APPENDIX C2 DETAILED RESPONSES TO GENERAL PUBLIC COMMENTS



Appendix C2

DETAILED RESPONSES TO GENERAL PUBLIC COMMENTS

STUDY PROCESS

Chapter 1 of this Final Environmental Impact Statement (EIS) provides a synopsis of the Washington, D.C. to Richmond Southeast High Speed Rail (DC2RVA) Project background and study process, including decisions made during previous studies that affect the Project assumptions, the basis of the Project Purpose and Need, and a summary of the alternatives development process and Draft EIS documentation.

PURPOSE AND NEED

1. How is the purpose of this Project different than the previous 2002 Tier I document?

As described in Section 1.1.1 of the Final EIS, the DC2RVA Project is the second of a two-tiered environmental process. A first-level Tier I EIS and Record of Decision (ROD) was completed in 2002 for the 500-mile Southeast High Speed Rail (SEHSR) corridor between Washington, D.C. and Charlotte, NC (hereafter referred to as the 2002 Tier I EIS). The 2002 Tier I EIS, which was completed by the Federal Railroad Administration (FRA) in coordination with the Department of Rail and Public Transportation (DRPT), defined much of the framework upon which the DC2RVA Project is based, including: using existing fossil fuel locomotive technology; upgrading existing rail corridors; and building the corridor in incremental sections as funds become available. Refer to Section 1.2.1.1 of the Final EIS for additional details on 2002 Tier I EIS decisions. Additionally, Chapter 1 of the Draft EIS provides more information on the federal policy decisions governing the Project and the decision to improve conventional intercity passenger rail service.

The 2002 Tier I EIS established the overall purpose for the SEHSR corridor: to provide a competitive transportation choice to travelers within the Washington, D.C. to Richmond, Raleigh, and Charlotte travel corridor. This DC2RVA Tier II EIS carries forward the purpose and need of the 2002 Tier I EIS within the specific Washington, D.C. to Richmond segment of the larger corridor—improving travel time, frequency, and reliability of conventional intercity passenger rail service along the existing railroad corridor between Washington, D.C. and Richmond, VA. The Tier II Purpose and Need further builds upon the Tier I by recognizing and incorporating several key corridor-specific items that are unique to the Project corridor, which are documented in Section 1.3.1 of the Final EIS. The corridor-specific items include establishment of a 90 mph maximum authorized speed for intercity passenger trains, accommodation of Virginia Railway Express (VRE) commuter trains, and accommodation of CSXT's freight service, plus the recognition that the corridor is owned and operated by CSXT.



2. Why is the Project adding more trains? Existing Amtrak trains do not appear to be full, and the corridor does not appear to be a major commuter route.

As described in Section 1.2 of the Final EIS, the need for additional intercity passenger trains in the corridor to meet the goals of the Project have been documented for many years. In line with response #1 above, the DC2RVA Project used three specific goals to guide the development of the proposed passenger rail service improvements:

- Increase the number of intercity passenger trains between Washington, D.C. and Richmond
- Increase the reliability of all intercity passenger trains between Washington, D.C. and Richmond, both existing and proposed trains
- Reduce travel times for all intercity passenger trains between Washington, D.C. and Richmond

In a properly functioning intercity passenger rail system, passenger cars are rarely "full" (i.e., filled to capacity), as a full train has no capacity to take on more passengers at the next stop or stops unless passengers exit the train. Ideally, there are always enough vacant seats available at each station stop to accommodate new passengers. If a train is already full when it leaves Richmond for Washington, D.C. (or vice versa), then passengers waiting at Ashland, Fredericksburg, Quantico, or other stations are unable to board. Furthermore, if the train continues full as it moves north to Philadelphia and New York or Boston, again, passengers are unable to board. The trains, now and in the future, are intended to have some empty seats.

DRPT conducted analysis as part of the Project that indicates that, if the Project is implemented, intercity passenger rail ridership will nearly double within the next 10 years, from 1.4 million annual passengers carried in 2015, to 2.5 million annual passengers carried in 2025, which is the proposed first year of the Project. These forecasts also indicate that intercity passenger rail ridership could triple between now and 2045, with a projected ridership in 2045 of 3.2 million annual passengers. Appendix J of the Draft EIS provides more information on passenger rail ridership projections in the corridor.

Intercity passenger trains, as defined in the Purpose and Need of the Project, are not limited to serving commuter passengers. Intercity passenger rail serves travelers making many kinds of trips, including business travel, recreational travel, visits to friends and family, vacation travel, and more. Intercity passenger trains traveling between Washington, D.C. and Richmond will continue north on Amtrak's Northeast Corridor (NEC) to Philadelphia, New York, and Boston, and south to Raleigh and Charlotte NC, as well as destinations in South Carolina, Georgia, and Florida, with stops in between.

While some passengers use Amtrak for commuting to/from work, many passengers continue traveling north beyond the Washington, D.C. metropolitan area or to points south of Richmond. VRE provides commuter service on a portion of the DC2RVA corridor by running commuter trains north into the city during the morning commute and south back to Spotsylvania during the afternoon commute. These trains do not continue north of Washington, D.C. or south of Spotsylvania, and do not provide intercity service.



3. The 2002 Tier I EIS stated that this Project should minimize impacts by using existing rail corridors. Therefore, the bypass options under consideration as part of this Project do not conform to the Tier I recommendation.

The Preferred Alternative for the corridor, as presented in Chapter 4 of the Final EIS, does not include any bypass alternatives that were evaluated in the Draft EIS.

As detailed within the Alternatives Technical Report (Appendix A of the Draft EIS), DRPT focused alternatives development within the existing CSXT right-of-way to minimize impacts and property acquisition. However, in areas where the right-of-way appeared potentially limited, or where other potentially reasonable alternatives were identified during Project scoping by stakeholders, DRPT evaluated a range of other alternatives, including new bypass alignments outside of existing CSXT right-of-way that would connect to existing rail lines. This approach is consistent with National Environmental Policy Act (NEPA) guidance, DC2RVA's Purpose and Need to increase capacity in the corridor, and recommendations of the 2002 Tier I EIS, which established the use of existing rail corridors in preference to new alignments, but did not preclude them if they provided the same benefits.

4. The Project made a recommendation based on the assumption that Long Bridge and Union Station capacity improvements will be complete, when the timeline of neither is known.

The DC2RVA Project is one part of a much larger intercity passenger rail series of interrelated projects to improve passenger rail service in the Southeast High Speed Rail Corridor and through its connections to the Northeast Corridor. The Project's service and benefits are clearly linked to and partially dependent upon completion of other projects both north and south of the DC2RVA corridor, as recognized in both the 2002 Tier I EIS and the Project's Purpose and Need (Chapter 1 of the Draft EIS and Section 1.3.1 of the Final EIS).

The relationship of the DC2RVA Project to the proposed improvements at the Long Bridge and Washington Union Station are presented in Draft EIS Section 1.6.4 and 1.6.5, respectively. Additionally, updated descriptions of the studies and projects in and adjacent to the corridor are presented in both Section 1.2 and Section 7.7 of the Final EIS. Refer to Section 1.2.4 of the Final EIS for details on how the Project relates to the 2017 Virginia Statewide Rail Plan, and Section 7.7 for current/ongoing Project coordination with other studies and projects, including their relevance to the Preferred Alternative specifically.

FRA and DRPT acknowledge that the recommended capacity improvements in the DC2RVA Project would provide incremental benefits to passenger service in the Project corridor and beyond, though the total benefits of the DC2RVA Project would not be available until other projects, including the Long Bridge Capacity Expansion and Washington Union Station capacity improvements, are complete. DRPT's assumptions regarding the completion of the Long Bridge and Union Station capacity improvements as part of the Project No Build Alternative are reasonable for the tiered planning process as described in 23 CFR 771.111(g) and Council on Environmental Quality (CEQ) regulations 40 CFR 1502.20 and 1508.28.



- 5. Concerns over area-specific capacity needs
 - a. Why is more rail capacity needed in Area 5 (Ashland) but not Area 2 (Northern Virginia)?
 - b. Additional rail capacity through Area 5 (Ashland) is not needed and not appropriate.
 - c. In all Build Alternatives, Ashland will become a choke point for rail traffic for the entire corridor and Project capacity goals will not be met.

In response to a) and b), in order to improve passenger rail service frequency, reliability, and travel time in the Project corridor, which is shared by growing volumes of intercity passenger, commuter, and freight rail traffic, additional rail capacity is needed throughout the 123-mile corridor. This has been the conclusion of prior corridor studies, including the 2002 Tier I EIS (see Chapter 4 of Appendix A of the Draft EIS), and was verified by rail operations modeling conducted throughout this Tier II Project to define the specific rail infrastructure required to meet the Purpose and Need of the DC2RVA Project (see Section 3.2 of the Final EIS for details).

The Preferred Alternative for the DC2RVA corridor, as presented in detail for each area within Chapter 4 of the Final EIS, includes corridor-wide rail capacity improvements, most notably an additional main line track along most of the corridor, including both Area 2 and Area 5. Other capacity improvements to rail infrastructure, such as additional rail sidings, crossovers, and rail yard bypasses and leads, are included as part of the Preferred Alternative.

The Preferred Alternative in Area 2 (Alternative 2A) adds capacity to the corridor to ensure that a minimum of three main line tracks are available through this section of the corridor; refer to Section 4.3.2 of the Final EIS for detailed description of the Preferred Alternative within Area 2. The Preferred Alternative in Area 5 (Alternative 5A, commonly known as the "3-2-3" option) adds an additional track north and south of Ashland, as detailed in Section 4.3.5 of the Final EIS.

In response to c), subsequent to the publication of the Draft EIS, DRPT conducted additional refined rail operations analyses to estimate the sufficiency of the rail infrastructure presented in the Draft EIS, both within the DC2RVA corridor as well as in a larger network beyond the limits of the Project. These refined operations analyses are summarized in Section 3.2 of the Final EIS and detailed in its Appendix F and build on the preliminary operations simulation modeling conducted during preparation of the Draft EIS. Based on the refined operations analysis, DRPT and FRA determined that Preferred Alternative, including two tracks through Ashland (Alternative 5A, also known as "3-2-3") and with 9 new daily intercity passenger round trips (18 total trains per day), meets the Purpose and Need of the Project while not unduly impacting CSXT's forecasted future freight operations and minimizing environmental impacts through the Town of Ashland.

6. CSXT does not support Build Alternative 5A (commonly known as the "3-2-3" option) due to capacity constraints. Why is it considered? Isn't their support required to meet the Purpose and Need of the Project?

FRA and DRPT are committed to continue working with CSXT to improve intercity passenger rail service in the DC2RVA corridor and have a long and successful history of cooperating with CSXT to improve passenger, commuter, and freight rail service in the Commonwealth. FRA and DRPT also recognize that CSXT owns and operates the DC2RVA rail corridor and has a responsibility to its shareholders and customers to provide efficient freight rail service. CSXT served on the Ashland/Hanover Area Community Advisory Committee (CAC) with other stakeholders, and



contributed to the CAC's review of alternatives, at a level commensurate with other stakeholders. The CAC's recommendations were instrumental in the selection of Alternative 5A: Two Tracks Through Town as the Preferred Alternative for Area 5.

In addition, DRPT and FRA conducted independent computer-based rail operations analyses, which estimated passenger and freight train performance in the corridor under several infrastructure alternatives in Area 5. This effort provided additional information that aided FRA and DRPT in the selection of Alternative 5A as the Preferred Alternative for Area 5. This refined operations analysis determined that while constructing a two-track western bypass or adding a third track to the existing CSXT railroad through the Town of Ashland would improve the efficiency of railroad operations through DC2RVA study Area 5, the additional capacity was not required to meet the Purpose and Need of the DC2RVA Project. Additionally, since Alternative 5A (Maintain Two Tracks through Town) provided adequate railroad capacity to meet the Purpose and Need of the Project, this alternative also resulted in the least impacts to environmental resources, including historic properties. Should an alternative that avoids impacts to historic properties be feasible and prudent and meet the purpose and need of a project, then Section 4(f) of the U.S. DOT Act of 1966 requires FRA to select that alternative.

FRA and DRPT will continue to coordinate with CSXT and other Project stakeholders on service planning and engineering for the Preferred Alternative, including Project implementation and phasing of service.

7. The Purpose and Need is based on an analysis of the "current" Need for the Project. However, the Draft EIS stated that the Project would be constructed between 15 and 25 years from now and the projections of the demand for enhanced passenger rail and freight service are presented for between 2025 and 2045—neither of which are "current."

Section 1.5 of the Draft EIS stated that "current conditions" in the Project corridor support the Purpose and Need set forth in the 2002 Tier I EIS. These conditions were listed as: population growth; freight growth; congestion in the I-95 corridor; air travel congestion; rail capacity issues in the corridor; reliable and convenient movement of goods and people; and air quality. The listed conditions are applicable to support the Project Purpose and Need throughout the Tier II planning dates that were established by FRA and DRPT and are presented in Section 1.2.6 of the Final EIS. As described in that section, federal guidance requires that DRPT demonstrate that the Project is sufficient to deliver the proposed passenger rail benefits and an efficient and reliable multimodal rail corridor over a 20-year time horizon following the anticipated completion of the construction (i.e., 20 years past 2025 for the DC2RVA Project). Accordingly, DRPT used operational simulations analysis, as summarized in Section 3.2 of the Final EIS, to test the proposed alternatives to determine if the rail capacity is adequate for both the opening day (2025) levels of projected passenger, commuter, and freight rail traffic and to determine if the infrastructure remains adequate over the 20-year planning horizon of 2045.



- 8. The DC2RVA proposed solutions do not demonstrate that the rail options will truly support the service growth and results required to meet the Project Purpose and Need.
 - a. Why is a proposed third track needed?
 - b. Are even more tracks needed?
 - c. Would it be worth it from a cost-benefit perspective to add more lines as part of this Project, to plan for the future?

In response to a), the Project capacity improvements recommended by DRPT in the Draft EIS, and the associated Preferred Alternative presented in Chapter 4 of the Final EIS, provide the additional infrastructure necessary to meet the Project's Purpose and Need. This includes additional capacity to support the addition of 9 new daily intercity passenger round trips (18 total trains per day) in the corridor, as well as VRE's planned near-term commuter service growth and CSXT's estimated freight service growth through the year 2045. The additional rail capacity is expanded by adding a third rail to the majority of the Project corridor, and a fourth track in some areas in Northern Virginia where a third track already exists. Chapter 4 of the Final EIS includes an explanation of DRPT's basis for recommending the Preferred Alternative within each area.

DRPT's operational analyses as described in the Draft EIS (Section 2.6 and Appendix I in the Draft EIS) show that for most of the corridor, adding one main track to the existing CSXT corridor provides sufficient additional capacity to meet the Project's Purpose and Need. Subsequent to the publication of the Draft EIS, DRPT conducted additional refined rail operations analyses to assess the sufficiency of the rail infrastructure presented in the Draft EIS, both within the DC2RVA corridor as well as in a larger CSXT network. These refined rail operations analyses are presented in Section 3.2 and Appendix F of the Final EIS, and they show that the Preferred Alternative meets the performance goals of the Project, and Project Purpose and Need, for the entire corridor.

In response to b) and c), any additional improvements beyond those identified as part of the Preferred Alternative do not justify the additional cost or environmental impact as they are not necessary to meet the Project Purpose and Need.

9. There is no point to this Project without a national plan for better passenger rail.

The DC2RVA corridor is a critical link between Amtrak's heavily traveled NEC and the developing SEHSR corridor extending south of Richmond. The DC2RVA Project is one part of a larger series of rail improvement projects throughout the state, region, and eastern portion of the U.S. that have been ongoing since the early 1990s. Section 1.2 of the Final EIS describes in detail how the SESHR corridor and its studies have evolved to reflect additional studies and planning, national and state transportation priorities and funding, and demand for intercity passenger rail services, and how these key documents relate to the Purpose and Need of the DC2RVA Project.

The ability of the DC2RVA Project to improve intercity passenger rail service is dependent upon the performance and capacity of the connecting NEC and SEHSR corridor and completion of the related projects and their associated rail improvements. A summary of some of the key interrelated rail improvement projects and studies is presented in Section 7.7 of the Final EIS.



10. High speed rail won't meaningfully reduce vehicle traffic, which is stated as an element of the Purpose and Need. The touted reduction in I-95 congestion by adding a high speed rail in the Project documentation is not true.

The DC2RVA Project Purpose and Need (Chapter 1 of the Draft EIS and summarized in Section 1.3 of the Final EIS) states the Project is needed to address existing congestion on the rail network, not I-95. The DC2RVA Project will offer travelers a viable alternative to the congested interstate and, by diverting some travelers from road to rail, congestion will be less than without the Project. Section 5.15.1 of the Final EIS estimates the decreases in vehicles using the regional roadway network (i.e., mainly I-95) between Washington, D.C. and Richmond, VA.

PROPOSED TRAIN SERVICE / OPERATIONS / SCHEDULE

1. The lack of specific travel time saved associated with each Build Alternative in the Draft EIS suggests the Project will provide negligible benefits for unacceptable costs.

To aid in preliminary ridership forecasting, DRPT developed conceptual timetables incorporating the train frequency and train speed for each of the Richmond Area Build Alternatives described in Chapter 2 of the Draft EIS. Table 2.6-2 in that same chapter summarizes the estimated travel times, inclusive of station stops, between Washington, D.C. and Richmond based on the conceptual timetables for each Build Alternative. However, the travel times would vary for each train depending on time of day and schedule, and the number of stops. Subsequent to the publication of the Draft EIS, DRPT worked with FRA and Amtrak to refine the proposed passenger train schedules; refer to Appendix F of the Final EIS.

The proposed reduction in travel time is only one of the three major transportation benefits that the DC2RVA Project would create. In addition to reducing travel time, the Project will improve the reliability of both existing and proposed passenger trains traveling between Washington, D.C. and Richmond. Finally, the Project will allow for the introduction of 9 new daily intercity passenger round trips (18 total trains per day) between Washington, D.C. and Richmond—essentially doubling the number of train departures each way for passengers traveling in the DC2RVA corridor. The significant increase in train frequency will provide more convenient travel times for multiple types of travelers and markets. It is the combination of more frequent departures, improved reliability, and the reduction in trip time that will fulfill the Project Purpose and Need to make rail a more competitive choice.

2. Amtrak service is not a reliable transportation choice. Amtrak doesn't need to be faster, just more reliable. What is this Project doing to improve the frequent delays and/or cancellations that currently occur on Amtrak?

Achieving better passenger train on-time performance (i.e., reliability) is a cornerstone of the rail infrastructure improvements that are proposed by the DC2RVA Project. The 2002 Tier I EIS concluded that in the DC2RVA corridor, opportunities for increased speeds are limited, and therefore recommended incremental improvements for network fluidity within the existing right-of-way. DRPT's goal is to enable intercity passenger trains to achieve an on-time performance of 90 percent or better between Washington, D.C. and Richmond (Amtrak current performance is approximately 65 percent on-time performance in the corridor). The increase in on-time performance would be achieved in large part due to the additional capacity from adding a third track (and fourth track in some areas in Northern Virginia where a third track already exists) along



most of the corridor, as proposed by the Project. Proposed infrastructure improvements of the Preferred Alternative will allow for intercity passenger rail speeds to increase from the current maximum authorized speed of 70 mph for the corridor (except for Richmond to Centralia, which is currently authorized at 79 mph) to a maximum authorized speed of 90 mph, where practical. It is important to note that the passenger trains in the DC2RVA Project have endpoints beyond the Project area (New York and Boston to the north, and Hampton Roads, North Carolina, Georgia, and Florida to the south); however, projects and plans are underway in connecting corridors to address delays in those locations, as described in Section 1.2.1.3 of the Final EIS.

3. The passenger trains proposed by the Project should go faster. This is not true high speed rail that other countries have.

As described in Chapter 1 of the Final EIS and in line with the 2002 Tier I EIS decisions that were made, the Purpose of the DC2RVA Project is to improve the travel time, frequency, and reliability of intercity passenger rail service between Washington, D.C. and Richmond on existing railroad lines using conventional diesel-powered locomotive technology. The 2002 Tier I EIS did evaluate and dismiss "advanced" high speed rail (i.e., trains with average operating speeds of 185 to 200 mph) because it would require the construction of an entirely new and separate passenger-only railroad system, which FRA and DRPT determined at that time was not necessary to meet the need of the SEHSR corridor to connect major urban centers. Additionally, passenger service (intercity and commuter) and freight service share the CSXT-owned tracks, now as well as in the Preferred Alternative proposed by this Project. The previous 2002 Tier I EIS assumed a maximum speed of 110 mph for intercity passenger trains, with an average speed of approximately 70 mph along the full length of the SEHSR corridor between Washington, D.C. and Charlotte, NC. Subsequently, in 2009, FRA released its strategic plan for higher speed rail in America; investment strategies included upgrading reliability and service on conventional intercity rail services (operating speeds up to 79 to 90 mph on shared track) and developing emerging and regional higher-speed corridor services (operating speeds up to 90 to 110 mph on shared track). Also in September 2009, DRPT released its I-95 Southeast High Speed Rail Corridor & Service Plan, which set a goal of increasing passenger rail speed to a 90 mph maximum in the Washington, D.C. to Petersburg, VA corridor. In keeping with DRPT's 2009 Service Plan, the DC2RVA Project was designed to upgrade the reliability and service of conventional intercity rail services at speeds up to 90 mph, where practical, in a corridor shared with commuter and freight services. Additional details on these previous studies are provided in Section 1.2 of the Final EIS.

DRPT determined that a maximum speed for intercity passenger rail of 90 mph, where feasible, for the DCRVA Project provided the optimal capacity to improve service on the DC2RVA corridor while minimizing environmental impacts and costs. However, DRPT's determination that a maximum speed of 90 mph for the passenger trains in the DC2RVA corridor does not preclude consideration in the future to increase the maximum allowable speed in the corridor, nor does it preclude pursuing European- or Asian-style 180-mph+ high speed rail projects at some point in the future, separate from this Project. Specifically, one of the guiding principles of the DC2RVA Basis of Design was to not preclude future electrification of the corridor, which would be subject to separate environmental documentation at that time.



- 4. Concerns about rail technology assumed and/or evaluated in the Draft EIS
 - a. The Project does not use the most up-to-date technology, such as hyperloop.
 - b. This type of rail is an antiquated system and is not the future of transportation.
 - c. No consideration is given to the fact that rail technology is changing (as reported in Draft EIS Appendix I); this assumption should be added to the report and then defended. The contents of Draft EIS Appendix J lists five types of transportation, but fails to identify new or emerging technologies.

In response to a), b), and c), FRA, DRPT, and their partners are focused on improving rail service and reliability through conventional intercity passenger rail service operating at higher speeds through this Project. As discussed in Section 1.2 of the Final EIS, the DC2RVA Project is a Tier II EIS that builds on the decisions made as part of the 2002 Tier I EIS and ROD, in which FRA and the Federal Highway Administration (FHWA) selected an incremental approach to developing the passenger rail that maximizes use of existing infrastructure and minimizes environmental impacts. In the 2002 Tier I EIS, FRA and FHWA determined this approach to be the most cost-effective. Key elements of this incremental approach include: upgrading existing rail corridors (instead of developing new rail corridors); using fossil-fuel burning equipment rather than electric-powered equipment; and adding service as market demand increases and/or when funding is available.

