

# 2023 Sioux Falls Bicycle Plan



### **TABLE OF CONTENTS**

<b>Chapter 1–</b> Vision and Goals for Change
<b>Chapter 2–</b> Bicycle Plan Strategy6
<b>Chapter 3</b> –Public Involvement14
<b>Chapter 4–</b> Bicycle Plan Design Guide
<b>Chapter 5</b> —The Trail Plan
<b>Appendix</b>



### **Chapter 1**—Vision and Goals for Change

#### Why is Bicycling Important in Sioux Falls?

WE BELIEVE bicycling brings people together.

When more people ride bikes:

Life is better for everyone;

Communities are safer, stronger and better connected;

Our community is healthier, economically stronger, environmentally cleaner and more energy independent.

-League of American Bicyclists

**Planning for Change** is planning to survive and prosper.

Planning is a process to change the status quo for the better in a very comprehensive "big picture" manner - taking all aspects and views into consideration. If everyone understands this going into the planning process, it will not be a surprise and more likely to succeed.

This Bicycle Plan has set the structure and direction to provide a continuing process for change strategies and actions by answering the following questions.

#### Why do we need to change bicycling and how can we make a difference?

► The single-occupancy vehicle has been the dominant form of transportation over the past 50 years (91.6% motor vehicle mode share in Sioux Falls). Because the motor vehicle is how people get around the community, the City has developed a street system that does not always take into consideration other forms of transportation. The lack of complete streets in Sioux Falls has discouraged people from using bicycles (0.3% bicycle mode share in Sioux Falls) and other forms of transportation such as pedestrians (2.3 % mode share) and transit (0.6% mode share).

#### What is our bicycle challenge?

The challenge is to find strategies to improve the Sioux Falls bicycle mode share to 1.0% over the next 10 years and to increase volumes on the Bicycle Trail by 50%.



#### How will the proposed changes to bicycling make a difference to the community and make the community better?

- ▶ Improve the environment.
- Reduce congestion by shifting short trips out of cars.
- Save lives by creating safer conditions for bicyclists.
- ► Greater choice of travel modes increases independence.
- Creating a community that is an attractive destination for people.
- ► Enhance recreational opportunities.
- Reduce the need for costly new road infrastructure,
- Preventing car-bike crashes
- ► Improve the health and well-being of the community

#### What public involvement and market research help determine reasons to change bicycling?

- ► 12% of people identified the bicycle as a primary transportation mode for their household for frequently traveled destinations (2019 Market Research Study)
- ► Satisfaction with safe biking facilities has decreased over the last 10 years (69% satisfaction in 2010 to 63% in 2014 to 61% in 2019)
- ► The public is satisfied with the trail system and would like for more connections and new trails throughout the City and region. However, the public is very worried about bicycle safety anywhere else in the community and would like to bicycle comfortably throughout the city and gain access to the bike trail from any part of the city (See Chapter 3—Public Involvement).

#### **BICYCLE PLAN VISION**

To construct a comprehensive network of bicycle lanes and trails that are safe and accessible to all.

#### **Priority goals for bicycling in Sioux Falls**

Planning to Succeed-how to realize our mission

In the Spring of 2021, a public survey was placed on the Planning & Development Services website to solicit input on the goals of the Bike Plan update. The survey was also listed on the Parks Department website. The survey asked the public to rank the importance of goals and to provide user data regarding bike facility usage in the City of Sioux Falls. The survey provided vital information which led to a reprioritization of goals for the next 5 years. Between June and August of 2021, the Bicycle Committee conducted further work sessions to rank the action items of the "very high" and "high" priority goals. The goals have been recategorized and the action items have been ranked in order of importance based on the work sessions.

### Very High Priority Goals

- ▶ Develop a complete bicycle network that is both comfortable and safe for all level of bicyclists through the addition of new on-street and trail facilities as identified in the Bicycle Plan.
- Expand the trail so that any origin or destination in the city is located no more than one-mile from the trail.
- Ensure that safe and comfortable bicycle routes exist for all schools and employment centers.

### High Priority Goals

- Develop a bicycle public education campaign.
- ► Continue to implement the city "complete street" resolution to accommodate all forms of transportation within each street right-of-way for all roadway or development projects.
- Add bicycle safety and Bike 101 programs.

### Moderate Priority Goals

- Complete bicycle projects by leveraging private resources with public dollars to maximize funding.
- City funding and staffing for bicycle planning should be a priority.



### **Chapter 2**—Bicycle Plan Strategy

How to Implement Plan Goals

#### What do we need to make bicycling changes happen in Sioux Falls?

The plan sets the direction, but it does not produce results. This chapter sets a continuous strategic planning process that encourages adapting strategies to help reach the desired goals and priorities.

#### ▶ How do we succeed?

- ► Experiment/Test actions—Pilot Projects
- Execution by the whole team or organization—not "top down"
- Determine project scopes and costs
- Define and measure results of each action
- ► Adaptive—if it doesn't work—go back to above questions and adjust
- Iterative process—build, refine, improve as needed
- Keep asking the above questions
- ► Are they all still valid?
- Accept that results will be incremental and cumulative and measure results

#### **SPECIFIC STRATEGIES:**

#### **Very High Priority Goals**

Develop a complete bicycle network through the addition of new facilities as identified in the Bicycle Plan.

#### Possible Action Items

- ► Implement the proposed bicycle network identified in Chapter 4—On-Street Priority Map, Trail Priority Map, and Sidepath Priority Map. This shall also include the following attributes:
  - → Collect data, conduct research, and update electric bicycle/vehicle laws as needed.
  - → Design and install bicycle/pedestrian oriented wayfinding signage.
     Signage should be destination based and provide time or distance.

90% of bicycle survey respondents said that developing a complete network is important (66% very important).

- All on-street routes should radiate off the trail to help bicyclists gain access to the trail and to destinations across the city.
- Find ways to provide access across major barriers especially I-229 from 26th Street to Western Avenue.
- Design and implement bike facilities that are appropriate for the street traffic. Streets with design speeds over 30 mph should include either sidepath or buffered/protected bicycle lanes.
- Signals should be designed to detect bicycles.
- Find design methods that safely and comfortably cross barriers such as the Interstates, rivers, and major intersections. Design methods should be reviewed include overcrossings, undercrossings, protected bicycle intersections, bike boxes, and other design methods.
- → Develop bicycle boulevard pilot projects. Identify future bicycle boulevard projects using the On-Street Priority Map.
- ► Meet with developers, businesses, and citizens to provide information about the benefits of including bicycle facilities within their developments.
- Count on-street bicycles for study of before & after on-street facility improvements.
- ► Cost-share with South Dakota Department of Transportaion on interstate highway crossings.
- Pursue private funding opportunities for pilot projects and other active transportation funding opportunities from State and Federal resources.
- ► The Active Transportation Board will give a voice to bicycle and pedestrian groups to provide input to the City Council and Mayor to advocate for funding for new facilities.
- Bicycle committee shall provide recommendations for city street corridor studies and city and state bike laws.

Expand the Trail so that any origin or destination in the city is located no more than one-mile from the trail.

#### Possible Action Items

- ► Build initial unpaved trails to help develop and preserve new trail corridors.
- Widen the Trail to 12 feet where applicable.
- Proactively inform the public regarding Trail construction activities and develop alternative routes during the construction.

90% of bicycle survey respondents said that expanding the Trail is important (61% very important).



- Regularly update the priority trail/sidepath/on-street bicycle maps to show new trails and on-street facilities.
- ► Develop new trail sections based upon the Trail Priority Map located in Chapter 5.
- ▶ Develop new access points to the trail system consistent with the trail access improvement projects in Chapter 5.
- ▶ Trail facilities should be designed to accommodate beginning bicycle riders.
- Ensure that safe and comfortable bicycle routes exist for all schools and employment centers.

#### Possible Action Items

- Areas that anticipate larger pedestrian/bicycle volumes should have wider sidewalks/ side paths.
- Add more dedicated bicycle routes in school and employment center areas.
- ▶ Identify streets that could implement buffered bike lanes to provide greater separation between bicycles and cars.
- ► Implement traffic calming measures in school and employment center areas such as reduced speed limits, curb extensions, chicanes, median refuge islands, road diets, and neighborhood round-abouts.
- Implement safe bicycle and pedestrian crossings of major streets. Coordinate with Public Works and School District staff to apply for "safe routes to school" funding opportunities.
- Implement on-street priority map with a focus on trafficcalming improvements such as chicanes and bump-outs.

**High Priority Goals** 

Develop a bicycle public education campaign.

#### Possible Action Items

- ▶ Develop a driver awareness of bicyclists program.
- Foster a private partner for bike education.
- Bicyclists should be treated as vehicles and act like vehicles.
- Provide Police training of bike laws every other year.

According to the Bicycle Survey, ensuring safe and comfortable bicycle routes for all schools and employment centers is important to 87% of respondents (51% very important).

- Educate about bicycle helmet usage
- ► The Falls Area Bicyclists (FAB) club shall be supported as the city's bicycle advocacy and education organization.
- ► Fall Area Bicyclists (FAB) should develop community bicycle ride events each year as a fund raiser.
- Provide a bicycle plan status report in the Fall of each year to the Bicycle Committee.
- Construct trails to reach American Association of State Highway and Transportation Officials / Public Service Announcement (AASHTO) safety guidelines.
- ▶ Bicycle safety information on city website and bike maps.
- ► Coordinate with the Falls Area Bicyclists (FAB) club on bicycle advocacy and education.
- Include bike safety and education PSA on city website.
- Police should first increase the education of traffic laws for bicyclists. Once an education campaign has been implemented, police should begin enforcement of traffic laws.
- Report, track and analyze bike crashes. Bicycle crash data will identify where improvements are needed.

► Implement a safety campaign in coordination with Falls Area Bicyclists (FAB) and Parks Department addressing speed limits, rules of the road, and e-bike laws.

- ► Provide the Active Transportation Board a yearly report with the following:
  - new trail, sidepath and on-street bicycle facility construction/maintenance
  - → updated priority maps for adoption
  - → Complete Street reviews

77% of bicycle plan survey respondents thought that bike safety programs should be an important policy (43% very important)

Continue to implement the city "complete street" resolution to accommodate all forms of transportation within each street right-of-way for all roadway or development projects.

#### Possible Action Items

- Incorporate bike routes and trails as a part of all major street corridor projects.
- Staff shall review and track all new subdivisions, road construction projects, and city utility reconstruction projects to be in compliance with the City's "complete streets" resolution.

85% of bicycle survey respondents thought adding a line-item to the city budget is an important policy. (50% very important).



- ▶ Bicycle facilities should be located in a way that connects major destinations.
- ▶ On-street bicycle facilities should be located no further than ½ mile from any residence or business in Sioux Falls. (page 46)—buffer-map around existing routes.
- ▶ Increase the incentive for bicycle parking in the city's zoning ordinance.
- ▶ Encourage bicycle parking in commercial areas and other destination areas.
- ▶ Update design standards to allow bicycle boulevards, cycle tracks, and protected bicycle lanes as new options.
- ► Implement priority trail/sidepath/on-street bicycle plan maps through continued implementation of the City's Complete Street review.
- ► Review City's Complete Street Resolution and update as needed to implement current standards and best practices.
- Metropolitan Planning Organization (MPO) Bicycle Plan should be updated.
- Update the Trail and route map every two to three years and include the development of a digital and clickable interactive Trail and route map.
- Maintain the bicycle racks on the front of all Sioux Area Metro buses.
- ► Add information to trail kiosks to gain input on Trail conditions or improvements.
- ▶ Drinking fountains should be placed every 4 to 5 miles along any trail.

Facilitate and provide assistance for bicycle safety and Bike 101 programs

#### Possible Action Items

- ▶ Implement a "bike to school" day/ week program in coordination with the school districts.
- ► Develop a partnership with schools for a bicycle club/education program as a part of school club activities. (E.g. Outride)
- Pursue a bicycle education program similar to the Parks Department Mobile Recreation Unit to meet social equity goals to provide access to children in low income neighborhoods.
- Organize bicycle rodeos and add more advanced components for older children that teaches street riding safety skills.
- ► Support "Effective Cycling" classes for adults.

The bicycle survey indicated that 80% of bicycle plan survey respondents thought that providing assistance for bicycle safety and Bike 101 programs would be important (38% very important)

- "Travel train" bicyclists to commute to work. (E.g. review travel routes and connections from home to work and practice loading a bicycle on a bus).
- ► Sponsor "Share the Road" affinity license plates.
- Develop and help facilitate community bike safety education programs.
- Add solar powered emergency call buttons and lighting along the trail.
- ► Coordinate with school districts to identify opportunities to implement bicycle education (E.g. bicycle rodeo, physical education classes, bicycle clubs).
- ► Coordinate with local bicycle groups to provide member education and training.
- ► If resources are limited, focus on providing education for elementary school children.
- Focus implementation in low-income neighborhoods/schools.
- Coordinate with local and state advocacy groups to provide outreach and education opportunities.

