









Implementation

OVERVIEW

This plan's infrastructure, program, and policy recommendations provide the framework for making the Albemarle region "a Bicycle Destination for the World." Successful implementation of these recommendations will require a consistent, coordinated effort by the Albemarle RPO, NCDOT, counties, municipalities, private partners, stakeholders, and advocates in the region. In order to monitor implementation success, an evaluation component is essential. Measuring performance over time will allow the region to gauge success in providing quality bicycle transportation and recreation choices. It will also provide a mechanism for making informed decisions and efficient investments in the future.

This chapter details priority action steps for the region. The actions steps presented do not cover every individual infrastructure, policy, and program recommendation of this plan. Rather, they call out priority items within each of these categories in order to provide guidance for moving forward on the most important items. For each action step, a lead agency, potential support agencies, and time frame for completion are suggested.

Key First Steps

The first step toward implementation is the **adoption** of this plan. All member counties and municipalities should adopt this plan as the guiding document for improving bicycle transportation and recreation in the region. Having an adopted plan is helpful in securing funding from federal, state, and private agencies.

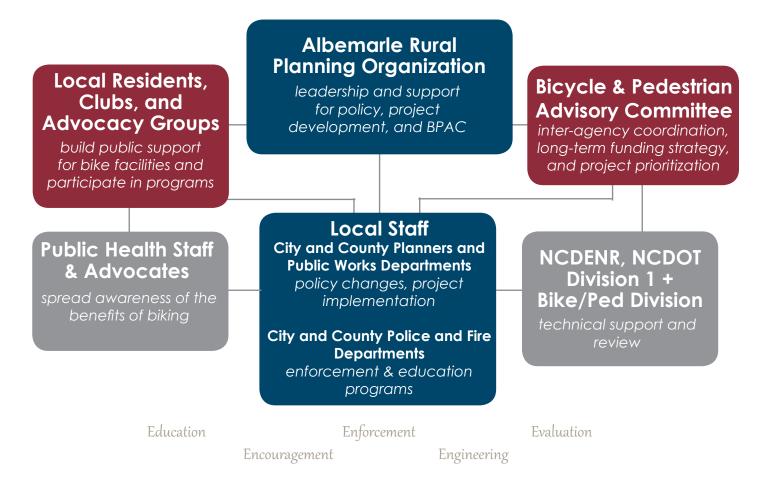
The second step is the formation of a BPAC (Bicycle and Pedestrian Advisory Committee). The BPAC could start largely with the members of the Bicycle Plan Steering Committee. The BPAC should also have representation from active pedestrians and commuting and recreational cyclists, and should champion the recommendations of this Plan. The BPAC should continue to provide a communications link between the citizens of the community, local governments, and the Albemarle Commission. They should meet at least quarterly, and be tasked with assisting in community outreach, marketing, and educational activities recommended by this Plan. Due to the size of the region, the BPAC may choose to divide into three subgroups to match the subregions of this study.

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Administrative Structure

The figure below presents an organizational structure for plan implementation. All of the groups and agencies shown in this figure will be necessary to successfully implement the extensive program, policy, and infrastructure recommendations of the Plan.



