LIGHT RAIL TRANSIT AND TRANSIT-ORIENTED DEVELOPMENT

Hudson–Bergen Light Rail System and Economic Development on the Waterfront

NEAL FITZSIMMONSBooz Allen Hamilton

WHITNEY BIRCH

Booz Allen Hamilton

The introduction of the Hudson–Bergen Light Rail (HBLR) line on the Hudson River waterfront in April 2000 was the result of a long planning and construction process that largely started in the mid-1980s. The system has both benefited from and helped shape an even longer cycle of economic recovery, redevelopment, and expansion in Jersey City, New Jersey, and on the waterfront.

Development activity in the area, key HBLR project milestones, and some lessons learned along the way are described. While it would be unreasonable to directly attribute the many economic successes on the waterfront to the development of the light rail line, clearly there is a symbiotic relationship between the two that has existed over the past 15 years as the system has been planned, constructed, and implemented.

Major development projects were constructed on the waterfront in the late 1980s and through the 1990s because of factors such as the proximity to New York City and the access provided by Port Authority Trans-Hudson (PATH), the aggressive upfront planning process, and the available tax incentives or other economic benefits that could be realized.

Now, as light rail has been implemented, the pace of development appears to have quickened, and the expansion is beginning to move away from the core waterfront areas developed first. Developers have begun to shift away from the PATH stations hubs. They are investing in properties along the light rail alignment, they are showing more attention to the residential market, and they are "selling" the amenities and connectivity that the light rail line provides.

INTRODUCTION

Jersey City, the second largest city in New Jersey and just across the Hudson River from lower Manhattan, was first and foremost an industrial center. It was home to thousands of immigrants who passed through nearby Ellis Island. These newcomers found work in its factories, and the railroads carried manufacturing products throughout the region. Here in the shadows of Wall Street's financial mecca, Jersey City grew as a thriving manufacturing town.

But over the last half century, population has shifted to the suburbs and a once dominant rail freight industry has seen traffic greatly diverted to trucks and other modes. With these overriding trends and the decline of manufacturing in the inner cities, Jersey City changed. The booming waterfront rail yards and ports were abandoned, the economy declined, and by the 1960s and early 1970s, the future looked dim.

But it was the vacant waterfront and its empty industrial centers that ultimately led Jersey City to once again be considered a land of opportunity. Through the late 1980s and early 1990s, things started to change for an area that was now sometimes called "Wall Street West."

Tomorrow's history is now being made, as abandoned properties are being developed, new businesses are arriving, and thousands of residents are settling in the area. The transportation network is one of the critical elements shaping the re-emergence of Jersey City as a thriving community, and the new Hudson–Bergen Light Rail (HBLR) transit system is certainly a key part of the story.

The Light Rail System

The planning for a light rail system to serve New Jersey's Hudson County waterfront area started well before it was ever termed the Gold Coast, with its majestic office towers across from Manhattan and upscale luxury housing. In the early 1980s, the waterfront was a different kind of place—a wasteland of abandoned rail lines, rotting piers, and vacant lots. Drug abuse plagued the area, along with the crime that goes with it. However, rents were cheap and an arts community began to emerge because of the proximity to New York City (NYC).

A small handful of firms like Nat West had located at Exchange Place largely because of the direct Port Authority Trans-Hudson (PATH) connection to NYC and the cost benefits of being outside Manhattan. These were pioneers who sought office space adjacent to the PATH station, and worked here for some 15 or 20 years before the HBLR system emerged to tie together the various waterfront parcels lying north and south along the Hudson River.

By 1984, a planning study was underway, looking at the area's transportation needs. A draft transportation plan for the Hudson River waterfront was released in 1985, with recommendations on a new north—south transit system stretching between Bayonne, Jersey City, Hoboken, and other New Jersey municipalities to the north. The study called for a transportation solution that could address the long-term needs of the area.

This was an area with much potential. In 1987, the forecasts called for 35 million square feet of new office space; 36,000 new residential units; 3.2 million square feet of retail space; and numerous hotels, restaurants, marinas, and other attractions.

