



Municipality of Princeton

**Application for Local Bicycle /
Pedestrian Planning Assistance**

For a

Bicycle Master Plan

April 2015

Prepared by the Princeton Engineering Department
with assistance from the Pedestrian and Bicycle
Advisory Committee and the Traffic and
Transportation Committee

The municipality of Princeton is in need of a comprehensive Bicycle Master Plan as a guide to create a connected network of bicycle facilities throughout the community. Such a plan would aid the municipality in addressing its circulation goals in accordance with its Complete Streets policy. Past efforts to implement Complete Streets on a street by street basis have shown that a Bicycle Master Plan is necessary to provide a comprehensive and holistic view of how bicycles are envisioned to fit into the Princeton circulation network.

The Princeton Council has prioritized the development of a Bicycle Master Plan as one of its goals for 2015. The Princeton Pedestrian and Bicycle Advisory Committee (PBAC) has similarly adopted a 2015 goal of creating, or assisting in the creation of, a new bicycle circulation plan for Princeton. The Traffic and Transportation Committee has also committed in its 2015 targets to “assist in preparing a municipal bike circulation plan that can be implemented and includes appropriate facilities in line with best practices” and to “assist in creating increased bike path and/or bike lane mileage within Princeton”.

Community Information

Princeton is a recently consolidated community in Central Jersey. Within the 18.1 square mile municipality, there is a well-defined central business district which is bordered on its south side by the Princeton University Campus. The central area of Princeton is designated as a Regional Center as shown on Attachment 1.

While no major arteries directly touch Princeton, it is dissected by US Highway Route 206 and NJ Highway Route 27. There is ready access to US Highway Route 1, the New Jersey Turnpike, the Garden State Parkway and Amtrak and New Jersey Transit which provide direct rail services to New York and Philadelphia. The D&R Canal Towpath provides regional bicycle and pedestrian pathway connections. The East Coast Greenway also traverses town via the D&R Canal Towpath and Route 27 / Mercer Street / Mercer Road.

The municipality of Princeton is designated a Bronze–Level Bicycle Friendly community for 2013-2017 by The League of American Bicyclists. It is Princeton’s goal to progress to Silver-Level status in the next renewal cycle and adoption of a Bicycle Master Plan is an integral achievement for that designation.

Princeton University is also designated a Bronze-Level Bicycle Friendly University by The League of American Bicyclists. In November 2014, the University launched a bike rental program for the Princeton Community with a long-term vision of transitioning it into a bike share program with stations on both campus and municipal sites.

Included in Attachment 2 is a data table regarding commuting mode shares in Princeton. It is significant to note that currently 4% of people who live and work in Princeton commute by bicycle; up to an additional 10% of residents could be enticed to choose commuting by bicycle, instead of by car, with the appropriate network. A bicycle network that makes regional connections can go a long way to provide more commuting by bicycle opportunities.

Background Information

The Princeton Planning Board adopted a Complete Streets Policy in its latest revision of the Circulation Element of the Community Master Plan (<http://princetonnj.gov/masterplan/circ-element-adopted-11-7-13.pdf>) on November 7, 2013. Although the Master Plan includes a Bikeway and Shared Path Plan (<http://princetonnj.gov/masterplan/BW-Shared-Plan-Adopted-PNJ.pdf>), it was adopted as a placeholder and does not reflect the vision of a comprehensive and connected bike facility for Princeton.

“The policy of this Master Plan is to promote bicycling as a safe choice for personal transportation. The Princeton community is served by a comprehensive system of pedestrian and bicycle paths. In order to achieve this policy it is necessary to plan and provide appropriate facilities which will accommodate all levels of bicycling skill. Roadways, sidewalks and bike paths should be designed to meet current state and federal requirements, where appropriate.”

“This Master Plan, with the inclusion of its Complete Streets Policy, recommends that a community-wide bicycle system that addresses all levels of bicycle riding ability be developed. Special attention should be given to developing routes which allow school-aged children to safely ride bicycles to and from school, parks, the Library and other areas in the community.”

