CHAPTER 8

SUPPORTING PROGRAMS AND POLICIES

WHILE PREVIOUS CHAPTERS HAVE FOCUSED ON THE DESIGN AND CHARACTER OF A BIKEWAYS NETWORK, INFRASTRUCTURE ALONE DOES NOT CREATE AN EXCELLENT PEDESTRIAN AND BICYCLE TRANSPORTATION PROGRAM. To guide communities, the League of American Bicyclists (LAB), through its Bicycle Friendly Communities (BFC) program, establishes five components of design that are used to determine whether a city should be awarded BFC status – the 6 E's of Engineering, Education, Encouragement, Enforcement, Evaluation and Equity.

Walking and bicycling network recommendations advance a vision for expanding active transportation in Grand Island. But supportive education and encouragement programs will help more Grand Island citizens feel comfortable walking and bicycling. These programs are designed to support people of all ages and abilities so that walking and bicycling are normal, safe, and comfortable ways to travel throughout the region. Recommended policy items build on and diversify current policies related to expanding walking and bicycling. Recommended education/encouragement programs and policies listed in the table below, and described in greater detail in this chapter, reflect the needs and values of the community residents who assisted this planning effort. The table shows which of the "Six E's" of bicycle and pedestrian planning are relevant for each recommendation.

The City should coordinate education/encouragement programming implementation with local partners in the Grand Island area. The School District and parent organizations, local bike shops, wellness groups, and others are crucial for helping develop successful programs.

Implementation of partnerships and support programs are of course dependent on community support, available funding and City Council action (as required).

PROGRAM AND POLICY DESCRIPTIONS

Annual Implementation Agenda

In partnership with the GIAMPO's existing bicycle and pedestrian advisory committee, other citizen groups, GIAMPO and NDOT representatives, and other partners, Grand Island should develop an annual implementation agenda and budget that identifies specific projects, programs, and targets for executing the Bicycle and Pedestrian Master Plan. The annual agenda and budget should be based upon available staff capacity, funding resources, and similar considerations.

Adoption of Best Practice Design Guides

Design guidelines are critical to the development of a safe, consistent bicycle network. In order to support local agencies in developing bicycle facilities based on sound planning and engineering principles and best practices from around the country, the National Association of City Transportation Officials (NACTO) created the Urban Bikeway Design Guide. From Omaha and Seattle to Washington, D.C., over fifty cities have adopted the guide to inform city staff and consultants during project design and development.

PROGRAM/POLICY	EDUCATION	ENCOURAGEMENT	ENFORCEMENT	ENGINEERING	EVALUATION AND PLANNING	EQUITY
Annual Implementation Agenda	X	X	X	X	X	X
Adopt Best Practice Bicycle and Pedestrian Design Guide				X		
Zoning Code and Subdivision Regulations Updates				X		
Youth Bicycle Safety Classes	X	X				X
Public Education and Awareness Campaigns	X	X	X			X
Bike Light Campaign	X	X	X			X
Project Outreach	X	X	X	X		X
Citywide Wayfinding Program	X	X		X		X
Crash Monitoring and Evaluation				X	X	
Bicycle Master Plan Updates	X	X	X	X	X	X
League Cycling Instructor Training	X					

The guide expands upon basic facility guidance and standards included in the AASHTO *Guide for the Development of Bicycle Facilities*, 4th Edition (2012) and the Federal Highway Administration's (FHWA) *Manual for Uniform Traffic Control Devices* (MUTCD). In 2013, the FHWA signed a memorandum expressing support for the Urban Bikeway Design Guide as a valuable resource to "help communities plan and design safe and convenient facilities" for bicyclists and actively encourages agencies to use the guide to go beyond minimum requirements and design facilities that "foster increased use by bicyclists… of all ages and abilities."

The FHWA has developed a number of new resources in recent years to support bikeway planning and development as well. In 2016, the agency released the *Small Town and Rural Multimodal Networks Guide* to support transportation practitioners by applying national design guidelines to the unique settings found in small towns and rural communities. The guide encourages innovation within the bounds of MUTCD and AASHTO compliance by providing unique engineering solutions and design treatments that address small town and rural needs.

