TRANSPORTATION SERVICES FINDINGS

TRANSIT FINDINGS & PROGRAM REPORT

This report is one element in the documentation of the study to revitalize Union Station in downtown Springfield, MA. Other documents address the evaluation of the station and baggage building and the potential economic development effects of reactivating this historic structure.

This report presents the findings from the stakeholder interviews conducted as part of the Union Station Intermodal Transportation Facility study. The findings describe current operations and projected future changes to service and facility requirements. The overall transit vision and space/operational program estimate is presented.

This report is organized as follows. This first chapter of the report presents a summary of the findings organized by their implications for the Union Station design. The individual sections present the findings by each travel mode, starting with the intercity rail and progressing through intercity bus, and local bus modes.

The subsequent chapter describes the transit vision for the building; and the space requirements in detail, including the relationship among the modes and their potential layout. Estimates of the transit-supported retail components will be included.

COMMON FINDINGS

- All stakeholders are interested in the project and want to be a part.
- Passenger providers want to be together but separate
    - Passengers should be able to move easily from one mode to the next
    - Each mode wants their own passenger waiting area
    - Each mode prefers an individual entrance
    - Each mode has different operating hours, up to 20 hours/day
    - Vehicle areas should be separated
- Freight railroads are experiencing an on-going expansion in demand
    - Capacity expansion must be preserved
    - Passenger platforms must not interfere with freight operations
    - Passengers should not cross the tracks at grade
- Union Station is located in a key area of downtown
    - The site is surrounded by parcels that could be redeveloped
    - Transit services could generate 8,300 daily transit boardings, or 16,600 daily transit trips (boardings + alightings)

TRANSIT SERVICES

All existing transit modes (intercity train, intercity bus, local bus) are anticipated to have all of their Springfield services operating through Union Station. In the future, an additional mode of travel, commuter rail, is anticipated to be added.

- Amtrak provides 18 daily trains (nine round trips) currently to Springfield; Springfield is the fifth most active train station in Massachusetts out of 11 total Amtrak stations
- Additional conventional Amtrak services have been planned as part of a phased implementation of commuter rail service to New Haven, CT
- Initial studies are being conducted on providing more train service to the north along the I-91 "Knowledge Corridor"
- Peter Pan intercity bus service has its headquarters in Springfield, diagonally across from Union Station.
- The Pioneer Valley Transit Authority operates all 18 of its Springfield bus routes through the same Peter Pan terminal

INTERCITY PASSENGER RAIL

SUMMARY OF INITIAL FINDINGS

- Amtrak desires to have a quick and convenient access to all passenger modes.
- Relocation of passenger activity to Union Station is a concern because of the potential backtracking that some of their passengers would encounter going through the passenger tunnel unless direct access was provided to each platform from the tunnel.
- Amtrak cannot afford to pay any more expenses for the station than it currently incurs (utilities and taxes).
- No parking is currently provided, but 85-105 spaces could be required; for the future commuter rail, an estimated 90-115 spaces could be warranted.

EXISTING AMTRAK TERMINAL

Connection to Union Station

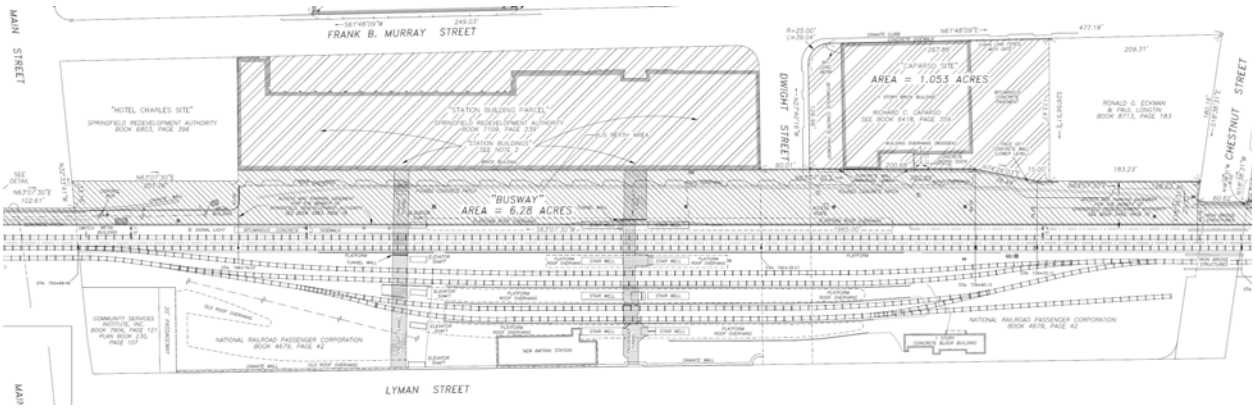
Springfield's Union Station is located at 55 Frank B. Murray Street, and is owned by the Springfield Redevelopment Authority. According to the 2008 Property Card, it was built in 1915 and has 184,850 square feet. It is adjacent to the CSX track (old Boston & Albany) that connects Springfield with Boston on the east and Albany, NY on the west. It is just northeast of a wye that connects to Amtrak's Springfield line south to New Haven, CT.

The existing Amtrak terminal is a separate building from Springfield's Union Station. They are located on opposite sides of the railroad viaduct that crosses Columbus, Main, Dwight, and Chestnut Streets. Two tunnels extend at street level from Union Station under the elevated tracks to Lyman Street. The eastern/northernmost tunnel previously was the main passenger tunnel that went from the main lobby, under the tracks, to Lyman Street. The tunnel width appears to vary from 15 feet to nearly 30 feet, with most portions around 28 feet wide. Four pairs of stairwells connected this tunnel with four platforms at track level.

This tunnel is blocked to through travel. The eastern/southernmost end, next to Lyman Street, is still open as the ground-level entrance to Amtrak's head house. One stairwell

and an elevator are open to Amtrak's passenger lobby at track level. Behind this entrance lobby space, Amtrak's Police use about 550 square feet of the tunnel for their offices.

A second tunnel connects Union Station to Lyman Street. This second tunnel is located west/south of the main passenger tunnel. Originally, this tunnel was the baggage tunnel from Union Station. It is a continuous 15 feet wide, and has five elevator shafts to the track-level platforms. The tunnel and shafts are now closed. The 2002 survey, below, prepared for a previous Union Station study[1] that envisioned a busway at track level, best illustrates the locations of the tracks, platforms, tunnels, the "New Amtrak Station", and the old Union "Station Buildings". According to this survey, the tunnels are part of the Union Station building, and are owned by the Springfield Redevelopment Authority.



Amtrak Head House

Amtrak's terminal is located at 66 Lyman Street and is open from 5 AM to 11 PM seven days per week. Ticketing and baggage check are provided until 9:30 PM. It was built in 1950, and according to the 2008 Property Card, it has 8,446 square feet. According to separate documents from Amtrak, the building is half this size, approximately 4,012 square feet. The property card appears to include a separate storage building as part of its information. Amtrak owns this building and does not pay any rent.

The bottom level of the head house includes the entrance lobby and space for a small vendor (previously occupied by a donut shop). The upper (track) level consists of the ticketing and baggage check facilities and the boarding lounge. The lounge includes three ticket counters and approximately 50 seats.

Amtrak also uses some trailers at track level. A small crew base (approximately 725 square feet) is located in temporary buildings alongside the tracks.

[1] Goody, Clancy and Associates. Design Development Submission, February 14, 2003

There are three pairs of tracks (six total). According to Amtrak, they use all six tracks at various times. The two tracks closes to the Union Station building are the mainline freight tracks, while the other two pairs are sidings located closer to Amtrak's head house.

Four platforms are provided – one adjacent to the head house that serves a single track; two platforms located between each pair of tracks that serve tracks on either side; and a fourth platform located adjacent to Union Station that serves a single track. The platforms are raised above the top-of-rail, but are generally in poor condition. Closed stairwells are in place for each platform down to the closed passenger passageway and closed stairwells and elevator towers are in place to the separate baggage tunnel. Passengers currently cross the tracks at grade to reach the appropriate platform location. Canopies are provided along most of the length of the platforms.

There are no dedicated parking spaces for Amtrak. Parking is available at several surface lots and on street.

EXISTING SERVICE AND RIDERSHIP LEVELS

Amtrak operates three routes through Springfield. The *Regional* operates primarily as a connecting train between Springfield and New Haven, CT. Transfers are provided in New Haven to trains to New York and Washington, DC. A total of five southbound and five northbound trains operate each weekday. One train in each direction provides direct service to Washington, DC without requiring a transfer. Approximately two-thirds of the station ridership is on *Regional* trains.

