T25-07

Preliminary Siting Analysis For Proposed Suffolk Train Station

HAMPTON ROADS TPO

October 2025

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Libreng ibinibigay sa mga miyembro ng komunidad ang **suporta sa pagsasalin para sa mga dokumentong** HRPDC at HRTPO. Para sa tulong, kumontak kay Quan McLaurin (qmclaurin@hrpdcva.gov).

REPORT DOCUMENTATION

TITLE
Preliminary Siting Analysis for
Proposed Suffolk Train Station

ORGANIZATION
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ABSTRACT
HRTPO staff examined the feasibility and desirability of several sites in downtown Suffolk as candidates for a proposed train station for passengers using the current Amtrak trains terminating/originating in Norfolk.

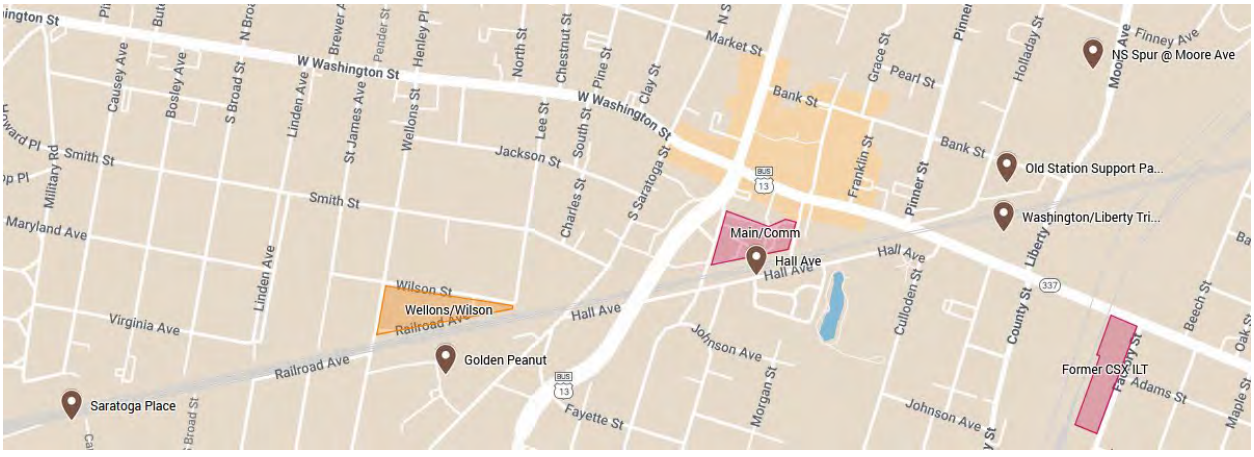
ACKNOWLEDGMENT & DISCLAIMERS
Prepared in cooperation with U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), the Virginia Passenger Rail Authority (VPRA), and the City of Suffolk. The contents of this report reflect the views of the Hampton Roads Transportation Planning Organization (HRTPO). The HRTPO is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the above cooperating agencies or the Hampton Roads Planning District Commission. This report does not constitute a standard, specification, or regulation. DRPT acceptance of this report as evidence of fulfillment of the objectives of this planning study does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.

Executive Summary

At the request of the City of Suffolk, HRTPO staff proceeded to "conduct preliminary analysis for **selecting a geographically feasible site** for the proposed Suffolk rail station"[1]. To find candidate sites for a train station in Suffolk, HRTPO staff developed a list of spatial requirements, then analyzed sites in the study area to determine whether or not they met those requirements.

The HRTPO/Suffolk[2] preliminary site analysis resulted in the following statuses for the examined sites:

- Sites not meeting the subject requirements:
  - Washington/Liberty Triangle
  - NS Spur along Moore Ave
  - Old NS Station Support Parcel
- Sites rejected for other reasons:
  - Saratoga Place
  - Hall Ave
  - Golden Peanut
- Sites **meeting the subject requirements**:
  - Residential
    - Wellons/Wilson
  - Commercial
    - Former CSX Industrial Lead Track (ILT) Site
    - Main/Commerce



Analyzed Sites

Source: HRTPO programming of Google My Maps

[1] "Unified Planning Work Program: FY 2025" (HRTPO, May 2024, p. 64)

[2] As indicated in the report body, City of Suffolk staff helped guide the HRTPO work.

Having identified three sites that meet the subject requirements, the City of Suffolk intends to **continue the process** of pursuing a train station (e.g. obtaining approvals from Norfolk Southern, the Virginia Department of Rail and Public Transportation (DRPT), and Amtrak), starting by hiring a consultant to estimate the ridership of the subject station, including impact on the existing Norfolk station.

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Former Norfolk-Southern Train Station

Source: Google Maps

Impetus and Purpose

Hampton Roads is currently served by five passenger trains per day, three arriving and departing on the Southside, and two arriving and departing on the Peninsula. These trains visit three stations in the region, Williamsburg and Newport News on the Peninsula route, and Norfolk on the Southside route.

At the February 15, 2024 HRTPO Board meeting, the City of Suffolk expressed interest in pursuing a station within its downtown area to further incorporate the western population of the region and possibly northern North Carolina. Earlier, the city had requested that HRTPO staff conduct a siting study to examine the feasibility and desirability of several sites in downtown Suffolk as candidates for a proposed train station for passengers using the current Amtrak trains terminating/originating in Norfolk. This idea was met with support, and HRTPO staff incorporated this study within its FY 2025 work program which reads:

> "conduct preliminary analysis for **selecting a geographically feasible site** for the proposed Suffolk rail station".

As opposed to a comprehensive study (including ridership forecast) required by external authorities—the Virginia Department of Rail and Public Transportation, and Amtrak—this study simply analyzes a set of sites, and identifies those sites meeting spatial requirements.

HRTPO Board
Source: HRTPO staff

Siting Analysis

To find candidate sites for a train station in Suffolk, HRTPO staff developed a list of spatial requirements, then analyzed sites in the study area to determine whether or not they met those requirements.

Spatial Requirements

To determine the requirements for a station site (e.g. minimum acreage), HRTPO staff examined 1) station analyses by others, 2) criteria published by stakeholders, and 3) existing stations in Virginia. Following these three sections, staff synthesized their information and established station requirements. Based on this research (included in the appendix under "Development of Station Spatial Requirements"), HRTPO staff determined **the following requirements for a Suffolk station**:

Minimum space for train while in station: 1,100'

- based on design train[3] being able to extend beyond the platform in either direction

Minimum platform length: 725'

- based on the platforms at Norfolk and Newport News stations

Minimum platform width: 12'

- based on "Amtrak Station Program and Planning Guidelines"

Minimum siding length[4]: double-ended[5]- 1,600'; dead-end[6]- 1,300'

- based on design train length and length of transitions

Minimum site size: 2 acres

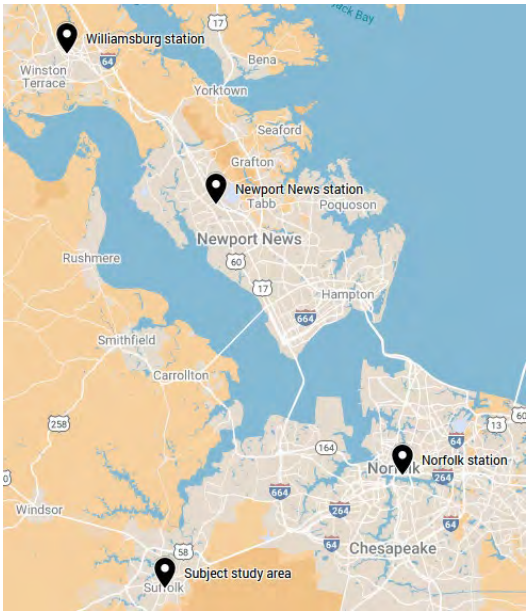
- based on existing station sites at Williamsburg, Lynchburg, and Danville

[3] Design train: The train (and its aspects, e.g. length) expected at the station, and therefore used in the selection of suitable station sites.
[4] Siding (re Merriam-Webster): "short railroad track connected with the main track". In this report, "siding" is the side track that serves the station platform.
[5] i.e. a siding that comes off the main track at one point and then returns to the main track at another point
[6] i.e. a siding that comes off the main track at one point but does not return to the main track

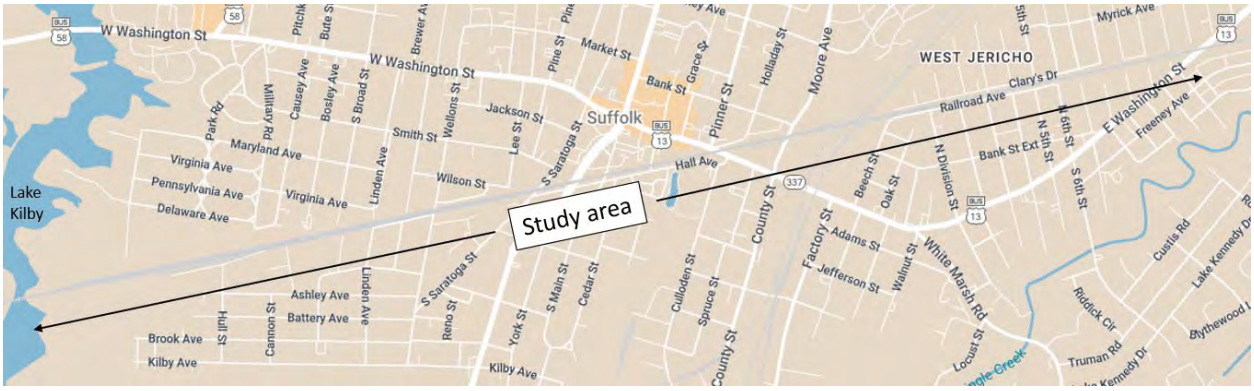
Sites Analyzed in Suffolk

HRTPO staff used the above spatial requirements to analyze the potential of various sites in Suffolk. City of Suffolk staff indicated a study area in the **vicinity of downtown Suffolk**, as shown below. HRTPO staff examined three types of sites:

- Along existing sidings[7]
- Along unused rail spurs
- Along Norfolk-Southern (NS) main tracks



Existing Train Stations and Suffolk Study Area
Source: HRTPO staff programming of Google My Maps



Downtown Study Area for Proposed Suffolk Train Station
Source: HRTPO staff programming and modification of Google My Maps

Sites along Existing Sidings

Three sites along existing sidings were examined:

- Washington/Liberty Triangle
- Hall Ave
- Saratoga Place

Washington/Liberty Triangle

For the triangular site bounded by Washington St (Bus. US 13 shown below), Liberty St (shown below at right), and existing tracks, the distance between streets (640', as measured below) is less than the 1,100' required, **eliminating this site as a candidate for a station**.

