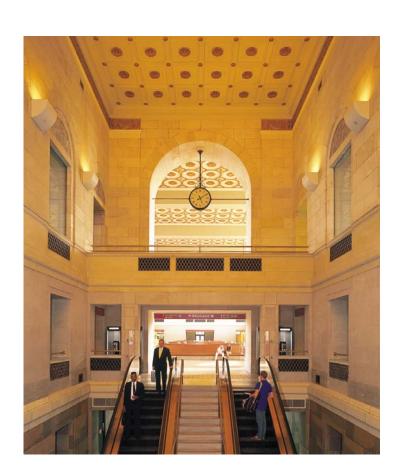


New Haven Union Station Transit Oriented Development Study February 2008



Section I. Executive Summary

In this study we have explored alternative ways to meet the growing ridership demand for additional parking at Union Station while enhancing near and long term opportunities to foster new development in and adjacent to the Station. As ridership grows, the value and likelihood of adjacent development increases, and as these adjacent developments advance, the use of rail service will increase. Setting out appropriate planning directions at the Station now can spur this dynamic and fulfill the aspiration for smart growth in New Haven and the State.

The New Haven market is experiencing some of the highest levels of development in the City's history, with billions of dollars in public and private investments scheduled to come online within the next five years. This unprecedented era of development can create an optimal time to leverage this activity with meaningful transit-oriented development of statewide significance.

New Haven's Union Station is the principal hub in Connecticut for passenger rail services. It is a multi-modal transportation center providing connections to bus, shuttle, taxi, and rental car as well as commuter parking facilities. It is the regional center of rail operations and maintenance for the Metro North New Haven Line and Amtrak, and provides a significant opportunity for Transit Oriented Development (TOD).

TOD's, by definition, involve the development of residential, commercial and employment centers within walking distance of public transportation facilities including rail and rapid transit. The Union Station terminal is a fine example of dignified and expansive early twentieth century architecture, a hierarchy of expression considered fitting by those who built rail service. These grand buildings signify the importance and value of rail travel, and at their best, play an important role as gateways to their communities. Grand Central in New York and Union Station in Washington are monumental examples of these ideas, and also represent successful TOD projects which include significant new dining and shopping alternatives and engaging public spaces. New Haven's station was conceived to fill such a role as well. Indeed the buildings architect, Cass Gilbert, proposed a plan that would have created a broad boulevard connecting the terminal to the commercial center of downtown New Haven. The idea expressed in this vision, that the Station can be and should be at the heart of the life of the city, has guided our considerations and recommendations for creating a Transit Oriented Development.

Parking demand at Union Station today exceeds available supply. The existing garage and surface lot often fill to capacity and drivers park at offsite locations and shuttle back to the station. With continued ridership growth, the City will have insufficient supply to meet future demand without new garage construction.

The Conceptual Design envisioned and described in detail in this report will accommodate current and proposed ridership demand, will re-energize Union Station through new retail opportunities, will create private development opportunities and will enhance the area around Union Station. The full build-out program consists of the following components:

- New South Garage. A new 667 space garage will be constructed on the south side of Union Station with a bridge from the second level of the garage to deliver riders into the station at the second level. Once inside the station, patrons will descend on new escalators onto the main concourse level.
- **New North Garage**. A new 530 space garage will be constructed just north of the existing garage and will be connected to that garage. The new garage will be set back from Union Avenue by about 50 feet to leave area for the development of a liner building.
- New Retail in Existing Garage. The first bay of the garage along Union Avenue will be eliminated (loss of 40 spaces) and 14,000 square feet f of new retail will be built. The liner building concept is based on similar, successful projects in this and similar markets.
- **New Liner Building on North Garage**. A new 51,000 square feet building lining the garage with retail on the ground floor on Union Avenue and five levels of office above.
- **New Development Parcel.** A new 15-story residential tower will be constructed over five levels of parking. A new 45,000 square feet building just north of the tower with retail on the ground floor on Union Avenue and five levels of office above.

Several program elements could be either office or residential depending on market demand at the time of planning and design. Today's residential rental and retail markets are continuing to experience great success, with steadily increasing rental and occupancy rates, proving the most prospects for new development in downtown New Haven. Opportunities for new commercial development remain a viable option as the commercial market maintains its stable pace; however, the demand for new bio-medical space remains undetermined.

