Plan On It

A Dutchess County Planning Federation eNewsletter

DUTCHESS COUNTY PLANNING FEDERATION

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Building Complete Streets: A Beacon Case Study

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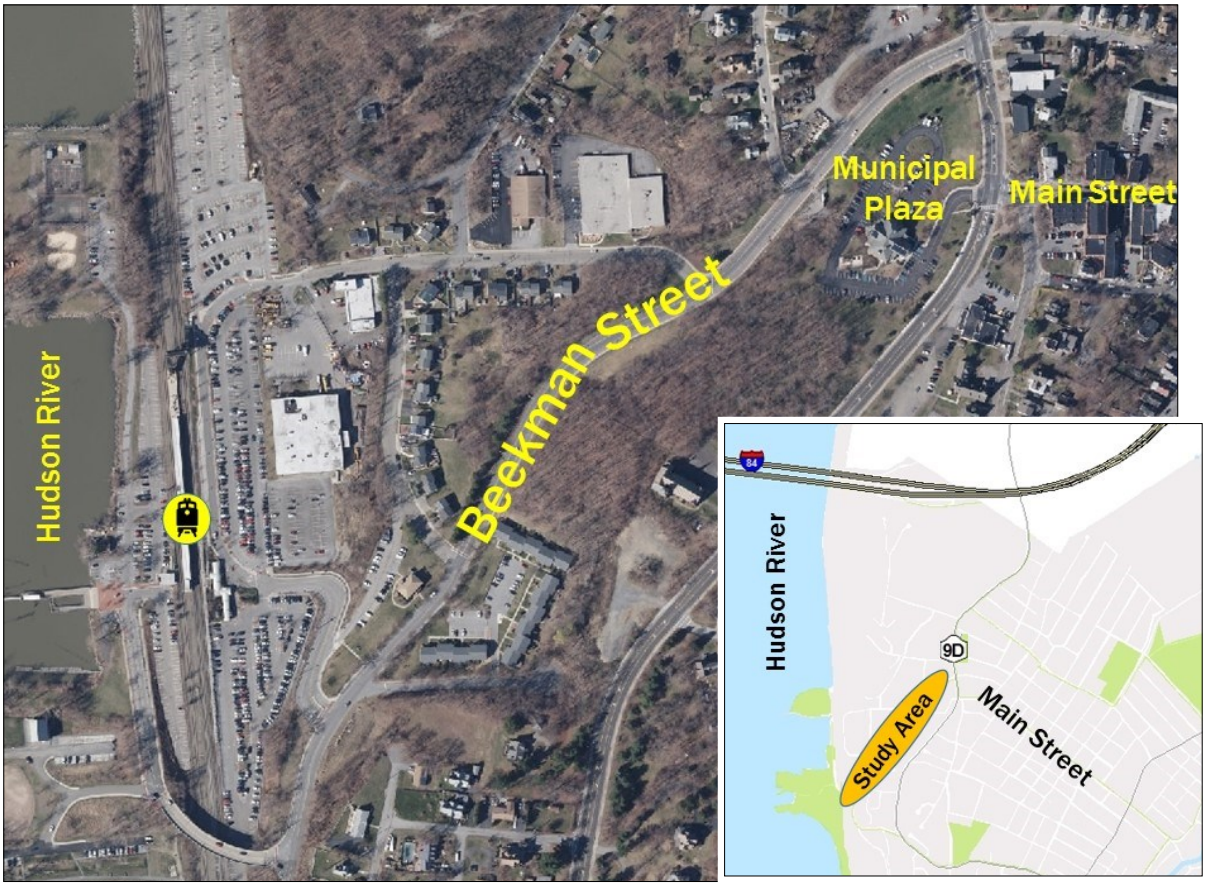
The Beacon waterfront is home to key destinations including the Metro-North train station, Long Dock Park, the Beacon-Newburgh Ferry dock, the Beacon Farmers Market, and Riverfront Park, as well as a local trail system. However, it is separated from Main Street by a half-mile with a substantial hill, and no direct walking or bicycling connections.

To address this, the City of Beacon requested the Dutchess County Transportation Council (DCTC) to evaluate ways to improve walking and bicycling access and safety between Main Street and the train station, focusing on Beekman Street between Route 9D and Red Flynn Drive/Long Dock Park Road. This project serves as a good case study of how we can help municipalities undertake a targeted analysis and develop conceptual plans that can be implemented at relatively low cost.



Beekman Street study area, with City of Beacon context map (inset).

Existing Conditions

We first evaluated existing conditions in the study area. This included taking measurements and photographs, and observing people using the streets. We also collected

traffic volume, speed, and vehicle class data from DCTC's online traffic count database, and considered barriers such as stairs, grade, and one-way segments (for bicyclists). Finally, we reached out to local contacts for their input, particularly regarding bicycle access.

