Safe Streets and Roads for All Users

# SS4A Action Plan

*for the city of*

## City of South Sioux City

*in the County of*

## Dakota County

*in the state of*

## Nebraska

**Prepared by SIMPCO 2022**

simpco

2022

**RESOLUTION 2022-102**

**RESOLUTION BY THE CITY OF SOUTH SIOUX CITY, NEBRASKA ADOPTING A ZERO GOAL TO ELIMINATE FATAL AND SERIOUS INJURIES FOR ALL ROAD USERS CREATING A SAFE SYSTEM FOR ALL**

WHEREAS, the City of South Sioux City establishes a Zero fatality by 2030 for all road users including those who drive, walk, bike, ride (passenger and transit) and travel by other modes;

WHEREAS, the City of South Sioux City by Ordinance 2011-16, Resolution 2011-249 establishes Complete Streets incorporates elements of planning, design and construction for pedestrians, bicyclists, transit riders, persons of all abilities, which promoting safe and efficient operation for all users;

WHEREAS, safe road system elements include Safe Road Users; Safe Vehicles; Safe Speeds; Safe Roads; and Post-Crash Care;

WHEREAS, traditional road safety strives to modify human behavior and prevent all crashes, the Safe System approach also refocuses transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity and save lives.

WHEREAS, it is the desire of the City of South Sioux City to formalize a commitment to the principles of Safe System throughout all city departments.

NOW THEREFORE, BE IT RESOLVED BY THE CITY OF COUNCIL OF THE CITY OF SOUTH SIOUX CITY, NEBRASKA, that the City of South Sioux City commits to a Safe System approach which has the following elements:

1. While no crashes are desirable, the Safe System approach prioritizes crashes that result in death and serious injuries, since no one should experience either when using the transportation system.

2. People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to accommodate human mistakes and injury tolerances and avoid death and serious injuries.

3. People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities.

4. All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes don't lead to fatal or serious injuries.

5. Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

6. Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.

7. All city departments will be required to address safe system approach with integrated training, shared implementation strategies, to achieve the goal of Zero while adhering to the aforementioned Resolution and Ordinance already adopted.

NOW THEREFORE, BE IT RESOLVED BY THE CITY OF COUNCIL OF THE CITY OF SOUTH SIOUX CITY, NEBRASKA, that the City of South Sioux City will be a Zero Community of Practice through the adoption and implementation of Vision Zero and applying the Safe System Approach while growing a positive safety culture in the community through a holistic view indicated by the principles and elements outlined above

PASSED AND APPROVED this 11th day of July 2022.

MAYOR

ATTEST:

CITY CLERK

CITY OF SOUTH SIOUX CITY, NEBRASKA
SEAL
INCORPORATED JUNE 4, 1887

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# Leadership Commitment and Goal Setting

## Established policies and practices

The City of South Sioux City, by resolution and by action, has committed to a safe system approach that establishes the goal of zero fatality and zero transportation-related serious injury by 2030. To attain this goal, the city has committed to developing a transportation network dedicated to the welfare of all road users regardless of travel mode – drive, walk, roll, bike, and ride. A series of planning meetings, data collection and analysis, and public input led to the development of the Safe Streets and Roads for All (SS4A) Action Plan. Supporting documentation to the city's long-standing commitment to its residents are referenced throughout include the following and available for review on the city's website at www.southsiouxcity.org with links provided.

- Complete Streets Resolution and Ordinance 2011-249:
  https://www.southsiouxcity.org/egov/documents/1662062702_6371.pdf
- South Sioux City Comprehensive Plan:
  https://www.southsiouxcity.org/egov/documents/1521832006_19409.pdf
- Zero Goal Resolution 2022- 102 (as included)
- SS4A Action Plan (9/12/2022) as presented herein.

## South Sioux City SS4A Committee

To accomplish the goals set forth in this plan, a development and implementation planning team was established including key city staff and a collaborative team of representatives from the County of Dakota County, Nebraska, South Sioux City Community School District, the area chamber of commerce, and the MPO. The inaugural planning team includes the following.

- Oscar Gomez – Public Works Director, Assistant City Administrator, South Sioux City
- Gene Maffit – Parks and Rec Director, South Sioux City
- Pat Somsky – Grant Administrator, South Sioux City
- Ed Mahon –Police Chief, South Sioux City
- Joan Spencer – Clerk, Dakota County
- Becky Eckhardt – Director of Student Services, South Sioux City Community Schools
- Melanie Gillaume – Membership/Tourism, South Sioux City Chamber
- Erin Berzina – Planning Director, SIMPCO

## Committee Roles

SIMPCO is the MPO for Dakota County, including South Sioux City and serves a tristate region of Iowa, Nebraska, and South Dakota as a catalyst to promote best planning practices and advocate partnerships throughout the region. As such, SIMPCO assists member communities in several capacities including transportation planning. SIMPCO conducted an examination and analysis of community traffic issues in terms of public perspective in addition to city policy, practices, and development to assist the city with a strategic action plan that includes leaders, citizens, and other stakeholder groups, while soliciting input from diverse populations within the community.

While this Action Plan is specific to the City of South Sioux City, support and coordination with regional partners is imperative to successful implementation and sustainability. South Sioux City Community Schools aided in the identification of student-focused safety concerns and collaborative projects in the short and long term. As a thriving rural community, South Sioux City gives full consideration to future development which involves addressing the city's planning boundaries which includes a one-mile zone surrounding city limits. Coordination with County is essential in plan sustainability to ensure consistent development pursuits and related supports. Participation by the South Sioux City Area Chamber of Commerce and Tourism Bureau includes perspective for

projects in relation to their impact and benefit to future growth and development. Finally, conversations with the residents of South Sioux City ensure that projects are sensible in their intent to benefit the community as a whole and not to merely meet a set of pre-determined criteria.

## Introduction

The City of South Sioux City has committed to advancing roadway safety through its Zero Goal resolution as guided through this Action Plan. Transportation network improvements that address walking, biking, transit, and driving, are to be strategically determined using priorities established here and in conjunction with the South Sioux City's Comprehensive Plan, Zero Goal initiative, Complete Streets Policy, Climate Change Plan, housing development policies, and planned growth. The city is motivated to further develop their trail network, road network features to safely accommodate pedestrians, and bicycle infrastructure. They are an active member of SIMPCO's Bicycle and Pedestrian Roundtable, and earned a bronze Bicycle Friendly Community designation from the League of American Bicyclists. Advancement of the city's Bicycle Friendly Community status was considered as a part of this plan's development.

In order to achieve safe streets and roads for all users, the City of South Sioux City has developed the SS4A Safety Action Plan. The Action Plan builds on the Complete Streets Ordinance and Resolution of 2011 while incorporating essential factors of national safe streets initiatives emphasized through the Bipartisan Infrastructure Law to prevent roadway deaths and serious injury. The Action Plan addresses key components as outlined below.

Leadership Commitment and Goal Setting
    Commitment Resolution
Introduction
Community Profile
Plan Development
    Engagement and Collaboration
    Equity Considerations
Current Transportation Policy
Safety Analysis and Potential Solutions
Strategy and Project Selections
Progress and Transparency

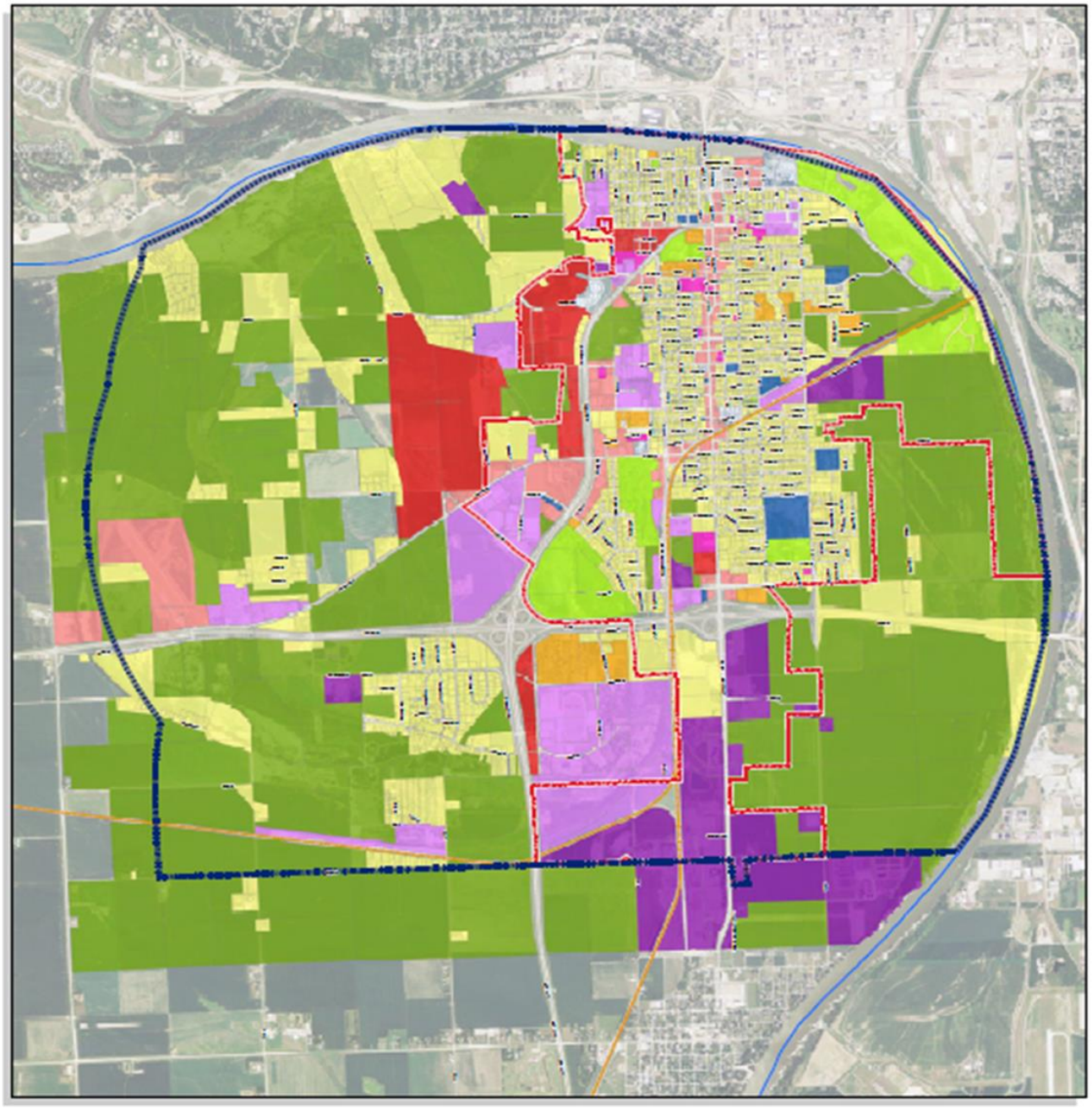
## Community Profile

South Sioux City is located in northeast Nebraska, flanked to the north and east by a bend in the Missouri River. It lies at the intersection of the Nebraska, South Dakota, and Iowa state lines. South Sioux City is part of the Sioux City five-county Metropolitan Statistical Area (MSA) IA-NE-SD MSA with a population of 149,940 residents. The area is classified as a rural community by the DOT which is indicated in their definition, "Urbanized Areas with population fewer than 200,000 will be considered rural". To traverse to South Sioux City from Iowa or South Dakota from the north, travelers must cross the Siouxland Veterans Memorial Bridge from Sioux City, Iowa across the Missouri River. This four-lane road accommodates a walking/biking path along the east edge of the bridge.

South Sioux City is a diverse community not only in its characteristics of its residents but the city as a whole. The city is a composite of many small towns and villages, now merged into one area. It was home to Covington, Harney, and South Sioux City and its roadwork is indicative of these historical mergers. It is also home to 14,043 residents reflective of growing cultural and language diversity as detailed in the following analysis.

Analysis of the community's demographics, housing, and economics significantly contributes to an effective

approach to equity in project planning and implementation. Discussion of South Sioux City's existing transportation network provides context for the safety analysis and proposed strategies.



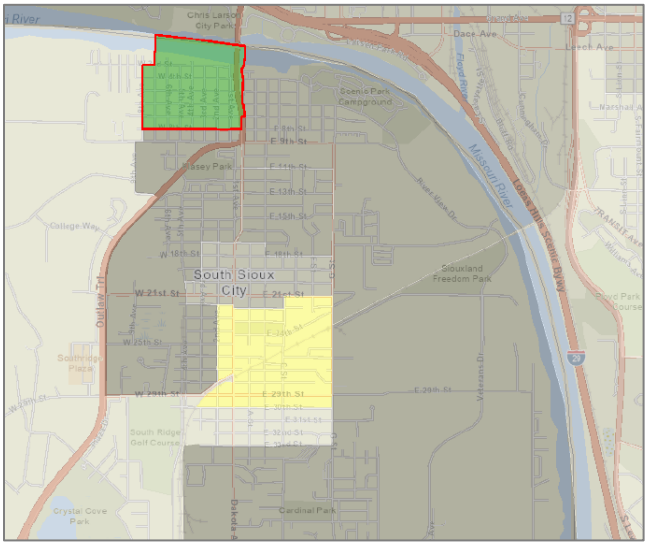
## Land Use

Development in South Sioux City is primarily oriented toward the major transportation channels of Dakota Avenue, G Street, Highway 77, and Interstate 129. Most of the commercial development in the city follows Dakota Avenue and Highway 77, the highest-volume north-south routes. On the west side of the city, big box stores with large footprints are located off of Highway 77, while strip malls populated by local businesses and auto-oriented restaurants make up the commercial development along Dakota Avenue. Along G Street lies several schools, and offers motorists an alternative drive when Dakota Avenue becomes bogged down. Major east-west routes across town include E 6th, E 9th, W 21st, W 29th, and 39th streets. Industrial uses are located in large part along the Burlington Northern Santa Fe (BNSF) and Union Pacific (UP) railways intersecting the city near 29th street and near the southern perimeter of the city. Train traffic accommodates 14 trains daily with approximately 110 cars or less. Some light industrial uses are located adjacent to residential areas, while heavy industrial uses have the highest concentration in the southernmost part of the city, easily accessible from the railway, Dakota Avenue, and Interstate 129, which connects Interstate 29 in Sioux City to Highway 20 in Nebraska. Residential areas lie predominantly between Riverview Drive to the east and Highway 77 to the west.

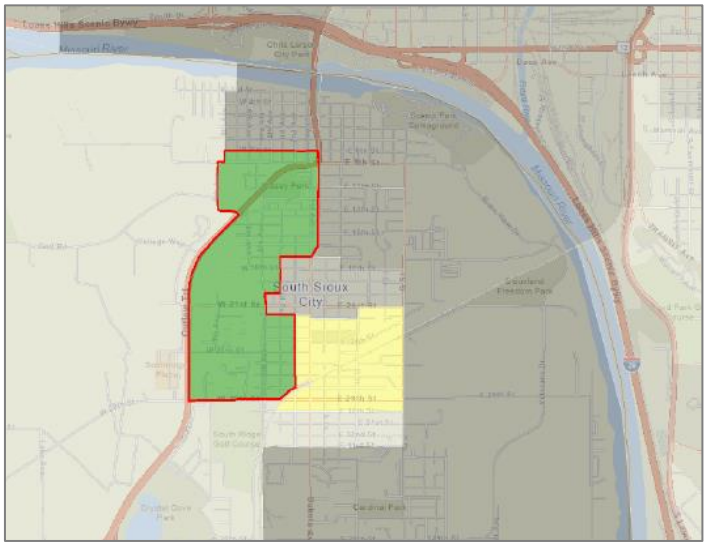
### Future development/expansion

Five large housing subdivisions and one new school is underway and planned as outlined by the South Sioux City Housing Development Plan included in Appendix C. A total of 1,435 mixed-use housing units are underway on the eastern edge of the city. Each of these housing developments creates new neighborhoods and meets the dire need for housing for the growing population.

Additionally, the city has recently annexed adjacent land east of Dakota Avenue and south of the interstate, in anticipation of future developments by Ho Chunk Capital. The group plans to build a racetrack and casino, as well as additional housing units in the coming years. While these developments represent an opportunity for city revenue and jobs for residents, the impact of these large-scale projects on the transportation network should be considered in this safety plan. South Sioux City is a relatively small town, and precautions should be made to ensure the increase in traffic volume does not cause congestion or present safety hazards for residents.




*Census block group 310430101003; 72nd percentile for traffic proximity compared to State of Nebraska.*




*Census block group 310430101004; 86th percentile for traffic proximity compared to State of Nebraska.*

### Environmental Justice

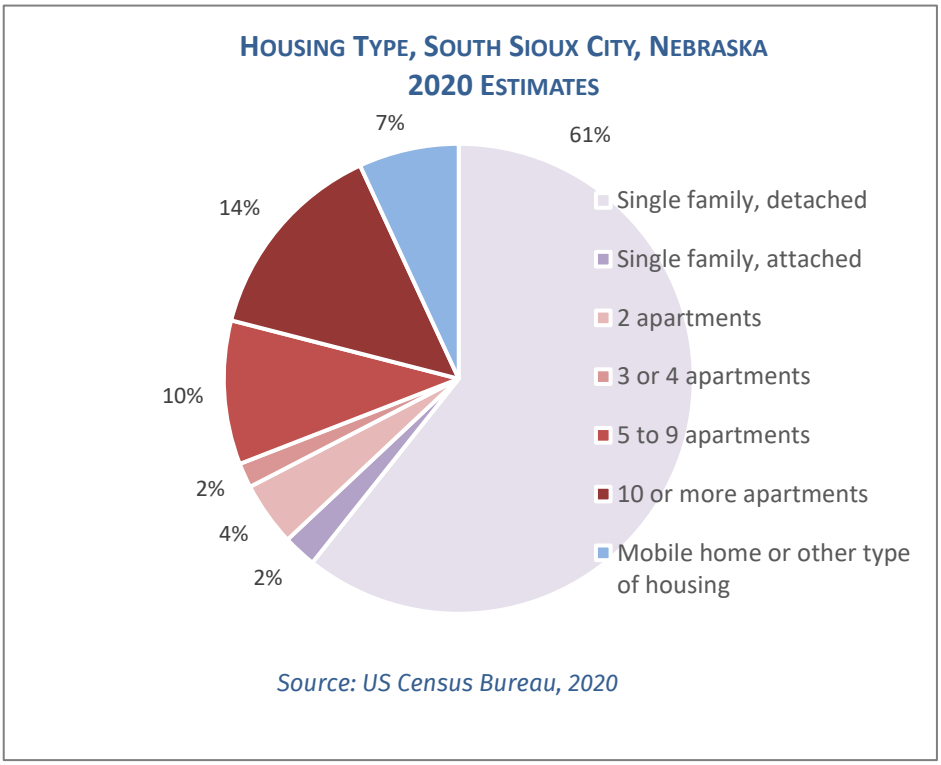
Using the U.S. Environmental Protection agency's EJScreen Tool to determine residents' vulnerability to various environmental health hazards, it was found that South Sioux City falls at or above the 88th percentile compared to the State of Nebraska on all 12 of the environmental justice indexes assessed in the tool. The leading

indicators related to transportation pollution and risk compared to state-level averages are ozone, diesel particulate matter, air toxics cancer risk, and traffic proximity. Ozone levels for all block groups are at the 89th or 90th percentile, air toxics cancer risk is at the 75th percentile, and diesel particulate matter is at the 92nd percentile of state levels. Air pollution in South Sioux City likely stems from residential proximity to truck routes, industrial uses located along the railway and railyard that border many residential blocks, and several heavy industrial operations on the southern end of the city such as food production, food processing, trucking and distribution companies, and other freight transportation logistics establishments. While all block groups have a very high percentile of ozone, diesel particulate matter, and air toxics cancer risk, there are two block groups in particular that are at or above the 72nd percentile for traffic proximity. These block groups, shown in the figures above, are both located on the west side of South Sioux City, in neighborhoods surrounding highway 77.

The demographic index of South Sioux City residents, which assesses the concentration of people of color and low-income residents, is 50% or at the 88th percentile of state residents. The socioeconomic indicators evaluating the concentration of people of color, linguistically isolated residents, and residents with less than a high school education, are particularly high: at or above the 93rd percentile of Nebraskans. These demographic factors limit residents' ability to overcome unforeseen health or financial challenges and reduce their housing mobility. This increased vulnerability amplifies the risks of transportation-related environmental hazards located within the city. Mitigation of such hazards should be considered when planning future safety-enhancing transportation projects.

