

New River Valley Passenger Rail Study

*Regional Survey
Measure Local Impacts
History of Passenger Rail*



*Identify All Potential Sites
Detailed Site Evaluation
Site Selection*

APPROVED: JANUARY 7, 2016

NEW RIVER VALLEY



1 PROJECT OUTLINE

The purpose of this study is to identify a potential location for a passenger rail station and document the ridership demand in the New River Valley region. Passenger rail service arrives in Roanoke in early 2017. As the fastest growing region in western Virginia, a service extension into the New River Valley is the next logical step towards expanding passenger rail services in the Commonwealth.

The Study process was led by the New River Valley Regional Commission, under contract by the New River Valley Metropolitan Planning Organization (MPO). In general, the MPO is a policymaking organization serving the towns of Blacksburg and Christiansburg, the City of Radford, and the urbanized parts of Montgomery and Pulaski counties. The MPO Technical Advisory Committee (TAC) collaboratively developed site evaluation criteria, reviewed public input, and provided study oversight. TAC representatives include local elected officials, administrators, and senior planning, engineering, economic development, tourism, and transportation management staff.

Initial ridership was estimated utilizing Amtrak's Station Program and Planning Guide. According to the guidelines, much of the New River Valley meets the characteristics of a medium city center and/or college town. The demographic profile of the region meets Amtrak's criteria of a Caretaker Station, which typically serves 20,000 – 100,000 annual passengers. To determine local ridership, 2014 Amtrak Service & Ridership Fact Sheets for Virginia, West Virginia, and North Carolina were analyzed. A conservative estimate of 40,000 boardings/alightings was utilized to determine potential passenger rail site characteristics for this study. Study findings later revealed that 40,000 boardings/alightings could be achieved through a 4% mode shift of NRV generated north-bound trips alone.

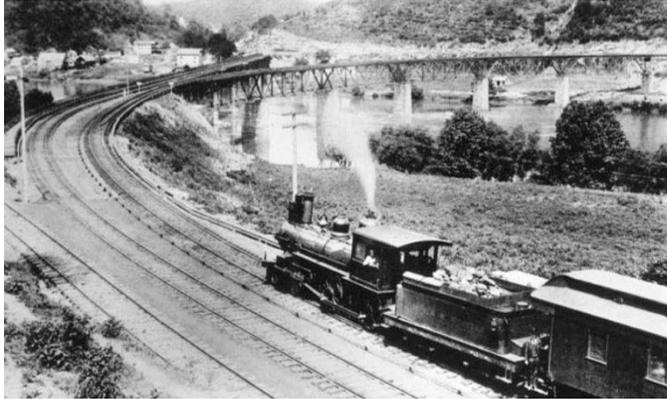
Amtrak provided additional guidance for determining site characteristics such as the number of parking spaces, platform length, and blueprints for a prototype Caretaker Station. Nearly thirty potential stop locations were identified along the region's rail corridor in the first phase. During the second phase of evaluation, a comparative analysis measured the strengths and weaknesses of nine locations. Criteria included consistency with local planning, potential business/residential displacement, potential environmental and historical impacts, proximity to primary transportation network and municipal utilities, availability/ownership, and general site capacity/flexibility.

In total, the region has six sites that meet or exceed minimum site requirements for a passenger rail station. The sites are located in Christiansburg, Dublin, Radford, and Pulaski. Quantitative and qualitative factors for each site were rigorously evaluated against up to 32 criteria. In September 2015, the TAC selected three final sites for concept level development and analysis, two locations in Christiansburg and one location in the City of Radford.

The final phase of site analysis focuses on the proximity to potential passenger rail trips, economic impacts, consumer spending, and construction costs. A new geospatial dataset for potential trip generations was developed by utilizing nearly 6,200 online survey responses. In addition to forecasting travel behavior, the survey also provided some insight into the types of amenities desired at a new station and how much users would be willing to pay for travel. This report identifies key study findings as a result of the planning process.

2 HISTORY OF PASSENGER RAIL SERVICE IN THE NEW RIVER VALLEY

The New River Valley has a rich history of passenger rail service. The railroad reached what is now Radford in 1854, eventually providing a rail connection between Lynchburg and Bristol. Scheduled rail



service on this line began in approximately 1856. The Norfolk & Western Railway's extension line from Radford west to the coalfields, along the south shore of the New River, reached the Town of Narrows in 1882. The Virginian Railway, along the north shore of the New River, began operation in 1909. The Norfolk & Western's passenger service offered a more fully developed menu of options, while the Virginian Railway offered limited passenger service.