Washington/Liberty Triangle
Source: Google Maps

Hall Avenue

The presence of Hall Ave along this existing siding **precludes building a station at this site**.

Hall Avenue
Source: Google Maps

Saratoga Place

Along the south side of the mainline tracks, multiple sidings exist between Lake Kilby and Wellons St, but—based on the fact that a station there would be in (or accessed through) the Saratoga Place neighborhood, HRTPO staff **eliminated this site as a candidate**.

Saratoga Place
Source: Google Maps

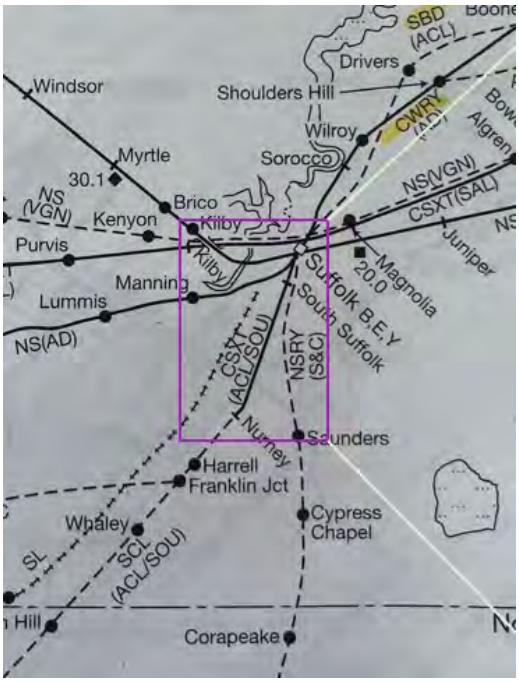
Sites along Unused Rail Spurs

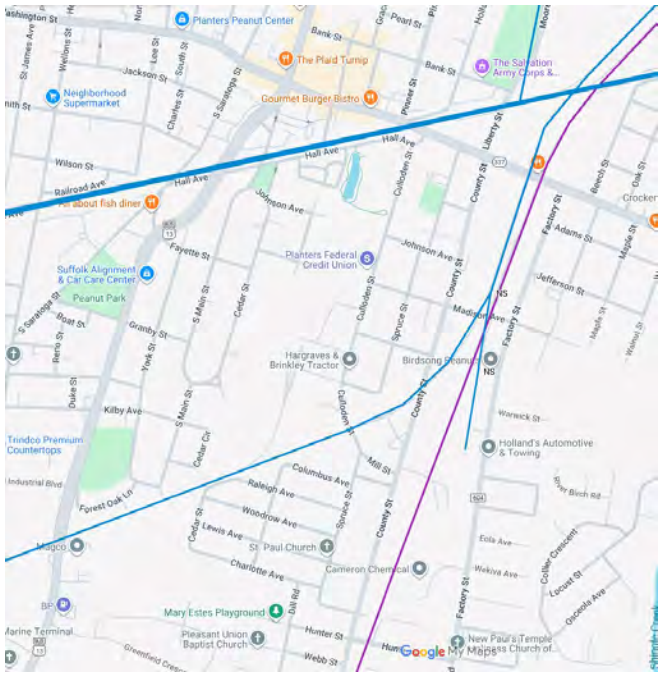
Two sites along unused rail spurs were examined:

- Former CSX Industrial Lead Track (ILT)
- NS Spur along Moore Ave

CSX Industrial Lead Track (ILT) Right-of-Way (ROW)

CSX has removed the rails from its industrial lead track that ran from the main NS tracks down to Nurney (map at left below). Because a short NS industrial siding serving Birdsong Peanuts crosses the CSX ILT ROW near Madison Ave (map at right below), any usage of this CSX right-of-way for a train station would have to be north of Madison Avenue.





CSX ILT Right-of-Way to Nurney (also showing NS r.o.w.)

Sources:

- Left: SPV's Comprehensive Railroad Atlas of North America, Appalachia and Piedmont (2004), map VA-12
- Right: HRTPO programming of Google My Maps

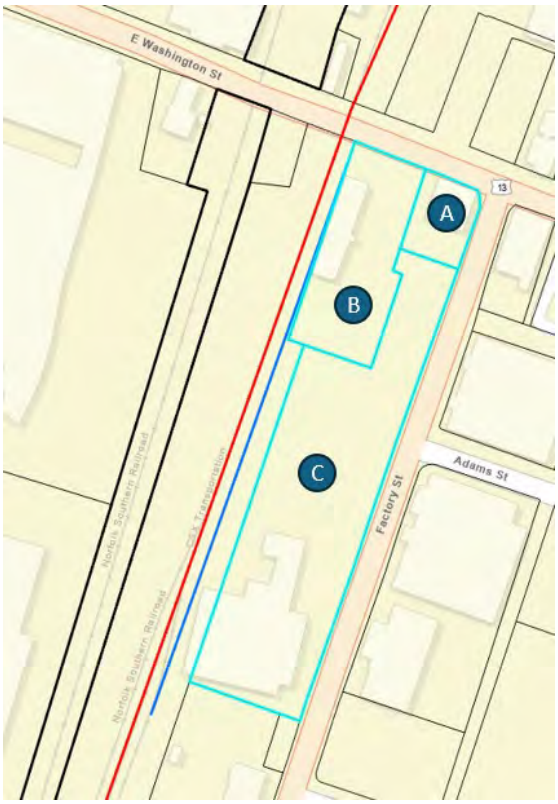
This site **meets the spatial requirements** (s.a. supporting maps on following page):

- Space for Train while in Station
    - The distance between Madison Ave. and Washington St. (1,250') being more than the 1,100' minimum requirement, this site meets that requirement.
- Platform Length
    - There is adequate room for the minimum 725' long platform.
- Platform Width
    - There is adequate space for the minimum 12' wide platform.
- Siding Length
    - The proposed siding—following earlier track coming off the mainline near Capital St and running first parallel to NS main line, then along former CSX spur—(0.7 mi.) being more than the 1,300' minimum requirement, would be adequate.
- Site Size
    - Three parcels (A: 461 Washington St, 0.2 ac.; B: 453 Washington St, 0.6 ac.; C: 125 Factory St, 1.7 ac.) sum to 2.5 acres, meeting the 2.0 acre minimum requirement.
        - Note: The southern portion of the platform would lie within the right of way (r.o.w) owned now or formerly by CSX, precluding the need to purchase the parcel south of 125 Factory St. for the proposed station.

Trains coming from Norfolk would pull into the proposed dead-end siding, serve the station, reverse back onto the main track (or onto a parallel siding), then proceed toward Petersburg. Trains coming from Petersburg would back into the proposed siding, serve the station, then return to the main track and proceed toward Norfolk. Because of backing, each station visit would take significantly longer at this site than at a regular, in-line station.

Proposed Siding and Platform for CSX ILT ROW

Source: HRTPO staff via ArcGIS Pro



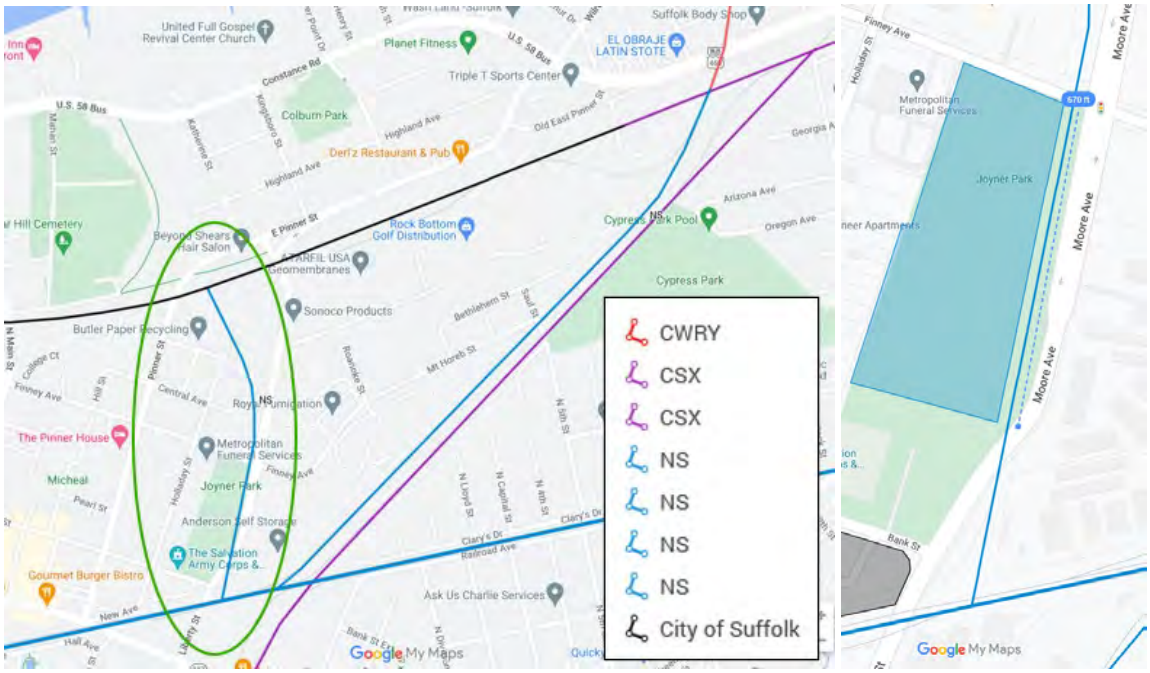
Site Parcels A, B, C for CSX ILT ROW

Source: HRTPO staff via ArcGIS Pro

NS Spur along Moore Avenue

Norfolk Southern (NS) has removed the rails from its former connection between the main NS tracks and the former Seaboard Air Line (now owned by the City of Suffolk, as shown below).

