

The 10th / 11th / 12th Street corridor (old S.D. Highway 42) is a key east-west corridor that runs through the heart of Sioux Falls. This high-volume arterial corridor provides connectivity to many of the region's destinations and other major routes.

DID YOU KNOW?

The 10th / 11th / 12th Street corridor (old S.D. Highway 42) is one of the few continuous east-west corridors through Sioux Falls. The adjacent continuous arterial corridors are 60th Street North (over 3.5 miles to the north) and 57th Street (3 miles to the south).

What have we heard?

Every five years, the Sioux Falls MPO develops a long-range metropolitan transportation plan to guide transportation related improvements throughout the metropolitan area. As part of those plans, the MPO conducts a statistically-significant market survey of residents and employers. In the latest survey, east-west traffic flow was, again, a top concern among the resident and employer survey responses.

- **Top priority for transportation improvements:**
Improving east-west roads in Sioux Falls
- **Top transportation improvement respondents were most willing to fund:**
Improving east-west roads in the City of Sioux Falls
- **Top roadway priority for residents:**
East 10th Street / S.D. Highway 42

SIoux FALLS DOWNTOWN TRAFFIC IMPACT STUDY (TIS)



QUICK FACTS

COMPLETED IN
EARLY 2024

3 STUDY PHASES:

- 1 East-West Corridor Study
- 2 Downtown Traffic Analysis
- 3 10th & 11th Street Viaduct Study

Analyzed 13 scenarios using Sioux Falls Travel Demand Model, with various combinations of:

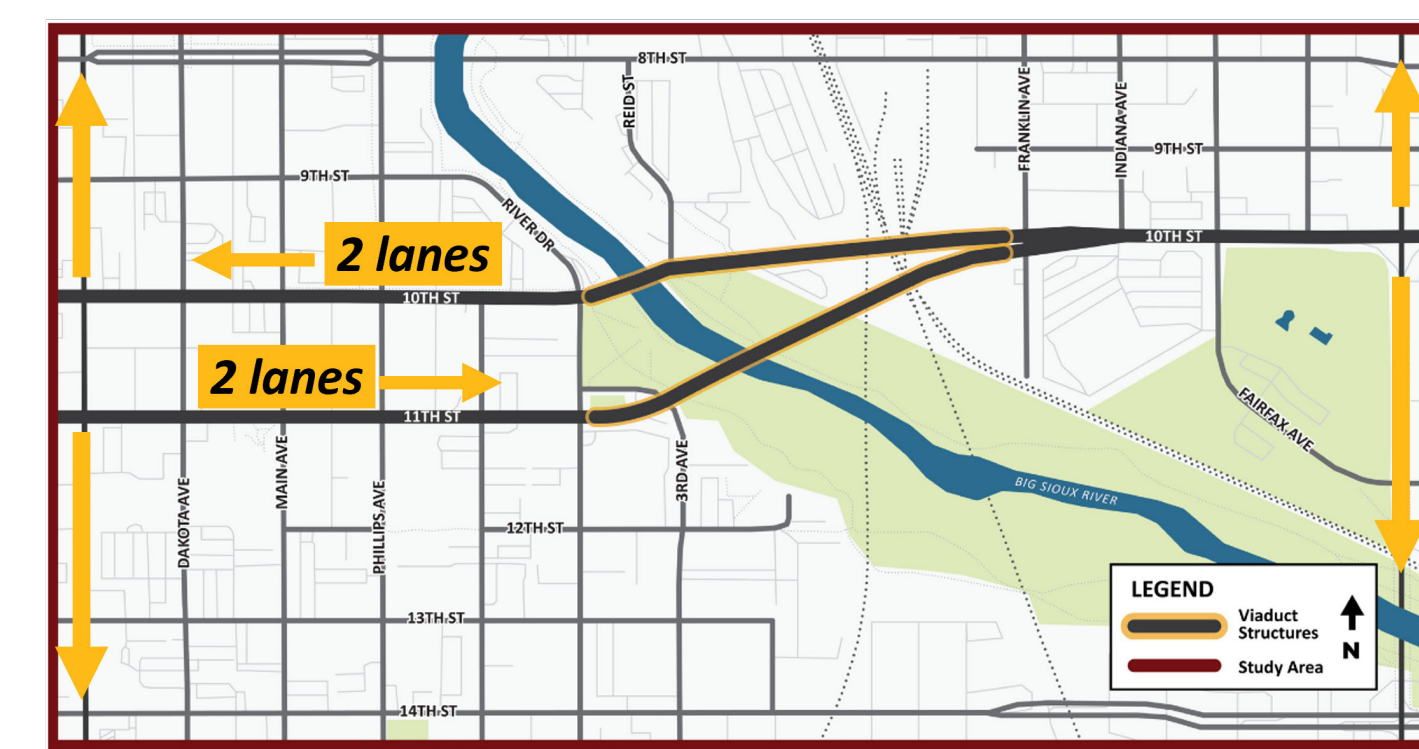
- Russell Street extension to Rice Street
- Benson Road extension to Rice Street
- 10th & 11th Street lane reduction
3 lanes to 2 lanes
- 10th & 11th Street one-way to two-way conversion
- 2nd Avenue road diet
4-lane to 3-lane conversion

