







41st Street DDI

Updated: 05/09/2022











PROJECT INTRODUCTION

The South Dakota Department of Transportation (SDDOT) and the City of Sioux Falls are constructing a new Diverging Diamond Interchange (DDI) at I-29 and 41st Street.

Improvements to the roadway include:

- Reconstruction and widening of 41st Street to include three lanes in each direction with a raised center median
- · Reconstruction and widening of portions of Marion Road and Shirley Avenue
- · Underground utility replacement
- · Improved pedestrian and bicyclist crossings and pathways
- · Bridge improvements and enhancements

Construction began in early 2022 and is anticipated to be completed in summer 2024.

PROJECT TIMELINE











PROJECT MAP



Construction sequencing includes:

- 2022: 41st Street construction from Marion Road to Meadow Avenue (west half of project area)
- 2023: 41st Street DDI construction from Meadow Avenue to Shirley Avenue (east half of project area)

The contractor/consultants will focus on the following construction activities:

- · 2022: Widen 41st Street, replace water main and sanitary sewer
- · 2023: Construction of the DDI
- · 2024: Restoration and Completion of project









ABOUT DIVERGING DIAMOND INTERSECTIONS

DDIs increase capacity and safety, decrease congestion, and minimize the cost of new infrastructure.

Benefits & Advantages:

- Creating safer turns for entering and exiting the highway including safer left turn movements to reduce the number of collisions
- Greater capacity and efficiency to move more vehicles through the intersection and decrease congestion and traffic delays
- · Drivers can make free flow right and left turns onto the freeway
- Easy navigation to guide drivers with overhead signs, pavement marking, and traffic signals
- Meeting the needs of all road users including large trucks and providing safe passage for pedestrians and bicyclists

Navigating A DDI:

- Drivers follow the signs, signals and pavement markings to cross through the intersection at the first set of traffic lights. Traffic appears as if on a one-way street
- All left turns onto the freeway are free flow, meaning vehicles do not have to stop to access the ramp
- · Vehicles going straight proceed through a second set of traffic lights
- · Pedestrians use designated walkways and cross only at the crosswalks
- · Bicyclists may choose to use the bike lane or pedestrian walkways and crosswalks

Cost-Effectiveness:

- For improvement projects, a DDI often uses the existing bridge structure and the existing right of way, which eliminates the cost of building new structures and purchasing additional right of way
- Because many of the existing Interchange features remain intact, the DDI is often built in less time than it would take to build a new Interchange and with significantly less impact to motorists

A DDI usually requires the purchase of less right of way and the construction of fewer lanes and bridge structures than traditional Interchange types.

Videos:

<u>LaCrosse Street Interchange</u> in Rapid City - construction 2020-2022 <u>I-29 & 41st Street Interchange</u> in Sioux Falls - construction 2022-2023

Source: http://dot.sd.gov/projects-studies/sddot-innovation/diverging-diamond-interchange

* Drone footage and construction photos are available upon request.









Will 41st Street close for construction?

41st Street will have one lane in each direction that remains open to traffic at all times.

How will pedestrians use 41st Street during construction?

Pedestrian access will be maintained at all times along 41st Street with signaled crossings at Valley View Road, Marion Avenue and Terry Road.

Will Shirley Avenue close for construction?

Shirley Avenue will remain open to traffic at all times.

Will I-29 close for construction?

I-29 will remain open to traffic at all times, with the exception of night closures during construction of the bridge.

Why is this Diverging Diamond Interchange (DDI) being constructed?

The I-29 (Exit 77) 41st Street Interchange Study (completed in fall 2021) evaluated design options to improve safety and enhance traffic operations. This is a priority corridor for the city and state for the following reasons:

- I-29 and 41st Street are vital routes for commuters and local traffic
- 41st Street is the most heavily traveled street in Sioux Falls and the state of South Dakota. It provides access to all types of retail and employment centers
- The nearby Empire Mall consistently ranks among the state attractions that draws the most visitors and in turn contributes to area congestion

What is a DDI?