The *Vermonter* operates one weekday train in each direction between St. Albans, VT and Washington, DC. Springfield is an intermediate stop on these trains. The *Vermonter* accounts for approximately 20 percent of the station ridership.

Unlike the other routes, the *Lake Shore Limited* travels east/west through Springfield. It operates one train in each direction from South Station in Boston to Albany-Rensselaer, NY. Springfield is an intermediate stop on these trains. The *Lake Shore Limited* has the lowest ridership of the three routes and accounts for less than 15 percent of the ridership.

Springfield is the fifth most active train station in Massachusetts (the other four are in Boston). In 2006, Springfield had a combined total of 112,465 boardings and alightings on the routes serving the station. This level is an estimated 271 daily boardings in the peak month and an estimated 41 boardings in the peak hour.

There is no information on transfer activity between Amtrak and the intercity bus passengers or the Pioneer Valley Transit Authority. While the terminals are only about 1,100 feet apart in walking distance (about the same as the distance from the Sheraton lobby to the Terminal B lobby at Bradley Airport), the nature of the walk is such that few passengers are estimated to transfer between modes. Based upon a study for the I-95 Coalition[2], roughly 20 percent of the intercity rail passengers could arrive/depart by public transit, if Springfield was similar to other locations.

Amtrak recommends that passengers arrive 30 minutes prior to departure.

FUTURE SERVICE AND RIDERSHIP ESTIMATES

Commuter Rail Service

The states of Connecticut and Massachusetts are studying the implementation of commuter rail service from New Haven, CT to Springfield's Union Station. 2005 New Haven-Hartford-Springfield commuter rail study[3] is examining the 62-mile corridor, owned by Amtrak. The start up service was recommended to be a 30-minute frequency during peak periods on weekdays. Service would operate in both directions during both morning and evening peaks. Commuter rail service times would be coordinated with Amtrak service on the corridor. A total of 15 trips in each direction were assumed between Springfield and New Haven; 7 in each direction are new commuter rail trips and 8 are adjusted existing Amtrak trips.

Total end-to-end travel time was estimated to be 90 minutes. Nine existing stations and three new stations were assumed to be served. No new parking spaces were assumed to be constructed at Union Station.

The NHHS study estimated that the total daily ridership at Springfield would be 169 weekday boardings and 169 weekday alightings. Subsequent to the initial ridership estimate, the study Steering Committee requested the development of a maximum-ridership alternative of 5,000 daily riders on the entire line. At this ridership level, the Springfield station was estimated to have an additional 73 daily boardings and alightings, for a total of 242 daily boardings and alightings.

DESIGN/SPACE CONSIDERATIONS

Station/Platform Location

According to the commuter rail study, the existing four platforms are adequate for the current and projected level of trains and passengers. While Amtrak officials indicated they use all six tracks for passenger boarding, observations indicate that the four siding tracks are used for the majority of passenger trains. According to the train schedules, no more

[2] TransCore, Inc. and Matthew Coogan. Intermodal Passenger Travel Information System Phase 2A Final Report. December 2003. http://66.167.232.132/pm/projectmanagement/Upfiles/reports/full194.pdf

[3] Wilbur Smith Associates. New Haven-Hartford-Springfield Commuter Rail Implementation Study. June 2005.

than two trains are scheduled to be in Union Station during any one hour period throughout the day.

One outstanding question is whether any improvements to Amtrak facilities, or the introduction of new commuter rail service, will require modification of the boarding platforms. The Americans with Disabilities Act (ADA) requires that accommodations be made to allow passengers in wheelchairs to use passenger trains. In many station locations, this accommodation has been accomplished through the use of movable platform lifts, or the construction of mini high platforms. A platform height of approximately four feet above the top of rail is needed to bring the platform height in line with the floor height of most passenger cars.

The US Department of Transportation (USDOT) Office of the Secretary is promulgating more stringent requirements, particularly along the Northeast Corridor. USDOT considers the Springfield line and Union Station to be located along the Northeast Corridor, primarily because Amtrak owns both corridors. The proposed regulations, which appear to be enforced in actual practice, are contained in a Notice of Proposed Rulemaking (NPRM), Docket ID OST-2006-23985. This NRPM was issued in 2006 and is still "pending". As currently proposed, a new, full-length, high-level platform will be required to permit level boarding with the passenger cars. To limit the gap between the high-level platform and the car, the platform must be located on a tangent track. To avoid conflicts with wider freight trains, the raised platform may need to be constructed on a gauntlet track adjacent to the main freight line. This requirement will add to cost and may require additional right-of-way. The new platform should be more secure, with access to the platform limited to the station so that passengers cannot bypass the ticketing lobby.

The implications of these regulations are considerable at Union Station. If fully enforced, four raised platforms will need to be constructed, each potentially 900+ feet long. The passenger tunnel, stairwells, and new elevators will need to be reconstructed between each pair of tracks to permit wheelchair-bound passengers to access all platforms. With raised platforms, passengers will no longer be able to cross the tracks at grade to reach the individual platforms. Raised platforms on the two tracks closest to Union Station could be an issue with the freight railroads since these are through freight tracks and the raised platforms could interfere with wide freight loads. The other platforms are already on gauntlet tracks, so interference with freight should not be an issue. Final resolution of these issues will be dependent upon negotiations among the USDOT, Federal Railroad Administration, Federal Transit Administration, Amtrak, and the freight railroads.

Sizing Considerations

The existing ticketing and boarding lounge space is considered to be adequate for the existing passenger volumes, with space to spare for additional commuter rail passengers. No parking is currently provided for Amtrak passengers. Based upon industry guidelines, approximately 100 spaces could be warranted for current service, with another 100 spaces for the commuter rail service.

The crew base and Amtrak police facilities will need to be maintained. This space can either be part of the new station or located close by as is the current arrangement. The existing facilities are adequately sized.

Track Implications

This current study does not foresee that any track improvements are required at the Springfield Union Station. Currently, there are four side tracks and two through freight tracks. The two freight tracks appear to only be used in the rare instance that the passenger sidings are blocked. No additional passenger sidings are warranted for the commuter rail service based upon the findings of that study. This conclusion assumes that any ADA platform improvements will not interfere with freight movements on the two through tracks.

CSX, the freight railroad company that owns and operates the tracks where the boarding platforms are located, has indicated that they do not want to have passengers crossing the tracks at grade. While they dislike the current Amtrak operation that does have passengers crossing at grade, they are most opposed to previous Union Station plans that envisioned passengers would exit Union Station at track level and walk across the tracks to their boarding platform. This movement would have all passengers crossing the active through freight tracks.

CSX also opposes having buses operate at track level, as envisioned in some of the earlier Union Station studies. CSX views this as compromising their right-of-way, and potentially creating a safety hazard by having passenger vehicles operating so close to freight trains.

INTERCITY BUS SERVICES

SUMMARY OF INITIAL FINDINGS

- Peter Pan is willing to move into a renovated Union Station if it makes financial sense for the company.
- Peter Pan desires to control the intercity bus space, including operations, signage, and other elements; a separate passenger waiting area is also desired.
- Security will be an issue if high school students board at Union Station.
- Their existing terminal works well for them.
- A minimal amount of drop-off parking is provided, and about 90 daily spaces are available behind the terminal for $7/day; this supply is adequate for projected demand at the current terminal.

EXISTING PETER PICKNELLY TERMINAL

Passenger Services

The existing Peter L. Picknelly Transportation Center is located at 1776 Main Street, and is open from 5:30 AM to 9:15 PM weekdays and 7:15 AM to 9:15 PM weekends. According to the 2008 property card, the original building was constructed in 1969 and is 26,301 square feet. A 10,500 square foot addition was built in 1986. The total square footage is 36,801 square feet. Peter Pan separately had an architect examine their existing facility. According to that report, the current building has 34,111 square feet, consisting of 25,150 on the first floor and 8,961 on the second floor.

The terminal has 17 bus bays or gates on the loading side, with another 4 bus bays on street adjacent to the building. Other than the on-street bays, the bus bays are head-in bays, which requires buses to back out upon departure. The site is 3 acres.

Four intercity companies operate at the facility: Peter Pan, Bonanza (a Peter Pan subsidiary), Greyhound, and Vermont Transit. Peter Pan charges the other companies as a percentage of their sales. PVTA has been a tenant for about 10 years; prior to that time they loaded their buses on street surrounding Tower Square. The surrounding merchants had concerns, which led to relocating PVTA to the Picknelly terminal. PVTA pays a flat amount to use the gates and to have a dispatch office. Until a few months ago,

PVTA also had a customer service center near the entrance. PVTA relocated its customer service center to a more customer friendly and visible location on Main Street.