In January 2024, the City of Sioux Falls completed a Downtown Traffic Impact Study (TIS) to provide traffic-related guidance to long-range planning efforts and future projects throughout the downtown area.

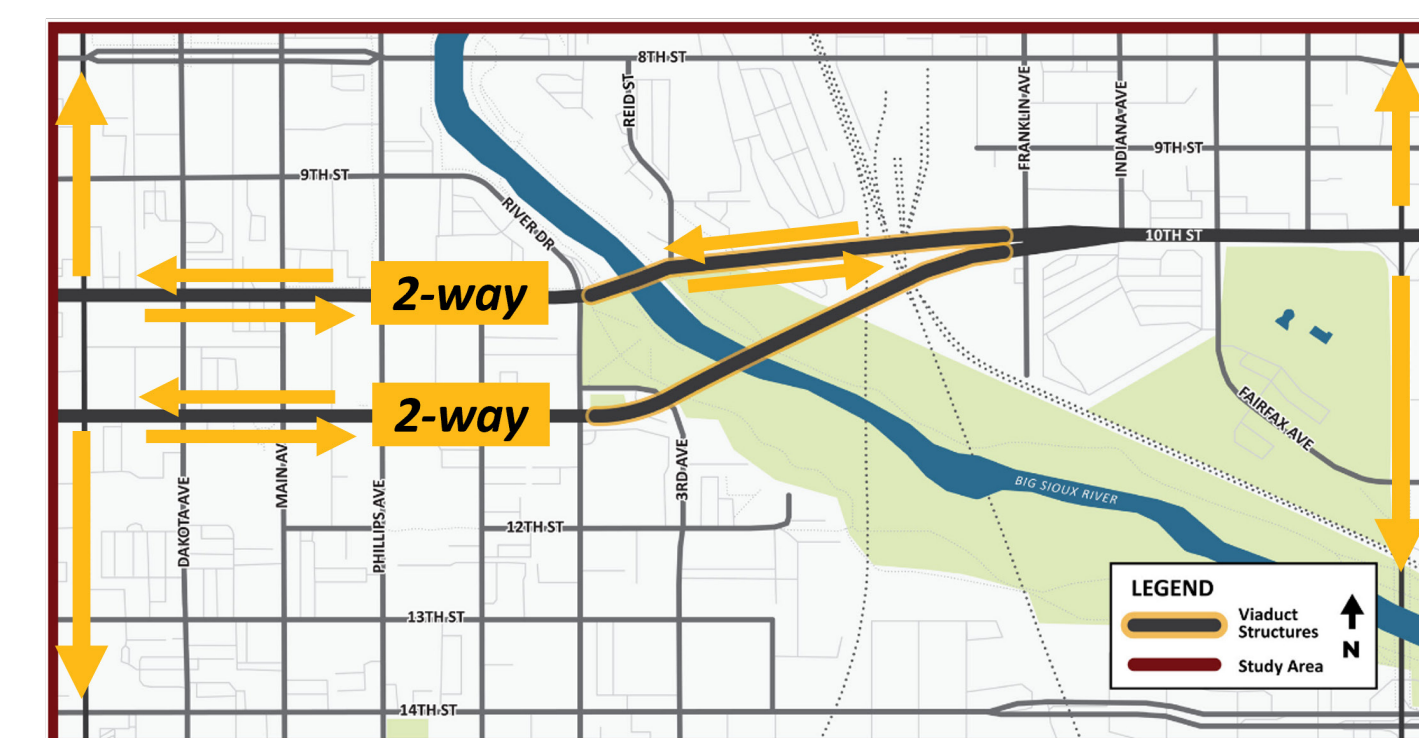
Key Findings

- There is strong traffic demand to travel to, from and through the downtown area.
- New east-west arterial street connections only provide nominal traffic reductions on 10th & 11th Street through downtown
- Reducing capacity on 10th & 11th Street due to removing lanes or converting the one-way pair to two-way streets:
 - Diverts traffic to other east-west corridors.
 - Adversely impacts 10th & 11th Street operations and other east/west streets not geared for higher volumes.
- Three alignment options were analyzed, with each tying into the one-way pair at 2nd Avenue.
 - The Separate and North alignments are most feasible.
 - The South alignment was determined infeasible due to operational and geometric challenges at the 2nd Avenue intersections.