ACTION STEPS

Task	Lead Agency	Support	Details	Phase
Presentations and Adoptions				
Present plan to Albemarle Commission	Albemarle Rural Planning Organi- zation (ARPO)	Project Consul- tant	Present the plan to the Albemarle Comimission for approval and adoption.	Short Term (2013)
Approve and adopt this plan - Municipalities	Municipal Plan- ners	ARPO/Project Consultant	Through adoption, the plan becomes a legitimate planning document of each municipality. Adoption shows that the city or town has been part of a successful, supported planning process and is a partner in implementation. It is key to securing funding from NCDOT and other state and federal agen- cies.	Short Term (2013)
Approve and adopt this plan - Counties	County Planners	ARPO/Project Consultant	Through adoption, the plan becomes a legitimate planning document of each County. Adoption shows that the County has been part of a success- ful, supported planning process and are partners in implementation. It is key to securing funding from NCDOT and other state and federal agencies.	Short Term (2013)
Involve media to spread word to public and elected officials.	ARPO	Municipal and County Planners; Advocates	ARPO should utilize the media to announce the adoption of the bicycle plan. Media includes local newspapers, websites, and local television. When significant trails and facilities are constructed, the media should be notified in order to spread the word to the public. This will help build upon successes.	Short Term (2013)
Local and Regional	Coordination			
Establish Albemarle Bicy- cle and Pedestrian Advi- sory Committee (BPAC)	Regional Bicycle Plan Committee	ARPO	An ongoing regional entity focused on bicycle issues will be instrumental to the implementation of this plan and promotion of biking in the Albemarle region. This group should initially be formed of interested members of this plan's committee, and meet semi-annually to share implementation suc- cesses and challenges and track progress. The group can be divided into meaningful subcommittes such as policy, program, infrastructure, and evaluation groups.	Short Term (2013)
Set up regional Walk Bike website	BPAC	ARPO	Set up a website providing information to residents and tourists on bicycling in the region. To begin, the website can include this plan and the brochure map produced by it.	Short Term (2013-2014)
Add information on the location of amenities to the Walk Bike website	BPAC	ARPO, Munici- pal and County Planners	Gather the locations of bike parking, restrooms, and water fountains along bike routes and communicate it on the regional website. A public input form could help to crowdsource this data.	Continuous/ Ongoing

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Task	Lead Agency	Support	Details	Phase
Schedule semi-annual project development meetings with NCDOT	ARPO	NCDOT Division 1; Municipal and County Planners	Many projects recommended in this plan could be developed as part of a roadway reconstruction, widening, or resurfacing project. ARPO should work with NCDOT to ensure that upcoming roadway reconstruction proj- ects, including TIP projects, incorporate the bicycle improvements recom- mended in this plan. Further, this plan's recommendations should become an input into the development of the resurfacing schedule - roadways with bicycle recommendations should become higher relative priorities for resur- facing or widening than other roadways.	Short Term (2013-2014)
Discuss bridge policy application with NCDOT	ARPO	NCDOT Division 1, Municipal and County Planners	During one of the project meetings above, confirm that all bridges along roadways that permit bicycles will be accommodated with bike facilities in any bridge replacement or repair project (where feasible during repair proj- ects). Identify bridges along the proposed network with insufficient handrails and work to install bicycle-safe handrails on those bridges in accordance with NCDOT's bridge policy.	Short Term (2013-2014)
EVALUATION AND DATA	BASES			
Establish central holding place for bicycle facility database	ARPO	Municipal and County Planners	Each municipality and county should continue to update a GIS bicycle database as new facilities come online and new crash data is published. This data should periodically be shared with the ARPO for maintenance of a central database. This central database can also serve communities of the region without the resources to maintain GIS data.	Continuous/ Ongoing
Publish Annual Perfor- mance Report	BPAC	ARPO, Munici- pal and County Planners	Publish an annual report to provide an update on progress made during that year to advance bicycle transportation in the Albemarle region. ARPO should lead this effort, with support and content development provided by local staff. This report will provide an objective measurement of progress.	Annually
Develop bicycle count program	ARPO	Municipal and County Planners	A key method to evaluate bicycle activity and needs is to conduct profes- sional counts. Counts should be recorded in the annual performance report and coordinated with NCDOT's Division of Bicycle & Pedestrian Transporta- tion.	Annually
Online form for bicycle facility request	ARPO	Municipal and County Planners	Provide a web-based service that allows residents to report hazards, such as debris in a shoulder or trail, and request new bicycle facilities and connec- tions. Requests should be collected and communicated to planners within the relevant jurisdiction, and used to update this plan in the future. The web- site should be linked to municipal and county websites.	Short Term (2013-2014)