Based on their prominence across the country, Grand Island should adopt by resolution the NACTO Bikeway Design Guide and the FHWA Small Town and Rural Multimodal Networks guide as a supplemental resource to implement the network recommendations included in this plan.

Resources

NACTO Urban Bike Design Guide: http://nacto.org/publication/urban-bikeway-design-guide/

Sample Endorsement Letters:

Omaha, NE: https://nacto.org/wp-content/uploads/2015/06/Omaha_Urban-Bikeway-Design-Guide-endorsement-letter_08.04.11.pdf

Minneapolis, MN: http://nacto.org/wp-content/uploads/2015/06/Minneapolis_Urban-Bikeway-Design-Guide-endorsement-letter_08.24.11.pdf

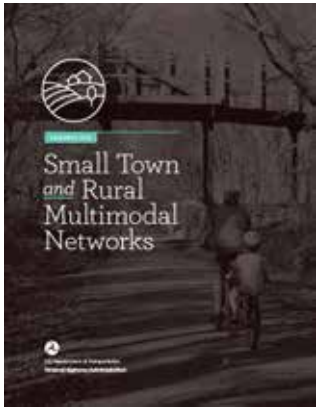
Zoning Code and Land Subdivision Regulations Updates

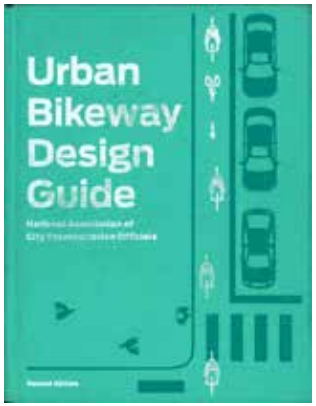
Land use patterns have significant impact on how people travel in Grand Island and the surrounding region. Bicycling and walking are disproportionately affected by land use patterns when compared to other travel modes, as travel distances, street connectivity, and other environmental factors can restrict or deter altogether bicycling and walking activity.

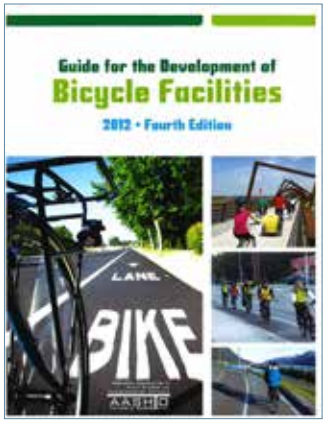
Zoning ordinances, subdivision regulations, building codes, and other policies create the framework for physical development. They focus on environmental design considerations, including aesthetics and safety, street connectivity, development scale and density, building setbacks, and mixture (or separation) of land uses. As a result, these regulations can change the way individuals relate to the people and places around them by affecting travel distances, streetscape character, presence of sidewalks and bicycling facilities, and even trees and landscaping.

An expanding body of scientific research points to the direct link between land use policies like zoning ordinances and subdivision regulations, and active transportation. Zoning regulations can impact the percentage of population making trips on foot or by bicycle instead of car. Zoning regulations and supportive land use policies and infrastructure improvements can increase bicycling trips and the percentage of the population riding bicycles. As the walking and bicycling network grows in Grand Island, it will be important to integrate and codify this value to ensure it is reflected in future developments. Zoning and subdivision regulations should provide:

- Medium-to-high densities wherever appropriate
- Fine-grained mix of land uses
- Short-to medium-length blocks
- Street-oriented buildings
- Parking requirements that reflect actual demand, typically reducing the space committed to auto parking and require bicycle parking







Bike parking as art. Top to bottom: inverted U's at the University of Nebraska at Omaha, enhanced with the school's mascot; Edsel bike parking lot; bicycle-shaped parking sculptures.