REMOVING A LANE IN EACH DIRECTION 3 lanes to 2 lanes

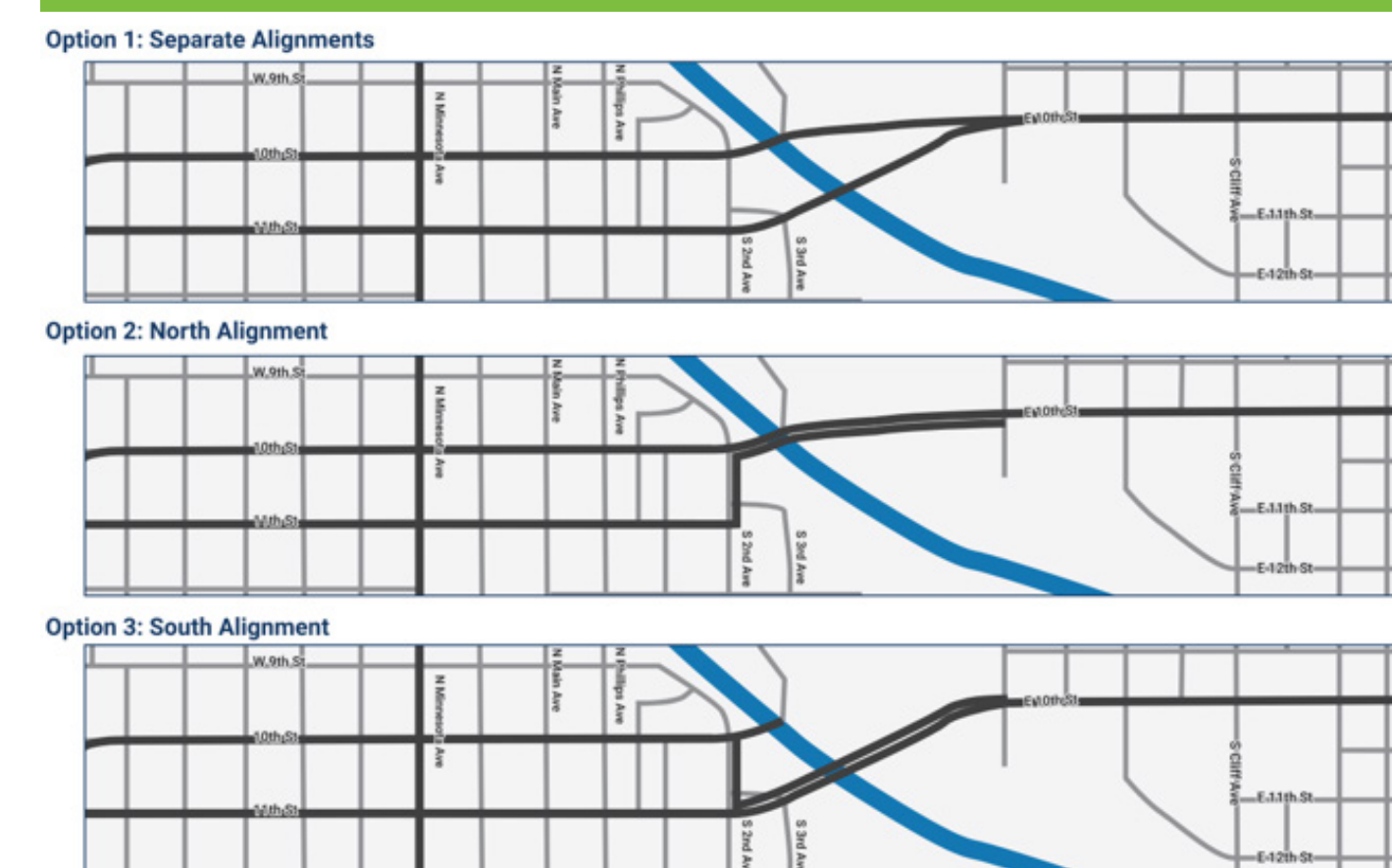


CONVERTING ONE-WAY PAIR TO TWO-WAY STREETS



3 VIADUCT ALIGNMENT OPTIONS

All options tie into one-way pair at 2nd Avenue



10th & 11th Street Corridor Recommendations

