4 THE FRAMEWORK

Mayor's Bike Ride
Photo Credit: The Town of Carrboro

INTRODUCTION

While transportation infrastructure – roads, bikeways, trails – are critical for improving bicycling, other components must also be used to create a truly bike-friendly Carrboro. This Plan incorporates these strategies to make bicycling safe, comfortable, and fun.

Non-infrastructure recommendations are organized according to two distinct categories:

Policies

Policies add political backing and institutionalize recommendations and design guidelines into town codes. Policies may be specific to infrastructure elements or may be broad and include multiple jurisdictions and stakeholders.

Programs

Programs can engage the broader community to encourage more people to bike, educate community members on rights and responsibilities, and enforce traffic laws to improve safety for all modes.

KEY PARTNERS

Numerous partners, ranging from public to private to non-profit, will be essential for rolling out a variety of programs. Some of these are shown below:

- Town of Chapel Hill
- GoChapelHill
- BikeCarrboro
- The Bicycle Chain/Clean Machine
- The ReCYCLEry
- Orange County
- The YMCA
- Chapel Hill-Carrboro City Schools
- Back Alley Bikes
- Carrboro Business Alliance
- Parcycles, Inc

Helmet Fitting & Bike Maintence Event organized by BikeCarrboro and the Clean Machine
Photo Credit: Molly De Marco

POLICIES

STRATEGIC PRIORITIES	**Expand Bike Parking Requirements**	High quality and convenient bike parking is a necessary component to encourage bike ridership.
	Shared Mobility Policy	The Town will need to stay up-to-date on trends related to bike share, scooter share, and the like and ensure policies reflect community goals.
	Tactical Urbanism Policy	Create a streamlined permitting process to allow community partners to collaborate on pilot projects.
CONTINUOUS	**Maintenance**	Ensuring facilities is clear of debris is important to increase ridership and increase safety. Establish new maintenance protocols to ensure fix-it stations remain in working order.
LONG TERM	**Expand Enforcement**	Police support for the safety of people bicycling, including encouraging reporting, provides the data for the Town to fully evaluate countermeasures.
	Speed Enforcement for Hot Spots	Using bicycle crash data and public feedback to identify hot spots and perform targeted enforcement can help prevent future crashes.
	Dedicated Funding	A dedicated funding stream would allow for more reliable and consistent long term bicycle planning and implementation.
	Allocation of Bicycle Program Tasks	Dedicate more staff hours to research, implementation and outreach. Ensure coordination and accountability of tasks

PROGRAMS

STRATEGIC PRIORITIES	**Tactical Urbanism**	Provides the ability to test new infrastructure and allows for immediate public feedback and early detection of obstacles before making large investments. The Town's future traffic calming policy includes some specifics for Tactical Urbanism.
	Continue Safe Routes to School Efforts + Partnerships	Continue work from the adopted 2012 plan in order to increase the number of students who bike to or at school.
	Bicycle Wayfinding	Wayfinding elements such as signage, pavement markings, and mile markers will help to draw visitors, help users identify the best routes, and enhance their ability to access major destinations.

LONG TERM	**Regional Map/Mobile App**	Ensure that the Town of Carrboro is represented and supported by the developing DCHC/CAMPO regional app that provides an easily accessible resource to plan bicycle routes, identify maintenance issues, and report safety issues.
	Expand Options for Skills Training + Social Rides in Diverse Neighborhoods	Making cycling accessible and enjoyable for all who bicycle, including the "interested but concerned" riders, should be a priority (current Town effort ongoing).
	Encouragement Campaign	Building off of Watch for Me, NC - a targeted encouragement campaign that fits within the culture and brand of Carrboro, would help educate users and encourage more bike trips.
	Advocacy Ambassador Program	Support and partner with Carrboro's existing bicycle advocates to help with public outreach and bike plan implementation.
	Expand Count Program	Counts are collected along state-maintained roads; the Town is working to expand counts along local roads and greenways. Accurate count information allows the Town to identify trends and determine where investment should be made.
	Education of People on bikes and People in vehicles on Rules of the Road	Ensure that educational opportunities about rules of the road are available for youth and adults.

