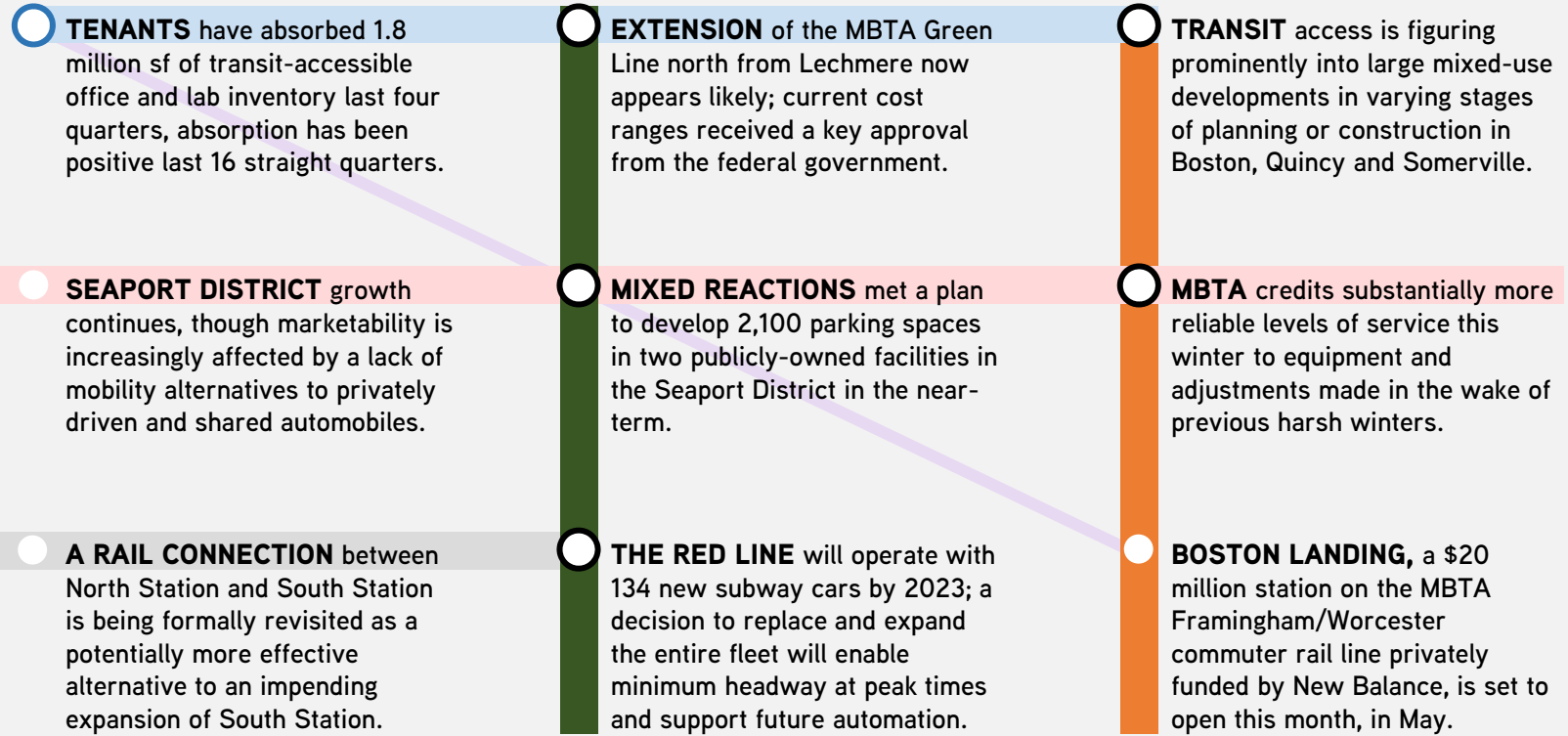


Node is Greater Boston's definitive resource for transit-accessible commercial office & lab real estate discussion & analysis.



QUICK

transit-accessible defined as 10-minute walking radius of rail rapid transit stations, office and lab properties, changes last twelve months



Absorption
+1.8 million sf
Absorption remains positive for the 16th straight quarter



Vacancy
6.6% -0.6%
Vacancy drops on positive absorption activity



Rents (Class A)
\$56.11 +2.1%
Transit access drives regional rent growth



TRANSIT ISSUES IN SEAPORT?

Boasting a host of new restaurants and an explosion of retail, commercial, residential and hotel development, the Seaport District stands out as Boston's most exciting new neighborhood in decades; it also stands out for its lack of transit alternatives, here's a perspective on the issue ...

