CITY OF ROANOKE

DOCUMENTED CATEGORICAL EXCLUSION

FOR

PROPOSED PASSENGER RAIL AND TRANSIT INTERMODAL FACILITY

APRIL 2015

Approved by: _____

City of Roanoke

Approved by: _____

Federal Transit Administration

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EXECUTIVE SUMMARY

On behalf of the City of Roanoke, Draper Aden Associates completed a Categorical exclusion and Documented Categorical Exclusion Worksheet (CATEX) for a proposed project in downtown Roanoke (Proposed Action). The Proposed Action consists of the development of a Passenger Rail and Transit Intermodal facility in Downtown Roanoke. This new facility would support the reintroduction of passenger rail service for the Roanoke area, a service that ceased in 1979. Amtrak intends to utilize the Proposed Action to reintroduce passenger rail service providing efficient and convenient transportation to and from the Washington D.C. Mero Area and potentially beyond along the northeast corridor up to Boston. The intermodal facility will also support the use of mass transit by encouraging bus, taxi, and bicycle access from residential and commercial portions of the City to the proposed intermodal facility. The construction of the Proposed Action will serve the existing and future regional demand for commuter rail service. Additionally, the Proposed Action will help provide updated facilities to support the Greater Roanoke Transit Company (GRTC) bus transit operations.

The Proposed Action will also decrease vehicle miles traveled regionally and along the U.S. Interstate 81 corridor in particular, which supports the stated goals and policies in state and regional planning documents. As recent studies have shown, severe traffic congestion exists throughout the region and on U.S. Interstate 81. Without the Proposed Action, drivers to and from the Roanoke Region will exacerbate these transportation problems. Based on a traffic estimated ridership, daily traffic volumes in the region will be lower with the Proposed Action as commuters will be able to travel shorter distances to the new commuter rail stop in Roanoke.

Based on a review of environmental components and evaluation of impacts associated with the City of Roanoke's implementation of the proposed action, no significant direct, indirect, or cumulative impact on the human or natural environment is anticipated. The existing management and control systems combined with implementation in compliance with existing environmental regulations and best management practices (BMPs) would mitigate potential impacts associated with the new passenger rail and transit intermodal facility. It should be noted that Draper Aden Associates was unable to determine the potential for negative impacts to historical resources at this time given the preliminary nature of this project. This information will need to be further evaluated as additional details are available via official consultation with Virginia Department of Historic Resources (VDHR) to be initiated by FTA.

1.0 INTRODUCTION

This documented CATEX report was prepared to assess the potential environmental and social impacts associated with those actions related to the proposed Roanoke train and transit intermodal facility. This document, addresses the environmental analysis requirements under NEPA, and provides a comprehensive review of the actions required to construct the proposed passenger rail and transit intermodal facility.

Two recent developments lead to the need for this proposed facility. First is the beginning of first phase of construction of passenger rail service infrastructure from Lynchburg to Roanoke, and the project is noted as Commonwealth of Virginia Department of Rail and Public Transportation's (DRPT) highest priority for extension. Second is that GRTC will be transitioning its fleet to new buses that are 8½ feet in width, which will require some change to the current allocation of space at Campbell Court. There is an obvious opportunity for an intermodal transportation facility that arises from the proximity of the selected location of the future passenger rail platform and station, GRTC's current transit hub at Campbell Court, with potential space reallocation improvements, and the connection of both to other modes.

An important current project to which this proposed project relates is the Downtown Plan. Roanoke has already initiated work on the plan. The downtown location of the passenger rail stop could have a profound impact on downtown. Accordingly, it is anticipated the results of this intermodal facility study will lead to recommendations for action to be included in the Regional Surface Transportation Program (RSTP) Funding Application: Downtown Roanoke intermodal Transportation Study 3 Downtown Plan and GRTC's Transit Development Plan (TDP) and adopted by both sponsors as their respective policy documents. The intermodal facility will also set the foundation for the Transit Vision Plan to be undertaken by Roanoke Valley-Alleghany Regional Commission (RVARC) as part of its FY14 Unified Planning Work Program. The recommendations of this study will likely lead to a future RSTP funding request when the facility needs and their costs are known.

1.1 Regulatory Context

The Proposed Action being evaluated in this document is the construction of a new train and transit intermodal facility within the Downtown Roanoke area adjacent to the existing Norfolk Southern rail lines. Federal funding is being sought for these transportation-related project elements; therefore, the Proposed Action is subject to the regulations and guidance established by NEPA.