#### **Moderate Priority Strategy**

Complete bicycle projects by leveraging private resources with public dollars to maximize funding.

#### Possible Action Items

- ▶ The partnerships should be utilized between new Trail and on-street bicycle facilities.
- ▶ Bicycle parking facilities should be encouraged thru a public/private cost-share program.
- Bike share owned by non-profit with business and government partners.
- ► Pursue partnerships to create a bicycle connection from Veterans Parkway to Good Earth State Park.
- Identify and apply for State, Federal, and private funding opportunities.
- ▶ Identify and provide local partners with opportunities to develop bicycle improvements (E.g. bike share, downtown bicycle parking).
- City funding and staffing for bicycle planning should be a priority.



#### Possible Action Items

- ► The city funding should be enough to develop one neighborhood bikeway, one commuter route and install 1 to 2 miles of new arterial sidewalk each year.
- ► The city funding should include a bike rack cost-share program with rack installation consistent with performance-based standards in the Bicycle Plan.
- ▶ The city funding should include money for bike safety and bike 101 programs.
- ► The city funding should include other bicycle-related improvements that are also included within the bicycle plan. In particular, bicycle safety improvements and bikeability initiatives should be explored such as Bicycle Boulevards, Safe Routes to School, and street-tree planting.
- ► The funding shall include opportunities to fund public portions of private and public partnerships such as bike share program opportunities.
- ► Support Active Transportation Board (ATB)—ATB shall identify, prioritize and pursue funding for bicycle and pedestrian improvements.
- Coordinate with Sioux Falls MPO to identify and apply for State and Federal funding for active transportation improvements.
- ▶ Identify and implement "bikeability" public improvements. EX. Tree planting, traffic calming devices, bicycle parking requirements for private development, public bicycle parking facilities.
- ► Increase the staff time of City of Sioux Falls Planning dedicated to bicycle and pedestrian activities.
- Provide bike information on the City of Sioux Falls website.
- Ensure the Trail is accessible to emergency vehicles.
- Work with Sioux Area Metro to develop a bike share program.

#### **Bicycle Actions to Maintain or Improve**

- ► Promote separated or buffered bike lanes and/or sidepaths when new arterials are constructed and/or existing arterial streets are reconstructed as per the Sidepath Priority Map.
- Maintenance budget for existing on-street facilities.

### **Bicycle Plan Action Items**

Trail Priorities	Implement top ten list - Construct very high priority trails (See Trail Priority Map Page 42)
Trail Access Connections	Construct / pave all identified trail connections (See Trail Connections Map Page 46).
On-Street Priorities	Implement top-ten list - Completing 15th Street Bicycle Boulevard is priority with Bahnson Avenue connection second.
Side Path Priorities	Implement the top-ten list. South Veterans Parkway, portions of Tallgrass Avenue, Arrowhead Parkway, 57th Street, 85th Street, and Sertoma Avenue are identified in the five-year Capital Improvement Plan as upcoming projects. (See Side Path Priority Map Page 33)
Trail Preservation	Coordinate with Parks Department to purchase right-of-way and easements for future trail expansion
E-Bikes	Update e-bike laws / education. Review best practices and statistics.
On-Line Maps	Regularly update on-line map layers and maintain a database of new side path, on-street routes, and trail construction.
Bicycle Education	FAB, Parks, Police, Public Works, Bicycle Subcommittee - Coordinate on implementing an education campaign geared to all modes.
Downtown Parking	Inventory, identify new locations, design new bicycle parking for downtown. Bicycle parking should be as ubiquitous as car parking
Pilot Projects	Identify opportunities for more pilot projects in neighborhoods and around schools to slow traffic and increase safety
Bicycle Rodeo	Coordinate with schools and PATH subcommittee to plan and begin implementing yearly bicycle rodeo.
Destination Signage	Identify destinations and routes that need signage. Coordinate with Public Works Department to develop
ATB Updates	Identify information that needs to be collected and presented to Active Transportation Board on a yearly basis. Complete Street reviews, new trails constructed, new side path constructed, new on-street routes completed.
Complete Streets	Continue to implement complete streets resolution including updates to City Engineering Design Standards. Complete Street 2.0 is an opportunity to implement multi-modal planning in new development.
Grants Opportunities	Identify future grant opportunities and high priority projects. Need design plans and cost estimate for new trails



### **Chapter 3**—Public Involvement

Over the course of the last decade, the Sioux Falls Planning Office has developed plans, studies and surveys that help answer the question—what do the citizens of Sioux Falls think about bicycling and what would they like to see changed? All public involvement listed below were provided to the Bicycle Committee to help the committee develop plan policies and priorities.

The Shape Sioux Falls Comprehensive Plan develops policies that help guide future ordinances, budgets and master plans for the City of Sioux Falls. In regard to bicycling, the following policies.

- Sioux Falls street and transportation network should accommodate all modes of transportation, with special consideration to encourage pedestrian, bicycle, and public transportation. (Chapter 5—C. Multi-Modal Access)
  - ▶ Policy 1: Identify "Complete Streets" Corridors
  - ▶ Policy 2: Provide Transit Access
  - ▶ Policy 3: Provide Bicycle Parking
  - ▶ Policy 4: Provide Direct Pedestrian Pathways in Nonresidential Areas
  - ▶ Policy 5: Pedestrian and Bicycle Access to Residential Areas
  - ▶ Policy 6: Street Connectivity in Residential Areas

#### **Long-Range Transportation Plan**

- ▶ 2019 Sioux Falls MPO LRTP Market Research Study—Expansion of the region's biking system will ensure that residents can safely bicycle in the region.
- ▶ People satisfaction with safe biking facilities has decreased over the last 5 years (69% satisfaction in 2010 to 63% in 2014 to 61% in 2019)
- Expand and maintain a network of bicycle, pedestrian, multimodal, and transit facilities that closes gaps, removes barriers, and connects homes, activity centers, and complementary amenities.

#### Downtown 2035 Plan

- ▶ The Downtown 2035 Plan update is currently underway in 2022–2023.
- ▶ The Downtown 2035 Plan recommends to improve mobility and infrastructure for all modes of transportation to and within downtown.
  - ► Encourage policies and programs that increase transit ridership, carpooling, car sharing, bicycling, bicycle sharing, and renewable energy vehicles.

- ► Improve bicycle and pedestrian safety and comfort when traveling to and from downtown by reducing traffic speeds, reducing crossing distances, constructing protected bike lanes, and improving strategic mid-block crossings.
- ▶ Develop bicycle/pedestrian connections between the trail system and surrounding neighborhoods to downtown.

#### Bicycle Plan Survey Analysis—full survey results in Appendix

- ▶ The Trail is by far and away what respondents like best about bicycling in Sioux Falls.
- ▶ The majority of bicyclists are recreational riders (89%) during the warmer weather months.
- ▶ Respondents prefer using neighborhood streets and the trail system to get to a variety of destinations.
- Riders are discouraged from bicycling on higher traffic streets due to traffic conflicts and discourteous drivers.
- ▶ 51% of bicyclists are intent on exploring more of the area and are wanting more trail connections in the City and to the regional network.
- ▶ 69% of respondents like to ride on the Trail, parks, and around downtown.
- ▶ Other than the Trail, 35% of respondents wanted improved on-street bicycle facilities such as bike lanes and sharrows.
- ▶ Education for drivers, bicyclists and pedestrians is seen as the best option to improve bicycling in the City.
- ▶ 61% of survey takers want to expand and improve the trail system for all users.

A Bike Plan and Pedestrian Plan Open House was held at the downtown library on May 18, 2023 from 4 P.M. to 6 P.M. The open house was staffed by Planning, Public Works and Parks staff. Comments were positive in general with many directed towards the development of new trails and bicycle facilities throughout the City. All comments are included within the Appendix.

#### **Bicycle Committee**

The Bicycle Committee consists of citizens and city staff that meet monthly to assist in putting together and implementing the Bicycle Plan. Also, the Bicycle Committee provides input into many city transportation projects, helps plan educational projects, provides input on ordinance changes, and helps other suggestions to making Sioux Falls a more bicycle-friendly place. The committee draws from many citizens in Sioux Falls interested in bicycling. Membership is open to any citizen allowing for a person to participate through just e-mails or at each meeting.



The Bicycle Committee met over the course of two years in putting together the Bicycle Plan. The committee reviewed and prioritized goals and policies for the plan. The review included determining design policies and on-street bicycle routes with recommendations for future improvements. The committee also determined public involvement for the plan.

#### **Active Transportation Board**

The Active Transportation Board (ATB) is a committee appointed by the Mayor to provide direction to the Council and city departments on implementation of plans and policies regarding pedestrian, bicycling, safe-routes-to-school, and all other non-motorized forms of transportation. The ATB was recently formed in January 2023 and combines the Bicycle Committee, Pedestrian Committee, and School Traffic Safety Advisory Committee (PATH) who will continue to serve as sub-committees of the ATB. The ATB will review and forward a recommendation to the City Council for the adoption of the 2023 Sioux Falls Bicycle Plan.



### **2023 Bicycle Summit**

On January 15, 2023, Planning staff presented at the South Dakota Bicycle Summit in Sioux Falls. A poster board was employed to obtain input on what the City should focus on regarding bicycling in 2023. Attendees used stickers to identify their top 4 (four) action items.



### Chapter 4—Bicycle Plan Design Guide

These design guidelines are intended to serve as an aid to engineers, designers, planners, and others for on-street bike routes, bicycle parking facilities, and on-street bike route signage. The design guidance is not meant to act as design standards, but rather as an acceptable list of bicycle facilities and the situations in which they are acceptable.

NO.	ТҮРЕ	STREET TYPE	WHEN
1	Protected Bicycle Lanes— separated by curb or barrier	Arterial Streets, Collector Streets	No Parking/adequate Right-of-Way/ heavy traffic
2	Bike Lanes—painted	Arterial Streets	No Parking/adequate Right-of-Way/moderate traffic
3	Sidepaths—8 feet minimum curbside or buffered	Arterial Streets	High Speeds/High Volumes with access no more than every ¼ mile
4	Cycle Tracks—separated from street and pedestrian sidewalk	Arterial Streets	High Speeds/High Volumes—limited Right-of-Way— Curbside sidewalk planned. No other collector route available in the section
5	Sharrows - painted on street	Local Streets/ Collector Streets	On low volume bike routes with good connectivity - painted every block - shall be used in combination with other options
6	Shared Lane – Bicycle Parking	Collector Streets	On low volume bike routes with good connectivity and very little parking - could combine w/ sharrow
7	Bicycle Boulevards	Local Streets/ Collector Streets	Closely paralleled to arterial streets—must do significant traffic calming and signalization for it to be effective.



NO.	ТҮРЕ	WHERE	WHEN
8	Street Signed Routes	Local Streets/ Collector Streets	Signed routes should move to destination-based system and should ultimately include one of the above facilities and should also include sharrows.
9	Bicycle Shoulders	Rural Section Arterial Streets/ Collector Streets	Bicycle Shoulders should be added where it is necessary to add connectivity to existing routes. The shoulders should be at least 6 feet to accommodate.
10	Traffic Calming	Local Streets	Traffic calming on local streets under 25 mph including chicanes, bump-outs, painted
11	High-intensity Activated CrossWalk (HAWK) Signals and Rectangular Rapid Flash Beacons (RRFB)	Arterial Streets, Collector Streets	On major streets that do not warrant signalization

#### More about Protected Bicycle Lanes

- Protected bicycle lanes are designed on roadways with higher volumes and higher speeds.
- 2. Protected bicycle lanes include two types:
  - ▶ Barrier protected bike lanes use physical barriers between people riding bikes and motorized traffic to help people of all ages feel more comfortable on the street. They are usually located next to the curb, rather than between parked cars and moving cars. Statistics show when barrier protected bike lanes are installed, more people ride bikes and safety improves for everyone who uses the street, whether they walk, ride a bike or drive a car.
  - ▶ <u>Buffered bike lanes</u> are similar to conventional bike lanes but with extra padding that helps keep people biking further from moving traffic and away from the danger of car doors in the parking lane.
    - They are highly visible and help to get people biking and driving out of each other's way. Buffered bike lanes are significantly more comfortable than conventional bike lanes.
- 3. They are highly visible and help to get people biking and driving out of each other's way. Buffered bike lanes are significantly more comfortable than conventional bike lanes.