Policy Spotlight: Shared Mobility Policy

BACKGROUND

Shared mobility programs are designed to provide cost-effective, environmentally-friendly and convenient travel options for short trips within a city or region. The systems consist of a fleet of user-friendly and durable bicycles, electric power-assisted bicycles or lightweight electric scooters (e-scooters) intended to be driven while standing. Both bike or scooter share programs are relatively inexpensive and quick to launch—compared to highway and transit projects—and can provide an extension to Carrboro's public transportation system.

As more success has been realized, larger cities are expanding shared mobility into lower density and lower income areas, and mid-size and smaller cities have launched successful bike share and scooter share systems. Bike share and scooter share have been transformative transportation system offerings for many cities in North America. They can provide sustainable transportation options, infill first/last mile connectivity (extend the reach of transit), create jobs, reduce reliance on private automobiles, and improve the health of Carrboro residents.

POLICY RECOMMENDATIONS

Cities and towns have had some challenges in implementing bike share and/or scooter share systems in recent years. In some cases, private vendors have dropped scooters in a city without any advanced warning. Today, cities are becoming better prepared with their own policies to effectively manage systems that work for them. Some specific policy areas for the Town to consider are:

- **Fleet Size -** Communities piloting shared mobility for the first time may opt for deploying a limited fleet in the interest of gauging public interest in the service and observing modal interaction between e-scooters, people on bikes, people walking, and motor vehicles. Other communities using static fleet caps may have determined the designated number of units is an appropriate or manageable amount for a community of their size, land-use pattern, or traffic conditions. *The Town of Carrboro should set an initial fixed fleet size with immediate demand-based expansion and reduction procedures within a set pilot period. This approach gradually integrates shared mobility devices into the streetscape.*
- **Speed Limits** - Shared Mobility devices are most compatible with designated bike lanes and low-to-mid speed travel lanes (under 25 MPH). Most municipalities regulating shared mobility systems require that vendors cap device speed at 15 MPH, a suitable speed for bike lanes, shared use paths and local streets. Some jurisdictions are exploring requirements to cap device speeds in high-traffic areas, such as downtown centers or in public parks. *To start, the Town of Carrboro should clearly state in its permit regulations that all electric devices should be*

equipped to achieve a speed of no more than 15 MPH throughout the designated service area.

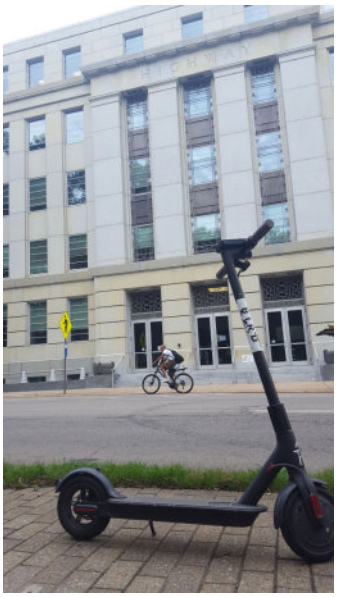
» **Sidewalk Use -** Most municipalities strongly discourage, if not outright prohibit the use of shared mobility devices on sidewalks to avoid posing unnecessary danger and discomfort to people walking. On sidewalks, people walking and especially people with disabilities have the clear right of way. Therefore, sidewalk riding by shared scooters should be actively discouraged or prohibited to ensure access, comfort, and safety where people walking have the right of way *The Town may consider prohibiting sidewalk use throughout all service areas, with potential exceptions in discrete areas where traffic speeds are high and pedestrian traffic is low.*

