Accessibility Case Study: Boston Landing

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Boston Landing[1] is a $500 million-dollar development by NB Development group for New Balance Athletics. It comprises six properties located at 40-180 Guest Street in Boston, Massachusetts. These are listed in Table 1.

[1] This information in this case study is for teaching purposes and I do not guarantee its accuracy.

Table 1: Properties included in the Boston Landing development

Address	Land use	Date opened
40 Guest St	Boston Celtics Practice Facility and Lab Space	2017
60 Guest St	Office/Lab Building	Future
80 Guest St	Warrior Ice Arena and Office/Lab Building	2016
100 Guest St	New Balance Athletics Inc. World Headquarters	2013
125 Guest St	Lantera Residential	2018
180 Guest St	Hotel	Future

In connection with the development, New Balance Athletics also funded the planning and construction of the $20 million Boston Landing commuter rail station located adjacent to the site. The station opened in 2017.

Figure 1 shows the locations of the properties and the commuter rail station.

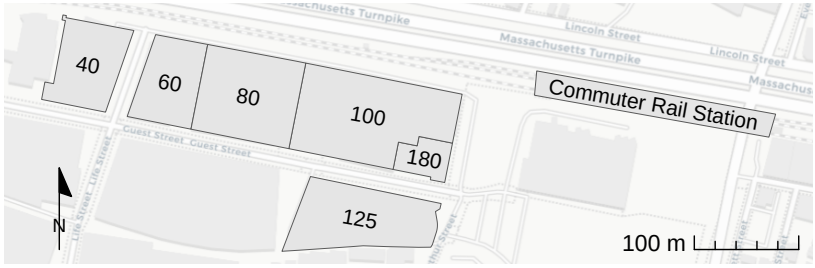

Figure 1: Boston Landing development and adjacent commuter rail station. Basemap by CartoDB — Map data © OpenStreetMap contributors

Transitshed area

The development of the Boston Landing commuter rail station substantially expanded the size of the transitshed for the site during the weekday commute periods. Prior to the station opening, the area of the transitshed at 6pm on a weekday was about 6.3 square kilometers (Figure 2). After the station opened,

the area of the transitshed at that time was about 14.1 square kilometers (Figure 3).

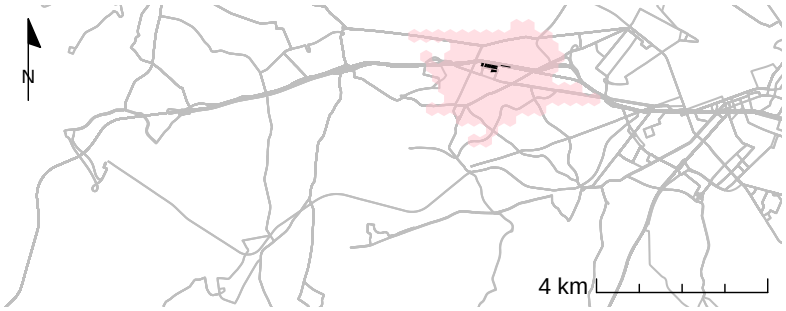

Figure 2: 30-minute transitshed from development site before the Boston landing Station opening

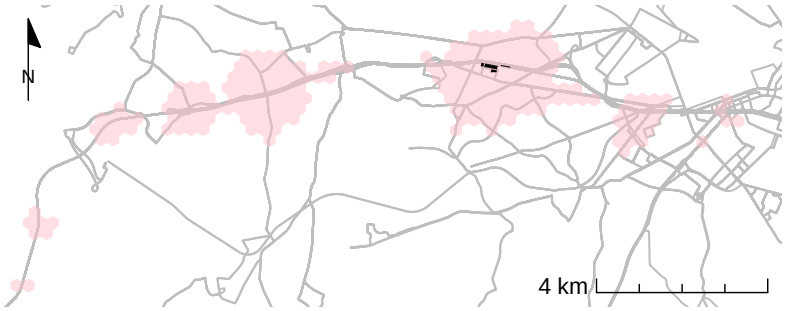

Figure 3: 30-minute transitshed from development site after the Boston landing Station opening

Accessibility of worker residences

Commercial developments benefit from being accessible from the residences of (potential) workers (and customers).

The number of workers[2] living within a thirty-minute transit commute of the site increased between 2012 and 2020 for three reasons:

1. The development itself includes residential space;
2. The development included a commuter rail station that expanded the transit shed to include existing residential developments that were not previously accessible by transit;
3. New residential developments opened in the surrounding area, which may have been prompted in part by proximity to the development and/or the associated commuter rail station.

[2] Employees at *any* U.S. firm, based on employer tax filings

Table 2: Changes in numbers of resident workers from 2012 to 2020

Area	2012	2020
Site	9	214
Pre-development transitshed	24 414	27 456
Post-development transitshed	44 020	47 610

Accessibility of employment

Commercial developments benefit from proximity to employment centers (for the benefits of agglomeration economies, for example) and residential developments benefit from proximity to employment.

The number of jobs within a thirty-minute transit commute of the site increased between 2012 and 2020 for three reasons:

1. The development itself includes commercial space;
2. The development included a commuter rail station that expanded the transit shed to include existing jobs that were not previously accessible by transit;
3. New jobs were created or relocated to the surrounding area, which may have been prompted in part by proximity to the development and/or the associated commuter rail station.

Table 3: Changes in numbers of jobs from 2012 to 2020

Area	2012	2020
Site	1 595	2 620
Pre-development transitshed	30 561	47 730
Post-development transitshed	127 250	150 533

Assessed property values

Table 4 shows the total assessed land and building values for the site in 2012 and 2020.

Table 4: Total assessed property values for site parcels

-	2012	2020
Land value	$8 416 500	$88 879 900
Building value	$10 303 400	$303 617 600
Total assessed value	$18 719 900	$392 497 500

Questions for discussion

1. Between 2012 and 2020, how much did the site's accessibility to workers increase?
2. How much of that increase can be attributed to each of the following sources?
    a. Residential development on-site?
    b. Off-site residential development?
    c. Expansion of the transitshed?
3. Over that same time period, how much did site's accessibility to jobs increase?
4. How much of that increase can be attributed to each of the following sources?
    a. Commercial development on-site?
    b. Off-site job creation/relocation?
    c. Expansion of the transitshed?
5. Approximately how much of the increase in the site's value might you attribute to increase in accessibility over that time period?
6. To what extent do you agree with the claim that accessibility (by all modes, to all possible destination types) is the primary driver of land value? What other factors could contribute to land value?