To serve the coal mines at Merrimac, in Montgomery County, the Virginia Anthracite Coal and Railway Company, built a branch rail line in the early 1900s that connected with the Norfolk & Western at Cambria, which is now part of Christiansburg. This line was eventually extended to Blacksburg with passenger service between Cambria and Blacksburg commencing in the fall of 1904. The new passenger rail service was a significant improvement over the largely unimproved roads in existence at that time. Owing to the berries that grew along the route, the line was affectionately referred to by locals as the "Huckleberry". Scheduled passenger service on the line ended in 1957. Special passenger trains operating over the Huckleberry line ceased after 1963.

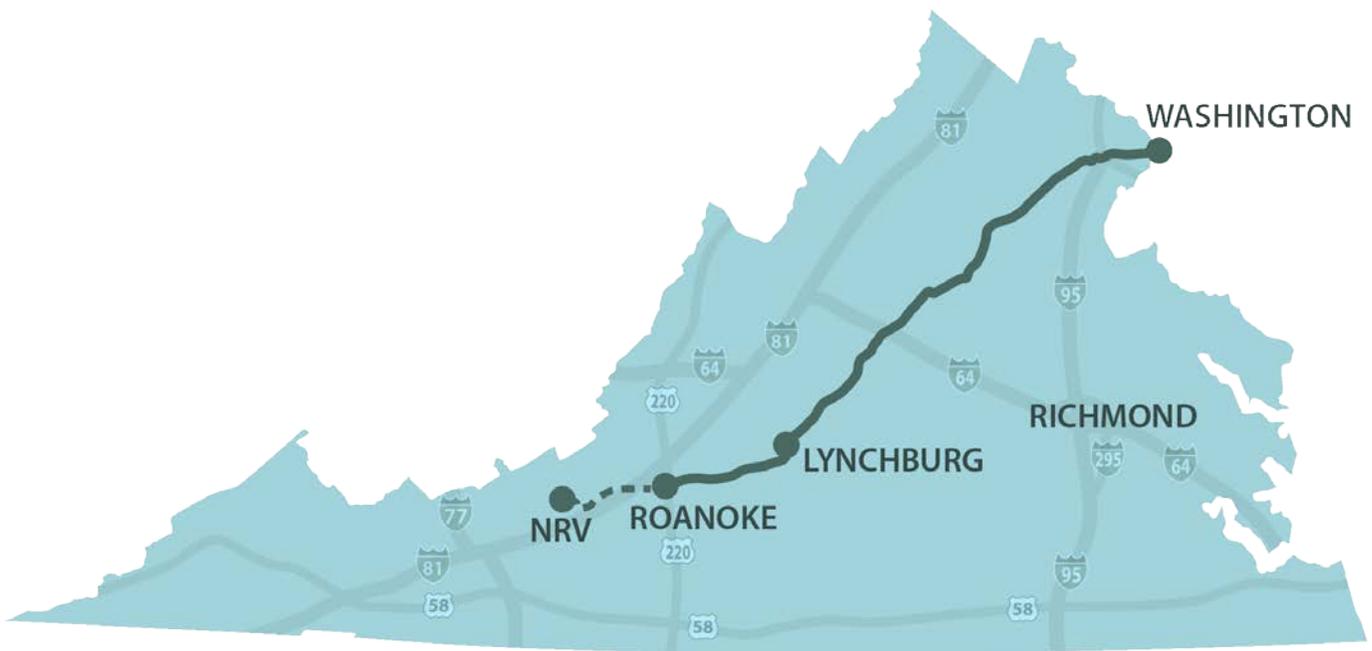
At the height of World War II, there were approximately 12 passenger trains passing through Radford daily. Additional east-west passenger trains operated through Cambria/Christiansburg. In the mid-1960s, there were approximately a dozen passenger trains (6 each way) passing through Christiansburg on a daily basis. Named passenger trains such as the Birmingham Special, Pelican, and Tennessean operated north-south, while trains such as the Powhatan Arrow, Pocahontas, and Cavalier operated east-west.

