

COURSE SYLLABUS

PLAN 823 (SECTION 1) — FALL 2015 Bike-Sharing in Carrboro, NC

Class time:	M, W 9:05-10:20AM
Class location:	New East 102
Client:	Bergen Watterson (BWatterson@townofcarrboro.org), Town of Carrboro
Faculty coordinator:	Daniel Rodríguez (danrod@unc.edu)

BACKGROUND

Over the years, the Town of Carrboro has often been commended for its bike infrastructure and friendliness. It is the only town in North Carolina that has achieved the Silver level from the League of American Bicyclists' *Bicycle Friendly Community Program*, and one of only several in the Southeast. The idea of a Carrboro bike share has been kicked around for over 5 years, since the Blue Urban Bikes (an unofficial bike share program sponsored by the ReCyclery) faded away. Several years ago there was talk of starting a regional bike share program, but Raleigh was the only community that moved forward and funded a feasibility study.

At the same time, the town of Carrboro has been facing increasing demands to provide additional parking close to destinations. As the town develops further, this becomes impractical. Others have suggested that Carrboro should begin charging for parking. In the midst of these discussions, bicycle sharing emerges as an alternative that allows residents and visitors to move within the expanded downtown of Carrboro without having to drive to every destination. Visitors may drive to a parking lot and can use the bicycle sharing system to link trips within the downtown. The system may also include the downtown of Chapel Hill.

GOAL

This workshop will develop a feasibility study of bicycle sharing for Carrboro. Some general goals of bike share in Carrboro would be:

- 1) To decrease automobile trips to/from and within downtown
- 2) To create less demand for parking spaces
- 3) To provide last mile options for commuters and downtown visitors.
- 4) To offer general recreation and mobility with the bikeshare service area
- 5) To bolster tourism

The purpose of the feasibility study is to examine the potential of implementing a bike share program in Carrboro. The feasibility study should examine potential station locations, projected demand, capital costs/operations & maintenance, various models of operations, benefits to the town, etc. The workshop will conclude with a report and a presentation to the Carrboro Board of Aldermen to discuss the main findings and recommendations.

OBJECTIVES

The following objectives comprise the workshop:

Objective 1: Provide a literature review of bike share in US cities

- Introduction and background information
- Different models of bike share/governance structure
- Best practices and evaluation of various programs

Objective 2: Conduct a community analysis of Carrboro (+ Chapel Hill/UNC if appropriate)

- Demographics
- Natural features
- Transportation indicators
- Existing infrastructure
- Near-term developments

Objective 3: Identify policies and/or planning documents that may affect bike share

- Zoning regulations
- Comprehensive plans
- Town Code
- NCDOT
- Go Triangle (Triangle Transit)
- DCHC MPO

Objective 4: Analyze and cost demand for bike share in Carrboro (+ Chapel Hill/UNC if appropriate)

- Develop and apply methodology to estimate demand and cost
- Consider focus population: tourists/visitors? Students and residents? Downtown workers? Others?
- Identify and use indicators and weights as necessary
- Estimate potential demand, capital costs, and operating costs; convey uncertainty of estimates

Objective 5: Provide recommendations for Carrboro (+ Chapel Hill/UNC if appropriate)

- Will bike share work?
- Where should the stations be located?
- How many stations, how many bikes?
- What are possible governance structures/business models? How could it be funded?
- How can equity be ensured?

WORKSHOP FORMAT

This workshop is driven by students. For the first few weeks, we expect to meet once a week on Wednesdays, while the team is expected to use the Monday time to read existing background materials and collect additional material. This will allow us to refine the objectives, have access to critical data, assign responsibilities, and develop a timeline of tasks and expected completion dates.

Towards the middle and of the semester, we may meet on Mondays as needed. Students should have the Monday class time available always, either to meet in the classroom, or to ensure a minimum block of time in which nobody has conflicts. Students are responsible for the on-time delivery of quality products. The faculty member will assist students in key decisions regarding the work, but please remember that the Town of Carrboro is the ultimate client in this exercise. A final report is to be delivered by December 1, 2015. A Presentation to the Board of Aldermen will also be required.

RESOURCES

Related documents, datasets and their metadata, are available on Sakai (sakai.unc.edu).

Raleigh Bike Share Feasibility Study:

<file:///C:/Users/BWatterson/Downloads/RaleighBikeshareFeasibilityStudy.pdf>

Memphis Bike Share Feasibility Study:

https://bikepedmemphis.files.wordpress.com/2013/02/memphis-bike-share-final-report_021913.pdf

Bike Sharing in the United States: State of the Practice and Guide to Implementation:

https://bikepedmemphis.files.wordpress.com/2013/02/memphis-bike-share-final-report_021913.pdf

Carrboro GIS data: <http://www.townofcarrboro.org/142/Geographic-Information-Systems>

Carrboro Planning documents: <http://www.townofcarrboro.org/750/Planning-Library>