Amtrak to Burlington
Rail Briefing

Transportation, Energy & Utilities Committee of
the Burlington City Council

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Amtrak to Burlington Rail Context

- **State & City goal to restore passenger rail service to Burlington**
  - 2015 Vermont State Rail Plan: “Proposed New Service.... *Extend the Ethan Allen Express to Burlington*... VTrans has established extending the *Ethan Allen Express* to Burlington and the *Vermonter* to Montreal as first priorities.
  
  - 2011 Burlington Transportation Plan: “The City will pursue several policy initiatives including... supporting improvements to the western corridor rail infrastructure and expansion of passenger rail services to Burlington.”
  
  - 2019 planBTV Comprehensive Plan: “Support improvements in the western corridor rail infrastructure and expansion of passenger and commuter rail services through Burlington to aid in traffic and congestion reduction.”
Amtrak to Burlington Rail Context

- **City goal to activate waterfront around Union Station as a mixed-use area**
  - 2013 planBTV Downtown & Waterfront: “The South Waterfront is truly the workhorse and activated waterfront of Burlington. In many ways this area serves as the front door to the city. The area from College Street down to and including the King Street Dock is envisioned as an active mixed-use area with retail, restaurants and an inn or hotel.”

- **City goal to move Burlington Greenway to west side of railroad tracks**
  - 2012 Bike Path Task Force Study: “Some sections of the path may be considered for realignment to improve safety and user experience...Between Perkins Pier/Maple Street and College Street: the path crosses to the east side of the railroad tracks for this section, resulting in two awkward railroad/road crossings and potential conflict points at King Street and College Street”

  - 2016 Citizen-initiated Advisory Ballot Item: “Should the Mayor of Burlington and the City Council be advised to relocate the Burlington Bicycle Path to the west side of the railroad tracks between College and King streets even if that means utilizing the public trust doctrine or eminent domain to accomplish this task?”
Amtrak to Burlington Rail Context

Three Interrelated Efforts

1. Accommodate Amtrak passenger rail service (VTrans)
2. Add a second track generally between King St and College St (VRS requirement)
3. Relocate Burlington Greenway to the west side of the tracks (City)
Amtrak to Burlington Rail Context

Rail ownership and operation

- **North of College Street:**
  - Railroad right of way owned and operated by Genesee & Wyoming / Brookfield Infrastructure (red line)

- **South of College Street:**
  - Railroad right of way owned by State of Vermont, leased to Vermont Rail System (VRS) (orange line)
  - VRS also has rights to spur on east side of Urban Reserve
Amtrak Accommodations

- **Station:**
  - General understanding and agreement that passenger loading and unloading will occur at historic Union Station. State of VT owns lower floor of 1 Main Street building, the balance of the building is owned by Lisa Steele.

- **Overnighting & Servicing:**
  - 2016: VTrans begins conversation with City regarding potential location to overnight and service the train in Burlington
  - 2017: City requested CCRPC/VTrans do a study of overnighting and servicing locations given our questions and concerns with the various proposed sites
  - 2017: CCRPC funded and initiated study
  - July 2019: Study completed by CCRPC and received by VTrans
Train Overnighting Locations Evaluated

1. Northern Urban Reserve
2. Urban Reserve
3. Union Station
4. Vermont Rail System Railyard
5. Flynn Avenue (City Market)
Northern Urban Reserve

*Location #1*

- 2018 construction by VRS to extend their current siding is not affiliated with Amtrak overnighting
- Amtrak train would be stored on a new adjacent siding
- Additional crossings and horn blows
- Located downslope from adjacent residences
- Overnight crew accommodations within short drive
- Requires coordination with New England Central Railroad (Genesee & Wyoming)
**Urban Reserve**

**Location #2**

- Current VRS siding located north of skate park
- Amtrak train would be stored on a new adjacent siding
- Additional crossings and horn blows
- Located down slope from adjacent residences
- Overnight crew accommodations within short drive
- Requires coordination with New England Central Railroad (Genesee & Wyoming)
Union Station

