

## Appendix 4

### Springfield Layover Site Alternative Analysis

**Connecticut Department of Transportation  
New Haven-Hartford-Springfield Line**

**Site Selection Evaluation**

**Technical Paper for  
Task 5.7: Springfield Layover Site Alternatives Analysis**

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## **1.0 Purpose**

The purpose of this technical paper is to provide a methodology for alternatives analysis for the three identified locations for a layover and maintenance facility in Springfield as part of the New Haven-Hartford-Springfield Line improvements.

## **2.0 Site Locations**

The proposed Rail Operation Service Plan developed by Amtrak and validated by WSA requires a train layover and light maintenance facility in the Springfield area. This site will be used to store up to three (3) regional trains overnight. Cleaning and light maintenance would also occur at the layover facility, thus a small maintenance building is envisioned.

Three sites have been identified as potential locations for the layover facility. These sites are identified below:

- Armory Street (east of Springfield Station)
- Springfield Station
- Sweeney Site (southwest of Springfield Station)

Details on each site are discussed in the Task 5.8 Technical Paper.

## **3.0 Location Criteria**

In order to perform a qualitative analysis, a set of criteria has been developed as a measure of effectiveness for each potential layover site. These criteria are defined below:

- Constructability of Site – any significant impacts such as adjacent structures, wetlands apparent from aerial mapping, topography, site constraints, natural or manmade barriers such as water bodies, roads, sidings and mainline rail.
- Ability to Acquire Land – any parcels which appear to be consistent with rail operations. Acquiring parcels that are developed with occupied homes, businesses and other operations should be avoided if possible.
- Proximity to Station – distance from station and logistics of moving trains to/from layover site.
- Availability of Space– ability of the site to accommodate the 3 regional trains as defined in Amtrak’s proposed 2030 service plan.

- Future Expansion – ability of the site to be expanded as necessary to accommodate additional potential future regional and inter-city passenger trains if service increases.
- Consistent with City Plans – the site’s consistency with development plans and potential future opportunities as identified during meetings with City of Springfield staff.
- Conflict with Train Operations – qualitative review of whether trains in the layover facility have the potential to conflict with other passenger and freight operations and existing or potential to add road and rail access.

#### 4.0 Analysis of Criteria

A ranking of good, fair and poor has been applied to each site on how effectively each of the above criteria is met qualitatively. This ranking matrix is shown in Table 4-1.

**Table 4-1: Layover Site Ranking Matrix**

Criteria	Station Site		
	Armory Street	Springfield Station	Sweeney Site
Site Constructability	Fair	Good	Good
Land Acquisition	Fair	Good	Poor
Proximity to Station	Fair	Good	Good
Availability of Space	Good	Poor	Fair
Future Expansion	Good	Poor	Poor
Consistent with City Plans	Good	Fair	Poor
Conflict with Train Operations	Good	Poor	Fair

#### *Armory Street*

The site with the highest ranking was the Armory Street site to the east of the station. Constructability, land acquisition and proximity were ranked as fair. The site will require construction of a road and rail access from the passenger station to the layover area to eliminate any conflict with freight operations, but this construction should be straightforward and not conflict with existing rail operations. This site will accommodate proposed trains and could easily be expanded to accommodate additional rolling stock as needed. In addition, there are no adjacent/existing structures or wetlands that will be

impacted by construction of the layover area and maintenance building. The proposal to use this site was well received by city officials during a meeting held on April 26, 2011 to discuss options.

#### *Springfield Station*

During the course of evaluation, it was determined that the Springfield Station site may be considered for a layover location. Land acquisition would not be required and parking trains at the station would require minimal deadheading, however available space within the confines of the station area is minimal and future expansion would be difficult. In addition, the potential conflict with other freight and passenger service is high. The storage of trains at this location is not consistent with the City's plans to redevelop the station into an intermodal facility and attract additional passenger rail service.

It should be noted that the platforms at the Springfield station could provide an interim location for train maintenance as the NHHS rail service begins to ramp up prior to the proposed 2030 service levels. There would be no adverse impacts resulting from noise or traffic and the use of the platforms for interim train servicing would be consistent with existing use of the platforms.

#### *Sweeney Site*

The Sweeney site is owned by Amtrak and is used by Amtrak for a number of activities including the storage and servicing of trains. While the site may be constructible for the long-term needs of the NHHS service plan, the available space is somewhat limited and any future expansion would not be possible. The City of Springfield has indicated that it does not support use of the site as a long-term, permanent maintenance site, as it hopes to redevelop property around the site in the future.

It should be noted that Sweeney site could provide an interim location for train maintenance as the NHHS rail service begins to ramp up prior to the proposed 2030 service levels. There would be no adverse impacts resulting from noise or traffic and the use of the existing layover site for interim train servicing would be consistent with existing uses of the facility.

## **5.0 Recommendations**

This qualitative analysis of the three sites above determined that the Armory Street site is the most feasible or practical for a long-term layover and light maintenance facility for the proposed New Haven-Hartford-Springfield rail service. The Sweeney and Springfield Station sites do not provide the capacity for long-term expansion. However, both could support interim servicing needs as the NHHS rail service ramps up to 2030 service levels; interim use would be consistent with existing uses of the sites.