In the era before the interstate highway system and widespread car ownership, passenger rail was a common means of intercity travel. New River Valley residents attending college in the 1960s note that college students were frequent users of passenger rail for travel between school and home. In the event of harsh winter weather conditions, passenger rail service often represented the only reliable means of transportation. Rail stations were important pieces of the community fabric. In communities such as Christiansburg, Pulaski, and Narrows, the rail stations which still exist are recognized as significant structures contributing to the architectural and historic character of designated historic districts.

Passenger rail travel declined through the late 1960s. Remaining passenger service operated by the Norfolk & Western Railway ended in 1971. Between 1975 and 1979, Amtrak offered limited passenger rail service operating east-west through the New River Valley on trains known as the Mountaineer (1975-1977) and the Hilltopper (1977-1979).

3 STUDY FINDINGS

Amtrak currently operates hundreds of intercity passenger trains every day, serving over 500 rail stations in 46 states. Most of Amtrak’s services are operated over track owned by freight railroads. Additionally, most of the stations are owned by commuter rail agencies, state and local governments, and private owners.¹ Implementing the new service will require additional coordination with Amtrak, the Virginia Department of Rail and Public Transportation, Norfolk Southern, and local partners. This study is one of the initial steps of the overall process.



3.1 LOCAL/REGIONAL SUPPORT

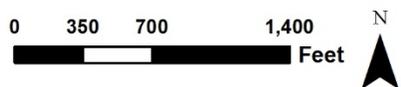
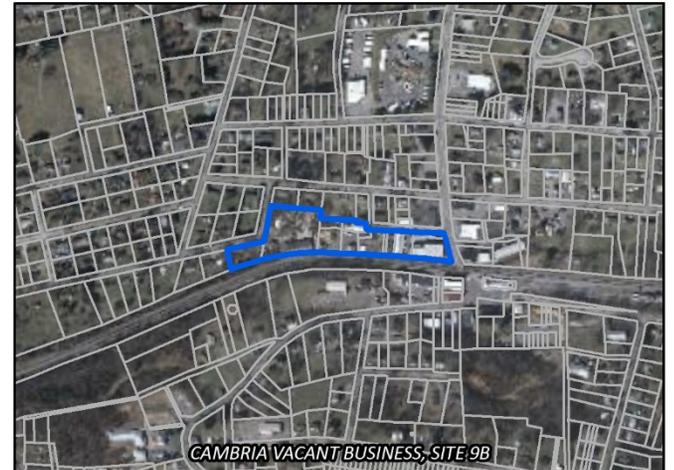
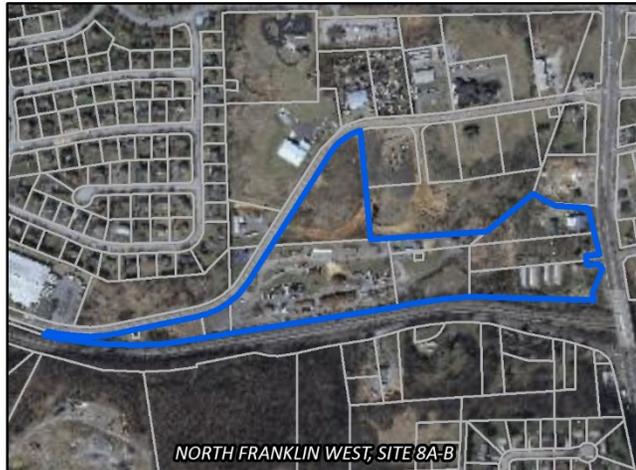
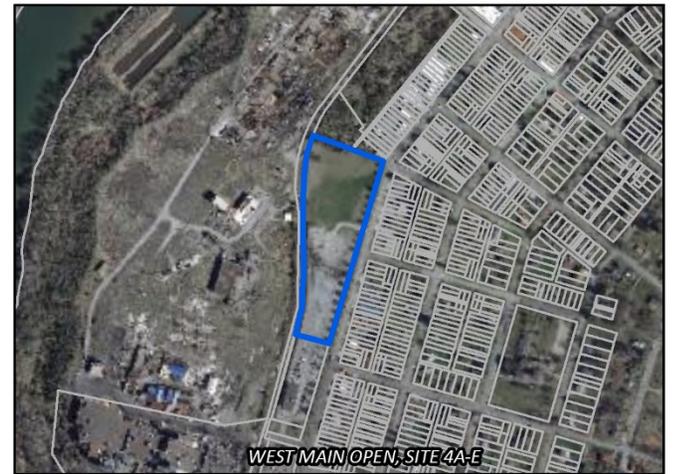
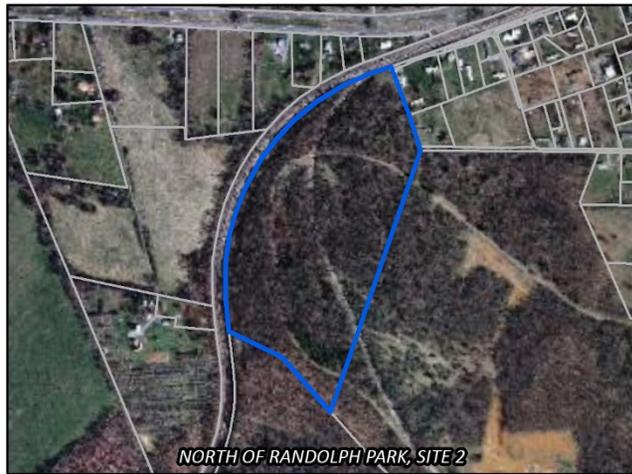
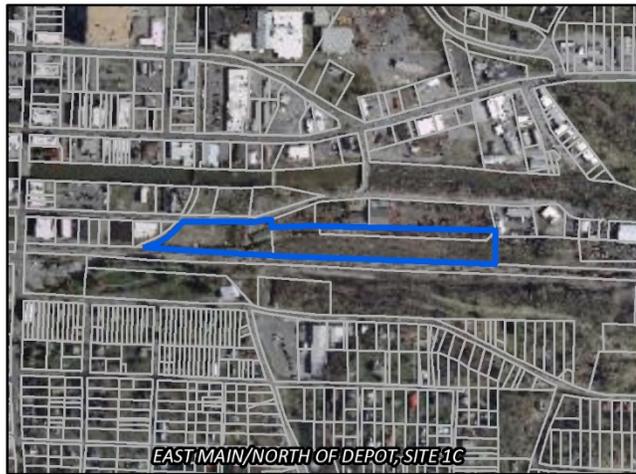
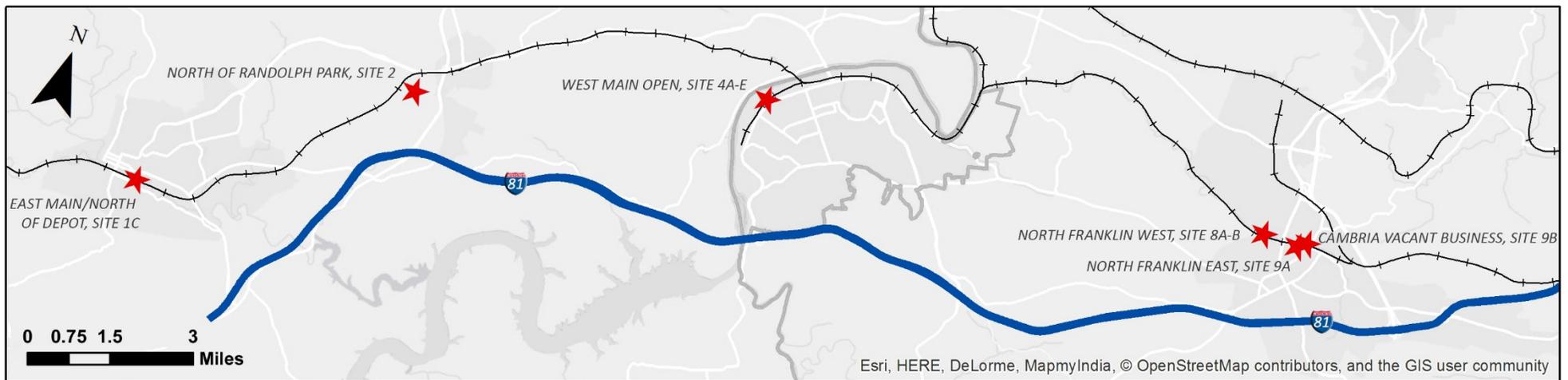
In December 2013, leaders throughout Virginia’s New River Valley region formed a partnership to bring passenger rail service to the area by 2020. The group consists of senior officials from the counties of Montgomery and Pulaski; towns of Pulaski, Christiansburg, and Blacksburg; City of Radford; Radford University and Virginia Tech; Virginia Tech Foundation; New River Valley Regional Commission; New River Valley Metropolitan Planning Organization; New River Valley Economic Development Alliance; and The Blacksburg Partnership and Montgomery County Chamber of Commerce. Additionally, Senators Mark Warner and Tim Kaine, Congressman Morgan Griffith; State Senators John Edwards and Ben Chafin, and Delegates Joseph Yost, Nick Rush, and Sam Rasoul have lent their support.