Task	Lead Agency	Support	Details	Phase
Update this plan	ARPO	BPAC	Update this plan after five years to reflect implementation progress, unex- pected challenges, and changes to the regional landscape.	Mid-Term (2018)
Infrastructure Impro	VEMENTS			
Identify and secure fund- ing sources for priority project implementation	Municipal and County Planners	ARPO, BPAC	Multiple funding sources should be sought. Appendix E contains a wide variety of funding opportunities.	Short Term (2013-2014)
Complete priority projects	Municipal and County Planners, ARPO	NCDOT, NCDENR, NCD- PR, NPS	Build priority projects identified in this plan (Submit bicycle projects to State TIP, add bicycle projects to local CIP lists)	Mid-Term (2015 - 2018)
Develop a long term funding strategy	Municipal and County Planners	ARPO, NCDOT, BPAC	To allow continued development of the overall system, capital funds for bicycle and pedestrian facility construction should be set aside every year, even if only for a small amount (small amounts of local funding can be matched to outside funding sources). Funding for an ongoing mainte- nance program should also be included in the county and town operating budgets. Multiple funding sources should be sought from federal, state, and health sources.	Short Term (2011-2012)
Programs				
Establish Safe Routes to School Program in Towns and Cities	School Districts	ARPO, BPAC, SRTS Program	Apply for Safe Routes to School funding for planning and implementation.	Short Term (2013-2014)
Apply for "Bicycle Friendly Community" designation by League of American Bicyclists	Municipalities	BPAC	Complete an application for the Bicycle Friendly Community designation.	Short Term (2013)
Hold first Police Officer Bicycle Training	Nags Head Po- lice Department	Outer Banks Pedestrian and Bicycle Safety Coalition	Arrange initial training and invite police departments from around the re- gion.	Short Term (2013)
Educate internal staff on bicycle and pedestrian-related issues.	Municipal and County Planners	ARPO, BPAC	Train relevant local government staff who play roles in implementation, de- sign, construction, enforcement, and maintenance of roadways and bike facilities. Local staff should be familiar with the Regional Bicycle Plan.	Short Term (2013-2014)

Task	Lead Agency	Support	Details	Phase
Develop local hard copy and online bicycle maps and brochures	Municipal and County Planners	BPAC, Health staff and advo- cates	A hardcopy and online map displaying bicycle facilities, suggested bike routes, destinations, and educational materials will be useful for tourists and residents. Maps for individual communities can provide the level of detail needed for navigation and supplement the regional brochure that was developed along with this plan. These maps should be updated every 3-5 years.	Mid-Term (2015-2018)
Establish maintenance standards	BPAC	Municipal and County Staff	Establish minimum standards for maintenance of bikeways (replacement of pavement markings, sweeping of debris, etc) and encourage local staff to follow these standards and set up hotlines for reporting of issues.	Mid-Term (2015-2018)
Hold WatchForMe NC workshop in the region	NCDOT	RPO, Municipal and County Staff	Present the campaign to interested municipalities and counties with infor- mation on how to implement it locally.	Short Term (2013-2014)
Celebrate and promote Bike Month	BPAC	Municipal and County Planners, Health staff and advocates	Bike Month provides an opportunity to encourage new bicyclists in a group setting with entertainment, prizes, and media attention. Promote and ex- pand Bike Month in May of 2014 and continue annually. Consider programs such as Ciclovias to generate interest (See Chapter 6 for more information).	Short Term (2013-2014)
Policies				
Incorporate this Regional Bicycle Plan's recommen- dations into long-range transportation and land use planning documents and local comprehensive plans.	ARPO	NCDOT, City and County Planners	Recommendations from this plan should become the starting point for the accommodation of bicycle facilites in future transportation and land use planning documents around the region	Ongoing
Revise Municipal and County Codes of Ordi- nances.	Municipal and County Planners	ARPO	Revise ordinances to better accommodate bicycle infrastructure and con- siderations. Use the policy recommendations and sample ordinance review in Chapter 6 as a guide for revisions.	Short Term (2013-2014)
Initiate regional Transfer of Development Rights program	ARPO	Municipal and County Planners	Establish a regional program to protect natural and working landscapes while encouraging appropriate development in population centers that supports bicycle transportation.	Long-Term (2019-2033)
Adopt form-based codes	Municipal Plan- ners		Replace use-based zoning codes with form-based zoning in growing munic- ipalities to support growth that will encourage and enable bicycle transpor- tation.	Mid-Term (2015-2018)

