
Portland Station Location Evaluation

Northern New England Passenger Rail Authority

October 2011



Photo by Jeremiah Cox

The Northern New England Passenger Rail Authority (NNEPRA) operates the Downeaster passenger rail service between Portland, Maine and Boston, Massachusetts under an agreement with Amtrak and the host railroads (Pan Am and the Massachusetts Bay Transportation Authority). Plans have been in place since 2001 to extend service to Brunswick. Construction is underway and expanded service is expected to begin late in 2012. NNEPRA's Strategic Plan for the Downeaster service includes the eventual addition of two daily frequencies between Portland and Boston, and the potential to expand service to other parts of Maine, such as Auburn. All of these pending and planned improvements pose significant issues for the existing Portland Station. As part of the Downeaster's Service Development Planning process, NNEPRA engaged Gannett Fleming, Inc. to, amongst other tasks, conduct an evaluation of alternative station locations to determine whether the existing station is the right place to invest in for the future. A Stakeholder Group was formed to assist GF in this evaluation to assure that various transportation, development and strategic perspectives were considered.

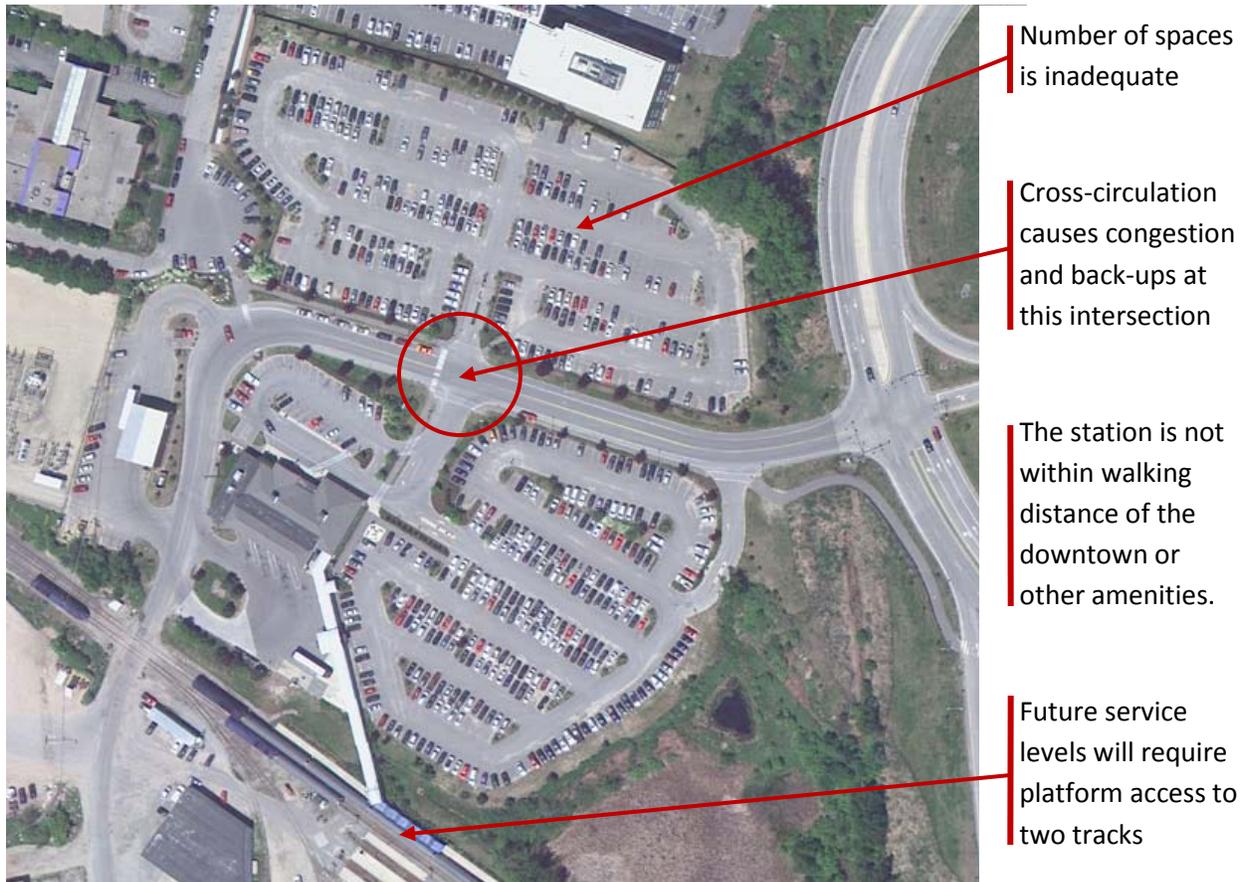
Portland Station Evaluation Stakeholder Committee:

Patricia Quinn, Executive Director, NNEPRA
Bruce Van Note, Deputy Director, Maine Department of Transportation
Greg Mitchell, Economic Development Director, City of Portland
Harry Blunt, President, Concord Coach Lines
Steve Corcoran, Road Foreman, Amtrak
Chris Thompson/Jon Jennings, Thompson's Point Developers
Wayne Davis, Chairman, TrainRiders Northeast

The Portland Transportation Center

The existing station, known as the Portland Transportation Center (PTC) is located on the edge of downtown Portland, with easy access to I-295. The station is co-located with a bus station owned and operated by Concord Coach Company. Concord Coach owns the station building which serves as a ticket office and waiting room for both Downeaster trains and Concord intercity buses. The building is connected to the single station platform via a covered walkway. Concord Coach maintains a 293 space paid parking lot and approximately 30 kiss-n-ride short term spaces for pick up and drop off. NNEPRA has an additional 375 paid parking spaces located on the opposite side of the station access road (Thompson's Point Road) from the station. Bus and rail passengers have access on a first come first served basis to both lots.

The existing station facility and location pose a number of issues for extending service to Brunswick and for providing additional service to existing destinations. These issues include:



- **Operational issues:** Downeaster trains will need to reverse out of the station and then change direction a second time to resume travel toward Brunswick. This adds 10 minutes to the schedule and increases the complexity of the trip.
- **Remote Location:** The PTC is not located within walking distance of Downtown Portland or other areas/amenities convenient to residents or attractive to tourists. This location constrains the Downeaster's ability to grow leisure-based riders to Maine.
- **Constrained Track Capacity:** The current facility has only one passenger platform. A two-track facility is required to facilitate eventual expansion of service to additional locations within Maine.