The 2002 Tier I EIS did consider other types of technology, such as electrification systems, but FRA and FHWA did not recommend these due to high capital cost of implementation relative to the level of ridership demand for that type of service in the SEHSR corridor. The 2002 Tier I EIS also evaluated and dismissed advanced high speed rail (i.e., trains with average operating speeds of 185 to 200 mph) because it would require the construction of an entirely new and separate passenger-only railroad system, which was not necessary to meet the need of the Project to connect major urban centers. The 2002 Tier I EIS recognized that ridership demand will continue to increase across the SEHSR corridor, and stated that electrification or higher speed operation could be developed in the future. Accordingly, one of the guiding principles of the DC2RVA Project's Basis of Design (Appendix B of the Draft EIS) was to not preclude future electrification of the corridor, such as providing sufficient clearance on new grade-separated roadway crossings to accommodate a potential future electric catenary system.

DRPT does recognize that technologies are changing, and new transportation modes and options may be available in the future. Advancing the DC2RVA Project with an incremental approach does not preclude future applications of hyperloop or other new technologies if or when they become viable, which would be subject to separate environmental documentation at that time.



5. Concerns about operations of new service proposed by the Project

- a. When will the proposed trains run?
- b. Why is there no late train?
- c. Are trips seven days a week?
- d. Are trips only for commuters?
- e. Monday through Friday service is insufficient, and weekends are needed too.

In response to a) through e), the proposed intercity passenger rail service expansion between Washington, D.C. and Richmond is planned to run seven days per week, just like the existing intercity passenger rail service between Washington, D.C. and Richmond. The Project proposes to add 9 new daily intercity passenger round trips (18 total trains per day) between Washington, D.C. and Richmond—essentially doubling the number of train departures each way for passengers traveling in the DC2RVA corridor. Intercity passenger trains are not limited to serving commuter passengers and are intended to cater to travelers making many different kinds of trips, including business travel, recreational travel, visits to friends and family, vacation travel, and more. To serve this diverse group of travel needs, DRPT prepared a service plan for the DC2RVA Project that proposes to operate passenger trains between Washington, D.C. and Richmond every 1 to 2 hours during the day and early evening. A conceptual train schedule was included in Draft EIS Appendix J. Additionally, as part of the Project, DRPT is developing a Corridor Service Development Plan that will provide additional detail on the service implementation, ridership, and operations; refer to Section 7.3 of the Final EIS for more details.

Under the proposed schedule, for both southbound trips from Washington Union Station and northbound trips from Richmond, the earliest departure of the day would occur around 6 a.m. and the last departure of the day would occur around 9 p.m. The 9 new daily intercity passenger round trips (18 total trains per day) proposed by this Project will be incorporated into Amtrak's existing passenger rail network, as described in Section 4.2 of the Final EIS.

6. Concerns about freight service

- a. Project forecasts of future freight should be viewed with skepticism.
- b. The Project fails to anticipate major shifts in distribution patterns for freight that will be implemented over the next 20 to 40 years.
- c. The growth in the freight capacity is an assumption that may not hold up. Data published by the Association of American Railroads shows that the number of carloads in the year 2017 to date is below the number for the years 2015 and 2016.
- d. Higher speeds are needed by freight trains.
- e. Amtrak may use the rail corridor, but over 90% of rail traffic will be CSXT freight trains.

Details of the rail operations analysis modeling for all Build Alternatives were provided in Appendix I of the Draft EIS; refined operations analysis modeling that was updated for the Preferred Alternative is provided in Section 3.2 and Appendix F of the Final EIS.

In response to a), as part of the planning work to accommodate the forecasted growth of freight service and in accordance with federal requirements, DRPT solicited input from CSXT about future increases in freight rail traffic in the corridor through the year 2045, which is the 20-year



horizon beyond the Project's proposed implementation year of 2025. CSXT provided baseline data and suggested that DRPT use the U.S. Department of Transportation's (USDOT) Freight Analysis Framework (FAF) to forecast how rail freight traffic in the DC2RVA corridor would increase and change through the year 2045. The FAF is produced through a partnership between the Federal Bureau of Transportation Statistics and FHWA; it integrates data from a variety of sources to create a comprehensive picture of freight movement among states and major metropolitan areas by all modes of transportation. The FAF provides publicly available projected growth rates for rail freight traffic. The FAF also provides growth rates that are differentiated by commodity type, and in addition provides forecasts for tonnage and value by regions of origin and destination.

To determine the growth rate of freight within the DC2RVA corridor, DRPT applied the growth rates in ton-miles by commodity group for the states that CSXT operates in to determine growth by train type in the corridor (i.e., intermodal, manifest, bulk, automotive). FAF data reports ton-miles by commodity group, from which DRPT was able to assign to different train types associated with that commodity based on a methodology used by the Association of American Railroads in its National Freight Infrastructure Capacity and Investment Study (AAR, 2007). The forecasted growth in ton-miles was applied to existing freight trains first until they reached a predetermined number of freight cars, after which the remaining growth was applied to additional trains with the same number of cars.

In response to b) and c), the DC2RVA Project is designed to accommodate the projected growth of freight service through the planning year of 2045, at freight growth rates established by USDOT's FAF, and accepted by the FRA and DRPT as documented in the Draft EIS. The infrastructure proposed as part of the DC2RVA Project meets the stated Purpose and Need; refer to Section 3.2 of the Final EIS for further details on refined operations modeling that indicated such. As described in the response a) above, as part of the planning work to accommodate the forecasted growth of freight service, DRPT solicited input from CSXT regarding their future increases in freight rail traffic in the corridor through the year 2045. This forecast is to ensure the Project meets meet federal requirements that rail projects must determine and accommodate future rail volumes and capacity needs for a period of 20 year beyond implementation date. DRPT used the USDOT's FAF to forecast how rail freight traffic in the corridor would increase and change through the year 2045. For more information on how planned increases in freight rail traffic were accounted for, refer to Appendix I of the Draft EIS.

In response to d), it is a Project Purpose to provide for the efficient movement of rail freight traffic in the DC2RVA corridor (refer to Section 1.3 of the Final EIS for additional detail). By adding an additional rail to the majority of the Project corridor, the Project will not only allow 9 new daily intercity passenger round trips (18 total trains per day) to run each day, at 90 percent on-time performance, but also allow for enough track capacity to accommodate anticipated freight train growth.

In certain segments of the corridor, the new and upgraded infrastructure proposed by the Project could also allow for a potential increase in freight train speeds. The most significant increase in freight train speeds could occur in the segment between Richmond Main Street Station and Centralia, where the Project proposes to rebuild a 25 mph freight line to current track standards that could accommodate passenger trains with a maximum authorized speed of 79 mph and freight trains with a maximum authorized speed of 60 mph. Throughout the corridor north of



Richmond, a number of curves will be rebuilt, which could result in potential freight train speed increases of 5 mph to 20 mph around those curves.

In response to e), in addition to what was stated in response to a) and b) above, the Project accounts for projected increases in all train types. In the DC2RVA corridor, the mix of freight, intercity passenger, and commuter rail traffic varies by segment of the corridor, with locations closer to Washington, D.C. having more passenger and commuter traffic, particularly north of Fredericksburg and Alexandria, regardless of whether the Project is implemented. Table 2.5-2 of the Draft EIS presented the total number of each type of train for existing and future conditions. In 2015, freight train traffic accounted for less than half of all train traffic in the overall corridor. The No Build scenario for 2045 indicates that freight traffic north of Alexandria is projected to account for 38 percent to 45 percent of all train traffic in the corridor – again less than half – and north of Fredericksburg, freight train traffic is projected to account for 51 percent to 59 percent of all train traffic. In the 2045 Build scenario, with the Project's proposed addition of 9 new daily intercity passenger round trips (18 total trains per day), freight traffic would again be less than half of all train traffic on the corridor; freight volume north of Alexandria would be only 32 percent to 40 percent of all traffic, and north of Fredericksburg would be 42 percent to 50 percent of all traffic. For additional information about the projected mix of freight, passenger, and commuter traffic on the DC2RVA corridor see both Chapter 2 and Appendix I of the Draft EIS. It is important to note that VRE and CSXT growth is independent of the DC2RVA Project and will occur regardless of whether or not the DC2RVA Project is implemented.

7. Concerns about Virginia Railway Express (VRE) service

- a. Are VRE changes part of the Project?
- b. Can night and/or weekend trains to VRE be added as part of this Project?
- c. A better alternative would be to expand commuter service between Fredericksburg and Richmond by the VRE or use Mobile Diesel Units to provide service connecting with VRE.

The DC2RVA Project proposes to expand intercity passenger rail service between Washington, D.C. and Richmond, VA as part of the development of the federally funded SEHSR corridor, as summarized in Section 4.2 of the Final EIS. Under the Project service plan, intercity passenger trains will operate through the DC2RVA corridor but originate from, or continue to, destinations north of Washington, D.C. on the Northeast Corridor, or south of Richmond in North Carolina or Hampton Roads (though one daily round trip is planned to originate in Richmond and operate north of Washington, D.C. to and from Boston.) Under the proposed service plan, intercity passenger trains will operate between Washington, D.C. and Richmond every 1 to 2 hours in each direction during the day and early evening.

In response to a) and b), the DC2RVA Project does not include changes to VRE service directly but will allow for the planned near-term expansion of VRE commuter rail service. The proposed intercity passenger rail service expansion for the Project is anticipated to run seven days per week, consistent with existing passenger rail service, with departures throughout the day. As shown in Figure 4.2-1 of the Final EIS, some of those intercity passenger trains may make station stops at stations also served by VRE commuter trains, including Fredericksburg, Quantico, Woodbridge, Alexandria, L'Enfant Plaza (limited service), and Washington Union Station.



The intercity passenger service will be operated separately from and independently of VRE commuter rail service. VRE has developed its own 2040 Plan, which includes a long-term goal of creating the opportunity for weekend service. Station improvements as part of the Project, as described in Chapter 4 of the Final EIS, apply to intercity passenger rail stations providing service to Amtrak, and include stations shared by Amtrak and VRE. Adjustments to VRE stations are being coordinated between VRE and DRPT, separate from the DC2RVA Project, but any additional track or track realignments constructed under the DC2RVA Project will support the planned platform improvements at stations served by VRE.

In response to c), options to expand VRE commuter rail service from Fredericksburg to Richmond or use self-propelled Diesel Multiple Unit railcars to provide connecting services were not evaluated because they do not meet the Purpose and Need of the DC2RVA Project.

8. Reliable travel times and schedules are an unachievable goal even if all of the recommendations of the Draft EIS were adopted because many of the trains originate outside of the corridor. The Draft EIS fails to acknowledge barriers to faster or more reliable travel times that are outside of the area of proposed DC2RVA capacity improvements, such as at Long Bridge across the Potomac River or at Washington's Union Station. The improvements will not make corridor trains a competitive alternative to automobiles and are not worth the costs to affected stakeholders.

See the response to Study Process #4 in the section above. FRA and DRPT recognize that the DC2RVA Project is just one of a series of projects which must be completed to achieve the Purpose and Need of the 2002 Tier I EIS and ROD for the entire SEHSR corridor, and to achieve the benefits of other rail improvement projects in the NEC and beyond. In order to obtain the full benefit of the DC2RVA infrastructure and service improvements, several other ongoing rail improvement projects must also be completed in corridors adjacent to the DC2RVA corridor. The DC2RVA Project provides a critical link between Amtrak's heavily traveled NEC and the developing SEHSR corridor. The ability of the DC2RVA Project to improve intercity passenger rail is dependent upon the performance and capacity of these connecting corridors and completion of the related projects and their associated rail improvements.

Details of the previous and ongoing rail planning studies in the DC2RVA corridor and adjacent sections of the larger Southeast and Northeast Rail Corridors were provided in Chapter 4 of the Alternatives Technical Report (Appendix A of the Draft EIS). Section 1.2 of the Final EIS describes how the Project is one part of a larger series of rail improvement projects through the state, region, and eastern portion of the U.S. is provided in. Additionally, a summary of some of the key interrelated rail improvement projects and studies, and the relationship of these other studies/projects to the DC2RVA Project, is presented in Section 7.7 of the Final EIS.

In keeping with the decisions in the 2002 Tier I EIS and ROD, improvements in the entire SEHSR corridor are being conducted in an incremental approach. The DC2RVA Project upgrades the reliability and service of existing and planned conventional intercity rail services to operate at higher speeds up to 90 mph, where practical, in a 123-mile multimodal corridor shared with commuter and freight services.



9. Concerns about the design of track crossovers

- a. Did the Project consider upgrading all rail line crossovers to be at least 45 mph?
- b. The current crossovers at Doswell and Milford are only 30 mph and the resulting approaching signals slow trains down farther out than is necessary, both of which results in operations delays in the corridor.

In response to a), per the Project Basis of Design, all proposed crossovers in the Project corridor are being designed to the maximum speed allowable by CSXT. The Project upgrades all new crossovers where track is impacted by the Preferred Alternative to include the highest-speed turnout (one end of a crossover) allowed by CSXT on its mainlines, which is 45 mph. The existing railroad infrastructure, including crossovers, will remain in place except where the DC2RVA Project directly impacts that infrastructure.

In response to b), the DC2RVA Project includes a higher speed crossover at Doswell and a second higher speed crossover at North Doswell. An existing crossover at Milford will remain in place with three proposed higher speed crossovers to be added to create a full universal interlocking at Milford.

PUBLIC INVOLVEMENT

1. How are our voices being heard?

- a. Are email and written comments being processed the same way?
- b. Mass comments dilute the messages of local residents.
- c. The comment-response is an unethical process "form" comments sent through autogenerated websites should be eliminated/should not be "counted" as equivalent to citizen comments.
- d. Will all repeat comments by a single person be counted as individual comments in the record?
- e. What is considered more helpful by the DRPT—the total number of comments for or against an option or the quality of the comments?

In response to a), Section 2.1 of the Final EIS describes the public involvement for the entire Project process, including public comments received on the Draft EIS. During the DC2RVA Project process, there were three formal comment periods to coincide with major Project milestones: Scoping, Alternatives Development, and Draft EIS.

During these formal comment periods, DRPT collected public and agency comments from a variety of sources including oral comments during public meetings and hearings, hotline calls, mailed letters, emails, petitions, and web comments. Each comment was reviewed to determine the issues and concerns identified. The same review process was applied for all comments, regardless of the method of receipt: each comment was documented and processed through DRPT's comment database to categorize issues and concerns about the Project.

In response to b), c), d), and e), the introduction to this Appendix C details the process for responding to public comments. During the Draft EIS comment period, DRPT received thousands of comments, and many of the comments addressed similar issues. The goal of the public



comment process is to understand the public's view of the Project and its alternatives in order to provide input into the decision-making process of the section of the Preferred Alternative.

DRPT considered all public comments on the Draft EIS and addressed substantive concerns in the Final EIS by way of this Appendix C. DRPT and FRA do not view the public comment process as a "vote counting" process but rather one seeking substantive comments that benefit the FRA and DRPT in their final decision-making process. The public comment process is also an opportunity for the public to inform FRA or DRPT of potential concerns or conditions that were not identified during the preparation of the Draft EIS.

2. Concerns about public outreach and involvement in Area 5 (Ashland)

- a. Within Ashland, the communication and transparency with the public was lacking.
- b. Homeowners along the proposed bypass should have been included/notified earlier.
- c. Ashland is getting a disproportionate amount of time/effort. It is one small town in a 123-mile corridor that will benefit from this Project.
- d. Why did Ashland have to do something other communities have not completed (i.e., the CAC, subsequent to publication of the Draft EIS)?

In response to a), DRPT implemented an active and robust outreach effort beginning in 2014 to engage the public and have meaningful exchanges with corridor communities regarding the Project. Through the alternatives development process and related public outreach, DRPT recognized the unique nature of the Town of Ashland and Hanover County, and that many of the alternatives for improved rail capacity in this area generated community concerns.

As part of their fulfillment of the NEPA requirements, DRPT conducted extensive public outreach along the corridor to identify potential alternatives and public concerns, present the results of DRPT's preliminary alternative screening and evaluations, and evaluate Project impacts. Project alternatives, mapping, and other information, including copies of all meeting presentations, are available on the Project website. In the Town of Ashland/Hanover County area meetings, DRPT provided Project materials presenting multiple alternatives including four western bypass alignments and five eastern bypass alignments, and identified one western bypass for detailed evaluation in the Draft EIS. The Draft EIS describes the alternatives development process, and for Area 5 (Ashland), evaluates in detail seven alternatives. See responses to b), c), and d) below for further details on communication and coordination.

In response to b), in order to solicit input from property owners near potential alternatives throughout the Project corridor, DRPT mailed letters to over 10,000 property owners asking for their input and urging them to visit the property owner page on the Project website. DRPT used locality data to obtain addresses and alerted local officials in advance of property owner letter mailings. DRPT also visited dozens of civic groups, task forces, and governmental organizations to inform them of Project status and to gather input.

In response to c), throughout most of the 123-mile Project corridor, DRPT was able to identify reasonable alternatives that largely fit within existing railroad right-of-way, thereby minimizing impacts to property, communities, and environmental resources. However, the railroad right-of-way in Ashland presents a unique set of circumstances within the Project corridor: the characteristics of a railroad mainline located at-grade in the center of a limited-width street for almost two miles through a historic town. Developing and evaluating alternatives that meet the DC2RVA Purpose and Need while seeking to minimize impacts to property, community and



environmental resources in the Ashland area was more challenging than in other parts of the Project corridor in regard to public outreach.

In response to d), during preparation of the Draft EIS, DRPT recognized that each of the proposed Build Alternatives for Alternative Area 5 would have potentially adverse consequences on the citizens and resources of the Town of Ashland and/or Hanover County, and there was no local consensus or preference for a build alternative. In addition, both the Town of Ashland and Hanover County expressed the desire to have the opportunity to be more engaged in the development and evaluation of local options. DRPT therefore determined that expanded community involvement would better inform DRPT's and FRA's decision-making process, and reached out to the Town of Ashland, Hanover County, Randolph-Macon College, Richmond Metropolitan Planning Organization, and CSXT to participate in the Town of Ashland/Hanover County Community Advisory Committee (CAC) to take a fresh look at a wide range of alternatives for the Project through Alternative Area 5. CAC members were appointed by their communities/organizations, and all CAC meetings were open to the public. Refer to Section 2.14.3 of the Final EIS for further description of the CAC, and Appendix G of the Final EIS for a summary of CAC activities.

- 3. What was the outcome of the Ashland CAC after the publication of the Draft EIS?
 - a. How does it affect analyses that occurred within the Draft EIS or in the Final EIS?
 - b. There needs to be a formal comment period on any recommendations in Area 5 prior to the next step in the process.

Section 2.1.4.3 of the Final EIS describes the CAC and Appendix G of the Final EIS provides a full summary of CAC activities.

In response to a), as described in the above locations in the Final EIS, Alternative 5A: Two Tracks Through Town (also known as "3-2-3" option) was selected by the Ashland/Hanover CAC as one of their three "least objectionable" options (it was the least objectionable "through town") alternative. As described in Chapter 4 of the Final EIS, Alternative 5A was selected as the Preferred Alternative for the Project, based on the findings of the Draft EIS, input from the CAC as well as public and agency comments, and the results of refined rail corridor operations simulation modeling that showed Alternative 5A could meet the Project Purpose and Need. This refined operations analysis determined that while constructing a two-track western bypass or adding a third track to the existing CSXT railroad through the Town of Ashland would improve the efficiency of railroad operations through DC2RVA study Area 5, the additional capacity was not required to meet the Purpose and Need of the DC2RVA Project. Additionally, since Alternative 5A (Maintain Two Tracks through Town) provided adequate railroad capacity to meet the Purpose and Need of the Project, this alternative also resulted in the least impacts to historic properties. Should an alternative that avoids impacts to historic properties be feasible and prudent and meet the purpose and need of a project, then Section 4(f) of the U.S. DOT Act of 1966 requires FRA to select that alternative (see Chapter 6 of the Final EIS for the Final Section 4(f) Evaluation).

The recommendations of the CAC were a contributing factor to both the Commonwealth Transportation Board (CTB) resolution for the Project (Appendix H of the Final EIS), and the selection of the Preferred Alternative, as documented in Section 4.1 of the Final EIS. The CTB resolution also directed DRPT to explore the need for other safety improvements to pedestrian



and vehicle at-grade crossings and to improve emergency vehicle access within the Town of Ashland, and to avoid or minimize any property acquisitions in downtown Ashland where the corridor would remain two tracks. Preferred Alternative 5A is fully described in Section 4.3.5 of the Final EIS, including rationale for the basis of selection and description of any design changes that have occurred since publication of the Draft EIS. In the Preferred Alternative 5A, a third main track will be added to the rail corridor from Doswell south to Ashland, and from Ashland south to I-295. Grade separations are proposed at Vaughan Road (Archie Cannon Drive) and Ashcake Road on the outskirts of Ashland. Between Vaughan Road (Archie Cannon Drive) and Ashcake Road, the rail corridor will remain two tracks through downtown Ashland and existing at-grade vehicle crossings, such as S.R. 54, will remain in operation. The Ashland station will remain in its present location, without any improvements as part of this Project. Environmental impacts for the Preferred Alternative are presented in Chapter 5 of the Final EIS.

In response to b), DRPT and FRA prepared the Draft and Final EIS in accordance with the NEPA and its implementing regulations, as described in FRA's Environmental Procedures and CEQ regulations 40 CFR 1500 -1508. These regulations require FRA and DRPT to consider the environmental impacts of proposed actions and reasonable alternatives to those actions, and to make information on the impacts and alternatives publicly available before decisions are made and actions occur. Acknowledging the unique nature of the area and community concerns, the CAC was established to further review and inform the evaluation of alternatives for Area 5. All meetings were open to the public, with specific meeting times set aside specifically to allow for verbal comment by the public. Each of the CAC meetings included a full video recording available after the meeting on the Project website. The video offered the public who were unable to attend the meetings an opportunity to view the same information when it was most convenient for them. All public comments and questions were reviewed by the DRPT staff, and responses were prepared and shared with the CAC as part of the decision-making process. The composition and role of the CAC are summarized in Section 2.1.4.3 of the Final EIS and a summary report of CAC activities is included as Appendix G of the Final EIS.

After reviewing all the comments received on the Draft EIS and considering the input from the CAC process and the public comments made during it, plus the results of additional operations simulation modeling, on December 6, 2017, DRPT provided the CTB with a final recommendation for Alternative 5A as the Preferred Alternative in Area 5.

4. DRPT has ignored public input for not expanding the CSXT rails.

The No Build Alternative (i.e., no expansion of rails within the CSXT corridor) was fully evaluated and dismissed by the FRA and FHWA in the 2002 Tier I EIS because it did not meet the Project's Purpose and Need. Although previously dismissed, the DC2RVA Project process fully considered the No Build Alternative in the Draft EIS as required by NEPA. However, as stated in Section 4.4.2 of the Final EIS, FRA and DRPT confirm the findings of the 2002 Tier I EIS that the No Build Alternative is not a viable alternative to meet the Project's Purpose and Need.



OTHER

1. Will this process happen again in 20 years because of infrastructure upgrade issues?

Infrastructure elements, as proposed under the Preferred Alternative, are intended to provide the desired capacity and safety improvements necessary to meet the Project's purpose and need (as stated in Chapter 1 of the Final EIS). Federal requirements under the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) require that the proposed improvements satisfy the corridor needs through the 20-year operation horizon (estimated to be 2045). Prior to that time, it is expected that routine maintenance and/or upgrading of railroad infrastructure could be required, however such actions would not require additional NEPA evaluations or approvals.

In the event of major changes in rail technology in the future, FRA or the appropriate Federal sponsoring agency would make a determination of required approvals at the appropriate time. It cannot be speculated at this time what such requirements will be 20 years in the future.

2. Opposition to CSXT's level of involvement in the Project

- a. CSXT is not funding its fair share of this Project.
- b. CSXT attempt to "control" the decision of Ashland based on their own in-house study of Project impact on CSXT.