## Housing

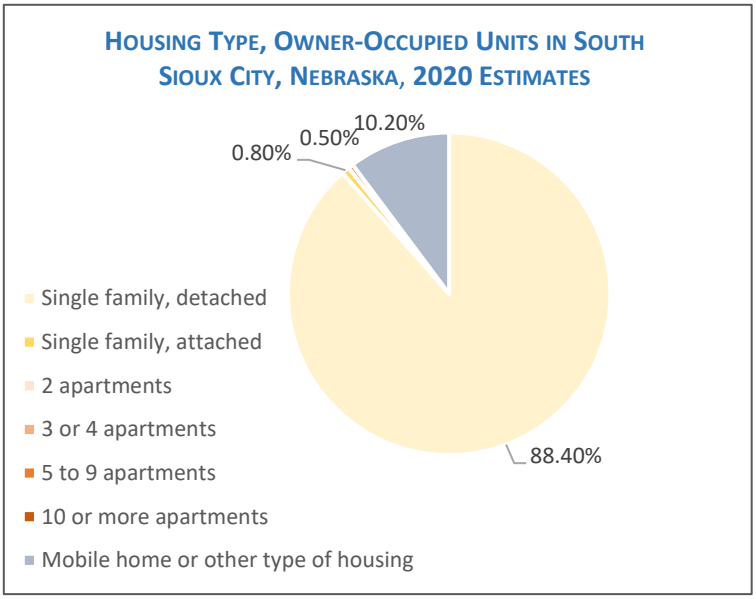
A majority of South Sioux City's housing is comprised of detached single-family homes, with 61 percent of units taking this form. About two percent are single-family attached units incorporated into neighborhoods dominated by single family detached homes. Multi-family buildings of varying density make up 30 percent of housing units and these are typically located on the fringes of residential areas where larger lots were available to develop these complexes. Six mobile home parks are located in South Sioux City, accounting for about seven percent of housing units: Siouxland Estates, Shady Elm, Lake Village, Orr, Parkview, and Tan Tara Hollow.

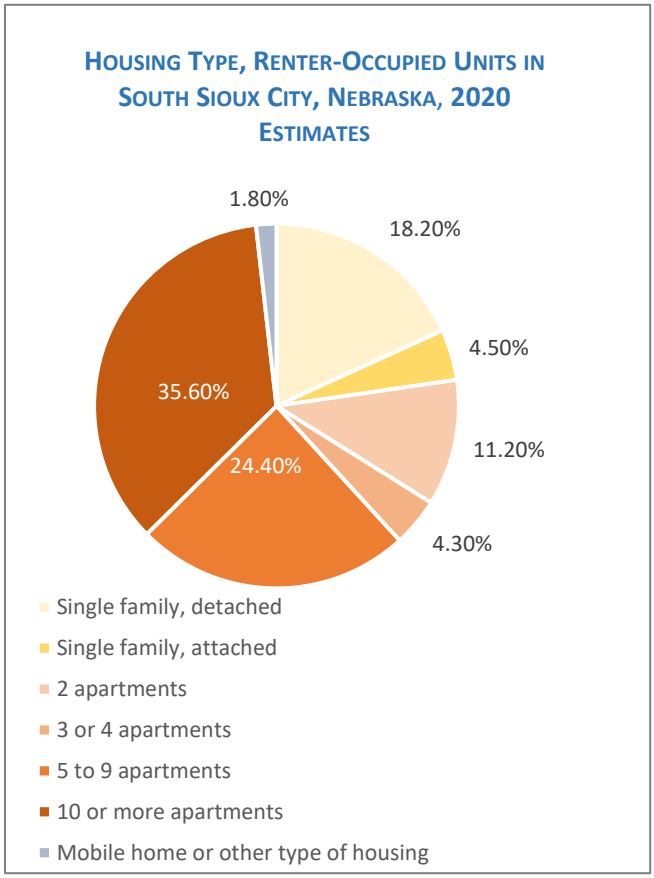



*Source: US Census Bureau, 2020*

Residents who rent rather than own their home are much more likely to live in multi-family apartment buildings, while those who own their home almost exclusively live in single-family and mobile homes. Most of the largest apartment complexes in South Sioux City are located in census tracts 101.01 and 101.02, where roughly half of residents are renters.

Housing units are disproportionately owned by some racial or ethnic groups than others. Most notably, we would expect 276 Black or African American residents and 87 American Indian residents to own homes, but instead it was estimated in 2020 that there were just 9 and 52 homeowners of these groups respectively. This represents a 187% difference in the number of Black or African American homeowners than would be expected based on the overall proportion of owners and renters in South Sioux City, and a 50% difference for American Indian homeowners.

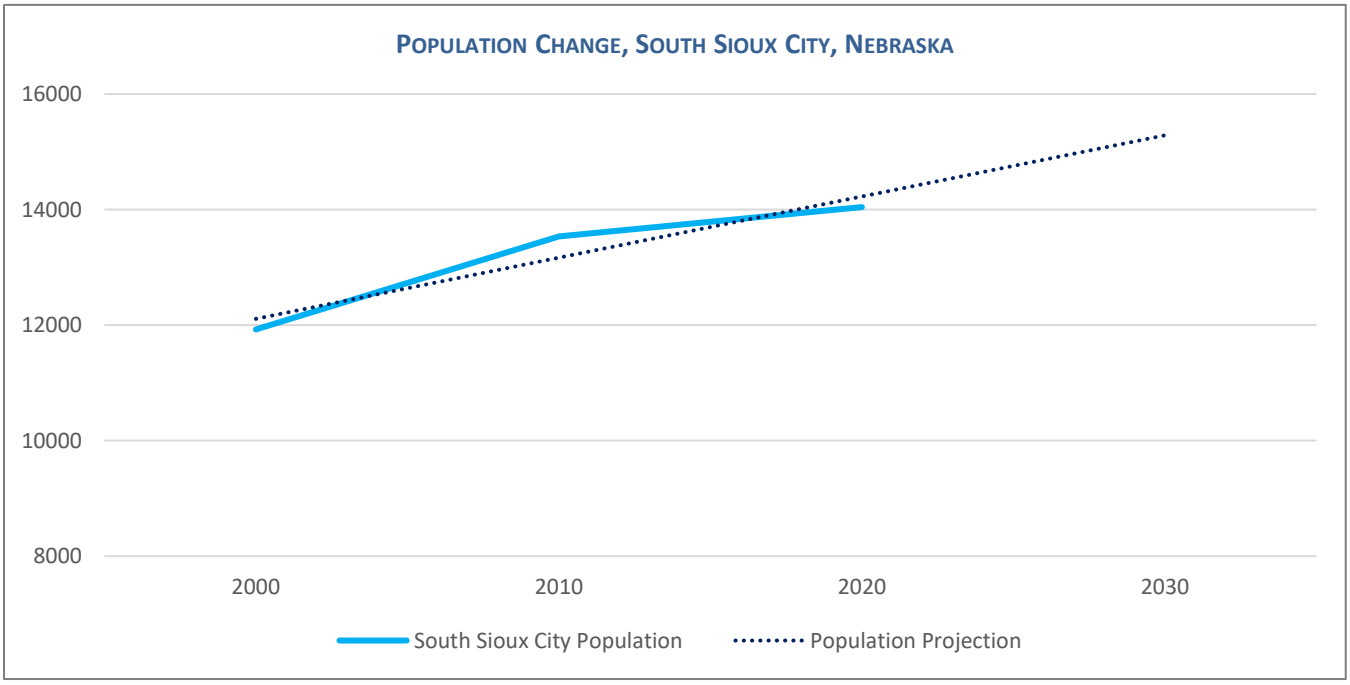



## Demographics

South Sioux City's population has grown quite steadily over the past two decades, from just under 12,000 residents in 2000 to about 14,000 in the 2020 census. Assuming a linear pattern of growth at the same rate into the future, the population would approach roughly 15,250 in 2030.

Over the past two decades, an increasing percentage of residents living in South Sioux City were born in a foreign country and moved to the United States, suggesting that immigration accounts in part for the city's population growth during this time. In the recent past, migration from African countries has been increasing year after year, approaching one fifth of the foreign-born population in 2020. A majority of foreign-born residents were still originating from Latin American countries as of 2020.



As demonstrated in Table 1, the population reflects a mosaic of growing diversity.

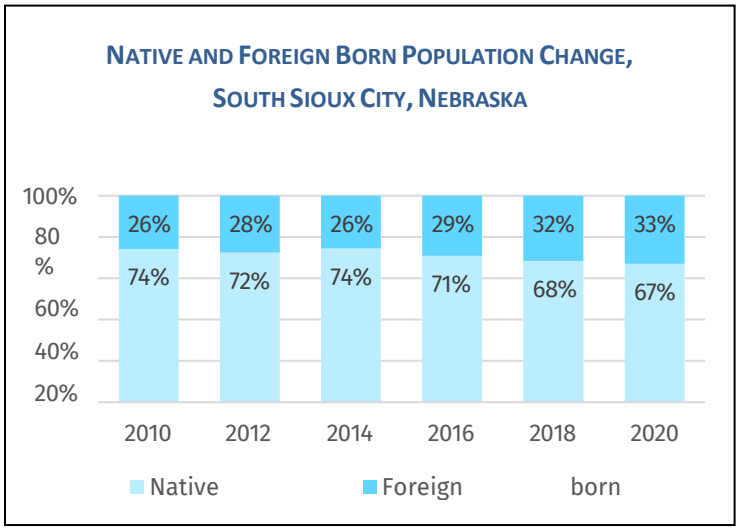
**TABLE 1: CITY OF SOUTH SIOUX CITY - DEMOGRAPHICS**

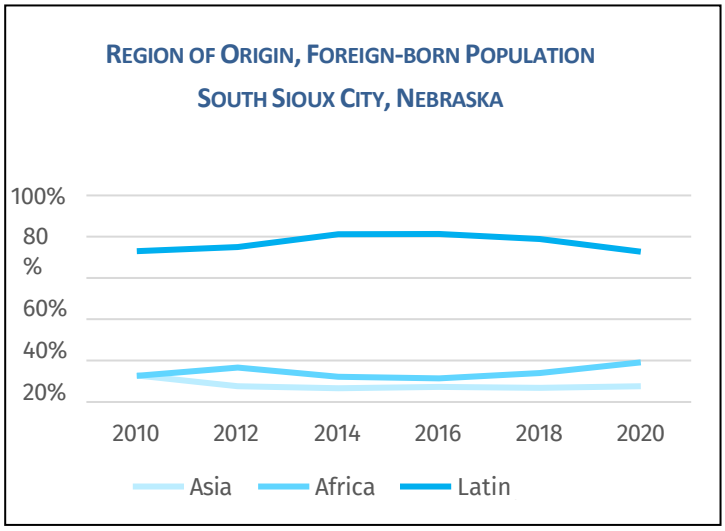
| Population | South Sioux City, NE | Dakota County NE | Nebraska | United States |
|---|---|---|---|---|
| Population | 14,029 | 21,582 | 1,961,504 | 331,449,281 |
| | | | | |
| White alone | 51.9% | 82.3% | 88.1% | 76.3% |
| Black/African Am | 9.1% | 6.7% | 5.2% | 13.4% |
| American Indian | 2.4% | 4.1% | 1.5% | 1.3% |
| Asian | 3.2% | 3.8% | 2.7% | 5.9% |
| Native Hawaiian | 0.0% | 0.6% | 0.1% | 0.2% |
| Two/More Races | 8.8% | 2.5% | 2.3% | 2.8% |
| Hispanic/Latino | 47.0% | 39.3% | 11.4% | 17.5% |
| White Alone, not Hispanic or Latino | 36.6% | 46.3% | 78.2% | 60.1% |
| | | | | |
| Foreign born persons | 33.0% | 23.8% | 7.4% | 13.5% |
| Language other than English Spoken at home | 53.5% | 41.0% | 11.8% | 21.5% |

Source: U.S. Census Bureau, 2020: https://www.census.gov/quickfacts/fact/table/US

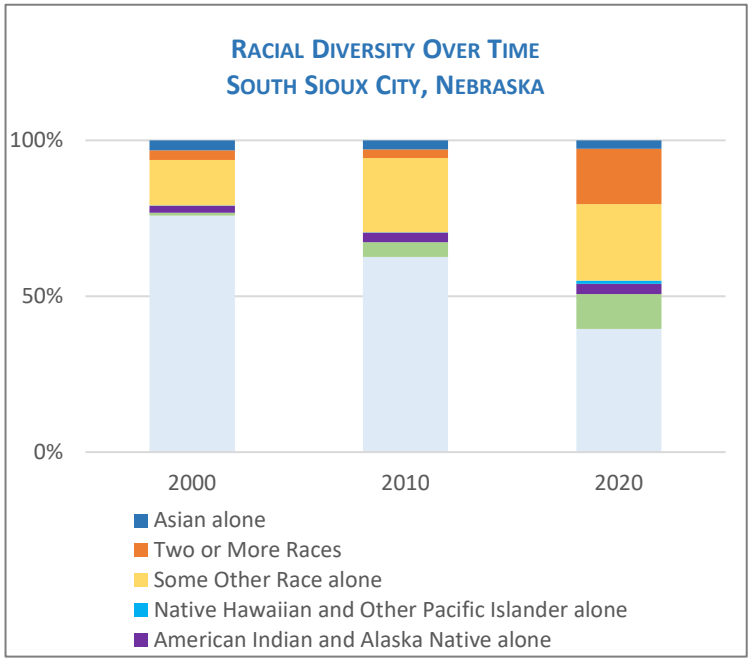
In Census tracts 101.01, 101.02, and 102, the proportion of foreign-born residents is roughly one third of the population. Many residents of these neighborhoods can be expected to have a native language other than English and feel more comfortable communicating in that language.

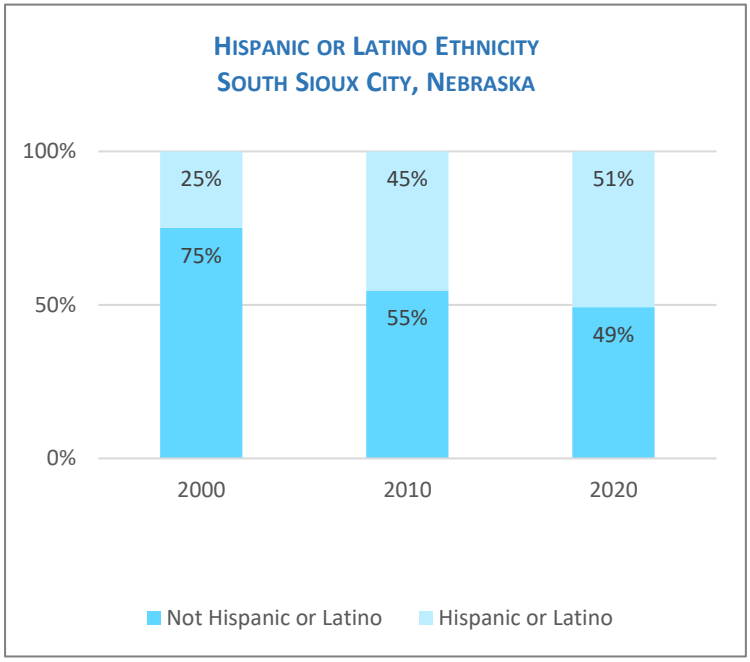
It was estimated by the American Community Survey in 2020 that over half of the population spoke a language other than English at home. About 80% of these residents spoke Spanish at home, followed by eight percent speaking "other languages", and less than five percent speaking Asian and Pacific Islander languages, or other Indo-European languages. It is likely that the "other languages" category represents the significant population of residents who are of African heritage. Many African countries are represented in South Sioux with individual languages being nearly innumerable. However, families responding to community engagement efforts have most frequently spoken Somali and Orduno. There is a notable number of households where a language other than English is spoken at home that also have limited proficiency in speaking English. Over one quarter of South Sioux City's residents reported speaking English "less than very well" in the 2020 American Community Survey estimates. In census tracts 101.01 and 102, the majority of residents who have limited skill with English speak Spanish at home, while those with limited English in census tract 101.02 most frequently reported speaking "other languages" at home.



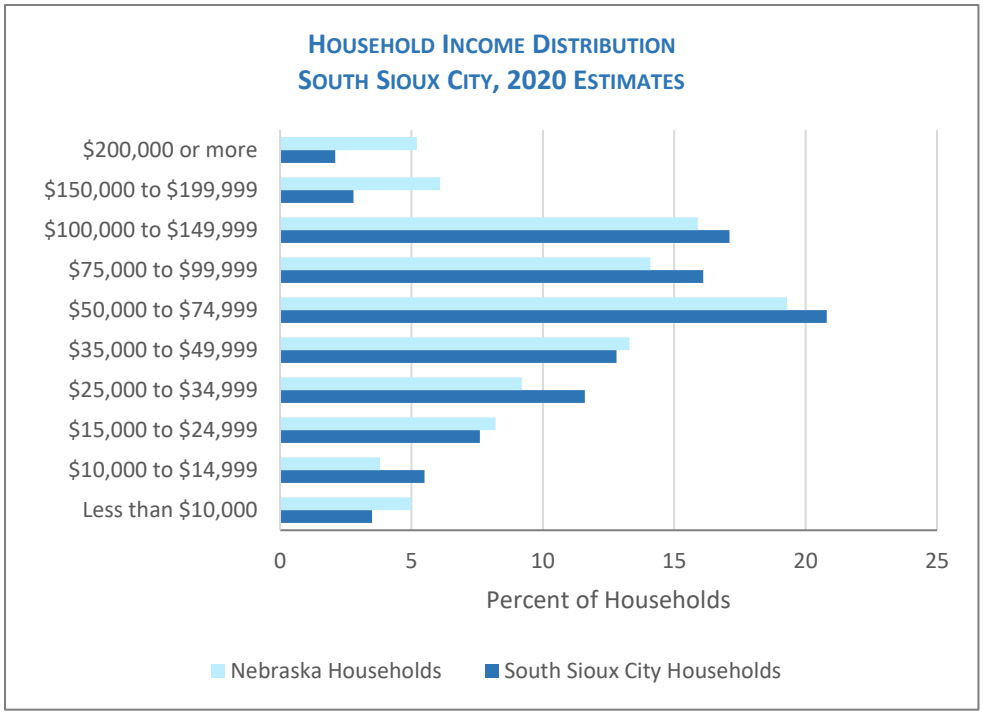



South Sioux City has become increasingly racially and ethnically diverse over the past 20 years. In the year 2000, residents of Hispanic or Latino ethnicity accounted for one quarter of the population, and by 2020, that percentage had increased to over half of the population. In contrast, 12 percent of residents in the state of Nebraska overall identified as Hispanic or Latino in the 2020 census. In a similar pattern, the city has grown in terms of racial diversity during this same period. In the year 2000, about 25 percent of residents were non-white or multi-racial, and 20 years later, that percentage had increased to about 60 percent. In the state of Nebraska, 14 percent of residents identified as such in 2020.




The median age of South Sioux City residents was estimated in 2020 to be 32.7, about 4 years younger than the Nebraska median of 36.6 years. The child dependency ratio describes the proportion of people younger than 15 to those ages 15 to 64. By comparing South Sioux City's child dependency ratio of 49.3 to Nebraska's of 41.4, it is clear that there is a higher proportion of children living in the city compared to in the state as a whole.