The following studies can be used as reference in creating an updated vision for bicycle accommodation in Princeton:

- In 2002, Charles Carmalt completed a “Bicycle Circulation Plan for the Princeton Community” ([http://princetonnj.gov/BPAC/carmalt_bike_plan\(2002\).pdf](http://princetonnj.gov/BPAC/carmalt_bike_plan(2002).pdf)). This Plan identifies roads that could be used as the spine of an eventual bike network.
- In 2010, the Princeton Joint Pedestrian and Bicycle Advisory Committee worked with a Rutgers University student to research and create a policy paper entitled “Recommendations Regarding Shared Lane Markings for Bicycles”. In response, the former Township and former Borough coordinated with Mercer County and the State to install sharrows on several major east-west and north-south roadways in town.
- PBAC draft bicycle route visions and Ad-Hoc 2012 Bicycle Plan (<http://www.princetonnj.gov/BPAC/documents.html>).
- 2006 DVRPC US 206 Corridor Study

As the Carmalt Plan and the Sharrows document were created prior to the adoption of Complete Streets in New Jersey and specifically in Princeton, a new analysis is required in the creation of a document that can be adopted by the Princeton Planning Board as a part of the Community Master Plan.

Additionally, as a result of consolidation in 2013, Princeton is in the process of reviewing and harmonizing all of the ordinances of the former Borough and the former Township. A Bicycle Master Plan will inform the process and assist the community in its new ordinance adoptions.

In 2014, Princeton Engineering began a three-pronged approach to implementing Complete Streets in Princeton:

1. Design three capital improvement roadway projects as demonstration projects, with different Complete Street approaches.
2. Prepare a working draft Complete Streets checklist and implementation guide for future adoption into the Master Plan.
3. Work with the Pedestrian and Bicycle Advisory Committee to create a Bicycle Master Plan for future adoption into the Master Plan.

Through the design process, we have learned clearly from the community that a Bicycle Master Plan is a key component of implementing Complete Streets improvements to existing roadways.

In 2015, a Princeton Bicycle Map, funded by the Princeton Transit Trust Fund (a partnership of Princeton University and the municipality of Princeton), was created to provide current information on bicycle facilities and suggested loop trails. This map can be found at: <http://princetonnj.gov/BPAC/bicycle-maps.html>.

Also in 2015, Princeton Mayor Liz Lempert was the first New Jersey mayor to sign up for US Transportation Secretary Anthony Foxx's Mayors' Challenge for Safer People, Safer Streets. The challenge calls for communities to implement Complete Streets through appropriate, forward-thinking road design and bicycle network planning.

Preliminary Scope of Work

Princeton is seeking the creation of a Bicycle Master Plan, including a network map and typical design cross-sections, that can be used to support the installation of appropriate bicycle accommodations in accordance with Complete Streets when municipal capital improvement projects are undertaken. Recently, conflicts between the community's goals to become a more bicycle-friendly community and the demand for on-street parking have come to the fore. Building bicycle infrastructure in Princeton has been historically challenging in the context of our relatively narrow, tree lined streets with on-street parking demands.

We seek the assistance of the New Jersey Department of Transportation and its consultants to complete the following work tasks:

- Review existing data such as existing planning documents and studies, the built environment, ordinances and other appropriate data.
- Gather pedestrian, bicycle and vehicle counts, as appropriate.
- Lead community design charrettes to identify community goals for bicycling in Princeton and solicit feedback on potential accommodations.
- Create a plan for a bicycle network to major destinations in Princeton, including schools, shopping, parks, municipal facilities, the Central Business District, Princeton University, the Princeton Branch "Dinky" train station, and links to adjacent communities and regional pathway systems including the Lawrence Hopewell Trail and the Freedom Trail. The plan shall designate

the appropriate bicycle treatment for each segment of the network spine, and identify potential ordinance changes that are required to accommodate such a treatment. The primary location of the network should be on municipal facilities; of secondary concern are the State and County roadways. Include Safe Routes to Schools and Safe Routes to Transit connections in this network.

- Create a menu of viable bicycle treatments for other roadways which are feeders to the main bicycle network spine. This menu of treatments shall be responsive to current design guidelines, address the conflict between competing community goals, roadway users, and meet the Princeton community needs.
- Prioritize the installation of the proposed bicycle routes in town and identify constraints (narrow rights of way, environmental, historic, parking, etc.) within existing planning, zoning and parking ordinances that must be addressed to implement the proposed improvements. The prioritization may consider the highest value connectors and the fewest constraints / drawbacks.