CSXT owns and operates the railroad upon which the DC2RVA Project is based and is therefore an important stakeholder in Project planning and evaluation.

In response to a), funding for the DC2RVA Tier II EIS was provided from an FRA grant for high performance intercity passenger rail development with the Commonwealth of Virginia and CSXT providing a required non-federal match to the FRA grant funds. DRPT has not secured funding for the full-build of the DC2RVA Project; refer to Section 7.4 of the Final EIS for details.

In response to b), CSXT served on the Town of Ashland/Hanover County CAC with other stakeholders, and contributed to the CAC's review of alternatives, at a level commensurate with other stakeholders. The role of the CAC and that of other Project stakeholders was to provide comments and input to DRPT and the CTB as they formulated a recommended Preferred Alternative. The CAC's recommendations were instrumental in the selection of Alternative 5A – Two Tracks Through Town as the Preferred Alternative for Area 5.

In addition, DRPT and FRA conducted independent computer-based rail operations analyses, which estimated passenger and freight train performance in the corridor under several infrastructure alternatives in Area 5. This effort provided additional information that aided FRA and DRPT in the selection of Alternative 5A as the Preferred Alternative for Area 5. This refined operations analysis determined that while constructing a two-track western bypass or adding a third track to the existing CSXT railroad through the Town of Ashland would improve the efficiency of railroad operations through DC2RVA study Area 5, the additional capacity was not required to meet the Purpose and Need of the DC2RVA Project. Additionally, since Alternative 5A (Maintain Two Tracks through Town) provided adequate railroad capacity to meet the Purpose and Need of the Project, this alternative also resulted in the least impacts to historic properties. Should an alternative that avoids impacts to historic properties be feasible and prudent and meet the purpose and need of a project, then Section 4(f) of the U.S. DOT Act of 1966 requires FRA to select that alternative (see Chapter 6 of the Final EIS for the Final Section 4(f) Evaluation).



EVALUATION OF ALTERNATIVES

Chapter 4 of the Final EIS describes the Preferred Alternative within each area as well as its selection process, the reason / basis for selection, and any design changes since publication of the Draft EIS, which includes defining the Preferred Alternative in Area 1 and Area 5. A detailed mapbook of the Limits of Disturbance (LOD) of the Preferred Alternative is Appendix L of the Final EIS.

Note that the Final EIS does not republish all data and analyses at the same level of detail as the Draft EIS and its technical appendices (refer to Section 1.1.2 of the Final EIS for details). Refer to Chapter 2 of the Draft EIS and Appendix A of the Draft EIS for full details of all Build Alternatives in the Draft EIS, including the process that was used to develop, evaluate, and eliminate them.

CORRIDOR OPTIONS NOT EVALUATED IN THE DRAFT EIS

1. Did the Project consider improvements outside of the existing rail corridor to improve train speed (such as construction of straighter lines, separate additional rail lines, flyovers, and/or tunnels)?

The 2002 Tier I EIS and ROD, FRA and FHWA selected an incremental approach to develop the corridor (refer to Section 1.2 and Chapter 7 of the Final EIS for further discussion). As described there, a key element of the selected incremental approach was upgrading existing rail corridors in preference to developing new corridors (but did not preclude them if they provided the same benefits). This approach sought to minimize cost and potential impacts to the environment by utilizing existing railroad tracks and rail rights-of-way as much as possible and allowing access to existing stations and infrastructure. DC2RVA Project infrastructure improvements are limited to those necessary to meet the DC2RVA Purpose and Need, which preclude many of the suggested improvements.

However, the Draft EIS did evaluate alignments outside of existing railroad right-of-way—but connecting to existing rail corridors—as bypass alternatives for the City of Fredericksburg and the Town of Ashland because they are urban areas with limited right-of-way. The typical cross section of the new bypass alignments in these areas included a total of two tracks. DRPT determined that these bypass alignments would have higher impacts to property and natural resources and higher costs, and they generated substantial public opposition compared to the alternatives that added capacity within or followed the existing right-of-way. Neither of these bypass alternatives were selected as part of the Preferred Alternative; refer to Chapter 4 of the Final EIS for details. Additionally, the alternatives development process included other freight and/or passenger rail bypass alignment options that were dismissed from further consideration for similar reasons; refer to Appendix A of the Draft EIS for details.



- 2. Did the Project consider moving all freight rail away/separate from passenger rail?
 - a. It is disappointing that no cost/benefit study was made of the alternative of diverting substantial numbers of freight trains to the existing rail line in Maryland along the Route 301 corridor. The expense of building a new Potomac River bridge at Dahlgren and building connecting tracks to the RF&P line would be outweighed by both the homeland security benefits of bypassing the national capital and the benefits of freeing up the Fredericksburg-D.C. line for passenger rail.

The Draft EIS did not consider completely separating freight and passenger rail away from the existing CSXT-owned/operated rail corridor between Washington, D.C. and Richmond. The Tier II EIS is the second step in a two-tiered federal environmental review process, building on the 2002 Tier I EIS that recommended passenger rail improvements in the 500-mile corridor between Washington, D.C. and Charlotte, NC. The 2002 Tier I EIS did evaluate other alignments in detail, but recommended adding additional track capacity within the existing railroad right-of-way between Washington, D.C. and Richmond. The 2002 Tier I EIS determined that building a new rail system dedicated to passenger or freight trains would cost more, result in more environmental impacts, and require extensive property acquisition. Conversely, sharing the rail system allows access to existing stations and infrastructure. This, in turn, allows the DC2RVA Project to be implemented more economically and minimizes impacts to the environment. Accordingly, and in line with the 2002 Tier I EIS recommendation for improvements within the existing rail corridor (in preference to new alignments), DRPT focused alternatives development within the existing CSXT right-of-way to minimize impacts and property acquisition. However, in areas where the right-of-way appeared potentially limited, or where other potentially reasonable alternatives were identified during Project scoping by stakeholders, DRPT evaluated a range of other alternatives, including new freight and/or passenger rail bypass alignments outside of existing CSXT right-of-way that would connect to existing rail lines, as detailed within the Alternatives Technical Report (Appendix A of the Draft EIS).

In response to a), in addition to what is stated above, evaluating a freight bypass around Washington, D.C. via a new Potomac River rail bridge at Dahlgren and connecting tracks to the existing rail line in Maryland along the Route 301 corridor is beyond the scope of the DC2RVA study, and is not in keeping with the Project's Purpose and Need, as set forth in the 2002 Tier I EIS. Subsequent to the completion of the 2002 Tier I EIS, and prior to the initiation of the DC2RVA Project, the National Rail Planning Commission prepared the Freight Railroad Realignment Feasibility Study in 2007¹ to evaluate the potential to construct freight rail bypass of Washington, D.C. from Central Virginia through Southern Maryland. The primary regional objectives of the study were to: mitigate security concerns related to the monumental core of Washington, D.C. and the U.S. Capitol; and accommodate the expansion of the passenger and freight capacity within the Washington, D.C. region of the East Coast rail corridor.

Although a new rail route connecting Central Virginia through Southern Maryland could divert some freight or passenger rail service from the CSXT RF&P corridor between Washington, D.C. and Richmond, VA, it would not meet the Purpose and Need of the DC2RVA Project. The advancement of the DC2RVA Project, however, would not preclude the consideration of a new rail bypass around Washington, D.C. in the future, which would be subject to separate environmental documentation at that time.

¹ https://www.ncpc.gov/docs/Freight_Railroad_Realignment_Study.pdf





3. Did the Project consider improving highway capacity, instead of and/or in addition to rail capacity?

The I-95 corridor carries more than 350 million tons of freight each year and more than 400,000 people a day². The corridor is a vital conduit for national commerce and trade that connects northeast consumer markets with southeastern ports and manufacturing centers, accounting for 20 percent of the U.S. gross domestic product and making it the fourth largest economy in the world. Congestion on I-95 and parallel rail lines challenges the efficiency of the workforce and the freight network. To address these problems, the Commonwealth has taken a multimodal approach, including highway, rail, and other improvements under the heading of the Atlantic Gateway Program. The Atlantic Gateway is a multimodal suite of projects focused on the I-95 corridor between Washington, D.C. and Fredericksburg, VA, and includes a combined suite of freight and commuter rail, highway, and technology components. The DC2RVA Project is specifically focused on improving intercity passenger rail in the corridor between Washington, D.C. and Richmond, and overlaps with the Atlantic Gateway Program.

The Purpose of the DC2RVA Project is to increase railroad capacity between Washington, D.C. and Richmond to deliver higher speed passenger rail while also supporting the planned expansion of VRE commuter rail service and accommodating the forecasted growth of freight rail service by developing an efficient and reliable multimodal rail corridor. Consideration of additional highway/roadway capacity beyond that necessary to improve existing road/rail crossings to meet the needs of the DC2RVA Project is beyond the scope of the Tier II effort. The Atlantic Gateway highway and rail improvements will expand upon and work in concert with the DC2RVA Project improvements to improve transportation choice and efficiency in this vital corridor.

4. Did the Project consider rail in the I-95 corridor right-of-way and/or within powerline right-of-way?

In the 2002 Tier I, FRA and FHWA recommended adding additional track capacity within the existing railroad right-of-way, which is owned and operated by CSXT. Building a new rail system dedicated only to passenger trains would cost more, result in more environmental impacts, and require extensive property acquisition. Conversely, sharing the rail system allows access to existing stations and infrastructure. This in turn, allows the Project to be implemented more economically and minimizes impacts to the environment.

In keeping with the recommendations of the 2002 Tier I EIS, and the DC2RVA's Purpose and Need, DRPT focused development of alternatives for the DC2RVA Project within the existing CSXT right-of-way to minimize impacts and property acquisition. However, in areas where the right-of-way appeared limited, or where other potentially reasonable alternatives were identified during Project scoping, DRPT evaluated alternatives outside the existing CSXT right-of-way, including new alignments alongside or within existing power line and interstate rights-of-way, to ultimately connect back to existing rail corridors. However, all of these alternatives were dismissed from inclusion in the Draft EIS environmental evaluation for the reasons noted above. Appendix A of the Draft EIS describes the range of alternatives identified and evaluated, including those dismissed from further consideration.

² http://www.atlanticgateway



Specifically, within the Ashland Area, the range of alternatives included five options for an eastern bypass around the Town of Ashland, all of which ran alongside an existing power line right-of-way for some portion of their alignment. Two of the eastern bypass options would use the median of I-95 and one option would run alongside the right-of-way of I-95 just east of Ashland. DRPT eliminated these eastern bypass options from further consideration during the screening process due to their cost, impacts to existing infrastructure, environmental resources, and extensive property acquisition. The Ashland/Hanover CAC (see Section 2.1 of the Final EIS) also looked at these and other eastern bypass alignments and eliminated an eastern bypass from consideration as well.

5. Did the Project consider having two freight lines and two high speed passenger rail lines?

In the 2002 Tier I EIS, FRA and FHWA determined the Project would be developed incrementally along the existing CSXT-owned rail corridor between Washington, D.C. and Richmond, and that intercity passenger, commuter, and freight rail service would use the same tracks to maximize use of existing infrastructure. DRPT's analyses described in the Draft EIS show that for most of the corridor, adding one main track to the existing CSXT corridor provides sufficient additional capacity for intercity passenger, commuter, and freight rail, in order to meet the Project's Purpose.

6. Did the Project consider a three-track option with overtaking lanes (i.e., outer tracks would handle freight traffic and inner track would be utilized for passenger rail service only, in both directions)?

Based on prior corridor studies, including the 2002 Tier I EIS and the 2009 Virginia I-95 High Speed Rail Corridor & Service Development Plan (both of which are described in Section 1.2 of the Final EIS), FRA and DRPT determined that the most efficient means of adding capacity to the existing corridor was through an incremental process using existing rail corridors, and by adding capacity to the existing corridors through the addition of a main track with crossovers such that all main tracks are interoperable by intercity passenger, commuter, and freight trains. Interoperability of the main tracks maximizes the corridor's capacity, speed, and flexibility for all trains.

ASHLAND AREA ALTERNATIVES

1. How and why was a western bypass alternative in the Ashland area brought forward as an alternative in the Draft EIS?

The DC2RVA Project generally proposes additional rail capacity, in the form of an additional main track, be added alongside the existing tracks and within the CSXT-owned right-of-way to minimize costs and impacts. However, in the Town of Ashland, the CSXT right-of-way is too narrow to accommodate a potential third track—additional right-of-way would be required if a third track was placed through the town. Therefore, in response to public input during DC2RVA scoping and alternatives development phases, DRPT evaluated numerous bypass alignments, including both eastern and western bypasses. The bypass alignments were considered as options that avoided/minimized the potential impacts caused by expanding the rail corridor through the Town of Ashland. After screening the bypass alignments for potential significant environmental impacts and effects on infrastructure, DRPT selected Ashland West Bypass #4 (AWB4) for detailed evaluation in the Draft EIS, which is included as Build Alternatives 5C and 5C-Ashcake.



Refer to question Public Involvement #2 and #3 in the section above regarding development of the Town of Ashland/Hanover County CAC and its outcome. The mission of the CAC was to take a fresh look at a wide range of alternatives for Alternative Area 5, including reexamining eastern and western bypass alternatives. After review of all Ashland area alternatives, the CAC identified AWB1 as the "least objectionable" western bypass alternative; refer to Appendix G of the Final EIS for full summary of CAC activities.

Ultimately, FRA and DRPT determined that the additional capacity and operational efficiency provided by either a third track through town or a bypass around the town did not justify the cost and environmental impacts associated with the additional capacity. The Preferred Alternative for Area 5 was selected as 5A, which maintains two tracks through town; the reasons for its selection are detailed in Section 4.3.5 of the Final EIS. No bypass alternatives were selected as part of the Preferred Alternative in the Final EIS.

2. Support for options not evaluated in the Draft EIS

- a. One elevated track through downtown Ashland
- b. Tunnel beneath the Town of Ashland
- c. Bypass for vehicular traffic around Ashland
- d. Use of the existing eastern rail alignment (i.e., the Buckingham Branch Line)

In response to a), DRPT evaluated a raised rail trestle or viaduct through the Town of Ashland as a potential option to add rail capacity along the existing corridor (see Appendix A – Alternatives Technical Report of the Draft EIS). The rail trestle or viaduct was eliminated during the screening process due to impacts to existing infrastructure, as well as public concerns over impacts to historic resources, noise, and aesthetics. Rather, DRPT advanced alternatives to the Draft EIS that included the construction of a third track at-grade through the Town of Ashland – Alternatives 5B, 5B–Ashcake, and 5D–Ashcake, and construction of a two-track western bypass – Alternative 5C and 5C–Ashcake.

In response to b), DRPT evaluated tunnel options as part of the alternatives development process of the Draft EIS. Tunnel options included a deep-bore tunnel into bedrock, a mixed tunnel in both bedrock and the unconsolidated overburden, and a cut-and-cover tunnel. These tunnel options were documented in the Alternatives Technical Report (Appendix A of the Draft EIS) but were eliminated from further consideration during the screening process due to concerns over cost and impacts during construction, effects on nearby structures, and the long-term impacts of the above-ground ventilation facilities on the Town of Ashland. Subsequently, during the Ashland/Hanover Area CAC process to review the Area 5 alternatives, tunnels were reviewed by the CAC and eliminated from further consideration due to their relatively higher cost compared to other area alternatives.

In response to c), the Purpose of the Tier II DC2RVA Project is to increase railroad capacity between Washington, D.C. and Richmond to deliver higher speed passenger rail while also supporting the planned expansion of VRE commuter rail service and accommodating the forecasted growth of freight rail service by developing an efficient and reliable multimodal rail. Consideration of additional highway/roadway capacity beyond that necessary to improve existing road/rail crossings to meet the needs of the DC2RVA Project is beyond the scope of the DC2RVA Tier II effort. The DC2RVA Project does not preclude future non-rail capacity improvements studies or projects, separate from this EIS process.



In response to d), DRPT evaluated the use of the Buckingham Branch Railroad (BBR) as well as other eastern bypass options as potential alternatives to adding rail capacity along the existing corridor in the Ashland/Hanover area (see Appendix A—Alternatives Technical Report of the Draft EIS). The BBR and other eastern bypass options were eliminated during the alternatives screening process due to impacts to parks, wetlands, historic resources, and existing infrastructure. Routing passenger trains via the BBR would not allow trains to serve Staples Mill Road Station in Richmond in Alternatives 6A, 6E, 6F, and 6G. Additionally, routing freight trains via the BBR would increase the travel time for freight trains operating between Washington, D.C. and Richmond, and would increase freight rail congestion within Richmond by routing additional freight traffic from Acca yard to the BBR. The BBR and eastern bypass options were reevaluated by the Ashland/Hanover CAC and again eliminated from consideration. Under the Preferred Alternative, CSXT will continue to route freight trains on the BBR from Richmond through Doswell, VA, as necessary.

3. Could the proposed alignments through the Ashland Area (Area 5) be modified to have less impacts overall, especially to homes?

The Preferred Alternative for Area 5 was selected as Alternative 5A, which maintains two tracks through town and adds an additional track north and south of the town, and has the least residential impacts of any Build Alternative that was evaluated in the Draft EIS. The conceptual design of the Preferred Alternative through Area 5, as described in Section 4.3.5 of the Final EIS, has been refined since the Draft EIS evaluation and does not have any residential impacts in the Ashland Area.

All of the impact analyses in the Draft and Final EIS are based on conceptual engineering, which was revised between the Draft and Final evaluations and further minimized certain impacts (refer to Chapter 4 of the Final EIS for details). The Preferred Alternative will be further refined during final design, after funding is available and incremental improvements are scheduled, to further minimize impacts to environmental resources and property throughout the entire Project corridor.

RICHMOND AREA ALTERNATIVES

1. How will the Project route trains on the S-Line in Richmond? Isn't exclusively using the S-Line a missed opportunity of capacity for the existing A-Line?

Full descriptions of routing for the Preferred Alternative through Richmond is provided in Section 4.3.6 of the Final EIS. The Preferred Alternative for Area 6 (Alternative 6F: Full Service, Staples Mill Road/Main Street Stations) will route all north-south passenger trains through downtown Richmond along the S-Line, with the exception of the Auto Train which will continue to use the A-Line. Passenger trains will diverge from the CSXT RF&P Subdivision just north of the Staples Mill Road Station onto a new passenger train bypass around the east side of the Acca Yard terminal, which will include new level-boarding station platforms to serve the Staples Mill Road Station. South of Acca Yard, passenger trains will use the existing S-Line, which will be rebuilt and expanded, to access Main Street Station in downtown Richmond. Trains bound for Norfolk, North Carolina, and southern destinations will continue south on the S-Line past the west side of Main Street Station south to Centralia, where they will rejoin the CSXT A-Line. Amtrak's Newport News passenger service will leave the S-Line to continue east of Main Street Station onto the Peninsula Line. The use of the S-Line for north-south passenger trains through Richmond also validates the Preferred Alternative of the Richmond-to-Raleigh (R2R) Tier II EIS,



the Preferred Alternative for the Richmond to Hampton Roads Tier I EIS, and is supported by FRA's Station Area Planning guidance that emphasizes downtown station locations.

Rebuilding the S-Line as the main passenger train route through downtown Richmond supports the DC2RVA Project's goal of providing a competitive passenger rail transportation option for travelers by providing downtown-to-downtown service between Washington and Richmond. In addition, the potential for conflicts between passenger and freight trains in the Richmond terminal area will be reduced, since most north-south freight traffic through Richmond will continue to use the A-Line, while passenger trains will use the S-Line. Options to expand rail capacity on the A-Line to support both the expanded passenger service and forecasted increases in freight traffic are limited, or cost-prohibitive, owing to the line's location in the median of I-195 in Richmond. DRPT conducted computer-based rail operating simulations that provided estimates of future freight and passenger train performance on alternatives using both the S-Line and A-Line as the primary passenger route through Richmond. Based on those simulations, DRPT concluded that the diversion of passenger trains onto the S-Line allowed for two primary freight and passenger corridors for north-south traffic through Richmond, which would reduce the potential for conflicts between freight and passenger trains and enable passenger trains to meet the Project's on-time performance goals.

However, DRPT believes that the A-Line offers much needed redundancy in the Richmond area's passenger and freight rail network should unforeseen occurrences inhibit the movement of trains via the S-Line. The infrastructure improvements proposed by the DC2RVA Project do not preclude use of the A-Line by passenger trains in the event of unforeseen occurrences that would prevent the use of the S-Line for passenger service.

2. The Richmond Area improvements should be further broken down into smaller projects that will allow for the steady increase of passenger rail service at Main Street Station to Hampton Roads and the Southeast United States.

The DC2RVA Project provides additional capacity to support 9 new daily intercity passenger round trips (18 total trains per day) between Washington, D.C. and Richmond, and extending north to the NEC. This new service includes one new round trip originating at Richmond Main Street Station, one new roundtrip extending south to Newport News, three new roundtrips extending south to Norfolk, and four new round trips extending south to Raleigh and Charlotte, NC. Refer to Section 4.2 of the Final EIS for description of the proposed service plan. DRPT is preparing a Corridor Service Development Plan as part of the DC2RVA Project, which will include a proposed service implementation schedule; refer to Section 7.3 of the Final EIS for details.

DRPT anticipates that the DC2RVA Project, and its proposed 9 new daily intercity passenger round trips (18 total trains per day), will be implemented incrementally, as funding becomes available. Refer to Chapter 7 of the Final EIS for an overview of the anticipated future steps for Project implementation and construction.



STATION EVALUATION

1. Concern about which stations are being served by new DC2RVA service throughout the corridor, why those locations were chosen, and/or suggestions of additional stations or transit services that should be added along the corridor

DRPT evaluated potential new passenger rail stations for their suitability to serve as intercity passenger rail stations in the DC2RVA corridor, as described in Section 2.3.3.2 of the Draft EIS, and plans to incorporate the proposed passenger train service into Amtrak's existing intercity passenger rail network. Under the proposed service plan for Preferred Alternative as described in Section 4.2 of the Final EIS, existing station locations that will be served by the proposed service include: Alexandria, Woodbridge, Quantico, Fredericksburg, Ashland, and Richmond (existing Staples Mill Road and Main Street Stations). All upgrades to existing station facilities served by the Project are included in the description of the Preferred Alternative in Section 4.3 of the Final EIS.

Several locations for potential new or replacement intercity passenger stations were identified during the Project scoping phase based on public input and recommendations from prior corridor studies. However, ultimately DRPT determined that no new stations were needed to meet the Purpose and Need for the Project. However, the Project does not preclude future changes to service patterns and intercity passenger rail station locations, nor does it preclude development of new station locations in the future along the corridor, separate from this Project and its environmental process. the Final EIS

Multimodal access to high speed rail stations, including highway, public transit, and other modes, was one of the evaluation criteria for selecting which stations could receive additional passenger service under this Project; additional detail on multimodal access to the corridor rail stations is provided in Appendix A of the Draft EIS.

Several of the Amtrak stations also serve VRE's commuter rail service, including Alexandria, Woodbridge, Quantico, and Fredericksburg stations. VRE has other stations along the corridor which are not served by Amtrak. The Amtrak/VRE Alexandria Station is adjacent to a WMATA Metrorail station, and all of the Amtrak stations in the Project corridor, with the exception of Ashland, are served by local/regional bus routes. Further, Richmond's Main Street Station is now served by the City's new Bus Rapid Transit System. However, the DC2RVA Project does not include any provisions to develop or implement new transit service to a station because addition of any new service is under the purview of local and regional authorities, and not DRPT.