Separate waiting areas are provided for the intercity buses and PVTA. Most PVTA riders stay outside at the boarding platforms or in the gate concourse hallway. There are approximately 34 seats in the intercity bus waiting area and no seats at the concourse or interior boarding area.

Retail Space

Besides the bus activity, there are three tenant restaurants – McDonalds (1839 square feet), Dunkin Donuts (619 square feet), and a Subway is being added (777 square feet). The Subway will be located where PVTA previously had a customer service center. No seating is provided in the restaurants, but standing tables are provided. In addition to the restaurants, a small sundries shop (492 square feet) is also located in the building. A total of 3727 square feet is devoted to these transit-supported retail activities. These tenants provide a strong financial return. They are the right mix and size for the current level of passenger activity. There are 5 vending machines in the boarding concourse and a cash machine in the lobby.

Peter Pan is undertaking a $400,000 renovation project in 2008. This project will include upgrading the HVAC, restrooms, waiting areas, and front façade, and adding the Subway.

Parking

There are 92 spaces on surface lot between Peter Pan's garage and the terminal, approximately 14 on the east side of terminal (for employees) and 21 on the west side, for a total of 126 spaces. The west side parking consists of 13 15-minute spaces and 8 reserved spaces. Peter Pan officials consider this amount of parking is about right for current passenger activity, but they may need a little more for growth. The current parking rates for the 90-space lot is a maximum of $7 per day, or $70 per month. No utilization information was provided, but based upon observations; the lot appears to be about two-thirds full.

Peter Picknelly also owns the parking garage across from Union Station at 30 Murray Street. This two-level facility has about 220 spaces and was built in 1951. The top level is currently closed, but has been used in the past as a storage facility for vehicles. Current parking rates are $0.50 per hour, with a monthly rate of $45. According to Picknelly officials, this garage is in poor condition. No utilization information was provided, but from observations, it appears to be lightly used.

Peter Pan Headquarters Space

The Picknelly Terminal is also the headquarters for Peter Pan Bus Lines and its subsidiaries. Office space is provided on two levels of the building. According to a 2008 architectural study prepared for Peter Pan, the headquarters space needs separate from the passenger activity is 15,902 square feet. This area does not include any space for passenger activity or the transit-supported retail.

RIDERSHIP LEVELS

According to Peter Pan officials, the existing Picknelly Terminal is the most used building in Springfield. Approximately 11,000 people per day go through the building, with 16,000 people per day during peak seasons. The majority of these users are PVTA users, with intercity passengers accounting for approximately 3,000 daily riders (less than 30 percent). No specific ridership counts are available.

Peak times for riders are Friday afternoons, Saturdays from 6 AM to 1 PM, and Sundays from 3 PM to 8 PM.

Intercity passengers are in the building for 30-45 minutes; Peter Pan encourages riders to arrive 30 minutes prior to departure.

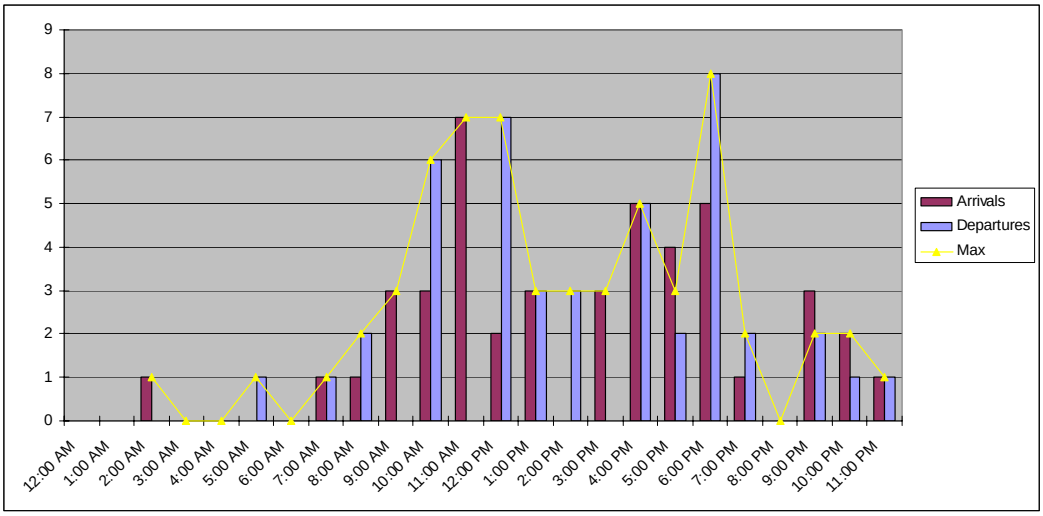
There is some transfer activity between the intercity carriers and PVTA, but there are no specific counts. Based upon the study for the I-95 Corridor Coalition, roughly 10 percent of the intercity bus passengers could arrive/depart by public transit, if Springfield is similar to other locations.

BUS ACTIVITY

Peter Pan regularly uses 9 of the 17 gates. This works well for the current passenger and bus levels. For the future, they estimate 10-12 gates would be required, but fewer gates would be needed if they were shared with PVTA. Intercity buses generally stay in the bays for 30 minutes or an hour at most. If they have more than an hour layover, the bus moves to a layover bay by the fence.

An analysis of the current (October 2007) bus schedules was made from *Russell's Guide* data. Based upon that information, the average weekday has 45 bus arrivals and 44 bus departures, with the majority of this activity Peter Pan or Bonanza buses. Vermont Transit has 5 arrivals and 3 departures and Greyhound has 3 arrivals and 4 departures.

The chart below shows arrival and departure activity by hour of the day. Also shown is the peak accumulation of buses, defined as buses arriving/departing within a 30-minute window.



Peak bus accumulation is during the 6 PM hour, when 8 buses are at the terminal at the same time. A smaller peak accumulation of 7 buses occurs twice during the 11 AM and 12 noon hours. Little bus activity occurs between midnight and 7 AM, with only 1 arrival and 1 departure during these hours.

Based upon the published schedules, for those buses with a layover, the average layover time is 18 minutes, but this is an estimated amount since the schedules do not show all layover information.

DESIGN/SPACE CONSIDERATIONS

The existing building space provides the appropriate sized space for their needs. Office and dispatching space is provided in addition to the retail tenants. No operator facilities are required since the main garage is adjacent to the terminal.

Peter Pan conducted an independent assessment of their space needs. According to their calculations, they need approximately 9,400 square feet for transportation purposes; 4,500 square feet for miscellaneous purposes, primarily transit-supported retail; and 16,000 square feet for the headquarters activity. Should Peter Pan relocate to Union Station, the headquarters activity could move or remain in the current location independent of whether the passenger activity moves.

PIONEER VALLEY TRANSIT AUTHORITY

SUMMARY OF FINDINGS

- The current Springfield Bus Terminal at the Picknelly building is inadequate for PVTA's operation. Major concerns are:
    - Passenger platform space
    - Head-in bus bays
- Additional amenities are desired for waiting passengers, including real-time bus information
- An estimated 14-15 bus bays should be provided within a new terminal to allow room for growth
- Space should be maintained for a dispatching office and operator restrooms
- No parking is currently provided, but between 45-70 spaces could be required

SPRINGFIELD BUS TERMINAL

PVTA calls the Picknelly Terminal the Springfield Bus Terminal (SBT). PVTA moved its central hub to this location from Tower Square in 1997 in response to adjacent business owner complaints. PVTA has a lease with Peter Pan Bus Lines to operate out of the terminal. Lease payments consist of two parts – the first part is for the lease of the bus gates and waiting area at an annual rent of $73,800; the second part is an additional rent of $40,000 for after hours dispatching, marketing, and additional security. The additional rent became effective in 2001. The total lease amount starting in 2001 is $113,800. While the lease includes an escalator clause for the rent, the amount has remained unchanged since it was first established, other than the institution of the "additional rent".

OPERATIONS / RIDERSHIP LEVELS

PVTA has a total of 44 routes in the system, but only 18 peak routes go through the Springfield Bus Terminal (SBT). The North Hampton and UMass routes do not come through. Frequency of service ranges from 15 minutes to 2 hours, with some routes only offering peak service. There are 555 daily arrivals 551 departures.

PVTA estimates that their ridership at the terminal ranges from 3,000 to 6,000 per day; Peter Pan had estimated PVTA riders at 8,000 to 11,000 per day. PVTA appears to count transferring riders once at the terminal while Peter Pan is counting them twice. The maximum number of riders waiting at one time is estimated to be 170 on weekdays (14 passengers per 12 bays); 125 on Saturdays (11.5 passengers per 11 bays); and 60 on Sundays (10 passengers per 6 bays). An estimated 1.6 million annual boardings occur at

the terminal. Ridership trends have been flat or declining until the recent surge in fuel prices.