The distance between Moore Ave and Finney Ave (670') is less than the 1,100' requirement for a train in station, **eliminating this site as a candidate for a station**.



NS Spur along Moore Avenue (blowup)

Source: HRTPO programming of Google My Maps

Sites along Norfolk Southern (NS) Main Tracks

Four sites along the NS main tracks were examined:

- Old NS Station Support Parcel
- Golden Peanut Site
- Wellons/Wilson Site
- Main/Commerce Site

Old NS Station Support Parcel

Norfolk Southern owns the triangular property that contains the old NS passenger station, making it desirable for the development of a new station. The distance between Liberty St and Washington Ave (800'), however, is less than the 1,100' requirement for a train in station, **eliminating this site as a candidate for a station**.

Old NS Station Support Parcel
Source: HRTPO programming of Google My Maps

Golden Peanut Site

The Golden Peanut Site, former location of the Golden Peanut Company, lies just south of the main NS tracks between Wellons Street and Saratoga Street . The distance between Wellons Street and Saratoga Street (1,150') makes this site desirable, however, most of the site has recently been developed for apartments, **eliminating this site as a candidate for a station** according to the City of Suffolk.

Golden Peanut Site

Source: HRTPO programming of Google My Maps

Wellons/Wilson Site

City staff suggested examining the currently residential triangle formed by the main NS tracks, Wellons St, and Wilson St.

Wellons/Wilson Site
Source: HRTPO via Google Maps

This site **meets the spatial requirements** (s.a. supporting maps on following page):

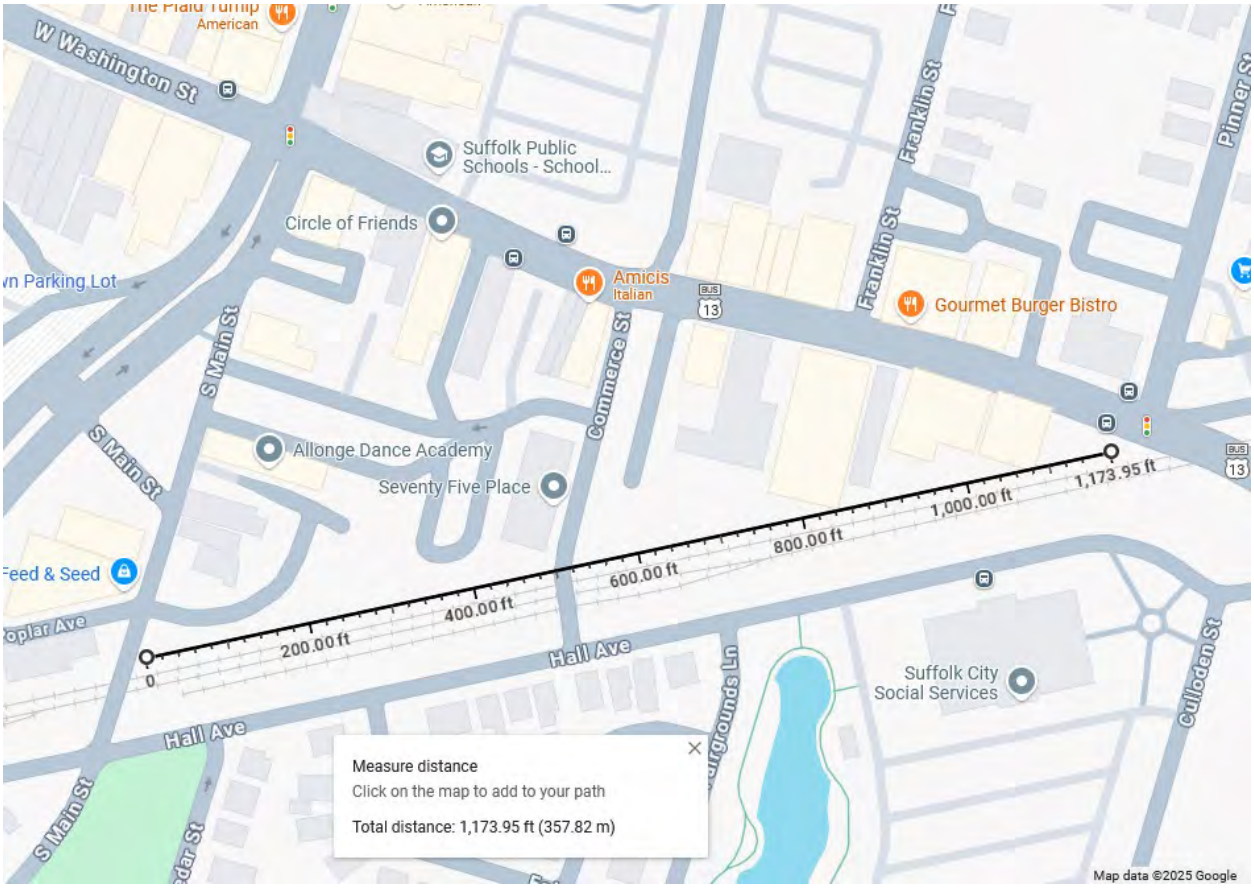
- Space for Train while in Station
    - The distance between Wellons St and Saratoga St (1,200') being more than the 1,100' minimum requirement, this site meats that requirement.
- Platform Length
    - There is adequate room for the minimum 725' long platform.
- Platform Width
    - There is adequate space for the minimum 12' wide platform.
- Siding Length
    - In order to prevent the transitions from lying across a street, the proposed 2,100' siding (which is longer than the 1,600' required) provides 1,500' of straight track in front of the platform, and 300' transitions at either end.
- Site Size
    - The properties within the triangle sum approximately to 3.1 acres, greater than the 2 acre requirement.

Wellons/Wilson Site (showing 725' platform, 2,100' siding, and NS right-of-way**)**
Source: HRTPO staff via ArcGIS Pro

The proposed platform and siding being within the existing NS right-of-way is an advantage.

Main/Commerce Site

In the heart of downtown Suffolk, HRTPO staff examined the triangle formed by Main St, Washington St, and the NS main tracks.



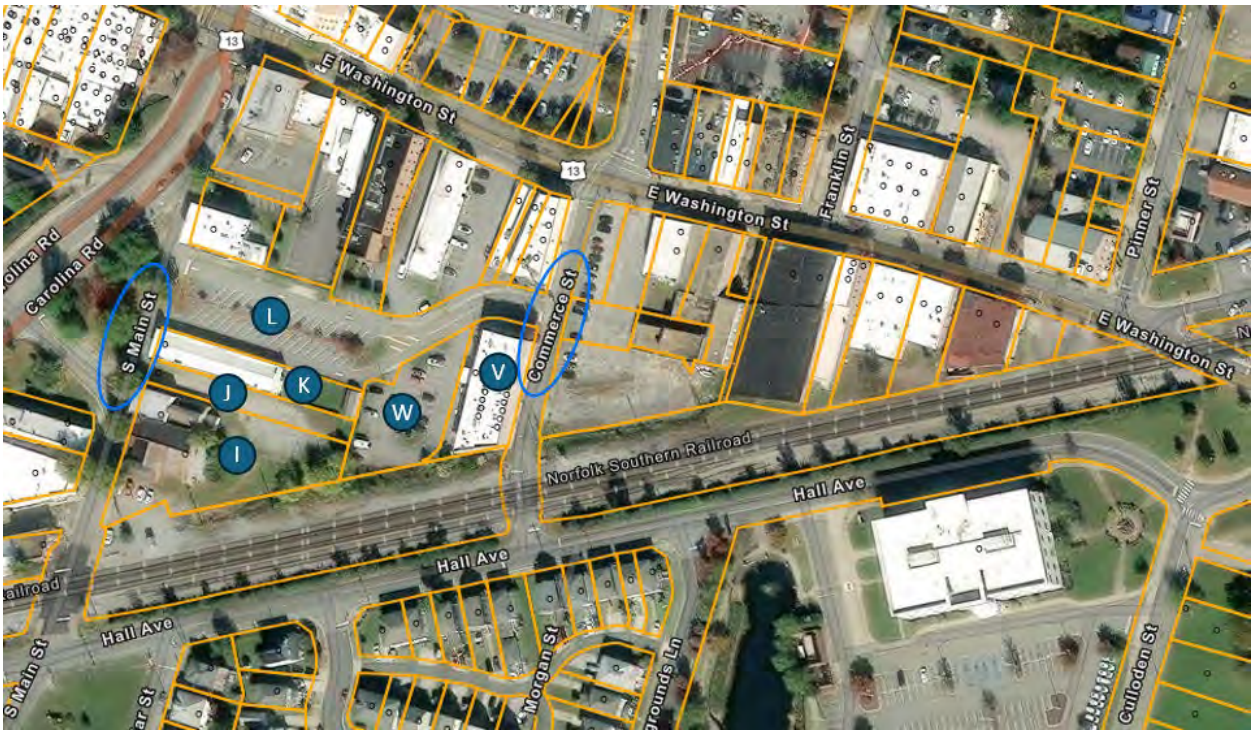
Main/Washington/NS Triangle
Source: HRTPO programming of Google Maps

When showing this analysis to City staff, they requested compiling a 2 acre station site between Main St and Commerce St, which includes city-owned property. (That area is called “Main/Commerce” herein.)

