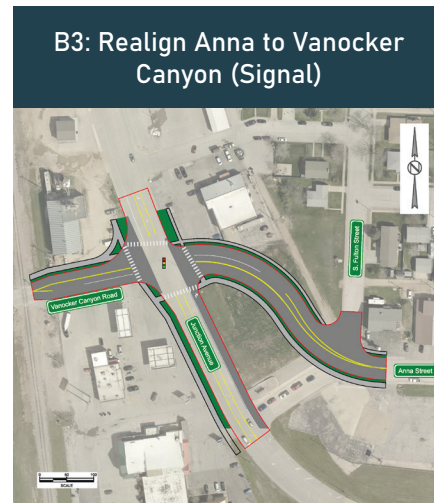
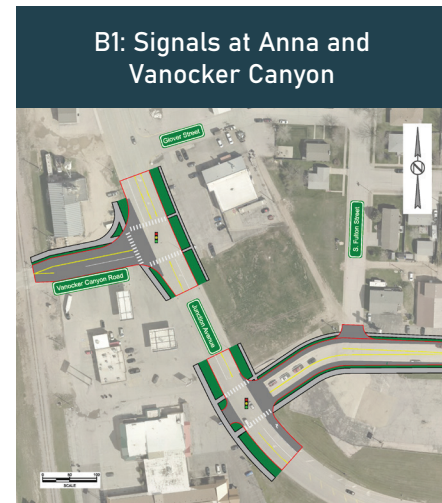
This concept is similar to the current configuration, but would also reclaim existing right-of-way for streetscaping, establish consistent pedestrian/bike facilities, but consolidate access points between adjoining parcels.



INTERSECTIONS OF ANNA STREET AND VANOCKER CANYON ROAD

The project team identified six alternatives to address:

- Future operational deficiencies at Anna Street based on future volumes.
- Non-standard turning pattern resulting from the close proximity of Anna Street and Vanocker Canyon intersections.



All six alternatives advanced to further evaluation, as summarized below:

Legend	No Build	B1	B2	B3	B4	B5	B6
● Good							
● Neutral							
● Poor							
Operations Motorist delay	● Poor	● Neutral	● Neutral	● Good	● Good	● Good	● Good
Safety Vehicle crashes/conflicts	● Poor	● Poor	● Good	● Poor	● Good	● Poor	● Good
Pedestrian Friendliness/Safety	● Neutral	● Neutral	● Good	● Neutral	● Good		● Good
Property Impacts Right-of-way acquisition	● Good	● Neutral	● Neutral	● Neutral	● Neutral	● Neutral	● Neutral
Project Implementation Cost Design, construction, ROW, utilities	NA	\$3,020,000 Anna: \$1,550,000 Vanocker Canyon: \$1,470,000	\$3,260,000 Anna: \$1,490,000 Vanocker Canyon: \$1,680,000 Adjacent improvements: \$90,000	\$4,030,000	\$3,560,000	\$4,700,000	\$3,910,000
Maintenance Cost Ongoing cost for life of project	● Good	● Neutral	● Good	● Neutral	● Good	● Neutral	● Good
Other			Unconfirmed impacts to traffic conditions during annual motorcycle Rally need to be considered		Unconfirmed impacts to traffic conditions during annual motorcycle Rally need to be considered		Unconfirmed impacts to traffic conditions during annual motorcycle Rally need to be considered