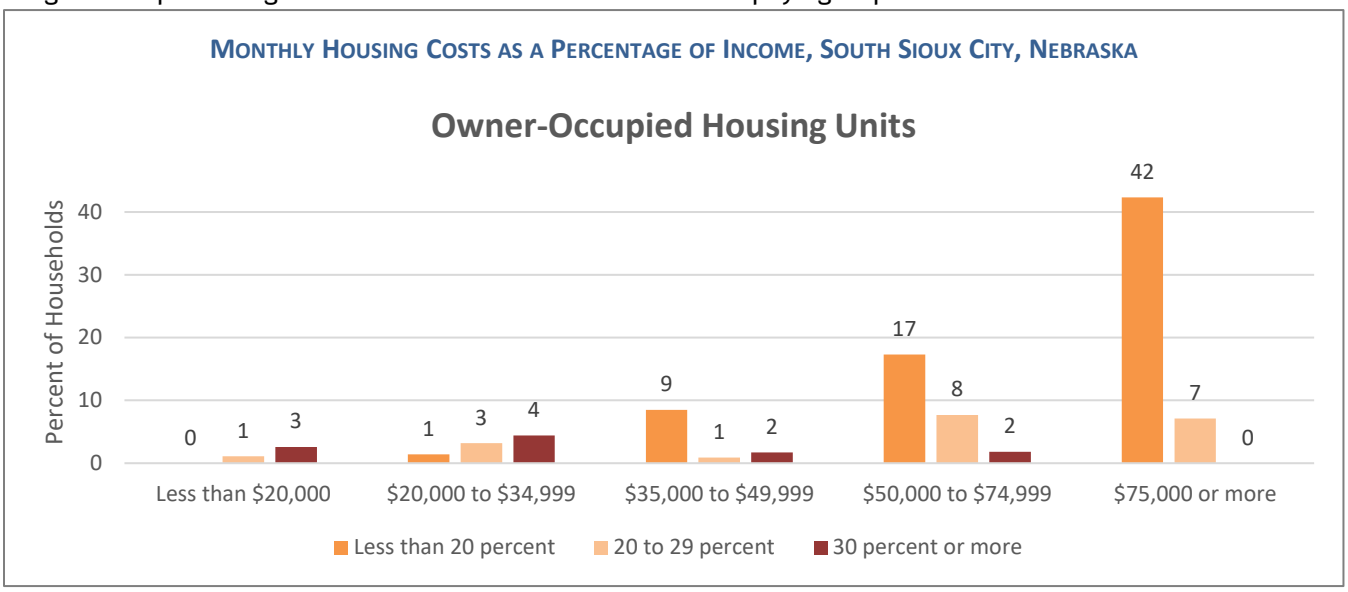

## Economics

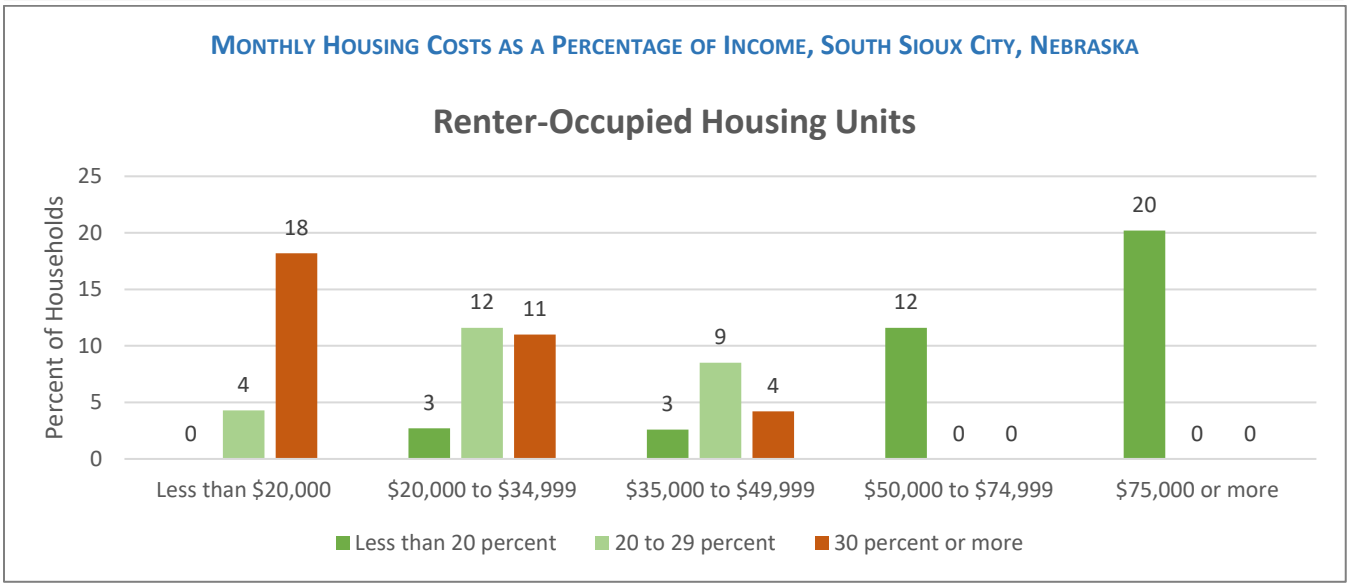
### Household Income

The median household income in South Sioux City of $56,744 is 11 percent lower compared to $63,015 at the state level. While the overall pattern of income distribution is similar across many income categories when comparing

South Sioux City and the state, the largest difference can be observed in the highest income categories. A far smaller proportion of households in South Sioux City were earning above $150,000 in 2020 compared to households at the state level.

The distribution of monthly housing costs as a percentage of household income in South Sioux City is remarkable when comparing owner and renter occupied units. When analyzing housing costs relative to income for rental units only, it is clear that renters are far more likely to be burdened financially by housing costs, with a significant percentage of households at lower income levels paying 30 percent of income or more toward rent.



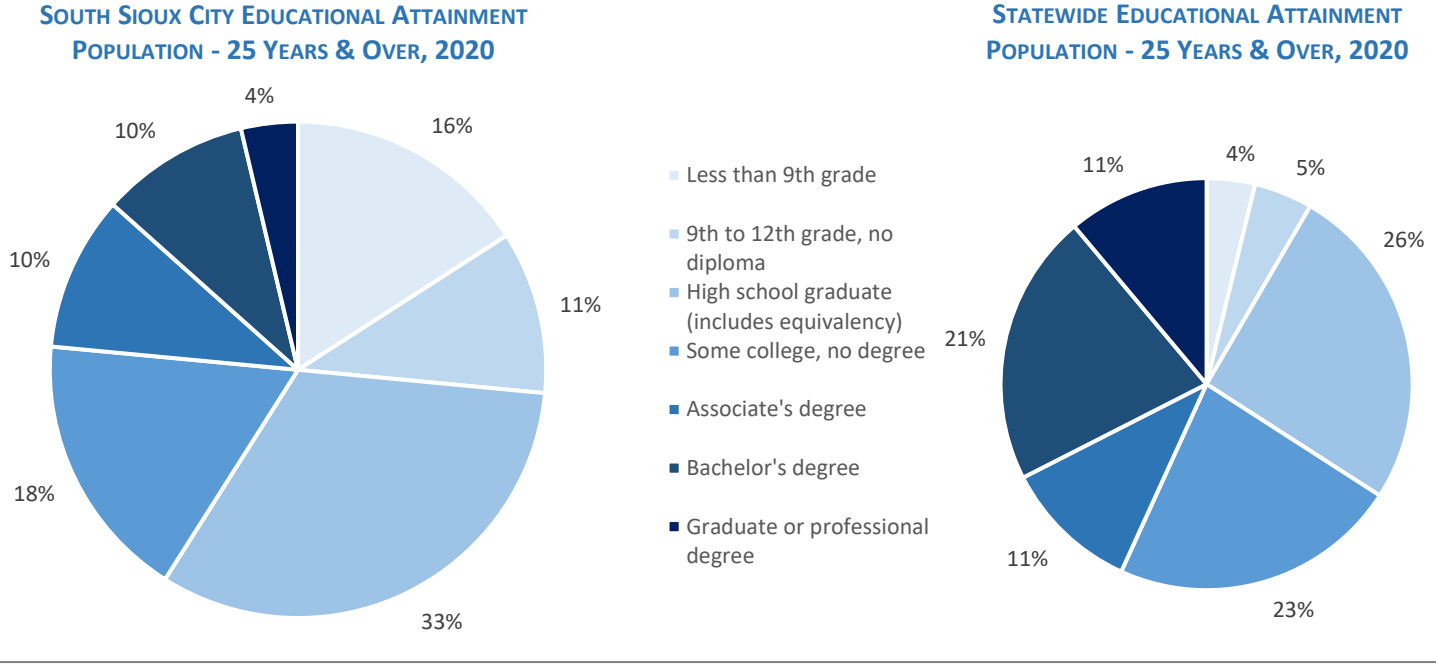

## Poverty

The percentage of residents in South Sioux City estimated in 2020 to have earned incomes below the federal poverty level in the past 12 months was 14 percent. The proportion of residents living on incomes below the poverty level varies greatly depending on the neighborhood in which they live. The areas with the highest estimate of residents earning below the poverty level in 2020 were Census tracts 101.01 and 103 where over one third and about 18 percent of residents were living in poverty, respectively.

The primary industry of employment for residents of South Sioux City is ag-related manufacturing, with an estimated 35 percent of the population ages 16 and over employed in this industry in 2020.

South of the city has the largest meat industry in the state – Tyson Foods which employs over 4500 individuals, Empirical Foods (formerly BPI), Richardson Milling – an oat processing plant, and Ingredion – a plant-based food processing plant. Combined, these industries employ large number of shift workers who travel through South Sioux City for work.

About 16 percent of residents were estimated to be employed in the Educational Services, Health Care, and Social Assistance fields. The most frequent occupational category across all industries was Production, Transportation, and Material Moving, with 37 percent of workers in these occupations, followed by Management, Business, Science, and Arts with about 25 percent of workers falling into this classification.




On average, educational attainment tends to be lower in South Sioux City when compared to achievement at the state level. The percentage of residents age 25 years and over in South Sioux City who were reported to have graduated from high school or earned an equivalent credential in 2020 was about 74 percent, while 92 percent of Nebraska residents had this level of education. Similarly, 13 percent of South Sioux City residents were estimated to have earned a bachelor's degree or higher compared to about one third of Nebraska residents.

Access to education in South Sioux City varies significantly on average based on neighborhood of residence and race and ethnicity. The high school graduation rate of residents in Census tracts 101.01 and 102 were estimated to be about 10 to 13 percent lower than tracts 101.02 and 104. Furthermore, educational attainment varied substantially based on race and ethnicity, revealing racial disparities in educational access. Stark examples of this inequity come to light when comparing the rate of high school graduation amongst Black or African American residents (71%), Asian residents (43%), some other race alone (45%), and Hispanic or Latino residents (52%), compared to non-Hispanic or Latino White residents (95%).

## Resiliency

According to FEMA's National Risk Index, Dakota County is most at risk from extreme weather hazards such as tornadoes, winter weather, strong winds, cold waves, heat waves, and hail. The social vulnerability index provides insight as to the community's ability to adapt to and withstand the impacts of these hazards. This index is "relatively high" for Dakota County, measuring higher than 88.3 percent of counties in the United States. Resilient design should be considered in transportation safety improvements to ensure that the community of South Sioux City is well-situated to minimize disruptions from extreme weather events.

## Transportation network

As previously described, the primary arterials of South Sioux City's roadway network are Dakota Avenue, G Street, US Highway 77, and Interstate 129. The city follows a grid system layout with streets running east to west and avenues running north to south. Apart from faster highway speeds, speed limits on most roads are 25 miles per hour and 20 miles per hour in school zones.

## Roadway designs

Much of Dakota Avenue is designed as a two-lane road with a center turn lane. This is the case between 11th street and 18th street, south of 29th street through the residential neighborhoods, and on the commercial corridor leading down to 39th street and the entrance to Interstate 129. Near busy four-way intersections in commercial corridors, the roadway expands to four lanes with a central median to divide opposing lanes of traffic, while dedicated lanes and signals are used for vehicles making left turns. The commercial corridors on Dakota Avenue are characterized by frequent, wide driveway entrances to the many businesses and restaurants that line this central, busy street.

Traveling south on Dakota Avenue from the north end of town, drivers encounter a major intersection at 9th street. Here, Dakota avenue continues south, and some traffic moves to the right to enter Highway 77 branching off to the southwest. The roadway design on Highway 77 consists of two lanes traveling in either direction with a lane-width central median. At signalized intersections, the central median narrows to allow for left turn lanes. Entrances to the highway are minimal. Service roads provide access to the businesses along the commercial corridor, allowing traffic exiting and entering the highway to be controlled by six signalized intersections between the northern entrance and the southern interchange.

Residences are by and large arranged on a grid pattern between the major arterials. Residential streets are designed for two-way traffic and allow street parking on both sides unless otherwise marked. While the naming convention follows a grid, not all streets remain connected throughout the city. Many end after several blocks, which prevents traffic from cutting through residential neighborhoods. A few notable exceptions to this broken grid pattern are 5th avenue on the west side, as well as B and G Streets on the east side, which run parallel to Dakota Avenue, uninterrupted for many blocks.

## Bike and Pedestrian Network

Most areas of the city have sidewalks, with several exceptions. In older neighborhoods and commercial areas primarily on the north end of the city, the sidewalks are relatively narrow, compared to trail-width sidewalks that have been constructed in the past several years, such as around the Flatwater Apartment complex, and along much of the US Hwy 77 commercial corridor. The city has a 10-foot-wide primarily concrete trail network that extends 21 miles, primarily around the perimeter of the city. The bike path crosses the Missouri River at the Veterans Bridge in the north of the city and connects three states – Iowa, Nebraska, and South Dakota. The trail network in South Sioux City is also connected with an on-street bike network that is indicated by bike route road signs. There are plans to expand the network to provide more connectivity for alternative modes of transportation in the future, and trails are required for all new housing subdivision construction.

## Commuting

Out of state workers from Iowa and South Dakota cross the bridges over the Missouri River at the north and south edge of the city for employment, primarily to the large industries to the south and health care facilities to the north and west in the city. The primary means of commuting to work in 2020 for about 68 percent of South Sioux City residents was driving alone by car, followed by carpooling which was the case for nearly 20 percent of working residents. About four percent, or 240, were estimated to walk to work and less than one percent used public transportation. The remaining seven percent of residents worked from home, negating the need for commuting altogether.

Nearly 60 percent of residents in 2020 reported commuting to work within Dakota County, while 40 percent worked out of state. For all drivers, including carpools, the median commute length was under 20 minutes. For transit riders, the median length was 20-29 minutes, but a quarter of these commuters traveled an hour or longer to get to work via bus.

## Vehicle Access

While some residents who commuted to work by walking had access to a vehicle and likely lived within convenient walking distance to work, over one quarter of walkers in 2020 did so due to a lack of vehicle access. Over three quarters of South Sioux City residents commuting without a vehicle lived in census tract 101.01 in 2020 (about 215 residents). Residents in this area were far more likely than residents of other census tracts to rely on public transportation or walking to commute to work, representing 75% of the city's public transit users, and 66% of walkers.

## Transit network

South Sioux City contracts with the City of Sioux City in Iowa for accessible fixed route transit service. The bus operates in South Sioux City Monday through Friday, from 6:00 in the morning until 6:00 in the evening. There are just over 30 outbound stops on the looped route with about 20 inbound stops back to the transit transfer center in Sioux City. The route includes access to destinations such as grocery stores, the YMCA, parks, City Hall, several school campuses, and other points of interest. The bus makes one circuit per hour. Standard fare for adults is $1.80 per ride, $18 for a ten-ride pass, and $48 for a monthly pass. Reduced rates are available for students, seniors, Medicare recipients, and persons with disabilities. Children under five and veterans with service-related disability ride for free.

Siouxland Regional Transit System expanded On-Demand services into Dakota County in 2022. This system provides ADA-accessible, door to door transportation services to the general public between 5:30 AM and 7:00 PM, Monday through Saturday. Rides are scheduled at least 24 hours ahead of time. The service is free for rides between South Sioux City and other Dakota County destinations, excluding rides within South Sioux City. All other Sioux City Metro area rides are five dollars each way.

### Public Services Accessibility

Many of the city's public services, such as City Hall, the library, Haven House domestic violence social services, the South Sioux City Housing Authority, and the Northeast Community Action Agency, to name a few, are centrally located on or near Dakota Avenue with parking spaces available. Accessibility for pedestrians is possible via the sidewalk network for those walking or using mobility devices. Bus stops are located every few blocks on Dakota Avenue, allowing transit users to access these social services as well.

In a city that has historically been designed for vehicles first and foremost and initially designed as multiple small villages that have since been incorporated, it will take a concerted and continued effort to ensure that the roads and pedestrian infrastructure, particularly in neighborhoods that rely on alternative forms of transportation out of financial necessity, are safe for all users.

## Plan Development

The Safe Streets for All Committee of South Sioux City is made up of representatives from the city administration, the Parks and Recreation Department, Police Department, Public Works Department, the South Sioux City Chamber of Commerce, the South Sioux City Community School District, Dakota County, and the Metropolitan Planning Organization - SIMPCO. This group met to discuss the need for a comprehensive safety action plan to reduce the frequency of severe vehicle crashes and improve the safety of alternative modes of transportation. During initial meetings, this group identified immediate safety needs of the community and corresponding improvement projects to address these needs. In addition to these initially identified projects, the committee has relied on the planning team to compile demographic and transportation data as well as public input to inform the selection of transformative safety improvement projects with a longer time horizon. The committee has reviewed and submitted comments to the planning team for the draft of this plan and subsequent budget and has approved the scope and timeline of projects as presented.

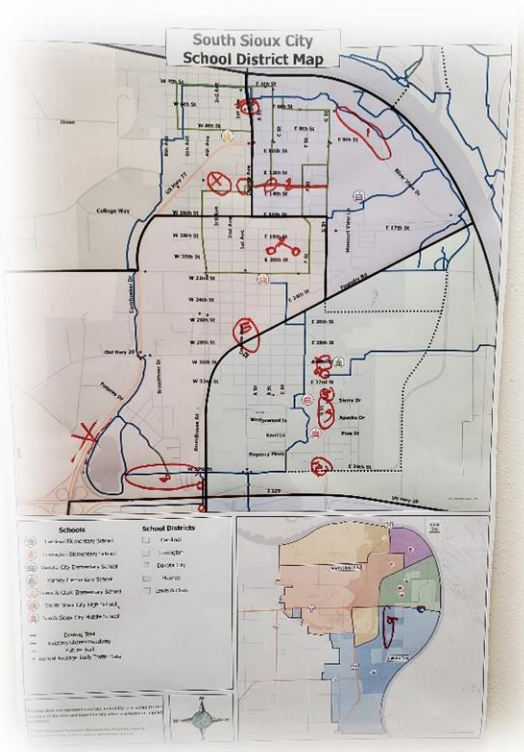
Going forward, this committee will annually review the safety action plan to evaluate progress toward the implementation of each planned project. This review will take place in advance of the annual budgeting process to ensure that projects the city should pursue according to the plan are accounted for in the Capital Improvement Program.

### Public Engagement Activities

Public engagement is integral to the development of this transportation safety action plan. While focusing on interactive opportunities, the planning team also created and distributed a survey in both Spanish and English as an alternative data collection tool. Available in paper and online, these surveys further enabled public comment about participants' comfort and safety levels while walking, biking, taking public transportation, and driving in different areas in South Sioux City. A combination of multiple choice, ranked priority, and open-ended questions allowed respondents to describe their personal walking, biking, riding, and driving experiences.

Prioritizing in-person conversations as means for collecting local data, the planning team attended fourteen already-established events to gather public input about transportation safety concerns. The team attended four Friday Coffee Hour networking events organized by the South Sioux City Chamber of Commerce to spread the word about the need for public input and distribute flyers with a link to the electronic survey. Throughout the five-day Dakota-Thurston County Fair, the planning team and project partners staffed a table in the vendor hall with a map of South Sioux City displayed. Attendees were encouraged to mark the map where they may have experienced or expect to experience safety concerns.

Conversations included discussion of intersection safety, missing sidewalks, school traffic congestion, and many other aspects that present safety concerns. Cards were provided to collect additional comments about the places they identified and ideas about how to make improvements. The survey, survey results, and a compilation of interactive responses are included in the appendix.




Additional in-person engagement was conducted during the district's back to school open house night at three South Sioux City Community Schools: Lewis and Clark Elementary, the middle school, and the high school. The planning team also conducted outreach during two food pantries at the St. Paul Methodist Church and the First Lutheran Church. One final open house event was hosted at City Hall prior to the regularly scheduled City Council meeting at the start of the public comment period for the draft plan. Each session included opportunity for attendees to map their concerns.

In between open house events, the team gave presentations about the plan and the need for public input to three community organizations with extensive outreach capacity within the human services network: the South Sioux Optimist Club, Voices for Food, and Growing Community Connections, a monthly collaborative meeting of approximately 130 regional health and human services providers.


Flyers were distributed by the South Sioux City Housing Authority to landlords of housing complexes for veterans, low-income residents, and residents with disabilities; and posted at the YMCA, the City Library, and the joint Northeast Community College and Wayne State College Center campus. Notices of the Open House to kick off the public comment period included links to the electronic surveys in English and Spanish, link to the Action Plan draft and were posted on the city website's home page, the city's Facebook page, SIMPCO's Facebook page, and the South Sioux City Public Library's home page.

City administrators contributed to outreach and plan development by providing data, contacts of community leaders connected to targeted outreach populations, and input from observed trends and known safety issues. The City also assisted with marketing the survey and open house events.