Projects or actions which do not have significant effects on the human and natural environment may be categorically excluded from certain documentation requirements of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.) Categorical Exclusions as defined in 23 CFR 771.118 include actions which do not induce significant impacts to planned growth or land use for an area, do not require the relocation of significant numbers of people, and do not involve significant impacts to any natural, cultural, recreational, historic, community or other resource. Furthermore, the action must not have significant impacts to air, noise, or water quality or have a significant impact on existing travel patterns. An action that qualifies as a Categorical Exclusion does not require the preparation of an environmental

assessment (EA) or environmental impact statement (EIS) (i.e., it is categorically excluded from the need for such documentation).

The Proposed Action, does not qualify as an Automatic CE or a PCE. Results of technical studies and resource analyses, reported herein, clearly demonstrate that the Proposed Action will not have significant environmental impacts. To satisfy NEPA requirements, this Documented CE has been prepared by the City of Roanoke in cooperation with the Virginia Department of Rail and Public Transportation (VDRPT) and the Federal Transit Administration (FTA).

1.2 Purpose and Need

The purpose of the Proposed Action is to increase access to public transportation and encourage its use through the construction of a new passenger rail and transit intermodal facility to support the reintroduction of passenger rail service in Roanoke. The Proposed Action will build upon the ongoing construction of the commercial Amtrak rail facility platform currently under development by Norfolk Southern, Amtrak, City of Roanoke and the Commonwealth of Virginia, in the general vicinity of the Proposed Action, allowing a shared infrastructure benefit for the City of Roanoke and GRTC. Other potential collocated facilities include an updated GRTC bus station and adequate space to support bike sharing and taxi parking areas. The Proposed Action will serve existing and future commuter demand along the Heartland Rail Corridor of the Norfolk Southern Railroad and help reduce traffic congestion along U.S. Interstate 81 one of the most congested Interstate corridors, with regards to commercial traffic, in the U.S.

The Proposed Action would result in the reintroduction of passenger rail service for the Roanoke area a service that ceased in 1979. Amtrak intends to utilize the Proposed Action to reintroduce passenger rail service providing efficient and convenient transportation to and from the Washington D.C. Mero Area. The intermodal facility will also support the use of mass transit by encouraging bus, taxi, and bicycle access from residential and commercial portions of the City to the proposed intermodal facility. This will allow mass transit access to Washington D.C. Metro Area as well as points along the way and access to Union Station, one of the largest train stations in the nation providing access to locations nationwide. This Proposed Action supports multiple transportation initiatives including the Heartland Corridor Initiative an ongoing rail improvement project of “national significance”. The construction of the Proposed Action will serve the existing and future regional demand for commuter rail service. Additionally, the Proposed Action will help provide updated facilities to support the GRTC bus transit operations.

The Proposed Action will also decrease vehicle miles traveled regionally and along the U.S. Interstate 81 corridor in particular, which supports the stated goals and policies in state and regional planning documents. As recent studies have shown, severe traffic congestion exists throughout the region and on U.S. Interstate 81. Without the Proposed Action, drivers to and from the Roanoke Region will exacerbate these transportation problems. Based on a traffic estimated ridership, daily traffic volumes in the region will be lower with the Proposed Action as commuters will be able to travel shorter distances to the new commuter rail stop in Roanoke.

1.3 Alternatives Considered

The No-Action Alternative was considered. The No-Action Alternative would not support the project purpose and need. Local and regional demand for increased access to public transit and multi-modal transportation options would not be addressed. Therefore, the No-Action Alternative was not considered feasible or practical.

The Proposed Action provides much needed local and regional access to commuter rail in an area where existing supply is not meeting the demand for these services. Consequently, it must be located in a convenient downtown location and within close proximity to bus facilities to support intermodal transportation. Given the proximity of Norfolk Southern' s rail modal platform facility, locations at, adjacent to or in the vicinity of the existing GRTC Bus Station and the location for the Amtrak rail station are the only viable on-site alternatives. The project overview presentation dated February 20, 2015 (Appendix D) identifies up to 5 sites (Slide No. 14) located in this area. This has now been revised and narrowed down to 4 sites as shown on Slide No. 13 in the presentation. Of these, Options 1 and 1A have been considered the most ideal and appropriate alternatives, at this time consequently, other alternative sites were not feasible. The NEPA environmental review performed to date includes a broad area that includes Options 1, 1A and 2.

1.4 Existing Conditions

The proposed project area currently consist of mixed use commercial, industrial, and residential structures. The project area is located adjacent to the existing Norfolk Southern railway and is largely covered with impervious surfaces. Current uses include large parking lots, parking garage, bus station facility, residential apartment buildings, retail store front property, restaurants and light industrial operations.