There is some transfer activity between the intercity carriers and PVTA. Based upon similar locations, PVTA could account for 10 percent of the intercity bus passenger activity.

BUS ACTIVITY

PVTA currently uses 12 bus bays, which consist of 8 head-in bays at the SBT and 4 on-street bus bays on Liberty Street. On Saturdays, maximum bay usage is 11 bays; on Sundays, the maximum bay usage is 6 bays. Buses do not have assigned bays; they pull up to whichever bay is available; the dispatcher announces the bay assignment. There is some effort at a pulse, but the schedules are not strictly coordinated.

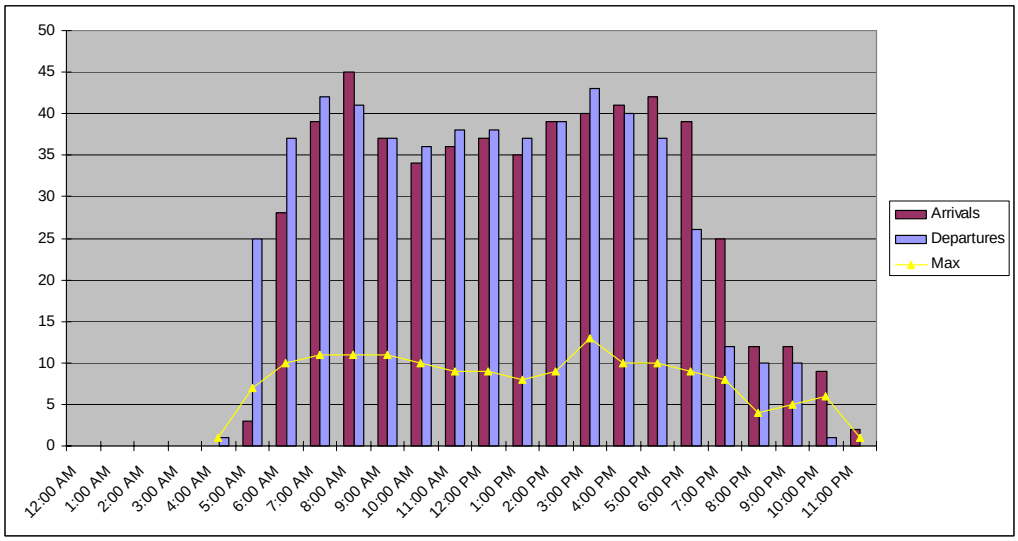
Past estimates of future demand have indicated a need for 6 additional bays for the following purposes:

- 1 bay for passenger drop offs for buses going out of service
- 1 bay for buses out of service due to mechanical or other reasons
- 1 spare bay
- 3 bays for future service expansions

At a new facility, the bus bays should be pull-through or some other arrangement that does not require the bus to back up.

Bus sizes are 30, 35, and 40 foot buses; most of the fleet is the larger buses. No articulated buses are in the fleet, but some bays should be designed to accommodate them in any new facility. Buses have an approximate 5 minute layover, while the operator takes a break at the SBT.

The chart below shows arrival and departure activity by hour of the day. Also shown is the peak accumulation of buses, defined as buses arriving/departing within a 5-minute window.



Peak bus accumulation occurs at 3 PM, when 13 buses are at the terminal at the same time. From 6 AM to 7 PM peak bus accumulation is in a narrow range between 8 and 13 buses. The maximum bus accumulation during most peak hours is 10-11 buses, with a 9-bus accumulation during most midday hours. Little bus activity occurs between 11 PM and 5 AM, with only 2 arrivals and 1 departure during these hours.

Access to the SBT is along Main Street, with buses traveling in both directions, that is, to and from downtown.

DESIGN/SPACE CONSIDERATIONS

In light of the current bus activity, 11-12 bus bays will accommodate the peak bus arrivals; the one exception at 3 PM can be modified to eliminate the need to add one bay for just one five-minute period. Based upon previous planning work, another 3 bus bays are needed for potential expansion, resulting in 14-15 bus bays. The remaining bus bays requirement previously identified does not need to occur at the principal loading platform; buses out of service, for example, can be in a lay-by location away from the platform.

PVTA currently has an approximate 150 square foot dispatch office, located within sight of the bus bays. In a new facility, they would like to have public restrooms, a customer service office and a drivers' break room. A customer-service booth is also desired. An estimated space amount is 300 square feet total.

In the funding application for the off-street parking grant, it was identified that 60 parking spaces were required for PVTA. A reasonable assumption is that the current activity level could require 45-60 parking spaces. While parking is currently available behind the SBT, the daily parking charge far exceeds the daily bus fare. No riders are assumed to park & ride at the SBT, but if convenient, free, and secure parking was provided, some riders would choose to use it. Based upon experience in other cities, this usage could be as high as 3 percent of the originating boardings.

TRANSIT VISION & SPACE/OPERATIONAL PROGRAM

This chapter is organized as follows. This first section describes the overall transit vision of Union Station. The second section describes the space planning needs for each travel mode, including supporting retail space to complement the transportation elements.

OVERALL MULTIMODAL TRANSPORTATION CENTER VISION

The revitalization of Union Station will dramatically change the look and feel of the northwestern side of downtown Springfield. Located in an area of lower-density development between the railroad and I-291, Union Station offers the potential to spur development. It can do so by increasing the level of activity on the northwest side through bringing in transit patrons from all travel modes in one convenient place, and by removing a long-standing vacant building. An active and attractive building located on one of the major freeway arteries into downtown should help spur development. With proper encouragement, the entire area between downtown and Mercy Hospital could be developed with higher densities, and in a way to encourage transit use. A revitalized Union Station cannot accomplish this redevelopment by itself, nor overcome a generally depressed real estate market, but it can serve as a focal point for development that is looking for a place to occur.

A successful multimodal transportation center at Union Station offers the following advantages:

- Increases transit use – by creating an attractive space where users can conveniently transfer among modes, ridership on all modes will increase. Improving the passenger experience will increase the viability of transit as an option for more downtown employees and residents.
- Establishes a transit identity – Union Station will be a focal point for transit service in Springfield, increasing the ease for new and casual users to find transit and understand how to use the systems. The station itself becomes a critical component of a transit marketing campaign.
- Plans for future modes – one major new transit mode is planned for Springfield. The New Haven-Hartford-Springfield (NHHS) commuter rail system is currently under study, as is its possible extension north to Vermont. Union Station can foster this service by preserving space for its implementation and by creating a pleasant transit environment for riders.
- Creates a gateway destination – by establishing an active, attractive space that serves more than just transit users, Union Station becomes the northwestern gateway into downtown. Instead of passing a derelict structure, the revitalized Union Station becomes an attractive welcoming feature, not only for transit users, but also for private vehicles entering downtown from I-291.
- Supports development – by creating a destination space, Union Station will foster spillover development on nearby parcels. Through proper controls, this development can increase the current density and value of the area.

The benefits of revitalizing Union Station are considerable, but they will not be without some challenges to implementation. The major challenges that have to be faced include:

- Coordination among multiple parties – while it is desirable to have all modes connecting, and have public and private interests involved in development decisions, there are numerous challenges in coordinating the desires and schedules of these diverse groups.
- Engineering – restoring an historic building and reopening a tunnel under active railroad tracks present numerous challenges. Fortunately, the building is empty and Amtrak's current passenger operations are on the other side of the tracks, which will allow construction to occur without disrupting passenger services.
- ADA Requirements – the ADA requirements for rail passenger platforms is in a state of flux. To prepare for any eventuality, funds should be set aside for the most costly option of having to raise the three platforms away from the through freight lines to an elevation of four feet for the entire length of the platform, restoring the stairwells for each platform, and installing a new passenger and freight elevator for each platform.
- Cost – the cost of Union Station, both for construction as well as for ongoing building and transit operations must be a principal concern. Equitably distributing the costs among the transit modes and the private sector must be determined at the outset to maximize the available funding from all sources, including governments at all levels and the private sector.

OPERATIONAL VISION

Based upon the discussions with the multiple stakeholders associated with this project, a vision has emerged for what the parties desire to accomplish. Some of these desires may conflict with one another, but techniques and good design through this process and continuing through implementation will allow most of the conflicts to be resolved.

- *Establish walkable connections among all passenger modes*
- *Create an active and attractive space*
- *Improve local bus operations*
- *Provide capacity for future commuter rail*

MODAL CONNECTIONS

Since at least 1991, when the Intermodal Surface Transportation Efficiency Act (ISTEA) was signed into law, federal transportation policy has sought to encourage intermodal passenger connections. As the Bureau of Transportation Statistics (BTS) notes in its special report on intermodalism[4], "The intermodal terminal is a key building block for developing connectivity because travelers can only transfer directly between modes if there is a place to do so." The vision for passenger travel in Springfield is for Union Station to be that place.