Location #3

- Proposed new siding constructed adjacent to Union Station to service Amtrak passengers
- Overnight crew accommodations within walking distance or short drive
- Burlington Greenway to be relocated in coordination with rail project adjacent to the station and the City’s goal to move Burlington Greenway to west side of railroad tracks
Vermont Rail System Railyard

Location #4

- VRS states railyard does not have the operational capacity to accommodate storage of the Amtrak train overnight (VRS)
  - Amtrak will disrupt freight rail operations
  - The timing of the evening Amtrak Train may be inconsistent
  - Open track space is used for freight storage and train operations
- Overnight crew accommodations within walking distance or short drive
Flynn Avenue / Briggs Street

**Location #5**

- Use existing VRS siding and construct additional siding to replace storage capacity for VRS
- Adjacent to residential neighborhood and new City Market
- Approximately 1.5 miles from Union Station
- Overnight crew accommodations within short drive
## Evaluation Matrix – Final Scoring

Each site was scored 0 – 3 for each criterion
0 being the worst and 3 being the best.

<table>
<thead>
<tr>
<th>Location</th>
<th>Estimated Costs</th>
<th>Electrical Power</th>
<th>Crew Hours</th>
<th>Property Acquisition</th>
<th>Natural Resources</th>
<th>Lighting</th>
<th>Train Visibility</th>
<th>Noise Impacts</th>
<th>Horn Impacts</th>
<th>Air Quality &amp; Emissions</th>
<th>Proximity to Residences</th>
<th>Impacts to VRS</th>
<th>Total Score</th>
<th>Ranking</th>
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Amtrak Overnighting Other Considerations

What about Air Quality?

- Air quality impacts were modeled using the AERSCREEN Dispersion Modeling framework
- The model uses worst case meteorology to conservatively estimate pollution concentrations
- The model evaluated one locomotive idling for 40 minutes at each location
- For structures adjacent to the modeled locations, building height was taken into consideration
- The Study air quality modeling revealed the following:
  - Nitrogen Dioxide (NO2) was the only emission determined to approach the National Ambient Air Quality Standards (NAAQS) under the one hour averaging period
  - The only locations which may have the potential to approach or exceed the NAAQS 1-hour averaging levels for NO2 are the second story position(s) of the Union Station/Wing Building, if the train engine were parked within 50’ of the structures and idling
  - All other locations were well below the threshold for NAAQS for NO2
  - A more detailed air quality assessment will be considered following the finalization of site selection
Amtrak Overnighting Other Considerations

*Why not extend the Ethan Allen to St. Albans? There are several unknowns...*

- What would the capital and operating expenses be?
- What is potential ridership with an expansion in the route?
- Would our partner states (NY, MA & CT) support this change? If so, what would the cost and revenue splits look like?
- What conflicts if any does this pose for other uses (freight service and the Amtrak Vermonter) on the route?
- Would the host railroad allow an additional passenger train to operate on the track?
- Would additional passenger service trigger the need for positive train control (PTC) safety upgrades, and if so, who would be responsible for the installation, maintenance and operating costs?
- If an extension of service were feasible what would the operating schedule look like and how would it fit with the Vermonter?
- Would additional train crews be required to complete the trip?
- The complexities of future expansion to St. Albans is outside of the Scope of the current project.
Have We Explored All of the Options?