Markets with the least flexibility for new development appear to be the residential condominium and hotel markets. The slowdown of the condominium sales market throughout the region, paired with the influx of recently completed and future projects to the market, hinders the opportunities for new condominium developments. Similarly, the hotel market's low occupancy rates and slowly increasing daily rates, coupled with the delivery of hundreds of new units downtown and in the greater region, do not create an optimistic outlook for new hotel developments.

A phasing plan has been developed to meet immediate and future ridership parking demands, and to build-out the full site over time. The phasing plan is envisioned as follows:

- Phase 1 includes the New South Garage and the re-merchandising and renovation of Union Station. This garage would add 667 new spaces and could be completed by early 2011. This would provide supply in excess of demand and would eliminate the need for offsite parking. Union Station's program could be completed by the end of 2011, thereby creating a destination and bringing excitement to the area.
- **Phase 2** includes the New North Garage and the build-out of new retail on the ground floor of the existing garage. This garage would add 530 new spaces and could be completed by early 2013, again providing sufficient supply to meet the projected demand in that year from ridership and demand from the new restaurants and activity in Union Station. New retail fronting Union

Avenue in the existing garage could be completed early 2012, further increasing pedestrian activity in the area.

• Phase 3 includes the build-out of the new development parcel as described above. There could be sub-phases within Phase 3, as market conditions require. This opportunity becomes more attractive to developers as Union Station has become a destination, Union Avenue has pedestrian activity and there are amenities and services on site.

Costs for each program element were estimated based on today's construction costs. Revenues for each program element were based on today's market rents for comparable properties. It was assumed that a Transportation Entity would be established to develop, own and operate all program elements in Phases 1 and 2 (see Governance in Section IX), and the costs, revenue and internal rate of return (IRR) for these phases were determined to evaluate the feasibility of this development. Results showed that Phase 1 costs approximately \$44.3 Million and Phase 2 costs \$24.8 Million; together, at \$69.1 Million. Based on the Net Operating Income (NOI) expected from these program elements, and including the existing NOI that the existing garage generates (before payments to Connecticut Department of Transportation), the IRR for Phase 1 is 11.0% and Phase 2 is 8.2%.

It was assumed that Phase 3 would be developed, owned and operated by a private developer. Results showed that Phase 3 costs approximately \$141Million and that the NOI is negative at (-7.8%). Incentives or subsidies would be required to make a profit on this development venture due to the costs of high rise construction and the current market residential rental rates.

There are basically three main models for governing large, complex public-private projects: private developer, internal agency management, separate special purpose entity. A viable solution for this TOD is to create a single-purpose entity to develop, own and operate the site which would be accountable and responsible for the financial and operational performance of the asset over the short and long term.

In summary, there is a tremendous opportunity at Union Station to create a vibrant, exciting TOD while meeting ridership existing and future parking demands. This report will describe in detail the market conditions, a conceptual design approach and program, the financial feasibility and how it could be implemented through governance structures.

Phase 3:

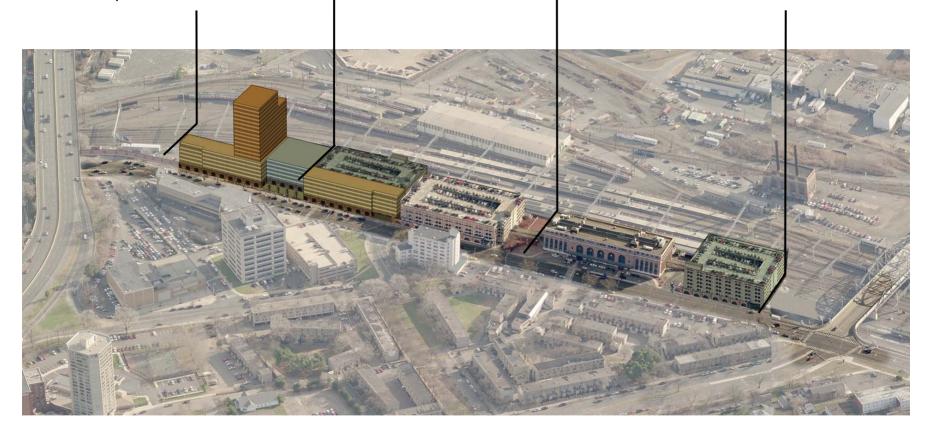
- New development garage 500 spaces
- New retail 20,000sf
- New office 90,000sf
- New loft apartments 138 units

Phase 2:

- New North Garage
 530 spaces
- Develop retail frontage at existing garage 14,000sf

Phase 1:

- New South Garage 667 spaces
- Pedestrian Bridge to Union Station
- Multi-modal connections at grade
- Expand mixed use development of Union Station 50,000sf



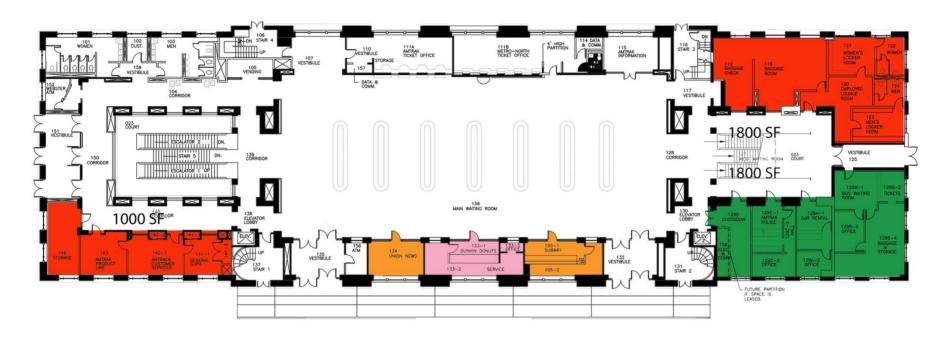








Union Station Floor Plans – 1st Floor



FIRST FLOOR PLAN



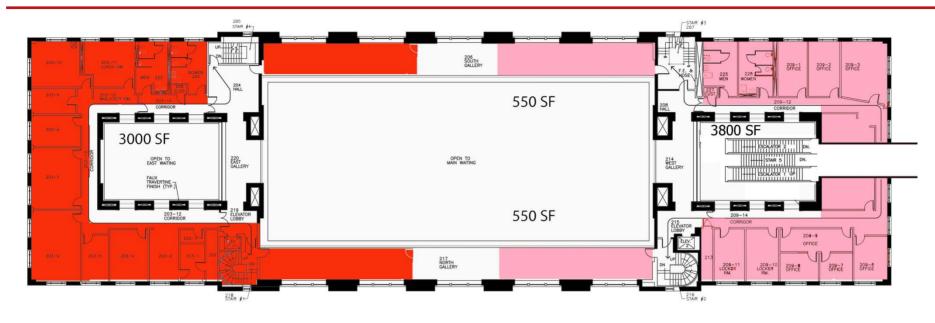








Union Station Floor Plans – 2nd Floor



SECOND FLOOR PLAN



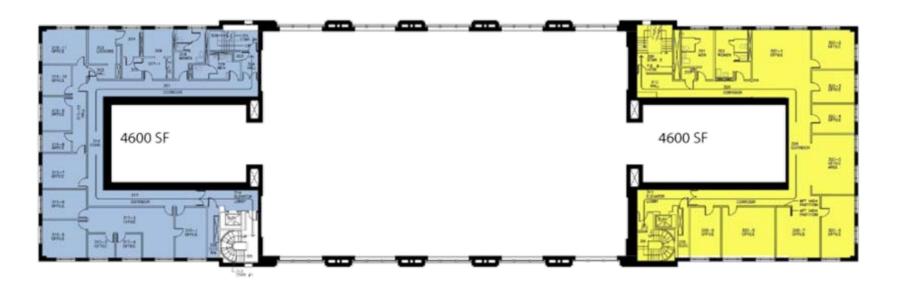








Union Station Floor Plans – 3rd Floor



THIRD FLOOR PLAN











Union Station Floor Plans – 4th Floor

26,000 SF



FOURTH FLOOR PLAN











Schedule

Planning, Design, & Approvals and Construction Schedule by Phase

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

PHASE 1

Build South Garage

Renovate Union Station

PHASE 2

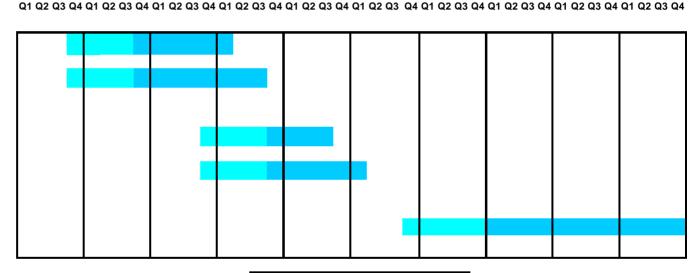
Build North Garage

Build retail in Existing Garage

PHASE 3

Build Tower, Parking, & New

Buildings





* Construction