1.5 Regulatory Compliance

NEPA requires that Federal agencies take into consideration the environmental consequences of proposed actions during the decision-making process. The intent of NEPA is to protect, restore, and enhance the environment through well-informed decision-making. The US Executive Office of the President Council of Environmental Quality (CEQ) was established under NEPA to implement and oversee Federal policy in this process. To this end, the CEQ issued regulations for implementing the Procedural Provisions of NEPA (40 CFR 1500-1508). The Federal Highway Administration/Federal Transit Administration (FTA) has supplemented the CEQ NEPA regulations by promulgating its own NEPA regulations, which are found at 23 CFR 771.

Federal, state and local regulations would be considered during the analysis of the impacts to individual environmental and social resources evaluated as a part of the CATEX. In addition, the following legislation would be been given particular consideration.

- Clean Air Act (CAA) (42 USC 7401)
- Clean Water Act (CWA) (33 USC 1251)
- Endangered Species Act (ESA) (16 USC 1531-1543)
- Environmental Justice (Executive Order 12898)

- Archaeological Resources Protection Act (ARPA) (16 USC 470aa *et.seq.*)
- National Historic Preservation Act of 1966 (16 USC 470 et seq., as amended)
- Resource Conservation and Recovery Act (RCRA) (42 USC 6901)

2.0 PUBLIC PARTICIPATION

The City invites and strongly encourages public participation in the NEPA process. Consideration of the views and information of all interested persons and entities promotes open communication and enables better decision making. All agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision-making process.

Public participation opportunities with respect to this Documented CATEX began with a public open house on January 29, 2015 to seek the community's input. Additional opportunities and community outreach will occur as the project proceeds.

3.0 CRITERIA REQUIRED FOR DOCUMENTED CATEGORICAL EXCLUSION

This CATEX documents the following natural, cultural, and community resources and issue areas required by NEPA for the Proposed Action:

- Traffic, Transportation and Parking;
- Land Acquisition and Displacements;
- Land Use and Zoning;
- Air Quality;
- Noise;
- Cultural and Natural Resources;
- Visual/Aesthetics;
- Public Safety and Security;
- Ecologically Sensitive Areas and Endangered Species;
- Wetlands;
- Water Resources/Water Quality;
- Floodplains;
- Wild and Scenic Rivers, Navigable Waterways, and Coastal Resources;
- Farmlands;
- Socioeconomics;
- Environmental Justice (EJ);
- Environmental Risk Sites and Hazardous Materials;
- Seismic;
- Property Acquisition;
- Construction Impacts; and
- Indirect and Cumulative Impacts.

3.1 Traffic, Transportation and Parking

The intermodal train and transit facility will serve the needs of many area commuters who currently compete for congested highway space along the I-81 corridor. It is assumed that Roanoke residents will be able to walk and take bus transit to the station. Additional residents from the New River Valley will also access the station via the Smart Way bus system. Therefore, the proposed passenger rail and transit intermodal facility is expected to result in a decrease in vehicle miles traveled along the I-81 corridor and beyond.

With respect to the local impacts of traffic associated with access to and egress from the proposed facility, peak-hour traffic volumes are essentially not impacted by the Proposed Action. The proposed Amtrak rail service will depart from Roanoke to Washington, D.C. at 6:19 AM and return at 9:55 PM. Total daily traffic volumes in the area are anticipated to be lower with the Proposed Action in place than without it because the Proposed Action will provide an alternative transportation mode to patrons of the site. Based on this assumption, the Proposed Action will have no significant adverse impact on traffic.

The design of the passenger rail and transit intermodal facility will maximize pedestrian access and bus access, thereby facilitating intermodal connections at the site.

3.2 Land Acquisitions and Displacements

Construction of the Proposed Action will occur primarily adjacent to the current railway facilities and other industrial/commercial facilities. This site is under the control of multiple property owners and developers. Property acquisitions will be required to implement the Proposed Action, but property transactions and purchases are anticipated to have no significant adverse impact on acquisitions and relocations.

3.3 Land Use and Zoning

The Proposed Action will be constructed on land currently and formerly occupied by commercial and industrial operations adjacent to the existing Norfolk Southern Rail Line. Existing land uses adjacent to the Proposed Action site can be characterized as mixed-use industrial, business/commercial, and residential.

The Proposed Action will not conflict with the surrounding uses and activities. It will serve existing residents in the surrounding community as well as future residents of the Roanoke Area. The Proposed Action will be built on the site of existing industrial and commercial operations, a use which was similarly intensive as the planned uses of an intermodal rail and transit facility. Consequently, no adverse impacts relative to land use are anticipated.

3.4 Air Quality

The proposed passenger rail and transit intermodal facility will decrease vehicle miles traveled on roadways along the I-81 corridor and beyond. Daily traffic volumes in the project area will be lower with facility in place than if these facilities were not built. The Proposed Action is thus considered beneficial in terms of air quality; no adverse impacts to air quality are anticipated. Improved traffic operations and the provision of additional transit options will intuitively improve air quality compared to the future No-Action condition.