- Require street design to be connected to create street network that supports walking, bicycling and transit
- Move toward implementation of the Grand Island Transit Study recommendation.
- Provide for safe street crossing at locations where pedestrians need to cross, such as bus stops, schools, parks, and other major destinations
- Incorporate bicycle facilities into street and building design to provide for access and parking that is convenient and accessible.
- Integrate active transportation within the Grand Island City Code would provide clarification for the rights and responsibilities of people who travel in the city by walking, bicycling and driving. The following changes are recommended to the City Code:
- Rewrite and reinstate City Code Chapter 6. Bicycles. Rewriting and reinstating Chapter 6. Bicycles to conform to national best practice would provide guidance about these roadway users' roles and responsibilities within Grand Island. This chapter should also address standards for including bicycle accommodation as standard elements in new development or during reconstruction projects. Furthermore, codifying bicycle parking requirements and other facilities would support Grand Island as the local culture of bicycling develops.
- Increase minimum sidewalk widths. (City Code, Chapter 32) Sidewalks in Grand Island are classified as 'conventional' sidewalks or 'curb' sidewalks. Minimum width for both types of sidewalk are four feet wide. Grand Island should consider increasing minimum widths from four feet to six feet on collector roadways. This increase would more comfortably accommodate all sidewalk users and would allow them to more easily pass others on the sidewalk. Arterial streets are more comfortable for pedestrians when they feature wider sidewalks than streets with lower traffic volumes. Increasing minimum widths to eight or ten feet would increase comfort along busy streets. Grass buffers should be encouraged or required wherever possible to increase space between people using the sidewalk and passing motor traffic. This increases user comfort along the sidewalk.

Resources

Zoning Regulations for Land Use Policy, Roadmaps to Health, Robert Wood Johnson Foundation: http://www.countyhealthrankings.org/policies/zoning-regulations-land-use-policy

Bicycle Parking Zoning Modifications, City of Cambridge, MA http://www.cambridgema.gov/CDD/Projects/Planning/bicycleparkingzoning

Youth Bicycle Safety Classes

Instilling a love for bicycling in children and young adults can support long-term gains in cultural acceptance of and support for bicycling activity. While many children learn bicycling at a young age, it is not a part of physical education curriculums in most schools in Grand Island and across the country, partially due to the lack of access to resources. Some school districts across the country, however, have begun to incorporate basic bicycling safety and skills into physical education curriculums with great success. Schools often partner with local police departments, non-profits, and certified bicycling instructors to provide bicycles for students and encourage safe riding practices. A partnership between the City and Grand Island Public Schools should explore opportunities to teach basic bicycling skills to young students. National resources are available to avoid the School District starting from scratch to develop bicycle safety related lessons.

Resources

SHAPE America (Society of Health and Physical Educators) Bicycle Safety Curriculum: http://www.shapeamerica.org/publications/resources/teachingtools/qualitype/bicycle_curriculum.cfm

League of American Bicyclists Bicycling Skills 123 Youth and Safe Routes to Schools courses: http://www.bikeleague.org/content/find-take-class

Safe Routes to School National Partnership Traffic Safety Training resources: http://www.saferoutespartnership.org/state/bestpractices/curriculum

Nebraska Department of Transportation Safe Routes to School resources: http://dot.nebraska.gov/business-center/lpa/projects/programs/tap/

Public Education and Awareness Campaigns

A broad public outreach and education campaign can help normalize bicycling as an accepted and welcomed way for people to travel in Grand Island through compelling graphics and messages targeted to motorists, pedestrians and bicyclists. Campaign materials can use customized messages to provide safety information for each of these types of roadway users. Common topics for media campaigns include safety and awareness; sharing the road and travel etiquette; light and helmet use; and humanization of bicyclists as fathers, mothers, sons, and daughters. These campaigns utilize a variety of media to share their messages, from buses and bus stop shelters to websites, online ads, and social media outlets.

Grand Island should develop a public education and awareness campaign to further establish bicycling as a valued mode of travel for all community residents. Partnerships with community leaders are crucial to spreading the word about such campaigns.