OTB, page 2

Boston's Next Great Neighborhood

Envisioned since at least the 1970s as a post-industrial center of livelihood and a connection to the harbor for a coastal city more oriented around its rivers, Boston's Seaport District is fulfilling its mixed-use vision, and more rapidly than anyone could have ever thought. While the neighborhood has many distinguishing features, one of them is unfortunately the area's lack of adequate public transportation, particularly for an urban area developed to its level of density. The following pages present a quick definition and explanation surrounding this great area's biggest growth challenge in its early modern history.



Bubbles denote relative geographic positioning of urban office inventory
Bubble size denotes relative distance from nearest rail rapid transit station; Seaport District shaded blue

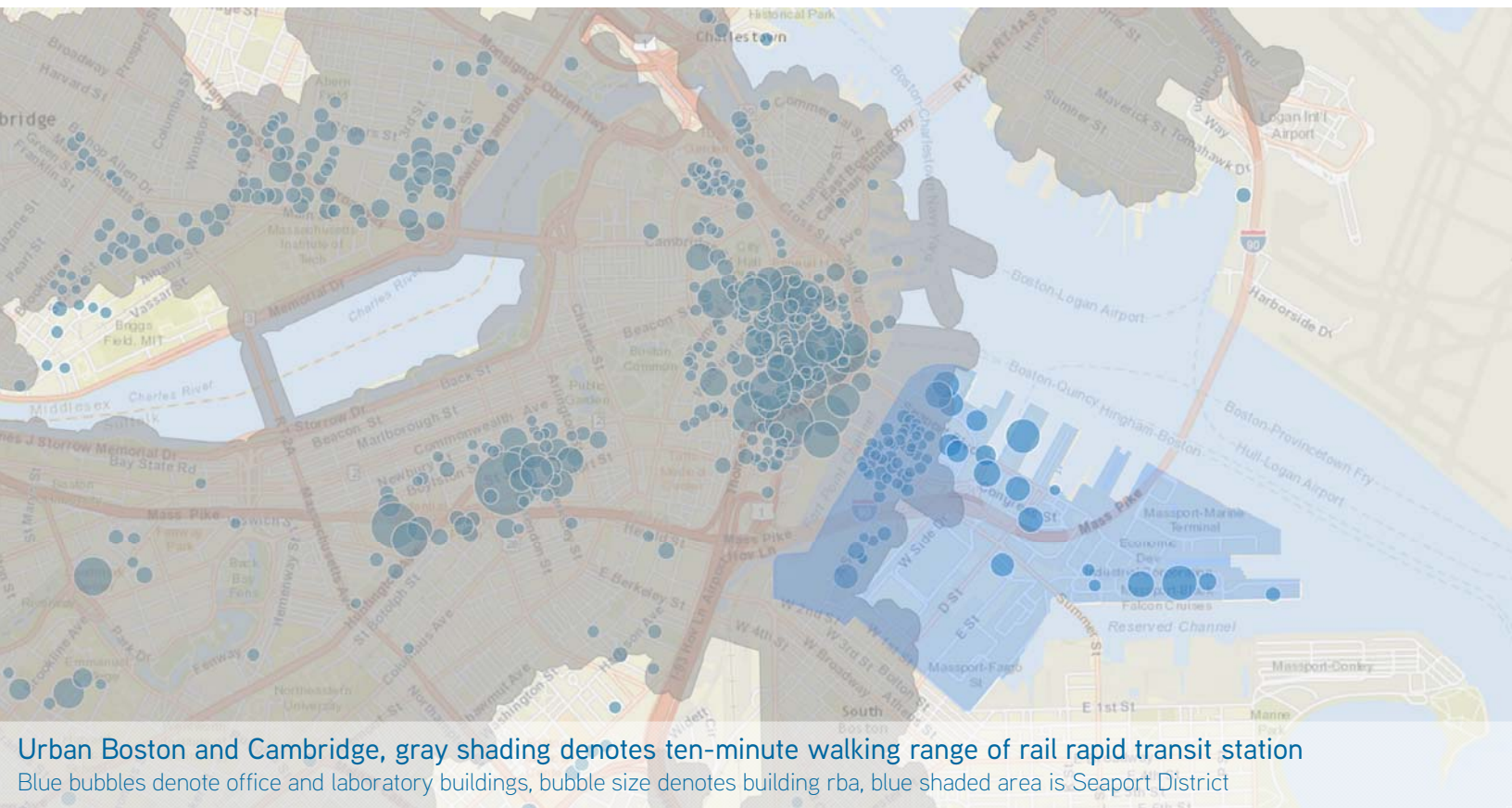


An Understandable Problem

The current transportation insufficiency of the Seaport District traces its roots to the 1990s, a time during which the city underwent the Big Dig. As the project was experiencing large cost overruns, efforts were made to save on other projects, including the transit project planned for the Seaport District. A project envisioned to be rail was scaled down to lower-capacity Bus Rapid Transit. Planners could not have envisioned the area would become among the country's fastest growing business districts, nor could they have foreseen a big share of the working population opting to live in non-car-dependent areas.