The Main/Commerce site **meets the spatial requirements** (see also supporting maps on this and following page):

- Space for Train while in Station
  - Given that the City is willing to close Commerce St at the tracks if necessary, the entire distance between Main St and Washington St (1,175') may be used for a train while in a Main/Commerce area station, greater than the 1,100' requirement for a train while in station.
- Platform Length
  - There is adequate room for the minimum 725' long platform. Note: The eastern end of the platform lying outside of the NS ROW, some or all of the affected properties would likely have to be purchased for this site.
- Platform Width
  - There is adequate space for the minimum 12' wide platform.
- Siding Length
  - There is adequate space for the minimum 1,600' siding.
- Site Size
  - As shown on following page, given that the city owns parcels L and W, combining those two parcels with parcels between the parking lot and NS tracks (parcels I, J, K, and V) would provide a total of 2.2 acres, greater than the 2 acre requirement.

Main/Washington/NS Triangle (725' platform, 1,600' siding, and NS right-of-way**)**
Source: HRTPO staff via ArcGIS Pro



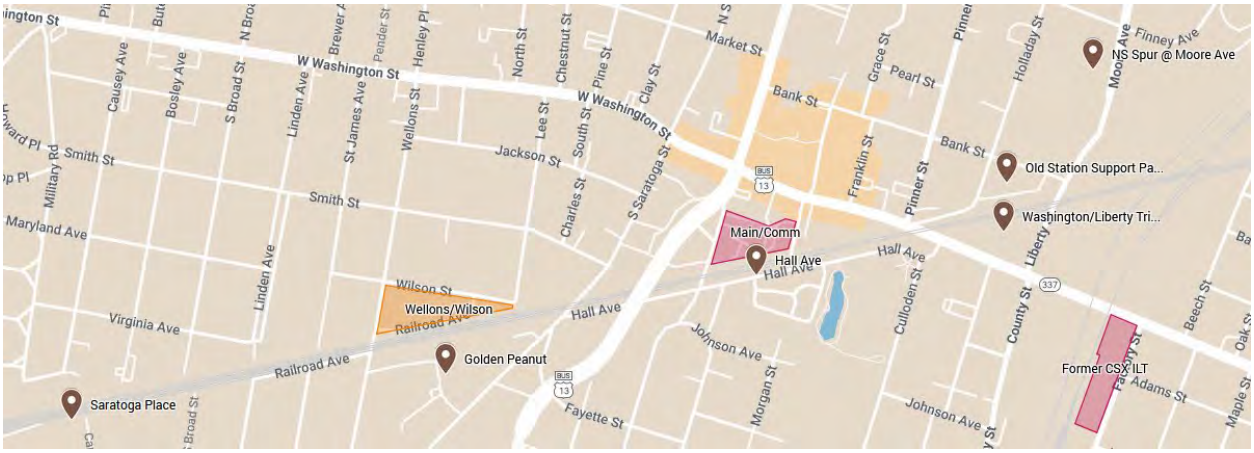
Main/Commerce Site

Source: HRTPO staff modification (lot letters) of Suffolk VA Parcel Data Viewer

Summary and Next Steps

To find candidate sites for a train station in Suffolk, HRTPO staff developed a list of spatial requirements, then analyzed sites in the study area to determine whether or not they met those requirements. The HRTPO/Suffolk[8] preliminary site analysis resulted in the following **statuses** for the examined sites:

- Sites not meeting the subject requirements:
  - Washington/Liberty Triangle
  - NS Spur along Moore Ave
  - Old NS Station Support Parcel
- Sites rejected for other reasons:
  - Saratoga Place
  - Hall Ave
  - Golden Peanut
- **Sites meeting the subject requirements**:
  - Residential
    - Wellons/Wilson
  - Commercial
    - Former CSX Industrial Lead Track (ILT) Site
    - Main/Commerce



Analyzed Sites

Source: HRTPO programming of Google My Maps

[8] As indicated in pages above, City of Suffolk staff helped guide the HRTPO work.

On June 4, 2025, HRTPO staff presented these findings—including the three candidate sites—to the city council of Suffolk. The city intends to **continue the process** of pursuing a train station, e.g. obtaining approvals from Norfolk Southern, the Virginia Department of Rail and Public Transportation (DRPT), and Amtrak by first hiring a consultant to estimate the ridership of the subject station, including impact on the existing Norfolk station. In addition, DRPT plans to analyze a potential Suffolk station as part of its work on the proposed Commonwealth Corridor, process starting in 2026. (See Appendix for more detailed information.)

Appendix

Study Scope

FY25 Unified Planning Work Program (UPWP), HRTPO, May 2024, p. 64

Seeking input from DRPT and VPRA, aggregate relevant current planning efforts needed to conduct preliminary analysis for selecting a geographically feasible **site for the proposed Suffolk rail station**:

- Consider current DRPT and VPRA planning for the Commonwealth Corridor as regards the proposed Suffolk rail station.
- The city of Suffolk intends to begin the FRA required Feasibility study for location and Cost Analysis and the required Ridership and Revenue Study in the FY 28-29 city budget year.
- Consider downtown and the adjoining local area as candidates.
- Consider physical constraints, e.g. existing grade crossings which would have to be closed to accommodate the station siding.

Related State of Virginia Effort

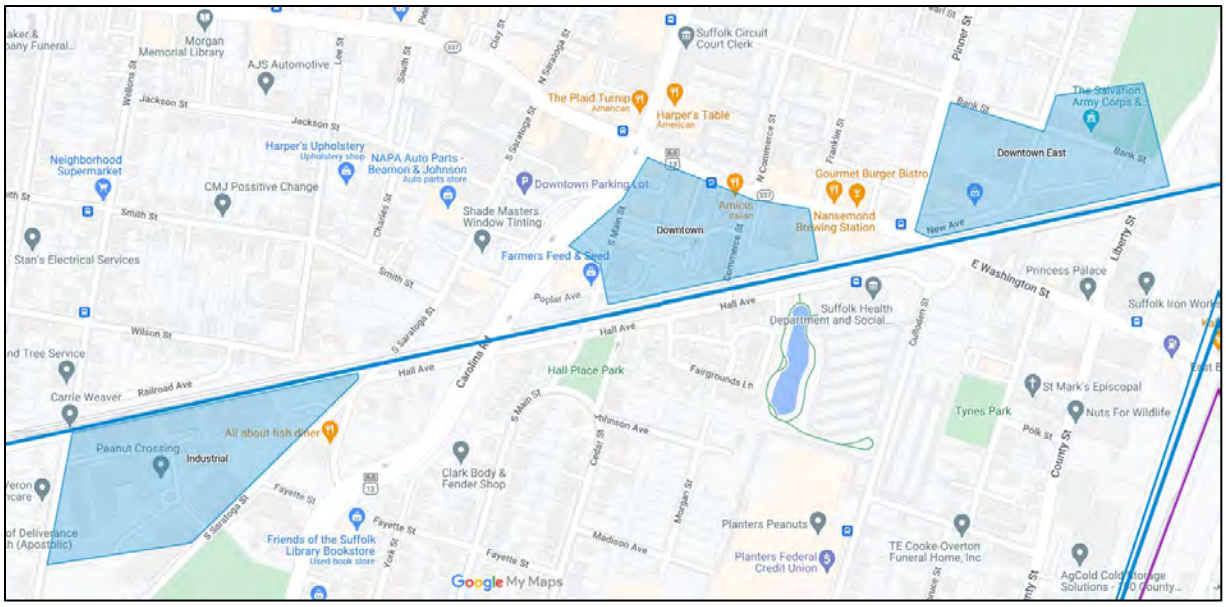
According to a 4-24-25 email from the Department of Rail and Public Transportation (DRPT), the department is currently in Step 1 of the Federal Railroad Administration (FRA) Corridor Identification & Development (CID) process for the planned Commonwealth Corridor (from Norfolk / Newport News to southwest Virginia), and is developing the scope, schedule, and budget for a service development plan (SDP) that will analyze future potential ridership and revenue, service options, and infrastructure needs, including potential station locations. The **SDP is expected to start in early-mid 2026** and will include a robust public outreach component in which HRTPO and other stakeholders will be invited to participate.

Development of Station Spatial Requirements

To determine the requirements for a station site (e.g. minimum acreage), HRTPO staff examined 1) station analyses by others, 2) criteria published by stakeholders, and 3) existing stations in Virginia. Following these three sections, staff synthesized their information and established station requirements.

Station Analyses by Others

In 2011, Moffat & Nichol (M&N) prepared a "Suffolk Passenger Rail Station" document, proposing three locations, as shown below.



Station Locations Proposed by Moffat & Nichol
Source: HRTPO staff mapping based on images in M&N 2011 study

Note:

1) Based on the HRTPO methodology of finding candidate sites developed below, the sites HRTPO examined included each of the three M&N sites (but HRTPO staff identified these candidate sites using different names for readability).
2) These M&N sites vary in size between 7 and 10 acres.
3) For each site, M&N recommended closing at least one street at the tracks:
    a. Downtown East: closing Liberty Street
    b. Industrial: closing Saratoga Street
    c. Downtown: closing Main Street and Commerce Street

In 2021, Moffat & Nichol (M&N) prepared "Bedford Regional Passenger Rail Stop Study". Using 20 binary criteria (yes/no), from 18 candidate sites, M&N identified six (6) sites meeting most of the criteria. Ranking these six sites using the same 20 criteria, M&N prepared conceptual layouts for the two most suitable sites- Courthouse and Jackson. After the Courthouse site was eliminated by the Bedford/Franklin Regional Rail Initiative (BFRRI) group, and the Jackson site was eliminated by Norfolk Southern (NS), M&N prepared a station layout for two sites chosen by Norfolk Southern. (These two sites were included in the original 18 candidates.) Note that only one of the original 18 candidates had a score lower than the two NS-chosen sites.