2. Concern about which stations are being served within Richmond, their operations, and/or their connections to other modes of travel

As described in Chapter 2 of the Draft EIS, DRPT evaluated two primary route alignment alternatives in the Draft EIS for the Richmond Area to determine which route was best capable of providing the capacity required to support the DC2RVA Purpose and Need: one route passes west of downtown on the CSXT A-Line, and the other passes through downtown via the CSXT S-Line. In addition to the routing options, the Draft EIS evaluated four unique station locations with eight different station service alternatives in the Richmond area serving multiple route and station combinations. DRPT also evaluated other potential station locations in the Richmond area as part of the alternatives development process, which were dismissed from further consideration



during screening (refer to the Alternatives Technical Report, Appendix A of the Draft EIS, for full details).

Section 4.3.6 of the Final EIS fully describes the station improvements, amenities, and operations at Staples Mill Road and Main Street Stations as part of the Preferred Alternative. Based on the cost estimates, levels of impact, and ridership projections presented in the Draft EIS, DRPT determined that having both a downtown station and a suburban station would provide the most flexible service, and Alternative 6F: Full Service, Staples Mill Road/Main Street Stations was selected as the Preferred Alternative. The Preferred Alternative will run all passenger train service that stops in Richmond on the S-Line, thus separating it from CSXT's principal freight corridor (the A-Line); this configuration will reduce rail congestion and delay. The Amtrak Auto Train, which does not stop in Richmond, will continue to use the A-Line.

All intercity passenger trains that stop in Richmond, including the 9 new daily intercity passenger round trips (18 total trains per day), will serve both Staples Mill Road Station and Main Street Station. Additionally, Main Street Station is unique in that passenger trains will be rerouted to it as part of the Preferred Alternative. Main Street Station currently serves two existing daily round trips (four total trains per day).

Under Build conditions of the Project, the S-Line will be rebuilt, enabling all existing and proposed new intercity passenger trains stopping at Richmond to serve both Staples Mill Road and Main Street Stations. As a result, Main Street Station will see a total of 18 daily round trips (36 total trains per day), which is an increase of 16 daily round trips (32 total trains per day) above the current service level at Main Street Station. Of those, the DC2RVA Project will add 9 new daily intercity passenger round trips (18 total trains per day) and also reroute 7 existing round trips (14 existing total daily intercity passenger trains). Main Street Station will provide for convenient connection to Richmond's transit system, including multiple bus routes and the City's new Bus Rapid Transit (BRT) system.

While Main Street Station site constraints and concerns over potential impacts to cultural resources limit the number of tracks and length of platforms proposed for the station, future passenger service amenities to be provided at the station, such as checked baggage service, are not precluded. Amenities to be provided at each station for a particular passenger service will be determined by DRPT in coordination between Amtrak, the City of Richmond, and other station stakeholders, and are not included as part of the DC2RVA Project. DRPT has assumed that Amtrak's scheduled crew changes in the Richmond area, which currently occur at Staples Mill Road Station, would continue to occur at Staples Mill Road Station under the Preferred Alternative.



- 3. Concern regarding proposed level of boarding platforms at stations as part of Project improvements
 - a. The Project should ensure that all platforms are at train-door level so that ADA customers do not have to utilize a lift / wait for the conductor to find a ramp at the station.
 - b. Not having "high-level" platforms in this Project adds travel time to trips. It looks like the Project will have at least four stations (if not more) that are "low-level" and that's going to add at least two minutes to every train in both directions.
 - c. The objections to "high-level" platforms seem to be that VRE owns equipment designed for "low-level" platforms and that freight railroads don't like "high-level" platforms, but there has to be a solution to those concerns from other places in the country.

In response to a), b), and c), federal regulations (49 CFR Parts 37 and 38) require passenger rail stations to have boarding platforms that are level to the floor of the railcar, wherever it would not be prevented by freight train clearance requirements. However, the different types of passenger, freight, and commuter trains sharing the tracks of the DC2RVA corridor have different height and clearance requirements, which prevents the use of level-boarding platforms at many of the stations in the DC2RVA corridor. For example, the floor height of Amtrak passenger cars is approximately 48 inches above the top of the rail, whereas the floor height of VRE commuter railcars is much lower and requires a station platform no more than 8 inches above the top of the rail. In addition, the width of certain freight cars operating in the DC2RVA corridor extends far enough outside the width of the rails that a 48-inch-high station platform would obstruct their movement. As a result, at stations where the platforms serve tracks used by passenger, freight, and commuter trains, the platform cannot be more than 8 inches above the top of the rail.

The DC2RVA Project has prepared a Basis of Design Report (see Appendix B of the Draft EIS) that governs all new station platform construction and reconstruction of existing platforms. The Basis of Design states that boarding for the mobility-impaired transit users shall be provided by one or more of the following methods:

- Level-boarding platforms (sometimes referred to as "high-level" platforms, as the platform is 48 inches higher than the top of rail). Level-boarding platforms provide level boarding where they would not conflict with freight train clearances.
- Railcar-equipped wheelchair lifts. Railcars equipped with mechanical lifts provide persons with disabilities access to all railcars.
- Wheelchair lifts at low-level platforms. At low-level platforms (8 inches above the top of rail) that do not provide level boarding, portable wheelchair lifts can be utilized to provide equal access as required by the Americans with Disabilities Act of 1990 (ADA).

Within the DC2RVA Project, Staples Mill Road Station is the only location where platforms will be located on new tracks that will serve only passenger trains, which will allow for the construction of level-boarding platforms (48 inches above the top of rail). However, Alexandria, Woodbridge, Quantico, Fredericksburg, Ashland, and Richmond Main Street Station have platforms that are served from tracks also used by freight trains and, in some cases, VRE commuter trains as well, and as a result, will require low-level platforms (8 inches above the top



of rail). At the stations where level-boarding is not permissible, DRPT or Amtrak (or other sponsoring agency) will be required to submit a level-boarding plan to FRA's Office of Civil Rights demonstrating that the proposed method (railcar-equipped lifts, wheelchair lifts, etc.) will meet the objectives of ADA.

4. Are future parking demands being addressed / increased at stations as part of this Project?

DRPT used an Amtrak-approved methodology to determine the parking demand at each existing intercity passenger rail station in the DC2RVA corridor (Alexandria, Woodbridge, Quantico, Fredericksburg, Ashland, and the two existing Richmond stations) for each Build Alternative evaluated in the Draft EIS. Parking capacities were based on DC2RVA ridership projections for the year 2045. Factors that affect parking demand include type of station (i.e., station location in an urban or more rural area, as urban stations are assumed to have greater access to public transit options and therefore require less parking) as well as type of Amtrak service (i.e., there are different parking requirements for long distance versus regional train passengers, and business versus non-business passengers). Refer to Section 4.5.2 of Appendix S of the Draft EIS for parking calculations, the results of which are summarized in Section 4.15 of the Draft EIS. An updated summary of the parking needs for the Preferred Alternative is provided in Section 5.15.1.4, and includes description of parking facilities at each station.

The conceptual layouts for each station site that are shown in the station alternative figures in Chapter 4 of the Final EIS are additionally based on the physical characteristics of the station site, the DC2RVA Basis of Design, the functional requirements of Amtrak, and/or Project refinements to the Preferred Alternative that have occurred since the publication of the Draft EIS. A multistory parking garage sufficient to meet the parking demand is proposed at the Fredericksburg Station as part of the Preferred Alternative. Since the publication of the Draft EIS, DRPT removed proposed parking improvements from the Preferred Alternative at the stations at Ashland in the Final EIS due to the relatively low increase in ridership proposed for those stations and availability of nearby private or publicly owned parking facilities; in addition, there was no local support for additional parking infrastructure dedicated to intercity passenger rail customers during review of Project Build Alternatives (see Appendix G for details on the CAC). DRPT also removed the proposed parking improvements at Main Street Station in Richmond as part of the Preferred Alternative due to its location in an urban area, availability of public transportation options, the presence of existing private or publicly-owned parking facilities, and concerns to potential impacts to historically sensitive resources in the station area. Additionally, at Staples Mill Road Station, in July 2018 Amtrak completed an expansion of the parking at the Staples Mill Road Station, from 274 parking spaces to 589 parking spaces. The completed parking improvements include a dedicated bus loading zone, bike racks, taxi/ride-share parking, improved pedestrian accommodations, additional ADA parking and two entrances via Staples Mill Road and Bremner Boulevard. This expanded parking lot meets the projected parking demand estimated for the DC2RVA Project, and no further parking improvements are recommended as part of the Project.



5. Station-specific concerns

- a. Carmel Church Station has been supported by the last three administrations and has been included in the last two Virginia State Rail plans. It was studied in depth by DRPT and affirmed in the Amtrak Station Area Planning and Land Use Analysis study from August 2008. While the Project states that it does not preclude the development of new stations, the Project should include the station that the Caroline County community has been working on with the full support of the Commonwealth.
- b. In Fredericksburg, the Project should look into renovating the current historic station as a passenger station rather than building a new station.
- c. What is happening at the Ashland Station? The Project needs to be sensitive to the aesthetics of the historic building.

In response to a), DRPT acknowledges the previous and ongoing support of a station location at Carmel Church. DRPT evaluated the potential for a new intercity passenger rail station at Carmel Church (see Section 8.3.5.8 of the Alternatives Technical Report, which is Draft EIS Appendix A). A Carmel Church station has been previously proposed in conjunction with a new mixed-use development known as the Carmel Church Community and Village; however, this development has not begun, and the area remains largely rural with low density single family residential and some industrial uses. DRPT considered and dismissed the Carmel Church location for development of a new train station as part of the DC2RVA Project due to its lack of development and its relatively low population density (and potential ridership) in the area. This does not preclude addition of a station at Carmel Church in the future if conditions change and the potential ridership warrants a new station.

In response to b), the Draft and Final EIS includes a conceptual footprint (and cost) for a new station in Fredericksburg on land currently used for surface parking. The conceptual footprint provides a basis for the Draft EIS impact evaluation but is not intended as a final determination on station layout. Final station design for any station in the DC2RVA corridor is not part of the Project. Any final design for a new station will be coordinated with Amtrak, the City of Fredericksburg, and other stakeholders. The potential use of the existing historic station could be evaluated during final design, should it be determined necessary at that time.

In response to c), the Ashland Train Station is both individually eligible for the National Register of Historic Places (NRHP) and as a contributing resource to the Ashland Historic District; as such, any changes made to this building or landscape as part of the DC2RVA Project would require an analysis to see if the changes adversely impact the station. The historic train station building is used as a visitor's center for the Town of Ashland and is not part of the Amtrak station.

However, there are no proposed changes to the station or its two brick platforms as part of the DC2RVA Project. In accordance with the September 2017 recommendation of the Town of Ashland/Hanover County CAC and with the December 2017 resolutions of the CTB, Build Alternative 5A: Maintain Two Tracks Through Town was selected as the Preferred Alternative. As selected, the Preferred Alternative in Area 5 will not include any roadway or station modifications within downtown Ashland (refer to Section 4.3.5 of the Final EIS for details). In a separate ongoing project, Amtrak is working with the Town of Ashland and FRA to improve the existing station platforms to meet ADA requirements.



ENVIRONMENTAL IMPACTS

Chapter 5 of the Final EIS documents the potential effects on the human, physical, and natural environments that may result from construction and operation of the Preferred Alternative for the Project. The effects presented in Chapter 5 are based on the conceptual engineering Limits of Disturbance (LOD) for the Preferred Alternative in each of the six areas defined for the Project, as defined in Chapter 4 of the Final EIS and its Appendix M.

GENERAL

1. Is there no route which would not impact local citizens?

The 2002 Tier I EIS established the general alignment for the SEHSR corridor, including the DC2RVA corridor between Washington, D.C. and Richmond, VA, ensuring connectivity with the future improvements to the NEC north of Washington, D.C. The 2002 Tier I EIS recommended that improvements be constructed within the existing railroad right-of-way to the extent possible in an effort to minimize physical impacts. The Basis of Design for the DC2RVA Project (see Appendix B of the Draft EIS) followed, to the extent practical, this recommendation for remaining within the existing right-of-way. Nonetheless, the DC2RVA Project requires some improvements outside the existing right-of-way in locations of limited right-of-way width, areas where speedlimiting curves needed to be flattened (or reduced), major river crossings where road/rail crossings required modifications, and other locations with limiting characteristics. The only alternative considered in both the Tier I and Tier II evaluations that would not require any additional right-of-way (and associated physical impacts) would be the No Build Alternative. However, FRA and FHWA determined in the 2002 Tier I EIS that the No Build Alternative did not to satisfy the Project's stated purpose and need and was thus considered not to be a viable alternative. DRPT considered the No Build Alternative as a baseline for evaluation as part of this Project, but confirmed the findings of the 2002 Tier I EIS that the No Build Alternative is not a viable alternative to meet the Project Purpose and Need. See Section 4.4.2 of the Final EIS for more detail.

2. The environmental impacts and/or monetary cost of the Project are not worth the projected time-savings of passenger rail. High speed rail is prohibitively expensive when compared to the time-savings for passengers using these trains. It is not fair to ask residents to "pay" for this when they will not be seeing any benefit.

The purpose of the DC2RVA Project is to increase capacity to deliver higher speed passenger rail, expand commuter rail, and accommodate growth of freight rail service in an efficient and reliable multimodal rail corridor. The increased capacity will allow for an increase of 9 new daily intercity passenger round trips (18 total trains per day), improve the reliability of on-time performance, and reduce travel time for all intercity passenger service in the corridor. Benefits of the Project and a comparison of the benefits to the No Build Alternative are documented in the Draft EIS. Improvements associated with the DC2RVA Project will also benefit non-rail users, such as improved safety of highway-rail crossings, reduction in growth of highway traffic congestion, and improvements in regional air quality. A detailed public benefits analysis is included in the Project's Corridor Service Development Plan, which is being prepared by DRPT as part of the DC2RVA Project (see Section 7.4 of the Final EIS for further details).



TRAFFIC / TRANSPORTATION

1. Concern about safety and/or accessibility of public at-grade roadway crossings as evaluated in the Draft EIS

In accordance with the FRA's High Speed Passenger Rail Safety Strategy, the Draft EIS analyses assumed that the Project would provide a minimum of active gates and lights at all public atgrade crossings. As part of that minimum protection, two types of active gates and light systems are recommended as part of the Project at public crossings:

- Four-quadrant gates: This system includes four gates (entrance and exit gates on all roadway approaches) designed to provide full closure of the crossing when a train is approaching or occupying the crossings, thus eliminating the opportunity for vehicles to navigate around a lowered gate. The design can include detection inside the gate to ensure that vehicles do not get "trapped" inside lowered gates.
- Median treatment (non-traversable) with center gates: This system includes physical improvements designed to impede the movement of vehicles into the opposing traffic lane and around a lowered gate. Typical treatments can include barrier wall systems, wide raised medians, and mountable raised curb systems with vertical median separators.

In addition to the two minimum treatment types above, DRPT also evaluated at-grade crossing elimination (which includes potential grade separation and crossing closure of existing at-grade crossings) as part of the Project.

Safety of all users and vehicle accessibility (i.e., connectivity of the roadway network) were two primary considerations during the crossing treatment review as part of the Draft EIS. DRPT applied FRA and FHWA guidance, which includes calculation of rail and roadway traffic and speeds, to determine if each at-grade crossing should be considered for grade separation or crossing closure, or if active gate systems (as described in the bullets above) would be sufficient. DRPT then determined specific crossing treatment recommendations for each crossing based on safety needs, the geometry of parallel/intersection crossing roadways to ensure safe and efficient vehicle operations, life-cycle cost efficiencies, construction feasibility, environmental impact, and operating conditions within the rail corridor. Discussion of this decision process can be found in Section 4.15.2.1 of the Draft EIS, with additional information in Section 5.2 of its Appendix S (Transportation Technical Report).

The proposed crossing treatments at each public at-grade crossing for the Preferred Alternative are summarized in traffic/transportation response #2 below, and fully detailed in Section 5.15.2.2 of the Final EIS. As detailed there, the Preferred Alternative includes "no action" at several existing at-grade crossings, in locations where other/future projects or actions will provide additional safety improvements.

Further, dynamic crossing safety technology to control exit gates (such as embedded loops or radar as part of active gate systems) will be included during the final design of the Project, as applicable, and is subject to FRA Office of Railroad Safety approval, at the time of that design.



2. What is happening to the existing at-grade treatments in the corridor (public crossings)?

The proposed crossing treatments at each public at-grade for the Preferred Alternative are presented in Section 5.15.2.1 of the Final EIS and shown on the detailed Preferred Alternative mapbook in Appendix L of the Final EIS, and include the following:

Grade separations: 7 crossings

Closure: 7 crossings

Four-quadrant gates: 13 crossings

Center median treatment: 8 crossings

No action: 8 crossings

These treatments are the same as evaluated in the Draft EIS, with three exceptions (listed north to south in the Project corridor):

- 1) The removal of one four-quadrant gate improvement in Northern Virginia (Potomac Road) from the Project, to align with the decisions made as part of the separate Powells Creek to Arkendale project in this same area (refer to Final EIS Section 4.3.2 for details).
- 2) The Preferred Alternative through Area 5 (Alternative 5A) will not improve any existing at-grade crossing treatments between Vaughan Road (Archie Cannon Drive) and Ashcake Road under the DC2RVA Project. Further, College Avenue/Henry Clay Street will remain open with no proposed changes as part of the Preferred Alternative. This differs from the evaluation as shown in the Draft EIS, which included proposed four-quadrant gates at all atgrade crossings within Town (which would require property and/or traffic operations impacts) and required closure of the College Avenue crossing (due to conflicts with station platform improvements that were shown in the Draft EIS). The recommendation for proposed grade separations at Vaughan Road (Archie Cannon Drive) and Ashcake Road remain in the Preferred Alternative, as analyzed in the Draft EIS. The CTB further committed DRPT to explore potential improvements in the Town of Ashland that will "help protect the safety of motorized and non-motorized roadway users." DRPT will continue the outreach for other safety improvements separate from the obligations of the DC2RVA Project.
- 3) The addition of one grade separation in Henrico County (Hermitage Road), which replaced a previous recommendation of four-quadrant gates in the Draft EIS evaluation.

3. Concern over private driveway access and/or crossing treatment throughout the corridor

DRPT's process to determine crossing treatments at private at-grade crossings followed a similar site-specific process as public at-grade crossings (as summarized in traffic/transportation response #1 above). Safety and accessibility were two key factors in the process.

Most of the existing private crossings currently have warning signs only, although a few have locking gates. Wherever practicable, existing private crossings are maintained, albeit with additional safety measures, as detailed in Section 5.15.2 of the Final EIS. At private crossings, the Preferred Alternative includes locking gates at most existing private at-grade crossings; however, four-quadrant gates are proposed at private locations in the Richmond area where site-specific safety, geometric, and/or operating conditions were determined to preclude use of locking gates. If access to private property cannot be maintained or provided in kind, the property would need to be acquired, as detailed in Section 5.11.4 of the Final EIS.



Locking gates will not impede the owner's access to the private crossing, but will provide an additional measure of safety for both vehicles and trains at the crossing. DRPT anticipates that locking gates will be tied to train control, and private property owners will need to "request" that their crossing gate be opened. However, details of technology and design of the track circuit interlock will be determined as part of the final design of the Project and is subject to FRA and CSXT approval at the time of that design. DRPT will coordinate with property owners to determine means of access to each property during final design.

4. Ashland-specific traffic concerns

- a. In Ashland, the proposed alternatives would not increase safety of at-grade roadway crossings, especially at the main intersection in downtown Ashland (England Street / Thompson Street crossing).
- b. In Ashland, railway traffic currently affects traffic flow by blocking intersections up to 15–20 minutes. This is not covered in the Draft EIS.
- c. There has not been adequate attention to how disruptive the destruction/construction through the town of Ashland would be. Shutting down Center Street for several years will create an inconvenience to all residents.

In response to a), the Draft EIS alternatives considered for downtown Ashland included safety upgrades to the at-grade road and pedestrian crossings in keeping with FRA's Safety Strategy (see Section 4.15.2.1 of the Draft EIS, with additional information in Section 5.2 of its Appendix S (Transportation Technical Report), for specific recommendations by alternative and road crossing). DRPT also analyzed the existing and projected future traffic on the at-grade road crossings to determine the potential need for grade-separations to improve safety and traffic flow, as well as site-specific physical conditions and rail operating conditions. DRPT did not recommend a grade separation at England/Thompson Street under any Build Alternative analyzed in the Draft EIS due to the potential impacts to traffic and adjacent properties from the infrastructure required for a grade separation at that location.

The Preferred Alternative (Alternative 5A: Two Tracks Through Town) includes grade separations be constructed at Vaughan Road (Archie Cannon Drive) and Ashcake Road in Ashland to improve safety, emergency response, and traffic flow throughout town. Additionally, the CTB's resolution recommending Alternative 5A for the Ashland/Hanover area also directed DRPT to explore the need for other safety improvements to pedestrian and vehicle at-grade crossings and to improve emergency vehicle access within the Town of Ashland, and to avoid or minimize any property acquisitions in downtown Ashland where the corridor would remain two tracks. Therefore, DRPT is committed to work with the FRA, the Virginia Department of Transportation (VDOT), Town of Ashland, Randolph-Macon College, and CSXT to identify safety improvements for pedestrians and vehicles crossing the tracks in Ashland that minimize the acquisition of additional right-of-way. DRPT will continue the outreach for other safety improvements separate from the obligations of the DC2RVA Project.

In response to b), the Draft EIS included an analysis of total daily delay experienced by vehicles at at-grade crossings based on Project-specific variables, which can be found in Section 4.15.2.4 of the Draft EIS, with additional information in Section 5.5 of its Appendix S (Transportation Technical Report); note that updated total daily delay results for the Preferred Alternative are presented in Section 5.15.2.4. The amount of time that a road is blocked by a passing train in



Ashland depends on several variables, including (a) the length of the train, (b) whether a train is making a station stop at Ashland, and (c) the speed of the train. The maximum train speed through Ashland is limited to 35 mph. The Preferred Alternative in Ashland (Alternative 5A) includes grade separations at both Vaughan Road (Archie Cannon Drive) and Ashcake Road in Ashland; these two grade separations will provide an alternative to drivers using the England Street at-grade crossing. The CTB's resolution also directed DRPT to explore the need for other potential improvements in downtown Ashland that will help protect the safety of motorized and non-motorized roadway users, and to facilitate emergency access, separate from the DC2RVA Project. DRPT will continue the outreach for other safety improvements separate from the obligations of the DC2RVA Project.

In response to c), in accordance with the September 2017 recommendation of the Town of Ashland/Hanover County CAC and with the December 2017 resolutions of the CTB, Alternative 5A: Maintain Two Tracks Through Town was selected as the Preferred Alternative. As selected, Preferred Alternative 5A does not include any rail or roadway improvements (including no modifications to existing at-grade crossing treatments) between Vaughan Road (Archie Cannon Drive) and Ashcake Road under the DC2RVA Project. College Avenue/Henry Clay Street will remain open with no proposed changes under the DC2RVA Project and the Preferred Alternative will not require the prolonged closure of or any impact to Center Street.

5. Concern over access of specific crossings

- a. In the Northern Virginia Area, there is no reference to problems at Railroad Avenue in Woodbridge. If a new 2-track bridge is to be built east of the existing bridge at Occoquan Creek, what will happen to access to houses on Railroad Avenue? The properties have no legal access to a public road except by using Railroad Avenue, which belongs to CSXT. There should be a frontage road study, with pedestrian passage.
- b. In Ashland, what is the plan for the Gwathmey Church Road crossing, which serves a landlocked community? As rail traffic increases, the safety of the crossing will become more of a problem.
- c. In Ashland along the western bypass (Build Alternatives 5C and 5C-Ashcake in the Draft EIS), there are families who presently gain ingress and egress from Cross Road. With the rail corridor replacing Cross Road, what happens to property owners in this area?