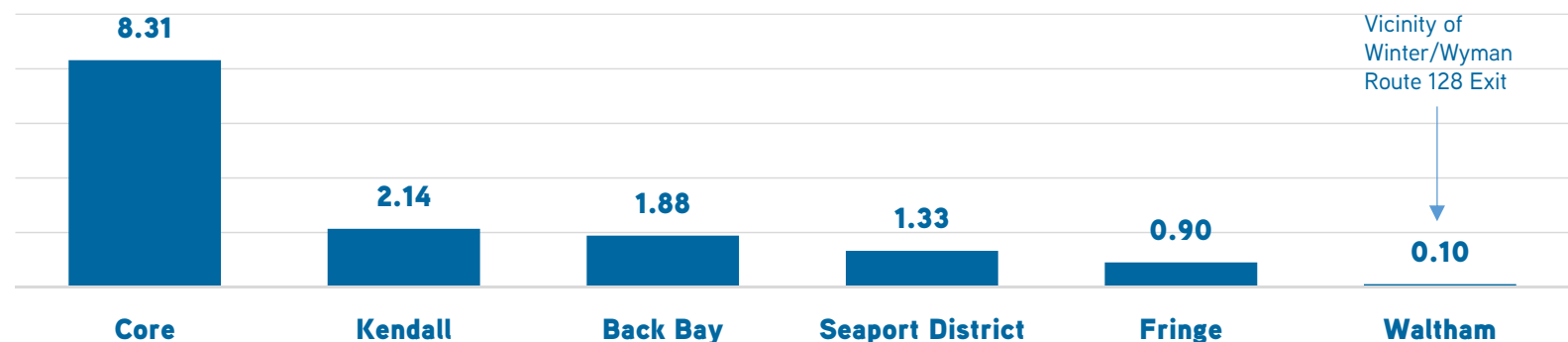
Where's the Train?

Unlike other parts of urban Boston & Cambridge, much of Seaport is out of range of rail rapid transit



Is Car-Only For Seaport Viable?

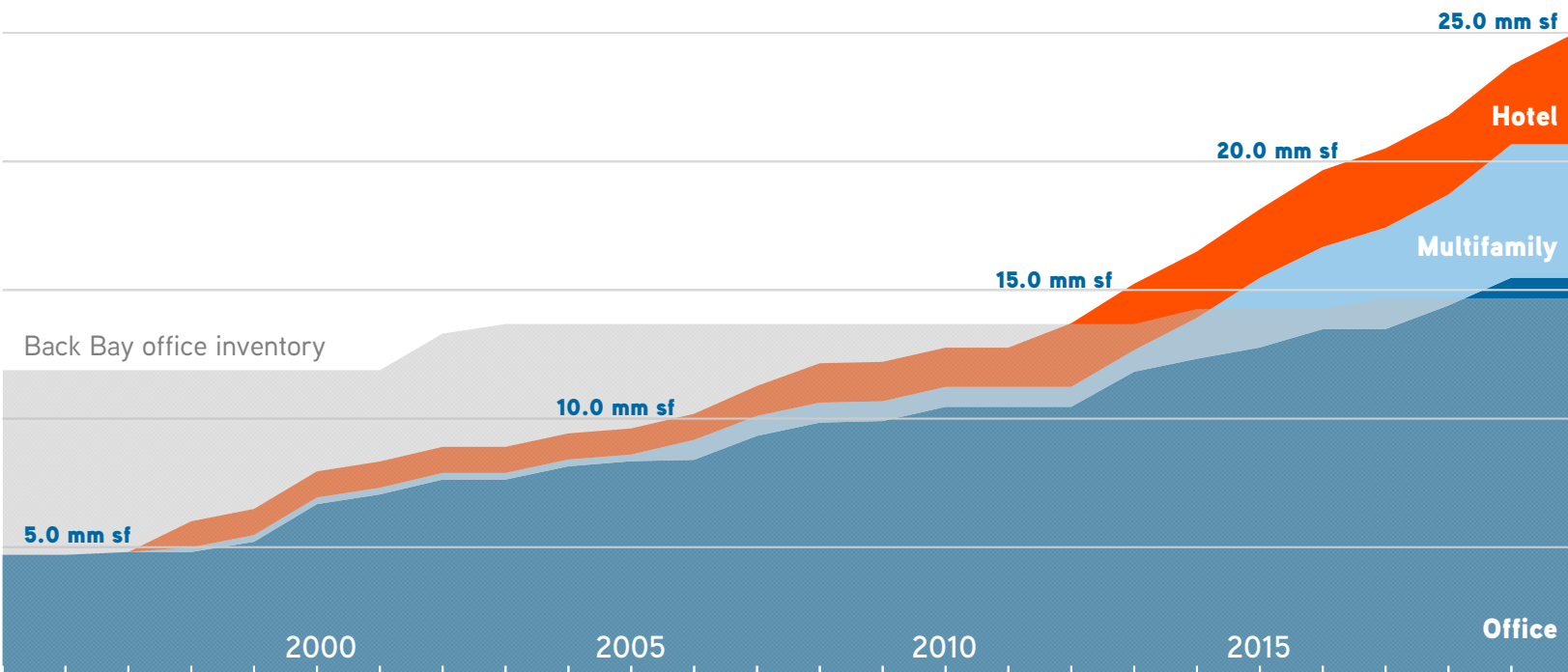
Density of Seaport is more aligned with urban multi-modal areas, not even the densest of suburban clusters