	Bedford Criteria							Amtrak Criteria							Additional Criteria					
Site Location	Car Access	Parking	Bus Access	Access to CBD	Real estate cost (inexpensive)	Construction cost (low cost)	Multi-use potential	Long Distance Service	Multi-Modal Services (available/provided)	Side Platforms (adequate length)	Parking	Functional Requirements (adequate space)	Safety and Security (visibility)	Sustainable Design	Universal Design (ADA accessible)	Topography	Utilities	Zoning	Neighboring Development	Time to US 460 interchange	Total Criteria Met
1 - Macon W	●	●			●	●				●	●	●		●	●			●			10
2 - Elks Field	●	●			●					●	●	●			●			●			8
3 - Raintree	●				●													●			3
4 - Davenport	●				●	●				●		●		●							6
5 - Elks Home	●	●				●				●	●	●		●	●	●		●			10
6 - Merchants	●				●	●	●			●				●		●					7
7 - Bedford Ave.	●	●				●				●	●	●	●	●		●	●				10
8 - Mountain	●	●		●		●	●			●	●	●	●	●		●	●				12
9 - Depot St.	●		●	●			●	●					●	●		●	●	●	●	●	12
10 - Courthouse	●	●	●	●	●		●	●		●		●	●	●	●		●	●	●	●	16
11 - Jackson	●	●	●	●	●	●	●	●		●		●	●	●	●		●	●	●		16
12 - Plunkett	●	●		●		●	●			●		●	●	●	●	●	●	●	●	●	15
13 - Woolen Mills	●	●		●		●	●			●		●	●	●	●	●	●	●	●		14
14 - Orange W	●	●				●				●	●	●		●	●		●	●		●	11
15 - Independence S	●	●			●	●	●			●	●	●		●	●	●		●		●	13
16 - Independence W	●	●				●	●			●	●	●		●	●	●		●		●	12
17 - Independence N	●	●				●	●			●	●	●		●	●			●		●	11
18 - Independence E	●	●			●	●	●			●	●	●		●	●			●		●	12
Total No. of Sites	18	14	3	6	9	14	11	3	0	16	10	15	7	16	12	9	8	14	5	8	

Highlighted rows indicate sites considered for further analysis.
Source: Moffatt & Nichol

Screening Analysis 1

Source: "Bedford Regional Passenger Rail Stop Study" (Moffatt & Nichol, 2021, Figure 1.3, p. 5

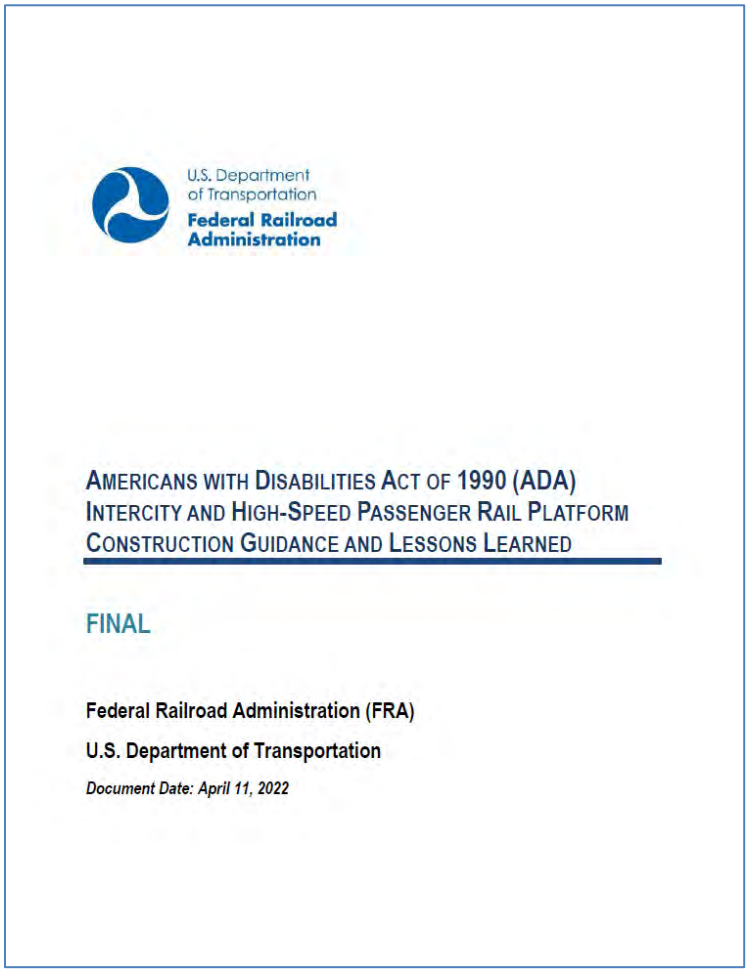
Criteria Published by Stakeholders

HRTPO staff gathered station site criteria from the following stakeholder documents:

- "Americans with Disabilities Act of 1990 (ADA) Intercity and High-speed Passenger Rail Platform Construction Guidance and Lessons Learned" (Federal Rail Administration [FRA])
- "Public Improvements Projects Manual" (Norfolk Southern)
- "2013 Amtrak Station Program and Planning Guidelines" (Amtrak)

Applicable station site requirements are summarized on the following pages.

Federal Rail Administration


U.S. Department of Transportation
Federal Railroad Administration

AMERICANS WITH DISABILITIES ACT OF 1990 (ADA)
INTERCITY AND HIGH-SPEED PASSENGER RAIL PLATFORM
CONSTRUCTION GUIDANCE AND LESSONS LEARNED

FINAL

Federal Railroad Administration (FRA)

U.S. Department of Transportation

Document Date: April 11, 2022

According to the "Americans with Disabilities Act of 1990 (ADA) Intercity and High-speed Passenger Rail Platform Construction Guidance and Lessons Learned" (Federal Rail Administration [FRA], April 11, 2022, p. 54), "FRA recommends that the design of stations with the following characteristics…include **full-length platforms**:"

- Terminal stations
- Crew change points
- Federally designated **high-speed rail corridors**
- Stations with annual ridership greater than 200,000

Concerning high-speed rail, according to "Richmond / Hampton Roads Passenger Rail Project, Tier 1 Final EIS" (FRA, August 2012, p. 1-11):

> "In 1996, the United States Secretary of Transportation, at the request of the Commonwealth of Virginia, expanded the federally designated SEHSR [Southeast High Speed Rail] Corridor to include a link from Richmond to Hampton Roads. The

designation did not specify which rail route [Peninsula or Southside] would be utilized between Richmond and Hampton Roads."[9]

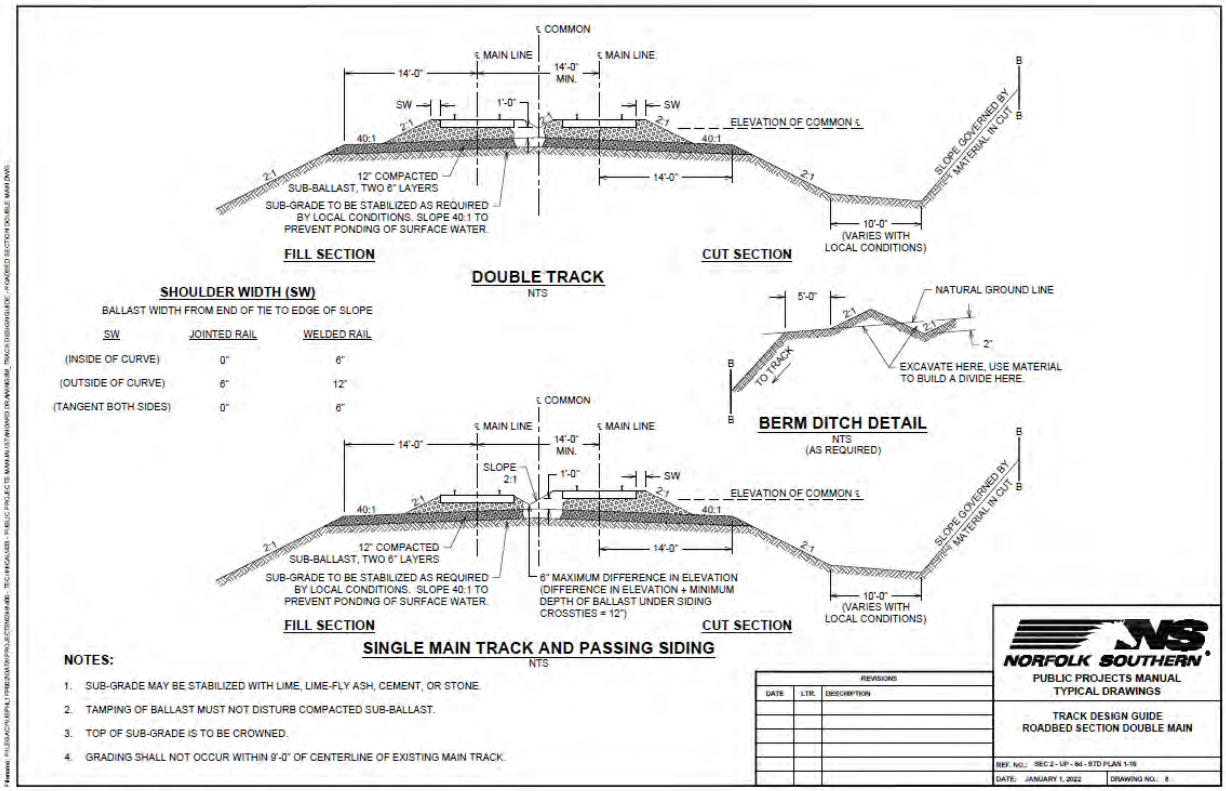
Since the Suffolk station under consideration will be on a federally designated high-speed rail corridor, the above FRA guidance **recommends a full-length platform for any station in Suffolk**.

[9] Note that the preferred alternative in this final EIS (p. ES-1) designates the Southside route (which passes through Suffolk) as "Higher-speed" and the Peninsula route as "Conventional speed".