#### **Intersection Improvement Options**

- ► Bike Boxes—http://nacto.org/cities-for-cycling/design-guide/intersection-treatments/bike-boxes/
- Protected Intersections—<a href="http://www.protectedintersection.com">http://www.protectedintersection.com</a>
- ▶ Shared right-turn lane and through bike lane
- Median Refuge Island—<a href="http://nacto.org/cities-for-cycling/design-guide/intersection-treatments/median-refuge-island/">http://nacto.org/cities-for-cycling/design-guide/intersection-treatments/median-refuge-island/</a>
- Mixing zone striping
- Curb Extensions

#### **Bicycle Boulevards**

Bicycle Boulevards are typically located on planned routes that have low speeds (<25 mph) with lower traffic volumes (<3,000 vehicles per day). They provide comfortable and attractive places for bicyclists and pedestrians through local neighborhoods. Bicycle Boulevards use signs, pavement markings, and traffic calming measures to create safe routes to neighborhood destinations. Implement the "Sioux Falls Connections Study" December, 2017 which identifies five routes: 15th Street Bicycle Boulevard, Ralph Rogers/61st Street, 41st Street/Empire Mall area, Bahnson Avenue Connection, and 22nd Street/24th Streets.

### **Pilot Projects**

Pilot Projects are typically temporary traffic calming measures that are constructed bicycle routes in locations that need additional traffic calming. Pilot Projects allow City staff to study and obtain feedback from the public.



The image to the left demonstrates the City's commitment to implementing pilot projects. The Sioux Falls Health Department was awarded a grant to purchase Dezign Line barriers which were installed in key locations to provide a physical buffer between on-street bicycle and/or pedestrian facilities and vehicles. This commitment to pilot projects should continue to be used to study traffic calming measures. The Bicycle Committee should continue to work with City staff to identify locations for additional pilot projects.

### **Proposed On-Street Bicycle Routes - Priorities**

The City of Sioux Falls has established a maximum speed limit in residential neighborhoods of 25 m.p.h. unless a different speed is posted. Streets with speeds lower than 30 m.p.h. are



more comfortable for bicyclists to ride on and are intended for bicyclists to ride in the street. The existing and proposed on-street bicycle routes identify routes that lead to destinations and/or provide connections between trail routes and side paths. The proposed onstreet priority routes should include additional features to identify that they are routes and provide some additional traffic calming devices.

The following on-street bicycle routes have been identified to

be improved to a safe and accommodating bicycle facility. The City will work toward improving these streets to the facility type recommended in the table on the next page. Very High Priority projects are intended to be constructed in the next five years. The total mileage is approximately 18.17 miles. High Priority projects are identified as facilities that should be completed in the next 5 - 10 years. The total mileage for high priority facilities is approximately 25.90 miles. Moderate Priority Routes should be completed in the next 10 - 15 years and include 3.79 miles of bicycle facilities.

Need-to-Study routes are shown along future streets where the right-of-way has not been dedicated and the alignment or type of facility may need to be refined. Long Range Routes are identified on streets that have been built-out without bicycle facilities and it will not be until a future construction project that the on-street facility will be constructed. However, it should be noted that even very high priority projects may be rerouted or adjusted depending on other projects that are constructed in the city. In addition, long range routes may also be constructed before very high priority projects if funding becomes available or a project is added to the City budget.

The following map shows the existing trails, on-street, and side path routes that are currently either constructed or signed as routes. There are specific existing routes that are also identified with a priority rating because they need to be improved. For example, when Russell Street was reconstructed an on-street bike lane was painted. The speed limit is 45 m.p.h. which is too fast for an unprotected bike lane. A future improvement should be providing a protected bike lane on Russell Street. Bahnson Avenue is also identified as needing improvement. The roadway is signed a bike route and sharrows are painted in the drive lane. However, additional traffic calming improvements are needed to slow vehicular traffic and provide a safer route. The types of traffic calming may include curb bump-outs, neckdowns, or traffic circles. All existing onstreet routes can be improved with traffic calming.

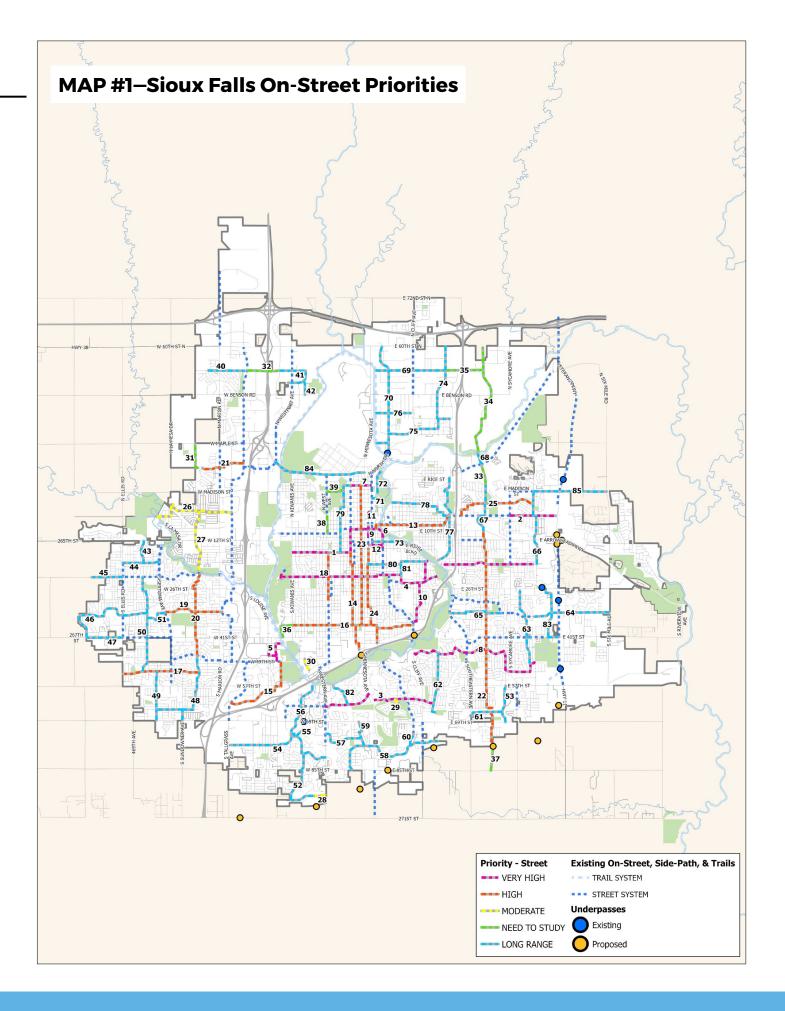
### **On-Street Bicycle Route Priorities**

NO.	PROJECT NAME	PRIORITY	MILES
1	15th Street Bicycle Boulevard - Kiwanis Avenue to Minnesota Avenue	Very High	1.97
2	6th Street - N. Sycamore Avenue to Veterans Parkway	Very High	0.97
3	St. Andrews Drive/61st Street - Minnesota Avenue to Briarwood Avenue	Very High	2.31
4	22nd/24th Bikeway	Very High	5.48
5	S. Westport Avenue - 43rd Street to 49th Street	Very High	0.72
6	9th Street/2nd Avenue - Minnesota Avenue to 14th Street	Very High	0.72
7	Brookings Street - Prairie Avenue to Main Avenue	Very High	0.44
8	Marson Drive/Edgewood - Tuthill Park to Harmodon Park	Very High	3.33
9	Dakota Avenue - 8th Street to 11th Street	Very High	0.26
10	Sherman Avenue/Van Epps Avenue - 24th Street to Lincoln High School	Very High	1.53
11	Dakota Avenue - 6th Street to Main Avenue	Very High	0.15
12	13th Street - Dakota Avenue to 2nd Avenue	Very High	0.30
13	8th Street/Leaders Avenue - Phillips Avenue to 6th Street	High	1.70
14	Prairie Avenue/Summit Avenue/Norton Avenue/Duluth Avenue - 15th Street to 49th Street	High	2.17
15	59th Street/Oxbow Avenue - Solberg Avenue to 49th Street	High	1.72
16	37th Street/38th Street - Kiwanis Avenue to Cliff Avenue	High	2.59
17	53rd Street - Ellis Road to Holbrook Avenue	High	1.59
18	S. West Avenue - 15th Street to Oak Street	High	0.98
19	32nd Street - S. Sertoma Avenue to S. Westlake Drive	High	1.23
20	S. Valley View Road/S. Holbrook Avenue - Dunham Park to W. Essex Drive	High	1.88
21	Teem Street - Family Park Trail to Career Avenue	High	0.96
22	Bahnson Avenue -Arrowhead Parkway to Brewster Street	High	4.46
23	Spring Avenue - Brookings Street to 37th Street	High	2.89



NO.	PROJECT NAME	PRIORITY	MILES
24	Dakota Avenue - 14th Street to 37th Street	High	1.95
25	3rd Street - Cleveland Avenue to N. Dubuque Avenue	High	1.78
26	Songbird Street/La Mesa Drive/W. 5th Street - Family Park to Ebenezer Avenue	Moderate	1.87
27	Valley View Road/Christopher Avenue - W. 5th Street to Dunham Park	Moderate	1.29
28	95th Street - Endeavor Elementary School to Western Avenue	Moderate	0.26
29	Sawgrass Circle - 61st Street to Prairie Trail Park	Moderate	0.11
30	Elmwood Avenue - 49th Street to 50th Street	Moderate	0.25
31	Valley View Road - Maple Street to Teem Street	Need to Study	0.54
32	54th Street N Career Avenue to Northview Avenue	Need to Study	0.66
33	Bahnson Avenue - Rice Street to Broken Arrow Street	Need to Study	0.43
34	Bahnson Avenue - E 60th Street N to Big Sioux River	Need to Study	2.35
35	E. 54th Street - Lewis Avenue to Bahnson Avenue	Need to Study	0.78
36	O'Gorman High School/37th Circle - 41st Street to Kiwanis Avenue	Need to Study	0.47
37	Bahnson Avenue - Veterans Parkway to 85th Street	Need to Study	0.50
38	West Ave from 6th to 10th	Need to Study	0.36
39	Madison from West to Menlo	Need to Study	0.36
40	54th Street - Astoria Drive to Career Avenue	Long Range	0.75
41	54th Street/W. 51st Street N Northview Avenue to Westport Avenue	Long Range	1.09
42	Bobhalla Drive - 54th Street to Benson Road	Long Range	0.29
43	Discovery Avenue - 12th Street to Stoney Creek Street	Long Range	0.48
44	Stoney Creek Street - Ellis Road to Sertoma Avenue	Long Range	0.74
45	22nd Street - West of Ellis Road	Long Range	0.64
46	32nd Street - Lana Drive to Sertoma Avenue	Long Range	2.14
47	41st Street - Lana Drive to Ellis Road	Long Range	0.75
48	Holbrook Avenue - Essex Drive to Sundowner Avenue	Long Range	2.14
49	Galway Avenue - 53rd Street to 69th Street	Long Range	1.01
50	Discovery Avenue/Grinnell Avenue - 22nd Street to 53rd Street	Long Range	2.07
51	Harvard Drive/32nd Street - Grinnell Avenue to Sertoma Avenue	Long Range	0.50
52	Meredith Avenue/95th Street - Bitterroot Street to Endeavor Elementary School	Long Range	1.69
53	Graystone Avenue - E. 57th Street to E. 69th Street	Long Range	0.79
54	W. 77th Street/Meredith Avenue/Bitterroot Street - Tallgrass Avenue to Western Avenue	Long Range	2.45