Potential Additional Location Under Consideration Adjacent to the McNeil Plant

- This location was originally set aside due to the fact that it is located on the New England Central Railway line north of the Burlington Waterfront in an area where VRS does not have track rights
- The location appears to work from a logistical standpoint
  - It is long enough to accommodate the train
  - No significant environmental constraints
  - It would accommodate the crew schedule
  - Shore power can be accommodated
- What will it cost and who will pay?
- What would be the timeframe to construct?
- The Agency is now adding this site to the mix for consideration
Amtrak Overnighting Decision Process

- Study completed by CCRPC and accepted by VTrans – July 2019
- Final Report is posted on CCRPC website: https://www.ccrpcvt.org
- VTrans will be making the final selection on the preferred storage site for the Amtrak train taking into consideration:
  - Results from the CCRPC study
  - Public and stakeholder input including City, Vermont Rail Council, Amtrak and VRS input
- VTrans plans to make a decision on the train overnighting location by the end of the year
- Public input can be sent to daniel.delabruere@vermont.gov
Second Track on Waterfront

- 2016: VTrans and VRS began discussing rail operations need for second track with City
- City has requested explanation and justification for second track
- The second track, and most of related infrastructure (gates, signal houses, etc.) is proposed to be installed within the railroad right of way
- VRS controls access to the rail line for the Amtrak service and all rail operations
- VRS has stated the need is based on VRS service requirements including:
  - Maintaining freight services when the Amtrak Train is positioned at Union Station (regardless of duration)
  - Accommodating the VRS Dinner Train when the Amtrak Train is at Union Station (expected evening overlap)
- VRS has notified the State that they will be installing a second track regardless of the overnight storage location of the Amtrak train if the State does not advance the second track; it is within the rights of VRS, as the Rail Operator leasing this railroad from the State, to do so
- The addition of the second track from south of King St to just north of College Street will occupy the railroad right of way for railroad functions
Rail Project Design Elements:

- Two track crossings at King St and College St with new quad-gates and signals
- The VTrans design team is working closely with the City to locate equipment (signals, gates, signal housing) where it won’t conflict with Greenway relocation and other waterfront uses
Rail Project Design Elements:

- The State is working closely with the City on the Greenway relocation (yellow) with meetings being held every month to coordinate efforts.
- The City has contracted with VHB to ensure a well-designed path prior to the finalization of the rail project designs.
Rail Project Design Elements:

- VTrans seeking low-level platform approval from the Federal Rail Administration (FRA), including locating the canopy on east side of tracks for passenger loading and unloading (orange)

- The project will maintain North/South pedestrian travel on east side of tracks within the railroad right of way (yellow)
If VTrans decides to overnight and service the train at Union Station, it will need truck access on east side for water, sewer, provisions, etc. (orange)

In-ground water and sewer hook-ups were reviewed as an option, however the potential for freeze up of the stationary connections was found to be problematic.
Rail Project Design Elements:

- New pedestrian alignment along West side of College Street to accommodate length of Amtrak train
- The City is seeking to minimize shift in sidewalk alignment along College Street
The second track will start between Maple St and King St and will require previously rehabilitated Greenway to be relocated to the west.
Amtrak to Burlington Rail Briefing
Ongoing Communications

- VTrans will develop a project website to provide up to date information
- The Agency will issue quarterly project updates through an email distribution link which will be built into the project website
- VTrans and City Staff will continue to meet on a monthly basis to coordinate the Amtrak project and the Greenway project
- At the invitation of the City Transportation, Utilities & Energy Committee the Agency will provide biannual updates on the project
Amtrak to Burlington Rail Briefing – Next Steps

- The City, through the Mayor’s office, has requested additional information from VTrans regarding overnighting options and project impacts.

- The City is expected to provide input to VTrans in December regrading the rail project in general, and Amtrak overnighting and servicing locations specifically.

- VTrans plans to make a decision on the train overnighting location by the end of the year.

- VTrans will be making the final selection on the preferred storage site for the Amtrak train taking into consideration:
  - Results from the CCRPC study
  - Public and stakeholder input including City, Vermont Rail Council, Amtrak and VRS input

- VTrans is expecting to complete designs for the project elements this winter and start construction in the Spring 2020.
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Questions & Comments

Public input can be sent to daniel.delabruere@vermont.gov