Key observations included:

- Incomplete sidewalks; some people walk in the street
- Various 'desire lines' indicating demand for sidewalks or paths
- Crosswalks are not high-visibility
- Crosswalks are unnecessarily long
- Some missing ramps; no detectable warnings
- Missing/non-standard crosswalk warning signs
- Inconsistent styles of wayfinding signs
- Few streetscape amenities (lighting, benches, trash/recycling)
- No bicycle facilities, such as bicycle boulevards, protected bicycle lanes, and shared-use paths
- Very limited bicycle parking

"Desire lines" show need for paved path or sidewalk (top), and pedestrian walking on Beekman Street where sidewalks are lacking (bottom).

Walkability Improvements

Based on our observations, data analysis, and local discussions we recommended a series of walkability improvements, focusing on accessibility and safety. These included:

- Improve access through the Municipal Plaza: provide an accessible alternative to the stairs, or re-design the property
- Complete missing sidewalk connections: construct a sidewalk on the west side of Beekman Street
- Make safer crosswalks: use high-visibility ladder markings; provide consistent warning signs; and shorten crossings through realignment, reduced curb radii, and curb extensions
- Improve accessibility: construct curb ramps at crosswalks and add detectable warnings
- Install consistent wayfinding signage, including designating an accessible route
- Improve comfort: install street trees, pedestrian-scale lighting, trash/recycling cans, and benches

Bicycle Access Improvements

We considered various bicycle facilities, based on the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide and recent Designing for All Ages & Abilities guidance. We assumed no changes to the existing roadway widths and no removal of on-street parking. Our recommendations were based on the most preferred facility type that could fit within the existing right-of-way. There is insufficient width for bicycle lanes in both directions unless the on-street parking was removed. Therefore, we focused on providing a bicycle lane (protected where feasible) in the uphill direction, when bicyclists are traveling significantly slower than motor vehicles, and sharrows (shared lane

Two ideas for improving walkability within the study are to provide an alternative to the stairs in the municipal plaza (left), and to make new sidewalk connections on Beekman Street where none currently exist (right).

markings) in the downhill direction, to encourage bicyclists to 'take the lane' if needed when they are traveling at speeds more consistent with motor vehicles.

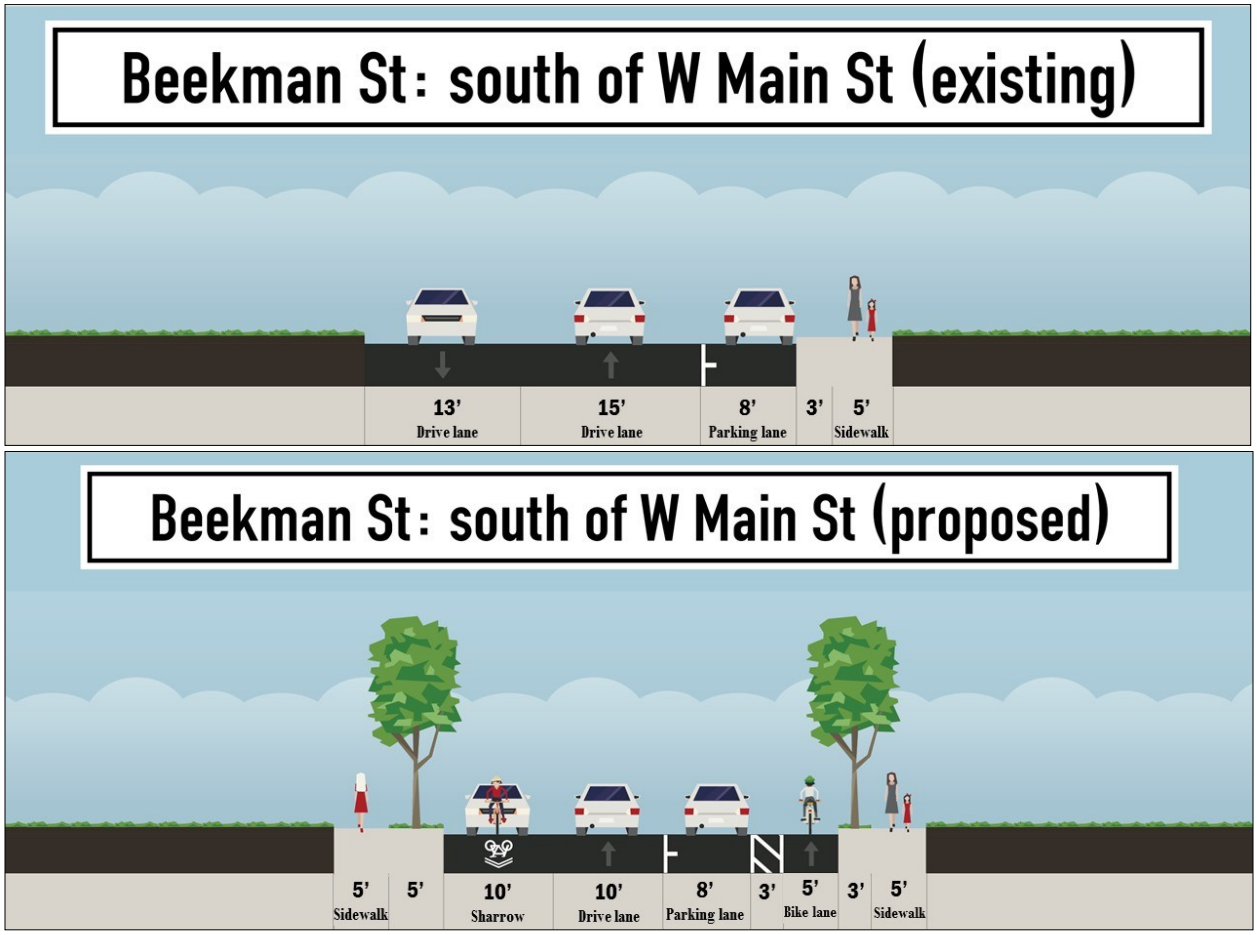
Because the width and configuration of Beekman Street varies, the recommended facility type varies as well. On most of the street, there is room for a parking-protected bicycle lane in the uphill direction, with sharrows downhill. The section with no on-street parking uphill could have a bicycle lane with a striped buffer, and the most constrained section could have a simple bicycle lane.