NO.	PROJECT NAME	PRIORITY	MILES
55	Latigo Trail	Long Range	0.15
56	Old Yankton Road/Hemingstone Trail - 57th Street to Meredith Avenue	Long Range	1.30
57	Laquinta Street - Western Avenue to Audie Drive	Long Range	0.91
58	Grange Avenue/77th Street - 85th Street to University of Sioux Falls campus	Long Range	2.50
59	Avalon Avenue/Audie Drive - 69th Street to 77th Street	Long Range	0.57
60	Tomar Road - E. 73rd Street to E. 77th Street	Long Range	0.26
61	Brewster Street - Southeastern Avenue to Graystone Avenue	Long Range	0.71
62	Lewis Avenue - Edgewood Road to Northstar Lane	Long Range	1.29
63	Alpine Avenue - 26th Street to Harmodon Park	Long Range	1.68
64	33rd Street - Highline Avenue to Six Mile Road	Long Range	1.58
65	33rd Street - Southeastern Avenue to Melanie Lane	Long Range	1.09
66	N. Dubuque Avenue/Foss Avenue - E. Madison Street to E. 18th Street	Long Range	1.53
67	N. Bahnson Avenue - E. Broken Arrow Street to E. 10th Street	Long Range	1.16
68	N. Bahnson Avenue - Big Sioux River to Rice Street	Long Range	0.27
69	54th Street N Diversion Channel to N. Lewis Avenue	Long Range	1.44
70	N. 4th Avenue - E. 60th Street N. to North Drive	Long Range	2.29
71	2nd Street - Main Avenue to Phillips Avenue	Long Range	0.07
72	Phillips Avenue - Falls Park Drive to Riverside Avenue	Long Range	0.46
73	12th Street - Main Avenue to Beadle Greenway Park	Long Range	0.44
74	N. Lewis Avenue - E. 60th Street N. to 34th Street N.	Long Range	1.55
75	Maple Street/Amidon Street/31st Street N Diversion Channel to E. 34th Street	Long Range	1.94
76	Hermosa Drive - Diversion Channel to Cliff Avenue	Long Range	0.72
77	Lowell Avenue - Rice Street to Southeastern Avenue	Long Range	2.03
78	3rd Street/5th Street/6th Street - Weber Avenue to Lowell Avenue	Long Range	1.38
79	Menlo Avenue/Grange Avenue - Brookings Street to 15th Street	Long Range	1.59
80	18th Street - Dakota Avenue to 7th Avenue	Long Range	1.25
81	7th Avenue/17th Street - Park Drive to River Boulevard	Long Range	0.21
82	Caraway Drive/Jasmine Trail - Yankton Trail Park to Ralph Rogers Road	Long Range	0.54
83	Daylight Drive/Manifold Avenue - 26th Street to 41st Street	Long Range	1.42
84	Russell Street - Westport Avenue to Minnesota Avenue (existing but needs to be improved to buffered or protected bike lane)	Long Range	1.92
85	Madison from Dubuque to Six Mile	Long Range	1.51
		Total:	107.67 Miles



### **Proposed Side Path Priorities**

Side paths have been identified as the preferred bicycle facility adjacent to arterial streets. Bicyclists feel safer being separated from vehicle traffic. In addition, the high speeds on arterial streets increase the chance of fatalities in collisions between vehicles and bicyclists. However, side paths should be located on arterial streets with fewer access points. Higher numbers of access points increase the likelihood of conflict between bicyclists and vehicles backing into the right-of-way or turning at intersections. Right-turning vehicles account for the majority of bicycle collisions as drivers are looking left for on-coming traffic and do not see bicycles.

The following side path routes have been identified to be constructed to provide a safe and separated bicycle facility adjacent to arterial roadways. Very High Priority projects are intended to be constructed in the next five years. The total mileage is approximately 16.09 miles. High Priority projects are identified as facilities that should be completed in the next 5 - 10 years. The total mileage for high priority facilities is approximately 5.37 miles. Moderate Priority Projects should be completed in the next 10 - 15 years and include 23.22 miles of side path.

Need-to-Study Priority routes are shown along future streets where the right-of-way has not been dedicated and the alignment or type of facility may need to be refined. Long Range Routes are identified on streets that have been built-out without bicycle facilities and it will not be until a future construction project that the side path will be constructed. However, it should be noted that even very high priority projects may be rerouted or adjusted depending on other projects that are constructed in the City. In addition, long range routes may also be constructed before very high priority projects if funding becomes available or a project is added to the Capital Improvement Plan budget.

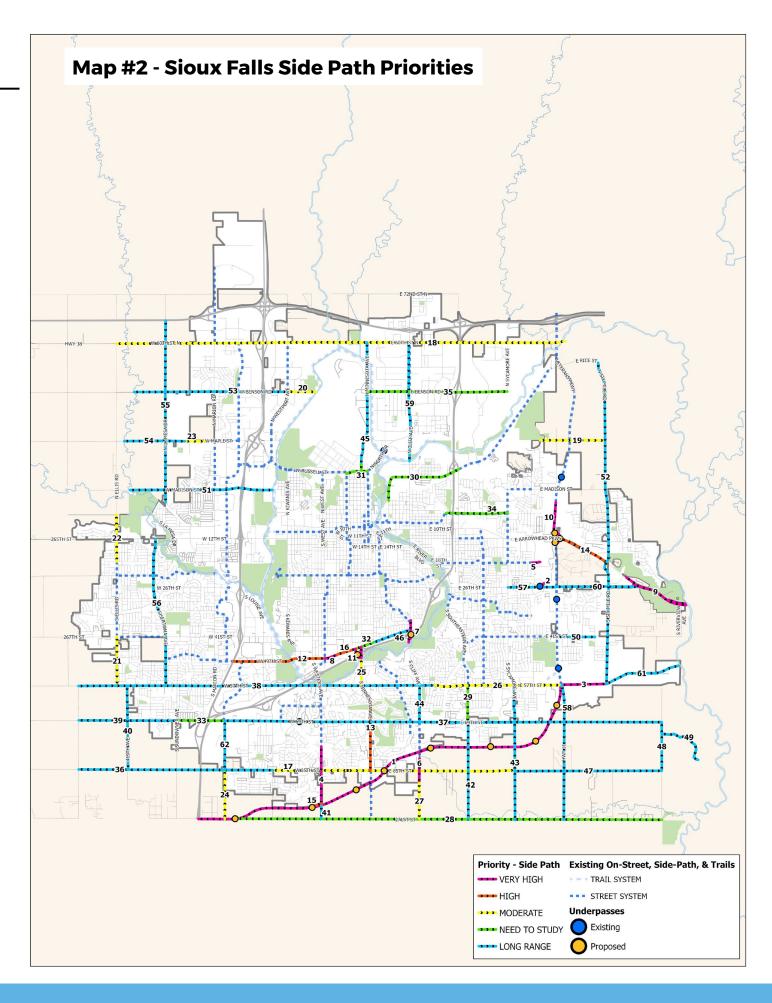
NO.	PROJECT NAME	PRIORITY*	MILES
1	South Veterans Parkway - I-29 to 57th Street	Very High	9.06
2	Highline Avenue - 26th Street to Red Oak Drive	Very High	0.18
3	57th Street - Veterans Parkway to Six Mile Road	Very High	0.92
4	Western Avenue - Black Rock Circle to S. Veterans Parkway	Very High	1.20
5	Active Generation Place - 18th Street	Very High	0.17
6	Cliff Avenue - Veterans Parkway to 90th Street	Very High	0.50
7	Cliff Avenue - Lincoln HS, Underpass and Tunnel	Very High	0.63
8	49th Street - West Avenue to Grange Avenue	Very High	0.26
9	E. Arrowhead Parkway - Bull Pine Trail to Big Sioux River	Very High	1.74
10	Veterans Parkway - Arrowhead north to existing	Very High	0.97
11	Minnesota Ave 49th to Big Sioux River, Underpass and Tunnel	Very High	0.46
12	49th Street - I-29 to West Avenue	High	1.88
13	S. Minnesota Avenue - 57th Street to 85th Street	High	1.80
14	E. Arrowhead Parkway - Veterans Parkway to Six Mile Road	High	1.08



NO.	PROJECT NAME	PRIORITY*	MILES
15	Veterans Parkway - Harrisburg North Middle School	High	0.21
16	49th Street - Grange Avenue to Duluth Avenue	High	0.41
17	85th Street - Sundowner Avenue to Sycamore Avenue	Moderate	4.96
18	E. 60th Street N Ellis Road to Veterans Parkway	Moderate	9.11
19	Maple Street - Great Bear Park to Six Mile Road	Moderate	1.33
20	W. Benson Road - Westport Avenue to Big Sioux River	Moderate	0.57
21	Ellis Road - W. 41st Street to W. 57th Street	Moderate	1.00
22	Ellis Road - Sand Street to Stoney Creek Street	Moderate	0.95
23	W. Maple Street - George McGovern Middle School to underpass	Moderate	0.41
24	Tallgrass Avenue - 69th Street to County Road 106	Moderate	1.01
25	Minnesota Avenue - I-229 to 57th Street	Moderate	0.57
26	57th Street - Lewis Avenue to Veterans Parkway	Moderate	2.57
27	S. Cliff Avenue - E. 90th Street to County Road 106	Moderate	0.74
28	County Road 106 - Veterans Parkway to 480th Avenue	Need-to-Study	8.68
29	Southeastern Avenue - 57th Street to 69th Street	Need-to-Study	0.76
30	Weber Avenue/Rice Street - 3rd Street to I-229	Need-to-Study	1.89
31	Russell Street - Prairie Avenue to Main Avenue	Need-to-Study	0.54
32	49th Street - Duluth Avenue to S. Phillips Avenue	Need-to-Study	0.38
33	69th Street - S. Sundowner Avenue to Tallgrass Avenue	Need-to-Study	0.95
34	E. 6th Street - Leaders Avenue to Sycamore Avenue	Need to Study	1.25
35	Benson Road - Big Sioux River to N. Sycamore Avenue	Need to Study	2.86
36	85th Street - 469th Avenue to Sundowner Avenue	Long Range	3.97
37	69th Street - Tallgrass Avenue to 480th Avenue	Long Range	8.94
38	57th Street - 469th Avenue to Lewis Avenue	Long Range	7.29
39	69th Street - 469th Avenue to S. Sundowner Avenue	Long Range	2.01
40	469th Avenue - 57th Street to 85th Street	Long Range	1.71
41	S. Western Avenue - Veterans Parkway to County Road 106	Long Range	0.28
42	Southeastern Avenue - 69th Street to County Road 106	Long Range	1.96
43	S. Sycamore Avenue - 57th Street to County Road 106	Long Range	2.75
44	S. Cliff Avenue - 57th Street to 69th Street	Long Range	0.75
45	Minnesota Avenue - E. 60th Street N. to Russell Street add to north section	Long Range	2.52
46	49th Street - S. Phillips Avenue to Cliff Avenue	Long Range	0.79
47	85th Street - Sycamore Avenue to 480th Avenue	Long Range	3.00

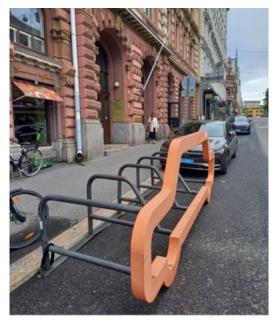
NO.	PROJECT NAME	PRIORITY*	MILES
48	480th Avenue - 69th Street to 85th Street	Long Range	0.99
49	Good Earth State Park - 480th Avenue to Big Sioux River	Long Range	1.16
50	41st Street - Veterans Parkway to Sparta Avenue	Long Range	0.78
51	W. Madison Street - Willow Creek to Big Sioux River	Long Range	2.92
52	Six Mile Road - Rice Street to 57th Street	Long Range	6.64
53	W. Benson Road - Willow Creek to Big Sioux River	Long Range	3.14
54	W. Maple Street - Willow Creek to Eagle Nest Avenue	Long Range	1.24
55	La Mesa Drive - I-90 to 5th Street	Long Range	3.72
56	Sertoma - 12th Street to W. 57th Street	Long Range	3.05
57	26th Street - Sycamore Avenue to Arrowhead Parkway	Long Range	0.98
58	Highway 11 - 57th Street to County Road 106	Long Range	2.76
59	N. Cliff Avenue - 60th Street N. to Big Sioux River	Long Range	2.43
60	26th Street - Veterans Parkway to E. Arrowhead Parkway	Long Range	1.66
61	E. 57th Street - Veterans Parkway to Big Sioux River	Long Range	1.55
62	S. Tallgrass Ave - 69th to 85th	Long Range	1.01
		Total:	132.01 Miles





### **Bicycle Parking**

**The Sioux Falls 2025 Downtown Plan** identifies bicycle parking as critical to managing an effective downtown public parking system. Initial feedback from the public on the **Sioux Falls 2035 Downtown Plan** shows that bicycle parking is still a major issue for the City. Strategies identified include replacing on-street parking at key locations to provide safe, comfortable, predictable bicycle parking. A study should be completed to inventory existing bicycle parking and to design and construct visible and impactful bicycle parking downtown.











#### **Parking Rack Design and Location Recommendations**

<u>Location</u>: A bicycle rack area should be located along a major building approach line and clearly visible from the approach. The rack area should be no more than a 30-second walk (120 feet) from the entrance it serves and should preferably be within 50 feet. A rack area should be as closer than the nearest car parking space. A rack area should be clearly visible from the entrance it serves.

<u>Design</u>: Bicycle racks should be designed in a way that one rack element supports two bikes and it supports the bicycle upright by its frame in two places.





### **Bicycle Route Signage**

All shown bicycle route signs are Manual of Uniform Traffic Signals (MUTCD) approved signage. Current on-street bicycle route signage is like the sign located to the right. The current signage numbering is based on an identification system which goes from north to south and west to east.