- Motorists, pedestrians, and bicyclists face greater mobility challenges and safety risks at interchanges as traffic volumes grow and congestion worsens. The DDI is a simple design innovation that improves safety and mobility, often at a much lower cost, compared to conventional interchange designs. The key to what makes a DDI work so well is how left turns are handled. Learn more by visiting the FHWA website.
- · The idea of the interchange is that it'll create safer left-turns and in turn create a safer driving









environment. 41st Street is the most heavily traveled street in Sioux Falls and the state of South Dakota, and it provides access to all types of retail and employment centers. Learn more about the benefits, advantages and cost-effectiveness by visiting SDDOT's DDI Innovation page.

How will the DDI improve this intersection?

The DDI will improve safety and traffic flow in the I-29 and 41St Street area. 41st Street will be widened to three lanes between Marion Road and I-29. Signal and sidewalk improvements at the 38th Street and Shirley Avenue intersection will also be completed as a part of this project.

Project benefits are:

- · Additional travel lanes to move more vehicles through the intersection
- Fewer travel delays
- · Safer turns for entering and exiting the highway
- · Safer crossings for pedestrians and bicyclists

Who is responsible for this project?

This project is a partnership between South Dakota Department of Transportation (SDDOT) and the City. SDDOT is leading project construction. D&G Concrete Construction is the primary contractor. IDG, Inc. is the primary contractor for Construction Communications, with HDR serving as the Public Relations Specialist (PRS).

What is the construction cost and who is paying for it?

Funding for this project comes from a combination of SDDOT and City sources. The City is responsible for 81.95% of the actual cost of construction, while SDDOT will contribute 18.05%. Total project costs will be approximately \$44 million.







VISUAL ASSETS































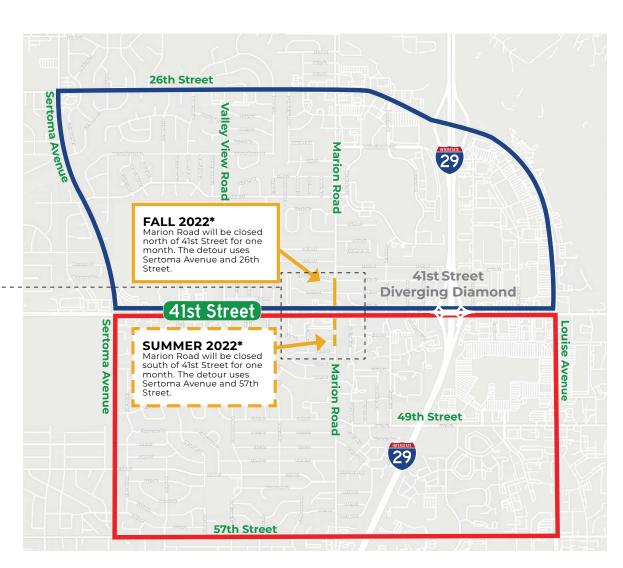


(2022 SPRING TO FALL)



- **SPRING 2022** Reconstruction of the south side of 41st Street starts at Meadow Avenue and progresses to the west.
- SPRING 2022 Marion Road will be closed south of 41st Street for one month.* The detour uses Sertoma Avenue and 57th Street.
- **SUMMER 2022** Reconstruction of the north side of 41st Street starts at Meadow Avenue and progresses to the west.*
- **FALL 2022** Marion Road will be closed north of 41st Street for one month.* The detour uses Sertoma Avenue and 26th Street.

*Time frames are all approximate, subject to change, and weather and schedule permitting.