In choosing events to promote the Safety Action Plan and establishing community connections, the planning team intentionally targeted opportunities involving diverse populations (the fair, library, YMCA, schools, and Northeast Community College/Wayne State College) as well as potentially disadvantaged individuals and families (Lewis and Clark Elementary School, food pantries, and service coordinators and agencies). Such measures were taken to ensure opportunity to participate by traditionally underserved persons. To further expand on equity and to incorporate South Sioux City's unique demographic make-up, this plan includes such in the following section of considerations.

## Equity Considerations

South Sioux City, Nebraska is a racially, ethnically, and economically diverse city. It was determined in the 2020 Census that 51% of South Sioux City residents identified as Latino or Hispanic ethnicity. Non- Latino or Hispanic people of color comprised 19% of the city's population.

According to estimates from the Census Bureau's 2020 American Community Survey, about 1,392 or 11.7% of Spanish-speaking residents aged five and over described their ability to speak English as "not well" or "not at all". Therefore, it was very important to the planning team to translate the survey into Spanish and provide translation services at all open house events to encourage these residents to engage with the planning process.

In addition to the prominent Latino population in South Sioux City, it was estimated in the 2020 American Community Survey that 1,023 or 8% of residents' first ancestry is the Sub-Saharan African region. The countries most frequently represented within this region were Somalia, Ethiopia, and Sudan. It was estimated that about 816 residents of this community were born in Africa and subsequently moved to the United States. Outreach attempts were conducted, however, an improved process of engaging persons from these countries and others as immigration patterns change is among projects identified in this plan.

It was estimated in the Census Bureau's 2020 American Community Survey that 14% of all South Sioux City residents earned an income below the poverty level in the previous 12 months. About 244 South Sioux City residents identified walking as their primary transportation to work. Those earning less than 100% of the poverty level were much more likely to be walkers compared to higher income categories. Furthermore, over 60% of American Indian or Alaskan Native residents, 17% of those identifying with two or more races, and 15.5% of Black or African American residents were earning below the poverty level in 2020, compared to 12.4% of white residents. Due to these socioeconomic disparities in income and access to a vehicle, the planning team ensured that several of the open houses were located within low-income and/or minority neighborhoods. One open house was located at Lewis and Clark Elementary School which serves many of the families living within census tract 101.01, where about 69% of residents were people of color, 59% were of Latino ethnicity, and over one third earned incomes below the poverty level according to the 2020 Census. Two open houses were located at the Middle School and High School in census tract 102 where nearly 50% of residents identified as having Hispanic or Latino ethnicity in 2020. Community leaders within these groups or otherwise connected through existing organizations assisted in making surveys available and posting notices of the public open house and input opportunity.

Renters in general tend to have a higher housing burden relative to their income, and most renters occupy multi-family apartment buildings rather than single family homes. Therefore, the planning team made efforts to advertise public input opportunities through landlords of affordable rental units. Landlords posted the flyers in public spaces within apartment buildings and emailed flyers to residents.

The following equity considerations were given in data analysis.

- Neighborhoods with highest number of pedestrians, bikers, transit riders
- Lowest-income neighborhoods and connectivity to public services
- Environmental justice considerations: sources of pollution, mitigation measures (EJ Screen tool)
- Transportation Access disadvantage: communities that spend more and longer to get where they need to go, access to transit, reliance on vehicles, etc.
- Economic disadvantage: areas with high poverty, low homeownership, low educational attainment, high inequality
- Resilience disadvantage: communities vulnerable to hazards caused by climate change (FEMA National Risk Index)
- Equity disadvantage: communities with a high percentile of people who speak English less than well
- Safety for pedestrians near multi-family affordable residences, institutional living such as senior housing, medical facilities, etc.

## Current Transportation Policy

The City of South Sioux City adopted a Complete Streets Policy in 2011. The goal of this policy is to accommodate pedestrians, transit riders, people of all abilities, and bicyclists on roadways, concurrent with transportation improvement projects. Performance measures to track progress toward implementing this policy include the number of new linear feet of pedestrian infrastructure, the amount of reduction in transportation collisions, and the amount of increase in the use of alternative modes, such as public transportation, biking, and walking. In cooperation with the SIMPCO Metropolitan Planning Organization, the city installs a trail counter on one segment of the trail system each year between May and September to track its utilization rate over time.

The city also recently updated their subdivision code to require bicycle paths in preliminary plans. If it is determined that a bike path is financially feasible and should be installed where a sidewalk is required, the cost is split between the developer and the city. If it is determined that a bike path should be incorporated into the development where a sidewalk is not required, the city will pay for this infrastructure. This policy ensures that the incorporation of bike paths is considered early in the design phase for new developments, reducing cost for both parties and increasing the feasibility of new trail construction. Over time, this policy will increase the connectedness and efficiency of the trail system as an alternative transportation route.

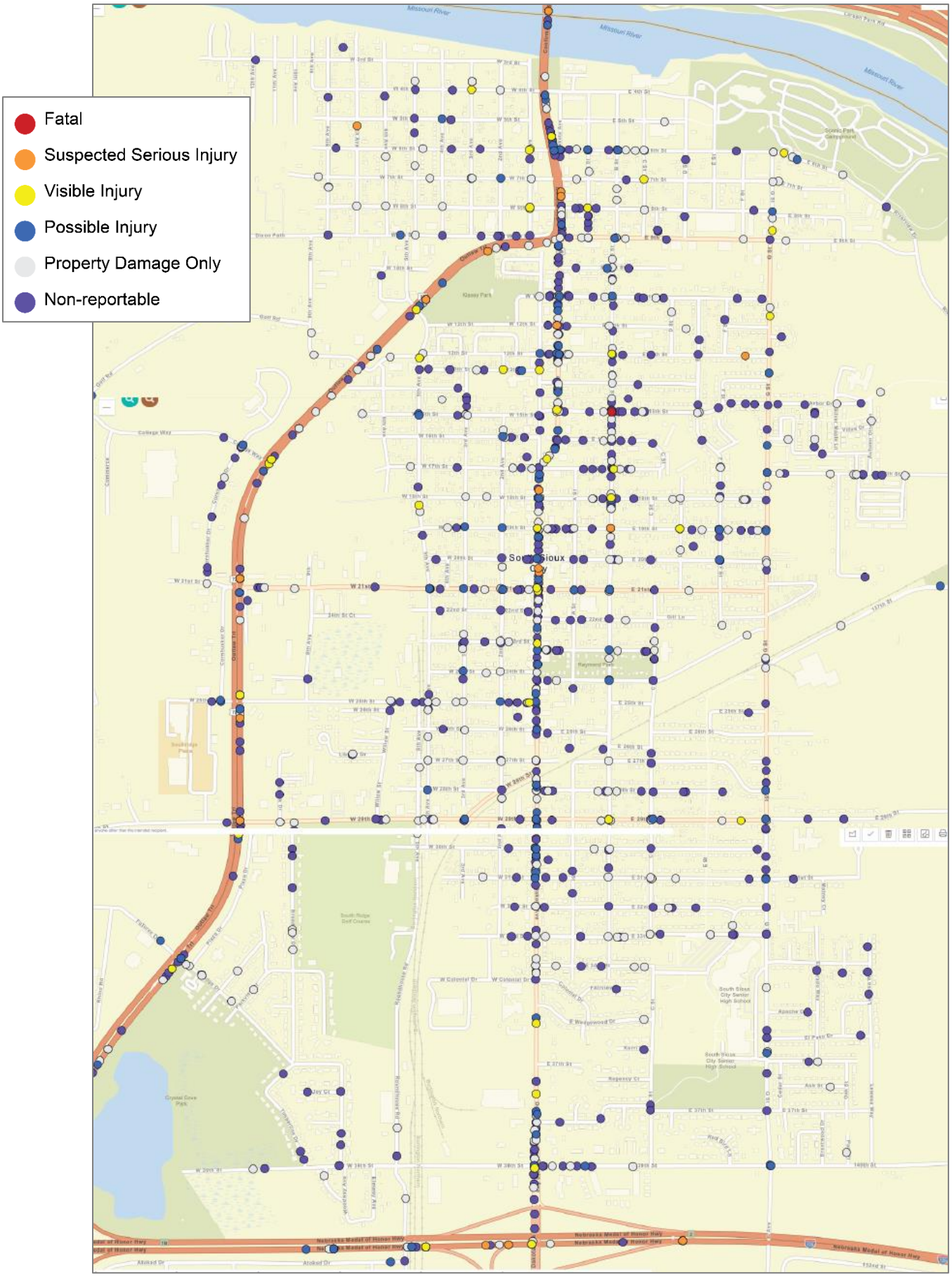
Throughout South Sioux City, the speed limit on a majority of streets is 25 miles per hour with a few exceptions. School zones are designated at a slower 20 miles per hour, while Highway 77, Old Highway 20, and the U.S. Highway 20 bypass have higher limits. While establishing low speed limits is valuable from a goal-setting perspective, user behavior does not naturally align with speed limits, as was commonly reported from public input comments. As will be detailed in the following section about safety strategies and project selection, it is recommended that 25 mile per hour and other low speed limits be supplemented by proactive roadway designs that are proven to reduce vehicle speeds. The statement below from the National Association of Transportation Officials' Urban Street Design Guide summarizes this approach succinctly

> Conventional Highway Design: Operating Speed = Design Speed = Posted Speed.
> Proactive Urban Street Design**:** Target Speed = Design Speed = Posted Speed.

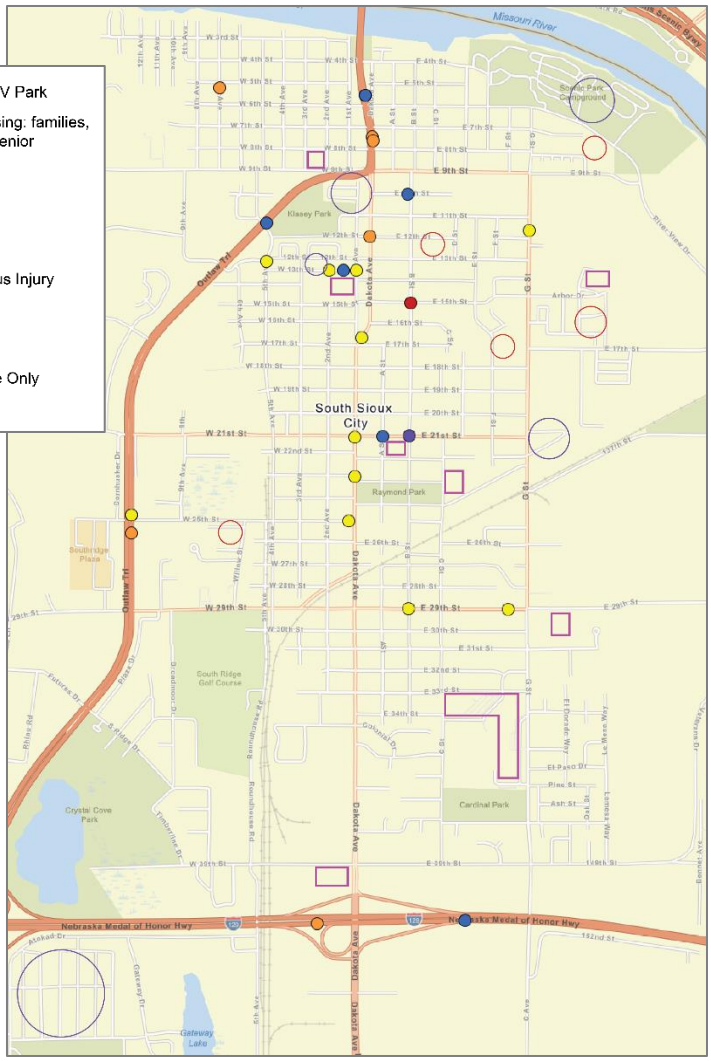
## Safety Analysis and Potential Solutions

Over the five-year period between 2015 and 2020, South Sioux City averaged 365 crashes per year. While only one of these crashes resulted in a fatal outcome, there were 1,829 total crashes that resulted in injury and/or property damage. Please note that property damage prevention is not a direct goal of this plan; however, it does figure highly into potentially furthering the effects of poverty for individuals involved. For a city that is relatively small in terms of population (14,029) and geographic extent (5.71 sq. miles), these numbers indicate that there is a need for safety improvements in this road network (7.12 per 100,000 deaths). The city's roadways and pedestrian trail networks were analyzed according to many aspects of safety, such as high-risk road features, residential and commercial walkability, pedestrian and bicycle connectivity, current city policies, and behavioral safety risks.

City administrators, elected officials, public safety departments, school administrators, and the Chamber of Commerce are resolved to uphold a zero goal policy for severe and fatal crashes. There is widespread support for making roadway design changes that promote a safe system and advocating for shifts in the collective thinking around which road users are prioritized. This holistic approach takes into consideration human behavior, vulnerability, shared responsibility, proactive safety tools, and redundancy. The safety improvement projects that address the identified safety concerns were informed by historical crash data, comments received during the planning process from members of the public, public survey results, the city's comprehensive plan, complete streets policy, input from city administrators, and comments from the safe streets committee. Projects were also informed by best practices published in resources made available by the U.S. Department of Transportation, Federal Highway Administration, and National Association of Transportation Officials.


Fatal
Suspected Serious Injury
Visible Injury
Possible Injury
Property Damage Only
Non-reportable
Missouri River
Missouri River
Missouri River
Dakota Dunes
Nebraska Medal of Honor Hwy

## Historical Crash Data, 2015 – 2020




From maps generated by the Nebraska Department of Transportation's data portal that display five years of crash data between 2015 and 2020, the planning team was able to cross reference historical crash patterns with the public's reported safety concerns. This data helped determine where road designs may be leading to driver error time and time again and where intervention should be considered. The highest volume of crashes during this period occurred on Dakota Avenue with particularly problematic intersections appearing to be at 6th, 9th, 21st, and 39th Streets. B Street was another north-south route with a relatively high frequency of crashes resulting in injury, especially along the corridor between 12th and 21st streets. Crashes resulting in injury were somewhat more common on Highway 77 as well, likely due to higher vehicle speeds, with incidents clustered primarily around intersections with commercial traffic entering and exiting the highway.

Crashes involving bicyclists or pedestrians were the most prevalent in the vicinity of Covington Elementary School, on Dakota Avenue between 21st and 25th Street, and on 21st Street between Dakota Avenue and C Street. The 29th Street corridor between Dakota and G Street; 13th Street just west of Dakota Avenue in the vicinity of Klasey Park, Saint Michaels Catholic School, and two trailer courts; and Dakota Avenue approaching the 9th Street intersection where the right lane turns into Highway 77 were also problematic. It is especially important to design roadways for pedestrian safety in the vicinity of low-income housing, parks, trailer courts, and other institutions where many families are living in relatively few blocks, increased pedestrian activity can be expected, residents with disabilities are living, or residents with fewer resources to overcome potential injury reside.

## Accessibility

First consideration must be given to the overall accessibility of the community in terms of the ability of the most vulnerable residents to access public amenities and services without barriers. In doing so, quality of life improves for the whole community. Data collection included conversation about inability to get to a grocery store without spending a significant amount of the food budget on transportation.

South Sioux City's trail network is well connected for recreational use but does not necessarily accommodate a direct route to essential services such as food suppliers and medical providers.

### *Recommendations*

Complete an inclusion-focused community accessibility assessment of public facilities, buildings, and transportation infrastructure including but not limited to sidewalks, trails, curb cuts, ADA accommodating street crossings, crossing signals, and public transit. Many such components are aspects of other identified safety concerns.

## High-risk Roadway Features

Despite South Sioux City having a speed limit of 25 miles per hour throughout a majority of the road network, speeding was one of the most frequently reported safety hazards during public outreach events. Additionally, as the towns grew together and merged into what is now South Sioux City, distortions on roadways exist and require assimilation to the extent possible.

### Dakota Avenue

This major north-south corridor begins at the Veterans Memorial Bridge in the north and cuts through the city to the south and to Dakota City or Interstate 129 (connector to I-29). This serves as a primary thoroughfare for services (City Hall, Library, food establishments, fire service), Cottonwood Inn and Conference Center, and southbound to heavy industries (Tyson Foods, Empirical, Ingredion, Richardson Milling, Northern Natural Gas, Ferrellgas, K&B Transportation, Tyson Fresh Meats, Dakota Cold Storage). The planning team received feedback about several intersections along Dakota Avenue, and historical crash data reflects the frequency of incidents on this corridor.

The city is currently working with JEO Consulting Group, Inc. and Nebraska DOT on the signalized intersections that have had 318 crashes with 81 injuries along Dakota Avenue (US 20 Business).

### Dakota Avenue & 6th Street, at base of the bridge

The 6th Street signalized intersection lies near the base of the Veterans Memorial Bridge, a high-volume connection to the City of Sioux City with over 39,000 vehicles traveling this route on average each day. The planning team received many comments about this junction as one that is very busy with frequent near misses. User behavior was often to blame in comments, such as failing to stop before turning or running red lights.

*Photo: Veterans Memorial Bridge approach from Dakota Avenue at 6th*

Continuing a short distance south, traffic splits with the right lane branching off west to southwest entering US Hwy 77 and traffic continuing due south on Dakota Avenue. Some residents reported this to be an intersection with many near misses as well. The proximity of both intersections in addition to traffic turning onto Dakota Avenue from East and West 6th Streets requires drivers to make quick lane shifts on a busy road amongst quickly moving traffic. Further complicating flow of traffic is varied post speed limit with the bridge at 45 MPH, Dakota Ave to US 77 at 30 MPH and US 77 (as a feeder back to Dakota Ave) at 45 MPH. Fluctuations in speeds often result with drivers attempting to maintain the higher limit as long as possible.

*Photo: Dakota Avenue at turnoff to US Hwy 77*

### School Zones

School zones were identified on several occasions as areas of concern for drivers violating the speed limit. Several comments were received related to students having difficulty crossing streets around school campuses, for example, at the intersection of Dakota Avenue and 39th Street outside of one of the middle schools, as well as on G Street and E 33rd Street near the combined middle and high school campus. The addition of a new school at 29th Street also requires pedestrian access given the new housing development underway in that area.

### B & G Streets

Additionally, B and G streets were identified as routes that are often used as alternative routes when there is traffic congestion on Dakota Avenue because these roads run parallel to the main arterial, uninterrupted for many blocks. Speeding on both of these routes was mentioned in public feedback. The city's most recent fatal car crash took place on B Street at the intersection with 15th and involved the driver with substance impairment.

Speeding on G Street near the schools was particularly concerning due to the number of walkers present on this corridor. Several other specific intersections were identified on the G street corridor as troublesome, including at E 30th Street where drivers do not stop, E 31st Street where many said a stop sign was needed to control speeding, and at E 33rd Street, which was identified as a point where children struggle to cross the road because of fast traffic.

Speeding was also reported to be a problem on Riverview Drive between G Street and the soccer field complex where there are many walkers as well. One intersection in this area that was recognized by members of the public as well as city officials as a spot of frequent crashes or near misses is where G Street and Riverview Drive come to a "T"-shaped intersection. Here it is unclear for those unfamiliar with the road which driver has the right of way, and what traffic will come to a stop. Traffic turning right onto G Street from Riverview Drive must only yield, while Riverview Drive traffic continuing straight in either direction have stop signs. However, G street traffic turning in either direction does not have a stop or a yield sign. This street intersection handles traffic from nearby Scenic Park (a large RV campground), the Y recreation and daycare center, a swimming complex / splash pad, three-softball/baseball fields, a 15-field soccer complex, and an indoor Tennis facility. A six building, 336-unit apartment complex and a planned 240-unit veterans housing complex are located along this road as well.

### The 13th Street corridor

One conclusion that emerged from many public comments is that the 13th Street corridor from Dakota Avenue to G Street is hazardous to drivers and pedestrians alike. Here, speeding and running stop signs were the primary concerns cited. Multiple intersections on this corridor were separately identified by residents as well: B Street, Dakota Avenue, 3rd Avenue, and 1st Avenue. All of these intersections with the exception of the signal at Dakota Avenue have stop signs for just some directional traffic, while perpendicular traffic flow continues uninterrupted. Furthermore, the intersection of 13th Street and 2nd Avenue does not have a stop sign.

### Atokad Drive

Part of strategic planning for the City of South Sioux City includes consideration of the 2-mile radius extending from the city's formal border. Atokad Drive falls in that unincorporated planning zone. This area was a frequent topic of discussion with residents both in- and outside of South Sioux City limits. Atokad is an area for future planned development. It currently hosts access to one of the area's mobile home parks and is without sidewalks. Respondents reported that vehicles speed on Atokad Drive is excessively high to the point that one father explained that he does not allow his children to play outside for fear of their safety. Other residents reported seeing drivers texting while speeding on this route, the presence of many trucks, and pavement that contains potholes significant enough to cause vehicle damage.