The Alternatives Analysis and Draft Environmental Impact Statement (EIS) was begun in 1989 and completed in 1992. The Locally Preferred Alternative Report was issued in 1993, and in summer 1994, a decision was made by NJ Transit to utilize an unconventional (for transit projects) turnkey approach to build the initial 10-mi segment of the HBLR line. The use of this design-build-operate-maintain (DBOM) procurement strategy was employed to shorten the construction cycle and allow a faster delivery of the needed transit service.

A supplemental EIS report was issued in 1995 for Bayonne. By 1996, the Final Alternatives Analysis and EIS Document was issued, and the Full Funding Grant Agreement was received from the FTA. In September, a contractor was hired and given notice to proceed on building the light rail system. Under the DBOM terms, this same contractor who handled the construction would also be responsible for the operation and maintenance of the line over a 15-year term. This shift to a single entity streamlines the process and encourages quality control because the contractor has an ongoing role.

Construction of the HBLR system was completed by fall 1999, and after a period of system testing and required operating demonstrations, the service was implemented on April 15, 2000, between Bayonne and Southern Jersey City to Exchange Place, as depicted in Figure 1. Future segments were completed and the alignment reached Hoboken in September 2002. A southern

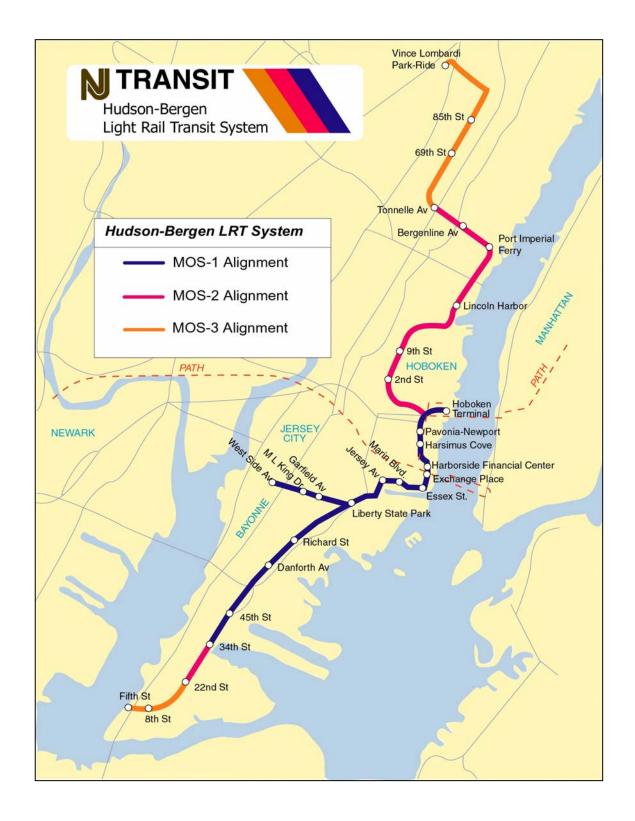


FIGURE 1 HBLR system.

extension further into Bayonne is planned to open in late November 2003. In February 2004, a northern extension to Weehawken and the Port Imperial ferry complex will open. A future extension north and west to Tonnelle Avenue will be put in place in 2005.

Development Activity

Exchange Place

The focus for much of the development along the Hudson River waterfront, from the beginning, was Exchange Place in downtown Jersey City. As an employment center, Exchange Place boasted those few early companies and a handful of restaurants which were perhaps the only real amenities on the waterfront. Things improved with the success of the huge Harborside complex, which benefited from being directly adjacent to PATH and also included a small indoor strip of stores and restaurants facing out on the river. Furthermore, Exchange Place was home to numerous vacant or abandoned parcels of land in the Colgate section, just south of the PATH station. There was a key alignment decision by NJ TRANSIT, and the Hudson–Bergen line followed the "City South" routing rather than a "City Center" option that would have served the already established Grove Street area. With this choice, the southern Exchange Place section of the waterfront was essentially primed for redevelopment, with its light rail stations stretching away from the PATH through vacant parcels.

Buildings went up quickly, and major tenants began to move in, such as Merrill Lynch, Morgan Stanley, and Lehman Brothers. More recently, in the late 1990s, the investment firm Goldman Sachs decided to build its 1.3 million square foot complex in the Colgate section of Exchange Place. As New Jersey's tallest building, this project is just being completed, and will be well served by the PATH system and the Hudson–Bergen line at both the Exchange Place and Essex Street stations.