Many people have told City officials that they do not understand the significance of the route number, and the size of the sign makes it very difficult to notice. Based upon that public input, the bicycle committee recommends that the bicycle route signage be changed to a destination signage system with larger bicycle route signs. The following examples should be used to design a system of signage for the existing bicycle routes



### **Proposed Bicycle Route Signage**

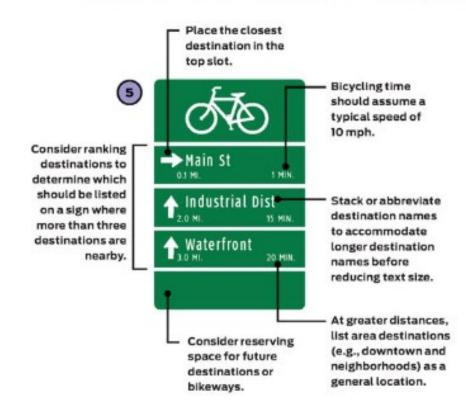








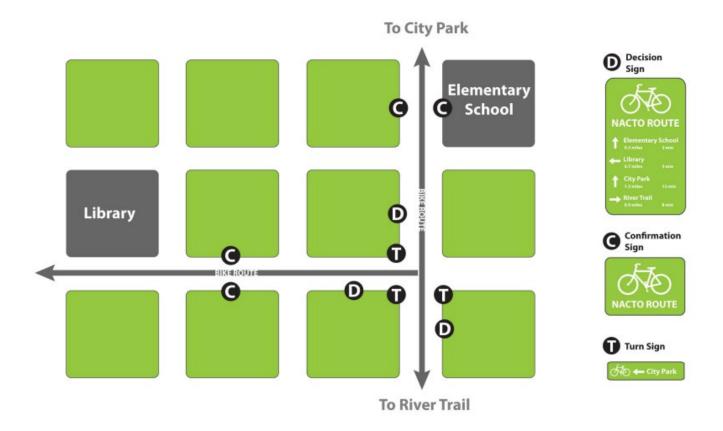






## National Association of City Transportation Officials (NACTO)—Urban Bikeway Design Guide

The illustration below provides information on the placement of the destination route bicycle signs. In urban areas, signs typically should be placed approximately every 400 meters (.25 mile) at every turn in the route, and at all signalized intersections.



### **Chapter 5**—The Trail Plan

As Sioux Falls continues to grow, the Trail will need to be expanded into new growth areas. This Bicycle Plan has incorporated specific trail projects that are expected to occur during the next 20 years. More specific trail routes, connections, and funding levels will be established through specific trail master plans. The Trail Priority Map is on the next page and illustrates these projects by category as listed below.

The following trail routes have been identified to be constructed as development continues throughout the community. Very High Priority projects are intended to be constructed in the next five years. The total mileage is approximately 8.45 miles. High Priority projects are identified as facilities that should be completed in the next 5 - 10 years. The total mileage for high priority facilities is approximately 11.10 miles. Moderate Priority Projects should be completed in the next 10 - 15 years and include 15.09 miles of trail.

Need-to-Study Priority routes are shown along drainage ways in the city's growth area. A Bicycle Trail Master Plan is planned for the 2023-2024 work program. The proposed study will review the feasibility of constructing future trails along drainage ways. It should be noted that even very high priority projects may be rerouted or adjusted depending on other projects that are constructed in the City. In addition, long range routes may also be constructed before very high priority projects if funding becomes available or a project is added to the Capital Improvement Plan budget.

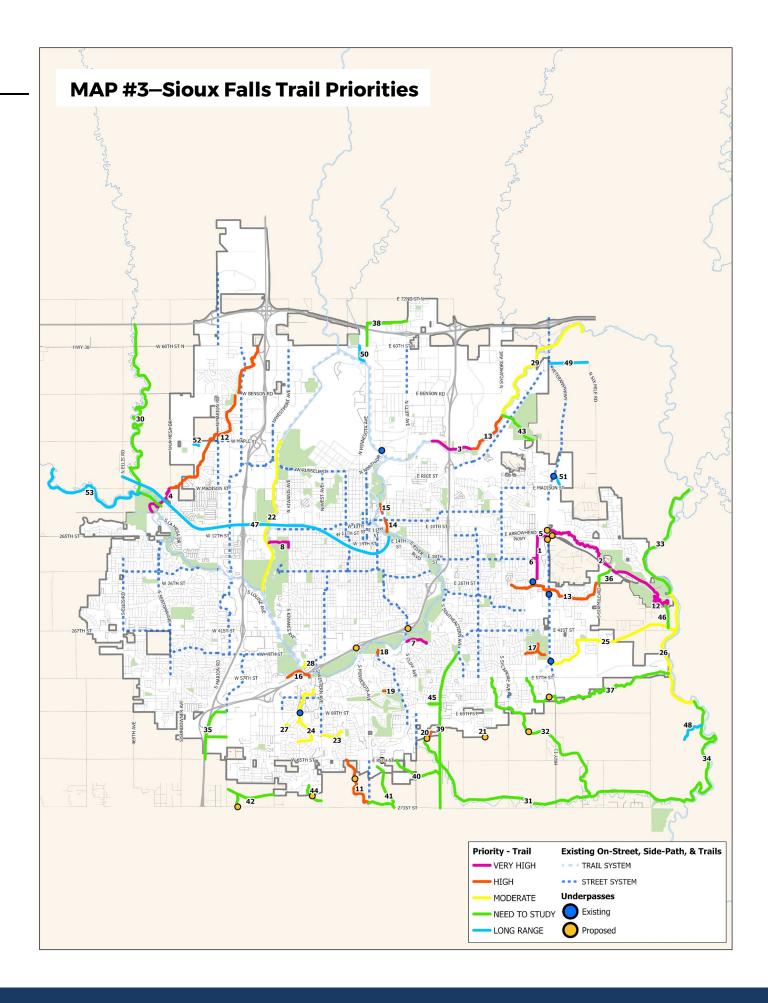
#### **The Trail Priorities**

NO.	PROJECT DESCRIPTION	TRAIL NAME	PRIORITY	MILES
1	Arrowhead Parkway to 18th Street	North Highline Trail	Very High	0.89
2	Veterans Parkway to Big Sioux River	Arrowhead Parkway Corridor	Very High	3.32
3	Barney's Auto Salvage to N. Bahnson Avenue	Falls Park to Great Bear Park	Very High	0.88
4	W. Madison Street to Family Park	Cherry Creek Corridor	Very High	0.88
5	N. Highline Avenue to Veterans Parkway	Highline Avenue to Veterans Parkway Trail Connection	Very High	0.26
6	Active Generation Place	Highline Trail Connection	Very High	0.09
7	Cliff Avenue and Edgewood Drive	Tuthill Park Connection	Very High	0.47



NO.	PROJECT DESCRIPTION	TRAIL NAME	PRIORITY	MILES
8	Big Sioux River to Kiwanis Avenue	15th Street Bicycle Boulevard Connection	Very High	0.54
9	River Bluff Road to Big Sioux River	Arrowhead Park	Very High	1.11
10	Alpine Avenue to Six Mile Road	Copper Creek Spur	High	2.47
11	E. 85th Street to S. Minnesota Avenue	Springdale Drainage	High	1.34
12	W. Madison Street to W. 60th Street N.	Cherry Creek Corridor	High	4.20
13	N. Bahnson Avenue to E. Rice Street	Falls Park to Great Bear Park	High	1.10
14	8th Street to Big Sioux River	S. Cherapa Rail Trail	High	0.26
15	Falls Park to 6th Street	N. Cherapa Rail Trail	High	0.17
16	57th Street to Farm Field Park	Sertoma Park Loop Connection	High	0.57
17	Interior park service road	Harmodon Park	High	0.61
18	Tomar Park to Twin Oaks Road	Tomar Park	High	0.08
19	Saint Andrews Drive to 61st Street	Prairie Green Golf Course	High	0.05
20	77th Circle to Veterans Parkway	Veterans Parkway Tunnel Connection	High	0.14
21	Sage Grass Street to Veterans Parkway	Veterans Parkway Tunnel Connection	High	0.10
22	W. Maple Street to Country Club of Sioux Falls	West Side Bike Path - Diversion Channel	Moderate	3.38
23	Western Avenue to Laquinta Street	Explorer Elementary Spur	Moderate	0.49
24	Swift Park Drive to Meredith Avenue	Diamond Creek Corridor	Moderate	1.73
25	Veterans Parkway to Big Sioux River	Good Sam Trail	Moderate	3.20
26	Arboretum to Good Earth State Park	Good Earth Corridor	Moderate	2.94
27	Hemingstone Trail	Prairie Hills West Park Connection	Moderate	0.05
28	Elmwood Place	Sertoma Park Loop Connection	Moderate	0.13
29	N. Sycamore Avenue to Six Mile Road	Great Bear Park to Brandon	Moderate	3.17
30	I-90 to Family Park	Skunk Creek Corridor	Need to Study	5.81
31	Veterans Parkway to Good Earth State Park	Spring Creek Corridor	Need to Study	6.56
32	E. 57th Street to County Road 106	Revillo Corridor	Need to Study	4.18
33	County Highway 11 to Arrowhead Parkway	Good Earth Corridor (North)	Need to Study	3.03
34	Gitchie Manitou State Preserve to Spring Creek Country Club	Good Earth Corridor (South)	Need to Study	3.68

NO.	PROJECT DESCRIPTION	TRAIL NAME	PRIORITY	MILES
35	69th Street to 85th Street	I-29 Tallgrass Trails	Need to Study	1.69
36	26th Street to Arrowhead Parkway	Ponderosa Trail Spur	Need to Study	0.43
37	57th Street to Big Sioux River	9 Mile Creek Trail	Need to Study	4.08
38	60th Street N. to N. Cliff Avenue	Silver Creek Spur	Need to Study	1.34
39	49th Street to County Road 106	Rails with Trails - Burlington Northern	Need to Study	3.34
40	85th Street to Burlington Northern Railroad	Burlington Spur	Need to Study	1.12
41	Veterans Parkway to County Road 106	Schindler Creek Trail	Need to Study	1.54
42	Tallgrass Avenue to Veterans Parkway	Mueller Spur	Need to Study	1.28
43	E. Rice Street to Great Bear Park	Falls Park to Great Bear Park Connection	Need to Study	0.90
44	95th Street to Western Avenue	Western Spur	Need to Study	0.52
45	Northstar Place to Burlington Railroad	Burlington Railroad - Judee Spur	Need to Study	0.24
46	Arrowhead Parkway to 41st Street	Arrowhead Park Connection	Need to Study	0.48
47	Ellis Road to Beadle Greenway Park	Ellis & Eastern Rails with Trails	Long Range	6.35
48	Good Earth State Park interior trail	Good Earth State Park Spur	Long Range	0.56
49	Ellis & Eastern / Nobles Rock	Rice Street / Six Mile Road	Long Range	0.80
50	E. 60th Street N. to Diversion Channel	Ditch Road Connection	Long Range	0.37
51	Drainage - Veterans Pkwy to east	East Prairie Addition	Long Range	0.21
52	N. Valley View toward east	Jefferson Hills 2nd Addition	Long Range	0.11
53	Family park west to growth boundary	Skunk Creek	Long Range	2.98
			Total:	86.55 Miles

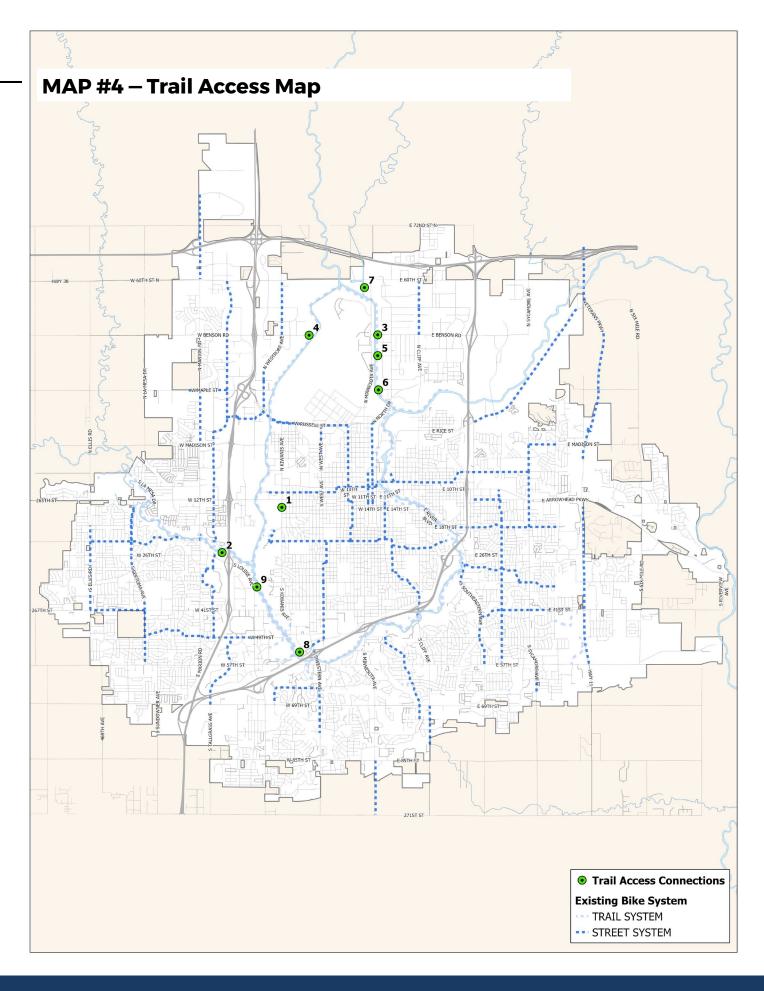


### **Trail Access Improvement Projects**

The 2014 Trail Access Study identified nine trail access points that needed to be improved to provide a safe and accessible connection to The Trail. Providing access to the trail is an important goal. The following nine access points have been identified as very high priority improvements. The existing access is typically gravel or dirt.