Portland Station Location Evaluation

Northern New England Passenger Rail Authority

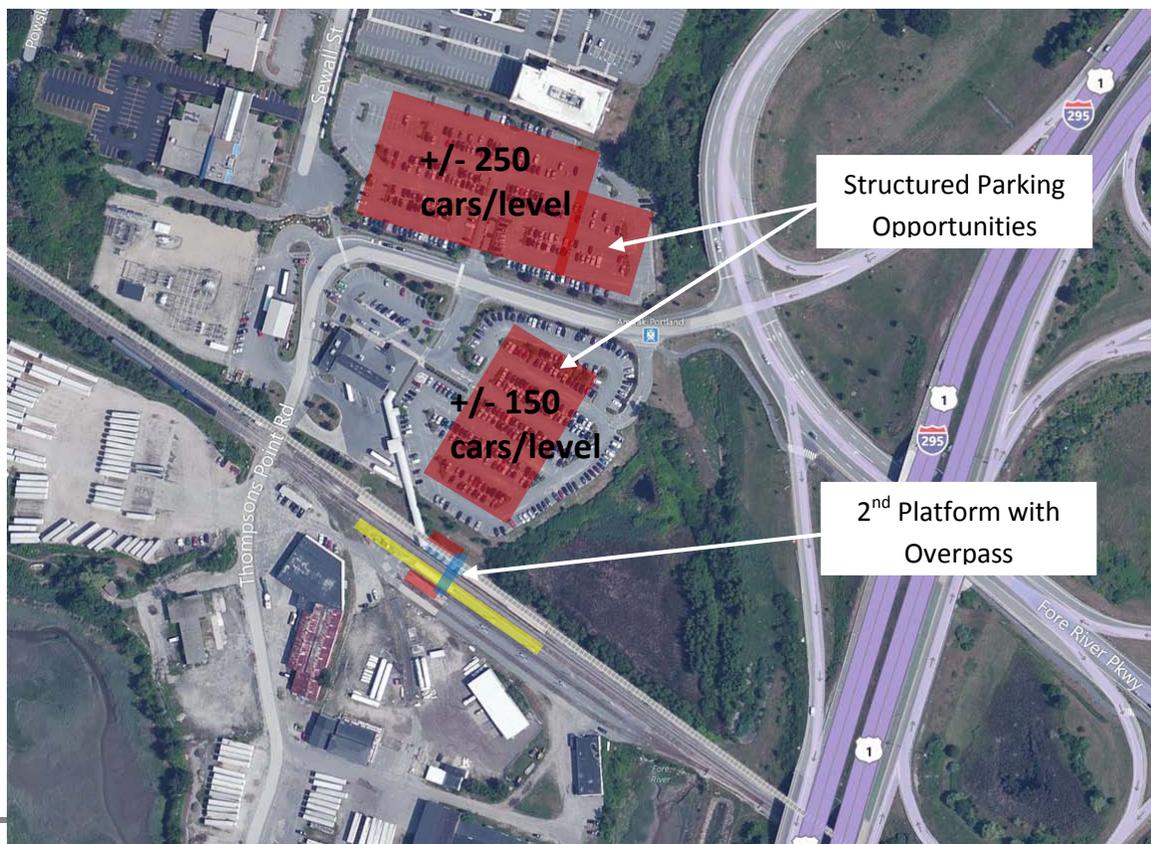
October 2011

- Traffic Congestion: Conflicting traffic movements at the intersection of Thompson's Point Road and the station/parking lot access driveways cause congestion.
- Inadequate Parking: Both parking lots frequently reach capacity and consequently some people park along Thompson's Point Road.

However, despite these issues there are important advantages to maintaining the station in its current location, including:

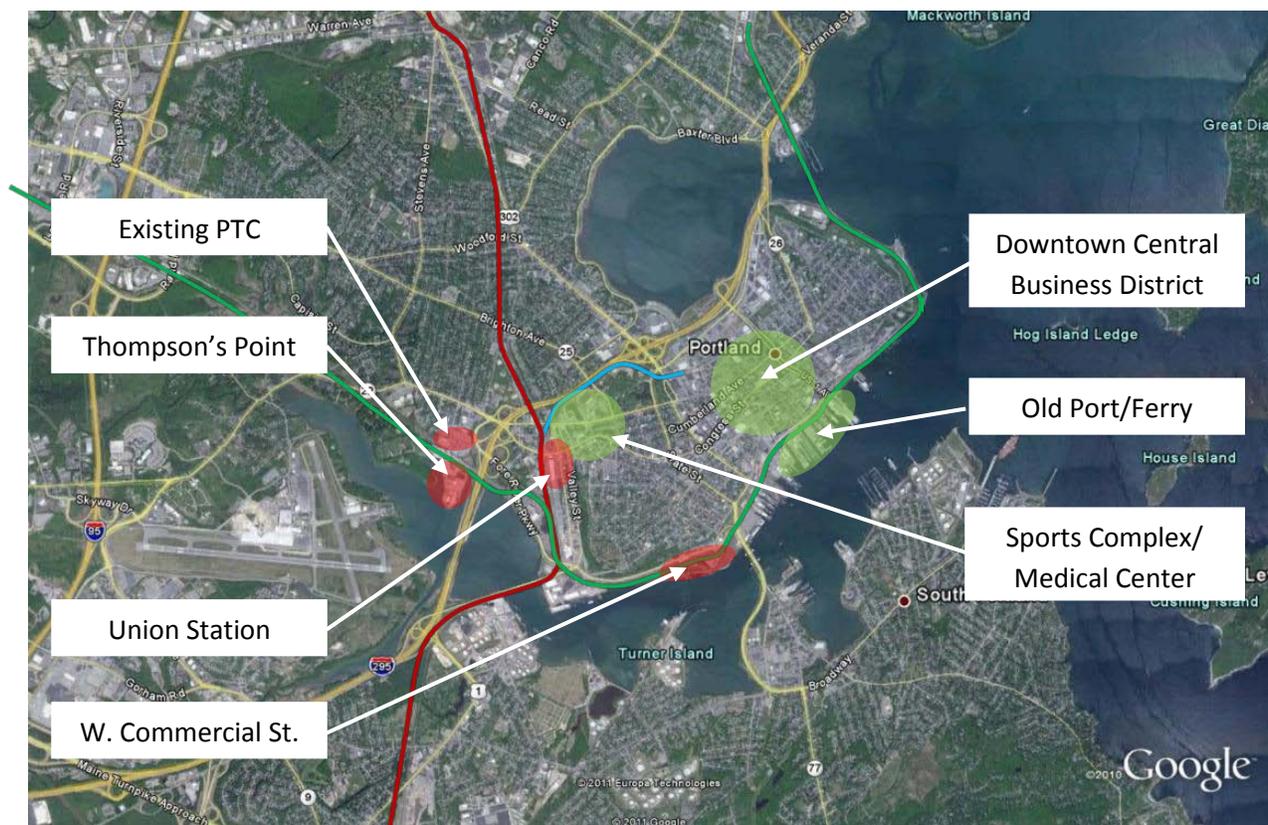
- Established location
- Synergy between intercity bus and rail service
- Convenient access to I-295
- Ability to share operating costs with Concord Coach
- Mutual benefits of a planned development on Thompson's Point.

