Sequence, Synergy, and Subsidy

Multi-Modal Train Stations as Anchors of Downtown Revitalization

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Downtown Multi-Modal Hubs: the Anti-Silos

- Downtown hubs are the most multi-modal projects of them all—typically 3-5 transit modes in the narrow sense.
- **And:** the pedestrian and bicycle environment is foundational—these places are people factories.
- **And:** there’s often a highway component as well—whether “only” bringing buses to the station or creating the street grid and project environment.
- These projects are uniquely important as urban development catalysts because of where they are—usually in an iconic location in need of a game-changing investment.
- They still provide transferrable lessons for newer transit environments.
- *These projects almost always require some form of public-private partnership with a developer—our focus today.*
Projects Share Common Challenges

The Three S’s:

1. **Sequence**: given four-dimensional complexity, who builds what when? To what extent do the public and private partners build each other’s facilities?

2. **Synergy**: What are the strategies—interim and permanent—for seamlessly connecting the transit modes to each other, the TOD, and the public realm?

3. **Subsidy**: at the end of the day, does the transit subsidize the development, does the development subsidize the transit, or is it a wash?

*Think of these as simultaneous equations—distinct but interwoven solutions.*
Three Projects to Compare

- Denver Union Station
- Boston South Station
- Boston North Station
Building Livable Communities with Transit

Denver Union Station

- Terminus of existing AMTRAK and Ski Train, to be augmented as hub of FasTracks Commuter Rail system (four future branches)
- Terminus of existing light rail system, to be enhanced through FasTracks
- Future Regional Bus Terminal to be built under 17th Street, using existing Interstate access ramp
- Terminus of Denver’s existing 16th Street Mall Shuttle; future terminus of parallel 18th Street Circulator
- The “hinge” between Lower Downtown (LoDo) and Central Platte Valley
- Less than 10-minute walk to Coors Field and Pepsi Center
- Private development partner selected in 2006 to design and build transit program, 19.5-acre joint development of station site
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Boston South Station

- Terminus of MBTA south commuter rail system and AMTRAK northeast corridor
- Red Line (heavy rail subway) and Silver Line (BRT subway) share a new “superstation”
- Intercity Bus Terminal built over rail yard
- The Big Dig Project:
  - buried I-93 alongside station
  - Created direct Interstate access ramp to bus terminal
  - Created Rose Kennedy Greenway on I-93 roof, terminating at South Station
  - Provided co-construction environment for Silver Line to South Boston Waterfront and Logan Airport
- Two major joint development projects in pipeline: air rights over rail yard and redevelopment of Postal Facility between rail yard and Fort Point Channel
Building Livable Communities with Transit

Boston South Station
**Boston North Station**

- Terminus of MBTA north commuter rail system (Purple Line)
- Orange Line (heavy rail subway) and Green Line (light rail subway) share a new "superstation"
- Boston Garden built over commuter rail track head and concourse
- The Big Dig Project:
  - buried I-93 in front of station, built iconic cable-stay bridge behind it
  - restored historic Bullfinch Triangle street grid and created multiple joint development parcels
  - Created Rose Kennedy Greenway on I-93 roof, terminating at North Station
- MBTA and Turnpike Authority ran consolidated RFP process; City zoned parcels for fast-track approval.
Building Livable Communities with Transit

Boston North Station
Sequence
Building Livable Communities with Transit

Denver Union Station

- A single transit project, to be built over ~5 years (2009-2013)
- A single developer for the transit property; same team controls key adjoining lands
- Key sequencing issue was to disentangle the transit and development components.
- Original Master Plan:
  - All major transit components below grade
  - Virtually all joint development was over-build
  - Everything rested on funding and building the transit program
- Revised Master Plan:
  - Light rail and passenger rail at grade
  - Only two of 8 development sites are over-builds
  - Development can be phased alongside transit work from 2009-2014
Three discrete events:
- Headhouse, train yard, and elevated bus terminal: 1980-1995
- Silver Line and Big Dig: 1995-2005
- Future expansion from 13 tracks to 19

Multiple developers over time

Sequencing issue #1: construction of tracks, platforms, air rights foundations, and bus terminal long before air rights joint development
- MBTA built existing bus platform
- Developer will build expansion platform

Sequencing issue #2: currently planned Postal Facility redevelopment must provide the surface envelope for future commuter rail track expansion
Boston North Station

- Two discrete events:
  - New Boston Garden, extension of train shed, creation of Causeway development parcels (1992-1996)
  - Green Line below grade, Superstation, Big Dig, creation of Bullfinch Triangle parcels, new train concourse (1999-2007)
- Multiple developers over time
- Sequencing issue #1: construction of Boston Garden and its underground garage long before Green Line project
  - MBTA built joint use garage
  - Empty Green Line tunnel segment built into garage
- Sequencing issue #2: Bullfinch Triangle sequence: underground superstation, then parcel above (“Avenir”), then other parcels
Synergy
The synergy issue: would moving the light rail 600 feet “off-site” fragment the program? No.

Multiple vertical movements eliminated

Make 17th Street a strong two-level axis between the LRT terminus, the rest of the station, the LoDo streetscape beyond
  - Both sides of the street lined with retail at grade
  - Underground bus station provides a weather-protected, moving-sidewalk connection

16th Street Mall Shuttle will pick up at the LRT platform
Boston South Station

- 25 million passengers a year
- Synergy challenge #1 (north-south): Bus terminal isolated from headhouse and Dewey Square; air rights development will make the connection
- Synergy challenge #2 (east-west): Postal Facility development will create need for movement connecting Dewey Square, headhouse, rail head, new development, and Fort Point Channel harbor walk
Boston North Station

- Connection between Green and Orange Lines:
  - best in MBTA system
  - a shared platform

- Connection between Green / Orange platform and the commuter rail station / Boston Garden:
  - distance very short
  - pedestrian and visual environment on Causeway Street awaits development

North side of Causeway Street a black wall awaiting development of two approved towers

South side of Causeway Street: Avenir, with street wall of retail, approaching completion

Entrance to Commuter Rail Isolated
Subsidy
• Only about 60% of the cost of the transit program is publicly funded.

• Nearly 40% comes from the joint development:
  - The developer’s cash payments for each of the six development sites
  - A tax increment finance district and a “metro” district; anticipated revenue streams will support a large bond issue

• One of the largest proposed "transit TIF’s" in the US

Denver Union Station

Union Station Neighborhood Corp. / AECOM / SOM
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Boston South Station

Three developers, three deals:

- Historic headhouse: Beacon Properties (now US Equity) paid for joint-use facilities and still provides O&M—development supporting transit

- Air rights mega-project:
  - MBTA paid for first bus terminal—“free” footings, air rights deck for developer
  - With passage of time, air rights have become much more valuable; developer will build $40 million bus expansion

- Future Postal Facility redevelopment:
  - MBTA needs to acquire ROW for future track expansion
  - Development expected to create passenger amenities

TUDC LLC / SUS LLC
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Boston North Station

Two developers, two deals:

- Commuter rail station / Boston Garden:
  - MBTA transferred air rights to City and developer
  - MBTA financed joint-use, market-rate garage that is used by hospitals and Garden events
  - Delaware North funded, built, and maintains the new train concourse (2007)

- Avenir residential / retail joint development project (on parcel containing Superstation):
  - MBTA built caisson foundations for project
  - Developer builds two entrances into station
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“Some Assembly Required”

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