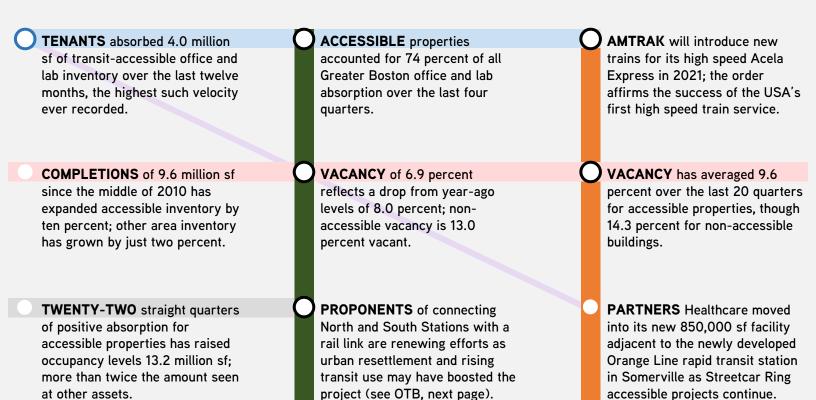
by encompass

spectrum family



node 2016.3 all data as of, or for the quarter ended, September 30, 2016, unless otherwise noted



UICK

transit-accessible defined as 15-minute walking radius of rail rapid transit stations, office and lab properties, changes last twelve months

Absorption +4.0 million sf Absorption reaches highest four-quarter total ever

ABOUT THE GAP ...

Vacancy 6.9% -0.9% Vacancy drops despite heavy delivery activity Rents (Class A) \$53.39 +1.8% Transit access driving regional rent growth



Another effort to connect the region's north and south rail systems through downtown Boston may be getting some momentum; here are some CRE implications for the link, and why this rare gap exists in the first place. **See OTB, next two pages**



node is greater boston's definitive resource for transit-accessible commercial office & lab real estate discussion & analysis.

enc mpass







About the Gap ...

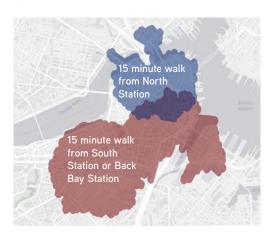


Among Boston's various peculiarities is a one mile gap in not only the region's, but also the nation's rail transportation network, spanning our North and South Stations. Urban development trends, increasing transit ridership and related capacity issues have given rise to the latest of numerous efforts to connect the two terminal stations by way of rail tunnel, a project described as the North-South Rail Link. Proponents state the \$2 billion potential project would be many times offset by the project's multiple efficiencies, related economic development potential, and other benefits.

GAP

Your downtown | My downtown

The lack of a connection through central Boston has exacerbated a North/South division, leading to a preference for location based on suburban habitats.



Ruggles? Boston Landing? Assembly?

CONSEQUENCES

As urban developments spring up in Streetcar Ring regional rail locations, a link could dramatically assist in connecting these developing areas to the region. With

numerous such sites currently undergoing millions of sf of multi-use development, rail connections can connect emerging multiple uses rapidly and with a high degree of efficiency.



That Red Line capacity issue ...

Frequently running beyond capacity, the Red Line, and the rest of the city's central subway system, would get a big boost from a North-South link. South Station's Red Line platforms are the busiest in the network, though a link would reduce this load dramatically, providing instead far more one-seat trips to user's destinations.

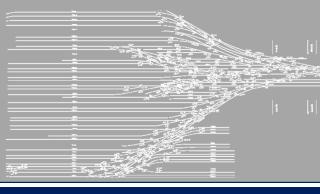


A Terminal Condition

Though not referred to as such, both North and South Station are Terminals, with no continuing, through tracks. Terminals create significant capacity problems as each track experiences two-way movement with heavy-switching at peak times; intercity front-facing trains must back out of the station, turn around, and back in to pick up passengers. A link would make both stations.

Terminal Facts

- In New York City, both Grand Central Terminal and Pennsylvania Station operate at full capacity. Penn handles more passengers per day than GCT, even though GCT has 67 tracks and Penn has 21.
- ✓ In 1984, Philadelphia's Center City Connection was completed, a project which united its two disparate rail systems with a link.
- Boston is one of just two cities in the United States with more than one active passenger rail terminal, the other being Chicago.



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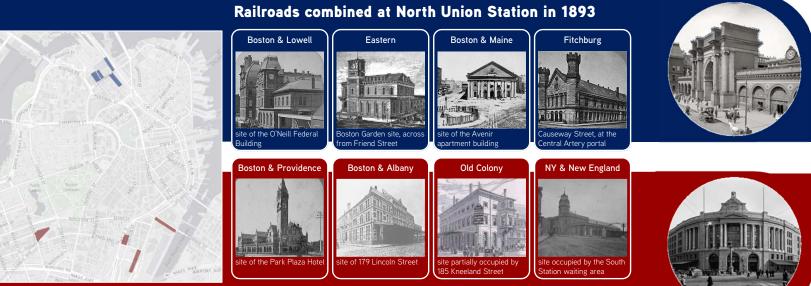




Why the Gap?

The uniqueness in Boston is not just that its systems aren't unified, it's that they still aren't. Early railroads throughout the 1800s grew their systems everywhere they could, building major terminals in center cities. Around 1900, railroads, with incentives from cities, built unified stations to provide better service, encourage

ridership, and enable partnered service across each other's lines. Our region actually did get into the Union Station craze, only the old City of Boston, densely settled and surrounded by water, caused the development of two union stations, north and south.



Railroads combined at South Central Station in 1899

Connecting the Corridor

1873

As railroads consolidated operations at union stations around the country, this was far more difficult to accomplish in the dense and long thickly-settled cities of the northeast. Today's Northeast Corridor was mostly connected in these cities by the Pennsylvania Railroad, the world's largest company for much of the 19th century



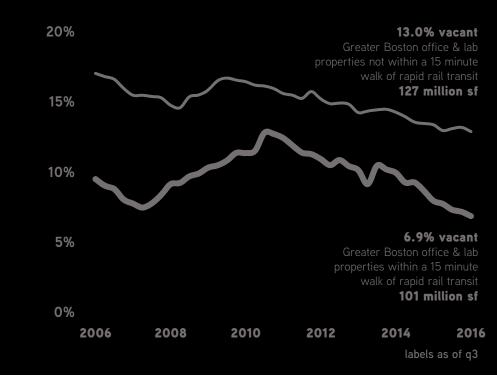
Philadelphia Boston **Washington DC** Boston remains notable gap in the The city's geography The ³/₄ mile First Street country's passenger rail system enabled a re-route Tunnel was built to connect through a new 30th Street 20XX? the new Union Station, which Station, though center city was on the north side of the tunneling was considered; center city, to points south ultimately a center city 1906 regional rail tunnel was opened in the 1980s 1933 **New York City** The building of Pennsylvania Station and the accompanying North River Tunnels under the Hudson River, and East River Tunnels under the East River, ultimately connected New England to the rest of the northeast by way of the Hell Gate Bridge and approach 1910 Baltimore Some of the oldest used urban tunnel infrastructure in the world, the Baltimore & Potomac and Union Tunnels flank Union Station, combining for more than 2 1/4 miles of tunneling

A Contraction

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 blue <> macro level office | quarterly

 steel <> macro level industrial | quarterly
- green <> macro level laboratory | quarterly
 slate <> submarket level office series | quarterly
 node <> transit-accessible office & lab | twice-yearly
- white $\langle \rangle$ investment sales | twice-yearly or so

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