Resources

We're All Drivers, Bike Cleveland (Cleveland, OH): http://www.bikecleveland.org/our-work/bike-safety-awareness/

Drive with Care, Bike PGH (Pittsburgh, OH): http://www.bikepgh.org/care/

Every Lane Is a Bike Lane, Los Angeles County Metropolitan Transportation Authority (Los Angeles, CA): http://thesource.metro.net/2013/04/11/every-lane-is-a-bike-lane/

Every Day Is a Bike Day, Los Angeles County Metropolitan Transportation Authority (Los Angeles, CA): http://thesource.metro.net/2014/04/30/l-a-metro-launches-new-bike-ad-campaign-in-time-for-bike-week-l-a-may-12-18/

A Metre Matters and It's a Two-Way Street, Cycle Safe Communities, Amy Gillett Foundation (Australia): http://cyclesafe.gofundraise.com.au/cms/home

Bike Light Campaign

Bicycling at night without proper front and rear bike lights increases crash risk, yet many people bicycling in Grand Island lack the proper lighting to stay safe and visible at night. In order to increase bicycling safety and overcome cost barriers that prohibit many individuals from purchasing bike lights, Grand Island should coordinate with local law enforcement and community partners to create a bike light giveaway campaign. Similar programs across the country combine catchy names like "Get Lit" or "Light Up" to garner public and media attention. The City should consider scheduling the program to coincide with back to school events for elementary, high school, or college students or the end of daylight savings. The campaign's giveaway focus would eliminate the cost of purchasing new lights for people who may not otherwise purchase them.

Resources

How to Do a Successful Bike Light Giveaway, League of American Bicyclists: http://www.bikeleague.org/content/how-do-successful-bike-light-giveaway

Get Lit, Community Cycling Center (Portland, OR): http://www.communitycyclingcenter.org/get-lit/

Pop-Up Bike Light Giveaway, BikePGH (Pittsburgh, PA): http://www.bikepgh.org/2013/09/30/pop-up-bike-light-giveaway/

Encouragement through events large and small. From top: a community street festival celebrating bicycling and healthy living (South Omaha, NE); a group event for the opening of a new bike lane project in Bellevue, NE; the world's largest group ride, Bike New York's Five Boroughs Bike Ride, with 32,000 participants.

Biking Rules. Excerpts from a street code to promote responsible urban cycling, developed by New York City's Transportation Alternatives advocacy organization.

Project Outreach

Public meetings held during this planning effort helped vet network recommendations with members of the community. It is crucial that as recommended short- and long-term projects are developed and installed, the City continue and increase outreach efforts to discuss the projects with residents along project corridors. Outreach should be conducted early and often. Outreach materials should discuss how to interact with new street designs and should discuss how to safely drive near people bicycling and walking. Although there is no substitute for door-to-door outreach and continued conversations with residents, online videos, temporary signs, updates through social media, neighborhood meetings, and other outlets, would build awareness and support for new and improved elements of the transportation system. Examples of project outreach via community meetings and online presence are listed in the following 'Resources' section.

Resources

Seattle DOT Bicycle Program Projects (Seattle, WA): http://www.seattle.gov/transportation/bikeprojects.htm

Cincinnati Bicycle Transportation Plan Current Projects (Cincinnati, OH): http://www.cincinnati-oh.gov/bikes/bike-projects/

Denver City and County Current Projects (Denver, CO): https://www.denvergov.org/content/denvergov/en/bicycling-in-denver/infrastructure.html

Citywide Wayfinding System

While signs and sign clutter should always be minimized, a carefully designed identification and directional graphics system can greatly increase users' comfort and ease of navigating the street and trail system. The graphic system may have individual features, but should generally follow the guidelines of the Manual of Uniform Traffic Control Devices (MUTCD). Types of signs in the system include:

- The D11-1c Bike Route Guide Sign, identifying a street or trail as a bike route and describing the route's end point or a landmark destination along the way. These are sometimes used in conjunction with arrows (M6-1 through M6-7) that indicate changes in direction of the route. These are located periodically along the route to both reassure cyclists and advise motorists.
- A version of the D1 family of destination signs (D1-1c, D1-2c, or D1-3c), identifying the direction and distance to specific destinations. Sometimes these signs include a time to destination, based on a standard speed, typically 9 miles per hour). These are typically located at intersections of routes or at a short directional connection to a nearby destination.
- On bicycle boulevards, a special street sign can be used to help provide additional notification to motorists and wayfinding information to bicyclists.
- Motorist advisory signs. The R4-11 Bicycles May Use Full Lane is usually the preferred sign on shared routes.

The graphic system should be modular to provide maximum flexibility and efficiency in fabrication. Signs should also use reflective material for night visibility. The Clearview font is recommended as a standard for text.

Installation of a wayfinding system is an inexpensive way to implement a major part of the bike network ahead of major capital expenditures, especially on streets like shared and marked routes or bicycle boulevards that do not require extensive infrastructure to be operational.

Crash Monitoring and Evaluation

Crash reports from collisions involving bicyclists can be an invaluable resource for learning about the behavior or motorists, bicyclists, and pedestrians, as well as roadway conditions and characteristics that may lead to collisions. Regular monitoring and evaluation of crash locations can help to identify high-risk areas and develop solutions to

minimize crash risk. Using a five-year sample of crash data can help identify trends with regard to crash time, contributing factors, crash type, location, and other key details. The City should routinely conduct a detailed analysis of reported bicycle crashes, including a review of individual crash report narratives, every two years. In addition, an online tool on the City's website can allow those biking to report concerns about specific areas of the city where they feel unsafe. This approach can help identify a problem before a crash occurs.

Resources

Denver Bicycle Crash Analysis: Understanding and Reducing Bicycle & Motor Vehicle Crashes (Denver, CO):

https://www.denvergov.org/content/dam/denvergov/Portals/705/documents/denver-bicycle-motor-vehicle-crash-analysis_2016.pdf

University of North Carolina Highway Safety Research Center Pedestrian and Bicycle Crash Analysis Tool (PBCAT): http://www.pedbikeinfo.org/pbcat_us/

Cambridge Bicycle Crash Fact Sheet (Cambridge, MA): https://www.cambridgema.gov/~/media/Files/CDD/Transportation/Bike/Bicycle-Safety-Facts_FINAL_20140609.pdf

Master Plan Updates

Like all plans, this plan will lose its efficacy and relevance as the bike network grows, physical development occurs, travel patterns change, and community needs and values evolve. Grand Island should plan to revisit the plan every five years for a comprehensive update, at which point implementation progress can be measured, new goals and targets can be established, and bike network and support systems can be evaluated and updated to reflect current conditions and opportunities.

Sign concepts for Grand Island. Top: Bicycle boulevard street sign in Topeka, KS. Above: Bismarck, ND trail gateway sign. Right: D11-1c (above) and D1-3c (below) basic wayfinding signs

League Cycling Instructor Training

The League of American Bicyclists (LAB) oversees an educational program called League Cycling Instructor (LCI) training that teaches participants how to train others to become more confident when bicycling in traffic. Participants who successfully complete the training are then certified to teach the League's "Safe Cycling" courses to adults and children. Other cities, such as Wichita, KS, offer LCI training to interested City staff and community members. No Grand Island residents are currently certified through LAB, but 21 residents are registered throughout Nebraska (including one of the writers of this plan). The City should offer at least one certification class per year to increase the number of City staff and residents who can teach others about safe bicycling. LAB offers resources and coordination to help courses to communities.

Resources

Bicycle Friendly America, League of American Bicyclists: Nebraska: http://bikeleague.org/bfa/search/map/Nebraska?bfaq=Nebraska

LAB, Smart Cycling: http://bikeleague.org/ridesmart

LAB, Become an Instructor: https://www.bikeleague.org/content/become-instructor