### *Recommendations*

Speeding on streets with a target speed limit of 25 miles per hour was a frequently reported issue in South Sioux City. To quell speeds on B, G, 13th, 15th streets, or any other cut-through routes that are intended for slower traffic, the city should consider adjusting street designs for this target. A variety of installations that are proven to calm traffic can be used depending on the surrounding context of the street. Such designs include small traffic circles paired with four way stop or yield signs, raised crosswalks, speed tables, and chicanes that all slow vehicles by introducing small changes to the roadway that must be navigated carefully. Narrower street lane widths and the addition of curb bump-outs also encourage drivers to slow down due to constrained lane boundaries. A street lined with trees has the effect of limiting drivers' visual field, which allows them to focus on their immediate surroundings. Similar strategies could be implemented to slow traffic near residential zones that have been identified by the public as having frequent violations, such as on Atokad near Siouxland Estates.


The city has plans to address the "T"-shaped intersection at Riverview Drive and G Street (pictured) using a single lane roundabout, which will greatly reduce the potential for crashes at this location. It is recommended that the city also investigate the feasibility of subsequent roundabouts on Dakota Avenue at the intersection with 6th Street to control traffic entering and exiting the Veterans Memorial Bridge as well as the 9th Street and US Hwy 77 junction. Roundabouts at these points could increase the predictability of traffic movements, allow a large volume of vehicles to flow through with minimal idling, reduce potential conflict points between vehicles, and offer a safer environment for pedestrian crossing.

Red-light running was cited by residents as a common occurrence in South Sioux City. While this is largely a driver behavioral issue, this behavior could be driven in part by signal timing issues, such as overly short cycles for turning vehicles. The city could take steps to reducing this behavior by evaluating the length of turn signals at higher volume intersections. Another strategy that could be employed to reduce this behavior is the coordination of signal timings concurrently with the target speed limit, so that drivers traveling just below the speed limit hit very few red lights along a corridor.

The city will continue working with the Nebraska DOT and JEO Consulting Group Inc. to move the Dakota Avenue traffic signal adjustment project forward. This estimated $2,304,600 project is further illustrated and defined in the document titled "Dakota County Signalized Intersections" in Appendix B. Currently, these signals offer a two-second delay for changing of lights and countdown counters at signals in an effort to further reduce traffic accidents. As of August, 2022, the Nebraska DOT Safety Committee requested additional changes and options and JEO provided revisions to the Nebraska DOT as the project continues to move slowly forward.

## Bike & Pedestrian Safety

South Sioux City is considered a Bicycle Friendly and Pet Friendly community. However, there are many aspects of the pedestrian and bicyclist network that were identified as hazardous or in need of improvement. Sidewalk maintenance and connectivity, cross walks, lighting, traffic proximity, and commercial driveways were all found to present hazards to pedestrians and bicyclists. The landscape and scale of commercial areas are by and large vehicle-oriented, causing uneasiness for those on the sidewalk, and discouraging walking.

## Sidewalk Condition & Missing Sidewalks

In the oldest parts of town on the original grid system, sidewalks are narrower than in newer developments and on the trail system. From a cursory visual analysis, the planning team noted areas of vegetation that encroach on the sidewalks and some areas of uneven surfaces. The photos included here depict public comments about the overgrowth of weeds on 5th Avenue alongside railroad right of way and in front of several businesses reflected this assessment. Walking along the Dakota Avenue commercial corridor, pedestrians have the road to one side and a parking lot on the other, with vehicles frequently crossing their path to enter or exit commercial parking lots. Several blocks lack an adequate buffer between the sidewalk and roadway to protect the safety and comfort of pedestrians.

Several parts of the city lack sidewalks altogether or on one side of the road. For example, the Siouxland Estates and Parkview trailer courts are in need of sidewalks, while Highway 77 cuts off the sidewalk connectivity of Klasey Park to the surrounding network. It was brought to the attention of the planning team that the sidewalk connecting the middle and high schools is disconnected. Constructing a connection here should be a priority to ensure that students do not have to walk in the roadway on this shared campus.

### *Recommendations*

There are currently no comfortably walkable commercial areas in South Sioux City downtown or main street, the development of which was a sustainability goal from the city's 2017 comprehensive plan. Taking strides to create such an environment would not only present a quality-of-life amenity for residents, but greatly improve safety for pedestrians, cyclists, and drivers by slowing traffic.

Improvements to the pedestrian landscape to increase comfort such as installing occasional benches along the sidewalk and providing additional trash cans could go a long way to encourage walking. Street trees would provide much-needed shade for pedestrians during hot weather; the effects of which are amplified by the prevalence of concrete, asphalt, and other heat-absorbing materials in the urban landscape.

It is recommended that the city construct sidewalks where there are gaps in the network or missing entirely. A full assessment of the sidewalk network is needed to document all such disconnections as well as sidewalk condition and accessibility issues. When implementing new sidewalks, consider buffers between streets and walkways that include greenery, public art, or other functional or aesthetically pleasing features. This improves walkability and, in the case of greenery or designed bioswales, a natural means of resilience during heavy rainfall events.

The use of vegetated buffers between the sidewalk and roadway not only enhances the aesthetic of the streetscape, but also creates a safer environment by providing clear differentiation and distance between

pedestrian and vehicle routes. Green infrastructure such as bioswales and rain gardens installed on buffer strips can provide many additional benefits. Native plants in these installations are low maintenance compared to conventional grass, are aesthetically pleasing, and help to counteract the heat island effect. These green infrastructure installations would be especially effective used as buffer strips alongside streets to help prevent hazardous roadway flooding, and help to capture roadway pollutants that would otherwise enter waterways. The city's climate change plan (included in Appendix B) speaks to increasing the number of bioswales and rain gardens in the city as this has shown to be an effective adaptive strategy with aesthetic benefits.

### Driveways

On the Dakota Avenue commercial corridor, driveways often interrupt an even grade of sidewalks, prioritizing vehicles entering and exiting parking lots. The distinction between parking lot, sidewalk, and roadway is at times unclear, making vehicle movements somewhat unpredictable for pedestrians. Driveways along this stretch are often overly wide, causing many potential conflict points between vehicles and pedestrians.

### Recommendations

To limit the number of driveways crossing the sidewalk, traffic from adjacent parking lots could be funneled into a shared driveway to limit the number of entry points pedestrians must contend with. This would improve safety for drivers as well by reducing the number of potential conflict points. Differentiation between the sidewalk, parking lot and road can be accentuated with the use of consistent grade, materials, and paint. Sidewalks should maintain the same material and grade across driveways to visually indicate to all road users the continuation of the walkway and establishing pedestrian right-of-way.

### Crosswalks

Comments from public input reported crosswalks that are spread too far apart to be useful. One intersection in particular at Dakota Avenue and W 28th Street was reported by many to be difficult for pedestrians to cross.

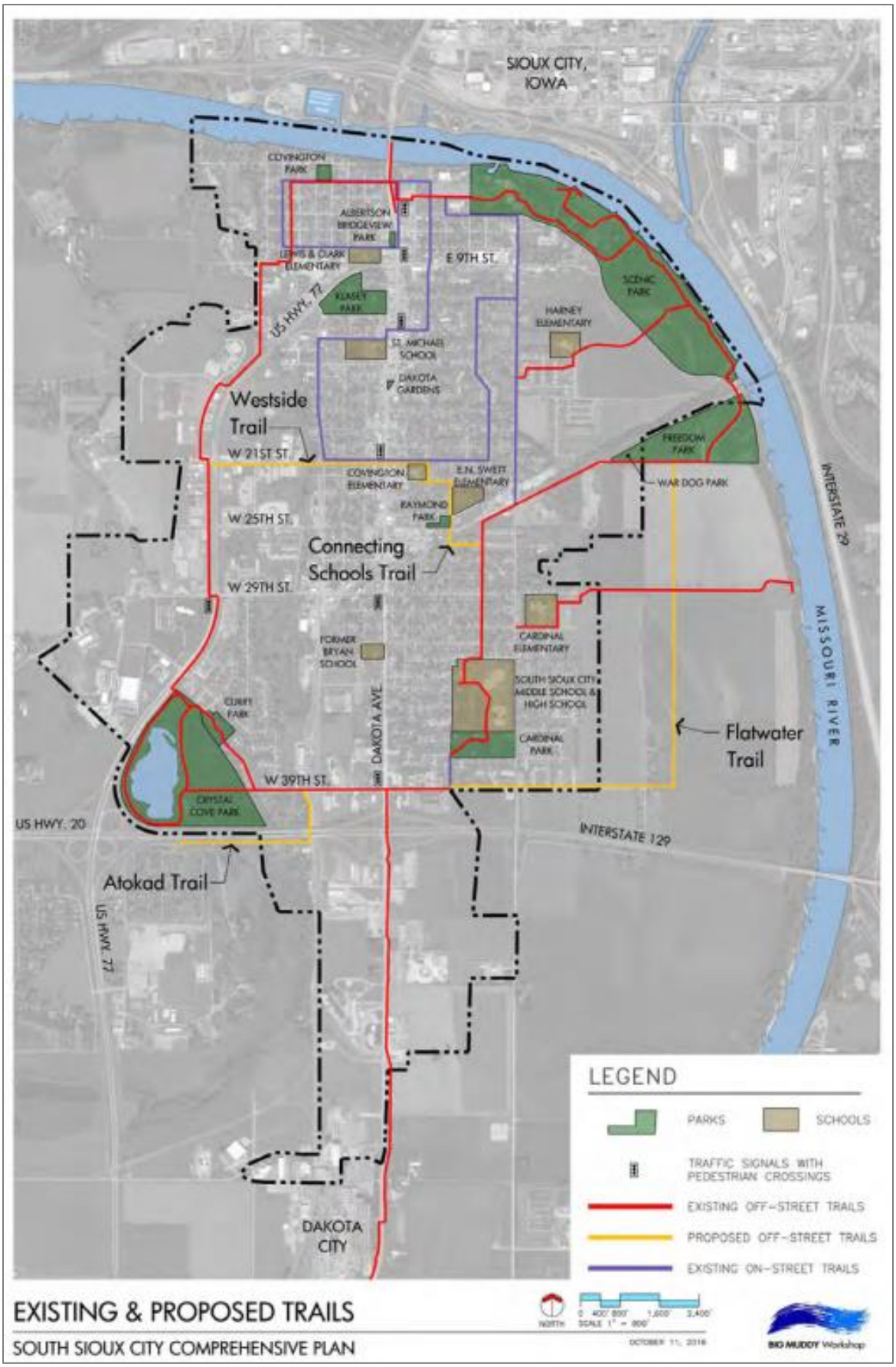
In school zones, public input emphasized the need for safer street crossings near the high school, middle school, and Harney Elementary school. Traffic congestion increases significantly in these areas before and after school, with additional risk coming from a concentration of young drivers in the high school parking lot. The sidewalk near the high school and middle school campus is disconnected, causing students to navigate this section alongside vehicle traffic.

Small businesses and commercial zones are dissected by major roadways along Dakota Avenue, W 21st Street, and Cornhusker Dr/US Hwy 77. Each roadway is structured differently, however the inability for pedestrians to safely cross the street exists along all three corridors. Similar concerns exist for persons traveling along the bike trail when coming to cross points on these or other commercial-centered roadways.

#### *Recommendations*

Pedestrians would benefit from additional crosswalks on commercial corridors as means to increase the accessibility of businesses on foot. Crosswalks with signs, those that flash on-demand, or pedestrian hybrid beacons that trigger red light signals could be placed between intersections. This would reduce the distance residents had to walk to use a crosswalk. Frequent, visible crosswalks, especially those with curb bump-outs or a raised design, could also provide visual cues to drivers that the corridor is one that should be taken at lower speeds.

Student pedestrian safety was noted as a concern of the public on multiple occasions. The installation of such visible crosswalk designs as noted above would enhance the safety of students in school zones during rush hour. The city and schools can also organize carpool programs for students to reduce congestion in and around parking lots and reduce the risk of crashes during pick-up and drop-off times.


SIOUX CITY, IOWA
COVINGTON PARK
ALBERTSON BRIDGEVIEW PARK
LEWIS & CLARK ELEMENTARY
E 9TH ST.
US HWY. 77
KLASEY PARK
ST. MICHAEL SCHOOL
DAKOTA GARDENS
HARNEY ELEMENTARY
SCENIC PARK
Westside Trail
W 21ST ST.
COVINGTON ELEMENTARY
E.N. SWEET ELEMENTARY
RAYMOND PARK
FREEDOM PARK
WAR DOG PARK
INTERSTATE 29
W 25TH ST.
Connecting Schools Trail
W 29TH ST.
FORMER BRYAN SCHOOL
CARDINAL ELEMENTARY
SOUTH SIOUX CITY MIDDLE SCHOOL & HIGH SCHOOL
CARDINAL PARK
MISSOURI RIVER
CURRY PARK
DAKOTA AVE
Flatwater Trail
W 39TH ST.
CRYSTAL COVE PARK
US HWY. 20
INTERSTATE 129
Atokad Trail
US HWY. 77
DAKOTA CITY
LEGEND
PARKS
SCHOOLS
TRAFFIC SIGNALS WITH PEDESTRIAN CROSSINGS
EXISTING OFF-STREET TRAILS
PROPOSED OFF-STREET TRAILS
EXISTING ON-STREET TRAILS
EXISTING & PROPOSED TRAILS
SOUTH SIOUX CITY COMPREHENSIVE PLAN
NORTH
SCALE 1" = 800'
OCTOBER 11, 2016
BIG MUDDY Workshop

## Trail Connections

The trail network has grown quickly over the past several years, offering a safe route for walkers and cyclists alike. The trail primarily provides access for bicyclists and pedestrians around the perimeter of the city but does not yet have an off-street trail route cutting across the city centrally from east to west. Many public services and city amenities are located centrally, and it would benefit residents to have safe access to these via pedestrian infrastructure. Furthermore, while the trail is linked to an on-street network of bike routes, the results of the public survey indicate that residents tend to feel safer with dedicated bike lanes rather than sharing lanes with vehicles. Currently, on-street bike routes are identified only by signs indicating such (pictured).


### *Recommendations*

The city has plans to construct the Westside multi-use trail connection which will allow affordable and accessible housing on the southwest side, such as Liberty Place and Canterbury Apartments, access to 21st Street amenities and schools. This would alleviate the issues identified earlier with accidents near Covington Elementary, W 21st and 25th Streets. The MidAmerican/Veterans Trail will connect to a new school from Foundry Road to 29th Street, a new housing subdivision. This trail will help reduce traffic along G Street, an already overcrowded corridor. These connections will allow trail users to cut across town while remaining on the trail system without having to loop around the city's perimeter. This would provide dozens more households in central neighborhoods access to the trail network within a ¼ mile radius of their home. During public input events, it was reported to the planning team that there is a missing trail connection between the Daniels Lane/Rhino Road area to Crystal Cove Park. The city has identified this as a future joint project with the county. Future additions to the trail network that increase east-west connectivity, mimicking the connectivity of major vehicle routes, could be considered as well.

In addition to these planned trail connections, it is recommended that the city also prioritize a safer shared road experience for bicyclists. For on-street bike routes, dedicated bike lanes instead of shared route signs would improve safety for inexperienced riders. Wide rights-of-way on commercial corridors would provide ample space for bike lanes if reconfigured, for example by slightly narrowing traveling lanes and locating on-street parking on one side.

## Pedestrian Lighting

Lastly, resident feedback indicates that many would feel safer and more comfortable walking in the evening or at night with improved lighting on trails and sidewalks.

### *Recommendations*

The city has plans to install 480 new LED lights to enhance the safety of the pedestrian and trail network. Plans indicate beginning at the north end of the city with priority in the economically distressed, lower income census tract of the city.

## Signs

The reflectivity of roadway signs was reported by city officials to be lacking. This becomes especially apparent during the extreme weather events not uncommon in northeastern Nebraska that cause poor visibility, such as snow, sleet, and heavy rain.

One hazard that was frequently identified by the public is the absence of stop signs in some residential areas. While most residential intersections have at least two stop signs, more than 60 percent of survey respondents identified four-way stop signs in residential intersections as a top strategy that would improve their safety while driving. Several residents alerted the planning team to the complete absence of stop signs at some residential intersections, such as F Street between 18th and 21st, and where E 19th Street intersects with B and D streets.

Additional comment was provided that there are relatively few signs indicating the speed limit throughout the city. While school zones tend to be clearly marked as 20 miles per hour, signs are not posted consistently on commercial corridors.

### *Recommendations*

It is recommended that the city install four way stop signs in residential neighborhoods, prioritizing locations without stop signs and intersections that have been identified as problematic through public input. Additional speed limit signs should also be installed with a focus on corridors that currently have few and areas that will be developed as pedestrian-friendly zones in the future.

The city has plans to purchase and install road signs with higher reflectivity, prioritizing snow removal routes.

## Traffic congestion

The primary arterials of South Sioux City can get quite congested during rush hour and after school. Traffic coming to and from Sioux City via the Veterans' Memorial Bridge contributes heavily to traffic on the north-south routes through town. Congestion on Dakota Avenue is reported to spill over onto B and G streets, causing safety hazards for the residential neighborhoods where traffic volumes and speeds should be low. Public input identified end-of-shift traffic coming from the Tyson plant in Dakota City to the south as a major contributor to traffic congestion. Residents also expressed concern about traffic congestion during the beginning and end of the school day, causing traffic to back up on G Street between Sierra Drive and El Paso Drive near the shared middle and high school campus.

The public also raised questions about the impact of planned developments on traffic congestion in the future. In the next few years the construction of a new casino and horse track on the south side of town will likely bring hundreds more daily visitors to the city once completed.

### *Recommendations*

Traffic management should be carefully considered early in the design process for future developments to ensure that residents are not put at risk from additional congestion that would result in more vehicles cutting through residential neighborhoods, more pollution, and an increased risk of vehicle collisions.

Another strategy that could reduce roadway congestion is for the city to facilitate partnerships between top employers and the Siouxland Regional Transit System (SRTS), which offers vanpooling services.

Groups of employees living within a reasonable distance of one another use a van supplied by SRTS and arrange a daily pickup and drop-off route and schedule to travel to the company's campus together.

Similarly, the city could work with the school district to implement a school-sponsored carpool system that would reduce the number of vehicles entering and exiting the school parking lots. This would not only reduce congestion on the roads, but also improve the safety of students walking or biking to school.

Lastly, the timing of traffic lights on higher volume streets can be assessed to ensure that traffic flows as efficiently as possible without compromising safety for all modes. On long corridors with evenly spaced

intersections, such as Dakota Avenue, the timing of lights can be coordinated in line with the target speed limit. This could reduce traffic congestion while helping to enforce lower speeds.

The aforementioned JEO Consulting and Nebraska DOT traffic signal study and project that is currently under review with the Nebraska DOT will alleviate some of the issues with Dakota Avenue. However, further examination is needed to reduce speed and create design processes for future developments.

### Behavioral/operational safety risks

Several public comments received by the planning team expressed concerns about operational safety risks of other drivers. These comments included distracted and impaired driving, rampant speeding, and drivers regularly running red lights and stop signs. The behavioral and operational concerns of other drivers represented the largest category of public concerns reported to the planning team. When asked about the need for police enforcement, it was suggested by residents that due to the frequency of such offenses, the police would likely have trouble contending with them. One resident summed up their feelings about this dilemma saying, "if you pulled over one, you'd have to pull over everyone". Routes that were commonly identified as having frequent speeding vehicles were G Street, B Street, 13th Street, and Atokad, however, many other individual trouble spots were identified as well. A complete list of public comments is included in Appendix A.

The team also received feedback about the location of bus stops for middle school children. At least one stop is located in an industrial corridor, where children have reportedly been harassed by adults, and generally feel uneasy by the surroundings.

#### *Recommendations*

A full review of school bus stop locations in coordination with the school districts would be needed to evaluate where any safety issues are taking place and to identify potential alternatives.

It is recommended that the city focus police enforcement of speed limits and impaired driving violations on areas where it reportedly happens frequently based on public feedback. Enforcement should also focus on school zones, pedestrian areas, and near senior housing, accessible and low-income housing, and trailer courts. The city has plans to increase the frequency of alcohol and speed checks by law enforcement. The use of additional speed limit signs, as well as variable signs that can be moved and updated to display relevant information are strategies that could also help to curtail speeding or reckless driving behavior.

Roadway features that proactively slow vehicles can be incorporated into corridors with known repeat speeding violations. Design elements such as narrower lane widths, roadside landscaping, speed humps, curb extensions, and chicanes reduce traffic speeds and improve the quality of the bicycle and pedestrian realm. Street trees and on-street parking narrow the driver's visual field, allowing them to focus on their immediate surroundings. These strategies also create "friction" for vehicles that require them to slow down to maintain their level of comfort.