In response to a), access to the existing homes along Railroad Avenue in Woodbridge, which parallels the existing tracks and is within CSXT right-of-way, is an ongoing issue that predates the DC2RVA Project. These houses currently use Railroad Avenue, an unpaved CSXT service access road to access an adjacent private residential development and then to a public road. While the use of Railroad Avenue to provide access to the homes has been ongoing for many years, it is not clear if a formal easement exists. The lack of clear access to a public road has created issues for the homeowners and limits re-sale of the homes. Prince William County is currently working with VDOT, the adjacent residential developer, and CSXT to address the existing access situation.

The Preferred Alternative in Area 2 (Northern Virginia) is largely within existing CSXT right-ofway, which includes and impacts the current use of Railroad Avenue. The potential impacts and limits of disturbance on Railroad Avenue are described in the Draft EIS in Section 4.11 and its



Appendix D; updated limits of disturbance are presented in the Final EIS Section 5.11.3 and its Appendix M. Railroad Avenue impacts, which are based on the conceptual engineering that was performed in support of the Draft and Final EIS, will require an alternate form of access to the properties currently served by Railroad Avenue. In accordance with the policies and procedures of VDOT, DRPT will develop plans for Railroad Avenue to provide the information needed to assess the feasibility of providing a frontage road or alternate access at the time that funding is provided for the further development of this portion of the corridor. Those plans would include pedestrian activities noted at the time the plans are developed. DRPT will seek to minimize impacts to property and access during final design throughout the corridor.

In response to b), under the Preferred Alternative, the Project will install four-quadrant gates at the Gwathmey Church Road crossing, which will provide an additional level of safety beyond existing conditions. Two gates will close the crossing to approaching highway vehicles, as in existing conditions; however, an additional two gates will close the crossing behind departing highway vehicles to act as a deterrent to drivers tempted to go between two lowered gates.

DRPT did consider crossing elimination (grade separation or closure with alternate access to Ashcake Road) at this location during preliminary analyses performed in support of the Draft EIS, which are provided in the At-Grade Crossing Evaluation Technical Memorandum (see Appendix OO of the Alternatives Technical Report (Appendix A of the Draft EIS)). However, DRPT determined that grade separation was not feasible due to cost-benefit considerations and the fact that closure with construction of a new connector roadway was not feasible due to property impacts to the residences on Gwathmey Church Road and safety of new intersection geometrics with proposed grade-separated Ashcake Road.

In response to c), Alternative 5A: Two Tracks Through Town has been selected as the Preferred Alternative for Alternative Area 5, which dismisses the western bypass alternatives and the associated impacts noted in the comment. Notwithstanding, as discussed in the Draft EIS, none of the bypass alternatives would have created any new at-grade crossings, and ingress/egress for all residences would have either be maintained, or the entire property would have needed to be acquired.

RIGHT-OF-WAY / DISPLACEMENTS / PROPERTY VALUE

Concern about process for acquiring private property, including compensation, timing, need, and methods

In order to minimize impacts to the built and natural environments and in accordance with decisions reached as part of the 2002 Tier I EIS, the DC2RVA Build Alternatives were designed to remain as much as possible within the existing CSXT right-of-way. Additional right-of-way is only required when this could not occur due to safety and/or operations of the Project.

In the Commonwealth of Virginia, the right-of-way acquisition process, including property owner notification, appraisal, acquisition, and relocation, is the responsibility of VDOT. VDOT will ensure the right-of-way process is undertaken in compliance with applicable Federal and state regulations, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA), as amended. The statutes ensure that the citizens of the Commonwealth affected by the right-of-way process are treated fairly and equitably. VDOT is granted the authority to ensure that right-of-way is acquired at fair market value. VDOT Right-of-Way and Utilities Division adheres to the code of Ethics of the International Right-of-Way



association, which includes a commitment "To ascertain and weigh all of the facts relative to real properties in making an appraisal thereof, using the best and most approved methods of determining the just and fair market value." Relocations associated with the Preferred Alternative are discussed in Section 5.11 of the Final EIS. For the improvements proposed in the Preferred Alternative, DRPT (or sponsoring agency) will coordinate all requirements of the right-of-way process through VDOT.

2. How are farms addressed in the property evaluations of the Draft EIS? Are farms considered businesses?

Farms are considered a business or commercial relocation and therefore fall under the URA, as described in Right-of-Way response #1 above. Commercial relocations, which includes farms, are addressed in Section 5.11 of the Final EIS.

The right-of-way acquisition process, including property owner notification, appraisal, acquisition, and relocation, is the responsibility of VDOT, in accordance with this Federal regulation, as well as other applicable Federal and state regulations. Additionally, farmland loss and farmland soil acreage loss are both considered as a part of the Farmland Protection Policy Act of 1981 (FPPA) compliance process and are used in the Natural Resources Conservation Service (NRCS) Form CPA-106. These effects are discussed in Section 4.3 of the Draft EIS.

3. It seems that people with property the railroad crosses would only be compensated for the actual amount of land used by the physical railroad, with no value given to a single property that is split into pieces by the Project, such as a farm with a barn on one side and a pasture on the other.

Right-of-way and relocations for each of the Build Alternatives are discussed in Section 4.11.4 of the Draft EIS; those associated with the Preferred Alternative are presented in Section 5.11.4 of the Final EIS. Total or partial acquisition of parcels will take place throughout the corridor. The right-of-way acquisition process, including property owner notification, appraisal, acquisition, and relocation, is the responsibility of VDOT, in accordance with Federal and state regulations. Under these regulations, a remnant or residue of a parcel that "can no longer be utilized for the purpose for which the entire tract is then being utilized" could be acquired as a part of the relocation process. In addition, a parcel could also be acquired if the construction of the Project would "leave the remaining portions without a means of access to a public highway."

4. Concern about property values

- a. Since the Project might not be completed until 15-20 years from now, this Project would encumber property owners land by basically tying their hands in the ability to utilize their property rights, and the value of their property would be devalued.
- b. In the Ashland Area, concern that the impact on property values of the proposed Project is immediate. Even just the discussion of shutting down Center Street for 2-3 years is hurting real estate prices now.

In response to a), the Draft EIS examined the direct effects of the Project on property in Section 4.11 those associated with the Preferred Alternative are presented in Section 5.11of the Final EIS. The right-of-way process is highly controlled by various laws and regulations. Compliance is required



with most of the substantial body of law that governs private real estate transactions. Preliminary right-of-way estimates are based not only on an individual property but also on similar properties throughout the surrounding area in order to provide a true fair market value of a property. The appraisal describes the property as it exists before the acquisition and without considering the impact of any proposed transportation improvements.

The cost estimates prepared for the Final EIS included all acquisition costs, including land, improvements (e.g. buildings), damages to the property, and relocation expenses for homeowners/renters. These estimates also include administrative costs of acquisition, condemnation costs, demolition costs, and any additional relocation assistance, or utility adjustments, as necessary.

In response to b), subsequent to the publication of the Draft EIS, the Preferred Alternative for the Ashland area was selected as Alternative 5A: Two Tracks Through Town. The corridor through downtown Ashland will remain two tracks and does not require any prolonged closure of or impact to Center Street. Notwithstanding, the economic effects of all Build Alternatives are in Section 4.11.1 of the Draft EIS and associated effects with the Preferred Alternative are in Section 5.11.1 of the Final EIS. Short-term effects are based on construction of the Project. Preliminary right-of-way estimates are based not only on an individual property but also on similar properties throughout the surrounding area in order to provide a true fair market value of a property. The appraisal describes the property as it exists before the acquisition and without considering the impact of any proposed transportation improvements.

5. Concern that impacts to homeowners that are not directly located on the tracks are not considered as part of the Project

The study areas for potential direct environmental impacts extended beyond the properties located directly adjacent to the railroad tracks. For example, as indicated in the introduction to Final EIS Chapter 5, study areas for each potentially affected environmental resource were identified. The study areas differ in size depending on the resource and are typically centered about the existing rail or potential bypass alignments. The study areas for the human environment, noise, and air quality are larger than the natural environment boundaries. The larger study areas are defined by regions of influence in which a resource may potentially have noticeable Project-related impacts. Regions of influence for human resources account for factors such as community sizes, geographical and political boundaries, and census tract boundaries. The study area widths range from 500 feet to up to 3 miles in some sections.

The indirect and cumulative impacts analysis considered areas even farther beyond properties adjacent to the railroad, as outlined for the Preferred Alternative in Final EIS Section 5.20.



6. Concern that the Draft EIS did not address the economic impact in the Ashland Area

- a. In the Ashland Area, concern about negative economic impact of the construction of alternatives through town. The FRA decision will have immediate economic impacts, even if it is scheduled for 15 20 years in the future.
- b. In the Ashland Area, the western bypass option will significantly impact taxpaying property owners with lower property values for homes, farms, and land. This negative economic impact will not simply affect the homes and lands in the immediate area of the proposed tracks, but many more homes, farms, and lands in the vicinity of the entire western bypass. These additional taxpaying property owners have not been included in the fact-finding efforts of the rail reports.

Subsequent to the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative and would maintain the existing two-track corridor through downtown Ashland without any impact between Vaughan Road (Archie Cannon Drive) and Ashcake Road, in accordance with the CTB resolution directing DRPT to avoid or minimize any property acquisitions in downtown Ashland. While this selection negates the comments made regarding the bypass alternatives in Ashland, further response is provided below.

In response to a), the economic effects of all Build Alternatives evaluated in the Draft EIS are presented in Section 4.11.1 of the Draft EIS. The Draft EIS states that "the short-term effects of construction within town [Ashland], particularly central downtown along Railroad Avenue and Center Street, could cause local businesses to suffer loss of commerce and, potentially, closure. In addition to the short-term effects of construction, Build Alternatives 5B, 5B-Ashcake, and 5D-Ashcake could close South Center Street between England Street and Maiden Street. Access to the businesses and residences would still be provided from other public rights-of-way. However, the long-term effects of the closure and change in access could also cause loss of commerce and potential closure of businesses. This in turn could cause negative effects on the economic vitality of downtown Ashland." Commercial relocations for the Preferred Alternative are presented in Section 5.11 of the Final EIS.

In response to b), although it is possible that the Project could have some incremental effects on property values, there is no reliable method to distinguish those incremental effects from other variables that influence values of property over time as part of the NEPA process. Furthermore, in some instances, property values could be affected positively, such as in areas of potential induced development surrounding stations, as indicated in the indirect effects analysis in Draft EIS Section 4.20.1.2.

7. In the Richmond area, there was no discussion of any potential impacts to local industrial businesses that this Project would affect outside of the Main Street Station Area.

The Draft EIS addressed a wide range of potential impacts to local industrial businesses (and other land uses) throughout the corridor, for all Build Alternatives, in Chapter 4 as follows: noise and vibration effects are described in Section 4.7; visual impacts are described in Section 4.9; economic effects are described in Section 4.11.1; community effects and effects from changes to the transportation network are described in Section 4.11.2; right-of-way and relocations are identified in Section 4.11.4; and changes in land use are described in Section 4.11.5. In addition, in Section 4.15, the Draft EIS presents changes in regional roadways, the road network near



stations, and parking near stations in Section 4.15.1, and proposed crossing improvements effects on connectivity and accessibility (Section 4.15.2). The Final EIS presents updated information on those same topics for the Preferred Alternative; Final EIS Chapter 5 is presented in the same structure as the Draft EIS sections listed above, but each of the numbered sections begins with a 5 (to denote Chapter 5) rather than a 4.

8. In the Ashland area, it is not clear from the Draft EIS documentation exactly how many houses are impacted by the bypass alignments?

Subsequent to the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative and would maintain the existing two-track corridor through downtown Ashland without any impact between Vaughan Road (Archie Cannon Drive) and Ashcake Road, in accordance with the CTB resolution on the Project. Preferred Alternative 5A would not impact any homes in Ashland. Notwithstanding, details on the right-of-way and relocations for all alternatives, including the bypass alignments, were discussed in Section 4.11 of the Draft EIS; this information for the Preferred Alternative only is presented in Section 5.11 of the Final EIS.

LAND USE

1. Lansdowne Road in Spotsylvania County is currently a two-lane facility. The Draft EIS mentions a grade separation where it crosses the tracks near the City of Fredericksburg. The County Comprehensive Plan recommends a future four-lane divided roadway for Lansdowne Road that should be considered as part of this Project.

Designs in support of the Draft and Final EIS were prepared at a conceptual level sufficient for assessing the impacts of the DC2RVA Project, which is approximately a 10 percent level of design (see the beginning of Chapter 4 of the Final EIS for details). While the expansion of Lansdowne Road to a four-lane facility is in the County's comprehensive plan as a possible improvement by 2030, there are no designs, concept plans, funding, or schedule in place to expand Lansdowne Road. Therefore, the conceptual design for the proposed grade separation of Lansdowne Road over the CSXT right-of-way reflects the two-lane roadway in place as of the completion of the DC2RVA Tier II EIS. Additionally, it is important to note that the Project is not anticipated to affect vehicle volumes or operations on Lansdowne Road. A future expansion of the roadway to four lanes is independent of the DC2RVA Project, and any impacts associated with expanding Lansdowne Road would be a result of that roadway widening project and not the DC2RVA Project. During future phases of design (see Section 7.5 of the Final EIS), DRPT will continue to coordinate with the County to incorporate the comprehensive plan's future roadway improvements in the DC2RVA design plans, as planned and funded at that time.

2. In Ashland, concern how a bypass would adversely impact Hanover County growth plans and/or is not compatible with County land use plans. For properties along the bypass alignment, houses are zoned for residential, so how can a bypass be built?

Subsequent to the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative and would maintain the existing two-track corridor through downtown Ashland without any impact between Vaughan Road (Archie Cannon Drive) and Ashcake Road, in accordance with the CTB resolution on the Project. The western bypass



alternatives (Alternatives 5C and 5C-Ashcake) were fully evaluated in the Draft EIS. After consideration of the Draft EIS, expanded community engagement of the CAC, and consideration of all of the public comments DRPT did not recommend the bypass alternatives in the Ashland area. Additional discussion and rationale for DRPT's selection of Alternative 5A in Ashland is discussed in Section 4.3.5 of the Final EIS and its Appendix I.

3. In Ashland, what is the opinion that VDOT has on this western bypass which is in conflict with their planned 4-lane north and western bypass of Ashland (starting at Cross Corner Road and ending at Staples Mills (Route 33))? That study was performed in the early 1990s. Numerous town meetings were held, and the route was chosen either on or very close to existing roadways. How does DRPT propose to close off Cross Corner Road with this West Ashland Bypass and still incorporate VDOT's planned bypass? Does DRPT or FRA have the authority to supersede existing plans by VDOT?

Although several east and west rail bypass options around the Town of Ashland were considered during the Project alternatives development process, Alternative 5A: Two Tracks Through Town has been selected as the Preferred Alternative. The concept of a roadway bypass of Ashland, studied in the 1990s, is not currently considered an active project by VDOT, and is not listed in VDOT's 2025 State Highway Plan of recommended improvements. The Preferred Alternative will have no effect on the previously studied roadway. Further, VDOT has not offered any objections or concerns regarding the Preferred Alternative and their prior road planning efforts. Two western bypass alternatives (Alternatives 5C and 5C–Ashcake) were evaluated in the Draft EIS. After consideration of the Draft EIS, expanded community engagement of the CAC, and consideration of all of the public comments, DRPT did not recommend the bypass alternatives in the Ashland area as the Preferred Alternative. Additional discussion and rational for DRPT's selection of Alternative 5A in Ashland is discussed in Section 4.3.5 of the Final EIS and its Appendix I.

COMMUNITY FACILITIES / TITLE VI / ENVIRONMENTAL JUSTICE

- 1. Concern over Title VI and environmental justice (EJ) populations
 - a. Will the Project affect more environmental justice (EJ) communities than non-EJ communities? If so, are there viable alternative routes which would have less of an impact on an EJ community and why haven't they been chosen?
 - b. What specific actions have been taken to ensure that minority and/or low-income communities are not disproportionately affected by the construction and use of high speed rail? How will coordination with these communities be conducted?

In response to a), the primary effects on Title VI and environmental justice (EJ) populations are through residential relocations. The methodology used to assess the locations of EJ communities and populations as well as the analysis of the effects of the Build Alternatives in the Community Impact Assessment and Draft EIS ensure that disproportionate and adverse effects are considered. The number of relocations, changes in community cohesion, relocations of community facilities, changes of access to these facilities, changes in response times for emergency services, and noise and vibration effects are all examined to assess effects. The EJ impacts are then compared to impacts in those census tracts that do not meet the thresholds for EJ populations. While several of the Build Alternatives analyzed in the Draft EIS had EJ impacts



(see Section 4.12 of the Draft EIS), the Preferred Alternative does not have the potential to disproportionately impact census tracts with low-income and minority populations through residential relocations (see Section 5.12 of the Final EIS).

In response to b), public outreach has been integral to the Project since the Project kick-off in the Fall of 2014 (see Chapter 6 of the Draft EIS). DRPT launched a dedicated Project website and social media accounts in October 2014. Newspaper and on-line advertising for the Project kick-off and all subsequent public outreach milestones and events were in both English and Spanish. Public outreach has included public meetings, a Project mailing list, newsletters, small group information meetings, and a continued presence on social media (i.e., Project website, Twitter, Facebook). Community coordination and public outreach will continue through these methods during all future phases of the Project.

2. It is discrimination that the Project does not include roll on / roll off level platforms at all stations.

This Project is along tracks owned by CSXT for freight train operations, requiring freight train clearance requirements at most stations. Freight train clearance requirements preclude level platforms for passenger service. As a part of the Title VI and ADA compliance for the DC2RVA Project, accommodations for the population with disabilities have been considered throughout the Project development process. Federal regulations (49 CFR Parts 37 and 38) require passenger rail stations to have boarding platforms that are level to the floor of the railcar, wherever it would not be prevented by freight train clearance requirements. Level boarding will be available at the Staples Mill Road Station after station reconstruction. At the other stations, including Alexandria, Woodbridge, Quantico, Fredericksburg, Ashland, and Richmond Main Street, the platforms are served from tracks that are used by freight trains and, in some cases, VRE commuter trains. These stations will require low-level platforms. See Station Evaluation response #3 for further details.

The DC2RVA Basis of Design Report, Appendix B of the Draft EIS, states that level boarding for mobility-impaired transit users shall be provided by one or more of the following methods: high level platforms, railcar-equipped wheelchair lifts, or wheelchair lifts. This design report also contains details on the new and rebuilt stations and platforms and their compliance with ADA access requirements. At the stations where level-boarding is not permissible, DRPT or Amtrak (or other sponsoring agency) will be required to submit a level-boarding plan to FRA's Office of Civil Rights demonstrating that the proposed method (railcar-equipped lifts, wheelchair lifts, etc.) will meet the objectives of ADA.

3. Is Long Bridge Park affected by the Project?

Subsequent to the publication of the Draft EIS, Alternative 1B was selected as the Preferred Alternative in Area 1 to align with the bridge capacity expansion alternatives that are under consideration as part of the separate Long Bridge study (see Section 4.3.1 of the Final EIS for full details). Preferred Alternative 1B will only have temporary impacts to Long Bridge Park on the west side of the existing right-of-way. These impacts are limited to short-term use of park lands during construction and will not affect existing or proposed park activities. The Draft EIS indicated that Build Alternative 1B would have permanent impacts to Long Bridge Park. However, coordination with Arlington County since publication of the Draft EIS has resulted in the elimination of the permanent encroachments upon park lands to the west of the existing right-



of-way. These updated impacts are presented in Section 5.14 of the Final EIS, and are reflected in the Final Section 4(f) Evaluation for the Project (which is Chapter 6 of the Final EIS).

4. Concern that the third rail options through Ashland do not appropriately consider impacts to Randolph-Macon College

Subsequent to the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative and would maintain the existing two-track corridor through downtown Ashland between Vaughan Road (Archie Cannon Drive) and Ashcake Road, in accordance with the CTB resolution on the Project. Notwithstanding, according to the College's Strategic Plan 2009-2017, college construction activities would be occurring adjacent to the right-of-way, but these are not expected to be affected by the Preferred Alternative or vice versa.

- 5. Concern about specific community facilities located along the bypass alignments in Ashland
 - a. To Independence Christian Church from the Western Bypass alternatives in the Ashland Area (Build Alternative 5C and 5C-Ashcake).
 - b. To Kiddie Kingdom (a non-profit child care center) from the Western Bypass alternatives in the Ashland Area (Build Alternative 5C and 5C-Ashcake).

In response to a) and b), the western bypass alternatives as evaluated in the Draft EIS (Build Alternatives 5C and 5C-Ashcake) have been dismissed from consideration in the Final EIS. Subsequent to the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative and would maintain the existing two-track corridor through downtown Ashland without any impact between Vaughan Road (Archie Cannon Drive) and Ashcake Road, in accordance with the CTB resolution on the Project. Preferred Alternative 5A will have no effect on the noted properties.

6. What is impact to Leesylvania State Park?

The Preferred Alternative (Build Alternative 2A) traverses through Leesylvania State Park along the existing rail corridor; however, within this area, improvements are contained within the existing CSXT right-of-way. The Preferred Alternative has no temporary or permanent impacts to the Leesylvania State Park lands.

7. No consideration was made for any individuals with disabilities, who would be impacted by the sound and vibrations from a rail being close to houses along the Ashland Western Bypass alignment.

The Preferred Alternative 5A: Two Tracks Through Town will have no effect on the noted property nor the occupants. The western bypass alternatives evaluated in the Draft EIS (Build Alternatives 5C and 5C-Ashcake) have been dismissed from consideration in the Final EIS. Notwithstanding, as part of the Draft EIS, DRPT completed assessments of Project-related noise and vibration for each of the Build Alternatives. The assessments used FRA methods and established maximum acceptable Project-related noise and vibration levels. All locations experiencing Project-related noise and vibration levels above this were considered to be impacts as defined by FRA and subject to appropriate mitigations.



FARMLAND

1. The proposed Project would impact acres of land that are currently farmed. Not only does this mean that farmers would be unable to farm the land, but it could be impossible to leave cattle in pastures split by a train track. Does the Project account for these ramifications?

The Agricultural Lands analysis was conducted in accordance with applicable Federal and state regulations: the Farmland Protection Policy Act of 1981 (FPPA) and the Local Agricultural and Forestal Districts Act. Effects to farmland soil, active farms, and Agricultural/Forestal Districts appear in Sections 3.3 and 4.3 of the Draft EIS for all Build Alternatives; the potential impacts of the Preferred Alternative on these resources are presented in Section 5.3 of the Final EIS.

The Preferred Alternative does not split any farms or other lands not already divided by the existing rail corridor:

- In Areas 1, 2, 4 and 6, none of the Build Alternatives had the potential to split farm properties. In Area 3, only Build Alternative 3C as evaluated in the Draft EIS had the potential to split farm properties, and this was not selected as the Preferred Alternative (which was selected as Alternative 3B). The western bypass alternatives in Area 5 (Build Alternatives 5C and 5C-Ashcake) were the only Build Alternatives that could potentially split farm properties, and no bypass alignments were selected as the Preferred Alternative. Alternative 5A: Two Tracks Through Town, which has minor encroachments on lands immediately adjacent the railroad right-of-way but does not split or divide any farm properties, was selected as the Preferred Alternative for this area.
- Throughout the corridor, a limited number of private crossings provide some landowners direct access across the tracks; the Project does not affect the number of private crossings (none are created and none are closed as part of the Project). DRPT will coordinate with CSXT and property owners to determine review or confirm means of access to each property during final design. DRPT will work with CSXT and the private crossing owners to install locking gates at each crossing identified for such treatment, which will be determined during the final design of the Project and is subject to FRA approval at the time of that design. These locking gates will not impede the owner's access to the private crossing, but will provide an additional measure of safety for both vehicles and trains at the crossing.
- 2. The Project should uphold the Farmland Protection Act and the Local Agriculture Districts Act quoted in the Draft EIS which were put in place to minimize the conversion of the Commonwealth's farmland to nonagricultural uses.