The U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for six air pollutants in the Clean Air Act and 1990 Clean Air Act Amendments. The standards aim to protect human health as well as public welfare. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards are set to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation, and buildings. With the exception of sulfur dioxide, all criteria pollutants have secondary standards that are equal to the primary standards.

When air pollutant levels do not exceed the standard for each pollutant, a region is considered in attainment of the standards. If a monitor shows an exceedance to a pollutant's standard, the region is then classified as nonattainment for that pollutant and must develop a State Implementation Plan to bring the region back to attainment status. The City of Roanoke and surrounding County of Roanoke are both currently designated as being in attainment for carbon monoxide (CO). There are no monitored CO exceedances in the project study area.

As stated above, the proposed passenger rail and transit intermodal facility will increase access to public transportation and encourage its use, and will also decrease vehicle miles traveled along the I-81 corridor. By reducing the number of auto trips and vehicle miles of travel on the roadways in the region, the project will have an overall positive impact on air quality. The region will likely have cleaner, healthier air from enhancing/increasing access to transit service that removes large numbers of drivers from roadways on a daily basis.

3.5 Noise

The proposed project area is located adjacent to an active and historical rail line that has been heavily trafficked by freight and formerly passenger trains for many years. Commuter trains are required to sound their horns when approaching stations and at-grade crossings. Train engineers typically blow train whistles about ¼ to ½ mile from a rail station platform or at-grade crossing, thus the greatest noise impact from train whistles will occur at those noise-sensitive receptors located up to ½ mile east and west of the proposed rail platform. Noise from train whistles can reach as high as 119 dBA at a point immediately adjacent to the tracks where the whistle is blown. At 500 feet, a train whistle emits a sound level of approximately 90 dBA. Trains already sound their horns in the general vicinity of the Proposed Action site due to a nearby existing at-grade crossing. Consequently, noise impacts associated with train horns are already experienced in the area. Furthermore, the Amtrak passenger train service will only operate once a day (one departure, one arrival) and is therefore an insignificant addition to the existing rail traffic in the area. In addition to noise associated with rail traffic potential noise concerns related to increase vehicular traffic were considered. However, the existing presence of the GRTC bus transit facility and the existing volume of vehicles are not expected to be increased. The proposed project area is located in an active portion of downtown Roanoke and therefore, noise impacts from high volumes of traffic from personal vehicles and buses are common to the area and would not experience significant increases as a result of this project.

In summary, the rail and transit components of the Proposed Action will not have an adverse impact on the existing noise climate of the study area. Train engineers will continue to blow their horns as they approach the existing crossings. This is located close enough to the Proposed Action to serve the dual purpose of warning users of the at-grade crossing as well as passengers at the new rail platform of an oncoming train.

3.6 Cultural and Historical Resources

The National Historic Preservation Act of 1966 (NHPA), as amended, sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places (NRHP). Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 CFR 800). The Archaeological Resources Protection Act (ARPA) applies when a project may involve archaeological resources located on federal or tribal land. The ARPA and under certain circumstances, Virginia Code, requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

Draper Aden Associates requested an Archives Search from the VDHR (SHPO) as a preliminary evaluation of historical resources within the project area (Appendix C). The purpose of an Archives Search is to determine the potential effects of the proposed action by reviewing known cultural resources within the area of potential effect (APE). An APE was searched based on the potential view shed of the subject project property. A review of existing information and the potentially historic areas is conducted for the site and the APE to determine if the subject property and associated proposed action may have an adverse effect on the characteristics of the historic site or area. The Archives Search identified two archeological resources and 32 architectural resources within the APE. A desktop review of these identified archeological and architectural resources was conducted to confirm their presence within the project area. As a result, both of the archeological resources and 27 of the architectural resources were confirmed as located outside the project area. Five architectural resources were identified as being located within the proposed project area. The results of the Archive Search and Roanoke's evaluation of the archive information was included in the project review request submitted to VDHR on February 2, 2015. In correspondence dated March 9, 2015, VDHR indicated the project may negatively impact historic resources within the area of potential effect. Therefore, they request FTA initiate formal consultation with VDHR in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended. Given the preliminary status of this project Draper Aden Associates is unable to evaluate potential negative impacts to historical resources at this time. Potential impacts will be evaluated as additional design information is determined.

The National Association of Tribal Historic Preservation Officers (THPO) is a group officially designated by a Federally-recognized Native American tribe. The National Park Service approved the THPO program. The THPO assumes some or all of the functions of the SHPO on Tribal lands. This program was made possible by the provisions of Section 101(d)(2) of the NHPA.