PEDESTRIAN ROUTES

(2022 SPRING TO SUMMER)



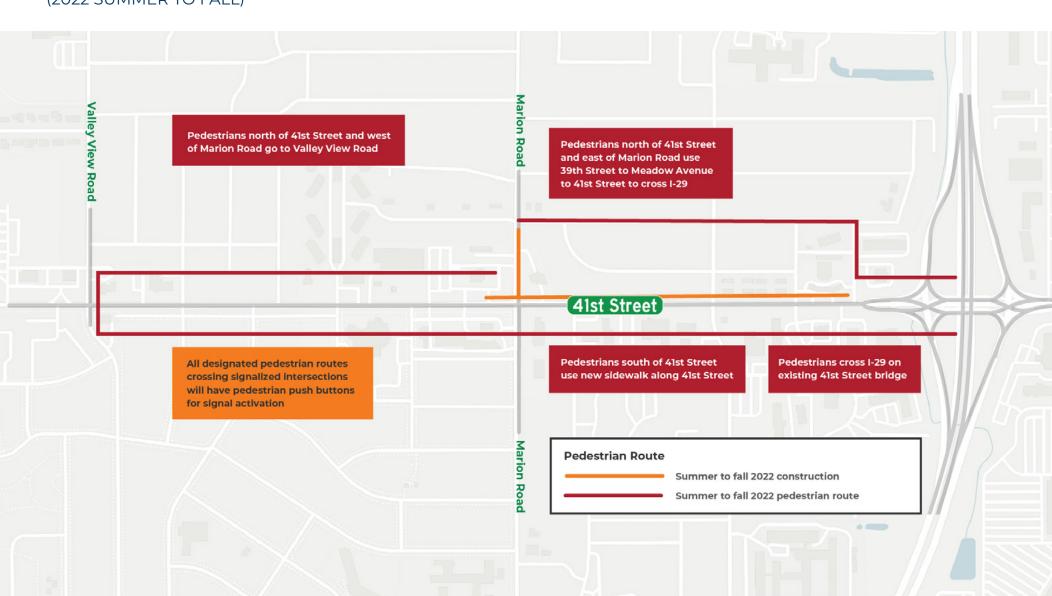






PEDESTRIAN ROUTES

(2022 SUMMER TO FALL)

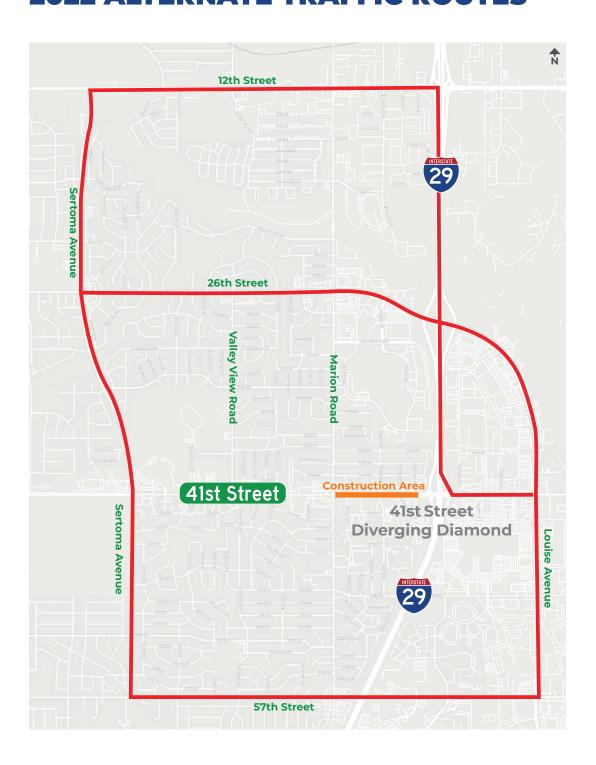




















PROJECT RESOURCES

• Website: www.41stddi.com

Facebook: www.facebook.com/CitySiouxFalls
South Dakota Department of Transportation: www.facebook.com/southdakotadot

• Instagram: @SouthDakotaDOT

Twitter: @SouthDakotaDOT, @CitySiouxFalls

All shared posts will utilize the hashtags #41stDDI #SiouxFalls #SDDOT #SD511

CONTACT INFORMATION

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