NO.	Connection Name	
1	Sherman Park Trail Access	Pave portion of trail that is currently gravel and post directional signage as a part of the 15th Street Bicycle Boulevard
2	Homefield Drive - connection to Trail	Pave existing connection to Trail northeast of intersection of 26th Street and Homefield Drive
3	East Benson Road connection to Trail	Pave trail connections on north and south sides of Benson Road
4	Benson Road - Sanford Sports Complex	Pave connection to Trail
5	East Hermosa Drive	Pave trail at western terminus of E. Hermosa Drive
6	Maple Street - east of Minnesota Avenue	Construct Maple Street from Trail to 4th Avenue. Include connection to trail.
7	60th Street North	Pave existing connection from Trail west of intersection with N. Minnesota Avenue to 60th Street N.
8	Elmwood Place	Pave connection to trail
9	Granite City / World Market	Obtain easement and construct trail connection

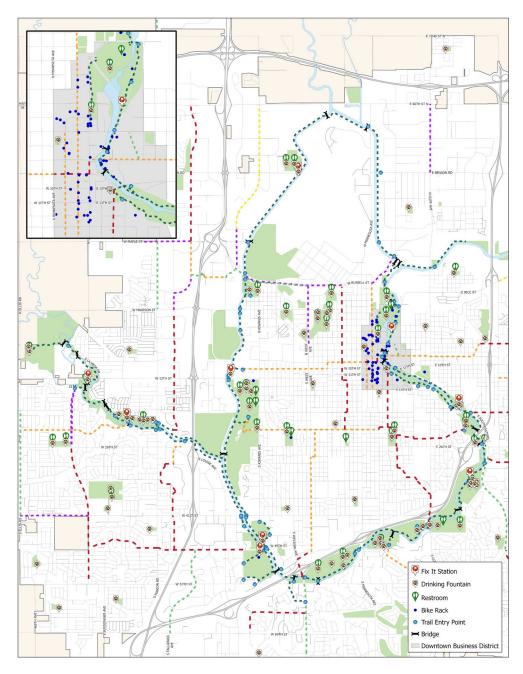
It should be noted that these access points were chosen as inexpensive and fairly easy ways to provide trail users with better access to the Trail. As a part of the Sioux Falls Bicycle Plan Survey, Trail access was rated as a high priority. However, the survey made it clear that barriers for that access go beyond just simple access points. The biggest barriers to access in Sioux Falls are I-29, I-229, and the Big Sioux River. To allow all residential areas in the city with better access, additional feeder trails and comfortable and safe on-street bike routes with (in some situations) safe crossings of the Interstates and River will be needed. Recommendations for these routes, trails, and crossings are included in the complete draft of the Bicycle Plan.



### **Trail Safety Projects**

The Sioux Falls Trail system is known throughout the community as the safest place to ride a bike in the community. The Trail has very few conflicts with cars with many separated grade crossings under roadways and over the river. The trail is also maintained at a very high level with a systematic plan to repair and repave areas along the trail. The Bicycle Committee, Active Transportation Board and Parks Board may from time to time recommend improvements to enhance the safety of the trail and provide additional amenities such as bicycle repair stations and water fountains.

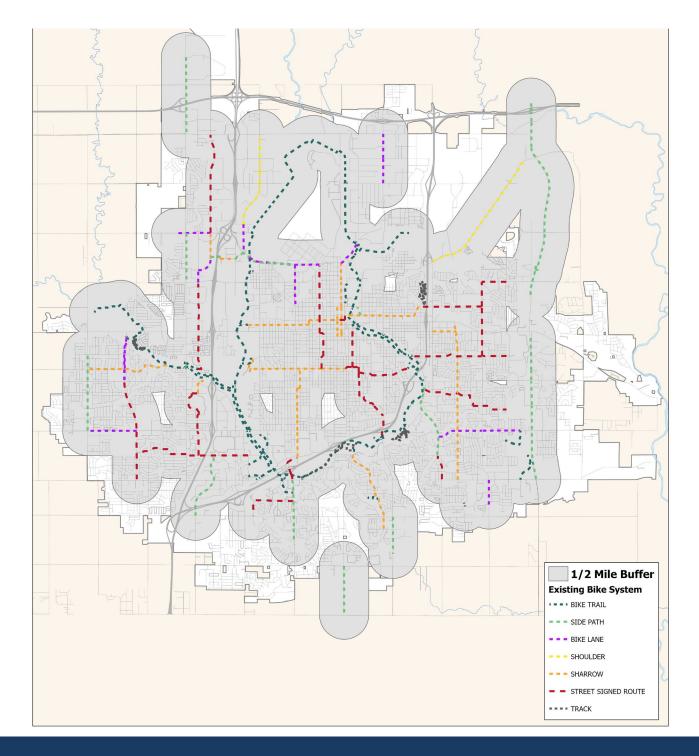
## MAP #5 – Trail Amenity Map





## MAP #6- Sioux Falls Half-Mile Buffer Map

The following map shows a half-mile buffer around existing on-street, sidepath, and trail routes. One of the goals of the 2023 Sioux Falls Bicycle Plan is to create a network of bicycle facilities that gets everyone to within a ½-mile of a trail, on-street, sidepath route. The following map identifies the gaps that remain.



# **Appendix**

- 1. Bicycle Plan Survey Summary (Page 43)
- 2. Bicycle Plan Map All Layers (Page 50)
- 3. Bike Laws (Page 51)



# **Appendix 1**

### **Bicycle Plan Survey Summary (627 responses)**

Question #1: Majority of bicycling activity (6 people skipped this question)

- ▶ Recreational—89%
- ▶ Transportation—11%

Question #2: How often do you ride your bicycle? (4 people skipped this question)

- ▶ Almost every day all year round—5%
- ▶ Almost every day during warmer weather—14%
- 1-2 times a week during warmer weather-25%
- ▶ 1-2 time a month during warmer weather—7%
- ▶ Occasionally on bike trail—4%
- ▶ Rarely or never—1%

Question #3: What do you like most about bicycling in Sioux Falls? (22 people skipped this question)

- Bicycle Trail System-77% (12% second choice)
- ▶ Bicycle Rides outside Sioux Falls—9% (26% second choice)
- Bicycling through Neighborhoods to my destination—8% (48% second choice)
- ▶ Commuting by bicycle–7% (13% second choice)

Question #4: What other things do you like about bicycling in Sioux Falls?

- Scenery/Trail amenities-35%
- Connectivity/Access/Maintenance-29%
- ▶ Safety/Ease of Use—10%
- ▶ Commuting/Traffic—7%
- ▶ Sense of Community/Active Lifestyle—15%
- ▶ Other–5%

Question #5: Indicate the importance of improving the following items (127 people skipped this question)

- ▶ Bicyclists not following bicycle rules and responsibilities—12% (#8 overall rank)
- Motorists are not courteous of bicyclists on city streets—47% (#1 overall rank)
- Not enough bicycle lanes and sharrows (shared lane marking)-36% (#3 overall rank)
- It is too dangerous to bicycle in traffic-49% (#1 overall rank)
- ▶ Bicycle parking is very limited at destinations—9% (#9 overall rank)
- ▶ Poor street condition along routes—20% (#4 overall rank)
- ▶ Not enough traffic signals detect bicycles—18% (#6 overall rank)
- ▶ The lack of bicycle and pedestrian facilities to safely cross the interstate highway–23% (#5 overall rank)

Question #6: Describe other things you do not like about bicycling in Sioux Falls.

- ▶ Lack of connectivity in City and new growth areas—4.5%
- ▶ Maintenance of bike facilities and trails/communication of detours/issues—9.4%
- Lack of bike facilities/need more trails/mountain bike options-21%
- ▶ Lack of access to trails from different areas of the City-10.5%
- ▶ Pets on the trail—1.5%
- Need more bike amenities such as wind breaks and bike parking-5.6%
- Safety of trail/bike and pedestrian courtesy/traffic conflict-44%
- ▶ Other–3%

Question #7: Rank 1-5 the bicycle trail improvements most important to you. (127 skipped this question)

- New trails to new growth areas-51% (18% second choice)
- ▶ More frequent access to trails—11% (28% second choice)
- ▶ Maintenance of existing trails—19% (28% second choice)
- ▶ Widening the existing trails—12% (14% second choice)
- ▶ Improving the trail users personal security—8% (12% second choice)

Question #8: Describe other bicycle trail improvements that are the most important to you?

- ▶ Improve trail maintenance such as repairing cracks—10.5%
- Expand Trails to provide connections throughout the City and region—41.6%



- ▶ Increase lighting—3.6%
- ▶ More amenities such as water fountains and bike parking—11%
- Improvements to existing bike trails and network in the City: such as trail widening, improving markings, adding bike lanes –15%
- ▶ Increase security and safety of trails—8%
- Improve and add trail signage—6%
- ▶ Bicycle, driver, and pedestrian education—3.2%
- ▶ Other–1%

Question #9: Rank 1-6 where you feel comfortable riding your bicycle in Sioux Falls (128 people skipped this question)

- Streets with bike lanes (Examples: Sertoma Avenue or East 41st Street)—22%
  - ♦ 23% second choice—#2 rank overall
- ▶ Collector streets (Examples: 18th Street or Valley View Road)—2%
  - ♦ 8% second choice—#5 rank overall
- Local residential streets—33%
  - ♦ 32% second choice—#1 rank overall
- Streets with sharrows (Examples: South Bahnson Avenue or West 22nd Street)—8%
  - \$ 16% second choice—#4 rank overall
- On the sidewalk–27%
  - ♦ 19% second choice—#3 rank overall
- None of the above—14%
  - 4% second choice—#6 rank overall

Question #10: When do you ride your bicycle instead of your motor vehicle?—pick any that apply (126 people skipped this question)

- To get to work-34%
- m To get exercise-98%
- ▶ To get to school—5%
- ▶ To get groceries, go to church, or to run errands—29%
- ▶ To get to events and entertainment venues—41%
- Go to a friend or family member's home-59%

Full results of survey at: <a href="https://www.surveymonkey.com/results/SM-67BQVRH57/">https://www.surveymonkey.com/results/SM-67BQVRH57/</a>

Question 11: To what areas of Sioux Falls do you like to ride your bicycle?

- Parks and Trails—30%
- Downtown/Central-39%
- ▶ North and West-6%
- ▶ South and East—14%
- ▶ All over—11%

Question #12: Other than the trail system, what improvements would you suggest for bicycling in Sioux Falls.