To calm traffic and provide a sufficient buffer for bicyclists, we recommended narrowing the travel lanes to 10-10.5 feet, and parking to 7-7.5 feet. We also recommended secure, long-term bicycle parking in the train station area, more short-term bicycle parking (covered bicycle racks) at destinations, and wayfinding signage to direct bicyclists between key destinations. We also suggested a bicycle path around the Municipal building to provide an alternative to Route 9D.

Working with the City on Implementation

Too often, even the best plans are not implemented due to changes in municipal leadership, varying priorities, funding constraints, or other issues. Several key steps helped give this plan a good chance for becoming a reality.

First, we had a series of meetings with municipal leaders. At the beginning of the project, we met with the Mayor, City Administrator, and Building Inspector to understand the project goals and context, including potential development and other changes in the area. After completing a first draft of our report, we met with the Mayor and City Administrator to discuss it. We also had several email communications with the City's planner to get his input and feedback. After more revisions, we presented our analysis and recommendations to the City Council. The presentation included photos, maps, and 'before' and 'after' street sections to help explain the recommendations. The Council was supportive of the concepts and had several questions that we were able to address.



Cross section showing existing conditions (top), and proposed improvements (bottom) including a new sidewalk on the west side, street tree buffer areas on both sides, a protected bike lane in the uphill direction, and sharrow markings in the downhill direction.

Second, we reached out to outside agencies that could affect implementation of parts of the plan. In this case, since the study area included a portion of Route 9D, we solicited feedback from NYSDOT Region 8's Pedestrian & Bicycle Coordinator and Regional Planning and Program Manager.

Finally, we met with key City staff who would manage the planning and maintenance of any changes to the street. After the Council presentation, we met with the Highway Superintendent and the City's planner to discuss priorities for implementation. We followed up with unit cost estimates and a list of potential funding sources, as well as some optional adjustments to the proposed street configurations. Many of the recommendations can be implemented through signage, striping, and repairs or alterations to existing infrastructure. The City is currently pursuing funding to implement the study's recommendations.

"Walking and bicycling access between the waterfront and Main Street has been an issue for a long time. The proposed improvements will help Beacon residents access the train station and waterfront more easily and safely by foot and on bike, which will also reduce congestion and parking pressure around the train station. The improvements will also encourage more visitors to walk or bike up from the train station area to our Main Street businesses."

—Mayor Randy Casale

City Administrator Anthony Ruggiero said, "DCTC was able to respond promptly to our request for assistance. They provided a high-quality report and clear graphics for the Mayor, City Council, and other decision makers. We now have a good sense of what improvements are needed, including a number of things we can do at relatively low cost. We've started to research funding and hope to implement several of the recommendations this year."

Who's Next?

The Beekman Street study is an example of a targeted plan that DCTC staff can complete in a short timeframe (typically 3-6 months, depending on the scope and meeting schedules), and generally at no cost to the municipality. We have particular expertise in transportation safety and pedestrian and bicycle planning, but we are happy to discuss other topics as well. We can often accommodate short studies within the current year. If your municipality has a transportation-related issue that you need help addressing, please reach out to us by email or call 845–486–3600.

Join Us May 31st!

If you would like to hear more about Complete Streets and how to make them happen, join us at our next DCPF short course:

Making Complete Streets a Reality: Local Lessons Learned
Date: Thursday May 31, 2018
Time: 6:00-8:00pm (supper at 5:30)
Where: DC Farm and Home Center

Register

More Information

City of Beacon: Beekman Street Complete Streets Analysis
Full Report | Appendices

Urban Bikeway Design Guide (NACTO)

Designing for All Ages & Abilities (NACTO)

Click here to view past issues of *Plan On It*.

This newsletter was developed by the Dutchess County Department of Planning and Development, in conjunction with the Dutchess County Planning Federation.