Maintain the following 10th & 11th Street corridor elements through downtown:

- Existing corridor capacity
- 3 lanes in each direction
- One-way pair

Study Area



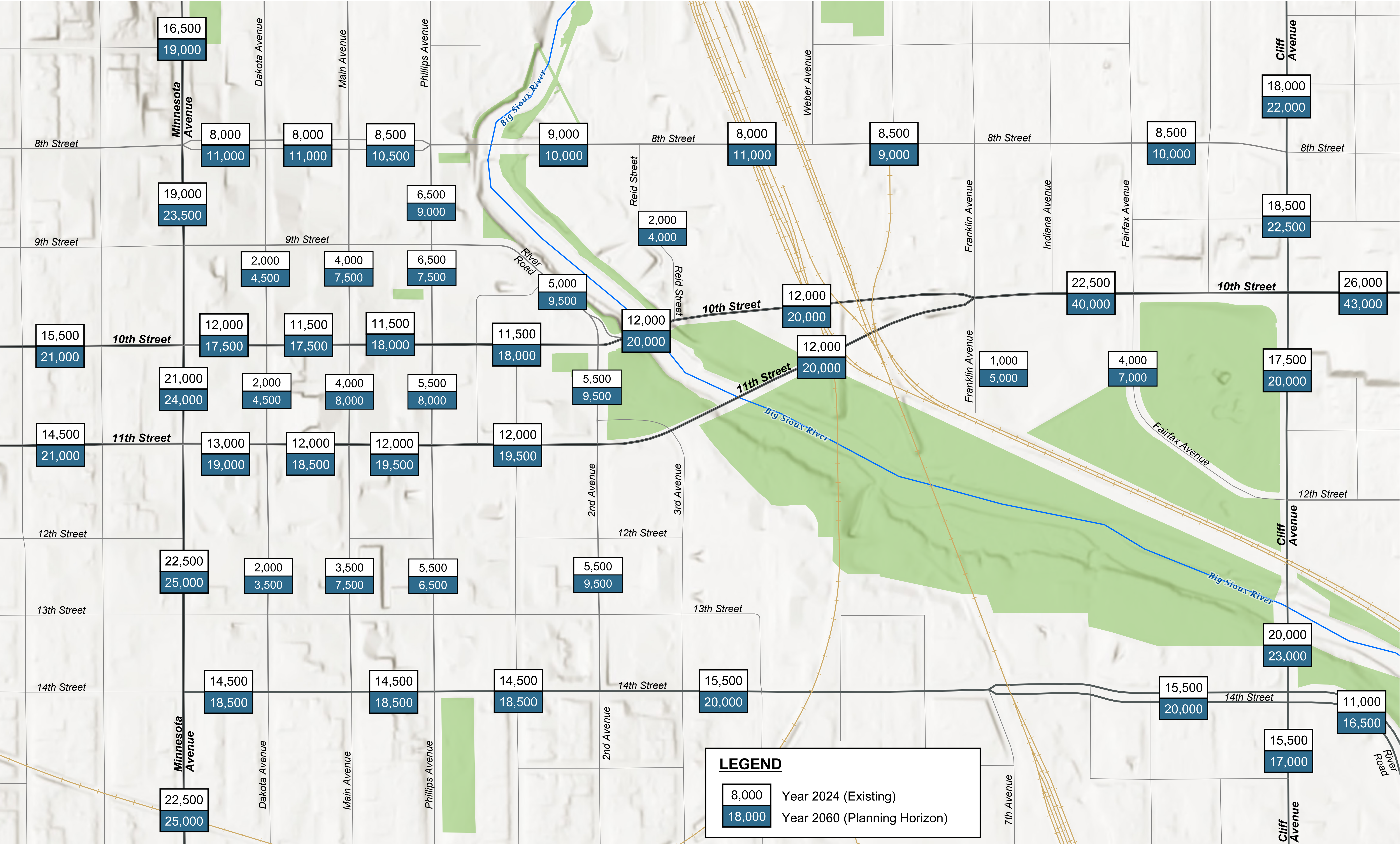
EXISTING AND 2060 PLANNING HORIZON DAILY TRAFFIC VOLUMES