» **Parking Policy** - Improper parking procedures are another challenge, in that scooters and bikes can create hazards for people traveling on the sidewalk, particularly those people in wheelchairs, with visual impairments or ambulatory disabilities. While systems have long encouraged users to park in the "furnishing zone" of sidewalks (where bike racks, benches, trees and signage are located), some cities have enhanced the formality and enforceability of scooter parking policy. Formalizing the relationship between device parking standards and pedestrian accessibility begins with setting a minimum sidewalk clearance requirement that riders are required to obey when parking. "Drop zones" are an emerging tactic aimed at reducing improper parking procedures. Drop zones are small designated parking areas for dockless bikes or e-scooters within the public right of way, identified with paint and/or signage. *If a bike or scooter share system is established, the Town should mandate shared mobility parking areas/drop zones in busy pedestrian areas and elsewhere, to mitigate blocked sidewalks and clutter. The Town should also include incentives in its scooter or bike share pilot program regulations.*

» **Accessible Bike Rentals** - While bikeshare and other shared mobility systems have become increasingly popular over the past few years there is still a lack of accessible devices (such as tricycles or handcycles). There are some examples of cities partnering with local bicycle shops or accessibility adovcates to provide an accessible bike rental service so that a system is available to people of all abilities.

Examples of accessible rental programs and partnerships include:

Portland, OR and KerrBikes:
www.adaptivebiketown.com
Eugene, OR Parks & Rec Dept:
www.eugene-or.gov/134/Adaptive
Detroit and Adaptive MoGo:
www.mogodetroit.org/mogo-for-all/adaptive-mogo/
Milwaukee, WI and Bublrbikes:
https://bublrbikes.org/adaptive
San Francisco and Bay Area Outdoor Recreation Partnership:
https://www.lyft.com/bikes/bay-wheels/adaptive-bike-share



Policy Spotlight: Bicycle Parking Policy

TODAY'S EFFORTS

The Town of Carrboro's bicycle parking regulations and guidelines are integrated in the Town's 2009 Bike Plan and Land Use Ordinance (Article XVIII Parking). The Land Use Ordinance outlines the location requirements, recommended design elements, space requirements, trade-offs, and deviations for Carrboro business owners and developers. The Town is currently working towards linking to the APBP bike parking guidance in the Land Use Ordinance.

RECOMMENDATIONS

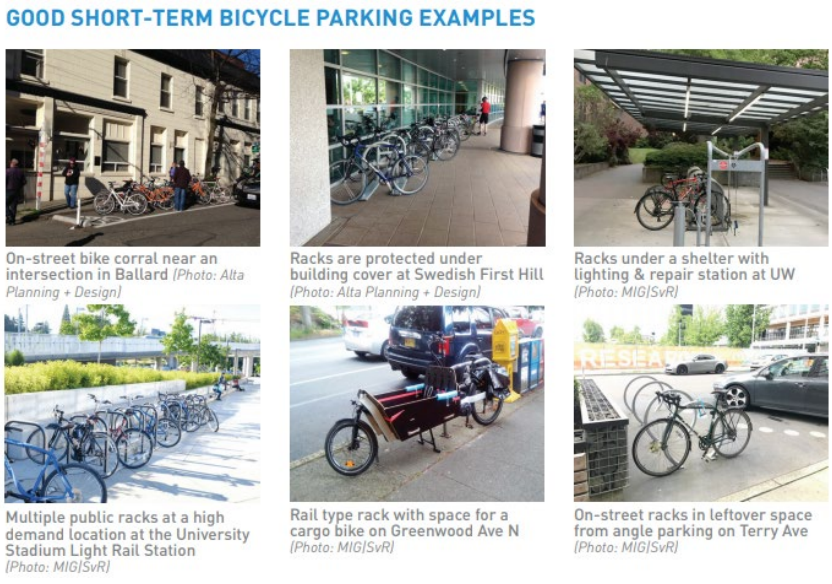
Creating a document, based on the APBP bike parking guidance, with easy to understand information and visuals tied to the Land Use Ordinance would allow Carrboro business owners, developers, and other interested parties to know what is required of them. Providing more resources and incentives will help support the expansion and enhancement of bicycle parking in Carrboro, which in turn encourages ridership.

CASE STUDY: CHARLOTTE, NC

Charlotte Department of Transportation created a City of Charlotte Bicycle Parking document, which provides direct guidance and graphics for recommended bike rack styles and the benefits of providing bicycle parking in the city right-of-way. This document's primary purpose is to help businesses apply to the Bicycle Rack Partnership Program. It details the application process and provides inverted "U" Rack specifications and other guidance for Charlotte businesses.