Currently in Springfield, excellent multimodal connections are provided between intercity bus service and local bus service. All of the Pioneer Valley Transit Authority (PVTA) Springfield bus routes connect with all intercity bus routes at the Picknelly Terminal,

[4] Bureau of Transportation Statistics. Making Connections: Intermodal Links in the Public Transportation System, Special Report. September 2007

diagonally across from Union Station. Riders can seamlessly transfer from one bus mode to the other without having to walk between locations.

Intercity train service, however, has limited connections with the other modes. While the walking distance from Amtrak's station to the Picknelly Terminal is only 1100 feet, the walking environment is not attractive, and involves a walk along a blank wall of the viaduct. The railroad viaduct separates the two terminals, which creates a psychological barrier as well.

Specific information on transfer activity among modes in Springfield was not available. Research conducted in other areas of the country suggests that providing connections within the same terminal can result in significant levels of intermodal transferring. The I-95 Corridor Coalition study examined trip making for the 12 northeast states along I-95 and compared their patterns with the other 38 states. Outside of the northeast, the study found that at Amtrak locations at the non-home end of the trip, such as would be the case for downtown Springfield, 20-25 percent of the trips used public transportation, and another 10 percent used taxis. In the northeast, the percent usage was even higher, with public transit used for 25-30 percent of the trips and taxis used for 30-35 percent of the trips. At intercity bus stations outside of the northeast, more than 10 percent of the travelers used public transit at the non-home end of their trip, with another 10 percent using taxis. Usage was even higher in the northeast, with nearly 40 percent of intercity bus passengers using public transit at the non-home end, with taxi usage similar at about 10 percent.

The implications for the Union Station are that, if the national patterns hold, 20 percent of the passenger rail users will arrive/depart by public transit, 10 percent of the intercity bus passengers will arrive/depart by public transit, and 10 percent of both intercity rail and intercity bus passengers will arrive/depart by taxis. If the higher capture rates of the northeast are realized, the transferring level could increase to 25-30 percent of rail passengers and 40 percent of intercity bus passengers. While bus-to-bus transfers are unlikely to increase since they already share a terminal, the connections with Amtrak are likely to result in an increase in the rail ridership. These connections will be a critical element in helping the future commuter rail system meet its ridership potential.

IMPROVED PASSENGER AMENITIES

Besides the practical objectives of bringing together the multiple transit modes into one space and addressing the needs of a new market of commuters, the vision for Union Station is to create an attractive location for all transit users and for the public at large. Simply creating a place to change travel modes is not enough – the building should be viewed as an overall asset for the community.

The existing Picknelly Terminal and Amtrak station provide a climate-controlled environment with seating and restrooms. The Picknelly Terminal also has a choice of fast-food restaurants and a sundries shop. Intercity bus passengers have information displays on bus arrival and departure times. A renovation is scheduled to get underway in 2008 to upgrade the HVAC system and add an additional fast-food restaurant. Compared with

many similar sized cities, Springfield has more passenger amenities and a more comfortable waiting environment for intercity passengers.

Even so, there are improvements that are warranted. The original portions of the Picknelly terminal are nearing 40 years old. The building has been heavily used during that time, particularly during the past 10 years since PVTA moved in. The one convenience store offers a limited shopping opportunity, and no retail services, such as dry cleaning or drug stores, are available. The waiting space for local bus passengers is inadequate. Little seating is provided, and most passengers wait outside, under cover, on small, cramped platforms. (No PVTA customer service center is provided, although one previously was located at the Picknelly Terminal). Customer service is provided at the dispatch center. Riders do not have any information displays telling them the bus bay location for their route; instead they must wait for a loudspeaker announcement due to the dynamic bay assignment used by PVTA. PVTA will be implementing these improvements over the next several months.

Outside of the Picknelly terminal, there are a few restaurants, a post office, and some medical offices available, but little else. Most of these locations are not readily apparent from the terminal. From the Amtrak station doorway, only empty storefronts and one lounge are visible. Passengers on all modes are essentially captive to their terminal/station, with little to do either inside or out.

The Amtrak building is even older, nearing 60 years old. Neither location provides the quality waiting environment that is desired in a modern, multimodal facility. No amenities are provided that would appeal to commuter rail users, namely retail opportunities, a pleasant waiting environment, wi-fi access, and other amenities that allow these passengers to make productive use of their time. A new, modern facility will serve to attract more riders, particularly those who have a choice of how they travel.

INCREASE OPERATIONAL EFFICIENCY

The Picknelly Terminal was designed as an intercity bus terminal. Bus bays are all oriented as head-in bays. Such an arrangement works best for intercity services where buses dwell for an extended time, but this orientation is inefficient for local bus operations with short dwell times. The revitalized Union Station can be constructed to provide separate bay orientations for each mode, improving the efficiency of local bus operations.

Intercity buses typically stay in their bay for 20-30 minutes while loading and unloading. Passengers load and unload at the single bus door, located near the building entrance. When departing, buses back out of the bay, which can be time consuming, but this is a small time penalty compared with the overall time spent in the bus bay. Local bus operations, in contrast, unload passengers through two doors and rarely spend more than five minutes at a bus bay. The head-in bus arrangement increases passenger congestion since passengers using the rear door must walk in a confined space between buses. The time spent backing up a local bus is relatively large compared with the dwell time in the bay. Because of these factors, local bus operations are more efficient when the bay orientation is shallower. Shallow bays allow passengers using the rear door to directly

access the platform without having to squeeze between buses, and the shallow bays allow buses to independently arrive and depart without having to back up.

The Picknelly Terminal arrangement increases PVTA's operational costs by increasing the time each bus must spend at the terminal, loading and unloading passengers, and then backing out of the bay. PVTA also has a person on full-time duty at the terminal to assist buses in backing up, and ensuring that no passengers are behind the bus.

The new Union Station arrangement, with bays oriented for local bus needs, will eliminate these costs and delays.

ADDITIONAL RAIL SERVICE

Two separate commuter rail efforts are underway. Both of these efforts are designed to attract a new group of choice users to public transit. Besides the NHHS commuter rail to the south, initial planning efforts on the I-91 Knowledge Corridor commuter rail to the north have begun. This rail service would connect Springfield with Holyoke, Northampton, and Greenfield in Massachusetts, and other locations further north into Vermont. To attract these users, an attractive, convenient station facility must be provided. The revitalized Union Station should be that facility.

Planning for commuter rail service connecting Springfield with Hartford and New Haven, CT is underway. The initial feasibility and implementation studies have been completed, and environmental studies have now commenced. As currently envisioned, the New Haven-Hartford-Springfield commuter rail would nearly double the number of weekday trains between Springfield and New Haven. A more even headway of approximately every 30 minutes would be offered. Passengers would have convenient trains scheduled for traditional work hours in the three major cities, as well as for connections into New York City.

The existing Amtrak facilities are not conducive to a commuter service. The most notable amenity lacking is the provision of convenient and inexpensive parking. Due to the separation of the local and intercity bus modes from Amtrak, all commuters would be expected to arrive by private vehicle, and few public parking decks are within a short walk. None provide a sheltered connection to the Amtrak waiting area. There is no convenience retail at the station or in the immediately surrounding area.

Commuter rail service to Springfield also faces some hurdles. The chief among these is the lack of an easy connection to distributor bus routes. While some downtown destinations are within a short walk of the Amtrak station, most are not, including Bay State Medical and Mass Mutual. The connections to a shuttle bus must be quick and easy to appeal to commuters, and the current connections through a walk to the Picknelly Terminal are not.

BUILDING VISION AND SPACE REQUIREMENTS

This section of the report presents the programmatic requirements for Union Station. This discussion begins with an overview of the estimated passenger demand at the facility. All space requirements are based upon this estimated demand.

For ease of reference, the building requirements have been divided into the interior elements and the exterior elements. Interior elements include the space requirements for waiting areas, baggage handling, and associated office space. Included in the interior space calculations is the space requirement for retail activities that can be supported by transit patrons. Additional retail tenants may be desirable in the building, but this additional space cannot be supported by transit patrons alone; additional patronage from non-transit riders would be required. Exterior elements include the vehicle loading space, parking requirements, and connections for other modes, such as taxis.