10TH & 11TH

STREET VIADUCT

MAJOR INVESTMENT STUDY



Existing Volumes 2024

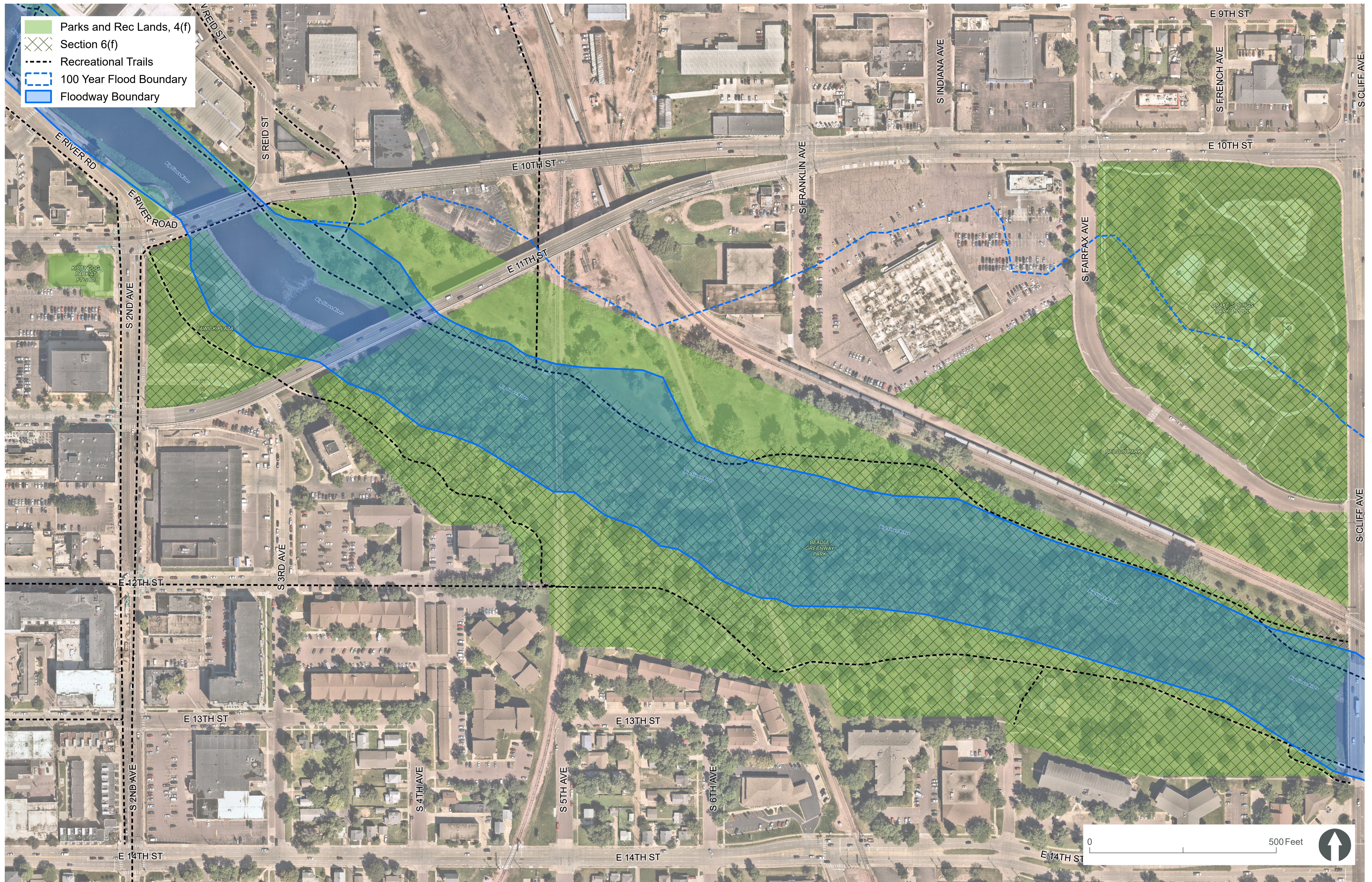
- Volumes reflect typical weekday during the summer
- Based on 2022, 2023 and 2024 traffic counts collected by City of Sioux Falls