Floor Area Ratio ("FAR") of total given area, given current office and lab development

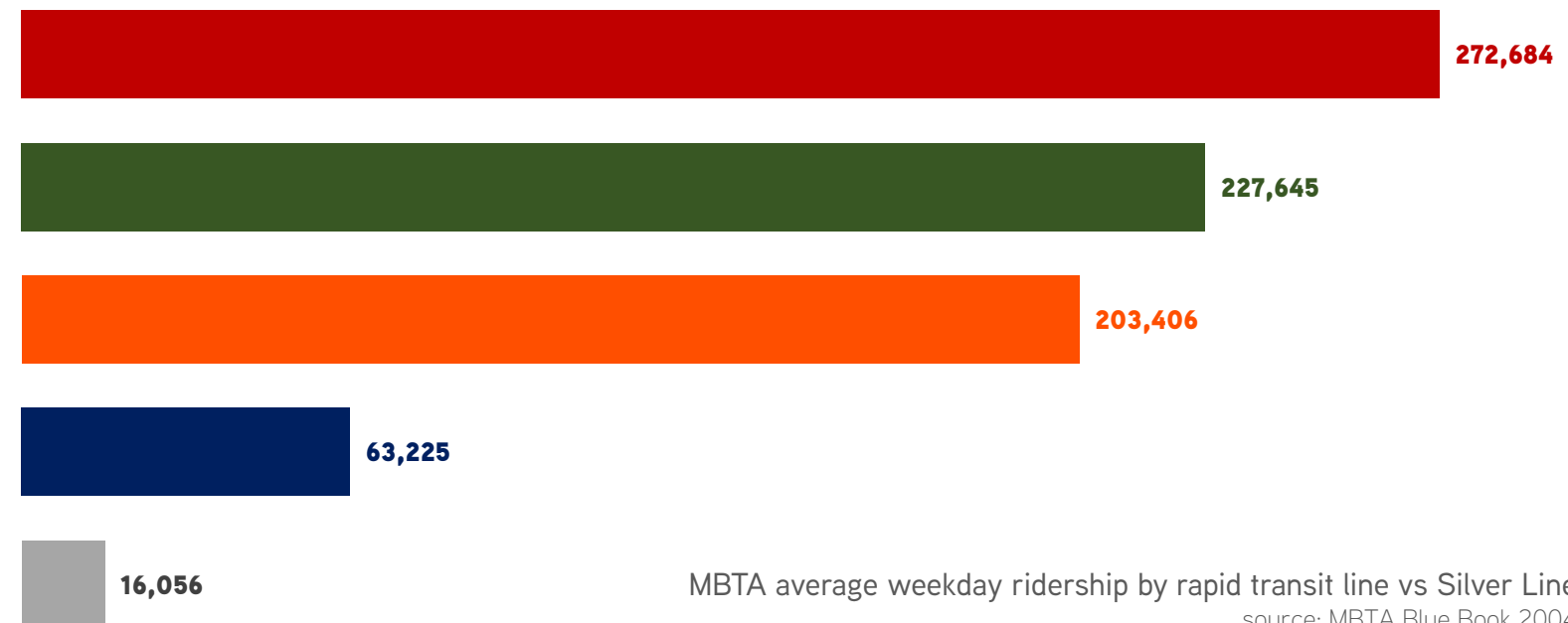
A Quarter-Century Building Binge

With less than five million sf of office inventory in the mid-1990s, developers added hotel and residential inventory in the late 90s, doubling the amount across the three categories between 1998 and 2009. The amount shared across the categories will again double by 2020. Currently there is more than five million sf of development approved or under review by the Boston Planning and Development Agency, and at least ten million sf of total development could be underway in the 2020s.



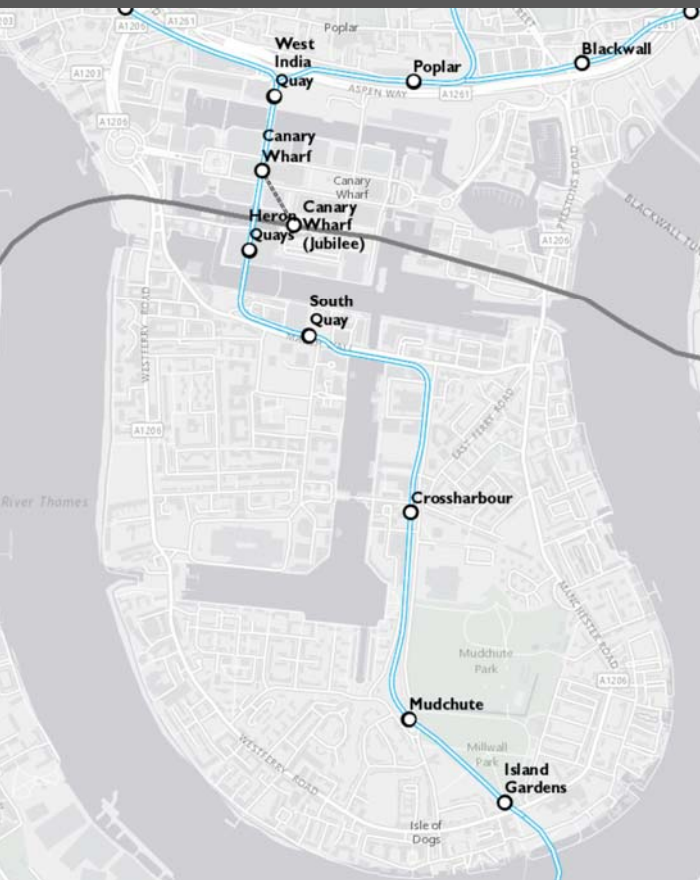
Silver Line vs Rapid Rail

The Silver Line is the Seaport District's primary transit route, consisting of a set of tunnels which connect the Seaport District to South Station through which bus service is provided. This is a service that the MBTA controversially refers to as "Bus Rapid Transit." The service operates near operational capacity at peak hours, though does not near the capacity of the MBTA's rail rapid transit lines.



The Urban Industrial Infill Craze

Boston's Seaport District is one of many former central urban industrial areas undergoing redevelopment into mixed-use neighborhoods worldwide. Changes affecting manufacturing and goods distribution have left many of these areas with high vacancy levels in their former uses, and their central location make them highly attractive as redevelopment opportunities. One caveat in many of these areas, as in Boston, is that these heavy industrial areas typically did not support dense populations as city centers, and do not have the type of more developed transportation infrastructure found, in even the very closely located downtown areas. Here are a few other notable of the world's urban industrial infill mixed-use commercial districts and an examination of their approaches to public transit through redevelopment.



Canary Wharf London

Owing its early history to Britain's global spice and general shipping trades, Canary Wharf may be considered the original version of which Boston's Seaport was a copy. Containerization had a profound effect on the area and after the last shipping operation pulled out in 1980, work immediately ensued to convert the area to what is now a 28 million sf mixed-use regional commercial center. The Docklands Light Rail (blue) opened in the 1980s with connection to the London Underground's Jubilee Line (gray) completed in 2006.

Upon closing in 1980, Canary Wharf's old industrial areas were the background for the opening scene in the 1981 film, For Your Eyes Only, where the villain is unceremoniously dropped down the tall chimney seen in the background; the first Canary Wharf buildings would be just four years from opening.