- Signage, lighting, maintenance—19%
- Additional bike lanes, sharrows—35%
- Pedestrian, bicyclist, automobile education-17%
- ▶ Create new connections to trails—8.4%
- ▶ Traffic calming measures, intersection improvements—5.5%
- ▶ Expand connections to neighboring communities—5.5%
- ▶ Mountain bike trails, Fast Track, single track—8%
- ▶ Other–1.2%

Question #13: The following are goals for improving bicycling in Sioux Falls. Please select the answer that matches how important you feel each goal is to the city of Sioux Falls. (127 people skipped this question)

- Develop a complete bicycle network through the addition of new facilities as identified in the Bicycle Plan to make it possible to bicycle anywhere in the city safely.
  - 66% very important 24% somewhat important
- 2. Expand and improve access to the Bicycle Trail for all citizens of Sioux Falls.
  - 61% very important 29% somewhat important
- 3. Ensure that safe and comfortable bicycle routes exist for all schools and employment centers.
  - 51% very important 36% somewhat important



4. Develop a bicycle public education campaign. (Example: "Share The Road")

50% very important 34% somewhat important

5. Adopt "complete street" ordinances and policies. (streets designed for all transportation types)

43% very important 34% somewhat important

6. Promote bicycle safety and Bike 101 programs in school curriculums.

38% very important 42% somewhat important

7. Initiate a public/private partnership to develop community support and maximize funding for bicycle facilities.

34% very important 39% somewhat important

8. Allocate City funding to include stand-alone bicycling and pedestrian facilities.

29% very important 34% somewhat important

9. Add one staff position at the City that helps address the needs of bicyclists and pedestrians.

29% very important 33% somewhat important

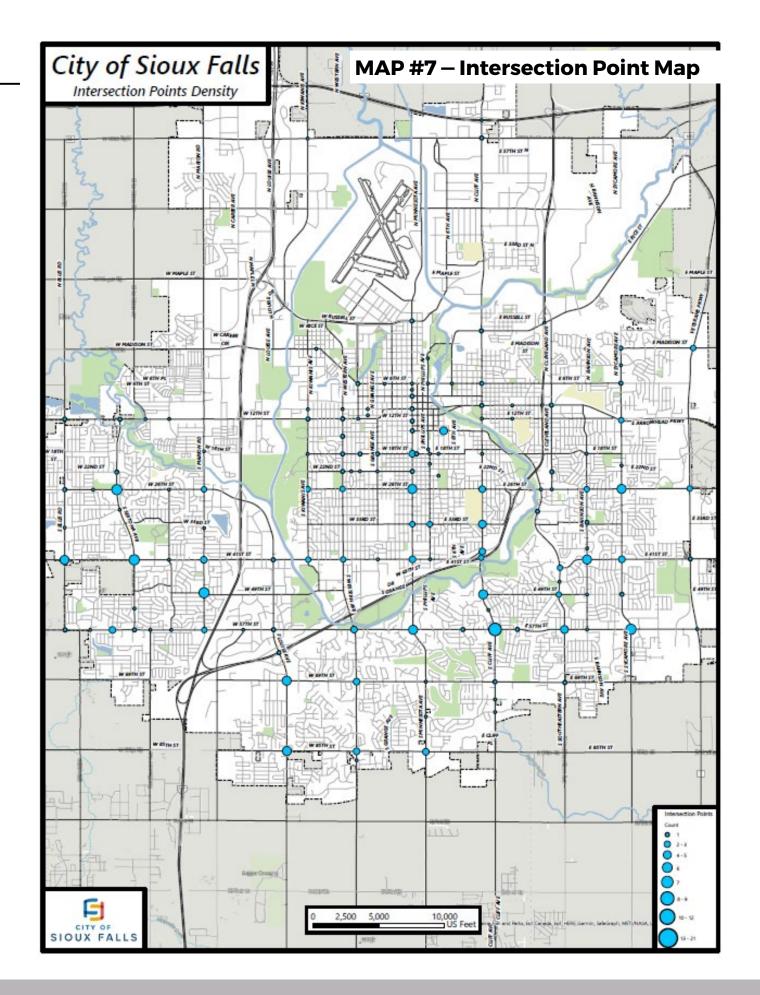
10. Study the feasibility of a bike share program.

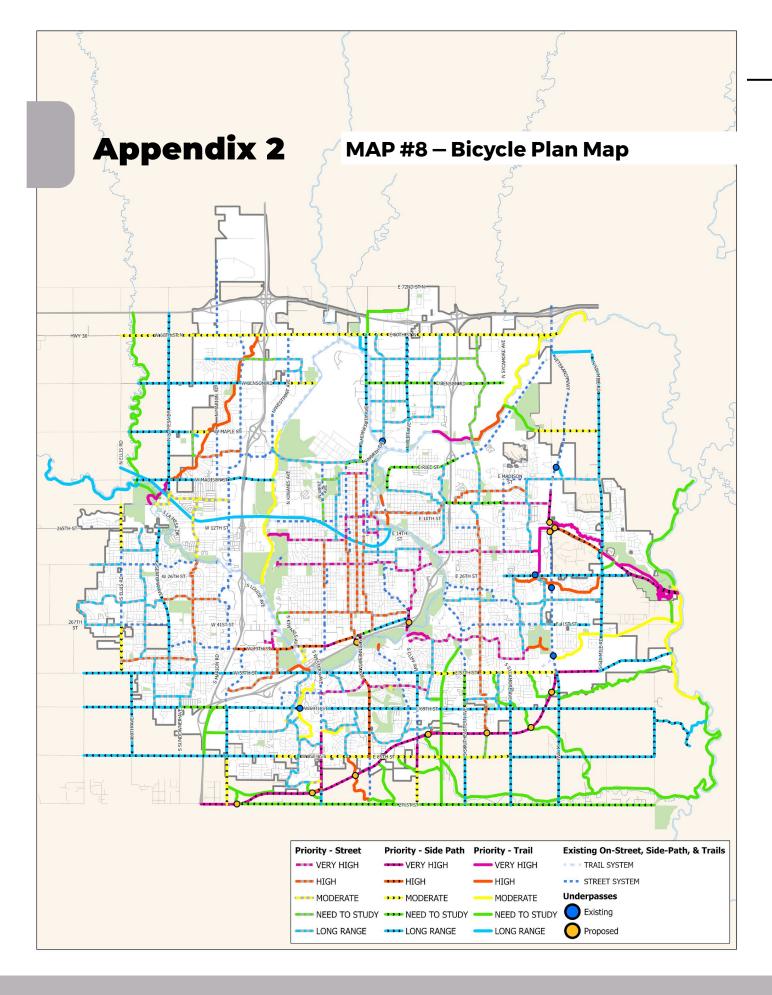
8% very important 27% not important

Question #14: Please share other ideas that you have that would help improve bicycling in Sioux Falls

- ▶ Invest in education for all modes of travel—27.5%
- ▶ Look to other cities (Boise, ID; Boulder, CO; European countries)—2%
- ▶ Focus on safe routes for children—7.4%
- ▶ Maintain and improve the existing bike system—18%
- Expand/connect/invest in new trails-22%
- Unique Ideas (public/private partnerships, bike clubs and events, bike share, etc.)—16.1%
- ▶ Other–7%

Question #15: To analyze data by geographical areas, what is the nearest major street intersection to where you live in Sioux Falls?







# **Appendix 3**

## **Bike Laws**

#### §70.001 DEFINITIONS.

**BICYCLE.** Every wheeled conveyance having two tandem wheels, propelled solely by human power, upon which any person may ride, except scooters and similar devices, but also including adult tricycles.

**BICYCLE LANE.** An exclusive space for bicyclists and e-bicyclists through the use of pavement markings and signage. The bicycle lane is located adjacent to motor vehicle travel lanes.

**CYCLE TRACK.** A cycle track is an exclusive bicycle facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bicycle lane. A cycle track is physically separated from motor vehicle traffic and distinct from the sidewalk.

**E-BICYCLE.** A wheeled conveyance having two tandem wheels or two parallel wheels and one forward or rearward wheel, and two of which are not less than 12 inches in diameter, with operable pedals for propulsion, and with an electric motor of 750 watts or less.

An e-bicycle is a Class I e-bicycle if the motor provides assistance only when the person is pedaling and ceases to provide assistance when a speed of 20 miles per hour is achieved.

An e-bicycle is a Class II e-bicycle if the motor is capable of propelling the bicycle without the person pedaling and ceases to provide assistance when a speed of 20 miles per hour is achieved.

An e-bicycle is a Class III e-bicycle if the motor provides assistance only when the person is pedaling and ceases to provide assistance when a speed of 28 miles per hour is achieved.

#### § 72.002 DRIVE ON RIGHT SIDE OF STREET; VEHICLES GENERALLY; BICYCLES; EXCEPTIONS.

- a. Upon all streets except upon one-way streets, the driver of a vehicle shall drive the vehicle upon the right half of the street and shall drive a slow-moving vehicle as closely as possible to the right-hand edge or curb of a street, unless it is impracticable to travel on that side of the street, and except when overtaking and passing another vehicle subject to the limitations applicable to overtaking and passing set forth in this chapter.
- b. The provisions of division (a) above shall not be deemed to prevent the marking of lanes for traffic upon any street and the allocation of designated lanes to traffic moving in a particular direction or at designated speeds.

- c. When bicycle lanes are included within a street and upon approaching an intersection where right turns are permitted and there is a dedicated right-turn lane, a bicyclist or e-bicyclist may ride on the left hand portion of the dedicated right-turn lane even if the bicyclist or e-bicyclist does not intend to turn.
  - 1. Any person driving a bicycle or e-bicycle upon a roadway at less than the normal speed of traffic shall ride in the right-hand lane, subject to the following conditions
  - If the right-hand lane then available for traffic is a standard lane width and clear
    of obstructions such that it may be shared with overtaking vehicles, a bicyclist
    or e-bicyclist shall ride as far to the right as allows the bicyclist or e-bicyclist safe
    operating conditions;
  - 3. When bicycle lanes are included within a street and upon approaching an intersection where right turns are permitted and there is a dedicated right-turn lane, a bicyclist or e-bicyclist may ride on the left hand portion of the dedicated right-turn lane even if the bicyclist or e-bicyclist does not intend to turn.
- d. A person driving a bicycle or e-bicycle upon a one-way roadway with two or more marked traffic lanes at less than the normal speed of traffic with two or more marked traffic lanes may ride in the left-hand lane, subject to the following conditions:
  - If the left-hand lane then available for traffic is wide enough and clear of obstructions that it may be shared with overtaking vehicles, a bicyclist or e-bicyclist shall ride as far to the left as allows the bicyclist or e-bicyclist safe operating conditions: and
  - 2. If the left-hand lane then available for traffic is not wide enough or clear of obstructions that it may not be shared with overtaking vehicles, a bicyclist or e-bicyclist may ride in the middle of the left-hand lane to indicate to the vehicle behind the bicyclist or e-bicyclist that passing within the same lane is not safe.

(1957 Rev. Ords., § 13.121; 1992 Code, § 40-77) (Ord. 28-83, passed 5-2-1983; Ord. 46-12, passed 7-10-2012; Ord. 66-19, passed 6-18-2019)

#### **Cross-reference:**

Bicycles, see ch. 81

#### Statutory reference:

Similar provisions, see SDCL 32-26-1

§ 72.004 MEETING OF VEHICLES.

- a. Drivers of vehicles proceeding in opposite directions shall pass each other to the right, each giving to the other at least one-half of the main-traveled portion of the roadway as nearly as possible.
- b. A driver shall not pass a bicyclist or e-bicyclist moving in the same direction and in the same lane when there is oncoming traffic unless the driver can simultaneously:



- 1. Allow oncoming vehicles at least one-half of the main-traveled portion of the roadway in accordance with division (a) above; and
- 2. Allow the bicyclist or e-bicyclist at least a 3-foot separation between the right side of the driver's vehicle, including all mirrors or other projections, and the left side of the bicyclist or e-bicyclist at all times.

(1957 Rev. Ords., § 13.169; 1992 Code, § 40-79) (Ord. 46-12, passed 7-10-2012; Ord. 66-19, passed 6-18-2019)

#### Statutory reference:

Similar provisions, see SDCL 32-26-3

#### § 72.011 OVERTAKING; GENERALLY.

- a. The driver of any vehicle overtaking another vehicle proceeding in the same direction shall pass at a safe distance to the left of the overtaken vehicle. The driver of an overtaking vehicle shall pass at a safe distance to the side of an overtaken vehicle and may not cut in front of the latter until safely clear of the overtaken vehicle.
- b. The driver of a motor vehicle overtaking a bicyclist or e-bicyclist proceeding in the same direction shall allow the bicyclist or e-bicyclist at least a 3-foot separation between the right side of the driver's vehicle, including all mirrors or other projections, and the left side of the bicycle or e-bicycle.
- c. The driver of a bicycle or e-bicycle may overtake and pass another vehicle upon the right, only under conditions permitting the movement in safety. A bicycle or e-bicycle may drive off the main-traveled portion of the roadway when making such movement.
- d. The driver of a bicycle or e-bicycle shall not overtake another vehicle on the right when the overtaken vehicle is signaling to make a right turn.

(1957 Rev. Ords., § 13.122; 1992 Code, § 40-86) (Ord. 28-83, passed 5-2-1983; Ord. 46-12, passed 7-10-2012; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

#### Cross-reference:

Bicycles, see ch. 81

#### Statutory reference:

Similar provisions, see SDCL 32-26-26

§ 72.012 OVERTAKING; PASSING ON RIGHT; CIRCUMSTANCES UNDER WHICH PERMITTED.