### Transit users

Bus stops in South Sioux City are located frequently along primary arterials, and distributed evenly nearby public services, attractions, and on the perimeter of residential neighborhoods. Typical bus stops are indicated by a sign posted in the buffer strip between the sidewalk and street (pictured to the right). The stops outside of the high school, Azria Health Care assisted living facility, and the South Sioux City aquatic center have a sheltered bench to protect passengers from poor weather conditions. The planning team encountered several stops that are not located directly beside a curb cut which could present a barrier to accessibility. Another potential safety hazard for transit riders is that the lighting at each stop varies by location, dependent on the proximity to streetlights. Each stop would need to be assessed after dark to determine which ones require lighting enhancements.

Photo: Fixed route bus stop

### *Recommendations*

In 2020, approximately 11 percent of South Sioux City residents were estimated to have a disability, with the most common being ambulatory difficulty, followed by disabilities impacting independent living, hearing, cognition, self-care ability, and vision impairment. Several apartment complexes, Liberty Place, Autumn Park, The Villas at Crystal Court, and Prairie Haven, provide affordable rental units specifically for elderly residents and/or residents with disabilities. It is vital to ensure that the street and pedestrian network adjacent to these apartment complexes are designed to protect the safety of residents that may have mobility, sensory, or cognitive disabilities. Residents with disabilities are often more likely to rely on public transit for transportation. Therefore, providing adequate space and appropriate infrastructure for paratransit vans and transit buses to access these sites should be a consideration in plans for safety improvements.

Bus stops that are accessible, covered, and strategically located to serve residents who are more likely to rely on the bus system are also important transportation safety elements. It is recommended that the city invests in bus stop upgrades to provide shelters with seating. A full accessibility assessment of the pedestrian network would also include consideration of curb cuts near bus stops and pathways between the sidewalk and bus shelters.


Photo: Sheltered bus stops

One resident made the suggestion that the transit system could train residents, especially seniors and non-drivers who need the service, on how to use the bus because not knowing the schedule and payment system could be a barrier to use. With adequate funding, this can be addressed through a travel training component to improving community accessibility and coordinated with transit providers and state health and human services providers.

## Interactive Community Input Process

As populations become more diverse, it is necessary for the city to incorporate multiple means of communicating resident safety concerns in as many languages as possible. Of the many languages spoken in the region, only Spanish translation of information is required under federal guidelines. Ideally, even languages spoken by a single family should be considered for public information. Only recently has such a concept been made possible through technology.

The city currently makes a concerted effort to communicate with residents who primarily speak a language besides English. Communications are posted in both the local English and Spanish newspapers. The city also

partners with Mary Treglia Community House in the use of multi-language electronic boards to connect with non-English speaking/reading individuals. This practice was born out of the need and struggle to inform residents in the local community of COVID-19 health measures. The electronic boards are strategically placed in destinations such as the South Sioux City library, outside city hall, the Tyson Foods cafeteria, Northeast Nebraska Community Action Program, Heartland Counseling, South Sioux City Community Health Center and is also shared on local cable. Additional sites include the local community collaborative (Growing Community Connections), Canterbury Village apartments and Northeast Community College.

### *Recommendations*

While it is vital to have the above-mentioned avenues of communication to convey emergencies and alert residents of important information, these strategies represent one-way communication. The planning team encountered difficulty in reaching these populations to receive their opinions and input about safety needs in the community. With this in mind, it is recommended that the city expand efforts to provide publications and information in all languages spoken within the community with in-time translation services for print and digital communications. Accommodation of oral translation through such providers in the community and/or teleconferencing providers should also be made available and the availability of these services should be marketed to non-English speaking populations. Such efforts should include online input methods to report transportation safety concerns such as damaged sidewalks and broken trail lights.

## Air quality/environmental hazards

As summarized in the community profile at the beginning of this plan, South Sioux City has several air quality hazards that are likely influenced by transportation. According to EPA's EJScreen tool, ozone levels, air toxics cancer risk, and diesel particulate matter are all at or above the 75$^{th}$ percentile of state concentrations. The two block groups adjacent to US Hwy 77 have a very high traffic proximity percentile as well. These hazards present a risk to an area with a high proportion of people of color and low-income residents. When combined with these demographic factors that increase their overall vulnerability, the risk of adverse health outcomes is amplified for these residents.

Traffic congestion and the number of vehicles on the road are likely contributors to air quality issues in South Sioux City. Furthermore, as manufacturing is a key driver of the city's economy, the transportation of goods and materials to and from industrial areas by truck and rail impacts air quality as well.

According to FEMA's resiliency tool, Dakota County is most at risk from extreme temperatures, strong winds, tornadoes, snowstorms, and hail. It was identified by the city that roadway signs should have higher reflectivity to ensure they are visible during extreme weather. Snow route signs in particular were of concern to city officials based on the experience of snow removal staff.

### *Recommendations*

Many strategies detailed above that improve transportation safety would also reduce air pollution from vehicle congestion. For example, encouraging institutional carpooling arrangements, building bicycle lanes and continuing to expand the trail network, and the designation of several blocks as a walkable "Main Street" or Downtown district. Making the walking environment of South Sioux City pleasant and enjoyable will encourage residents to replace short vehicle trips when possible. The use of tree plantings and other vegetated buffer strips between residential neighborhoods and industrial corridors would improve the aesthetic quality of the neighborhoods while improving local air quality and capturing particulate matter.

While these strategies would help to reduce air pollution, it is recommended that the city consult with an environmental agency to assess the sources of pollutants and develop specified mitigation measures. This partnership could assist the city in developing target reductions and monitoring progress toward these goals.

The city is currently partnering with Project Energy, a student-run organization through the University of Nebraska-Lincoln that aims to reduce greenhouse gases. Through this partnership, the city now has a greenhouse gas inventory, a business-as-usual forecast of emissions, and a planning scenario that reduces future emissions (included in Appendix B). This scenario incorporates the energy efficient veterans housing campus that will be constructed with green materials and built with renewables and energy efficiency incorporated into the design. This scenario will help the city understand the impact of future energy efficient policies for new residential and commercial buildings. The greenhouse gas inventory identifies transportation as the top source of emissions, accounting for roughly half of emissions. In assessing the impact of various aspects of the veterans' housing project, the compact pattern of the new development was estimated to save 2,200,200 vehicle miles traveled annually. It is recommended that the city continue analysis of these projections to determine what scenarios could reduce emissions from the transportation sector, the highest emitter. Reducing emissions from transportation will improve overall air quality and could also help address the specific air quality hazards detailed above.

While the frequency of extreme weather events is not within anyone's control, the city can take measures to improve transportation infrastructure proactively to prepare for the effects of climate change. The installation of highly reflective road signs would improve safety for road users and emergency personnel during low visibility weather events. The use of green infrastructure in buffer strips and medians would provide many benefits including flood control to keep roadways operational during increasingly frequent high-volume rain events.

## Strategy and Project Selections

The city's strategy to bring Zero Goal to attainment by 2030 is to implement best practices by way of result-driven data in planning all transportation projects. In doing so, the city will adhere to the following standards as itemized in their resolution to a Zero Goal approach to a Safe System for all users.

1. While no crashes are desirable, the Safe System approach prioritizes crashes that result in death and serious injuries, since no one should experience either when using the transportation system.

2. People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to accommodate human mistakes and injury tolerances and avoid death and serious injuries.

3. People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities.

4. All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes don't lead to fatal or serious injuries.

5. Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

6. Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.

7. All city departments will be required to address safe system approach with integrated training, shared implementation strategies, to achieve the goal of Zero while adhering to the aforementioned Resolution and Ordinance already adopted.

A list of prioritized projects is provided showing short-term for projects expected to be completed within one year, mid-term for projects expected to be completed in 1-3 years, and long-term timeframes for projects

expected to be completed within five years. Feasibility including but not limited to related cost and access to materials and related labor are considered. However, such components alone do not dictate priorities. The potential effect on improved safety along streets and roads for all users is given highest consideration. Explanation of applicability of project types is provided in the Safety Analysis and Project Description section.

## Planned Projects

| Project | Timeframe | Intervention Type |
|---|---|---|
| Roundabout at Riverview Dr and G St | mid-term | infrastructure |
| PSAs/Demonstrations on how to use roundabouts | short-term | behavioral |
| Pedestrian Crossing, Stop, Handicap Signs | short-term | operational & behavioral |
| Pedestrian Crossing Beacons | mid-term | operational & behavioral |
| LED Lights / Street | short-term | operational |
| Westside Pedestrian Bicycle Lane | long-term | infrastructure |
| Alcohol Checks | short-term | operational & behavioral |
| Painting, Planters, cross walk visibility enhancements | short-term | operational |
| Variable Signs | mid-term | operational |
| Comprehensive Accessibility Assessment | short-term | operational |
| MidAmerican Trail | long-term | infrastructure |

## Additional Considerations

### Traffic Studies

| |
|---|
| Dakota Ave - potential for roundabouts, runoff control such as bioswales, on-street protected bike lane, enhancements that create barriers between the sidewalk and the street<br>• US Hwy 77 - potential for roundabouts to slow flow of traffic<br>• G Street - modification to accommodate school bus lane near middle school, high school pending effects of pedestrian crossing improvements and other traffic calming measures |
| Air quality improvement studies |
| Signal timing study on Dakota Avenue (ongoing) |

### Accessibility, Ease of Use, Improved Function

| |
|---|
| Bus stop improvements |
| Bus usage training (especially for foreign-born residents and seniors) |
| Traffic calming measures: curb extensions (with green infrastructure), mini neighborhood traffic circles, raised crosswalks, speed bumps/tables, street trees, chicanes, reduced lane width |
| Walkable downtown district |
| Enhance pedestrian sidewalk network: benches, trashcans, shade trees, sidewalk repair/maintenance |
| Shared driveways on Dakota Avenue to reduce entry points |
| Distinction between driveway, parking lot, sidewalk, and road |
| Carpool programs (partnership between SRTS and major employers, work with schools and other institutions) |

| |
|---|
| Translation services |
| Multi-language publications |

### Demonstration Projects

| |
|---|
| Dakota Ave - temporary barriers between sidewalk and street with varying function<br>• bioswale - vegetation to aid in runoff collection; reduce impacts of extreme heat<br>• expanded sidewalks for patio seating &/or benches<br>• on-street bike lane |
| US Hwy 77 - barrier preventing left-hand turns on W 13th (both directions) |
| US Hwy 77 - left-turn lane for turns onto W 13th St (both directions) |

## Progress and Transparency

Projects as selected for completion have already been prioritized through due process including consistency with established plans, community development standards, public input, and results-based data. The city has policies in place guiding project implementation in terms of procurement and budget appropriations. In the interest of maintaining the integrity of the safe system approach to Zero Goal, the city will:

1. track project progress and implementation
2. include applicability of Zero Goal standards when projects are introduced and when implemented
3. assess new technologies to further improve the transportation network
4. complete a full review and update of the Safety Action Plan every five years
5. amend local policies and procedures as necessary to comply with the resolution for Safe Streets and Roads for All
6. consider the strategies and recommendations herein for all future transportation-related projects
7. maintain SS4A Committee to oversee plan compliance and sustainability
8. incorporate an addendum to the plan labeled “Appendix B” to track annual progress in reduction of fatalities and/or serious injuries as associated with the city’s transportation network
9. post the Safety Action Plan online including incremental and annual updates and progress reports

# Appendix A – Public Engagement

## Public Input Flyers




## Public Input Schedule

**In Person Public Input Opportunities**

Friday Coffee (South Sioux City Area Chamber of Commerce)
Friday Jul 22, 2022 9:30 AM - 10:30 AM
The Don'$ / LongLines, 801 W. 13th St South Sioux City NE 68776

Friday Coffee (South Sioux City Area Chamber of Commerce)
Friday Jul 29, 2022 9:30 AM - 10:30 AM, Wytec, 301 Centennial Dr. North Sioux City SD 57049

Friday Coffee
Friday August 5th, 2022 9:30- 10:30 AM
Dakota Thurston Co Fair & Friends

Dakota Co Fair (shared table w/SRTS & Broadband project)
Aug 3-5 6:30-9 PM
Aug 6th 10 AM – 9 PM

Optimist Club
Aug 10th 7:00AM

Postings & Onsite contacts
Aug 9 Flyers provided @ Northeast Community College & YMCA

SSC Back to School Open House
Tuesday Aug 9 4-6 PM

- SSC High School
- SSC Middle School
- Lewis & Clark Elementary School

Growing Community Connections (monthly collaborative meeting of service providers)
Thursday Aug 11 9 – 10:15 AM login to join the meeting is reqd.

Friday Coffee (South Sioux City Area Chamber of Commerce)
Friday Aug 12, 2022 9:30 AM - 10:30 AM
Coffee Hour hosted by Siouxland Federal Credit Union

Food pantry - St. Paul Methodist Church, 2003 A Street, South Sioux City, NE 68776
Friday Aug 12 2:00 P.M. - 4:00 P.M.

Voices for Food (Organizational Meeting), SSC Library
Wed Aug 17 noon

Food pantry – First Lutheran Church, 3601 Dakota Avenue, South Sioux City, NE 68776
Thursday Aug ~~4,~~ 18 1:00 P.M. - 3:00 P.M.

City Hall
Monday Aug 22 4:30-5:30 PM

## Survey

# South Sioux City
# Transportation Safety Survey

1. What is your primary means of transportation?
    - Drive alone
    - Carpool
    - Bike
    - eBike, electric scooter, etc.
    - Public transit
    - Walk

2. What best describes the neighborhood that you live in?
    - Lewis & Clark
    - Covington
    - Harney
    - Cardinal
    - Dakota City
    - Other

3. How often do you bike or walk for recreation?
    - Often (almost every day)
    - Once or twice a week
    - Once or twice a month
    - Occasionally (a couple times per year)
    - I do not walk or bike for recreation

4. Please rate how **safe** you would feel walking in residential neighborhoods. *(Consider things like traffic speed, distance between the sidewalk and road, ease of crossing the street safely, etc.).*
    - Completely safe
    - Somewhat safe
    - Somewhat unsafe
    - Very unsafe

5. Please rate your **comfort level** walking in residential neighborhoods. *(Consider things that make walking easier and more enjoyable like shade, sidewalk width, landscaping, etc.)*
    - Completely comfortable
    - Somewhat comfortable
    - Somewhat uncomfortable
    - Very uncomfortable

6. Please rate how **safe** you would feel walking in commercial areas, such as Dakota Avenue. *(Consider things like traffic speed, distance between the sidewalk and road, ease of crossing the street safely, etc.).*
    - Completely safe
    - Somewhat safe

- Somewhat unsafe
- Very unsafe

7. Please rate your **comfort level** walking in commercial areas, such as Dakota Avenue. *(Consider things that make walking easier and more enjoyable like shade, sidewalk width, landscaping, etc.)*
   - Completely comfortable
   - Somewhat comfortable
   - Somewhat uncomfortable
   - Very uncomfortable

8. Please choose your **top three** strategies from the list below that would improve your safety and comfort while **biking**:
   - Dedicated bike lanes
   - Bike lanes with a physical barrier
   - Vehicles driving slower on roadways
   - Trail-width sidewalks
   - Signs encouraging drivers to share the road with bicyclists
   - Painted shared-lane markings on bike route roads (sharrows)

9. Please choose your **top three** strategies from the list below that would improve your **safety** while **walking**:
   - Improved lighting along trails and sidewalks
   - Commercial driveway design that encourages vehicles to slow down
   - Refuge medians or pedestrian islands on busy roads
   - Highly visible crosswalks
   - Pedestrian bridge over busy roads
   - Eliminating right turn on red at some traffic signals
   - Increased accessibility for wheelchairs and strollers (smooth sidewalks, curb cuts, etc.)
   - Longer walk signals at intersections
   - More sidewalks

10. Please choose your **top three** strategies from the list below that would improve your **comfort** while **walking**
    - Tree cover along sidewalks for shade
    - Benches placed along trails and sidewalks
    - Planted buffers between sidewalks and streets
    - Plazas or pocket parks along sidewalks
    - Occasional trash cans along sidewalks

11. Are there parts of town that you avoid walking or biking in for safety reasons? What makes them feel unsafe?

12. Are there any intersections in South Sioux City where you tend to have near misses while **driving**?

13. Please choose your **top three** strategies from the list below that would improve **driving safety** in South Sioux City:
    - Slower speeds
    - Addressing distracted driving

- Slowing down turning vehicles
- Dedicated left turn arrows on traffic signals
- A stronger law enforcement presence
- Higher reflectivity of traffic signs for improved visibility
- Replacing busy four-way intersections with roundabouts to reduce conflict points between vehicles
- Four-way stop signs in residential neighborhoods

14. Do you use public transportation?
    Yes No

14a. **If yes:** What would improve the safety and comfort of using public transportation?
14b. **If no:** Is safety a factor in your decision to not use public transportation?
    14b1. If so, what are your primary safety concerns for public transportation?

# Encuesta de Seguridad en el Transporte de South Sioux City

1. ¿Cuál es su principal medio de transporte?
    - Conducir solo
    - Compartir coche
    - Bicicleta
    - Bicicleta eléctrica, patinete eléctrico, etc.
    - Tránsito público
    - Caminar

2. ¿Qué describe mejor el barrio en el que vives?
    - Lewis & Clark
    - Covington
    - Harney Cardinal
    - Dakota City
    - Otro

3. ¿Con qué frecuencia anda en bicicleta o camina para divertirse?
    - A menudo (casi todos los días)
    - Una o dos veces a la semana
    - Una o dos veces al mes
    - Ocasionalmente (un par de veces al año)
    - No camino ni ando en bicicleta para la recreación

4. Califique qué **tan seguro** se sentiría caminando en vecindarios residenciales. *(Considere cosas como la velocidad del tráfico, la distancia entre la banqueta y la carretera, la facilidad para cruzar la calle de manera segura, etc.).*
    - Completamente seguro
    - Algo seguro
    - Algo inseguro
    - Muy inseguro

5. Califique su **nivel de comodidad** al caminar en vecindarios residenciales. *(Considere las cosas que hacen que caminar sea más fácil y agradable, como la sombra, el ancho de la banqueta, el paisaje, etc.)*
    - Completamente cómodo
    - Algo cómodo
    - Algo incómodo
    - Muy incómodo

6. Califique qué **tan seguro** se sentiría caminando en áreas comerciales, como Dakota Avenue. *(Considere cosas como la velocidad del tráfico, la distancia entre la banqueta y la calle, la facilidad para cruzar la calle, la seguridad, etc.).*
    - Completamente seguro
    - Algo seguro
    - Algo inseguro
    - Muy inseguro

7. Califique su **nivel de comodidad** para caminar en áreas comerciales como Dakota Avenue. *(Considere las cosas que hacen que caminar sea más fácil y agradable, como la sombra, el ancho de la banqueta, el paisaje, etc.).*

Completamente cómodo

- Algo cómodo
- Algo incómodo
- Muy incómodo

8. Por favor, elija las **tres mejores estrategias** que tendrían el mayor impacto en su **seguridad y comodidad** mientras anda **en bicicleta**.

- Carriles exclusivos para bicicletas
- Carriles bici con barrera física
- Vehículos que conducen más lento en las carreteras
- Aceras de ancho de sendero
- Señales que animan a compartir la carretera con los ciclistas
- Marcas planas de carriles compartidos en rutas para bicicletas (sharrows)

9. Por favor, elija las **tres mejores estrategias** que tendrían el mayor impacto en su **seguridad al caminar**:

- Iluminación mejorada a lo largo de senderos y banquetas
- Diseño de calzada comercial que anima a los vehículos a reducir la velocidad
- Medianas de refugio o isletas peatonales en carreteras muy transitadas

Ccruces de peatones altamente sisible

- Puente peatonal sobre calles transitadas
- Eliminar el giro a la derecha en rojo en algunos semáforos
- Mayor accesibilidad para sillas de ruedas y cochecitos) aceras suaves, cortes de banqueta, etc.)
- Señales de caminata más largas en las intersecciones
- Más banquetas

10. Por favor, elija las **tres mejores estrategias** que tendrían el mayor impacto en su **comodidad al caminar:**

- Cubierta de árboles a lo largo de la acera para dar sombra
- Bancos colocados a lo largo de senderos y aceras
- Amortiguadores plantados entre las banquetas y las calles
- Plazas o parques de bolsillo a lo largo de las banquetas
- Botes de basura ocasionales a lo largo de las banquetas

11. ¿Hay partes de la ciudad en las que evita caminar o andar en bicicleta por razones de seguridad? ¿Qué los hace sentir inseguros?