Even though there are both advantages and disadvantages to the existing site, the potential does exist to improve and expand the facility at Thompson's Point to meet the growing needs of the Downeaster service.



Identification of Alternative Sites

Because costly improvements at the existing Thompson's Point location are necessary to support growing passenger rail service, alternative sites also were identified and then evaluated to determine whether the existing location was the best place to invest for the future. As a first step, a list of possible alternative locations was identified and an initial high-level evaluation was conducted to determine which of these were really feasible. These alternate locations included sites closer to downtown Portland, the medical complex and to the waterfront and ferry terminal. Alternatives that were not located on existing active rail corridors were quickly dismissed as infeasible. For instance a location closer to the waterfront would have required street-running for the last half mile. The resultant feasible sites were then included in a further evaluation.



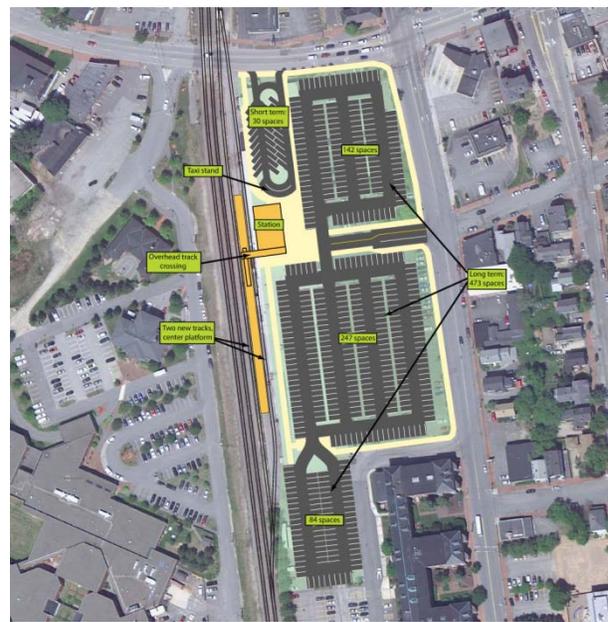
Alternatives feasible for further examination included:

- **West Commercial Street** on an underutilized rail yard west of the Casco Bay Bridge
- Station Square at St John's Street on the site of an existing shopping center, where the original **Union Station** building once stood.

For each of the alternative locations, a preliminary sketch plan was developed showing how the site could accommodate the station building and platforms, a kiss-ride facility at least equivalent in size to the existing facility, and surface parking. In addition to a no-build scenario, a sketch plan for the existing Transportation Center location was developed to illustrate the potentially reconfigured site which would accommodate two platform tracks, a station building closer to the station platforms, maximized parking and reorganized the site access to solve some of the traffic issues caused by cross circulation. The layouts for the alternative sites did not include relocation of the Concord Coach facility since it appeared uncertain that this business would be willing to relocate.



West Commercial Street Site



Union Station (St. John Street) Site

The sites were evaluated based on a number of criteria developed in conjunction with the project Stakeholder Committee. The evaluation was both quantitative and qualitative based on readily available information. Table 1 summarizes the evaluation and is color coded to indicate the advantages and disadvantages of each site.