Melbourne Docklands Melbourne

Melbourne Docklands was an active industrial and shipping area until 1990, upon which it served as the unofficial center of a world famous rave music scene. This CBD-adjacent area is currently about 25 percent through a redevelopment into a 20 million sf mixed-use neighborhood. High capacity rail transit runs along the area's borders, but a tramway is currently being proposed to go through the area to support its growth.



Mission Bay San Francisco

A new line of San Francisco's municipal railway accompanied the early stages of the redevelopment of Mission Bay, the former railyards of the Southern Pacific Railroad. The 0.8 square mile area is a similar land size to Boston's Seaport District, and is also adjacent to Caltrain, the regional rail service. Upon completion, the area will have at least 6,000 residential units and more than ten million sf of office and biotech development.

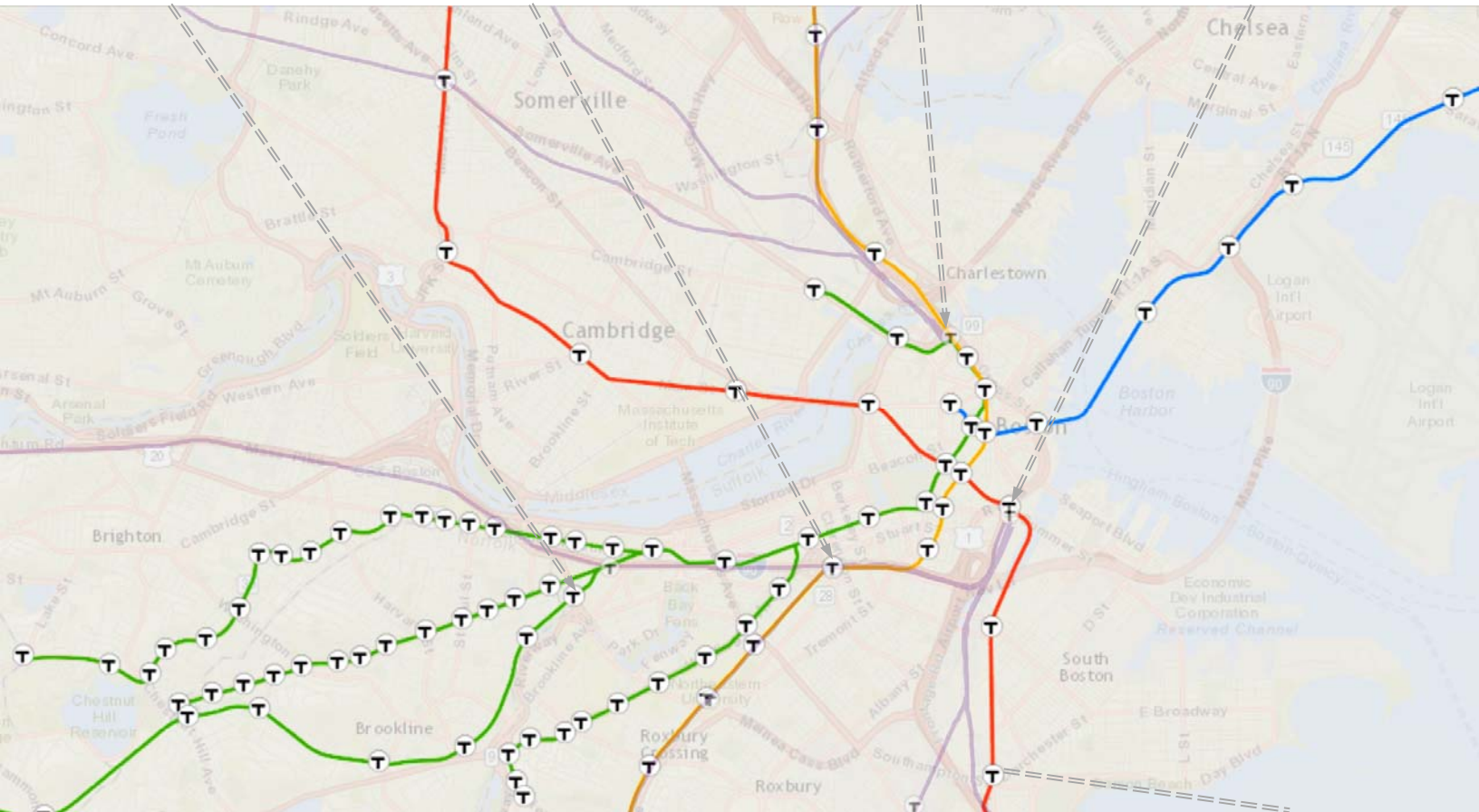


FENWAY Crews have topped out on construction of the 367-foot Pierce Boston condominium building, the tallest in the state outside Boston's urban core.