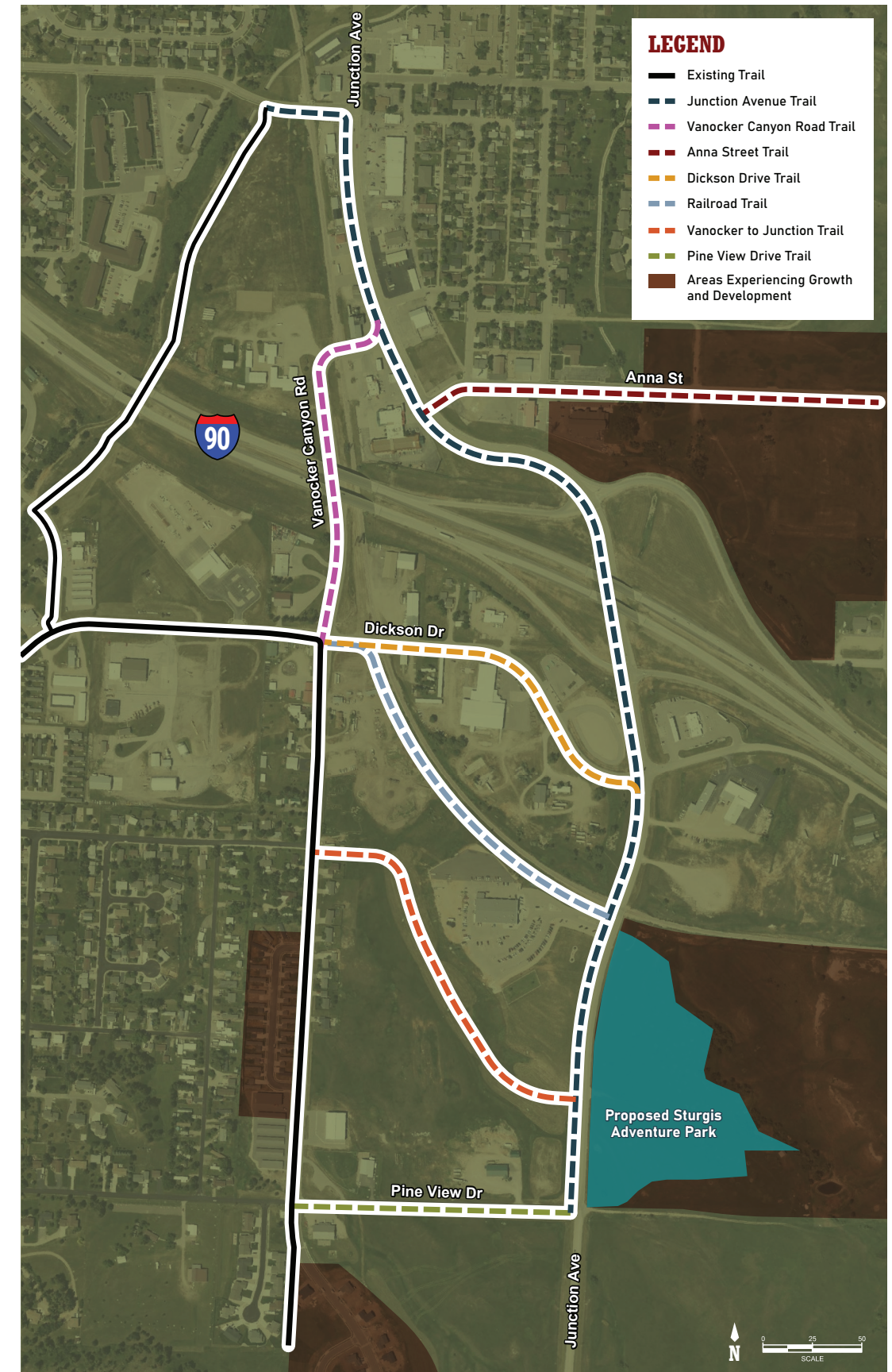
BIKE PATHS

There are seven trail segments that would enhance pedestrian and bicycle connectivity.

- The Junction Avenue Trail would likely be constructed in phases, with Anna Street being a natural phase break.
- Portions of the Anna Street Trail are already being constructed as part of ongoing development activity.
- The Sturgis community could prioritize one or two of the four potential east-west trails south of I-90.

A rectangular rapid flashing beacon (RRFB) is proposed for all trail-street crossings.

Trail	Approx. Length (Linear Feet)	Estimated Cost	Connectivity			
			Connects Junction Ave to Existing Trail Network	Provides Trail Access to area south of I-90	East-West Trail South of I-90	Provides Access to Sturgis Adventure Park
Junction Avenue Trail	4,177	\$1,310,000	●	●		●
Vanocker Canyon Road Trail	1,745	\$550,000	●	●		
Anna Street Trail	2,192	\$690,000				
Dickson Drive Trail	1,820	\$580,000	●		●	●
Railroad Trail	1,980	\$1,200,000	●		●	●
Vanocker Canyon to Junction Trail	1,900	\$1,110,000	●		●	●
Pine View Trail	1,320	\$420,000	●		●	●





PUBLIC COMMENT

The public is invited to share feedback on potential improvements to Junction Avenue between Pine View Drive and Harmon Street.

Input can be submitted online at surveymonkey.com/r/JunctionAve or sent to:



Brittney Ragels, City of Sturgis

bragels@sturgisgov.com

1040 Harley-Davidson Way

Sturgis, SD 57785.

Please share your input by June 23, 2023.

PROJECT CONTACTS

For more information, visit www.sturgis-sd.gov/JunctionAvenueCorridorStudy or contact one of the following:

CITY OF STURGIS

Brittney Ragels

bragels@sturgisgov.com

SDDOT PROJECT MANAGER

Steve Gramm

Steve.Gramm@state.sd.us

CONSULTANT PROJECT MANAGER

Mark Lutjeharms

mlutjeharms@jeo.com



This project is part of SDDOT's annual State Planning & Research (SPR) program for local governments.