Newport

Another key location in between Exchange Place and Hoboken, in the center of Jersey City's waterfront, is Newport. Once home to a large rail freight yard, the Newport site was mostly vacant in the early 1980s. It had its own PATH station, and a pair of residential towers that offered quality housing just a few minutes by train away from New York City jobs.

In the mid-1980s, with the aid of a massive \$40 million Housing and Urban Development block grant, Newport began to expand. While preserving that critical transit corridor through the very heart of the waterfront region, Jersey City worked with the development community and in 1988, a one-million square foot retail shopping mall, Newport Centre, was opened along with four high-rise residential towers. Initially, PATH provided the critical transit linkage and later the promise of the north–south Hudson–Bergen line brought more activity. Through the latter half of the 1990s, the Newport site grew dramatically, with large-scale office and residential development following the earlier residential and retail investments.

Growth occurred on the fringes of these major sites, between Exchange Place and Newport and the PATH stations that had once offered the only quality transit connectivity in the area. Sites like Harsimus Cove developed later and now continue to expand, along with other locations that were no longer within an easy walk of the PATH station. Areas that had remained vacant for a decade or more, in times of economic prosperity, were now building up. With the light rail line funded and under construction, the developers turned their attention in the later 1990s to the

pockets of open space too far from PATH. The pace of development moved south following the light rail alignment, with office and residential activity that was unquestionably spurred by the mass transit line.

Away from the Waterfront

Just south and west of Exchange Place, and well away from the waterfront, lies the Liberty Harbor North site. On a location that essentially spans the Jersey Avenue and Marin Boulevard station stops on the HBLR line, there is only now in the last 18 months a viable plan for a major office and residential complex. On a vacant 70-acre parcel that has been undeveloped for decades, located about five or six minutes by train (light rail) from Exchange Place, there will likely one day be more than 6,000 new residential units. There are proposals for office space here too, on a huge scale up to 4.5 million square feet.

To the west, across Jersey Avenue, the Jersey City Medical Center complex will be relocated to a site that boasts convenient access on HBLR to points throughout Hudson County. This Medical Center was originally built in the early 1930s, and it is being moved to a brand new state-of-the-art facility located next to the Jersey Avenue light rail station. This center is proposed to open fully in 2004, serving thousands of patients, visitors and hospital employees each day.

On the western side of Jersey City, an economically depressed urban neighborhood appears to be rebounding. Alongside the light rail station at Martin Luther King Drive, a new retail shopping center is now in place and other residential construction is underway. This is unusual, as most of the retail centers are located on the highways that surround the city. At West Side Avenue Station, one stop further west, joint development is being discussed as the Hudson–Bergen line and the link to the waterfront and PATH has created new opportunities.

In sum, the story of development in Hudson County and on the Hudson River waterfront is largely the story of what happened and is happening in Jersey City. This is the result of many different factors, including the up-front planning steps taken by the Jersey City Department of Planning, the existence of available land, the presence of the PATH access to New York, and certainly supported by the early phases of the HBLR line built within Jersey City (and northern Bayonne).

The type and rate of the changes in Jersey City are dramatically different than those occurring in virtually all of the other major urban centers in New Jersey. From 1980 to 2000, Jersey City's population increased to more than 240,000 while the population in other major cities such as Newark, Camden, and Trenton all experienced major declines. State forecasts for the period between 2000 and 2020 project an increase of nearly 28,000 new residents, or 11 percent growth, and the residential development occurring on the Hudson Waterfront is cited as a contributing factor.

To illustrate the role that Jersey City has with regard to the area growth, Figures 2 and 3 show the proposed and approved commercial and residential development, respectively, that is occurring in Hudson County. Of note, the four municipalities on the left (Bayonne, Hoboken, Jersey City and Weehawken) have HBLR station stops existing or under construction.

