



Route 18 Improvement Project

New Brunswick,
New Jersey

New Jersey Department of
Transportation

Above: Commercial Avenue Bridge rendering (©NJ DOT).

Replacing older bridges and roads can spur great advances in nearby placemaking.

CONTEXT

- Constructed in 2010.
- Northeast.
- Suburban/Urban.
- \$200 million.
- 2 miles.
- 85,000 vehicles per day.



SAFETY+ IMPROVEMENTS

- Replacement of 6 bridges and new local roads led to new bicycle and pedestrian facilities.
- New and improved community spaces such as a promenade, park access, and amphitheater.
- Formalized community partnership teams brought all issues and stakeholders to the table.

WHAT WAS THE PROJECT DRIVER?

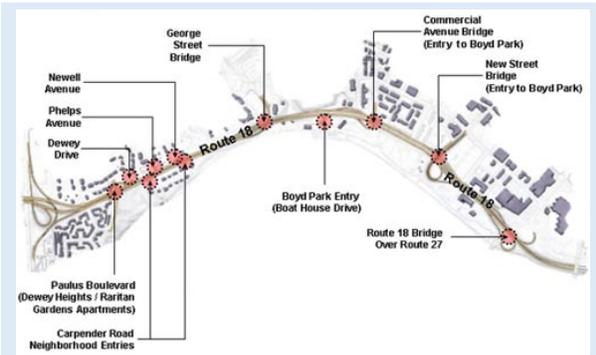
Many of the roads and bridges along Route 18 had been built from the 1950's through the 1970's and were showing their age. Crash rates were higher than statewide averages, and pedestrian facilities were desperately needed, as evidenced by the numerous worn footpaths in the area.

HOW DID THIS CONNECT THE COMMUNITY?

From these important transportation needs came an opportunity to enhance one of the primary regional thoroughfares that provides access to downtown New Brunswick, several key educational and employment centers, and rail lines.

In replacing the older bridges and adding outer local lanes, the New Jersey Department of Transportation (DOT) was able to also improve non-automobile access and connections to community assets more effectively. The newer outer roadways have wide multi-use paths along their entire lengths and at each bridge crossing to connect the city's downtown, institutions, neighborhoods, and recreational areas. Safer pedestrian crossings were added at key intersections, along with several new or enhanced pedestrian bridges. New sidewalks

and lighting were added to enhance the bicycle and pedestrian experiences. It also met NJDOT's **Complete Streets** initiative criteria, which draw upon national best practices to emphasize context-sensitivity in the design process and communicate the advantages and applications of various design options.



Project Map (©NJ DOT)

Furthermore, this project enhanced important natural and community spaces. NJ DOT did not just undertake access improvements, they helped support a more robust sense of place. A new ramped promenade now provides a scenic vista of the Raritan River and a grand entranceway for pedestrians into Boyd Park. A new amphitheater was built adjacent to the park pavilion as a new community asset. In addition, Boyd Park was extended into the former City Docks area, along with a new boat ramp and picnic pavilion.

The public engagement process pre-dates this project by over 10 years. On this project and many other projects at this time, NJ DOT pioneered the use of Community Partnering Teams (CPTs) as part of an intensive **Context Sensitive Solutions** approach to projects. CPTs are a formalized partnership with community **stakeholders** and the public to help work through transportation problems and solutions and keep all parties informed of the progress and development of the project.

The CPT also had several task forces to address key issues such as corridor aesthetics, design/development, Boyd Park enhancements, traffic management, and public safety. CPTs helped pave the way for more effective communication during project development and construction. The CPT was comprised of 198 members that met over 85 times during the project development process.

In addition, the project team used **visualization techniques** at all stages of the project, such as

- Photo collage of future improvements on local access roads.
- Drawings and renderings of the aesthetics, minor enhancements, new pedestrian access, and the new amphitheater design.
- Scale models at information meetings.
- Mock-ups and material samples to demonstrate the feel of the design elements for the bridges and retaining walls.

WHAT WERE THE BENEFITS?



The project provided multiple benefits. It expanded multimodal access through new bicycle and pedestrian facilities as well as improving access to nearby transit facilities. It minimized

the impacts of construction on the local community through an organized project delivery process. It provided a transportation solution that was more consistent with the local master plan, and it enhanced the overall public space experience.

Once completed, the George Street bridge received awards for outstanding bridge design (2010 International Bridge Conference, 2011 Engineering Excellence Award from the American Council of Engineering Companies, and 2010 Project of the Year from the American Society of Civil Engineers NJ Section).

For more information:

<http://www.state.nj.us/transportation/commuter/roads/route18/>

<http://www.nj.gov/transportation/capital/pd/documents/route18bestpracticesforum.pdf>

<http://gannettfleming.com/Projects/2015/02/24/17/22/george-street-bridge>