Seattle Department of Transportation (SDOT) has a similar document with helpful graphics.

Showing photos of bike racks helps users understand how to meet requirements. Photo Credit: SDOT



Program Spotlight: Wayfinding

TODAY'S EFFORTS

As of writing, Carrboro is developing a branded wayfinding system, which will include a variety of new signs around town. These include bike parking signs, "bike trailblazer" signs, and bike share signs. Future options can be developed to include a separate sign for other forms of micromobility devices.

Photo Credit: Axia Consulting

RECOMMENDATIONS

This new wayfinding signage system should be applied to the proposed neighborway network (see Chapter 5) as a low-cost, quick action item. The town's bike maps should also be updated with this new information so people who bicycle can plan routes both before and during rides.

CASE STUDY: TRAVELERS REST, SC

The City of Travelers Rest, SC, population 4,600, has transformed itself into a "trail town" with careful planning and incremental implementation. A large part of this transformation has been its wayfinding system. By using branded, clear wayfinding signage, not only was it safer and more enjoyable for people who bicycle to find their way around town and to the surrounding trails, but also promoted a sense of place.

Signs, such as the ones in these images, create a sense of identify and place within a town for people who bicycle.

Program Spotlight: Tactical Urbanism

TODAY'S EFFORTS

The Town of Carrboro has experience with both pedestrian- and bicycle-focused tactical urbanism projects, such as the painted crosswalk on Weaver Street and a traffic calming pilot project on Cobblestone Drive.

RECOMMENDATIONS

Due to Carrboro's enthusiastic bicycle community, bicycle-focused tactical urbanism projects would be a great option for the Town. These short, relatively quick interventions using low-cost materials allow the Town to experiment, gather data, and receive immediate feedback on bikeway projects before making large investments in permanent infrastructure. The Town can complement their own programs with creating policies to allow community groups to initiate their own bicycle-focused tactical urbanism projects.

CASE STUDY: MORGAN HILL, CA

Alta Planning + Design worked with Town of Morgan Hill staff, Morgan Hill's Downtown Association, and Street Plans Collaborative to create a demonstration project utilizing tactical urbanism techniques for a six-month pilot project. Meetings were held with city staff, stakeholders, and residents to determine the two favorite alternatives which would be built in the three-day pop-up event. After the pop-up event, buffered bike lanes were chosen by the public and were installed for six months.

CASE STUDY: RALEIGH, NC

Raleigh's city government and local advocacy group Oaks & Spokes installed a pop-up, two-way cycle track for three blocks in downtown Raleigh for a weekend. Cones and donated planters were used as temporary protection for the cycle track. Because of its success, a permanent cycle track will be implemented.

Program Spotlight: Bicycle Count Programs

TODAY'S EFFORTS

Currently, the Town of Carrboro has bicycle counters on the Libba Cotten Bikeway and on Old NC 86 north of Hillsborough Road.

RECOMMENDATIONS

Adding more counters in new locations will provide data for evaluation of bicycle facilities and for future bicycle infrastructure decisions. The data collected from counters can also help quantify the benefits of biking and make bicycle projects more competitive for funding opportunities.

CASE STUDY: SAN DIEGO, CA

The County of San Diego Health and Human Services Agency, San Diego Association of Governments, and San Diego State University collaborated to install automated bicycle counters throughout the region using grant funding. Data is collected every 15 minutes and uploaded daily to the SANDAG website.

CASE STUDY: SAN FRANCISCO, CA

San Francisco has a multi-pronged approach to bicycle counting. While they have "invisible bike counters" that are installed in the pavement, they also have installed digital bike counters. Digital bike counters were placed on San Francisco's busiest biking streets to not only gather data on ridership, but also to send a message to people that bicycle and the public that people who bicycle count. The digital signs display the weather, the count of people bicycling that day, and a bar indicating the number of people bicycling that year.

Digital bicycle counters gather data and are also a form of encouragement for people who bicycle. Photo Credit: SFMTA