Municipal Participation Commitment

The municipality of Princeton is committed to assisting with the following tasks:

- Community outreach – scheduling, advertising and hosting design charrettes; soliciting community feedback via multiple social media outlets
- Data collection by municipal staff
- Local agency outreach to Princeton University, Mercer County, the Princeton Merchants Association, Princeton Public Schools, the Institute for Advanced Study, Westminster Choir College of Rider University, and other local institutions
- Presentation of the Bicycle Master Plan to the Planning Board for adoption as a part of the Community Master Plan Circulation Element

Local Citizen Group Participation

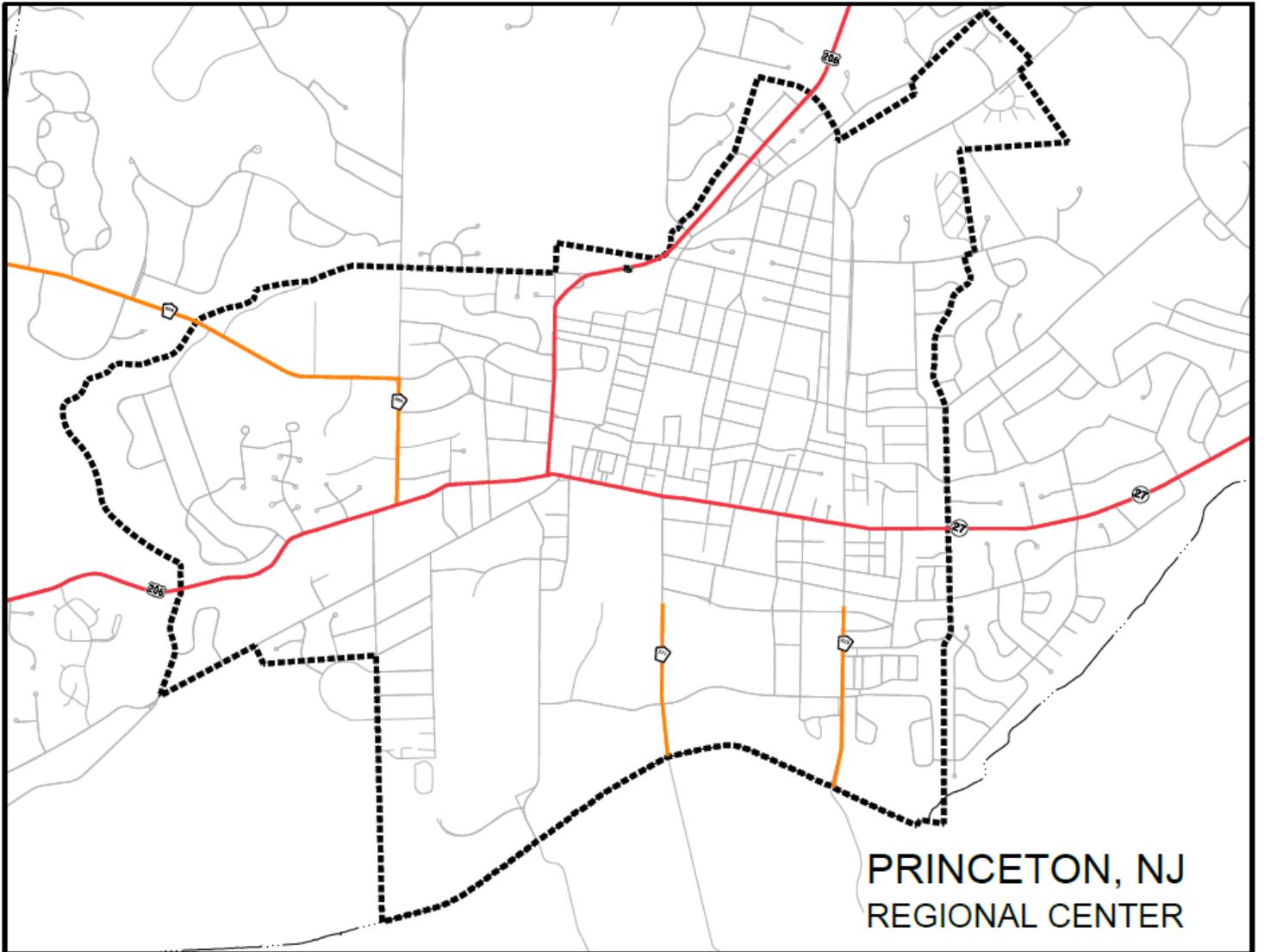
The following local citizen groups are committed to assisting with community outreach and other designated tasks:

- Princeton Pedestrian and Bicycle Advisory Committee
- Princeton Traffic & Transportation Committee
- Sustainable Princeton
- Princeton Future
- Greater Mercer TMA
- Princeton University
- Mercer County

Contact Person

Deanna Stockton, P.E.
Assistant Engineer
Princeton Engineering Department
400 Witherspoon Street
Princeton, New Jersey 08540

Attachment 1 – Regional Centers Map



Attachment 2 – Commuter Mode Shares

In “A Statistical Portrait”, a database of data from the 2010 Census and the 2007-2011 American Community Survey compiled by Ralph Widner, the following table provides insight into the commuting modes in Princeton:

Estimated Princeton Mode of Travel to Work

Resident Commuting Workers	Number	Percent	New Jersey
Total	12,725		
Commute out	6,283	49.4%	79.3%
Work in town	6,442	50.6%	20.7%
<i>Work at Home</i>	1,371	10.8%	3.4%
<i>Walk to Work</i>	2,905	22.8%	3.3%
<i>Bike to Work</i>	530	4.2%	.3%
<i>Drive to in-town job</i>	1,636	12.9%	
Drive to out of town job	4,753	37.4%	81.0%
Transit	1,346	10.8%	10.4%
Van / Shuttle	657	5.2%	9.1%
Taxi or Other	36	.3%	1.6%

Source: 2007-2011 American Community Survey, U.S. Census Bureau

Attachment 3 – Princeton University Letter of Support



Kristin S. Appelget
Director, Community and Regional Affairs

Erin A. Metro
Associate Director, Community Relations

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March 25, 2015

Honorable Liz Lempert
Princeton
400 Witherspoon Street
Princeton, New Jersey 08540

Re: Municipality of Princeton Application for Local Bicycle/Pedestrian Planning Assistance for a Bicycle Master Plan

Dear Mayor Lempert:

On behalf of Princeton University, I am writing in support of the Municipality of Princeton's application for Local Bicycle/Pedestrian Planning Assistance for a Bicycle Master Plan.

In a community such as Princeton that seeks to encourage increased use of alternative means of transportation, development of a comprehensive bicycle master plan to guide this process is a crucial first step.

As the largest private land owner in Princeton, Princeton University has been pleased to work with the Municipality of Princeton regarding our plans for improving bike and pedestrian access on the University campus, and we are encouraged by the interest of the community to provide connections that would link the campus network and the community network of bike and pedestrian trails and paths to provide increased access for all.

We commend the Municipality of Princeton for initiating this project, and appreciate the opportunity to work with the community on this matter. We enthusiastically join with others in endorsing the planned Princeton Bicycle Master Plan project.

Sincerely,

A handwritten signature in blue ink that reads "Kristin Appelget".

Kristin S. Appelget
Director
Community and Regional Affairs

Cc: Robert V. Kiser, P.E., Princeton Municipal Engineer
Deanna Stockton, P.E., Princeton Municipal Assistant Engineer
Kim Jackson, Princeton University Transportation and Parking

Attachment 4 – Mercer County Letter of Support



COUNTY OF MERCER

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ANDREW MAIR

County Administrator

March 19, 2015

Deanna Stockton, PE
Assistant Engineer
Princeton Engineering Department
400 Witherspoon Street
Princeton, NJ 08540

Dear Ms Stockton,

Thank you for notice that Princeton wishes to create a bicycle master plan. Mercer County Executive Brian Hughes is pleased to support municipal and regional planning efforts. For County participation in a project like this, I would delegate our transportation planner, Matthew Lawson.

Mr. Lawson can work with you to supply background data, attend meetings, and ensure that the Princeton plan integrates well with the County's complete streets policy and with plans for bicycle and pedestrian improvements on County routes.

Sincerely,


Donna M. Lewis
Director, PP/AICP

DL/ml