The Virginia Council on Indians (VCI) is a subcommittee created by the general assembly to gain knowledge of the historic dealings and relationship between the Commonwealth of Virginia and Virginia Native American Tribes. The Council's duties include studies and research regarding the Native American Tribes in Virginia and making recommendations to the Commonwealth on issues regarding Virginia Native Americans. A list of Virginia's recognized Tribes is available through the VCI.

No Federally-recognized Native American Tribes are located within the vicinity of the subject site based on a review of the tribal databases available through NRHP, VCI and are included in Appendix D. Correspondence from SHPO (VDHR) is included in Appendix C. As stated in the above, there are no known Federally-recognized Native American Tribes with a historical presence or claim within the project area.

Given the preliminary nature of the project, it is not possible at this time to determine if an adverse impact to historical resources will occur as a result of this project. In accordance with correspondence received from the VDHR, the FTA should consult with VDHR regarding any potential negative impacts to historical resources once additional project details are determined.

3.7 Visual/Aesthetics

Existing views from residential apartments and commercial storefronts surrounding the overall proposed project site consist primarily of railway facility and industrial facilities. Those residences closest to the Proposed Action site currently have a view of the active rail line and the soon to be constructed Amtrak platform and passenger rail facility located in the proximity of the Proposed Action site. The Proposed Action will be constructed in such a way as to minimize visual impacts to nearby residents to the greatest extent possible through façade and design, vegetative screening, and color selections. Therefore, the Proposed Action is not anticipated to result in any visual or aesthetic impacts to the surrounding communities.

3.8 Public Safety and Security

The Proposed Action will not alter existing emergency access routes and will have no adverse effects on the delivery of emergency and/or health care services in the area. Consequently, the Proposed Action will have a beneficial effect and no adverse impact on public safety and security.

3.9 Ecologically Sensitive Areas and Endangered Species

The Virginia Fish and Wildlife Information Service (VaFWIS) database was consulted to identify whether any rare plant and animal species or significant natural communities could potentially exist in the project area. The VaFWIS identified one federally endangered and one federally threatened species within a 3 mile radius of the project site. However, the current and historical site conditions include previously disturbed areas with no suitable habitat for wildlife species. The project site is largely covered by existing structures, concrete sidewalks, and paved roads. Based on these findings, the Proposed Action will have no significant adverse impact on ecologically sensitive areas or any threatened or endangered species.

Furthermore, the project site is dissimilar to each of the critical habitat descriptions provided in both threatened and endangered species lists. As per the US Fish and Wildlife Service (USFWS) Virginia Field Office project review requirements, Virginia Department of Game and Inland Fisheries (VDGIF), and Virginia Department of Conservation and Recreation (VDCR) were contacted for project reviews. Copies of the correspondence are included in Appendix C, and provide documentation of consultation with VDGIF and VDCR. The response received from VDCR on January 28, 2015, provides concurrence with our findings of no adverse impact related to listed plant species. VDCR recommend strict adherence to the requirements of applicable state and local erosion and sediment control/stormwater management laws and regulations to minimize potential for adverse impact downgradient. The Proposed Action will be implemented with strict adherence to applicable local, state and federal stormwater and erosion/sediment control requirements. A response was received from VDGIF on January 9, 2015 and states due to budget restrictions, they are unable to review “pre-application or scoping documents.” Per US Fish and Wildlife Service (USFWS) Virginia Field Office environmental project review process, if no endangered species or critical habitat is located within the potential project area the applicant shall print an Online Project Review Certification Letter to document adherence to their online review process (Appendix C). No formal consultation is required, but documentation supporting our

determination must be maintained in the project files. Therefore, the Proposed Action would result in no impact to endangered or threatened species as they are not present within the APE.

3.10 Wetlands

A review of National Wetlands Inventory GIS data confirmed that there are no hydric soils (i.e. poorly drained or very poorly drained soils) indicating wetlands on the project site. To minimize the risk of temporary or long-term pollution effects, including sedimentation, on the waters that may receive stormwater from the Proposed Action, storm water pollution prevention measures and erosion and sediment control measures in accordance with applicable local, state and federal regulations/permits will be implemented during/post construction of the Proposed Action.

3.11 Water Resources/Water Quality

Surface Water Resources

The Roanoke River is classified by the VDEQ as a Category 5 impaired surface water resource. Stormwater from the proposed project area is collected in the Roanoke City stormwater collection system and ultimately discharged into the Roanoke River. Implementation of the Proposed Action would have the potential for soil erosion and constituents of concern to indirectly affect off-site surface water that flows into the Roanoke River. Erosion and runoff would be a particular concern during construction, as the Proposed Action would entail clearing and grading of the site to create foundations for the train and transit facility.

As the proposed site would likely be larger than 1 acre in area, compliance with the Virginia Stormwater Management Program (VSMP), prior to commencing any construction activities will likely be required including preparation of a stormwater pollution prevention plan. The temporary effect of the Proposed Action on water quality would be mitigated by fulfillment of applicable VSMP requirements.