BACK BAY Boston Properties continues in the filing process with the BPDA regarding its 1.3 million sf Back Bay/South End Gateway multi-use project.

NORTH STATION Construction is progressing on more than 800,000 sf Hub on Causeway, set to deliver multifamily, retail, hotel and office space by 2019.

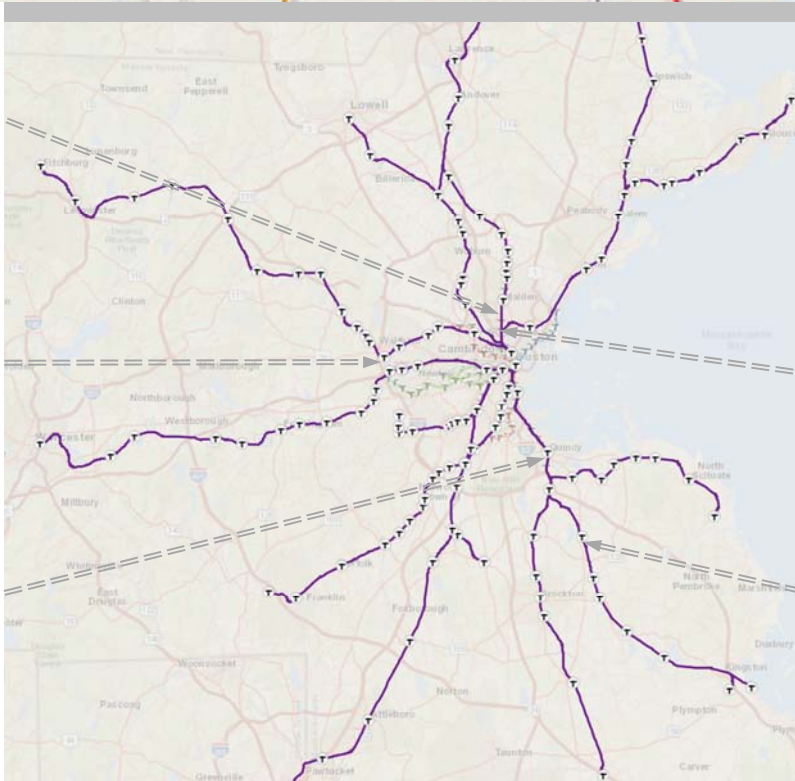
SOUTH STATION Hines Interests is expected to break ground in the 2nd quarter on a 51-floor tower to be built using air rights above the tracks at South Station.



WELLINGTON A third quarter delivery is expected at Modera Medford, a 297-unit multifamily complex near the 460 units existing at Station Landing.

WALTHAM More than 500 units will have been delivered in downtown Waltham from 2015 through 2017 following completion of the Cooper Street Apartments.

QUINCY CENTER The City of Quincy may allow a mixed-use development as high as 20 floors in sites slated for redevelopment in and around the downtown area.



ANDREW A second half 2017 groundbreaking is expected at the 656-unit, \$400 million mixed-use development known as Washington Village.

ASSEMBLY ROW A speculative 250,000 sf office building may be underway here this quarter, making more than 2.7 million sf completed here between 2014 and 2019.

SOUTH WEYMOUTH A property-tax break was granted to Prodrive Technologies, which will occupy a 250,000 sf build-to-suit office building at SouthField.

What is Node?

Node is Greater Boston's first and only report series covering the commercial real estate market from a perspective of non-automobile accessibility. This covers the supply, demand and pricing of properties and opportunities that can be conveniently reached through the use of user-appreciated public transit, biking and walking options.