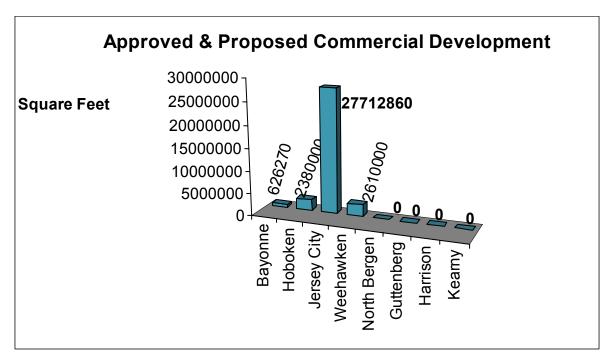


FIGURE 2 Commercial development in Hudson County. (Source: Jersey City Planning Department.)

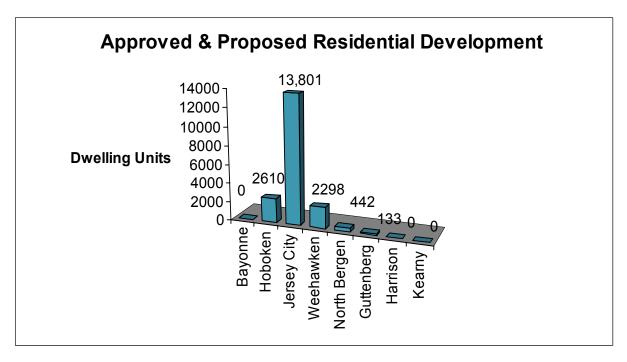


FIGURE 3 Residential development in Hudson County. (Source: Jersey City Planning Department.)

The Future

Even if we look only at those firmly committed projects on the waterfront, the fast pace of development is not slowing. In Figure 4, the office, retail and residential development on the Hudson River waterfront has been broken down into different stages. Beyond what is shown as existing in 2002, there is significant activity on projects that are either under construction or are proposed or approved.

This development of committed projects adds a total of nearly 7.5 million square feet of new office space, which would project to a workforce of up to 22,000. This tally shows 6,489 new residential units as well.

The Hudson–Bergen line is a stimulus for the development that has occurred and what will occur in the future. With the dramatic data in Figure 5, the investment value of the area's construction has been compared with the key milestones in the development of the light rail system over the past 12 years.

Development projects have come on line rapidly as the construction on the rail alignment and stations has been completed. From 1996, with the selection of the contractor up to the opening of the first two segments of the system in 2000 and 2001, the construction activity on new development projects has been impressive.

Lessons Learned

There have been many successes in Jersey City, with both the waterfront development and the implementation of the light rail line. And there are lessons learned and inferences that can be drawn.

Jersey City is a prime example of where, if you can "get your planning in place," the

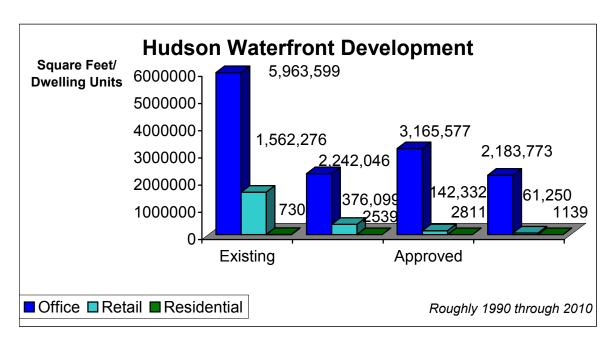


FIGURE 4 Office, retail, and residential development in Hudson County. (Source: Jersey City Planning Department.)

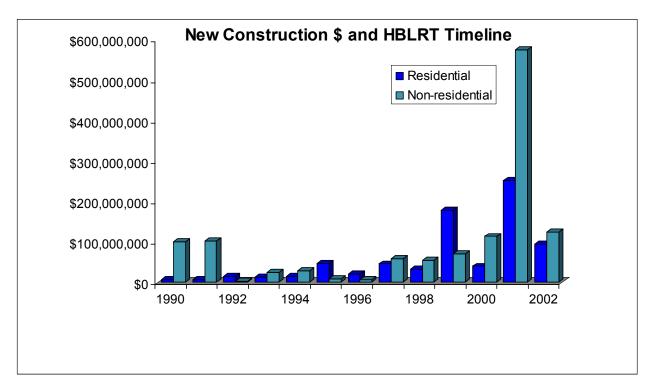


FIGURE 5 Investment value of Hudson County construction and light rail system timeline. (Source: Jersey City Economic Development Department.)