Farmland loss and farmland soil acreage loss are both considered as a part of the Farmland Protection Policy Act of 1981 (FPPA) compliance process and are used in the Natural Resources Conservation Service (NRCS) Form CPA-106. These forms appear in Appendix N of the Draft EIS and are summarized in Section 4.3 of the Draft EIS for all Build Alternatives; summary for the Preferred Alternative is provided in Section 5.3 of the Final EIS. Within Areas 1-4 and Area 6, the Build Alternative as analyzed in the Draft EIS with the lowest score on Form CPA-106 was chosen as the Preferred Alternative (Alternatives 1B, 2A, 3B, and 4A). Within Alternative Area 5 (Ashland/Hanover County), Build Alternatives 5C and 5C-Ashcake would both convert the



highest amount of acreage of farmland soils and both have the highest Corridor Assessment Scores of any Build Alternative throughout the Project corridor; however, neither of these alternatives were selected as the Preferred Alternative for the area. Conversely, the Preferred Alternative (5A: Two Tracks through Town) encroaches upon the least amount of farmland soils and does not bisect or divide any of the properties.

Effects to Agricultural/Forestal Districts have been analyzed in compliance with the Local Agricultural and Forestal Districts Act. The Draft EIS was provided to the Agricultural/Forestal District Advisory Committee, Hanover County Board of Supervisors, and Planning Commission to solicit their comments on the Project.

3. The dairy industry is in peril all on its own. Over the last 15 years dairies in Hanover have diminished and warrant protection.

Farmland loss, including pasture and grazing land and on-farm investments, and farmland soil acreage loss are all considered as a part of the Farmland Protection Policy Act of 1981 (FPPA) compliance process and are used in the Natural Resources Conservation Service (NRCS) Form CPA-106. These forms appear in Appendix N of the Draft EIS and are summarized in its Section 4.3 for all Build Alternatives; summary for the Preferred Alternative is provided in Section 5.3 of the Final EIS. Within Alternative Area 5 (Ashland/Hanover County), the western bypass alternatives (Build Alternatives 5C and 5C-Ashcake) would both convert the highest amount of acreage of farmland soils and both have the highest Corridor Assessment Scores of any Build Alternative throughout the Project corridor; however, neither of these alternatives were selected as the Preferred Alternative for the area. Conversely, the Preferred Alternative (5A: Two Tracks through Town) encroaches upon the least amount of farmland soils and does not bisect or divide any of the properties.

BICYCLE AND PEDESTRIAN FACILITIES

- 1. Concern regarding consideration/accommodation of bicycle and pedestrian facilities
 - a. It is an oversight that the Project does not include a parallel greenway. The Project corridor should include a multiuse path that connects to trailways that are in place or planned along the corridor, such as the East Coast Greenway.
 - b. The Draft EIS did not focus enough on bicycle and pedestrian facilities. Bicycle and pedestrian facilities should be considered and accommodated as part of at-grade and/or grade separated crossings.
 - c. Walking over the tracks is an impediment and impossible for wheelchairs and mobility aids. How does the Project improve these problems?

The DC2RVA Project addresses bicycle and pedestrian safety at public at-grade crossings along the DC2RVA rail corridor, in keeping with the Project's Basis of Design and applicable FRA, Amtrak, CSXT, and VDOT safety standards.

In response to a), the decision to establish a new greenway is a separate and distinct action from establishing high speed passenger rail service under the NEPA and is not part of the Purpose and Need of the Project. Additionally, the incremental approach called for in the 2002 Tier I EIS dictates utilizing existing rights-of-way as much as possible. Accordingly, the DC2RVA Project corridor runs on right-of-way belonging to CSXT. The CSXT right-of-way is not of sufficient width to support a



greenway, nor does CSXT allow recreational use of its rights-of-way. The Project does not preclude a future greenway outside the CSXT right-of-way, should the Commonwealth decide at some point to pursue such a greenway, under a separate project at that time. However, developing a parallel greenway outside the CSXT right-of-way is a major undertaking and would likely require its own unique corridor study and potentially its own NEPA evaluation should federal funds or actions be involved.

In response to b) and c), existing bicycle and pedestrian facilities are proposed to be maintained (provided in-kind, i.e., to the same level of existing treatment) as part of Project improvements. In locations where the Preferred Alternative includes modifications to the railroad or roadway where bicycle/pedestrian access is present or required, the Project will improve at-grade vehicle crossings with crosswalks for bicycle/pedestrian use, and upgrade other bicycle/pedestrian crossings, to ensure compliance with applicable standards, including ADA. This compliance would be required for the entire crossing and not just the side of the crossing closest to the Project track work. If a crossing does not require roadway or railroad modifications as part of the Preferred Alternative, there will be no changes to the existing bicycle and pedestrian facilities at that location. Additional safety measures, including opportunities for additional bicycle and pedestrian accessibility improvements, including new and/or additional ADA-compliant facilities beyond existing levels, will be evaluated during final design in coordination with FRA; refer to Chapter 7 of the Final EIS for an overview of future steps for the Project.

In addition, as part of the CTB's resolution recommending Alternative 5A as the Preferred Alternative for the Ashland/Hanover area, the CTB directed DRPT to explore the need for other safety improvements to pedestrian and vehicle at-grade crossings within the Town of Ashland. Therefore, DRPT is committed to work with the FRA, VDOT, Town of Ashland, Randolph-Macon College, and CSXT to identify safety improvements for pedestrians, bicycles and vehicles crossing the tracks in Ashland that minimize the acquisition of additional right-of-way. DRPT will continue the outreach for other safety improvements separate from the obligations of the DC2RVA Project.

Finally, DRPT notes that crossing railroad tracks at any location other than designated crossings is unsafe and is a violation of Virginia code §18.2-159.

2. Will bicycles be allowed/accommodated for on all the new trains? If not, why?

Provisions for luggage and bicycle allowances are under the purview of the operator (Amtrak). Accordingly, the new service that is proposed as part of the DC2RVA Project will be subject to Amtrak's bicycle policies at the time of service. Current Amtrak bicycle policies are summarized below.

Beginning in fall 2015, Amtrak began implementing a new bicycle policy that allows bicyclists to check their bicycles for transport on customized bike racks installed in train cars. The service is available for a fee at stations with checked baggage service. In addition, at stations with checked baggage, passengers may also check bicycles and/or bicycle trailers in a bicycle container, in lieu of a piece of baggage. Bicycle boxes are sold at most staffed locations.

Amtrak also permits passengers to bring aboard folding bicycles in lieu of a piece of carry-on baggage.



3. Ashland is home to the intersection of Bicycle Routes 1 and 76. The Draft EIS did not consider these trails that would be impacted by all through-town build alternatives.

These facilities were mentioned in Section 3.15.1.3 of the Draft EIS (Other Regional Transportation Facilities – Bicycle and Pedestrian Facilities On and/or Adjacent to Public Roadways) and are located in the Project corridor beyond just the Town of Ashland. As noted in bicycle/pedestrian facilities response #1, the Project will improve at-grade vehicle crossings with crosswalks for bicycle/pedestrian use, and upgrade other bicycle/pedestrian crossings, in locations where the Preferred Alternative includes modifications to the railroad or roadway.

Bike Routes 1 and 76 are located on the existing public road right-of-way, which are considered for transportation use and which intersect the DC2RVA corridor in the following locations:

- Bike Route 1 crosses the DC2RVA rail corridor on Mills Drive (U.S. 17) in Spotsylvania County and on White Oak Road (VA 218) in Stafford County. Bike Route 1 is impacted and improved by DC2RVA improvements at: Hermitage Road in the City of Richmond; Hungary Road and Purcell Road in Henrico County; Elmont Road, Gwathmey Church Road, Center Street, and Ashcake Road in Hanover County; Mine Road in Spotsylvania County; Leeland Road in Stafford County; and Lorton Road in Fairfax County.
- Bike Route 76 is impacted and improved by DC2RVA improvements at Ashcake Road in Hanover County.

Additionally, as part of the CTB's resolution recommending Alternative 5A (Two Tracks Through Town) as the Preferred Alternative for the Ashland/Hanover area, DRPT is committed to work with the FRA, VDOT, Town of Ashland, Randolph-Macon College, and CSXT to identify safety improvements for all users, including bicyclists, crossing the tracks at-grade in Ashland. DRPT will continue the outreach for other safety improvements separate from the obligations of the DC2RVA Project.

CULTURAL RESOURCES

1. Concern regarding the Main Street Station options in Richmond and their impact on the Shockoe Bottom Area and the cultural resources related to slave trade in the area, including the footprint of the "Burial Ground for Negros," Lumpkins Jail/Devil's Half Acre, and/or the proposed Memorial Park. Concern that impacts to these resources, either individually or as a whole, were not fully considered within the Draft EIS.

DRPT and FRA fully understand the sensitivity and significance of the Shockoe Bottom area. Studies to record and evaluate archaeological and architectural properties in this area have been ongoing since 2006. Above- and below-ground cultural resources in the Shockoe Bottom area of Richmond are referenced in the Draft EIS, Final EIS, and associated technical reports in a manner consistent with the Virginia Department of Historic Resources (DHR) guidelines on cultural resource studies and per the process set forth in Section 106 of the National Historic Preservation Act of 1966, ensuring that all effects of the proposed undertaking on historic properties were taken into consideration. Due to additional studies and comments by consulting parties, Lumpkins Jail/Devil's Half Acre site and a burial ground to the north of Shockoe Bottom, Graveyard for Free People of Color and Slaves, have been added to the list of historic properties in the APE. In addition, Lumpkins and the "Burial Ground for Negros" are both being considered contributing elements to the Shockoe Valley and Tobacco Row Historic District, and impacts to



these sites and the district due to the Project have been evaluated by the DHR. Project plans are taking recorded resources, the proposed Memorial Park boundaries, and the historic role of Shockoe Bottom in the slave trade into consideration during every step of the engineering and evaluation process and every attempt is being made to avoid significant resources. DRPT used DHR guidelines to evaluate the presence of known resources associated with the slave industry. Tools used during the cultural resource evaluation process included overlaying historical maps on modern aerial imagery, detailed map analysis of the proposed Shockoe Bottom Memorial Park relative to Project alternatives, and careful evaluation of ways to avoid and/or limit both physical and visual changes in the area around Main Street Station.

The Project, as designed and evaluated in the Draft and Final EIS, does not impact known boundaries of sites associated with the slave trade. At the request of consulting parties since the Draft EIS, Lumpkins Jail was added as a historic property to the Section 106 analysis as it is within the indirect area of potential effects. However, FRA determined that the Project will have no adverse effect on this resource, and the DHR concurred with this determination.

Although a Richmond Slave District has not been recorded on file at the Virginia Department of Historic Resources, creation of such a district is a recommended future study to be completed by the City or another entity as described in Final EIS Chapter 3. Establishment of boundaries for such a district is included as a mitigation for adverse effects to the Shockoe Valley and Tobacco Row Historic District.

Aiding in determining boundaries for such a district, in tandem with City efforts, is included in the Section 106 Draft Memorandum of Agreement (MOA) as a mitigation stipulation for adverse effects to the Shockoe Valley and Tobacco Row Historic District. Refer to Appendix K of the Final EIS for the MOA; all Section 106 mitigations are also included as Project Commitments in the Final EIS. This approach, as well as close coordination and a robust dialogue on historic properties in the Shockoe Bottom area, has taken place during numerous meetings, telephone calls and emails between DRPT and FRA with DHR as well as other local stakeholders including the City of Richmond, Historic Richmond Foundation, Preservation Virginia, National Trust for Historic Preservation, National Park Service, and the Advisory Council on Historic Preservation.

Alternative 6F (Full Service Staples Mill Road/Main Street Station) has been selected as the Preferred Alternative in Area 6 through Richmond, which provides full service to two stations in Richmond, one serving Downtown Richmond at Main Street Station and a second serving suburban Richmond at Staples Mill Road. Section 4.3.6 of the Final EIS describes the infrastructure improvements proposed near Main Street Station in Area 6. Through review and investigation of historic records, consultation with consulting parties and groups with a vested interest in area history, and in comments received from the public and organizations, DRPT has reduced the facilities proposed for construction at Main Street Station to the minimum infrastructure necessary to deliver the service proposed in the DC2RVA Project. This includes a reduction in the design length of the platforms on the west side of the station to remain south of East Broad Street, and to the minimum width feasible to support the forecasted level of ridership and services provided at the station. The east side platforms will also remain south of East Broad Street. The provision of a two-station alternative in Richmond allows for a distribution of ridership, parking and automobile traffic among the stations. Therefore, this minimizes the infrastructure required and potential impacts associated with Main Street Station. In addition, the Preferred Alternative infrastructure designs rely upon existing piers and platforms to the greatest extent possible to limit disturbance in general and subsurface impacts specifically in this area. Also, a parking deck



planned for east of Main Street Station has been removed since the Draft EIS to minimize impacts on archaeological sites and surrounding buildings.

The City of Richmond is currently developing a plan for the development of the Lumpkins Slave Jail archeological site and a future slavery museum. The Mayor's vision is to develop an area plan that will enable the City to protect and honor the history of the area. This plan would not be limited to the jail and burial grounds, but will also include the broader footprint of Shockoe Valley. As conceived by the City, the plan will support the significant public/ private investments that are underway and that have already been made in Shockoe Valley, such as the renovated Main Street Station and 17th Street Farmers Market. The City confirmed this and their general commitment to historic preservation in this area in a letter dated November 1, 2018 (see Appendix E.5 of the Final EIS for a copy of this letter). The final design of the DC2RVA rail improvements will be coordinated with the City of Richmond and the City's Shockoe Bottom area plans.

All maps showing specific archaeological sites in Shockoe Bottom and elsewhere in the DC2RVA Project corridor have been redacted from public report copies to comply with the Archaeological Resources Protection Act (1979), which limits data available to the public to protect sites from looting or other damaging activities. However, these maps were provided to DHR and interested Consulting Parties for consideration; contact DRPT for details.

To the north of Shockoe Bottom, DRPT also recorded and carefully evaluated the Grave Yard for Free People of Color and Slaves (recorded as archaeological site #44HE1203). The site was first recorded in the spring of 2018. Upon recognition of the presence of the site, DRPT worked to minimize the Project's limits of disturbance in this area to avoid the cemetery to the greatest extent possible. In addition, further research was undertaken to better understand the altered landscape of this area, including gathering historic maps, photographs, newspaper articles, and more. Previous studies by VDOT were also examined to understand the stratigraphy at this cemetery. Based on the revised Project parameters and the historic data on the area's development, the DHR concurred that the Project will have no adverse effect on this cemetery from the perspective of Section 106 of the National Historic Preservation Act. Despite this finding, DRPT is committing to complete additional studies in this area prior to commencing construction, including: 1) completion of an extensive landscape analysis to understand the changes in the topography and development over the past 200 years; 2) archaeological testing in any areas where the Project may require excavation in the vicinity of the cemetery; and 3) archaeological monitoring during Project construction. Data on all of the activities completed on this resource were disseminated to consulting parties and interested members of the public on several occasions, including an onsite visit on February 13, 2019, to assure that this data was thoroughly shared. These are included in the Project Commitments, which are included as a preface in the Final EIS document and will become part of the Record of Decision.

Resources in Shockoe Bottom and the Grave Yard for Free People of Color and Slaves were discussed in Chapters 3, 4 and 5 of the Draft EIS and within several reports in its Appendix R (cultural resource technical reports) to assure that these historic places were taken into consideration during Project planning. Section 3.1.4, Chapters 5 and 6, and Appendices D, E, and K of the Final EIS provide additional information on the historical resources in the Shockoe Bottom/Grave Yard for Free People of Color and Slaves area and provide the reader with a greater sense of the historic and cultural context of the area as indicated in the comment. This additional information, along with numerous comments, led to the modification of several



proposed improvement elements for Richmond's Main Street Station (refer to both Section 4.3.6 and Appendix J of the Final EIS for discussions of specific infrastructure changes).

2. Concern regarding the third-rail options through Ashland and their impact on the historic districts / properties, including the potential Berkleytown Historic District. The Section 106 study revealed buildings that are potentially eligible for individual listing. Aren't historic districts and buildings elevated to individual listings supposed to be protected?

Section 106 is a process designed to assure that historic resources are taken into consideration during project planning and that adverse effects to these resources be mitigated. The law sets forth this process to assure that significant historic properties are part of the project planning process but designation as a historic property does not afford "protection" per se. Only resources that are determined to be National Historic Landmarks should be avoided outright. If it is found that a project will have an adverse effect on a significant resource in some manner (both direct and indirect), the law states that this effect needs to be mitigated. Mitigation could mean minimizing the Project footprint or physical impacts to a property, installing vegetative screening, preparing historical research for public distribution, creating public interpretive signage, and more. The goals are to assure that all impacts are minimized to the greatest extent possible while still achieving the Project's purpose and need and, in some cases, to give history back to a community wherein historic elements are impacted or removed.

Section 106 studies completed as part of the DC2RVA Project included reconnaissance- and intensive-level architectural documentation of resources along the corridor in areas where the Project may have an effect on their character-defining features; refer to Draft EIS Chapters 3, 4, and 5, and Appendices R and U. Follow-up reports and final summary data can be found in Final EIS Chapters 3, 5, and 6 and Appendices D and K.

The Berkleytown Historic District has been determined to be eligible for listing in the NRHP by the DHR. Section 3.1.3 and Chapters 5 and 6 of the Final EIS provide additional information on Berkleytown and other historical resources in the Ashland area. The expanded discussion provides the reader with a better sense of the historic and cultural context of the area as indicated in the comment.

The FRA has determined that the Preferred Alternative (5A: Two Tracks Through Town) will have an adverse effect on this Berkleytown Historic District as the Project requires notable road modifications at Vaughan Road, thus changing the road pattern of the historic district and installing a new overpass within the viewshed. Berkleytown has been included in the Section 106 Draft Memorandum of Agreement to outline steps to mitigate the adverse effects (see Appendix K of the Final EIS).

The FRA determined that the Project will not adversely affect any other eligible historic property in Ashland due to the minimization of the Project design. The DHR concurred with these determinations (see Appendix E of the Final EIS for details on all Section 106 comments and coordination).



3. In the Ashland Area, how did cultural resources studies along the bypass alignment differ from those along the main corridor through Ashland? Have any studies been conducted on any potential structural changes that may occur to these properties due to additional freight and passenger rail trains?

The Ashland Bypass alternatives (5C and 5C-Ashcake) and the Ashland Through Town alternatives (5A, 5A-Ashcake, 5B, 5B-Ashcake, and 5D) were studied at different levels at the recommendation of the DHR. Because numerous alternatives overlapped in this area, the extant main line (through town) corridor was surveyed through a cultural resource Phase IB identification-level study. This included documenting recorded above-ground resources over 48 years in age and excavating shovel test pits in select areas to identify archaeological sites. For purposes of the Draft EIS study, DHR chose to have DRPT conduct a Phase IA reconnaissance study rather than a Phase IB identification-level study for the bypass alignment due to the possible width of the bypass corridor and the archaeological best practice to avoid excavations where possible. Should the bypass alternative have been selected as the Preferred Alternative, then an extensive Phase IB identification-level survey, including mapping of all areas that would have been the subject of subsurface archaeological testing through shovel test pits, would have been conducted.

Since the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative for the Ashland Area 5. The cultural resource studies have been completed for the Preferred Alternative, a list of historic properties has been developed, Project effect has been determined on the historic properties, and a Section 106 Draft Memorandum of Agreement (refer to Appendix K of the Final EIS) has been authored to outline steps to mitigate the adverse effects, as applicable. This includes considerations on avoidance and/or mitigation, as possible, on both direct (structural) and indirect (visual, etc.) impacts on any resource that is eligible for or listed on the NRHP.

4. Concern regarding the Rosemont Historic District in Alexandria

DHR has determined that the Rosemont Historic District is eligible for the NRHP. As such, the National Historic Preservation Act of 1966 requires an evaluation of potential impacts on the historic significance and integrity of the neighborhood. DRPT has worked closely with DHR, the City of Alexandria, and other groups to assure that character-defining features of the historic district are taken into consideration during all Project planning and all attempts to avoid and minimize impacts are made. Additional studies on the district have been completed since the publication of the Draft EIS, including expanded surveys to assure that all resources have been identified in the area of potential effects and working with the City of Alexandria on their plans to expand the district boundaries. Additional information is presented in both Section 5.13 of the Final EIS and Appendix D.

5. In Ashland, residents living along the tracks receive tax credits from the state to maintain and preserve historic homes. How will this be impacted by the Project?

DRPT does not anticipate that the Project will have negative impacts on the availability of historic tax credits. Any building that is a contributing resource to a NRHP-eligible or NRHP-listed historic district, or that is individually eligible for the NRHP, is potentially qualified for tax credits. The Ashland Historic District will remain listed on the NRHP regardless of the Project. This ensures that tax credits will remain an option for any property owner who owns a building



that contributes to the district. DRPT actually recommended within the DC2RVA studies that several other area districts be eligible for the NRHP, including Berkleytown, Taylorsville, Doswell, and an expansion of Randolph-Macon College. DHR's concurrence with DRPT's recommendation that these other area districts are eligible for the NRHP will potentially open up the tax credit program to many more area property owners with buildings that contribute to the eligible districts.

6. In Ashland, the Commonwealth has invested in the town itself to preserve its historic character. Any three-track option through town would be at odds with those state-sponsored efforts—how does the document account for this investment?

The Ashland Historic District is listed on the NRHP. Several individual resources in the district are also eligible for the NRHP. The DRPT continues to work closely with the DHR to evaluate any potential impacts to the area's historic significance, integrity, and character, as required through the National Historic Preservation Act of 1966. This analysis and additional data are presented in both Section 5.13 and Appendices D and E of the Final EIS.

Since the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative for the Ashland Area 5. The Preferred Alternative 5A provides the railroad and roadway infrastructure required to support the railroad operations proposed in the DC2RVA Project without adding an additional track through town. As presented in Chapter 5 of the Final EIS, Alternative 5A is expected to affect zero historic properties in downtown Ashland, as no additional infrastructure would be constructed within the Town of Ashland or outside of the CSXT railroad right-of-way through Hanover County. The exception to this includes the construction of new highway-rail grade separations where Vaughan Road (Archie Cannon Drive) and Ashcake Road cross the corridor to the north and south. There are no historic properties in the area of potential effects at the Ashcake Road intersection. There is one historic resource at the Vaughan Road (Archie Cannon Drive) intersection: the Berkleytown Historic District. The FRA has determined, and the DHR concurred, that the Project will have an adverse effect and a 4(f) use of this resource. Stipulations to mitigate the adverse effect are set forth in the Section 106 Draft Memorandum of Agreement (see Appendix K of the Final EIS for details).

7. The Draft EIS did not give adequate consideration to the impact on the cultural, archeological, and historic site of Ferry Farm, George Washington's boyhood home. Currently Stafford County is re-configuring the entrance road to this cultural site to align with the Ferry Road and Route 3 (Kings Highway) intersection, which would be directly across from the rail crossing of Ferry Road on the Dahlgren spur (relevant to the 3C option).