Measures would also be implemented to prevent stormwater infiltration into open excavations or trenches, limiting potential for direct or indirect impacts to groundwater. These impacts could include fuel or oil spills associated with equipment used during construction.

With the proper implementation of the BMPs, coupled with erosion and sediment controls required by the City's permit, no impact to surface water resources is expected.

Groundwater Resources

Groundwater in the vicinity of the Proposed Action is found in both unconsolidated materials and bedrock. This aquifer system is primarily composed of limestone and dolomite and contains the rocks of the Shady Dolomite, Rome and Elbrook Formations, and of the Knox group, and Middle Ordovician limestone. The Groundwater in the limestone aquifer and karst features is generally high in total dissolved solids. There are no aquifer/wellhead protection areas on or surrounding the Proposed Action site. With implementation of proper erosion and sediment control best management practices, proper management of waste materials and any onsite or

encountered hazardous materials, impacts to groundwater resources within and adjacent to the Proposed Action site will be avoided.

Surface Water Quality

Potential impacts to surface water resources and water quality could arise from stormwater runoff associated with the Proposed Action. To mitigate potential surface water quality degradation, both during construction and post-construction, stormwater pollution control measures will be designed and implemented in accordance with applicable regulations. The measures taken will prevent and minimize sedimentation, siltation, and/or pollution of the Roanoke River. Temporary and permanent stormwater management systems like those described above will be appropriately designed in conformance with applicable regulations and guidelines to ensure that stormwater runoff is appropriately managed prior to discharge from the Proposed Action site. As a result, no adverse impacts to water resources and water quality are anticipated.

The Proposed Action will have no significant adverse impact on water quality, navigable waterways, or coastal zones.

3.12 Floodplains

A preliminary review of the Roanoke City GIS floodplain data and Federal Emergency Management Agency (FEMA) mapping reveals that there are 100-year and 500-year floodplains within the Proposed Action site (See Figure 3).

Since the area of the Proposed Action is within a Zone A floodplain, in a future design phase, existing base flood elevations and limits of the floodway will be determined based on existing floodplain models available from the Federal Emergency management Agency (FEMA). The Proposed Action will be analyzed and designed, as required, to result in no change from the existing base flood elevation upstream or downstream of the Proposed Action or encroach on the newly defined floodway limits. The Proposed Action (structures) within a floodplain will be designed in accordance with FEMA regulations and the City of Roanoke ordinances. Overall, the Proposed Action is not anticipated to have any significant adverse impacts on Floodplains and downstream flood elevations.

3.13 Wild and Scenic Rivers and Navigable Waterways

There are no federally designated wild or scenic rivers, navigable waterways, or coastal resources in the project study area. Therefore, the Proposed Action will not impact these resources.

3.14 Farmlands

A review of Virginia Natural Heritage Data Explorer GIS database agriculture model confirmed that there are no prime farmland soils or statewide important farmland soils in the project area. Therefore, the Proposed Action will not impact these resources.

3.15 Socioeconomics

Socio-economic impacts associated with a project typically include changes in employment opportunities, impacts to major employers, business displacements, and other effects on the economy. The additional new passenger rail and transit intermodal facility will provide greater access to transit for residents of the Roanoke Area, which will in turn provide greater access to employment centers within the region. Therefore, the Proposed Action will have no significant adverse impacts on socioeconomics.

3.16 Environmental Justice

The City of Roanoke has not directly or indirectly used criteria, methods, or practices that discriminate on the basis of race, color, or national origin. No disproportionately negative economic or social impact is anticipated to minority or low-income communities, and no human health or environmental impacts are believed to be associated with the Proposed Action.

3.17 Environmental Risk Sites and Hazardous Materials

The Proposed Action will be located on the site of former industrial and commercial operations as well as located adjacent to an active rail line. It is possible hazardous materials or waste materials may be encountered during construction activities. At this time no evidence has been encountered to confirm the presence of such materials. However, proper management of these material should they be encountered, will be required.

Adherence to proper emergency response procedures, should a hazardous material be encountered during construction, will ensure that the Proposed Action will have no significant adverse impact related to hazardous materials. The project will not contribute to any surface or ground water contamination or result in increased exposure and/or risks to the public from hazardous materials.

3.18 Seismic

There are no unusual seismic conditions in the project vicinity as noted by the information collected from the US Geological Survey (USGS) and Figure 4 included below.