Site Evaluation

The evaluation was organized into five broad categories as follows:

- *Operational Compatibility:* How the site is suited to support the current and proposed future operation of the Downeaster service

- *Connectivity:* How the site best meets the overall multi-modal transportation needs of the region
- *Economic Development Potential:* How the station best compliments the overall development initiatives for the City/region
- *Financial Impacts:* A comparison of the capital and operating costs associated with the facility
- *Ease of Implementation* – An evaluation of the challenges/barriers associated with the development of a facility at this location

Operational Compatibility:

Train Operations: One of the major downsides to the existing site is that, when the Downeaster service is extended to Brunswick, trains will need to change direction twice coming out of the station to continue in the northerly direction. This will have a significant impact on the schedule and will ultimately inconvenience passengers. The construction of the missing leg of the “wye” between the northbound tracks and the westbound tracks accessing the Thompson’s Point station would alleviate this problem, since with this track in place, trains would just reverse out of the station and continue to Brunswick. The construction of this missing link necessary if the station is to remain at Thompson’s Point. On West Commercial Street, trains would need to back out of the station on their journey either to Brunswick or south to Boston, but an additional reverse move would not be required. The Union Station site is located immediately on the northbound tracks leading to Brunswick so trains stopping at this location would pull through the station northbound or southbound.

Parking: With increased service comes the need for increased parking. Parking is already limited at the Transportation Center and there is little opportunity to increase the number of at-grade parking spaces substantially. Increased parking will either need to be accommodated in structured parking which is expensive or at grade on additional land. The West Commercial Street site is unconstrained and can provide adequate parking. The Union Station site is somewhat constrained but can accommodate approximately the same number of spaces as exist today at the Transportation Center. These spaces would all be available exclusively for rail passengers as the site plan assumes the Concord Coach facility would not be relocated.

Supports Expanded Services: The existing single platform and single platform track at the Portland Transportation Center are inadequate to support potential service to other locations in the future. This level of service will require two platform tracks with either two side platforms or a central island platform between the tracks. A new station or a significantly expanded station will have to meet the requirements for accessibility outlined in the American’s with Disabilities Act (ADA). All three locations can accommodate this configuration with additional improvements.

Connectivity

One of the most important considerations for the station site is the co-location of the rail station with Concord Coach Lines, which exists at the PTC. Neither of the two alternative sites provides good accessibility for intercity coaches and would not be feasible as a location for the bus terminal, though the West Commercial Street site could physically accommodate it. The only opportunity for co-location is to maintain the station at the existing site which is the only location adjacent to an intersection with I-295.

In terms of local access to the surrounding neighborhoods, the Union Station site is the best integrated into Portland with good pedestrian access, connections to two bus routes and the local street network. The West Commercial Street site is closest to the downtown tourist area, but is somewhat cut off from the rest of Portland by the topography of the bluff, and the existing site, while having access to one bus route.

All three locations will require a shuttle system to transport tourists from the station to the tourist destinations in Portland. However, the two waterfront sites (West Commercial Street and Thompson's Point) have the added advantage of being located on the waterfront and could ultimately be served by a ferry service, thus avoiding traffic congestion around the waterfront tourist attractions and providing an additional tourist experience.

Economic Development Potential

Theoretically all three locations could ultimately support economic development around the station. At the Union Station location additional development could be conceived on the site if parking were placed in garages. Retail units at street level (to replace the existing shopping center) and residential units above potentially serving the hospital could wrap around structured parking in the center of the site. At West Commercial Street additional development, sparked by the existing renovated warehouse project may ultimately be possible, especially if the fuel storage facility to the east is purchased and redeveloped. However, at Thompson's Point there is an active redevelopment proposal for the land on the Point which will include an arena, a concert venue, a hotel and possible additional uses like commercial offices. This development is in the process of obtaining the necessary approvals to begin construction and a Transportation Tax Increment Financing (TIF) District has been created around the station. The availability of Downeaster and intercity bus service at Thompson's Point was a major factor for developers when considering this site.

Financial Impacts

There are three basic financial concerns to consider: capital cost, operating cost and the potential for the project to receive funding assistance.

Substantial capital investment is required to develop each of the sites to meet the growing and future needs of the Downeaster and other transportation providers. The construction of the 'wye' track is essential to making service function at Thompson's Point in the near term. Additional investment at this location will be required to expand station facilities, accommodate parking needs and add a second platform to meet longer term needs. While the rail operation could exist within the current footprint, additional property would likely be required to support increased/improved parking.