PASSENGER DEMAND

- *Total weekday boardings expected to exceed 8000 patrons*
- *Total annual passenger movements (boardings + alightings) are expected to exceed 3.8 million patrons*
- *More than two-thirds of the patrons are on PVTA*
- *New commuter rail service that is projected to double rail ridership*

The space requirements for Union Station will be based upon the space needed to support the projected passenger and vehicle demand. Passenger demand has been based upon existing patronage plus forecasts for patronage on future modes, however, no specific ridership forecasts have been prepared for this study. Instead, ridership has been estimated based upon forecasts prepared by previous studies that focused on an individual mode's demand.

The table below summarizes the expected patronage by mode for both the annual passenger movements as well as the average daily boardings. Passenger movements include both boardings and alightings, while the boarding estimate only covers patrons getting on a transit vehicle. Each component is important in sizing the facility since some elements will be based upon the number of patrons waiting to board, while other elements will be based upon the number of people moving through the building.

Mode	Annual Passenger Movements	Average Weekday Boardings
Existing Services		
PVTA	2,620,000	5,800
Peter Pan Bus Lines / GREYHOUND	960,000	1,900

Mode	Annual Passenger Movements	Average Weekday Boardings
AMTRAK	110,000	300
EXISTING TOTAL	2,050,000	4,000
Mid-Term Services		
	120,000	300
TOTAL		
TOTAL PASSENGERS	3,810,000	8,300

No projections were provided for changes to any mode's ridership. Essentially, all modes are projecting flat ridership. PVTA indicated they expected flat ridership over the foreseeable future, unless there are funds available to improve service levels.
The New Haven-Hartford-Springfield commuter rail study included two ridership projections – a conservative level and an aggressive ridership level. The table above reflects the aggressive ridership projection. No ridership estimate has been prepared for the I-91 Knowledge Corridor. The analysis of this service is only beginning in 2008. Based upon the population along the corridor compared with the NHHS corridor, ridership levels are anticipated to be lower.

INTERIOR ELEMENTS

- *Central grand lobby space provided for all modes*
- *Lobby includes ticket counters, baggage handling, and the majority of waiting space and retail*
- *Smaller departure lounges with convenience retail provided nearer boarding platforms, primarily for intercity services*
- *Office space provided for transit functions only; market office space would be in addition to estimated space*
- *Overall transit space requirement is 28,000 square feet; all but 2,000 square feet are based upon existing modes*
- *Additional tenant space could include PVTA's headquarters (12,000 sf); Peter Pan's headquarters (16,000 sf); Amtrak crew base (700 sf); Amtrak Police (600 sf)*
- *Transit-supported retail space (included in overall) is 7,000 square feet*

The principal passenger flow is anticipated to be through the central lobby, although experienced users can go directly to their platform area if they do not need to interface with a ticket agent. PVTA passengers can flow through the lobby or directly proceed to their boarding platform as they do at the current terminal. A small customer service area will be located near the exit doors for the platform. Intercity bus passengers will buy their tickets in the central lobby and either wait there, or precede to a smaller boarding lounge near their platform exit doors. Amtrak passengers will buy their tickets in the central lobby and wait there until time for their train to board. They will then proceed through the tunnel to

the stairs/elevator to their boarding platform. Commuter rail passengers can either flow through the central lobby, or enter from Lyman Street and proceed up the stair/elevator to their boarding platform, assuming that the commuter trains are always assigned to the same platforms.

The space requirements for the building interior are based upon the expected passenger levels. The space has been calculated using design guidelines for each of the major intercity modes, including Amtrak's facility planning guide and Greyhound's guidelines. The general guidelines have been augmented by additional guidance from the local staff, and by an architectural review for Amtrak and intercity bus. The space requirements should be viewed as a general indicator of the space needs. A more complete analysis of the individual mode's needs and how it would fit within Union Station is required before a final determination can be made.

No guidelines exist for estimating the amount of retail space that can be supported by transit users. This space requirement has been estimated using guidelines prepared for the airline industry, adjusted for the differing waiting characteristics of the individual mode patrons and actual terminal usage from other locations around the country. It is considered to be a reasonable estimate, but it has some degree of uncertainty. The overall estimate, however, is in line with the amount of successful retail that has been provided at other intercity bus and rail facilities that rely on just transit patrons. Additional retail space can be provided if other patrons are drawn to Union Station besides just riders on the transit service.

The following table shows the projected space needs for each transit mode. Included in these numbers are the space requirements for passenger waiting, baggage, offices, and other support space. Also included is the amount of retail space that each mode's passengers could be expected to generate. These space numbers do not represent the amount of space each mode would have to "rent", nor does it include boarding space at platforms.

Mode	Overall Space (square feet)	Optional Space (square feet)	Total Space (square feet)
Existing Services			
PVTA	4,200	12,100	16,300
Peter Pan Bus Lines / GREYHOUND	16,900	15,900	32,800
AMTRAK	4,700	1,300	6,000
EXISTING TOTAL	25,800	29,300	55,100
Mid-Term Services			
CONNECTICUT COMMUTER RAIL	1,900		1,900

Mode	Overall Space (square feet)	Optional Space (square feet)	Total Space (square feet)
	TOTAL		
TOTAL SPACE	27,700	29,300	57,000

Central Lobby Space

The majority of the interior building space will be dedicated to the central lobby. Riders on all modes will most likely enter the building through this space. Overall, the central lobby space is about 20,000 square feet. The following summarizes the assumptions for the lobby space:

- Central hall for retail, baggage handling, auto rentals, courtesy phones
- Approximately 75 percent of train passenger waiting will be in lobby area, requiring an estimated 115 seats
- Baggage handling is required for Amtrak and Peter Pan/Greyhound modes; passengers may be required to carry their own baggage to their vehicle, depending upon the policies of the operators
- Approximately 80 percent of retail will be in lobby area; departure lounges will have vending machines only
- Any shared facilities, (e.g. restrooms, smoking lounge) would be located in the central terminal lobby or directly adjacent
- No specific space has been set aside for security screening for passengers or baggage

The central lobby will include the majority of the seating and waiting areas for train passengers, including any visitors that are there to meet arriving passengers or send off departing passengers. The majority of this space will be for the Amtrak/commuter rail passengers since intercity and inner city buses have their own waiting areas closer to the bus berths. An example of this operation is New Haven, CT, which has a large display announcing pending train departures, shown at the far end of the hall.

Most of the retail space will be located within the central lobby. This space can be a combination of kiosks located out in the lobby area as well as separate spaces off to the side, primarily for kitchen and related counter needs. Seating for retail patrons will be intermingled with seating for departing passengers. The amount of transit-supported retail is modest, but with additional office or residential uses on upper floors or in surrounding blocks, more retail space can be provided. As a guide, a fast-food restaurant requires about 750-1500 square feet for kitchen, counter, and queue space, while a sundries shop requires about 500-700 square feet.

No Transportation Security Administration (TSA) guidance has been issued on screening passengers for any of the Union Station modes, so no specific space has been provided for this function. Based upon airport guidance, 100-150 square feet could be required if all passengers were screened.

Intercity/PVTA Departure Lounges

Separate departure lounges should be provided for the bus modes. These lounges should be located closer to the passenger boarding areas. They will be used for the passengers during the time they are in the facility waiting for the bus.

These lounges will include seating, since passengers will be in them for an extended period. PVTA will have their own departure lounge, although smaller, since the passengers would likely wait at the boarding platforms.

Transit Passenger Office Space Requirements

All of the transit modes require some amount of office space to support their customer interface requirements. The amount of office space varies considerably based upon how much interaction is anticipated to occur. The regional and local providers (PVTA and the future commuter rail) do not require much space since the majority of their patrons will not need assistance. These patrons are generally more familiar with the system, do not carry baggage, and purchase their fares either on-board or in advance of arriving at Union Station. A single, small office for one agent should suffice.

The intercity providers require more space since more ticket and baggage agents are required to process their patrons. Peter Pan / Greyhound estimates that they need space for ticket agents and the associated office space, a dispatcher's office, a drivers' break room, and a training room. Amtrak has similar requirements.

Optional Transit Office Space Requirements

Several ancillary office space users could be located within Union Station. These users are not directly related to passenger functions and so do not necessarily need to be located in the passenger building, but they could be additional tenants. If located in Union Station, these uses could be on the upper floors instead of at ground level.

PVTA's headquarters are located away from downtown in a renovated city firehouse. Since this building was originally designed for a significantly different function, PVTA has made some sacrifices in their space arrangement to fit within the building. Relocating the headquarters to Union Station may allow for a more efficient space layout, and would allow headquarters staff to be more closely attuned to service quality. Based upon discussions with PVTA staff, the program requirements are estimated to be 12,100 square feet – less than the 16,800 square feet in the firehouse location.