Norfolk Southern

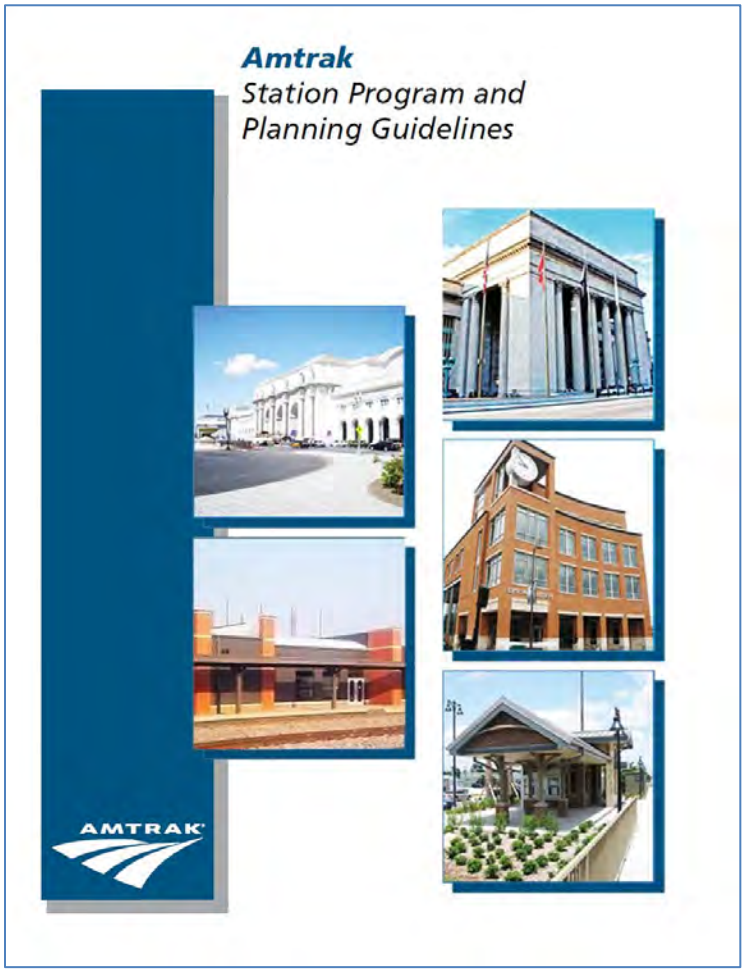
According to the "Public Improvement Projects Manual" (Norfolk Southern; January 1, 2022; p. 162), **14' separation is required between main track and passing siding**, as shown on following page.[10]

[10] Apparently (based on the "Single Main Track and Passing Siding" title of the diagram, the leftmost centerline (labeled "main line") should have been labeled "passing siding".



Source: "Public Improvement Projects Manual" (Norfolk Southern; January 1, 2022; p. 162)

Amtrak



According to the "Amtrak Station Program and Planning Guidelines" (Amtrak, 5/1/2013, p. 87)—the current Hampton Roads trains being "Northeast Regional" trains, and Suffolk not being on the Northeast Corridor (NEC)—the **minimum platform length is 425' and the preferred platform length is 1,000'**, as shown on following page.

8.5 Platform Length

Platform length, width, and height are critical planning dimensions that are derived from the service types and equipment that serve the station. It is important to think of platform design and planning systematically. For example, a station platform that serves HSR should be consistent with platforms at other stations that serve the same train, as the equipment and consist will remain constant from station to station.

All platforms should accommodate the full length of a typical train consist and allow for maximum flexibility. While the minimum required platform length will vary depending on the type of rail service provided, platform lengths should be as standardized as possible, both within the individual station, and across multiple stations serving a corridor.

Platform lengths on the Northeast Corridor are driven by the frequency of service and service types provided by both Amtrak and commuter services. Amtrak has identified preferred and minimum platform lengths, as identified in the following table:

Service Type	Preferred - All Locations	Minimum - Off NEC	Minimum - NEC
Acela Express [1]	700'	N/A	550'
Northeast Regional	1000'	425'	850'
State Corridor	700'	300'	700'
Long Distance	1200'	550'	850'

1 Platform lengths for High Speed Rail services will be modified to accomodate full length level boarding for lengthened Acela Expess and new HSR fleets.

According to page 88 of the document, for a siding with baggage loadings, the **minimum platform width is 12', and the preferred width is 15'**, as shown below.

8.6 Platform Width

The determination of platform width is a balance between accommodating the peak passenger load and the physical constraints. In other words, wider platforms will generally be preferred over narrower ones as being safer, better able to handle service baggage vehicles, and able to provide for growth in passenger volume.

Platform	Preferred Width	Minimum Width	Live loading
Center Island	24'	20'	250 psf
Side w/Baggage Loadings	15'	12'	250 psf
Side w/Passenger Service Only	12'	10'	150 psf

When 12 foot wide platforms are used with full baggage service, turnarounds for equipment need to be provided at the platform ends.

Existing Stations in Virginia

HRTPO staff examined **five stations in Virginia**, the three local stations plus two stations thought to have ridership similar to that expected at a Suffolk station:

- Newport News
- Norfolk
- Williamsburg
- Lynchburg
- Danville

Newport News Station

The Newport News station, opened in 2025, has the following dimensions:

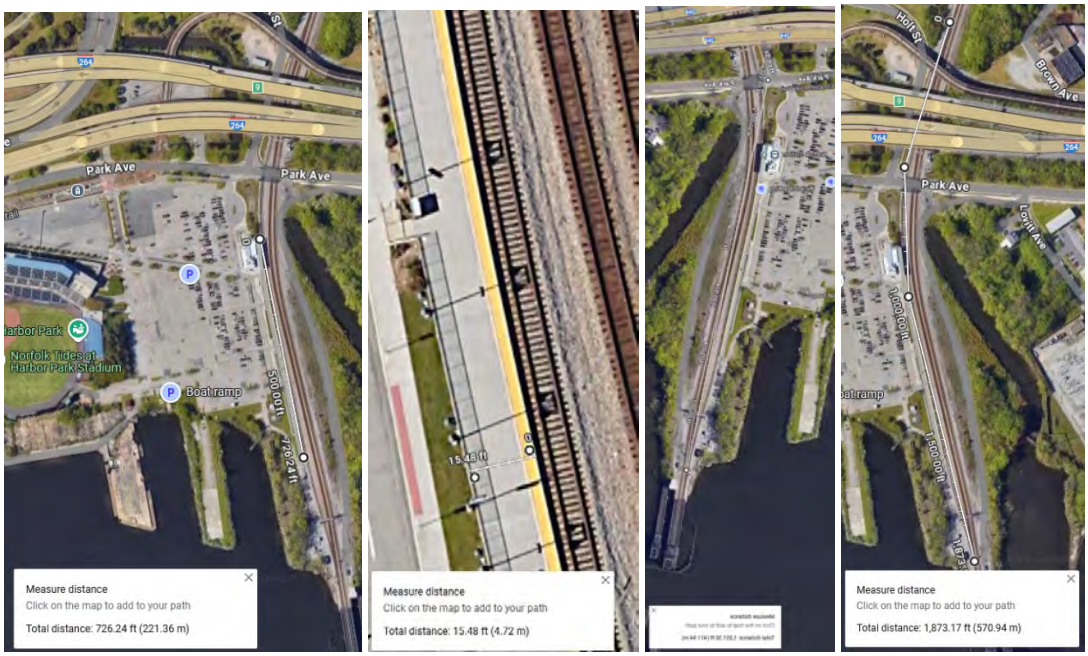
Platform length: 725’
Platform width: 15’
Siding length: n.a.
(The siding includes a turn-around making it different from a siding for a Suffolk station.)
Space for train while in station:
n.a. (no streets cross the siding)

Newport News Train Station Aerials
Source: Google Maps

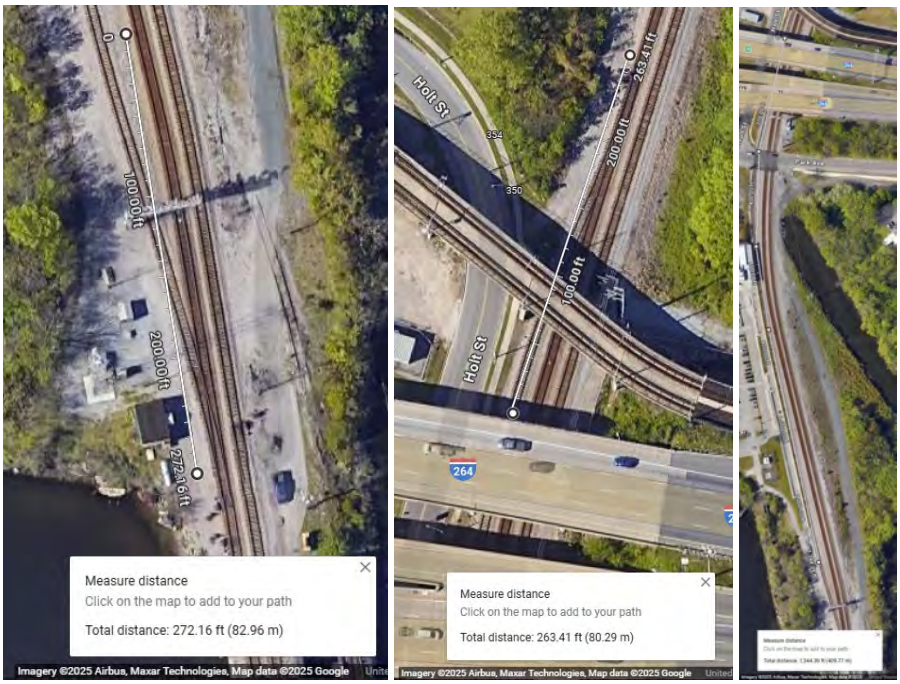
Norfolk Station

The Norfolk station, opened in 2012, has the following dimensions:

Platform length:	725’
Platform width:	15’
Siding length:	1,900’
Space for train while in station:	1,350’
Siding transition length(s):	275’ each
Siding length (non-transitions):	1,350’



Norfolk Train Station Aerials (part 1)
Source: Google Maps



Norfolk Train Station Aerials (part 2)

Source: Google Maps

Williamsburg Station

The Williamsburg station, like the Suffolk station under consideration, lies on the edge of the region. It has no siding. The site size is **1.5 acres**. The distance from the nearest cross street to the center of the ground-level platform is 600', providing **1,200'** space for trains while in station (considering both directions).