The Fredericksburg Bypass (Build Alternative 3C) was the subject of a Phase IA reconnaissance study rather than a Phase IB identification-level study as part of the Draft EIS process for several reasons, including the width of the bypass corridor and the archaeological best practice to avoid excavations where possible. DRPT and FRA understand that the Phase IA is a planning document only and does not replace the need for a Phase IB identification survey had the bypass alternative been selected. However, the Preferred Alternative 3B (which adds one track east of the existing tracks) will not have any effect on the historic Ferry Farm as it is not located with the area of potential effects of the Preferred Alternative, which bypasses this area and runs through downtown Fredericksburg instead.



NATURAL AND WATER RESOURCES

1. How will the Project reduce and/or mitigate the effects on the groundwater and private wells throughout the construction and long-term operation of the railways? Will the Project be assessed for its potential to contaminate water supplies under the Safe Water Drinking Act amendments? How will these specific potential sources of pollution be monitored and addressed so that contamination is minimized to the lowest levels possible? Are there measures in place for how to address a contamination episode if one occurs due to the Project? A testing and alert mechanism for contaminated water should be implemented in order to ensure groundwater stays clean and safe for use.

Section 4.1.4 in the Draft EIS and Section 4.1.4 in the Natural Resources Technical Report describe the extent of involvement of the Project with public groundwater drinking water sources and private wells for all Build Alternatives evaluated in the Draft EIS, and Section 5.1.4 of the Final EIS presents this same information, updated for the Preferred Alternative specifically. Section 5.1.6.3 in the Final EIS identifies a number of impact reduction and mitigation measures to be implemented for the Project. Among these are temporary and permanent stormwater management measures and pollution controls. If accidental spills occur during construction, the contractor will be required to immediately notify all appropriate local, state, and federal agencies and to take immediate action to contain and remove the contaminant. Spills of fuel or other potentially hazardous materials that may occur during operation of proposed passenger trains will be handled in accordance with emergency management and response plans of CSXT, Amtrak, and VRE in coordination with local, state, and federal emergency response agencies as appropriate, depending on the situation; refer to Section 5.18 of the Final EIS, which has been updated since the publication of the Draft EIS, for details on public health and safety with regard to hazardous materials.

Proposed mitigation is identified throughout Chapter 5 of the Final EIS as a way to avoid, minimize, reduce, or eliminate potential effects of the Project, including applicable Best Management Practices (BMPs), which are existing practices and measures required by law, regulation, or policy that reduce the environmental impacts of designated activities, functions, or processes. As detailed in Section 5.1 of the Final EIS, the Project will not remediate existing sources of contaminants unless practical or required by federal, state, or local regulations; however, construction of the Preferred Alternative will incorporate BMPs and improved stormwater facilities, which will mitigate potential impacts and minimize further impairment of the water bodies. Further, the Preferred Alternative will be located adjacent to existing railroad and roadway facilities, and construction of the Preferred Alternative will incorporate BMPs and improved stormwater facilities, which will mitigate the potential impacts caused by the new facilities constructed by the Project and may result in improved water quality conditions.

2. How will the Project protect flood zones/wetlands or get approval from DEQ to build in these areas? More must be done to absorb the cost of losing wetland ecosystems.

Efforts have been made throughout the planning and preliminary design process to avoid and reduce impacts to streams and wetlands to the extent practicable, and such impact avoidance and reduction efforts will continue to be made during the Project's final design and permitting, which will occur after funding becomes available and incremental improvements are scheduled. Impacts to streams and wetlands are governed by the federal Clean Water Act, which requires



permits from federal and state regulatory agencies. Close coordination has been maintained with the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality during the course of the DC2RVA Project development process - including scoping meetings, review of DRPT's approach to evaluating wetland and stream impacts, and field reviews. DRPT anticipates the Project will be developed incrementally depending on availability of funding. As funding becomes available, a selected portion of the Project will move into final design and permitting prior to construction. As part of the joint permitting process, mitigation for unavoidable impacts will be developed in coordination with these same regulatory agencies and will be incorporated into final design for both temporary and permanent impacts. An updated mapbook of water resources (major river crossings, streams, wetlands, impaired waters, and resource protection areas) in relation to the Preferred Alternative LOD is provided in Appendix M of the Final EIS. Section 5.1.2 of the Final EIS discusses the impact of the Preferred Alternative on wetlands, and Section 5.1.6.1 presents avoidance, minimization, and mitigation evaluation for water resources. Section 7.8 of the Final EIS discussion permits and regulatory approvals that will be needed for the next steps of the Project design and construction.

The Project is also being designed consistent with Executive Order 11988 and state/local regulations pertaining to floodplains so that the probability of increased flooding is minimized and to avoid or minimize impacts on natural and beneficial floodplain values.

3. The effects of sea level rise are not considered by the Draft EIS. Currently, there are stretches along the corridor where the water seems to be lapping at the tracks already. That's going to be a growing problem and needs to be addressed.

A review of Sea Level Rise Planning Maps produced by the Virginia Institute of Marine Science's Center for Coastal Resources Management show that most of the corridor is at elevations that will be well above projected sea level rise. The most vulnerable areas would be in Arlington, Alexandria, Prince William County, and Stafford County, and potential issues posed by rising sea level in these areas include potential flooding, wave attack and erosion of the railroad base, and potential interruptions of service due to damaged infrastructure.

Railroad design standards (as summarized in the DC2RVA Basis of Design, which is Appendix B to the Draft EIS) take into account the risks of flooding, hydrological parameters, and erosion protection. During the final design phase, these standards, as well as any necessary supplemental hydrological studies reflecting potential sea level rise, will be used to design the rail infrastructure to withstand reasonably expected risks associated with potential sea level rise. Refer to Chapter 7 of the Final EIS for an overview of future steps for final design, implementation, and construction of the Project.



- 4. Concern over "missed" natural and/or water resources in the Ashland Area along the Western Bypass alternatives (Draft EIS Build Alternatives 5C and 5C-Ashcake)
 - a. In the Ashland Area, the proposed bypass (Build Alternatives 5C and 5C-Ashcake in the Draft EIS) would kill a Giant Sequoia on the land at 12311 Elmont Road.
 - b. In the Ashland Area, a property owner along the Western Bypass (Draft EIS Build Alternative 5C and 5C-Ashcake) found a male (red eyed) eastern box turtle. Its roaming radius is approximately 1 mile.
 - c. In the Ashland Area, property along the Western Bypass (Draft EIS Build Alternative 5C and 5C-Ashcake) has wetlands and flood zone areas. If property owners cannot build in this area, how is it legal to build a train track? The number of trees that will have to be cut and soil that will have to be disturbed will be devastating. The DEQ of VA website seems very clear that it can't happen. These areas are also home to native wildlife such as deer fox owls and eagles, which could become landlocked if the Project is built.

Subsequent to the publication of the Draft EIS, Alternative 5A: Two Tracks Through Town was selected as the Preferred Alternative and would maintain the existing two-track corridor through downtown Ashland without any impact between Vaughan Road (Archie Cannon Drive) and Ashcake Road, in accordance with the CTB resolution on the Project. Notwithstanding, DRPT has provided responses to each of these concerns, below.

In response to a), the western bypass alternatives (5C and 5C-Ashcake), which could potentially affect the noted tree, are not included as part of the Preferred Alternative evaluated in the Final EIS.

Notwithstanding, as acknowledged in the Draft EIS (page 4-68), construction of the Build Alternatives would affect terrestrial natural communities and associated wildlife habitat through conversion of existing land coverage to railroad structures and maintained right-of-way. Minimization measures to protect natural habitats and communities could involve minimization of clearing and grubbing, landscaping and planting for onsite replacement of trees that are removed, and native shrub planting and reseeding of disturbed areas. Non-native ornamental trees, such as a Giant Sequoia, typically have less value to terrestrial natural communities and wildlife than native trees and shrubs, although such trees can have value to property owners and communities.

In response to b), the western bypass alternatives (Alternatives 5C and 5C-Ashcake), which could potentially affect the noted box turtle habitat, are not included as part of the Preferred Alternative evaluated in the Final EIS.

Notwithstanding, as discussed in Section 4.10.1 of the Draft EIS, the Build Alternatives would affect terrestrial natural communities and associated wildlife habitat through conversion of existing land cover to railroad structures and maintained right-of-way. Box turtle habitat consists of mesic (moist) woodlands, including hardwood (oak-hickory) forests, mixed hardwood-pine forests, and maritime forests (Dodd 2002). As reported in Table 4.10-1 of the Draft EIS, approximately 64.0 acres of permanent impacts and approximately 20.7 acres of temporary impacts to upland forest habitat would occur on the Ashland bypass alignments (Alternatives 5C and 5C-Ashcake). These habitat conversions could be expected to incrementally diminish the



resident population of box turtles, if present in the impacted areas, and to present a barrier to box turtle movements. However, box turtles are not on the Virginia or federal lists of threatened or endangered species. According the Virginia Department of Game and Inland Fisheries (VDGIF), the box turtle is known or likely to occur in every county in Virginia (VDGIF website 2017). The box turtle is not included on the Virginia Division of Natural Heritage's Rare Animals List, Animal Watchlist, or Animal Review List (Roble 2016).

In response to c), the western bypass alternatives (5C and 5C-Ashcake), which could potentially affect the noted wetlands, are not included as part of the Preferred Alternative evaluated in the Final EIS.

Notwithstanding, it would be legal to build railroad tracks within wetlands and floodplains provided applicable permits are obtained from the U.S. Army Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission. Before issuing such permits, permitting agencies require applicants to document efforts to avoid and minimize impacts to these resources to the extent practicable. In addition, compensatory mitigation must be provided to offset unavoidable impacts.

5. As our region and state see more traffic, investment in Long Bridge across the Potomac is a critical component to handle growth in Amtrak and VRE and freight. All that construction must meet high standards for sediment and erosion control and long-term stormwater management.

DRPT and FRA agree that additional capacity across the Potomac River at or adjacent to the Long Bridge is critical to handle growth in passenger, commuter, and freight rail service, and the DC2RVA Project has included the expanded capacity over the Long Bridge as part of the infrastructure that would be in place under the No-Build Alternative in both the Draft and Final EIS. Separate from the DC2RVA Project, DRPT is working with District Department of Transportation (DDOT) and other stakeholders on an EIS for the Long Bridge Project, which proposes to increase rail capacity at the Long Bridge Potomac River rail crossing. Any impacts associated with the proposed expansion of the Long Bridge are accounted for (quantified and mitigated, as necessary) as part of that project, separate from the DC2RVA Project.

Comprehensive sediment and erosion controls will be implemented on a temporary basis during construction and on a long-term basis for the life of the DC2RVA Project. Similar controls would also be expected to be employed under the Long Bridge Project, as defined in its separate EIS record. Applicable standards require controls aimed at both water quality and quantity. Refer to Section 7.8 of the Final EIS for summary of regulatory actions and approvals that will be required as the Project moves forward.

6. What is the plan for design of bridge openings over navigable waterways, including Neabsco Creek?

Bridge openings over navigable channels are regulated by the U.S. Coast Guard (USCG), which typically requires existing navigable channels to be maintained. Specifically, in response to Neabsco Creek, information available to DRPT at the time of this study indicates that the USCG will require a minimum navigable channel opening width of 30 feet for a new structure at the crossing. Final designs for the new bridge will meet the USCG permit requirements at that time.



NOISE AND VIBRATION

- 1. Concern about what noise and /or vibration studies have been conducted as part of the Project
 - a. How will noise and vibration of high speed rail compare to current Amtrak, CSXT, and commuter trains?
 - b. Noise and vibration levels were not studied for all traffic that would travel on new line such as freight and other passenger trains.
 - c. The effects of increased weight from heavier and longer trains and the increases in the future were not considered, nor is the closer distance about 15 feet considered.
 - d. What about impacts due to existing trains or when existing trains pass by each other? This Project will increase the ability of other trains to move more quickly. What would the vibration and noise impacts be of increased speeds of these other trains?
 - e. The noise impact assessment failed to assess and compare current noise exposure versus projected future in terms of length of time of exposure and any increases in decibels.
 - f. Concern over impact to underground pipelines within the railroad easement, especially since some of these may be very old and not withstand increased vibrations from the Project.

DRPT completed noise and vibration studies for all Build Alternatives that were considered in the Draft EIS, including bypass alignments (Fredericksburg and Ashland), from which the Preferred Alternative evaluated in the Final EIS was chosen. FRA has established maximum acceptable Project-related noise and vibration levels. Noise and vibration levels due to the proposed Project that are above these maximum acceptable levels are considered to be impacts as defined by FRA. Train noise level calculations accounted for Project-related wayside noise (locomotive and wheel-rail noise) and locomotive horn use at public at-grade crossings. Existing locomotive horn use is incorporated into the noise analysis via the existing noise measurements. FRA locomotive horn use regulations and CSXT operating rules do not require locomotive horn use at private at-grade crossings. Further, CSXT has a rule on train horn use such that trains should not sound horns at any passenger and commuter station on the corridor between the hours of 11:30 pm and 4:30 am unless people are present. The train noise evaluated by DRPT, following FRA guidelines, combines the wayside train noise from the passage of the locomotive and rail cars and the train horn noise at crossings and stations. The vibration assessment also followed precedent recently established by the Richmond to Raleigh (R2R) EIS, which was also approved by FRA. DRPT completed assessments of Project-related noise and vibration using FRA methods, which included measuring existing noise levels throughout the corridor and along the bypass routes. DRPT also measured existing vibration levels. Results of the noise and vibration assessments are summarized in the Draft EIS and presented in greater detail in its Appendix P (Noise and Vibration Technical Report). Section 5.7 of the Final EIS presents the noise and vibration impacts for the Preferred Alternative, and includes discussion of the minor changes that have occurred since the publication of the Draft EIS. Figures in the Noise and Vibration Technical Report (Appendix P of the Draft EIS) showed the noise and vibration impact contours for the Build Alternatives evaluated in the Draft EIS, which have not changed for the Preferred Alternative other than in two locations for noise only in the Project corridor (these locations are in Area 2 and Area 6 and are updated in Appendix M of the Final EIS).



In addition, see below for details for each of the questions asked above.

In response to a), the intercity passenger trains proposed under this Project are anticipated to utilize locomotives and railcars that are similar to locomotives and railcars currently used by passenger trains in the corridor. Therefore, DRPT anticipates that noise and vibration from the proposed trains will be similar to noise and vibration from existing passenger trains when the speeds are the same. Train noise and vibration generally increase as speed increases, however, duration of the noise and vibration event decreases.

In response to b) and c), DRPT evaluated noise and vibration associated with the addition of 9 new daily intercity passenger round trips (18 total trains per day) on the DC2RVA corridor, using FRA methods for noise and vibration impact assessment. The most common source of noise and vibration in the study area is freight trains, generally produce higher levels (or more) noise and vibration than passenger trains because they are heavier and longer. Freight trains operate and may increase or decrease independently of the proposed DC2RVA Project and, and in some sections of the corridor may operate more frequently or during evening/late night hours when noise may be more noticeable. Potential changes in freight and passenger train traffic currently utilizing the Project corridor that would occur independent of the proposed Project are not included in the noise or vibration assessment performed for this Project. CSXT's potential use of longer and heavier freight trains was not evaluated in the noise and vibration assessment.

In response to d), in accordance with the requirements of NEPA and the noise and vibration assessment guidelines of the FRA, DRPT assessed noise and vibration due to the 9 new daily intercity passenger round trips (18 total trains per day) and did not separately evaluate noise and vibration from passenger or freight trains that currently use the corridor except where the DC2RVA Project proposes to install the new tracks and realign the existing tracks on a shifted location, which would bring the tracks closer to or shift them farther from noise receptors (i.e., closer to or farther away from a home or school.). Also, the Preferred Alternative has the potential to reduce existing horn noise through the seven new grade separations and seven crossing closures proposed for existing at-grade crossings in the corridor (refer to Section 5.15.2 of the Final EIS for specific locations of at-grade crossing treatments for the Preferred Alternative).

If two of the proposed intercity passenger trains happened to pass each other while traveling in opposite directions at the same speed, it is possible that vibration levels could increase up to 3 vibration decibels (VdB) at the moment and place of passing. However, it is difficult to project where along the corridor such a passing event may occur. Vibration levels from simultaneous pass-by events are subject to the same FRA vibration impact thresholds as single passenger trains are subject to, however, evaluating vibration from identical trains passing at the same speed, in the same location, is highly variable and beyond the scope of FRA vibration assessment requirements.

In response to e), DRPT's noise analysis is based on the land use category and the projected change to the existing noise exposure in the area. In accordance with FRA noise impact assessment guidelines, DRPT measured existing noise levels at locations throughout the corridor, calculated future Project-related noise levels, and compared those results with FRA noise impact thresholds. The thresholds are based on specific noise-sensitive land categories: "no impact" indicates Project noise levels are unlikely to cause annoyance; a" moderate noise impact" is a noise level increase that is noticeable to most people, yet generally not enough to cause adverse reactions; and a "severe noise impact" is a noise level increase that could cause annoyance to a significant percentage of people. The FRA noise impact assessment methods base the noise impact threshold



on existing noise levels; in that manner, existing noise levels are incorporated into the noise assessment. DRPT's assessment accounted for the length of the proposed intercity passenger trains and their speed, as well as new tracks and track shifts.

In response to f), pipelines and other in-ground utilities do occur within or along portions of the CSXT-owned right-of-way. For the purposes of assessing potential Project impacts and estimating Project costs within the Draft and Final EIS, DRPT has assumed that where the permanent limits of disturbance associated with Project improvements encroach upon these utilities, the utility would be relocated. Utility relocations would be subject to existing easement agreements between the utility and property owner; subject to the nature of the cause of the relocation (DC2RVA Project related or tertiary); and subject to the cause of the action (dependent upon who is initiating and funding the work – private party, property owner, utility owner, or public entity).

Project improvements have been designed to a conceptual (10% design) level. The impact limits and location of the utilities is based on readily available geospatial data. That utility data does not provide pipeline conditions or other information necessary to reach a more detailed conclusion. As the Project advances through future design phases, DRPT will coordinate with CSXT and the utility owners/operators to address potential impacts (ballast encroachment, vibration, maintenance access, etc.) to the utility. Possible measures to address utility impacts include design modifications to the Project, design modifications to the utility, and/or relocation of the utility.

2. Concern about noise and vibration mitigation

- a. What noise and vibration mitigations are occurring? Residences already have noise impacts and/or shaking of homes when the trains go past, which will get worse with the addition of new rails. Can an impact study and/or mitigation (natural and/or manmade, i.e., noise barriers) be completed? Are you going to pay for damage that the Project does to homes shaking?
- b. Concern that Draft EIS does not detail mitigation. When will residents know whether the severely impacted residential areas will be looked at for noise barriers? Will mitigation include sound walls and/or requests for sound walls?

The Final EIS presents preliminary avoidance, minimization, and mitigation measures for noise and vibration in Section 5.7.1.3 and 5.7.2.3, respectively.

In response to a), DRPT is aware that some residents living near the existing alignment report being able to feel vibration during train pass-by events. It is possible that freight trains produce the highest levels of ground-borne vibration, and that some of the perceived vibrations are actually the result of airborne low frequency noise emitted by diesel locomotives on freight trains.

The FRA has established maximum acceptable Project-related noise and vibration levels. Noise and vibration levels above this, due to the proposed Project are considered to be impacts as defined by FRA. DRPT completed assessments of Project-related noise and vibration using FRA methods. Results of those assessments are summarized in the Draft EIS and presented in greater detail in its Appendix P (Noise and Vibration Technical Report). Section 5.7 of the Final EIS presents the noise and vibration impacts for the Preferred Alternative, and includes discussion of the minor changes that have occurred since the publication of the Draft EIS. Figures in the Noise and Vibration Technical Report (Appendix P of the Draft EIS) showed the noise and vibration



impact contours for the Build Alternatives evaluated in the Draft EIS, which have not changed for the Preferred Alternative other than in two locations for noise only in the Project corridor (these locations are updated in Appendix M of the Final EIS).

In response to b), mitigation measures will be evaluated in more detail during final design, which will occur after funding becomes available and incremental improvements are scheduled. Mitigation measures for noise impacts from the additional 9 new daily intercity passenger round trips (18 total trains per day) will be evaluated where warranted. Train noise (other than whistle noise at crossings; refer to response #7 below) is difficult to mitigate without creating additional impacts to property and the environment. The process of evaluating and implementing noise and vibration mitigation will occur in accordance with FRA methods and guidelines and subject to FRA approval.

While sound barrier walls are a common mitigation measure for major highway projects, they are not typical for intercity passenger rail projects and are not required by FRA or FTA. Further, CSXT policy generally does not allow sound barrier walls within their right-of-way. Therefore, use of sound barrier walls as future mitigation for DC2RVA train noise would require additional property impacts.

3. Concern about noise and vibration during construction, which doesn't seem to be evaluated in the Draft EIS

DRPT evaluated construction noise and vibration; refer to Section 4.19 of the Draft EIS for all Build Alternatives, and Section 5.19 of the Final EIS for the Preferred Alternative specifically.

4. The noise and vibrational impact section of the Draft EIS falls far short of describing, if not actively disguises, the increased vibrational and noise impact that another set of tracks and the resulting increased high speed train and freight traffic will have on the livability of the surrounding neighborhoods. The report fails to note that some homes are all built on marine clay. This is in contrast to what the report says, which states that the soil on which the tracks are built minimally conducts vibration or noise. The Project should mandate slow moving trains and lighter trains and enforce these regulations.

DRPT adequately and appropriately evaluated noise and vibration from the proposed intercity passenger trains using FRA methods and guidelines. Vibration effects were assessed based on the methods and criteria included in FRA's High Speed Ground Transportation Noise and Vibration Impact Assessment guidance manual (September 2012) as well as those included in the FTA's Transit Noise and Vibration Impact Assessment (May 2006) manual, where applicable.

Vibration is evaluated on a per-event basis, not on a cumulative or 24-hour basis; noise is evaluated on a 24-hour cumulative basis. The Project proposes to add intercity passenger trains, which are lighter than freight trains and therefore do not produce the same levels of ground-borne vibration as freight trains operating at the same speed. Freight trains operate as-needed in response to market demands, and independently of this Project. This Project does not propose to change the consist (e.g. type and order of rail cars in a train) or volume of freight trains in the Project corridor. Reducing the speed of passenger trains in the corridor conflicts with the Purpose and Need for the Project.



DRPT reviewed publicly available and reasonably obtainable soils data in the study area in an attempt to assess their ability to propagate ground-borne vibration. Due to the magnitude of the Project corridor, DRPT developed general characterizations of the soil's vibration propagation characteristics for each segment of the corridor evaluated in the vibration analysis and incorporated those characterizations into the vibration assessment for each Project segment.

5. If adequate engineering studies had been done, the conclusion would be that many of the historic homes along the corridor would not be able to withstand the construction/drilling impact that will occur because of the Project.

DRPT performed a preliminary evaluation of construction-related vibration using FRA guidelines. The construction vibration assessment performed at this phase of this Project did evaluate the potential for vibration-induced damage to buildings during construction; see Draft EIS Appendix P—Noise and Vibration Technical Report for full details, and Section 5.7.2 of the Final EIS for vibration impacts of the Preferred Alternative. A more detailed construction vibration assessment will be performed as-needed during the final design phase of the Project.

6. Why has no one has done a noise and vibration study on any of the houses on Mount Vernon Avenue near King Street Metro? Due to the proximity of these houses to the tracks, such a study should have been a priority for this EIS to be taken seriously.

DRPT evaluated noise and vibration throughout the entire 123-mile study corridor using FRA methods for noise and vibration impact assessment, which are the appropriate methodologies for this type of Project. This evaluation included measuring noise throughout the study area, measuring vibration at select locations, and calculating Project-related noise and vibration throughout the entire study corridor. These findings for all Build Alternatives are summarized in Section 4.7 of the Draft EIS, and in Section 5.7 of the Final EIS for the Preferred Alternative. Specific areas projected to experience noise and vibration impacts as defined by FRA are identified in the contour figures presented in Draft EIS Appendix P—Noise and Vibration Technical Report; changes in noise and vibration impacts from the Draft EIS to the Final EIS due to minor design changes are presented in Section 5.7 of the Final EIS.