12. ¿Hay intersecciones en South Sioux City en las que tiende a tener casi accidentes mientras conduce?

13. Por favor, elija las **tres mejores estrategias** que tendrían el mayor impacto en su **seguridad vial** en South Sioux City:

- Velocidades más lentas
- Abordar la conducción distraída
- Reducir la velocidad de los vehículos que giran
- Flechas de giro a la izquierda dedicadas en las señales de tráfico
- Una presencia policial más fuerte
- Mayor reflectividad de las señales de tráfico para mejorar la visibilidad

- Reemplazar las intersecciones de cuatro vías concurridas con rotondas para reducir los puntos de conflicto entre vehículos
- Señales de alto de cuatro vías en barrios residenciales

14. ¿Usas el transporte público?

Sí No

14a. **En caso afirmativo**: ¿Qué mejoraría la seguridad y la comodidad de usar el transporte público?

14b. **Si no:** ¿Es la seguridad un factor en su decisión de no usar el transporte público?

Sí No

14b1. **En caso afirmativo:** ¿Cuáles son sus principales preocupaciones de seguridad para el transporte público?

# Appendix B - Resources

Several resources and City documents were consulted in the development of this Action Plan. Following is the list of referenced documents and sources with links provided where applicable. Documents without a link can be found on file at City Hall located at 1615 1st Avenue, South Sioux City, Nebraska.

## Supporting Documents

1. South Sioux City Housing Development Plan:
   https://www.southsiouxcity.org/egov/documents/1553169739_93767.pdf

2. Complete Streets Resolution and Ordinance 2011-249:
   https://www.southsiouxcity.org/egov/documents/1662062702_6371.pdf

3. South Sioux City Comprehensive Plan:
   https://www.southsiouxcity.org/egov/documents/1521832006_19409.pdf

4. Zero Goal Resolution signed (7/11/2022), herein as introduction

5. Climate Plan "Responding to Climate Change":
   https://www.southsiouxcity.org/egov/documents/1662062557_59137.pdf

6. Project Energy Nebraska:
   https://www.southsiouxcity.org/egov/documents/1662121422_21847.pdf

7. South Sioux City Signal System Safety Project:
   https://www.southsiouxcity.org/egov/documents/1662121622_11331.pdf

8. SS4A Action Plan (9/12/2022) as presented herein. Also, located at the following:
   https://www.southsiouxcity.org/egov/apps/document/center.egov?view=item&id=5567

## Resources

U.S. Census Bureau's MAF/TIGER database (TAB20), Map Created by Geography Division: January 06, 2021

U.S. Environmental Protection Agency
- EJScreen
- Environmental Justice Screening and Mapping Tool

FEMA National Risk Index Mapping Tool

Transportation:
- Nebraska DOT Crash Data Portal
- U.S. Census Bureau, American Community Survey, 2020 5-Year Estimates:
  - Means Of Transportation To Work By Selected Characteristics
- Making Our Roads Safer – One Countermeasure at a Time, https://safety.fhwa.dot.gov

Housing charts:
- U.S. Census Bureau, American Community Survey, 2020 5-Year Estimates:
  - Physical Housing Characteristics For Occupied Housing Units

    - Demographic Characteristics For Occupied Housing Units

Demographics, population, place of birth, etc.:

- U.S. Census Bureau, American Community Survey, 2020 5-Year Estimates:
    - Selected Social Characteristics In The United States
    - Language Spoken At Home

- U.S. Census Bureau, Decennial Census Redistricting Data
    - Race

Economic data:

- U.S. Census Bureau, American Community Survey, 2020 5-Year Estimates:
    - Poverty Status In The Past 12 Months
    - Financial Characteristics
    - Educational Attainment

# Appendix C

This addendum to the approved SS4A Action Plan will hold documentation of updates including but not limited to the following. Such records will guide future projects and project prioritization.

C-1 Annual safety reports Progress/Project Completion Reports Amendments

C-2 New/Proposed Housing and Community Projects

C-3 SS4A Proposed Projects – Illustrations, as applicable, plus preliminary budget estimates

C.3 1 Roundabout G street and Riverview Drive

C.3.2 Enhanced Street and Walkway Lighting

C.3.3 Westside Pedestrian Bicycle Walk/Bike Path – connecting low income housing units to school and Dakota Avenue resources

C.3.4 MidAmerican Trail – Connecting new school and alternative to G Street for new housing development

C.3.5 Enhanced Alcohol and Speed Checks –

C.3.6 Pedestrian Crossing Beacons – enhanced safety

C.3.7 Achievable Countermeasures, i.e. planters, cross walk visability enhancements, missing sidewalk completions

C.3.8 Variable signs – redundancy reminders and safety enhancements as necessary

C.3.9 Supplemental Action Planning: Accessibility, Dakota Avenue Design, Middle and High School

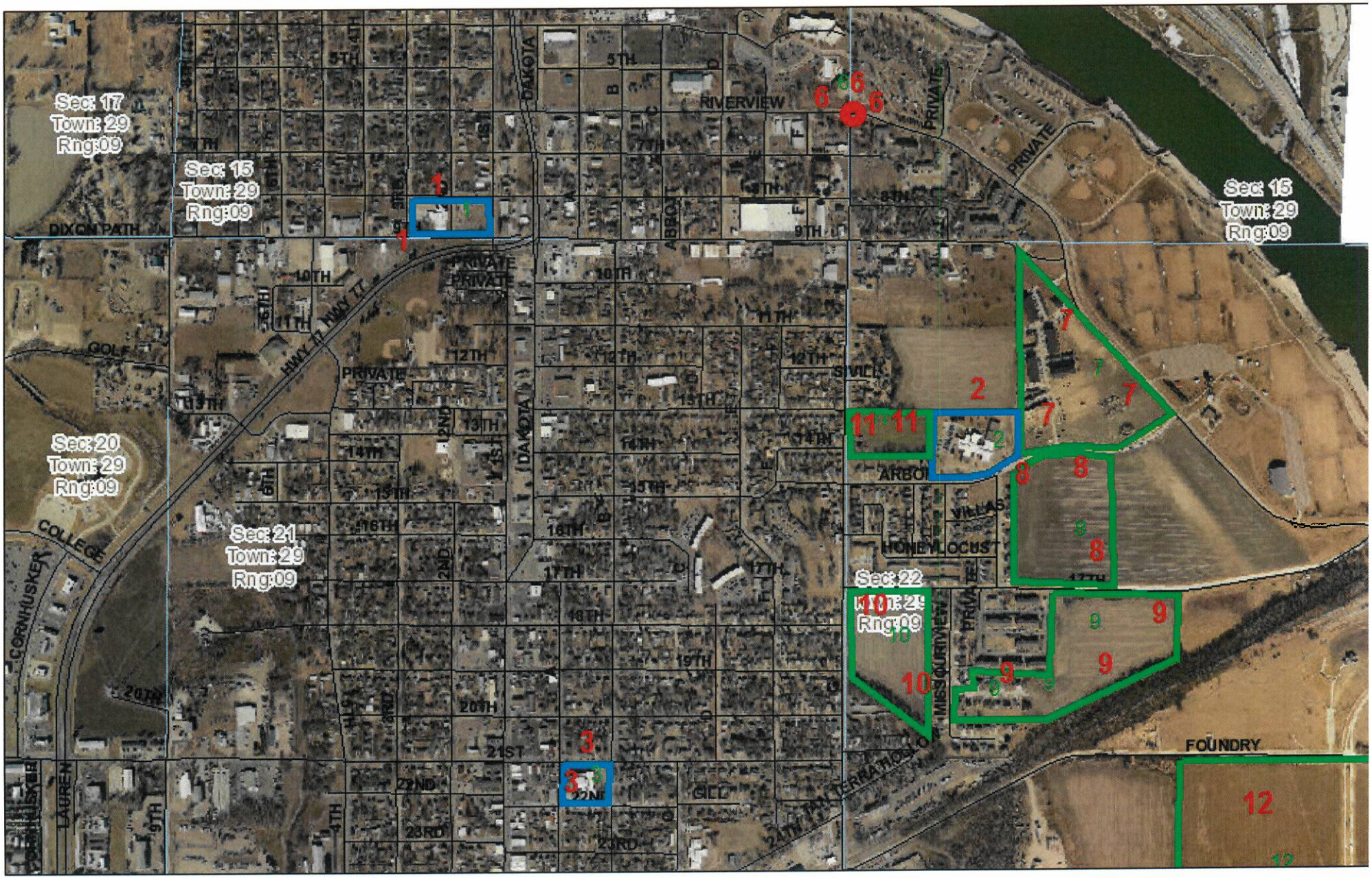
Leverage or collaborative activity outside SS4A budget - Dakota County Signalized Intersections
https://www.southsiouxcity.org/egov/documents/1662121622_11331.pdf

## C.2.1 Planned Projects - Current and New Community

## Development <u>Explanation on Maps</u>

1- Lewis and Clark Elementary School
    a. School District is looking to either renovate or demolish and built new school
2- Harney Elementary School
    a. Potential expansion due to all the apartments being built in this area. Pending on student growth
3- Covington Elementary School
4- Cardinal Elementary School
5- Middle School and High School
6- Proposed roundabout on Riverview Drive and G Street
7- RoyDon LLC development
    a. Total of 280 multi-family units
    b. Project expected to be completed by the end of 2023
8- Veterans Villa Project
    a. Proposed 300 multi-family units, it will also include office space and veterans center.
    b. Project expected to start on 2023
9- Andy Hovey Development
    a. Total of 72 single family houses.
    b. Project is set for 4 phases. Phase 1 is completely sold and will be completed in 2022. Phase 2 will start in the Fall of 2022 with a total of 12 homes.
10- Gary Ogden Development
    a. 42-single family houses
    b. Project will start in the Fall of 2022
11- Jalisco Drive Development
    a. 15-single family houses
    b. Project to start Summer of 2023
12- Flatwater Development (Ho Chunk Inc)
    a. Land available to build retail space or residential housing
    b. Project continues each year, 2022 is focused on single family housing
13- Potential land for a new middle/elementary school
14- Ho Chunk Inc. development
    a. Plans to add single family housing
    b. Project is under design and will include approximately 40 single family homes
15- Ho Chunk Inc development
    a. Potential to add Multi-Family Units or town houses
16- Ho Chunk Inc development
    a. Site for potential Casino
    b. Project to start in 2 years, estimated

gWorks




September 1, 2022
08:46 AM

DISCLAIMER: This map is not intended for conveyances, nor is it a legal survey. The information is presented on a best-efforts basis, and should not be relied upon for making financial, survey, legal or other commitments.

1:17,507

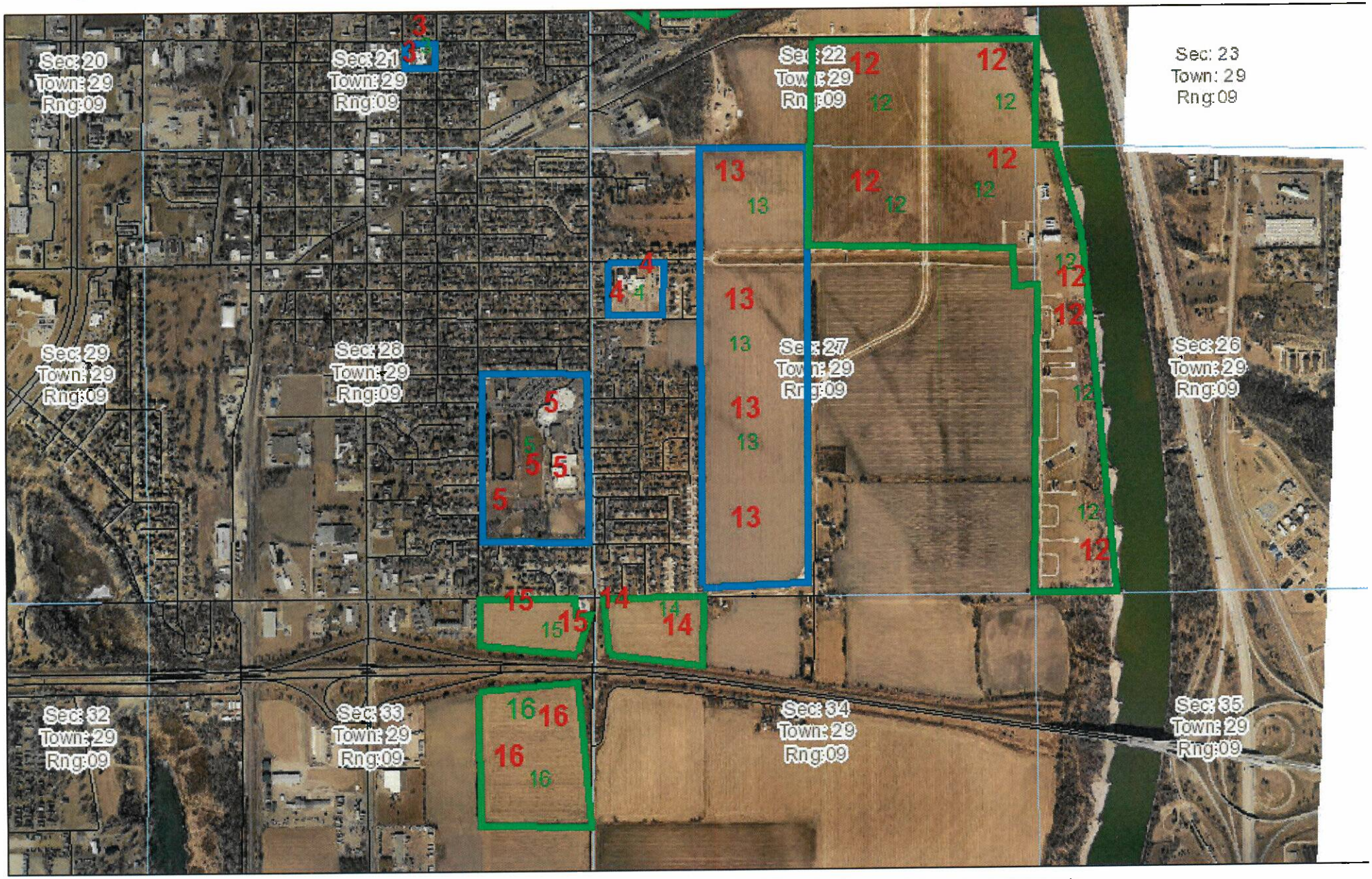
0 0.15 0.3 0.6 mi

0 0.225 0.45 0.9 km

— Streets

Sections

gWorks




September 1, 2022
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DISCLAIMER: This map is not intended for conveyances, nor is it a legal survey. The information is presented on a best-efforts basis, and should not be relied upon for making financial, survey, legal or other commitments.

1:26,506

0 0.225 0.45 0.9 mi

0 0.35 0.7 1.4 km

— Streets

Sections

**C.3.1 Roundabout / Traffic Circle**

Traffic circles or roundabouts are circular intersections designed to eliminate left turns by requiring traffic to exit to the right of the circle. Roundabouts are installed to reduce vehicular speeds, improve safety at intersections through eliminating angle collisions, help with traffic flow more efficiently, reduce operation costs if converting from a signalized intersection, and help create gateway treatments to signify the entrance of a special district or area.

A single lane traffic roundabout is proposed at G Street and Riverview Drive.

# C.3.1 Roundabout / Traffic Circle

**ENGINEER'S CONCEPTUAL OPINION OF PROBABLE COST**
**G Street Roundabout at Riverview Drive**
**South Sioux City, Nebraska**
**JEO Project No.**

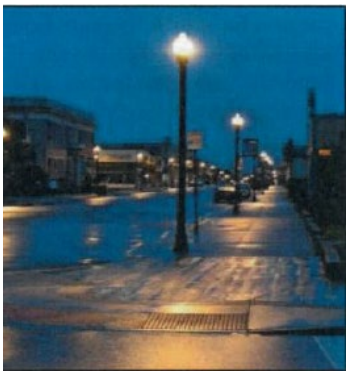
*Date Prepared:*
*July 8, 2022*

**ESTIMATE OF QUANTITIES**

| Item # | Description | Unit | Quantity | Unit Price | Total |
|---|---|---|---|---|---|
| ***GROUP A - BUILD ROUNDABOUT*** | | | | | |
| 1. | Mobilization | LS | 1 | $30,000.00 | $30,000 |
| 2. | Bonding and Insurance | LS | 1 | $10,000.00 | $10,000 |
| 3. | Remove Pavement | SY | 1,000 | $10.00 | $10,000 |
| 4. | 8" Concrete Pavement | SY | 2,600 | $110.00 | $286,000 |
| 5. | 9" Stamped Colored Concrete Pavement (Inner Tubing Radius) | SY | 265 | $130.00 | $34,450 |
| 6. | Roundabout Median Landscaping | SY | 350 | $100.00 | $35,000 |
| 7. | Roundabout Median Stamped Pavement | SY | 50 | $130.00 | $6,500 |
| 8. | Subgrade Preparation | SY | 3,000 | $17.00 | $51,000 |
| | | | | Construction Subtotal Group A | $462,950 |
| | | | | Contingency 20% | $92,590 |
| | | | | **Total Opinion of Construction Cost - Group A** | **$555,540** |
| ***GROUP B - BUILD PAVING*** | | | | | |
| 1. | Mobilization | LS | 1 | $1,000.00 | $1,000 |
| 2. | Bonding and Insurance | LS | 1 | $250.00 | $250 |
| 3. | Remove Pavement | SY | 3,500 | $10.00 | $35,000 |
| 4. | 8" Concrete Pavement | SY | 4,800 | $110.00 | $528,000 |
| 5. | Concrete Curb and Gutter (24"-36" wide) | LF | 1,700 | $35.00 | $59,500 |
| 6. | Build Median Stamped Concrete | SY | 900 | $130.00 | $117,000 |
| 7. | Build Median Landscaping | SY | 350 | $130.00 | $45,500 |
| 8. | Subgrade Preparation | SY | 6,000 | $17.00 | $102,000 |
| 9. | Remove Concrete Sidewalk | SF | 660 | $5.00 | $3,300 |
| 10. | 4" Concrete Sidewalk | SF | 1,050 | $11.00 | $11,550 |
| 11. | Detectable Warning Panels | SF | 75 | $35.00 | $2,625 |
| 12. | Excavation, Established Quantity | CY | 5,000 | $15.00 | $75,000 |
| | | | | Construction Subtotal Group B | $980,730 |
| | | | | Contingency 20% | $196,150 |
| | | | | **Total Opinion of Construction Cost - Group B** | **$1,176,880** |
| ***GROUP C - Drainage*** | | | | | |
| 1. | Mobilization | LS | 1 | $5,000.00 | $5,000 |
| 2. | Bonding and Insurance | LS | 1 | $2,000.00 | $2,000 |
| 3. | 18" RCP, Class III | LF | 250 | $90.00 | $22,500 |
| 4. | 60" Dia. Storm Sewer Manhole | EA | 1 | $6,000.00 | $6,000 |
| 5. | Storm Sewer Inlet, Type A | EA | 6 | $3,500.00 | $21,000 |
| 6. | Storm Sewer Inlet, Type B | EA | 2 | $3,500.00 | $7,000 |
| 7. | Connect to Existing Storm Sewer Structure | EA | 2 | $1,300.00 | $2,600 |
| 8. | Abandon Existing Storm Sewer | LS | 1 | $5,000.00 | $5,000 |
| | | | | Construction Subtotal Group C | $71,100 |
| | | | | Contingency 20% | $14,220 |
| | | | | **Total Opinion of Construction Cost - Group C** | **$85,320** |
| ***GROUP D - Water*** | | | | | |
| 1. | Mobilization | LS | 1 | $5,000.00 | $5,000 |
| 2. | Bonding and Insurance | LS | 1 | $1,500.00 | $1,500 |
| 3. | 10" PVC Water Main, DR 18 | LF | 150 | $100.00 | $15,000 |
| 4. | 10" Gate Valve and Box, MJ | EA | 2 | $3,000.00 | $6,000 |
| 5. | Connect to Existing Water Main | EA | 2 | $1,200.00 | $2,400 |
| 6. | Water Fittings | LS | 1 | $10,000.00 | $10,000 |
| 7. | 6" Fire Hydrant Assembly | EA | 3 | $7,000.00 | $21,000 |
| 8. | Remove Existing Fire Hydrant | EA | 2 | $500.00 | $1,000 |
| | | | | Construction Subtotal Group C | $61,900 |
| | | | | Contingency 20% | $12,380 |
| | | | | **Total Opinion of Construction Cost - Group D** | **$74,280** |
| ***GROUP F - Sanitary*** | | | | | |
| 1. | Mobilization | LS | 1 | $2,500.00 | $2,500 |
| 2. | Bonding and Insurance | LS | 1 | $1,000.00 | $1,000 |
| 3. | 60" Dia. Concrete Manhole | VF | 18 | $1,000.00 | $18,000 |
| 4. | 6" PVC Sanitary Sewer Service, SDR 26 | LF | 50 | $75.00 | $3,750 |
| 5. | 18" PVC Sanitary Sewer Main, PS 46 | LF | 20 | $200.00 | $4,000 |
| 6. | By-Pass Pumping | LS | 1 | $7,000.00 | $7,000 |
| | | | | Construction Subtotal Group C | $36,250 |
| | | | | Contingency 20% | $7,250 |
| | | | | **Total Opinion of Construction Cost - Group F** | **$43,500** |
| | | | | Construction Subtotal - All Groups | $1,612,930 |
| | | | | Contingency | $322,590 |
| | | | | **Total Opinion of Construction Cost - All Groups** | **$1,935,520** |
| ***PROFESSIONAL SERVICES*** | | | | | |
| 1. | Engineering Services (Design, Survey, Bidding, Construction Administration) | | | | $425,814 |
| 2. | Overhead (Legal, Fiscal, Etc.) 3% | | | | $48,390 |
| | | | | Subtotal Professional Services | $474,204 |
| | | | | **Total Opinion of Project Cost** | **$2,409,724** |