Williamsburg Train Station Aerial #1
Source: Google Maps

Williamsburg Train Station Aerial #2
Source: Google Maps

Lynchburg Station

HRTPO staff expects that a Suffolk station would be in a similar ridership category as the existing Lynchburg station. The site size is **1.5 acres**. Note that the streets near the station are bridged over the tracks.

Lynchburg Train Station Aerial
Source: Google Maps

Danville Station

HRTPO staff expects that a Suffolk station would be in a similar ridership category as the existing Danville station. The site size is **2.2 acres**. The distance from the nearest cross street to the center of the ground-level platform is 700', providing **1,400'** space for trains while in station (considering both directions).

Danville Train Station Aerials

Source: Google Maps

Establishment of Station Spatial Requirements

Based on the above research, HRTPO staff established the spatial requirements for a Suffolk station.

Minimum Space for Train while in Station

Sites without adequate length between streets would require street closure—permanent or temporary (i.e. while train is in station)—eliminating them as candidates according to the City of Suffolk. The five Virginia stations examined above had at least 1,200' for trains while in station. The minimum space for train while in station is calculated below:

> The trains HRTPO staff inspected in the field had 8 passenger cars and 1 engine (Stapels Mill, 10-18-22; Norfolk 1-8-25). Staff calculated the length of a *design train* of 9 cars and 1 engine: (9 cars * 85'/car[11] + 1 engine * 72'/engine[12] = 909', say 900'. With the end of the train at the end of a 725' platform, 175' of space (900-725) is needed for the train to extend beyond both ends of the platform (i.e. for both westbound and eastbound trains). Therefore, the minimum space for a train while in station is 725 + 175 + 175 = **1,100'**.

Minimum Platform Length

While considering a) the above FRA guidance recommending a "full-length" platform for stations on high-speed rail corridors, and b) the above Amtrak guidelines indicating a "preferred" platform length of 1,000' for Northeast Regional trains, based on the 725' platforms built at the Norfolk (2012) and Newport News (2025) stations, HRTPO staff assumed a minimum platform length of **725'**. Note that the platform for a station (e.g. Suffolk) must be located roughly in the middle of the above 1,100' space for train in order to provide 175' at both ends for the front of the train, depending on direction of travel.

Minimum Platform Width

Based on the "Amtrak Station Program and Planning Guidelines" (above), HRTPO staff assumed a minimum platform width of **12'**.

[11] Amfleet cars (Wikipedia)
[12] Based on 1-8-25 field inspection

Minimum Siding Length

In the Moffatt & Nichol documents reviewed above, planned stations had sidings of 1,600-2,000' total length. As shown above, the total length of the siding of the Norfolk station is 1,900'.

For Suffolk, to separate the station train from those on the main track, make the straight portion of the siding long enough to contain the design train length (900', above), say 1,000'. The minimum total siding length is calculated below:

> Length of transitions: 275' (based on Norfolk station, above), say 300'. Therefore, the minimum dead-end siding length is **1,300'** (1000+300), and the minimum double-ended siding length is **1,600'** (1000+[300*2]).

Minimum Site Size

The following site size information was collected (as detailed above):

M&N Suffolk study:

- The planned sites were large (7-10 acres), perhaps to serve additional functions (e.g. bus transfer).

Williamsburg station:

- 1.5 acres

Lynchburg station:

- 1.5 acres

Danville station:

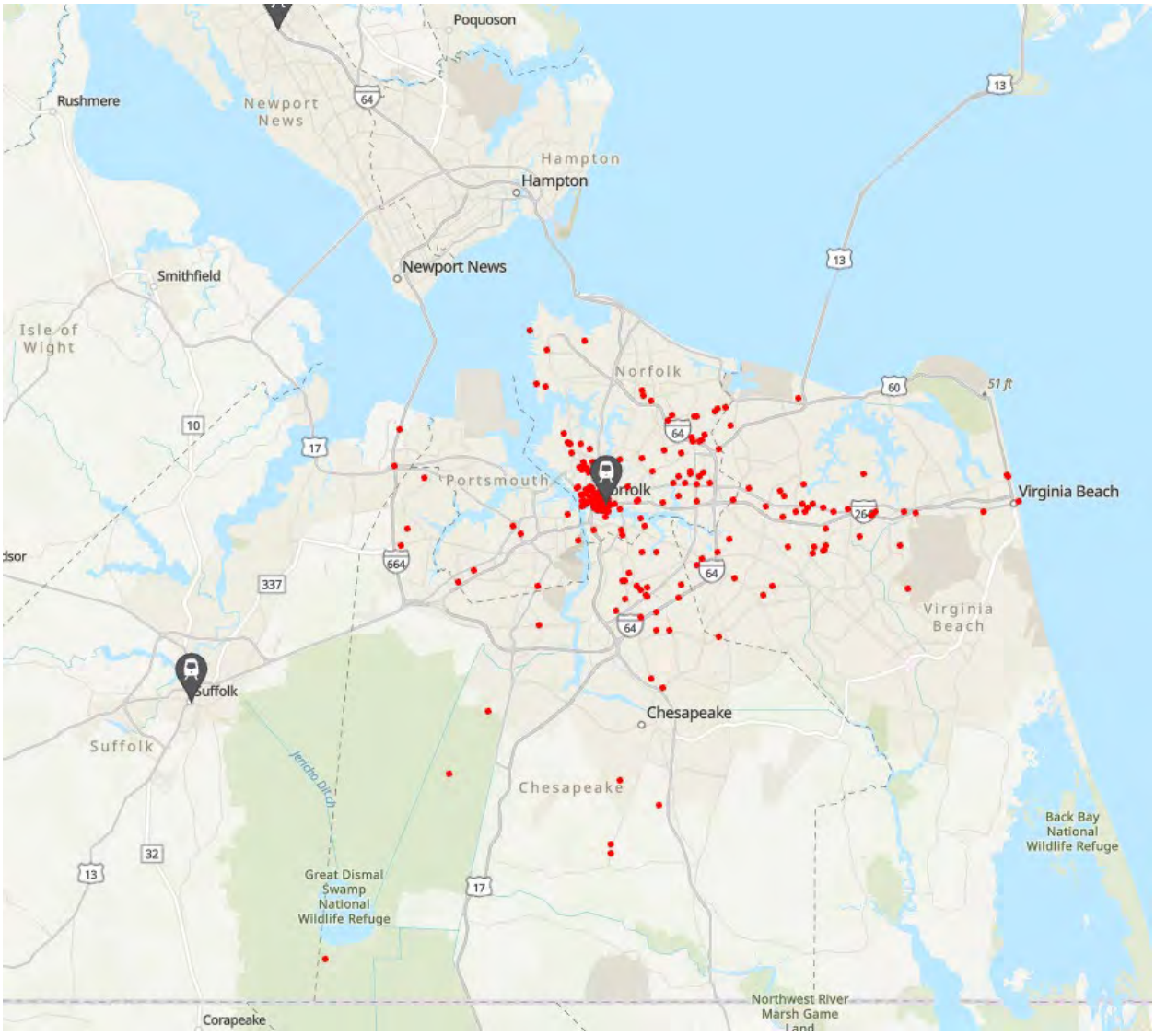
- 2.2 acres

Based on these data, staff assumed a minimum site size of **2 acres**.

Geography of Local Train Stations

To investigate how a Suffolk station might fit within the regional passenger rail system, HRTPO staff examined the geography of local train stations.

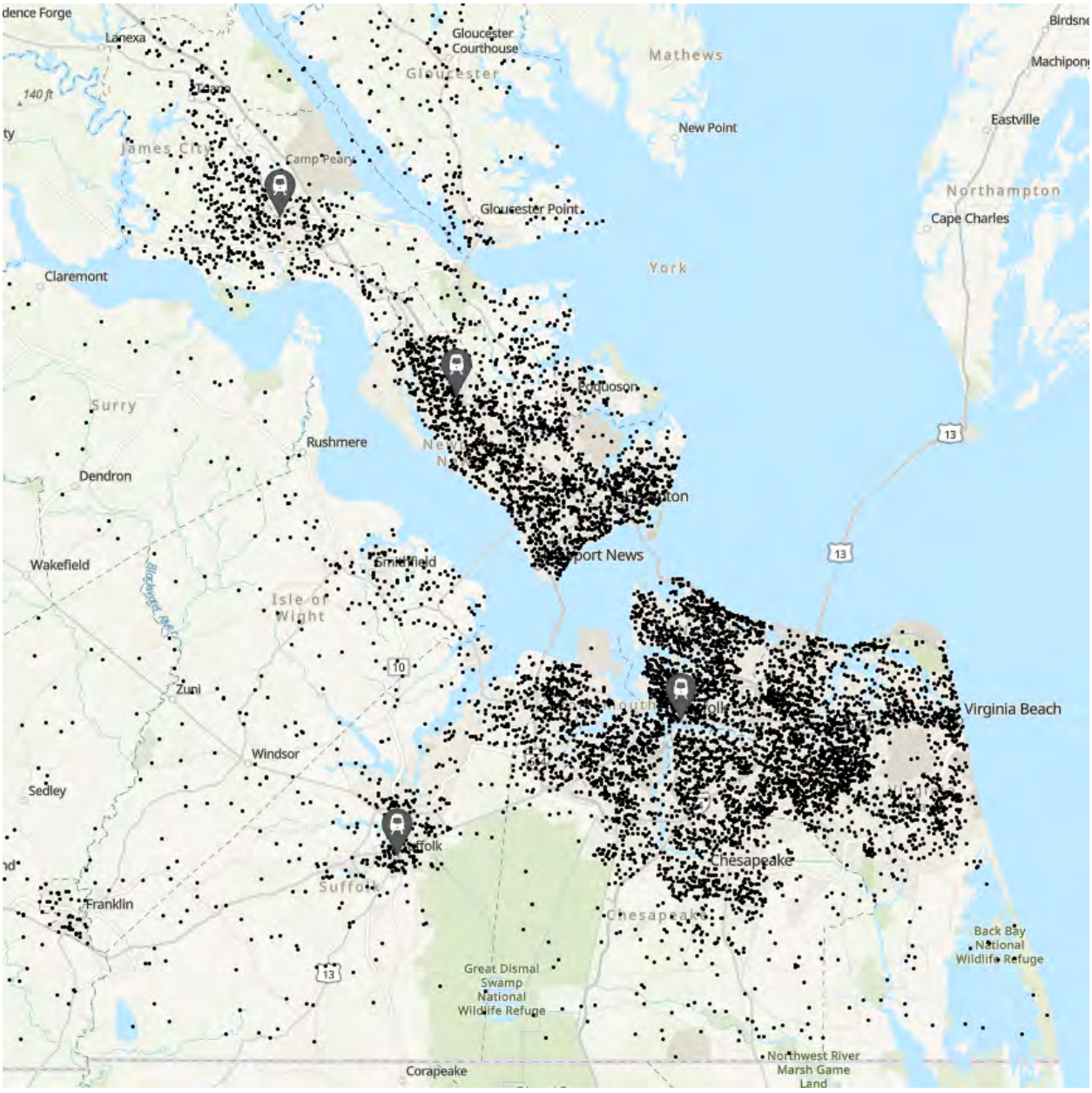
First, in order to determine whether or not a Suffolk station would serve trips already served by the Norfolk station, staff plotted the local origins of trips made to the Norfolk station using the StreetLight travel monitoring tool, finding that few trips to the Norfolk station come from Suffolk. Therefore, it appears that a Suffolk station **would not "cannibalize" riders** from the Norfolk station.