7. Concern about train horn use

- a. There are existing quiet zones in the corridor to prevent the trains from blowing horns. The Project should establish new quiet zones in other areas throughout the corridor?
- b. Will the Project significantly decrease frequency and decibels of train horns?
- c. The process for evaluating locomotive air horn noise in Crystal City and Alexandria is flawed. 110 decibels is in the Code of Federal Regulations, but that level of air horn noise is an issue.

In response to a), quiet zones are addressed in Section 5.15 of the Final EIS. FRA regulations (49 CFR Part 222) requires locomotive horn use at public at-grade crossings, but the regulations also include the procedures by which the local authority could establish a quiet zone where locomotive horn use at public at-grade crossings is not necessarily required because supplemental and alternative safety measures (SSMs) are installed. Under the regulations, local jurisdictions/municipalities initiate and manage the process for implementing the creation of new quiet zones; it is not under the purview of DRPT nor this Project. Therefore, noise reduction



benefits that would derive from removing the requirement for trains to routinely sound horns are dependent on locality actions, in accordance with FRA standards and approved by FRA. Also, CSXT operating rules require all trains to sound their horn when approaching, passing, or departing a passenger (intercity or commuter) station along the mainline. Localities would also fund all improvements, equipment, and signage, and they would provide ongoing maintenance for all quiet zones within their jurisdictions. The FRA Office of Railroad Safety authorizes quiet zones on a site-specific basis, which are voluntary by the operating railroad.

DRPT does not anticipate that the Project will adversely affect existing or future quiet zone designations as Project improvements that qualify as SSMs are proposed at most existing public atgrade crossings, including the two areas with existing Quiet Zone designations (see Section 5.15.2.2 of the Final EIS).

In response to b), use of locomotive horns and how loud they have to be are regulated by FRA safety rules, and are also subject to CSXT operating rules. This Project does not propose to decrease the loudness of locomotive horns; however, the Project does include the elimination of several at-grade crossings by either grade separating the crossing or closing the crossing. In these locations, the elimination of at-grade crossings would decrease horn noise.

In response to c), locomotive horn use is regulated by FRA safety regulations, and also subject to CSXT operating rules. DRPT evaluated locomotive horn use by the proposed intercity passenger trains implemented under the DC2RVA Project using FRA noise assessment methodologies.

AIR QUALITY

1. The Draft EIS doesn't seem to reflect the reduction in highway emissions that could occur if more people chose to travel by rail.

DRPT evaluated the potential reduction in highway pollutant emissions in the Draft EIS. This information was presented for all Build Alternatives in Section 4.6.4 and Table 4.6-3 of the Draft EIS; updated impacts for the Preferred Alternative are presented in Section 5.6.4 and Table 5.6-3 of the Final EIS. DRPT estimates that the Preferred Alternative will reduce carbon dioxide (CO2) 6,518 tons per year by 2045. This calculation includes all modes of intercity passenger travel between Washington, D.C. and Richmond, VA (i.e., rail, automobile, bus, and air). CO2 is the primary greenhouse gas (GHG) associated with the combustion of transportation fuels, accounting for more than 95 percent of transportation GHG emissions based on global warming potential.

Additionally, DRPT estimated the Project will result in a net reduction in fuel consumption in the DC2RVA corridor of approximately 3 million gallons per year by 2045; refer to Section 4.6.2.1 of the Draft EIS and Section 5.6.2.1 of the Final EIS. Reducing fuel consumption will result in a commensurate reduction in pollutant emissions.

2. Increased train traffic from the Project will cause an environmental burden on the people living next to the tracks because of the additional diesel fumes and related emissions which impact the air quality, which was not addressed in the Draft EIS.

Section 4.6 of the Draft EIS addressed air quality impacts of all Project Build Alternatives, and Section 5.6 of the Final EIS addresses the same topic for the Preferred Alternative. While the Project would increase the emissions of diesel exhaust and associated directly-emitted air



pollutants along the DC2RVA corridor, the spatial and temporal density of these emissions would not be nearly sufficient to cause or substantially contribute to localized violation of the National Ambient Air Quality Standards (NAAQS). Additionally, the Project will decrease intercity passenger regional vehicle miles traveled (VMT) and mobile source air toxics (MSAT) emissions compared to the No Build Alternative. The availability of improved intercity passenger rail service would reduce the number of vehicle trips on a regional basis. Because the Project will not substantially change the regional traffic mix, the amount of MSATs emitted from highways and other roadways within the study area would be proportional to the VMT. Because the regional VMT estimated for the Project would be less than the No Build Alternative, MSAT emissions from regional vehicle traffic would be less for the Project compared to the No Build Alternative.

3. There is no consideration given to air quality during construction in the Draft EIS. There will be fumes and noises coming from construction that it will be unhealthy to residents and their posterity.

Since the publication of the Draft EIS, DRPT has conducted a quantitative assessment of greenhouse gas (GHG) emissions during construction for the Preferred Alternative using the FHWA Infrastructure Carbon Estimator (see Section 5.6.5 of the Final EIS for details). DRPT determined that CO₂ emissions from DC2RVA construction will be less than 0.1 percent of the total CO₂ emissions from large facilities in the DC2RVA study area. Given this relatively small contribution, its distribution along the 123-mile corridor, and emission across multiple years, DRPT concludes that construction of this Project will have a negligible impact on climate change due to GHG emissions.

All construction activities will be performed in accordance with VDOT's Road and Bridge Specifications on fugitive dust control, which would be incorporated into the contract specifications at the time of construction. With the application of appropriate measures to limit dust emissions during construction, DRPT does not anticipate that this Project will cause any significant, short-term particulate matter air quality impacts.

VISUAL / AESTHETIC

1. How are visual impacts evaluated, both throughout the corridor and within historic downtown Ashland streetscape specifically?

Aesthetic and visual impact methodology are addressed in Section 4.9 of the Draft EIS, and the visual impacts related to the Preferred Alternative are presented in Section 5.9 of the Final EIS. In accordance with FRA's Procedures for Considering Environmental Impacts (FRA 1999), DRPT identified major changes likely to occur in the natural landscape and in the developed environment as a result of this Project. The assessment considered the visual changes associated with the Build Alternatives, such as track improvements, bridges, grade crossings/separations, roadway improvements, stations and maintenance facilities, and other permanent improvements associated with the Project. The level of visual impact was assessed by combining the severity of the change in visual quality with the degree to which people are sensitive to the change.

The visually sensitive nature of the Town of Ashland is recognized by DRPT. The Preferred Alternative 5A: Two Tracks Through Town will introduce minimal changes to the visual context of the historic downtown area. The two existing tracks will remain in their current location and no new trackage will be constructed. Further, there would be no changes to the existing station



location or infrastructure under the DC2RVA Project. Grade separated structures will be constructed at Vaughan Road (Archie Cannon Drive) and Ashcake Road on the north and south ends town, respectively, to improve traffic operations and safety at these two crossings. The architectural features of these new structures will be designed to befit the visual setting with minimal structural elements or appurtenances.

2. Page 3-54 of the Draft EIS lays out the definition of Visual Resources: "Viewers in visually sensitive resource areas are typically involved in outdoor activities where their sensitivity to the surrounding visual environment may be heightened." However, later on page 3-66 of the Draft EIS, it states in regard to VAU 5-2 or the western bypass of Ashland that "no sensitive visual resources are identified within this unit." This is incorrect, as bicyclists, walkers, and joggers frequent Yowell Road and the private residences there. This area of private residences provides a visual resource to viewers traveling in this VAU and should be taken into consideration in the final copy of the EIS given its regular recreational use.

Subsequent to the publication of the Draft EIS, Alternative 5A was selected as the Preferred Alternative. The Preferred Alternative does not include any bypass alignments (Build Alternative 5C and 5C-Ashcake in Ashland, as evaluated in the Draft EIS).

Visually sensitive resources along the Project corridor are defined as those typically open to many viewers, not just an individual residence. That said, DRPT recognizes the unique visual quality of this area and accounted for it with the visual assessment unit impact rating as shown in the Draft and Final EIS. The overall change to the visual assessment unit (VAU) is considered as part of the Project, not just impacts to visually sensitive resources.

3. The Project will have a negative visual and noise impact on homes and Blue Park in Alexandria if the existing "greenbelt" of mature trees and shrubs along the railroad tracks are cut down. The Draft EIS maps show that some of this greenbelt is within the Project's area of temporary and permanent impact.

Under the Preferred Alternative 2A, the additional track in the area nearest Blue Park would be located on the east side of the existing tracks (opposite side from Blue Park) and the existing tracks would be shifted slightly to the west in the direction of the park. However, all work on the west side of the tracks nearest the park would be conducted within the existing CSXT right-of-way. Impacts to the existing trees and vegetation within the existing right-of-way would be minimized to the greatest extent practical to maintain the visual buffer between the park and the rail corridor. Note that CSXT may choose to remove or modify vegetation within their right-of-way at any time.



HAZARDOUS MATERIALS

- 1. The DC2RVA will provide CSXT an upgraded rail system with the potential of moving more freight and toxic materials though the Project corridor.
 - a. Do more trains mean more chances that a hazardous spill will happen?
 - b. In the Bypass alignments, the Project will be introducing the potential for hazardous materials in previously pristine places. How is that accounted for?

Refer to Section 5.18 of the Final EIS for discussion of public health and safety associated with hazardous materials transport on the rail line, which has been updated since the publication of the Draft EIS. FRA and the United States Department of Homeland Security (DHS) regulate the transportation of hazardous materials on railroads, and part of that regulation requires all Class I railroads to maintain a safety plan for transporting such materials, which are separate from the scope of this Tier II effort.

In response to a), neither FRA nor DRPT anticipate that the addition of the 9 new daily intercity passenger round trips (18 total trains per day) would result in any change in either the types or quantities of freight shipped on the corridor. Freight shipments, including any hazardous materials, would not be affected by the Project, and are projected to increase under CSXT freight operations whether or not the Project is implemented.

In response to b), subsequent to the publication of the Draft EIS, Alternative 5A was selected as the Preferred Alternative, which does not include any Project impacts in town between Vaughan Road (Archie Cannon Drive) and Ashcake Road. The Preferred Alternative does not include any bypass alignments (Build Alternatives 3C in Fredericksburg and 5C and 5C-Ashcake in Ashland, as evaluated in the Draft EIS).

INDIRECT AND CUMULATIVE EFFECTS

1. Concern about secondary/cumulative impacts in and around Fredericksburg

Draft EIS Sections 4.20.1.2 and 4.20.1.6 addressed potential induced development impacts of all Build Alternatives associated with the Project. The locations where induced growth might occur are focused near the stations where access to improved intercity passenger rail services would be provided. In the Fredericksburg area, that would be Fredericksburg Station. Inducement of growth requires access to the rail services at the station locations in the same manner as highway interchanges provide access to the interstate highway system. FRA guidance suggests defining the station area in terms of 0.25- and 0.5-mile radii of the station. Accordingly, the study area for analysis of potential induced development was defined as the areas within a 0.5-mile radius of the station locations.

There are many factors influencing the ongoing development in the Fredericksburg region regardless of any previous or future rail improvements.

As described in Draft EIS Section 1.5.2.6 in the Project Need and summarized in Section 1.3 of the Final EIS, providing more consistent, reliable, on-time passenger rail service is expected to induce more people to travel by rail, which would in turn reduce demand on parallel roadways. Although the proposed rail improvements could potentially provide a small incremental boost to the attractiveness of the region, that attractiveness already has been in play for decades due to the existing roadway network and other factors noted above. Moreover, the region increasingly



is becoming more than a bedroom community to Washington, D.C. and northern Virginia as development mass and diversity now support more "home-grown" markets and industries. Regional business and government leaders have undertaken strategic planning efforts to target retention and expansion of industries best suited to the location and economic strengths and capabilities of the Fredericksburg Region. In such an environment, any contribution to the region's attractiveness would be consistent with regional goals and planning and would be overshadowed by other forces driving further development in the region.

2. In the Richmond Area, the Draft EIS does not take into account the indirect/cumulative effects of the Project, including induced development.

Expected indirect and induced impacts in the vicinity of Main Street Station from the Preferred Alternative are addressed in Section 5.20 of the Final EIS, which has been updated since the publication of the Draft EIS. Additionally, in response to comments received on the Draft EIS, DRPT has included Section 3.1.4 of the Final EIS, which contains additional discussion of potential indirect and induced impacts on the slave district issues.

SAFETY

1. Does adding a third rail increase the risk of train derailments?

Adding a third track to the existing two track corridor does not inherently increase the risk of derailments, especially as new improvements are built to current safety standards. However, any increase in the number of passenger and freight trains in the corridor does increase the likelihood of derailments, just as increasing the number of cars using a particular road increases the likelihood of accidents. The third track will be constructed to meet FRA and CSXT standards for safety and performance, and the Project will include improved signals and communications systems and improved safety systems for all at-grade crossings. However, there may be an increase in the number of derailments regardless if the Project is implemented or not, as the number of trains using the corridor increases over time. CSXT freight service and VRE commuter service is projected to increase without the Project.

2. Within Ashland, a third track would significantly endanger Randolph-Macon College's students, faculty and staff, and tens of thousands of annual visitors.

Randolph-Macon College is located on both sides of the existing railroad mainline in downtown Ashland, and has plans for expansion including dormitories on the west of the tracks, with the main campus on the east side of the tracks. Crossing the railroad tracks at other than designated crossings is unsafe and is a violation of Virginia code §18.2-159. Nonetheless, students and other pedestrians often walk across the existing tracks, and increased train service in the future can exacerbate the situation. Recognizing such, the CTB resolution recommending Alternative 5A as the Preferred Alternative for the Ashland/Hanover area (Appendix H of the Final EIS) directed DRPT to explore the need for other safety improvements to pedestrian and vehicle at-grade crossings within the Town of Ashland, separate from the DC2RVA Project. Therefore, DRPT is committed to work with the FRA, VDOT, Town of Ashland, Randolph-Macon College, and CSXT to identify safety improvements for pedestrians, bicycles and vehicles crossing the tracks in Ashland that minimize the acquisition of additional right-of-way, and DRPT will continue the outreach for other safety improvements separate from the obligations of the DC2RVA Project.



3. Within Ashland, parked cars on Center Street/Railroad Avenue block visibility whether driving, walking, or biking. The difficult combination of street traffic, pedestrians, and trains from multiple directions is unsafe—how will the Project change these unsafe conditions?

Center Street/Railroad Avenue is an existing condition of the local roadways and is controlled by the Town of Ashland. The Preferred Alternative 5A: Two Tracks Through Town would increase the number of trains through town by approximately one train per hour in each direction, depending on the time of day, without affecting the designated parking. However, the CTB has directed DRPT to explore the need for other safety improvements to pedestrian and vehicle at-grade crossings within the Town of Ashland, separate from the DC2RVA Project. Therefore, DRPT is committed to work with the FRA, VDOT, Town of Ashland, Randolph-Macon College, and CSXT to identify safety improvements for pedestrians and vehicles crossing the tracks in Ashland that minimize the acquisition of additional right-of-way, and DRPT will continue the outreach for other safety improvements separate from the obligations of the DC2RVA Project.

OTHER

1. In Ashland, the analysis of the through town alternatives does not take into account the 100-year old trees and their history that would be destroyed. They date back to the Civil War.

Although none of the mature trees located along the rail line in downtown Ashland are listed in the National Register of Champion Trees or Virginia's Big Trees program, they were considered in the visual and cultural resource evaluations. The stately trees were considered for their important part in the context (or setting) of downtown Ashland. The Preferred Alternative 5A: Two Tracks Through Town does not have any permanent or temporary impacts in town between Vaughan Road (Archie Cannon Drive) and Ashcake Road, so it will not impact the noted trees (directly or indirectly).

2. What are the impacts to east coast commerce and international trade, if the DC2RVA corridor were incapacitated? There should be a north-south rail infrastructure back-up plan in a geographically separate location in case something occurred along the DC2RVA corridor, such as a natural or man-made emergency.

FRA and DRPT recognize that the Project corridor is an integral part of the freight rail commerce and trade distribution network, and the DC2RVA Project proposes to accommodate efficient movement of rail freight traffic in the DC2RVA corridor. However, the primary Purpose of the DC2RVA Project is to increase railroad capacity between Washington, D.C. and Richmond to deliver higher speed passenger rail while also supporting the planned expansion of VRE commuter rail service and accommodating the forecasted growth of freight rail service by developing an efficient and reliable multimodal rail corridor. Consideration of larger regional and national network emergency issues, such as a back-up plan for redundant capacity in a different geographic location, is beyond the scope of the DC2RVA Project as Project improvements are limited to those necessary to meet the DC2RVA Purpose and Need.



FUNDING, CONSTRUCTION, AND IMPLEMENTATION

Chapter 7 of the Final EIS presents an overview of future steps for the Project that would occur after publication of the Final EIS, including funding, final design, permitting, construction, and implementation.

- 1. Questions regarding Project funding, funding sources and timing, and/or funding for construction.
 - a. Who is paying for this Project?
 - b. DRPT claims that this Project will be paid for by "federal state and local sources" but have failed to advise the public that this "source" is our tax dollars.

In response to a) and b), funding for the current DC2RVA Tier II EIS is from an FRA grant for high speed intercity passenger rail development. The Commonwealth of Virginia and CSXT are providing the local match to the federal grant. The DC2RVA Project is not funded beyond the NEPA Tier II EIS; however, as of the publication of the Final EIS, DRPT has secured funding from both the U.S. DOT FASTLANE program and state sources to construct a fourth mainline track for approximately six miles between the Potomac River and Alexandria, as part of the Commonwealth's "Atlantic Gateway" program, described in greater detail in Section 7.7.1 of the Final EIS.

DRPT anticipates that the DC2RVA Project will be implemented incrementally, as funding becomes available. DRPT has not secured funding for Project construction, but has identified several possible sources of funds, including public and private sources. Potential federal sources for construction funding include FRA high speed intercity passenger rail grant funds, U.S. DOT Transportation Investment Generating Economic Recovery (TIGER) or Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant funds, and other Federal discretionary sources, subject to future appropriations. Other non-federal funding sources include the Commonwealth of Virginia, local governmental, and private sector funds. The new DC2RVA service would be part of Virginia's state -supported passenger rail system and a system of long-distance Amtrak and multi-state high speed rail lines. Therefore, operation and maintenance cost would be covered by a combination of passenger fare revenue recovery and state, federal, and/or local funds.

2. How much will the new service fare cost? The cost of travel, not the number of trains, is the biggest obstacle to regularly using Amtrak. Will there be fare reductions compared to existing pricing?

Fares are not determined during this stage in the NEPA process. The DC2RVA Project service plan includes adding 9 new daily intercity passenger round trips (18 total trains per day) in the corridor, and DRPT anticipates that these trains – like other intercity passenger trains on the corridor - would be operated by Amtrak. The fares for passenger service on these new trains would be set by Amtrak, in coordination with DRPT and other stakeholders, at the time the trains are brought into service. Additional information on implementing the 9 new daily intercity passenger round trips (18 total trains per day) intercity passenger trains will be included in the Corridor Service Development Plan, which is being prepared by DRPT as part of the DC2RVA Project.



3. Construction-related questions and/or issues

- a. How long would the Project take to construct?
- b. What does access to private property during construction look like?
- c. How will emergency access to properties occur during construction?
- d. What does construction phasing look like? Could the third rail alternatives be phased within Ashland that Center Street is not closed for the duration of the construction?
- e. There needs to be a robust process to ensure that new construction minimizes the impacts on adjacent neighborhoods and that there is a robust and transparent process for residents to monitor decisions and to be able to influence plans and actions.

In response to a), the period of construction has not been determined, and is dependent on Project funding. For the purposes of this analysis, DRPT assumed that the DC2RVA Project would be fully built (infrastructure built and proposed intercity passenger trains in service) by 2025. Actual dates for future Project development are dependent on obtaining a Record of Decision (ROD), identifying and securing construction funding, completing Project design, and finalizing all necessary approvals and permits, including agreements with Amtrak and CSXT. DRPT anticipates the Project would be built in increments, with higher priority given to adding capacity to the Arlington, Northern Virginia, and Fredericksburg areas, followed by Richmond, Central Virginia, and Ashland areas. Full details on the anticipated dates and order of future steps of the Project are provide in Chapter 7 of the Final EIS.

In response to b) and c), access to private properties will be determined during future phases of design as it is beyond the level of detail of the conceptual engineering that was prepared in support of the Draft and Final EIS. A construction management plan will be prepared during final design, which will address means and methods to maintain safe access to all properties, including midblock properties in Ashland, and/or to mitigate any access impacts to the property. Emergency access to homes will be maintained to all properties during construction and will be coordinated with First Responders. If emergency access cannot be maintained, relocation of residents or other means of mitigation would be required.

In response to d), the extent and duration of any construction-related road closures will be determined after funding is secured and during final design, which will include development of a construction management plan to consider maintaining traffic on public and private roads to allow for property access and flow of traffic. With regard to Ashland specifically, subsequent to the publication of the Draft EIS, Alternative 5A was selected as the Preferred Alternative, which does not include any Project impacts in town between Vaughan Road (Archie Cannon Drive) and Ashcake Road; the Preferred Alternative will not impact Center Street in Ashland.

In response to e), a construction management plan will be developed for the Project that identifies measures to be taken to minimize construction impacts to local neighborhoods, roadways, and other resources, during final design. Short-term impacts due to construction activities will be minimized through the use of prescribed Best Management Practices. Work in protected resource areas such as wetlands, water bodies or floodplains, will be performed in accordance with stipulations contained in the permits issued by the regulatory agencies. Similarly work in historic districts or other areas of cultural resources will be performed per the conditions of Section 106 Draft Memorandum of Agreement (see Appendix K of the Final EIS). Details on construction practices associated with the proposed improvements are presented in Appendix L of the Draft



EIS (Constructability Technical Report), and will be further refined during future phases of Project design (refer to Chapter 7 of the Final EIS for details).

4. After the Final EIS and ROD, what other tasks/deliverables are part of this Project? What is the "conceptual design" of this EIS versus "final design," and when would that occur?

Chapter 7 of the Final EIS has been added since the Draft EIS to summarize the anticipated sequence of events following the publication of the Final EIS, which include: preliminary engineering; service development planning; funding; final design and permitting; construction and implementation; coordination with other ongoing studies and projects; and other federal actions, permits, and regulatory approvals.

The current Tier II DC2RVA EIS is being funded from an FRA grant with the Commonwealth of Virginia and CSXT providing the local match to the grant. The grant includes preparing the DC2RVA Tier II EIS, which will culminate in a ROD produced by FRA. The ROD will identify mitigation measures and related commitments by FRA and DRPT. In addition to the EIS and ROD, the grant includes funding for DRPT to prepare Preliminary Engineering Design (e.g., design to about the 30% level) of the DC2RVA track and roadway improvements. DRPT is preparing a Corridor Service Development Plan that: develops updated ridership and revenue forecasts for the new service; reviews the rail operational plan for the new service, including rolling stock requirements, crew and equipment scheduling, and terminal, yard and support operations; conducts a station access analysis for the new service; identifies operations and maintenance costs; and provides an estimate of public benefits.

DRPT anticipates that the DC2RVA Project will be implemented incrementally as funding becomes available. Once funding becomes available for a segment of the Project, DRPT and/or CSXT will initiate final design for that segment, apply for applicable environmental and construction permits and easements, acquire additional right-of-way, and finalize specific mitigation requirements.