The driver of a motor vehicle may overtake and pass to the right of another vehicle only under the following conditions:

- a. When the vehicle overtaken is making or about to make a left turn.
- b. Upon a street or highway with unobstructed pavement, not occupied by parked vehicles, of sufficient width for two or more lines of moving vehicles in each direction.

- c. Upon a one-way street, or upon any roadway on which traffic is restricted to one direction of movement, where the roadway is free from obstructions and of sufficient width for two or more lines of moving vehicles.
- d. The driver of a motor vehicle upon a one-way roadway with two or more marked traffic lanes, when overtaking a bicyclist or e-bicyclist on the right proceeding in the same direction and riding on the left-hand side of the road, shall allow the bicyclist or e-bicyclist at least a 3-foot separation between the left side of the driver's vehicle, including all mirrors or other projections, and the right side of the bicyclist or e-bicyclist at all times.

(1992 Code, § 40-86.1) (Ord. 46-12, passed 7-10-2012; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

#### Statutory reference:

Similar provisions, see SDCL 32-26-27

#### § 72.016 SKATEBOARDING AND ROLLER SKATING PROHIBITED.

- a. The city engineer may designate and maintain by appropriate devices or by marks or lines upon the surface where the riding of coasters, skateboards, bicycles, e-bicycles, roller skates, toy vehicles, or similar recreation devices is prohibited. Areas may be designated where, in his or her opinion, there is particular danger to pedestrians, and at such other places as he or she may deem necessary.
- b. Owners or occupants of private property may post their property subject to the approval of the city engineer.
- c. No person shall ride any coaster, skateboard, bicycle, e-bicycle, roller skates, toy vehicles, or similar recreation device upon any portion of public or private property as may be designated and posted in accordance with divisions (a) and (b) above.

(1992 Code, § 40-91) (Ord. 86-87, passed 10-5-1987; Ord. 54-89, passed 6-12-1989; Ord. 32-90, passed 4-2-1990; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

#### § 76.082 VEHICLES ON PARKWAYS OR SIDEWALKS.

- a. Generally. No person shall drive any vehicle or motor vehicle other than a bicycle, Class I e-bicycle, or wheelchair upon the sidewalks or parkways or permit any vehicle to be driven or remain on any sidewalk or parkway. The following vehicles shall be exempt from the provisions of this section: vehicles authorized by the city to be used to perform an authorized public service or carry out any authorized city function, including vehicles used by public parking, parks and recreation, and public safety personnel.
- b. Bicycles on sidewalks or in crosswalks.
  - 1. A person driving a bicycle or e-bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall yield the right-of-way to any pedestrian and shall give an audible signal before overtaking and passing the pedestrian.
  - 2. A person shall not drive a bicycle or e-bicycle upon and along a sidewalk, or across



- a roadway upon and along a crosswalk, where the use of bicycles or e-bicycles is prohibited by official traffic control devices.
- 3. A person driving a bicycle or a Class I e-bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall have all the rights and duties applicable to a pedestrian under the same circumstances, except that a bicyclist or Class I e-bicyclist must stop before entering a crosswalk or highway from a sidewalk or sidewalk area and must yield to all traffic on the highway.
- c. Use of cycle tracks and bicycle lanes limitation on conveyances:
  - 1. No person shall drive any vehicle or motor vehicle other than a bicycle or e-bicycle upon a cycle track.
- d. Bicycles and e-bicycles on sidepaths.
  - No person shall drive any vehicle or motor vehicle other than a bicycle, e-bicycle, or wheelchair upon a sidepath or permit any vehicle other than a bicycle, e-bicycle, or wheelchair to be driven or remain on any sidepath. The following vehicles shall be exempt from the provisions of this section: vehicles authorized by the city to be used to perform an authorized public service or carry out any authorized city function, including vehicles used by public parking, parks and recreation, and public safety personnel.
  - 2. A person driving a bicycle or e-bicycle on a sidepath or across a roadway upon and along a crosswalk shall yield the right-of-way to any pedestrian and shall give an audible signal before overtaking and passing the pedestrian.
  - 3. A person shall not drive a bicycle or e-bicycle upon and along a sidepath or across a roadway upon and along a crosswalk where the use of a bicycle or e-bicycle on the sidepath is prohibited by official traffic control devices.
  - 4. A person driving a bicycle or e-bicycle upon and along a sidepath or across a roadway upon and along a crosswalk shall have all the rights and responsibilities applicable to a pedestrian under the same circumstances, except that a bicyclist or e-bicyclist must stop before entering a crosswalk or highway from a sidepath area and must yield to all traffic on the highway.
  - 5. No person shall drive any vehicle or motor vehicle other than a bicycle or e-bicycle upon a bicycle lane unless the vehicle is making a legal turn, entering or leaving an alley, private road, or driveway, or when necessary to legally park near a curb. Drivers using the bicycle lane for this purpose must yield the right-of-way to any bicycle or e-bicycle using the designated bicycle lane.
  - 6. Bicycle lanes and cycle tracks shall be used exclusively for the operation of bicycles or e-bicycles unless signage specifies joint use with pedestrians.

(1957 Rev. Ords., § 9.806; 1992 Code, § 40-226) (Ord. 40-79, passed 5-21-1979; Ord. 28-83, passed 5-2-1983; Ord. 20-99, passed 2-16-1999; Ord. 46-09, passed 5-18-2009; Ord. 118-18, passed 12-18-2018; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

#### **Cross-reference:**

Bicycles, see ch. 81

#### Statutory reference:

Similar provisions, see SDCL 32-26-21.1 § 77.003 PLACES WHERE STOPPING, STANDING OR PARKING PROHIBITED.

Except when necessary to avoid conflict with other traffic, or in compliance with law or the directions of a law enforcement officer, no person shall stop, stand or park a vehicle:

- a. On the roadway side of any vehicle stopped or parked at the edge or curb of a street;
- b. On a sidewalk; unless the vehicle is attended and is being loaded or unloaded and the area adjacent to the sidewalk has been designated by appropriate signs as a sidewalk loading zone by the city engineer or unless the vehicle is properly identified as a vehicle for transporting of disabled persons, it is necessary for the vehicle to be located on the sidewalk for loading and unloading purposes, and only two wheels on the loading/unloading side are on the sidewalk;
- c. Within an intersection:
- d. On a crosswalk;
- e. Between a safety zone and the adjacent curb or within 30 feet of points on the curb immediately opposite the ends of a safety zone, unless a different length is indicated by signs or markings;
- f. Alongside or opposite any street excavation or obstruction, when stopping, standing or parking would obstruct traffic;
- g. Upon any bridge or other elevated structure upon a highway or within a highway tunnel;
- h. On any railroad tracks; and
- i. Upon any street, alley or parkway for the purpose of selling or offering the same for sale or rent. Any vehicle which is parked or placed within 50 feet of the property of the residence of the owner of the vehicle is exempt from the provisions of this section.

(1957 Rev. Ords., § 13.139; 1992 Code, § 40-243) (Ord. 2423, passed 6-13-1966; Ord. 122-82, passed 12-13-1982; Ord. 28-83, passed 5-2-1983; Ord. 46-92, passed 5-18-1992; Ord. 47-92, passed 5-3-1993; Ord. 20-96, passed 2-20-1996; Ord. 12-04, passed 2-2-2004)

#### **Cross-reference:**

Bicycles, see ch. 81

#### Statutory reference:

Similar provisions, see SDCL 32-30-6.1



#### **BICYCLES: IN GENERAL**

§ 81.001 LIGHTS. Every bicycle or e-bicycle driven upon any street, recreation trail, or sidewalk during the period from one-half hour after sunset to one-half hour before sunrise and at any other time when there is not sufficient light to render clearly discernible any person at a distance of 200 feet ahead shall be equipped with a lighted lamp on the front thereof visible under normal atmospheric conditions from a distance of at least 300 feet in front of the bicycle or e-bicycle and shall also be equipped with a reflex mirror or lamp on the rear exhibiting a yellow or red light visible under like conditions from a distance of at least 200 feet to the rear of the bicycle or e-bicycle.

(1957 Rev. Ords., § 13.306; 1992 Code, § 10-1) (Ord. 27-83, passed 5-2-1983; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

§ 81.002 BRAKES. Every bicycle or e-bicycle, when operated in the city, shall be equipped with a brake adequate to control the movement and to stop the bicycle or e-bicycle whenever necessary.

(1957 Rev. Ords., § 13.306; 1992 Code, § 10-2) (Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

#### **BICYCLES; OPERATION REGULATIONS**

§ 81.015 TRAFFIC REGULATIONS GENERALLY. Every person driving a bicycle or e-bicycle shall have all of the rights and all the duties applicable to the driver of any other vehicle by this Code, except as to special regulations in §§ 81.015 through 81.023 and except as to those provisions of this Code which by their nature can have no application.

(1957 Rev. Ords., § 13.301; 1992 Code, § 10-34) (Ord. 27-83, passed 5-2-1983; Ord. 66-19, passed 6-18-2019)

#### Cross-reference:

Traffic regulations, see ch. 76

§ 81.016 MANNER OF RIDING. No person shall ride or propel a bicycle or e-bicycle upon any street except in a careful or prudent manner and unless the person shall be capable of efficient control and operation of the bicycle.

(1957 Rev. Ords., § 13.308; 1992 Code, § 10-35) (Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

§ 81.017 PASSENGERS PROHIBITED; EXCEPTION. No bicycle or e-bicycle shall be used to carry more persons at one time than the number for which it is designed or equipped, except that an adult driver may carry an infant securely attached to his or her person in a backpack or sling or in an infant carrier designed for bicycles or e-bicycles with a safety belt firmly attached.

(1957 Rev. Ords., § 13.308; 1992 Code, § 10-36) (Ord. 27-83, passed 5-2-1983; Ord. 50-88, passed 6-20-1988; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

§ 81.018 CLINGING TO VEHICLES. Any person riding upon any bicycle or e-bicycle shall not attach the bicycle or e-bicycle or himself or herself to any vehicle upon a street.

(1957 Rev. Ords., § 13.308; 1992 Code, § 10-37) (Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

§ 81.019 DRIVING ABREAST. Persons driving bicycles or e-bicycles upon a roadway shall not drive more than two abreast and within a roadway's outside single-lane at any time except while in the process of passing. When persons riding bicycles or e-bicycles two abreast are riding at less than the normal speed of traffic and are approached from behind by a motor vehicle, the persons shall then ride single file in accordance with the provisions of § 72.002(c).

(1957 Rev. Ords., § 13.308; 1992 Code, § 10-38) (Ord. 2423, passed 6-13-1966; Ord. 27-83, passed 5-2-1983; Ord. 46-12, passed 7-10-2012; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

§ 81.020 CARRYING ARTICLES. No person driving a bicycle or e-bicycle shall carry any package, bundle, or article which prevents the use of both hands in the control and operation of the bicycle or e-bicycle. A person driving a bicycle or e-bicycle shall always keep at least one hand on the handlebars.

(1957 Rev. Ords., § 13.308; 1992 Code, § 10-39) (Ord. 27-83, passed 5-2-1983; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

§ 81.021 ACROBATIC RIDING. No rider of a bicycle or e-bicycle shall remove both hands from the handle or feet from the pedals or practice any acrobatic or fancy riding on any street. (1957 Rev. Ords., § 13.308; 1992 Code, § 10-40) (Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

#### § 81.022 SPEED: CONTESTS.

a. No person shall, while driving a bicycle or e-bicycle upon a street, recreation trail, cycle track, or sidewalk participate in any race for speed with any other vehicle, except under permit from, and under the supervision of, the police department.



- b. By agreement with the police department, participants in an approved bicycle or e-bicycle racing event may be exempted from compliance with any traffic laws otherwise applicable thereto, provided that traffic control is adequate to assure the safety of all highway users.
- c. Tests of endurance are not considered bicycle or e-bicycle racing.

(1957 Rev. Ords., § 13.308; 1992 Code, § 10-41) (Ord. 27-83, passed 5-2-1983; Ord. 118-18, passed 12-18-2018; Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999

#### Statutory reference:

Bicycle races, see SDCL 32-20B-7 et seq.

#### § 81.023 INTERFERING WITH PEDESTRIANS.

No person shall ride or propel any bicycle or e-bicycle upon any street in a manner as to interfere with any pedestrian thereon.

(1957 Rev. Ords., § 13.307; 1992 Code, § 10-42) (Ord. 66-19, passed 6-18-2019) Penalty, see § 10.999



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