development will follow. At the municipal level, time was spent early in the process on the needed zoning changes and on other efforts that would support and encourage future development. According to Bob Cotter, long time Planning Director for Jersey City, decisions were made and the necessary steps were taken in the mid-1980s. The municipality spent time developing a Master Plan for the waterfront area that assumed mixed-use development and the inclusion of a light rail system even before the system had been designed.

Through a three-part process that addressed site acquisition, custom zoning, and tax abatement, Jersey City was prepared. As a result, when major corporations were looking to invest in properties with good transportation access, the waterfront area was attractive. This worked in the late 1980s and into the 1990s, with the PATH system, and it is working perhaps at a more feverish pitch now with the arrival of the Hudson–Bergen line.

There was regular ongoing dialogue between the development community and Jersey City. Ultimately when the formal site plan application was submitted, the planning approvals could literally be handled in 20 minutes because it was consistent with the Master Plan requirements. When considering the cost of money, this resulted in significant savings to developers and it offered new tenants the ability to quickly relocate. Jersey City was an attractive alternative, in comparison to many of the other sites in the New York City region.

Waterfront development permits administered by the Department of Environmental Protection were essentially the mechanism used to regulate any developments proposed within 200 ft of the Hudson River. Through this process, a number of state agencies were brought in to evaluate proposals and approvals were typically granted with a series of conditions.

The state transit agency secured no-cost transit easements through the waterfront area and developers were also required to provide a continuous waterfront walkway that allowed public access all along the river. This 3- to 6-month process included a public hearing, and identified and addressed issues associated with the particular development.

In approving developer projects on the waterfront, Jersey City was able to implement a very aggressive parking ratio policy, at only one parking space per 1,000 square feet of office space. Currently, this ratio is even lower, at .67 space per 1,000 square feet. It is important to note that this policy was not a deterrent, either to the project lenders or the development community. In fact, it allowed them to maximize the tenant space in the building while minimizing the investment in parking. This worked in large part because of the transportation alternatives that were in place. While this was begun initially with PATH and local and regional bus service, it was given a dramatic boost as the connectivity of the HBLR line encouraged development with the institution of low parking space ratios.

The initial growth on the waterfront, especially with office space, was most dramatic at Exchange Place and Newport, as developers built and tenants settled alongside the PATH stations offering the direct PATH link to nearby Manhattan. This space filled, and the light rail line emerged to connect the other developable properties up and down the waterfront. This is illustrated in Figure 6. With these changes, and in a positive economic climate, the development activity continued but it has moved away from PATH. Perhaps as a result of the fixed rail connection, office development and dramatic residential growth are occurring further and further from the heart of the Gold Coast waterfront. Space that will be served by the Hudson–Bergen line, in western Hoboken and Weehawken and in southern Bayonne, is being cleared, construction is underway, and expansion is continuing.

The residential activity has jumped also, following the initial success of office development on the waterfront and along the Hudson–Bergen alignment. Since the light rail line opened in April 2000, there has been a major expansion of residential space. The residential decision seemed to come later, as the employees waited to see the light rail system in operation, to see what the service would be like and whether they wanted to live nearby.

Due to the closer spacing of light rail stations, the Hudson–Bergen line may have also facilitated greater density over the line than could be achieved with the localized, concentrated, heavily office-based development occurring within a .25-mi radius around PATH stations. In other words, the light rail line has facilitated the infill of residential properties, and this has brought development into locations that office space developers would not be interested in.

Part of this expansion by residential properties farther out from the central hub is simply explained by basic land economics, with higher-order uses locating near the core. Further, however, it can show how the new transportation access from the rail line has helped to make otherwise undesirable locations attractive. In doing so, it also helps to facilitate a twenty-four hour environment around the hub location as residents are now in a position to support other mixed uses in the area.



FIGURE 6 Jersey City downtown development map, October 2002. (Source: Jersey City Economic Development Department.)