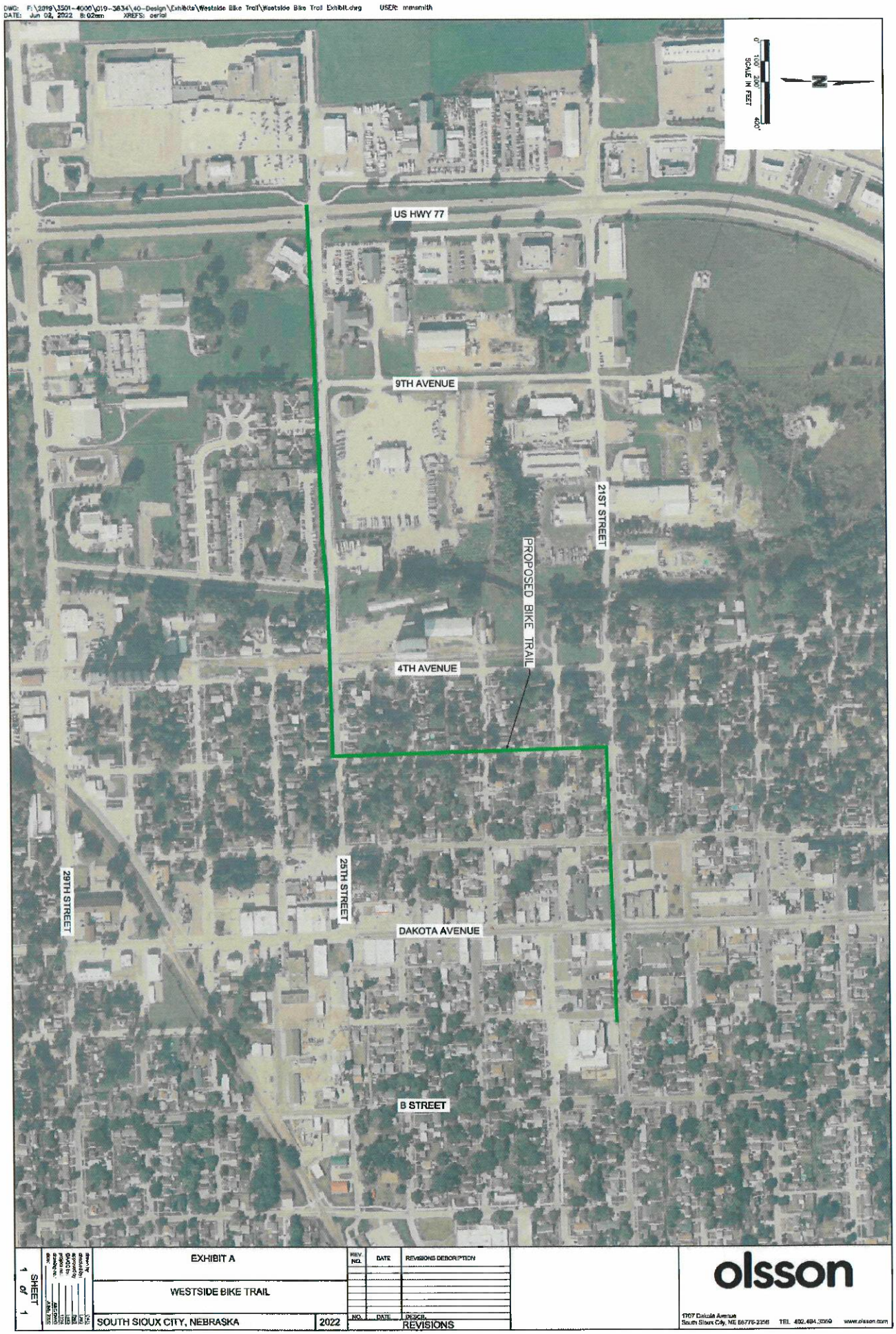
## C.3.2 Lighting

Adequate roadway lighting enhances the safety of all roadway users, while pedestrian walkways lighting improves evening and nighttime security. These costs vary depending upon the fixture type and service arrangements. The City will be enhancing lighting using more energy efficient LED lighting in approximately 480 lights beginning with Census Tract 101, the low-income area of the city.



| | | | |
|---|---|---|---|
| **Header Information** | Source: NE Public Power District (NPPD) | | |
| Work Order/DM Number | 5431118 | | |
| Description(SAP) | SSCITY-MN-ALL HPS LIGHT REPLACE ESTIMATE-SM02 | | |
| | | | |
| | **THIS IS AN ESTIMATE TO REPLACE ALL EXISTING NON-LED CITY OWNED STREET LIGHTS,** | | |
| | **AS WELL AS EXISTING NON-LED RENTAL AREA & DIRECTIONAL LIGHTS.** | | |
| | **PRICES INCLUDE PURCHASING, SHIPMENT, MAN & BUCKET HOURS FOR INSTALLATION/REPLACEMENT.** | | |
| | | | |
| | **THIS ESTIMATE WILL CHANGE AS TIME GOES ON AS BURNED OUT NON-LED LIGHTS** | | |
| | **WILL BE REPLACED WITH LED AS INITIALLY INSTRUCTED BY CITY.** | | |
| | | | |
| Address Information | | | |
| Engineer/Estimator | tjtorso | | |
| Description from DM Alternative #X | | | |
| | | | |
| | | | |
| | | | |
| **Design Summary** | | | |
| Point/Span | | | |
| P-1 | REPLACE (25) 100W HPS AREA LIGHTS W/44W LED (MAN HOURS & SMALL BUCKET TRUCK INCLUDED) | | |
| | **$7,340.50** | | |
| P-2 | | | |
| | REPLACE (6) 250W DIRECTIONAL LIGHTS WITH 132W LED (MAN HOURS & SMALL BUCKET TRUCK INCLUDED) | | |
| | **$5,260.62** | | |
| P-3 | | | |
| | REPLACE (70) 400W DIRECTIONAL LIGHTS WITH 189W LED (MAN HOURS & SMALL BUCKET TRUCK INCLUDED) | | |
| | **$64,120.70** | | |
| P-4 | | | |
| | REPLACE 221 100W RESIDENTIAL STREET LIGHTS WITH 44W LED (MAN HOURS & SMALL BUCKET TRUCK INCLUDED) | | |
| | **$66,899.91** | | |
| P-5 | | | |
| | REPLACE (123) 250/400W HPS WITH 131W LED (MAN HOURS & SMALL BUCKET TRUCK INCLUDED) | | |
| | **$53,242.26** | | |
| P-6 | | | |
| | REPLACE (35) 100W HPS POST TOP LIGHTS WITH 71W LED (MAN HOURS & SMALL BUCKET TRUCK INCLUDED) | | |
| | **$20,258.60** | | |
| | | | |
| **Total Estimated Costs** | **$217,122.59** | | |
| | | | 480 |
| | | | |
| **Additional** | Requires poles and lights (Source: Olsson and Associates) | | |
| **Siouxland Freedom Park** | **100,000.00** | | 10 |
| | | | |
| | | | |
| **TOTAL Costs** | **$ 317,122.59** | | 490 |

# C.3.3 Westside Pedestrian Bicycle Walking Path



# C.3.3 Westside Pedestrian Bicycle Walking Path

**Preliminary Opinion of Probable Cost**
**Westside Bike Trail**
**South Sioux City, Nebraska**
**June 2, 2022**

| NO. | DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL |
|---|---|---|---|---|---|
| 1 | Mobilization | LS | 1 | $ 60,000.00 | $ 60,000.00 |
| 2 | Earthwork | LS | 1 | $ 30,000.00 | $ 30,000.00 |
| 3 | 6" Concrete Bike Trail (10' width) | SY | 5,900 | $ 70.00 | $ 413,000.00 |
| 4 | ADA Ramps | EA | 20 | $ 500.00 | $ 10,000.00 |
| 5 | Pedestrian Crossing (HWY 77 & RR) | EA | 2 | $ 25,000.00 | $ 50,000.00 |
| 6 | Seeding | AC | 1.5 | $ 5,000.00 | $ 7,500.00 |
| 7 | Erosion Control | LS | 1 | $ 5,000.00 | $ 5,000.00 |
| 8 | Traffic Control | LS | 1 | $ 5,000.00 | $ 5,000.00 |
| 9 | Utliity Relocation (Transformer, Light Pole, Hydrants etc.) | EA | 10 | $ 5,000.00 | $ 50,000.00 |
| SUBTOTAL | | | | | $630,500.00 |
| CONTINGENCY (20%) | | | | | $126,100.00 |
| SURVEY, DESIGN, & CONSTRUCTION OBSERVATION (20%) | | | | | $126,100.00 |
| **Total Project Cost** | | | | | **$882,700.00** |

# C.3.4 MidAmerican / Veteran Drive Trail


THE SECTION LINES, PROPERTY LINES, EASEMENTS, AND RIGHT OF WAY AS SHOWN ARE MAPPED BASED ON DOCUMENTS FROM THE DAKOTA COUNTY COURTHOUSE. NO TITLE WORK HAS BEEN DONE ON THE SUBJECT PROPERTIES AND NO SURVEY WORK HAS BEEN PREFORMED IN THE PREPARATION OF THIS DOCUMENT

22X34

PROJECT NO R0000000.00
DATE 6/3/2015
DRAWN BY RMO
FILE NAME
FIELD BOOK FIELD BOOK
FIELD CREW XX/XX
SURVEY FILE NO 000000
REVIEW BY ---
REVIEW DATE ---
REVISIONS ---

**MID-AMERICAN TRAIL EXHIBIT**

**SOUTH SIOUX CITY, NE**

JEO CONSULTING GROUP INC
Ph: 402.494.7019
1909 Dakota Avenue
South Sioux City, NE 68776

# C.3.4 MidAmerican / Veteran Drive Trail

**ENGINEER'S CONCEPTUAL OPINION OF PROBABLE COST**
**Project Name: Mid-American Trail**
**Project Location: South Sioux City, NE**

*Date Prepared:*
*August 3, 2021*

**ESTIMATE OF QUANTITIES**

| Item # | Description | Unit | Quantity | Unit Price | Total |
|---|---|---|---|---|---|
| ***Group A - Veterans Drive Trail*** | | | | | |
| 1. | Mobilization | LS | 1 | $75,000.00 | $75,000 |
| 2. | Bonding and Insurance | LS | 1 | $25,000.00 | $25,000 |
| 3. | Clearing and Grubbing | LS | 1 | $4,000.00 | $4,000 |
| 4. | Stripping and Topsoiling | CY | 1,900 | $10.00 | $19,000 |
| 5. | Excavation, Established Quantity | CY | 1,900 | $10.00 | $19,000 |
| 6. | 24" RCP, Class III | LF | 200 | $100.00 | $20,000 |
| 7. | 24" RCP Flared End Section | EA | 16 | $1,200.00 | $19,200 |
| 8. | Remove Pavement | SY | 27 | $35.00 | $933 |
| 9. | Remove Concrete Sidewalk | SF | 564 | $5.00 | $2,820 |
| 10. | 6" Concrete Driveway | SY | 82 | $80.00 | $6,578 |
| 11. | 6" Concrete Trail | SF | 105,780 | $6.00 | $634,680 |
| 12. | 4" Concrete Sidewalk | SF | 60 | $10.00 | $600 |
| 13. | Detectable Warning Panels | SF | 340 | $40.00 | $13,600 |
| 14. | Relocate Utilities | LF | 1,000 | $30.00 | $30,000 |
| 15. | Adjust Utilities | LS | 1 | $20,000.00 | $20,000 |
| 16. | White Preformed Pavement Marking, Type 4, Crosswalk Bars, Grooved | EA | 12 | $400.00 | $4,800 |
| 17. | Curb Inlet Sediment Filter | EA | 30 | $150.00 | $4,500 |
| 18. | Silt Fence, Low Porosity | LF | 5,000 | $3.50 | $17,500 |
| 19. | Hydro-Seeding, Fertilizer and Mulch | ACRE | 2.4 | $5,000.00 | $12,000 |
| 20. | Temporary Traffic Control Measures | LS | 1 | $8,000.00 | $8,000 |
| | | | | | |
| | | | | Construction Subtotal Group A | $937,220 |
| | | | | Contingency 15% | $140,590 |
| | | | | **Total Opinion of Construction Cost - Group A** | **$1,077,810** |
| | | | | | |
| ***Group B - 25th Street Trail*** | | | | | |
| 21. | Mobilization | LS | 1 | $20,000.00 | $20,000 |
| 22. | Bonding and Insurance | LS | 1 | $7,500.00 | $7,500 |
| 23. | Clearing and Grubbing | LS | 1 | $4,000.00 | $4,000 |
| 24. | Stripping and Topsoiling | CY | 569 | $10.00 | $5,690 |
| 25. | Excavation, Established Quantity | CY | 569 | $10.00 | $5,690 |
| 26. | 24" RCP, Class III | LF | 60 | $100.00 | $6,000 |
| 27. | 24" RCP Flared End Section | EA | 4 | $1,200.00 | $4,800 |
| 28. | Remove Concrete Sidewalk | SF | 1,980 | $5.00 | $9,900 |
| 29. | 6" Concrete Trail | SF | 25,000 | $6.00 | $150,000 |
| 30. | 4" Concrete Sidewalk | SF | 48 | $10.00 | $480 |
| 31. | Detectable Warning Panels | SF | 40 | $40.00 | $1,600 |
| 32. | White Preformed Pavement Marking, Type 4, Crosswalk Bars, Grooved | EA | 12 | $400.00 | $4,800 |
| 33. | Curb Inlet Sediment Filter | EA | 2 | $150.00 | $300 |
| 34. | Silt Fence, Low Porosity | LF | 1,500 | $3.50 | $5,250 |
| 35. | Hydro-Seeding, Fertilizer and Mulch | ACRE | 0.8 | $5,000.00 | $4,000 |
| 36. | Temporary Traffic Control Measures | LS | 1 | $4,500.00 | $4,500 |
| | | | | | |
| | | | | Construction Subtotal Group A | $234,510 |
| | | | | Contingency 15% | $35,180 |
| | | | | **Total Opinion of Construction Cost - Group B** | **$269,690** |
| | | | | | |
| | | | | Construction Subtotal - All Groups | $1,171,730 |
| | | | | Contingency | $175,770 |
| | | | | **Total Opinion of Construction Cost - All Groups** | **$1,347,500** |

| | | | |
|---|---|---|---|
| ***PROFESSIONAL SERVICES*** | | | |
| 1. | Design Services (Engineering, Survey, Architecture) | 20% | $234,400 |
| 2. | Overhead (Legal, Fiscal, Etc.) | 2% | $23,000 |
| | | Subtotal | $257,400 |
| | | **Total Opinion of Project Cost** | **$1,604,900** |

JEO Consulting Group Inc.'s (JEO) Opinions of Probable Cost provided for herein are to be made on the basis of JEO's experience and qualifications and represent JEO's best judgment. However, since JEO has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, JEO cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from Opinions of Probable Cost prepared by JEO.

**Appendix C.3.5 Enhanced Alcohol and Speed Checks**


In response to the many complaints of speeding, enforcement efforts will include a concentration on areas specifically mentioned in addition to planned joint enforcement efforts that are conducted regularly with the sheriff and NE Highway Patrol. An attempt will be made to document costs related to any special enforcement efforts that address areas of most concern described in the Action Plan. Costs are not delineated but an estimate is made that over five years approximately $20,000 primarily in staff time will involve local matching share.

**C.3.6 Pedestrian Crossing Beacons**

(Action Plan pg. 28)
Pedestrians would benefit from additional crosswalks on commercial corridors as means to increase the accessibility of businesses on foot. Crosswalks with signs, those that flash on-demand, or pedestrian hybrid beacons that trigger red light signals could be placed between intersections. This would reduce the distance residents had to walk to use a crosswalk. Frequent, visible crosswalks, especially those with curb bump-outs or a raised design, could also provide visual cues to drivers that the corridor is one that should be taken at lower speeds.

Student pedestrian safety was noted as a concern of the public on multiple occasions. The installation of such visible crosswalk designs as noted above would enhance the safety of students in school zones during rush hour. The city and schools can also organize carpool programs for students to reduce congestion in and around parking lots and reduce the risk of crashes during pick-up and drop-off times.

Eight locations for the pedestrian crossing beacons -

- Middle / High school @ G street
- Harney school on Arbor Drive
- New Elementary School on 29th Street
- Siouxland Freedom Park @Riverview Drive
- Four additional sites, to be determined
    - Near church and new housing development on G Street
    - Near new housing development

Source for pricing:
Estimated $85,000-$90,000 that included beacon system ($35,000, light pole $10,000, and installation ($35,000)

- Street Smart Rentals www.streetsmartrental.com
- General Traffic Controls, Inc. www.generaltraffic.com

**C.3.7 Achievable Countermeasures**

Action Plan, pg. 12, 22, 23, 26-27, 29, 41
Cross walk visibility enhancements, signing, strategic use of planters, completion of missing sidewalks, obstruction such as parked cars, trees in line of vision at intersections can contribute to safety issues. Under such conditions, more substantial crossing improvements or completion of off-road issues (i.e. missing sidewalks) to prevent an increase in pedestrian, vehicle crash potential. Many of these countermeasures were recommended and identified in the planning efforts.

Approximately $342,095 is budgeted to address these items.

Source Documentation:

- TA Design Treatment Typical Costs (Material + Installation)
- Online estimates

**C.3.8 Variable Signs**

Action Plan, pg. 32,
Redundancy reminders of speeds, safety enhancements for road closures, placed and moved as needed. The use of additional speed limit signs, as well as variable signs that can be moved and updated to display relevant information are strategies that could also help to curtail speeding or reckless driving behavior. The focus for police enforcement of speed limits on areas where it reportedly happens frequently based on public feedback in the Action Plan. Enforcement should also focus on school zones, pedestrian areas, and near senior housing, accessible and low-income housing, and trailer courts.

Budget estimates unit cost at $29,000 each plus shipping x 4.

Source Documentation: PCMS-1500 Ver-Mac www.Ver-Mac.com

**C.3.9 Supplemental Action Planning**

Three items were addressed repeatedly throughout the action plan that requires further action planning. The three items included accessibility, Dakota Avenue intersection and signal design and the congestion around the middle and high school. Additional planning is required

Accessibility, Action Plan pg. 17, 21, 25, 31
To assist with the cost of an accessibility study by the local MPO estimated to be $23,700. Source: SIMPCO

Dakota Avenue design, Action Plan pg. 14, 17,21-22, 24
No SS4A funds are requested. Work with Nebraska DOT is occurring to increase safety elements along the Dakota Avenue corridor as it has a high crash count. The study, original plan design is found at https://www.southsiouxcity.org/egov/documents/1662121622_11331.pdf
The City and Engineers continue to work with NDOT, as they have indicated that they will fund the project. This leverages safety strategies currently in the works.

Middle and High School, Action Plan pg. 18, 22, 29-30
Throughout the Action Plan the need to resolve the congestion around the middle and high school was identified through the surveys, public meeting events, and by committees (SS4A, public works, city, school). However, no consensus has been reached. Through continued collaboration efforts, further design work, supplemental action planning costs are available. This would also address the need for further study as the action plan is implemented.