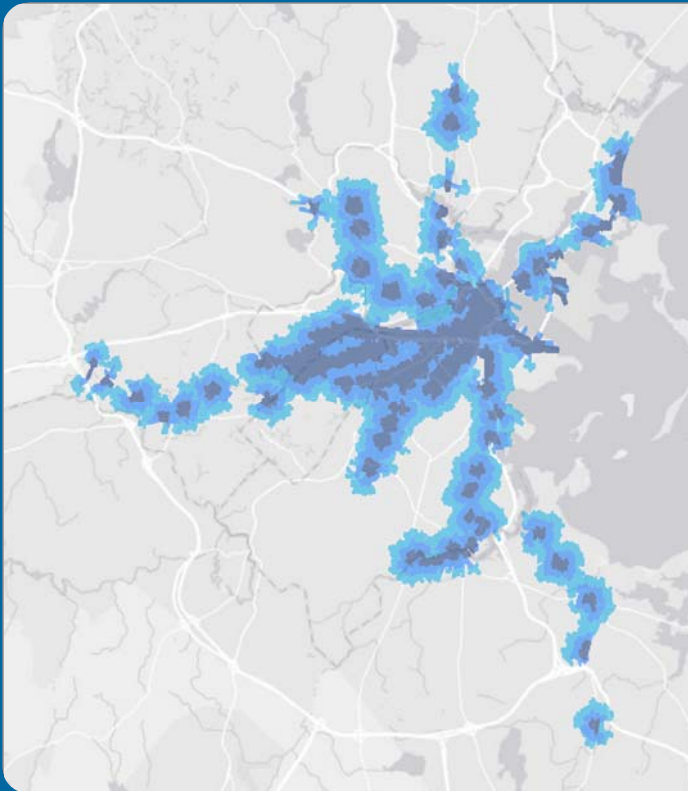
The need for Node.

The United States is currently seeing a gradual re-organization of dwellings, workplaces and other activities toward locations that offer more accessibility options than just automobile access. This trend is far more dramatic in areas with stronger existing alternative transit offerings and areas that have attractive in-place dense clusters of activity, both features of the Greater Boston area. This can largely be seen as an undoing of the exclusively automobile-oriented environment that has been characteristic of United States growth since World War II.

Node is the industry's tool to help make better decisions more expeditiously and confidently surrounding what may be among the largest development shifts and opportunities in our country's history. Encompass is building out Node's capabilities to be an increasingly robust resource for you twice a year.




What types of transit are analyzed in Node?

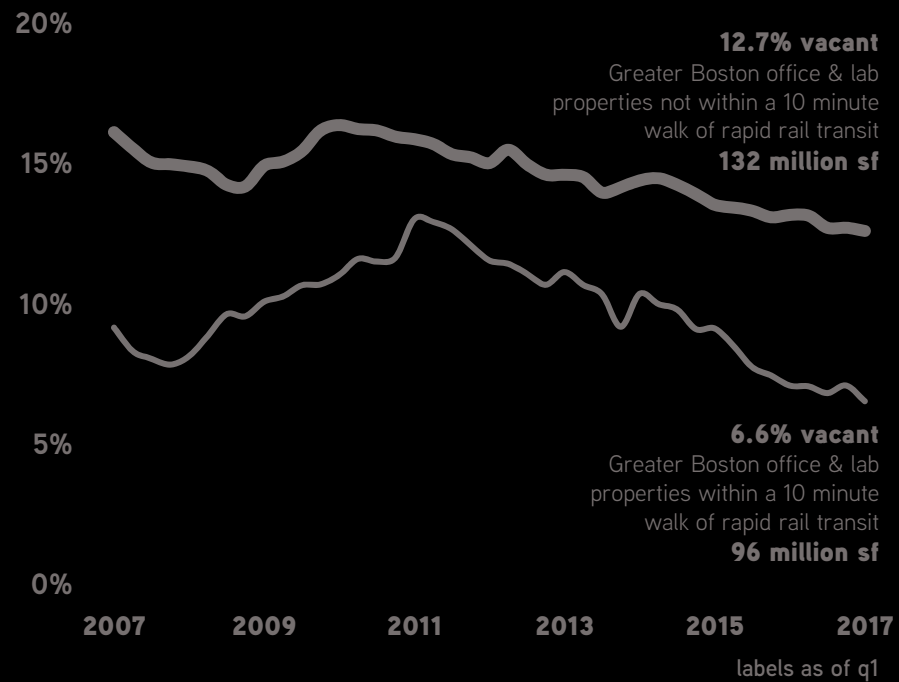
Node 2017.1 analyzes conditions surrounding all grade-separated rail rapid transit lines in Greater Boston. This includes the Red, Blue and Orange Lines, all of the Green Line D-branch and the underground or grade-separated sections of the rest of the Green Line. Node will analyze expansion of its coverage to include additional transit conveyances in future releases.



Node & Mapping

Node uses sophisticated mapping tools to understand properties that are within a given walking radius of rail transit stations. It is then possible to understand the inventory of office and laboratory properties that fit any type of proximity criteria. These criteria can then be used to show ideal locations relative to labor pools and other characteristics.

-  Five-minute walking radius of rail transit
-  Ten-minute walking radius of rail transit
-  15-minute walking radius of rail transit


spectrum family

- 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** <> special interest | twice-yearly or so

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