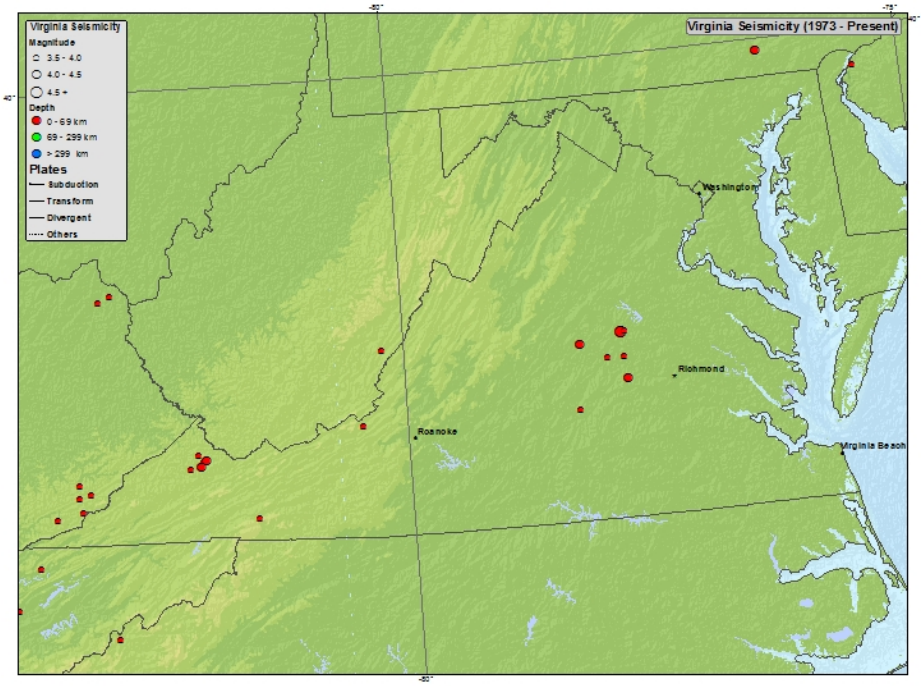

Figure 4: USGS, Virginia Seismicity Map: 1973-March 2012
http://earthquake.usgs.gov/earthquakes/states/virginia/seismicity.php

3.19 Coastal Zone

The proposed project site is not located in a coastal zone. Documentation in the form of a map depicting the coastal zone management area was obtained from the Virginia DEQ website related to coastal zone management area. A copy of the map is included in Appendix D.

3.20 Construction Impacts

Impacts during construction of the Proposed Action are anticipated in relation to air quality, water quality/wetlands, noise, solid waste, hazardous materials, and public utilities and services.
The nature of these impacts and proposed mitigation measures for adverse impacts are described below.

3.20.1 Air Quality

During construction of the Proposed Action, the potential exists for dust from exposed surfaces to become airborne. The City of Roanoke will require contractors to comply with current best management practices. Additionally, the prolonged use of diesel-powered construction vehicles contributes to increased diesel exhaust emissions including carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter ($PM_{2.5}$). Concerns over diesel exhaust emissions have led EPA to develop new emission standards for new diesel-powered vehicles beginning in 2004.

Mitigation: Appropriate mitigation for excessive idling of construction equipment and fugitive dust control will be achieved by complying with Virginia Air Pollution Control Program and the requirements of the Virginia Regulations for the Control and Abatement of Air Pollution.

Mitigation measures to control impacts to air quality during construction will include wetting and stabilization to decrease dust, cleaning paved areas, placing tarps over truck beds when hauling dirt, and staging construction in such a way to minimize the amount and duration of exposed earth. In addition, the contractor will be required to keep equipment maintained and operating efficiently in a clean manner to mitigate any exhaust impacts. Construction vehicles will also need to comply with the three-minute idling regulation.

3.20.2 Water Quality/Wetlands

To mitigate potential water quality impacts during the construction period, temporary best management practices (BMPs) will be employed and an erosion and sedimentation control plan will be implemented, pursuant to regulatory guidelines and approvals. The *Virginia Erosion and Sediment Control Manual* will be followed. Erosion and sedimentation controls such as silt fences and hay bales will be installed at appropriate locations, such as at the base of fill slopes or around catch basin drop inlets, and will be regularly maintained and routinely checked after rainfall events.

Noise

During the construction period, continuous as well as intermittent (or impulse) noise will be experienced in the immediate project vicinity, which may be perceived by some to be intrusive, annoying and discomforting. This noise will be generated by construction equipment including pneumatic tools which emit strong penetrating percussive sounds, and the daily movement of dump trucks, loaders, backhoes, and other heavy equipment to, from, and on the construction site. However, considering the Proposed Action's location in an industrial downtown area adjacent to an active rail way these impacts are anticipated to be negligible on a short term basis.

Mitigation: Numerous mitigation measures will be considered relative to noise, as follows:
- Install and maintain properly functioning muffler devices on all construction equipment; and
- Restrict construction activities to normal weekday work hours, 8 a.m. until 5 p.m.