Peter Pan's headquarters are another possible tenant. The headquarters use could stay in the existing Picknelly Terminal, owned by Peter Pan, or it could move to Union Station. Based upon an estimate prepared by their architect, the headquarters function would need 15,900 square feet.

Amtrak has two uses that do not necessarily need to be in the passenger building. These uses are for a crew base and for the Amtrak Police. The crew base needs 725 square feet and the police need 550 square feet, for a total space requirement of 1275 square feet. These users could also be located in the current head house when the passenger activity is moved to Union Station.

EXTERIOR ELEMENTS

- *Three groups of boarding platforms are required – Amtrak & commuter rail; Peter Pan / Greyhound intercity bus; and PVTA local bus*
- *ADA requirements for rail platforms in flux, but high-level platforms are assumed*
- *Parking space requirement estimated at 260+ daily / overnight spaces*
- *Additional parking required for drop-off and hourly needs, estimated at 80 spaces*
- *Eight (8) taxi stands required*

The exterior elements covers the conceptual needs to accommodate the vehicles providing the transit services, as well as other access modes, principally parking. Transit vehicle space has been estimated based upon the operating plan for each mode. Parking requirements have been estimated from the best available sources.

Platform Space

Platform space is required for trains; the intercity services can share platform space with the future commuter rail service. Separate platforms will be required for intercity and local buses due to different bus requirements and the different usage patterns of the passengers.

The following summarizes the platform requirements:

- Amtrak has four current platforms, two of which serve two tracks each, for a total of six boarding locations. Based upon current Amtrak schedules, a maximum of two trains are boarding/alighting within any given hour. Under the potential commuter rail schedule, a maximum of three trains will be boarding/alighting within a single hour. This train activity level can be satisfied with just the two platforms furthest from Union Station (and the through freight tracks), since one of the platforms serves two tracks. Even if a fourth train boarded/alighted during the same hour, the existing number of platforms and side tracks are sufficient for passenger operations.
- Platforms must be ADA-compliant – under current FRA regulations, these platforms will need to be 48" high for the length of the train, currently 1000 feet; platforms must be straight to minimize gaps with the train

- If commuter rail service is implemented, it will be able to use the intercity platforms
- Peter Pan / Greyhound needs 10-12 bus bays with a head-in orientation (1-3 more than current)
- PVTA needs 12-15 saw tooth bus bays (12 for current levels, 15 for growth); the additional bays could be located on street, as are some of the current bus bays.

Parking Space Requirements

Only Peter Pan currently provides any parking; 13 15-minute spaces are provided adjacent to the building, primarily for the package express. Paid parking is available in the vicinity of all modes, although only short-term parking is available near Amtrak, and overnight parking near the Picknelly Terminal is unsecured.

Parking space requirements have been estimated by a combination of the design guidelines for each mode (where specified); actual experience from other locations; or the previous parking grant application. The major parking need comes from the future commuter rail, closely followed by the existing Amtrak service. Total parking demand has been reduced by 15 percent to account for the ability of each mode to share spaces due to the different peaking periods for each mode. Parking can be shared among the modes as long as there is easy access to the central lobby.

Mode	Kiss & Ride / Hourly Spaces	Daily / Overnight Spaces
Existing Parking Need		
PVTA	14	44
Peter Pan Bus Lines / Greyhound	26	44
Amtrak	17	86
EXISTING TOTAL	57	174
Mid-Term Parking Need		
Connecticut Commuter Rail	25	91
TOTAL NEED		
TOTAL PARKING	82	265

The above requirements could be considered as being on the high side for the two bus modes. The estimate, however, is based upon actual experience at other locations and can be viewed as the upper potential demand if free, secure parking is provided. The

parking needs for the rail modes is judged to be reasonable based upon nationwide experience and in light of the existing and projected ridership.

An additional 50-60 spaces could be required for employees, based upon current demand. Actual spaces should reflect the city code.

Taxi Stands

None of the design manuals provide a method for estimating taxi stand requirements. Future demand has been estimated based upon the access mode split for taxis from the I-95 Coalition study. Based upon this mode split and the ability to share taxi stands at a combined terminal, Union Station will need an estimated eight (8) taxi stands. Taxis can stage on Frank B. Murray Street in front of the station.

Street Circulation Impacts

The bus circulation patterns will essentially be the same as the current pattern, given that the bus activity is only moving diagonally across the street. One change that will need to be made is to permit vehicles to make a left-turn on from Main Street to Frank B. Murray Street and to permit vehicles to make a left-turn from Frank B. Murray Street on to Main Street heading into downtown. See Appendix A for Option One, Two and Three Circulation Drawings.

REAL ESTATE MARKET CHARACTERISTICS SUMMARY

Real Estate Market Characteristics Summary

Following is a summary of the economic and real estate market conditions which form the back-drop for the Union Station Redevelopment Plan and Project Implementation Strategy. This addendum summarily reviews the national and regional forces affecting the project and then looks at the dynamics surrounding specific use categories in the City of Springfield and relates their potential viability to the project.

Current General Economic Outlook

National Outlook

As has been widely reported, the US economy has remained generally weak throughout 2007 and the first half of 2008. Residential and commercial real estate, while varied, is weak across most of the country. Residential real estate continues to be a drag on the overall economy and consumer credit continues to soften. Input prices, including those for commodities, energy, metals and others continue to increase, with oil prices being a prime driver in overall input costs. Wage growth remains limited except in a few areas for certain skilled labor positions. The general outlook for the near term is for the economy to continue to be soft but stable with the national economy maintaining modest or nominal growth.

Regional and Local Outlook

The current regional economy mirrors the national outlook in the very near term, with weak or nominal growth. While the national economy is forecasted to improve somewhat by the end of this year, Springfield and the surrounding area is anticipated to remain relatively stable with only nominal gains in population and employment for a 3 mile radius around the project as well as within the 3 County area. Similarly, the outlook for the City of Springfield as a whole is for slow growth as shown in the following charts:

3 Mile Radius				3 County Area		
2007	2012	change	Indicator	2007	2012	change
8.17%	8.19%	0.02%	**Unemployment Rate**	5.43%	5.15%	-0.28%
133,979	133,790	-0.14%	**Population**	687,525	692,195	0.68%
$145,455	$166,265	14.31%	**Existing Home Price**	$213,716	$262,311	22.74%

Table 1 : Regional and Local Outlook

Indicators	2007	2008	2009	2010	2011
Gross Metro Product, $B	23.0	23.3	23.6	23.9	24.1
% Change	*0.9*	*1.1*	*1.2*	*1.2*	*0.8*
Total Employment (000)	294.2	295.1	296.7	298.7	300.0
% Change	*0.5*	*0.3*	*0.5*	*0.7*	*0.4*
Unemployment Rate	5.4	5.5	5.2	5.1	5.2
Personal Income Growth	5.9	3.1	3.2	3.3	3.3
Population (000)	687.5	688.6	689.6	690.5	691.4
Single-Family Permits	995	863	1,217	1,292	1,257
Multifamily Permits	126	34	46	71	78
Existing Home Price ($Ths)	213.7	210.7	224.5	238.2	249.8
Mortgage Originations ($Mil)	4,049	3,168	3,500	3,725	3,840
Net Migration (000)	0.3	0.0	-0.2	-0.3	-0.5
Personal Bankruptcies	1,402	1,936	2,176	2,374	2,426

Table 2: Springfield SMSA Projections

Real Estate Market Sectors – Project Area Market Conditions and Metrics

Office

The downtown Springfield office market is very competitive; there is a relatively large supply of space (~500,000 SF of vacant Class A space as of January 2008) relative to demand. Office buildings in the downtown area sell for $35 - $120/SF. Rental rates (annual full service) for Class A space in downtown are generally in the $15-20/SF range.

Industrial, Flex and Warehousing

The industrial sector is contracting in the Springfield area with a decrease in jobs and output forecasted. Therefore, the demand for industrial space will continue to lag supply. As a result, typical rental rates are approximately $5/SF (NNN). These low rates make the prospect of bringing new supply on-line as part of the project infeasible.

Retail

A survey of the retail market place within the vicinity of the project shows few gaps between supply and demand with most categories indicating a surplus of retail supply within the .6, 3 and 5 mile radii. This data indicates that for retail to succeed within the project, demand must be generated by the project itself, in a localized manner.