Task	Lead Agency	Support	Details	Phase
Generate a model smart growth scorecard and bi- cycle needs checklist for use around the region	BPAC	ARPO, Munici- pal and County Planners	Develop these tools based on best practices and market to local staff for use in development review. Chapter 6 provides a sample bicycle needs checklist and Camden County's smart growth scorecard can act as a model.	Mid-Term (2015-2018)
Consider Complete Streets Policy	Municipal Plan- ners	ARPO	The municipalities of the ARPO should consider Complete Streets policy guidance language to ensure commitment to developing roadways that accommodate all users.	Mid-Term (2015-2018)
BICYCLE TOURISM ECO	NOMY			
Create a bicycle tourism committee	ARPO, BPAC, Chambers of Commerce	Municipalities, Businesses, etc.	The cultivation of relationships among businesses, cycling groups, govern- ment agencies, NCDOT, local chambers of commerce, etc. is essential for creating and marketing a bicycle-friendly region. This group should prioritize steps to grow the bicycle tourism economy. See resource on 6-8.	Short Term (2013-2014)
Track return-on-invest- ment measures	Department of Commerce, Chambers of Commerce	Municipalities, ARPO	Like the 2004 Outer Banks report, further measurement is needed to quantify the many economic benefits of bicycling and evaluate its success in the region.	Mid-Term (2015-2018)
Further Studies				
Wayfinding signage pro- gram	BPAC	ARPO, Munici- pal and County Planners	Develop a cohesive wayfinding strategy for the region, incorporating the wayfinding recommendations of this plan, and seek funding sources for implementation across the region.	Mid-Term (2015-2018)
Ehringhaus Street	Elizabeth City	ARPO	Complete a combined transportation and land use study of the Ehringhaus Street corridor to address broad safety issues and improve the road for cy- cling.	Mid-Term (2015-2018)
US 158	Southern Shores, Nags Head, Kill Devil Hills, Kitty Hawk	ARPO	Complete a corridor study of US 158 to identify design solutions that work for all users of the corridor and improve its aesthetic.	Mid-Term (2015-2018)
Hatteras Island to Oc- racoke Island Ferrry	Dare County	ARPO, BPAC	Complete a study examining bicycle and pedestrian access to this ferry.	Mid-Term (2015-2018)

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ACTION STEPS CONTINUED

Task	Lead Agency	Support	Details	Phase
Jennette's Pier/Whale- bone Junction	Nags Head	DBPT, ARPO	Complete a study of the NC 12 sidepath's termination at this location. Consider a reduction in driveway access to reduce conflict locations and improve safety.	Mid-Term (2015-2018)
Speed Limit Reduction	Municipalities and Counties	dbpt, Arpo	Further study should be conducted locally to determine appropriate speed limit reduction locations.	Mid-Term (2015-2018)



Automated and manual counts are effective ways to measure bicyclist use, characteristics, and behaviors.



Performance Measures

As stated above, measuring performance over time is essential to implementation. Tracking performance measures within communities and across the region will allow implementing agencies to understand progress, communicate successes and challenges, and motivate leaders to take further actions. The following performance measures were selected to track progress toward the goals of this plan. The BPAC and RPO should together monitor progress against these measures and report that progress in an Annual Performance Report. Individual counties or municipalities may also be interested in tracking and reporting progress independently. The RPO or these individual entities may choose to set specific goals for each measure.

Goal	Objectives	Performance Measures
Increase the quality of	Encourage and support regional, sub-regional, and	Number of advocacy groups promoting bicycling
bicycling throughout the region	local bicycle advocacy groups Increase connections between neighborhoods, schools, and businesses	Measure of connectivity Percentage of new projects built as Complete Streets with connectivity to surrounding destinations
	Increase bicycle facilities	Percentage of roadways that have designated or separated bicycle facilities Percentage of signalized intersections that have bike and pedestrian friendly accommodations Percentage of bridges with bicycle facilities Total funding devoted to the construction of bicycle facilities
Improve health outcomes in the region	Increase access to recreational bicycle facilities Increase bicycle exercise and activity rates among all age groups	Mileage of greenways per person (residents and visitors) Percentage of East Coast Greenway through the region with a separated bicycle facility
		Physical inactivity rates Obesity rates Reduction in transportation-related emissions from increase in bicycling trips
Improve safety for all	Reduce cyclist crashes	Bicyclist crash and fatality rates per capita
cyclists	Engage law enforcement in bicycle safety	Percentage of police departments completing bicycle education courses
	Improve cyclist and driver adherence to traffic laws	Number of citations related to bicycle safety violations to bicyclists and motorists
Increase bicycling trips by residents and visitors	Increase education on the social, economic, and health benefits of bicycling	Towns, businesses, and colleges designated as Bicycle Friendly by the League of American Bicyclists
	Increase bicycle mode share for commuting	Number of schools participating in bicycle safety education/encouragement programs
	Improve resources for bicycle tourists	Bicyclist mode share Bicyclist counts
Continued on next page		Number of tourism websites promoting cycling Number of brochures or guides available to tourists