Origins of Trips to Norfolk Station

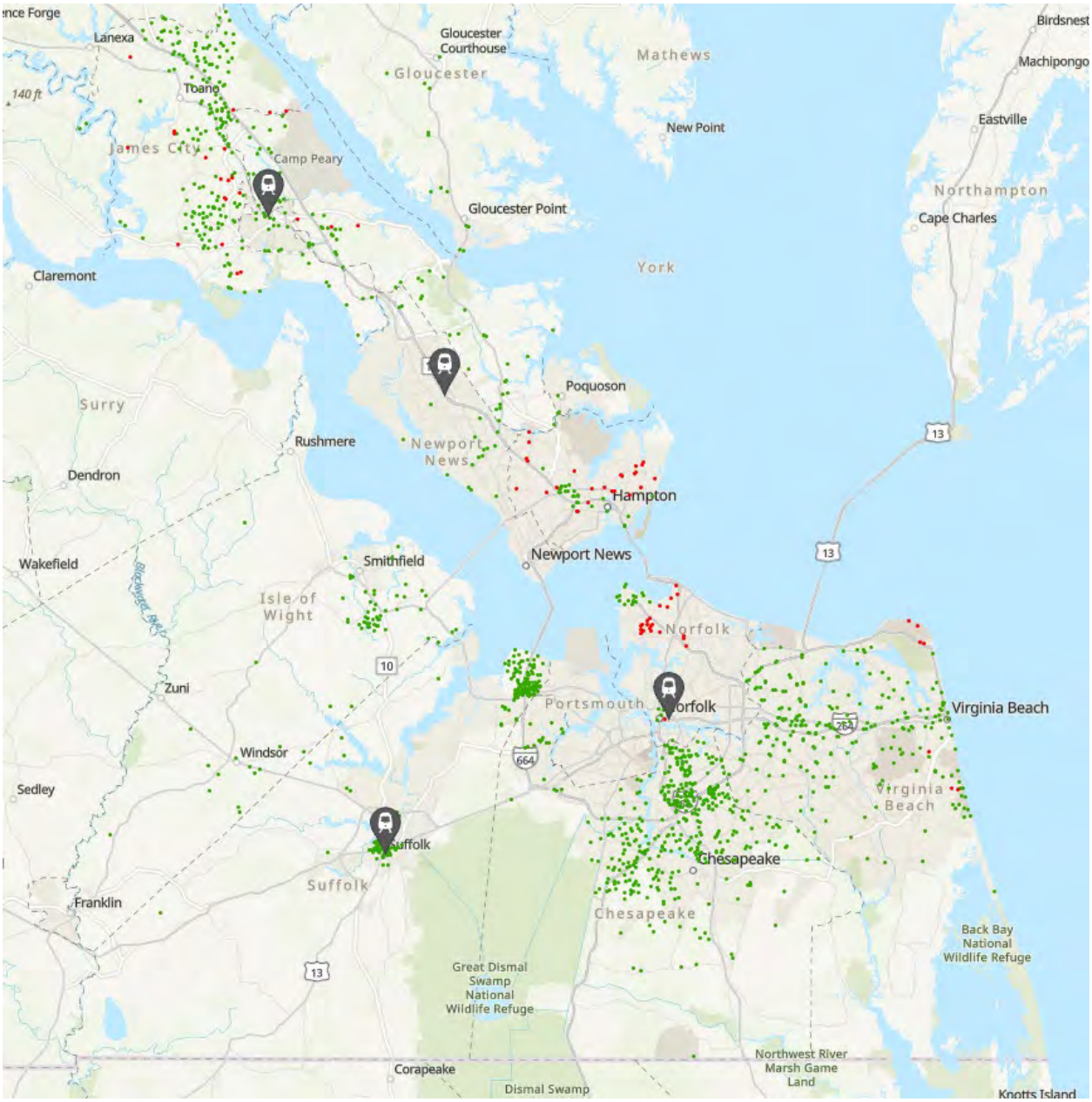
Source: HRTPO programming of StreetLight; note: each dot is one trip per day

To investigate the potential users of a Suffolk station, staff mapped the existing and expected population in Hampton Roads, finding clusters of existing population around each station—the three existing stations, plus the proposed Suffolk station—plus (on the following page) **population growth expected near the Suffolk station**.



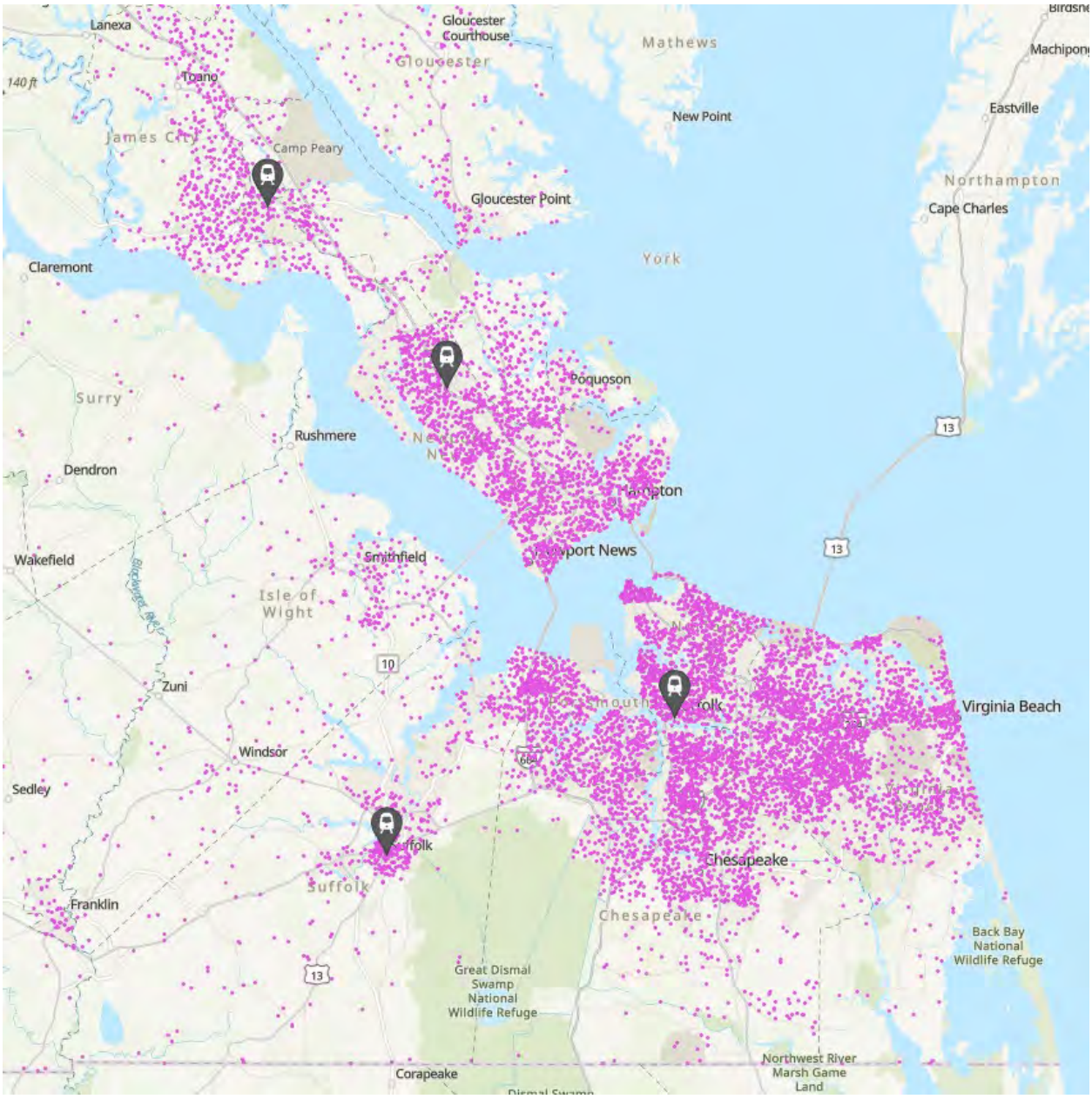
2020 Population and Train Station Icons

Source: HRTPO mapping of US Census data; note: each dot equals 200 persons



Forecasted Population Change (2050 vs. 2015)- increase, decrease

Source of population change: HRTPO long-range transportation planning; note: each dot equals 200 persons



2050 Population and Train Station Icons

Source of population: HRTPO long-range transportation planning; note: each dot equals 200 persons