All property would need to be acquired for a station at either of the two alternate locations and passenger and parking facilities would need to be constructed from the ground up. A significant length of track will need to be reconstructed to access the station and platforms for passenger trains at the West Commercial site, and the Union Station site will require the purchase of an active shopping center (Station Square), and the construction of additional holding and passing tracks to accommodate two-track passenger access.

All three alternatives will require grade crossing work. In the case of Thompson's Point and Union Station, improvements will be required to existing crossings to account for additional tracks crossing adjacent roadways. At Commercial Street a new grade crossing will be required, however, in this case it is a crossing of an infrequently used industrial siding into the station parking lot.

In terms of operating costs for the station facilities the existing location has a distinct advantage in that operating costs are shared with the Concord Coach Company and revenue from the parking lots is used to offset operating costs of the station. While revenues could be used to off-set operating costs at the other two locations the advantage of sharing these costs with Concord Coach and the increased revenue from having the coach parking co-located does not exist at the other two locations. Regardless of the location, the ability to continue to sustain operations of the transportation facility is factor.

Finally, there is a rapidly developing coalition of support among stakeholders for the station to stay in its current location. A Transportation TIF has already been adopted to generate funds in the future to improve transportation connections at this location. Furthermore, Downeaster station investments in this location will support and be enhanced by other private and public development initiatives associated with Thompson's Point. This synergy will lends credence to applications to the state or federal government for funding.

Conclusion

While each of the three locations evaluated has some advantages over the others, and all locations have disadvantages, the evaluation concluded that, on balance, the existing location at the Transportation Center is the preferred location. However, this is only the case if certain assumptions hold true. First and foremost of these assumptions is that the missing (western) leg of the 'wye' track can be constructed. This track is essential to improve rail operations and improve travel time. Preliminary evaluations suggest that the "wye" can be built and has estimated preliminary costs. In addition, traffic

and parking issues need to be satisfactorily resolved for the station to remain at its current location. Assuming these issues can be resolved, the advantages of being co-located with the Concord Coach Lines, having close proximity to I-295, and potential for increased transit connections, expansion and development associated with the Forefront project are significant. Therefore, it is recommended that the Downeaster station remain at Thompson's Point and that work continue to identify and implement improvements to develop this location into a thriving transportation hub.

Table 1

DOWNEASTER PORTLAND STATION LOCATION EVALUATION SUMMARY				
Criteria	Thompson's Point- No Build	Thompson's Point Improved	Commercial Street	Union Station
Operational Compatibility				
Facilitates Train Operations	Back-up Move Required	Back-up Move Required	Reverse Move Required	On main line
Provides Sufficient Parking	Needs improvement	Can be built	Can be built	Can be built
Supports two platform tracks	Not currently	Can be built within ROW	Can be built	Can be built
Supports Tourism Development	With TP Development	With TP Development	Walkable to Old Port	Not desirable for visitors
Storage Tracks	Exist	Exist	Can be built	Can be built
Multi-Modal Connections:				
Intercity bus interface	Exists	Would Exist	Off Highway	Off Highway
Access from I-295	Direct	Direct	Fore River Parkway	Congress Street
Access to City bus routes	1 Route	1 Route	No Service	2 Routes
Pedestrian access	Commerical Area	Commerical Area	Near Downtown	Near Downtown
Access to airport	Good	Good	Less convenient	Less convenient
Local roadway access	Average	Average	Poor	Good
Economic Development:				
Supports new development	Yes - Thompson's Point	Yes - Thompson's Point	Zoned Industrial	Potential in future
Financial - Capital Costs				
Connecting Wye Track	\$\$\$	\$\$\$		
Land Acquisition		\$	\$\$\$	\$\$\$\$\$
Track Work Required		\$	\$\$\$	\$\$\$
Grade Crossing Rehab		\$	\$	
Building		\$\$\$	\$\$\$	\$\$\$
Parking	\$	\$\$\$	\$\$\$\$\$	\$\$\$\$\$
Financial - Operating Costs				
	Shared with Concord	Shared with Concord	Unknown	Unknown
Potential to Fund Improvements				
	Good	Good	Unknown	Unknown
Ease of Implementation:				
Zoning	Commercial	Commercial	Industrial	Commercial
Support from stakeholders	State, City, Private	State, City, Private		