2060 Planning Horizon Volume Forecasts

- Reflect approximately 26 years of development and traffic growth throughout the Sioux Falls metropolitan area
- Based on Sioux Falls MPO Travel Demand Model growth rates
- Account for recent and anticipated development/redevelopment throughout downtown
- Account for recommended projects in Go Sioux Falls MPO 2045 Long-Range Transportation Plan fiscally constrained street network



SECTION 4(F), SECTION 6(F), AND BIG SIOUX RIVER FLOODWAY AND FLOODPLAIN



SECTION 4(F), SECTION 6(F), AND BIG SIOUX RIVER FLOODWAY AND FLOODPLAIN

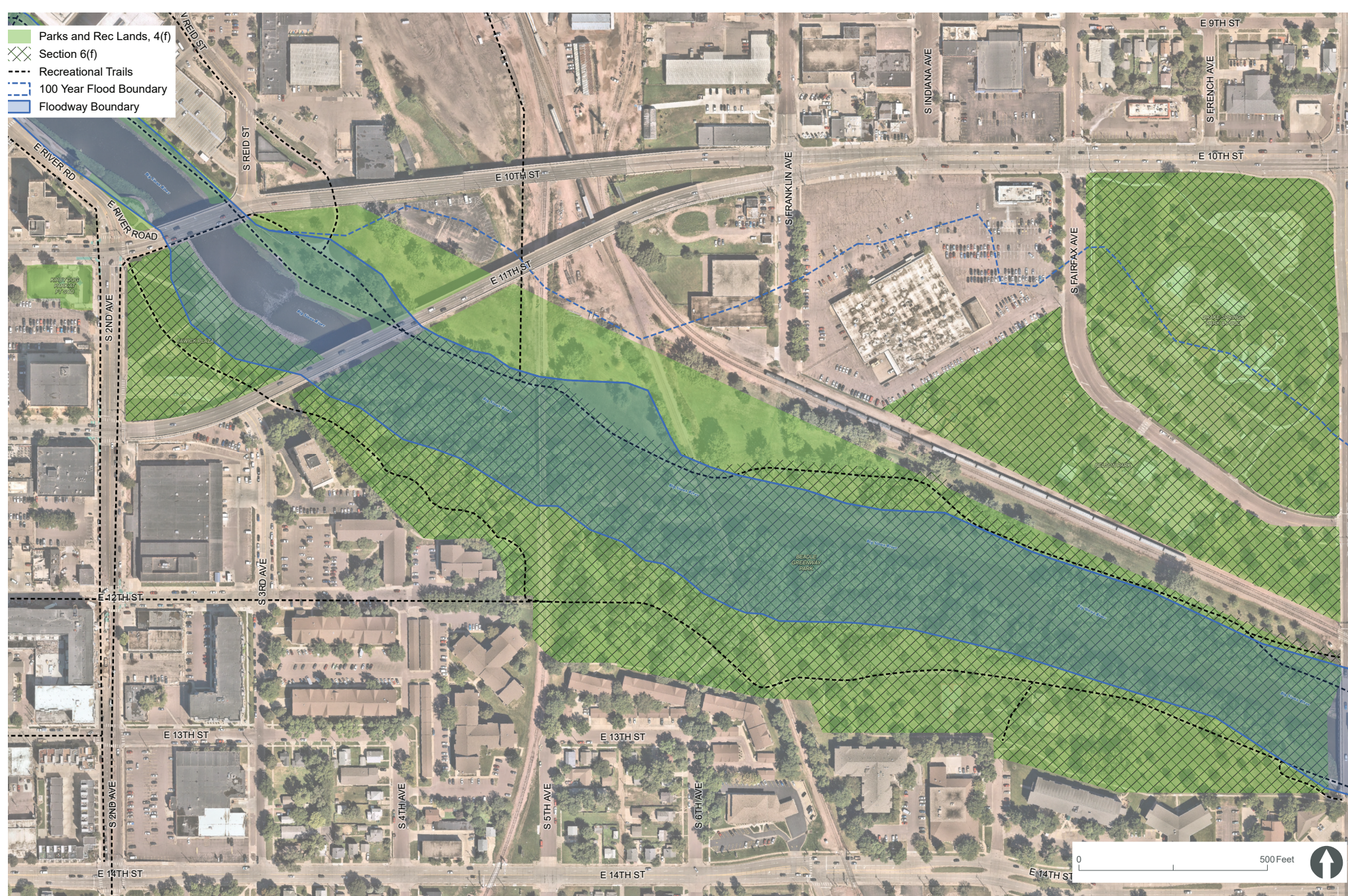


Study Constraints and Considerations

Section 4(f) and Section 106

Section 4(f) of the U.S. DOT Act of 1966 requires Federal Highway Administration (FHWA) to consider impacts to recreational properties and National Register of Historic Places (NRHP) eligible properties. FHWA cannot approve the use of land from publicly owned recreational areas or NRHP-eligible properties if a feasible or prudent alternative avoids or minimizes impacts to those properties.

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to determine the effects to NRHP-eligible properties. For Section 106 process, mitigation would be necessary for any adverse effects to NRHP-eligible historic structures, in consultation with the South Dakota State Historic Preservation Office.



Section 6(f)

Parks that have received Land and Water Conservation Funds (LWCF) must follow Section 6(f) of the LWCF Act. The Act requires that a conversion of the property that received the funds needs to be coordinated with the National Park Service. If a conversion of the property to non-park use occurs, replacement of that property is required. The conversion process requires that all practical alternatives have been evaluated and that an environmental review occur on the replacement property.