Retail Stores	Demand (Consumer Expenditures)	Supply (Retail Sales)	Opportunity Gap/(Surplus)
Radius 1:SPRINGFIELD, MA 01103, 0.00 - 0.60 Miles, Total			
Total Retail Sales Incl Eating and Drinking Places	$86,064,687	$169,869,069	($83,804,382)
Radius 2: SPRINGFIELD, MA 01103, 0.00 - 3.00 Miles, Total			
Total Retail Sales Incl Eating and Drinking Places	$1,700,138,127	$2,346,773,984	($646,635,857)
Radius 3: SPRINGFIELD, MA 01103, 0.00 - 5.00 Miles, Total			
Total Retail Sales Incl Eating and Drinking Places	$3,420,579,177	$3,863,880,509	($443,301,332)

Table 3: Retail Market Supply and Demand

Residential

Sales remain slow, but prices are stabilizing. Springfield is predominantly a single family market with demand lower for multi-family product. This weak demand coupled with low market prices and rents make residential development within the project area difficult if not impossible. Sales prices for existing condos within the downtown area average approximately $115/SF. The pricing range for all types of ownership housing is $80 to $120/SF. These values do not support new construction or substantial rehabilitation/conversion in the downtown area.

Sources/References: Claritas – MarketPlace; The Federal Reserve Board - "The Beige Book"; Colliers International – various reports; Moody's Economy – Précis METRO; Property& Portfolio Research, Inc. – PPR Fundamentals; interviews with various area real estate professionals.

Achievable Rents at Site:

The following table summarizes our estimates of "Achievable" rents at the Union Station site in the next year to 18 months. It is based on our analysis of the local real estate market trends (including, in addition to the above summarized real estate research, interviews with key local commercial brokers and development interests) and the locational attributes of the site relative to the larger "Downtown" market.

Rents are quoted in $ per square foot per year of Net Leaseable Space (i.e. excluding common corridors and areas).

Use	Vacancy Rate/Empty Space-Units	City of Springfield Rent Low	City of Springfield Rent High	Achievable Rental Rate at Site	Terms
Class A Office	~500,000 sf	$ 14	$ 20	$ 15	Full service (includes TI's)
Class B Office		$ 11	$ 13	$ 12	Full service (includes TI's)
Med Ofc. (off-site)		$ 10	$ 19	$ 15	Full service (includes TI's)
Retail	15 to 20%	$ 7	$ 18	$ 11	NNN (white box)

Table 4: Summary of Market Rents for City of Springfield and at Site
(mid 2008 conditions)

LETTERS OF INTEREST

- Pioneer Valley Transit Authority
- Pioneer Valley Planning Commission
- Square One

PVTA

September 16, 2008

Mr. David Panagore, Director
Springfield Redevelopment Authority
36 Court Street
Springfield, MA 01103

Subject: PVTA Letter of Interest
Union Station Intermodal Transportation Project

Dear Mr. Panagore:

This letter will confirm the interest of the Pioneer Valley Transit Authority in moving its administrative offices to Union Station as part of the PVTA's joint effort with the Springfield Redevelopment Authority (SRA) to redevelop the historic station property as an Intermodal Transportation Center (ITC). The redevelopment plan, which will enable Union Station to serve this new and expanded function, calls for restoring many of the terminal building's signature architectural and historical features, and envisions the property as a linchpin for revitalization of the surrounding neighborhood. This effort is the result of a year of study and planning by a team led by the PVTA and the SRA.

PVTA administrative functions will occupy approximately 18,000 square feet in the Union Station ITC, and a 2,500-square-foot conference center which will be shared by the other transit providers located in the proposed center.

The station redevelopment project is expected to integrate transit and transit-related uses. The ITC will house PVTA bus operations as well as private intercity bus carriers and passenger rail service, while transit-related components are expected to include commercial, institutional and/or educational uses.

We look forward to continuing our partnership with the SRA as we finalize plans for redeveloping the Union Station ITC and complete our specific occupancy and space layout requirements.

Sincerely,

Mary L. MacInnes
Administrator

MLM/cms

Pioneer Valley Transit Authority **address:** 2808 Main Street, Springfield, MA 01107 **phone:** 413.732.6248 **fax:** 413.737.2954 **web:** www.pvta.com

Catalyst for Regional Progress
PVPC
Timothy W. Brennan, Executive Director

September 19, 2008

Ms. Mary MacInnes, Administrator
Pioneer Valley Transit Authority (PVTA)
2808 Main Street
Springfield, Massachusetts 01103

Mr. David Panagore, Director
Springfield Redevelopment Authority
36 Court Street
Springfield, Massachusetts 01103

Reference: Expression of Interest in Occupying the Proposed Union Station Intermodal Transportation Center

Dear Ms. MacInnes and Mr. Panagore:

After receiving an authorization from the Pioneer Valley Planning Commission's Operations Subcommittee earlier this week, I am writing to express the Planning Commission's keen interest in the possibility of becoming a future tenant of the rehabilitated and revitalized Union Station Intermodal Transportation Center situated in the City's downtown area. More specifically, this letter will confirm our interest in the potential to lease approximately 20,000 net square feet on the third floor of the subject transportation facility from the Pioneer Valley Transit Authority (PVTA) and/or the Springfield Redevelopment Authority (SRA). We understand that the subject space is to be built to the specification approved by the Pioneer Valley Planning Commission's Executive Committee and said space is located wholly within the proposed Intermodal Transportation Center which will be developed at the Springfield Union Station property located at 55 Frank B. Murray Street in downtown Springfield.

As we understand it, this new transit-oriented redevelopment project is expected to include an integration of transit and transit-related uses. Moreover, the Union Station Intermodal Transportation Center will service PVTA operations as well as a private intercity bus carrier and passenger rail services. Transit-related facility components will likely include a mix of commercial, institutional and/or education uses that we expect will complement one another within this shared transportation facility.

The space referenced in this letter of interest will be utilized as the home-base and headquarters of the PVPC which is the officially-designated lead planning agency for a planning district encompassing 43 cities and towns, approximately 1200 square miles of land area and a population in excess of 615,000 residents. The PVPC encompasses New England's fourth largest metropolis and its transportation, transit and transportation related responsibilities are a core function of the agency and its mission over four and a half decades. Among the numerous transportation duties the PVPC conducts include being the lead planning entity for the Pioneer Valley's Metropolitan Planning Organization; it provides ongoing transit planning support to the PVTA; it is the region's premiere regional data and GIS mapping center; and it is responsible for a myriad number of transportation related functions including regional land use planning, air quality conformity, transportation modeling and housing and community development functions.

Based on recent and ongoing conversations with both PVTA and SRA representatives, we understand that the PVTA is now in the midst of finalizing plans for the Union Station Intermodal Center and that the PVTA anticipates it will initiate the construction work to create this new Transportation Center within the next 12 to 15 months. Assuming the project is completed in a reasonable time frame anticipated to be on the order of three to four years, our agency will be interested and prepared to take occupancy at the time the new Intermodal Transportation Center is completed and the facility opens. In the interim, we look forward to working with the PVTA and the City to negotiate our organization's specific occupancy arrangements including space layout requirements; lease terms and conditions; and associated occupancy expenses that would be charged for the space our agency would presumably occupy.

We here at the PVPC see this as an extraordinarily important and exciting opportunity for our agency, the host City of Springfield, our PVTA Transit partners and indeed the Pioneer Valley region as a whole. We thus look forward to becoming an anchor tenant in the new Union Station Intermodal Transportation Center and all the new possibilities this new facility can unleash for our Planning Commission.

Sincerely,

Timothy W. Brennan
Executive Director

TWB/ikg

cc: PVPC Executive Committee

LOI_Union Station/admin/staff/brennan/letters

Square One
This Is Where It Starts
947 Main Street, Springfield, MA 01103
(413) 732-5183 Fax: (413) 739-0310
www.startatsquareone.org

September 8, 2008

Ms Mary MacInnes, Administrator
Pioneer Valley Transit Authority
2808 Main Street
Springfield, MA 01103

Mr. David Panagore, Director
Springfield Redevelopment Authority
36 Court Street
Springfield, MA 01103

Dear Ms. MacInnes and Mr. Panagore,

Please accept this letter as evidence of Square One's interest in leasing approximately 8,000 – 10,000 square feet at the Union Station Intermodal Transportation Center from the Pioneer Valley Transit Authority (PVTA) and/or the Springfield Redevelopment Authority (SRA). The space, to be built to the specifications approved by Square One, is located in the proposed Transportation Center which will be developed at the Springfield Union Station property located at 55 Frank B. Murray Street in downtown Springfield.

If we can come to an agreement on appropriate terms, this space referenced in this Letter of Interest would be utilized for early education and care programs.

We understand that the PVTA is finalizing plans for the Union Station Intermodal Transportation Center and expects to begin construction within the next 12 months. We look forward to working with you to negotiate our specific occupancy arrangements, including space layout requirements and lease terms and conditions, including the occupancy expenses that will be charged for the space and other terms of a lease.

Sincerely,

Joan Kagan

Joan Kagan
President and Chief Executive Officer

HDR

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