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Goal	Objectives	Performance Measures
Promote and encourage growth of tourism economy	Increase economic growth, job creation, and tourism revenue through bicycling	Return on investment measures such as job creation, small business development, tourism, home prices
		Promotion of bicycling Number of Chambers of Commerce, Visitor Bureaus, and other groups promoting bicycling Number of bike events in region and corresponding economic impact Number of visitors coming to region partially due to bicycling

amenities

BICYCLE TOURISM

Bicycle tourism for economic development has been a priority of many regions in the United States for the past few decades. North Carolina developed the first statewide bicycle route system in 1974 geared towards scenic riding and created maps for those routes providing information on camping, lodging, and other destinations. At the time of this Albemarle Regional Bike Plan study, NCDOT was considering re-routing and re-branding the state bike route system as part of the WalkBikeNC Plan.

The 2011 Oregon-based report Bicycle Tourism As a Rural Economic Development Vehicle is a tremendous resource and provides unique insights into touring bicyclist needs, the economic benefits of bicycle tourism, and key steps for making a region more bicycle-friendly. Increasing bicycle tourism requires cooperation between businesses, cycling clubs, government agencies, advocates, and local chambers of commerce. The report defines the steps towards bicycle tourism development and provides a menu of action steps at the state, regional, and local level.

The Albemarle Region is unique in its beautiful landscapes, villages, historic towns, waterfronts, and flat terrain, making it a prime candidate for bicycletourism. Keymarketingrecommendations that are applicable to the Albemarle Region include:

- Market bicycle destinations and activities.
- Develop welcome signs for cycle tourists at gateways.
- Launch a Bed & Bike program for hotels to market themselves to cycle tourists.
- Organize a signature event for recreational cyclists (e.g. Cycle NC).
- Make bike maps, and distribute through tourism groups (Chambers of Commerce, visitor's centers, etc.).

- Organize one or more historic bike rides, then make a brochure to distribute.
- Develop Websites (e.g. http://www. routeverte.com/rv/index.php?page=home).
- Enhance regional bike routes and wayfinding.
- Develop strategic bike parking and shelters.

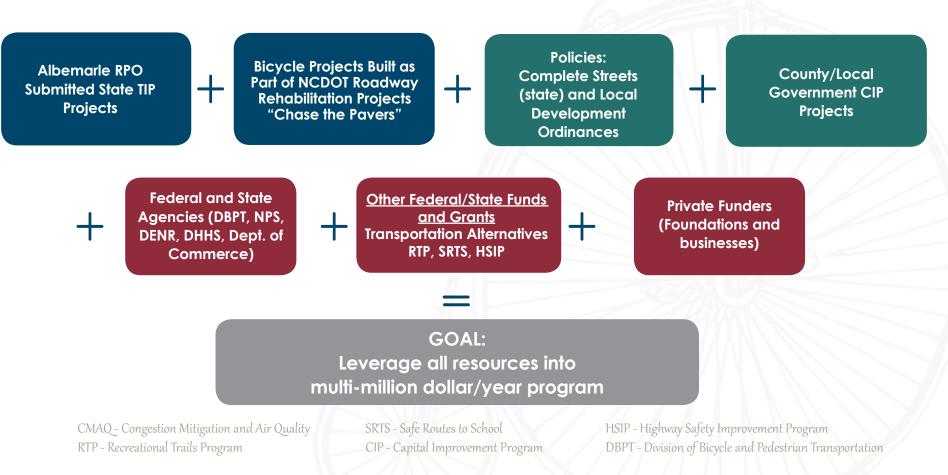
BICYCLE TOURISM AS A RURAL ECONOMIC DEVELOPMENT VEHICLE

by Heidi Beierle

June 2011

Funding Strategy

A combination of funding using federal, state, local, and private sources will be necessary to fully implement this plan. The figure below illustrates this combined funding strategy. Detailed information on specific funding options and their applicability to projects and geographies are provided in Appendix E: Funding.



2013