USACE Flood Walls

United States Army Corps of Engineers (USACE)-managed flood walls exist adjacent to the 10th Street Bridge. Work within 500-feet of this floodwall will require consultation with the USACE District Office to determine if a Section 408 Permit is required.



Big Sioux River Floodway and Flood Plain

Federal Emergency Management Agency (FEMA) Floodway Regulations

According to FEMA regulations,

- Any fill placed in the floodway must not cause an increase in base flood elevations
- Bridge embankment fill should be avoided in the floodway
- Bridge designs should span the entire regulated floodway area to minimize impacts.

City of Sioux Falls Floodplain Regulations

The City regulates fill within the floodplain and requires compensatory storage for any added fill. According to the City's regulations, compensatory storage must be located within the project area and maintain a direct connection to the floodplain.

However, existing site constraints and project boundaries limit the ability to provide that compensatory storage. Therefore, fill in the floodplain should be minimized to reduce the need for mitigation in these constrained areas.

Purpose

The purpose of the project is to address the deteriorating condition and increasing maintenance costs of the 10th and 11th Street structures while accommodating east-west traffic over the Big Sioux River and BNSF railroad. The project will consider the City of Sioux Falls' and Metropolitan Planning Organization's transportation plans for the area.

Needs to be Addressed

- Deteriorating structure condition
- Increasing maintenance costs
- Geometric deficiencies
- Transportation system linkage