3.20.3 Solid Waste and Hazardous Materials

Solid waste will be generated from construction. This waste will be disposed of as municipal solid waste or construction, demolition, debris waste, as applicable. Any construction waste materials containing solvents (e.g., paint thinner, varnishes) will be properly managed in accordance with the Virginia Solid Waste Management Regulations and Virginia Hazardous Waste Management Regulations, as applicable. If hazardous waste is generated it will be transported and disposed of by a licensed waste hauler

3.21 Indirect and Cumulative Effects

As required by NEPA, indirect and cumulative impacts must be studied to determine if the Proposed Action fosters or accelerates development beyond the immediate project area and if the Proposed Action, when added to other actions, collectively results in significant environmental impacts.

Indirect effects are those which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8). Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural resources and systems, including ecosystems. The Proposed Action includes transportation elements serving community and regional transportation plans. The action, by itself, is not anticipated to induce any growth or change to the pattern of land use locally or regionally. Potential indirect effects were considered relative to potential changes in the resources listed above. Based on this assessment, the Proposed Action is not anticipated to have any indirect negative impacts either later in time or farther away from the site.

Cumulative effects are defined as the impact on the environment that results from the incremental impact of the Proposed Action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Planned and programmed actions considered for this cumulative impacts assessment fall into two categories; land development and transportation system projects. Each along with its potential for cumulative effects is described in summary below.

The Proposed Action will provide transit access and help meet commuting demands from Roanoke Area residents and business patrons, in addition to serving commuters from throughout the region. The overall Roanoke Passenger Rail and Transit Intermodal Facility project is expected to have a beneficial indirect effect on the local and regional economy, environmental quality, and neighborhood cohesion for the Roanoke Area. The Proposed Action will contribute to those beneficial effects by enhancing the sustainability of the region's transportation and associated environmental impacts. The cumulative effect is expected to be beneficial, including economic growth, improved transportation, and enhancement of neighborhood cohesion the Roanoke Area.

Improvements in rail service are expected to be implemented over the next five years. These projects are anticipated to collectively ease congestion, improve safety, and enhance access to all modes for travelers in the region. The Proposed Action will complement those improvements. Consequently, there is some potential for positive cumulative effects of the Proposed Action.

Present and future development in and around Roanoke City is controlled by management measures including master area planning, local zoning ordinances, state and/or federal laws, and building codes. Future development in the area would be in compliance with the above listed management measures, minimizing impacts to the environment.

The impacts of the Proposed Action, when considered along with past, present and future actions, are cumulatively insignificant. The overall lack of negative impacts associated with the Proposed Action, as documented here, demonstrates both the benign nature and limited impacts associated with completion of this proposed project. Continued positive impacts to air quality due to increased mass transit opportunities, would occur with construction of the Proposed Action. Any negative

impacts associated with the proposed project, when added to other past, present and reasonable foreseeable future actions are collectively insignificant.

4.0 CONCLUSION

The proposed action is to construct a Passenger Rail and Transit Intermodal facility in Downtown Roanoke to support the reintroduction of commuter rail service in the Roanoke Area. Specifically, the Proposed Action would result in overall beneficial impacts when compared to the No Action Alternative which would result in continued congestion of the I-81 corridor and limited mass transit improvements. This beneficial impact is largely the result of significantly reduced pollutant emissions by an increase in mass transit transportation, and enhanced benefits to human health, welfare and the environment through the use of healthier modes of transportation and commute. Overall, the introduction of passenger rail and construction of this passenger rail and transit intermodal facility is a significant component of several of the City and Regional development plans, is anticipated to further enhance the vibrancy of Downtown Roanoke and vitally contribute to the economic and social growth of Downtown and the greater Roanoke area.

Based on a review of environmental components and evaluation of impacts associated with the City of Roanoke's implementation of the proposed action, no significant direct, indirect, or cumulative impact on the human or natural environment is expected. The existing management and control systems combined with implementation in compliance with existing environmental regulations and BMPs would mitigate potential impacts associated with the new passenger rail and transit intermodal facility. It should be noted that Draper Aden Associates was unable to determine the potential for negative impacts to historical resources at this time given the preliminary nature of this project. This information will need to be evaluated as additional details are available via official consultation with VDHR to be initiated by FTA.

5.0 LIST OF AGENCIES AND PERSONS CONSULTED

- Rene Hypes, Project Review Coordinator, Department of Conservation and Recreation
- Virginia Department of Environmental Quality
- Gladys Cason, Environmental Services Section, Virginia Department of Game and Inland Fisheries
- Andrea Kampinen, Architectural Historian, Virginia Department of Historic Resources
- US Fish and Wildlife Services Online Project Review