¹ Amtrak (2013), *Station Program and Planning Guidelines*. Retrieved from: www.greatamericanstations.com.

3.2 POTENTIAL NRV LOCATIONS FOR A PASSENGER RAIL STATION

The New River Valley Metropolitan Planning Organization's Technical Advisory Committee (TAC) established the methodology for site scoring. In general, sites needed to be a minimum of 5 acres in order to accommodate the station, 1'000 foot-long platform, 200+ parking spaces, and regional transit hub. Through the study process established by the TAC, final scoring revealed the following ranking:

1. **NORTH FRANKLIN WEST, SITE 8A-B:** located in Christiansburg, offers 21.5 acres and 2,800 feet of track frontage. The site offers the highest proximity to potential ridership, excellent proximity to the existing transportation system, and consistency with local planning. Less than desirable characteristics of the site include: approximately 40% of the site is located within the floodplain. Additionally, the Town of Christiansburg has existing infrastructure that will need to be relocated as a component of the project.
2. **NORTH FRANKLIN EAST, SITE 9A:** located in Christiansburg, offers 10.05 acres and 1,248 feet of track frontage. The site offers the highest proximity to job access and low income populations. Despite having one of the higher number of parcels to assemble, all affected property owners indicated their willingness to cooperate during the planning process in writing. Less than desirable characteristics of the site include: steep topography, inconsistency with local planning, and a water main may need to be relocated.
3. **WEST MAIN OPEN, SITE 4A-E:** located in Radford, offers 6.3 acres and 1,098 feet of track frontage. The site offers the highest proximity to population and employment (activity centers) within a 15-mile radius and households with 1 vehicle or less. Less than desirable characteristics of the site include: located adjacent to a spur track that is approximately 1-mile from the main line, and proximity to potential ridership is considerably lower than the top two sites.
4. **NORTH OF RANDOLPH PARK, SITE 2:** located in Dublin, offers 10.47 acres and 1,260 feet of track frontage. The site offers the highest overall site capacity and flexibility score and is located within 1 mile of Interstate 81. Less than desirable characteristics of the site include: highest proximity to threatened or endangered species, and is within proximity to approximately 53% of the total population and employment within 15-miles, compared to the top performing site. This site was not selected to move into the final scoring phase.
5. **EAST MAIN/NORTH OF DEPOT, SITE 1C:** located in downtown Pulaski, offers 6.17 acres and 1,780 feet of track frontage. The site offers one of the longest stretches of property adjacent to the main line. Less than desirable characteristics of the site include: approximately 20% of the site is located within the floodplain, and is in proximity to approximately 48% of the total population and employment within 15-miles, compared to the top performing site. The site was not selected to move into the final scoring phase.
6. **CAMBRIA VACANT BUSINESS, SITE 9B:** located in Christiansburg, offers 4.02 acres and 1,137 feet of track frontage. The site offers relatively good proximity to Activity Centers. Less than desirable characteristics included: property availability, majority of the site located within the floodplain, and inconsistency with local planning. The site was not selected to move into the final scoring phase.



Created by NRVRC. 2015. Source: Virginia Information Technologies Agency.



3.2.1 Identifying the Best Location

New River Valley partners began to identify potential passenger rail stop locations by initiating communication with Amtrak and the Virginia Department of Rail and Public Transportation (DRPT) in March 2015. Identifying all potential stop locations in the region was the next step of the planning process. In total, 29 unique sites were identified during the initial phase by TAC representatives with knowledge of land in their community. Before initiating a more detailed site analysis, TAC representatives selected nine locations for Phase 1 review. Based on Phase 1 scoring, three sites were selected to move into Phase 2 (final phase) of the analysis. The scoring criteria, methodology, and value for each phase is below.

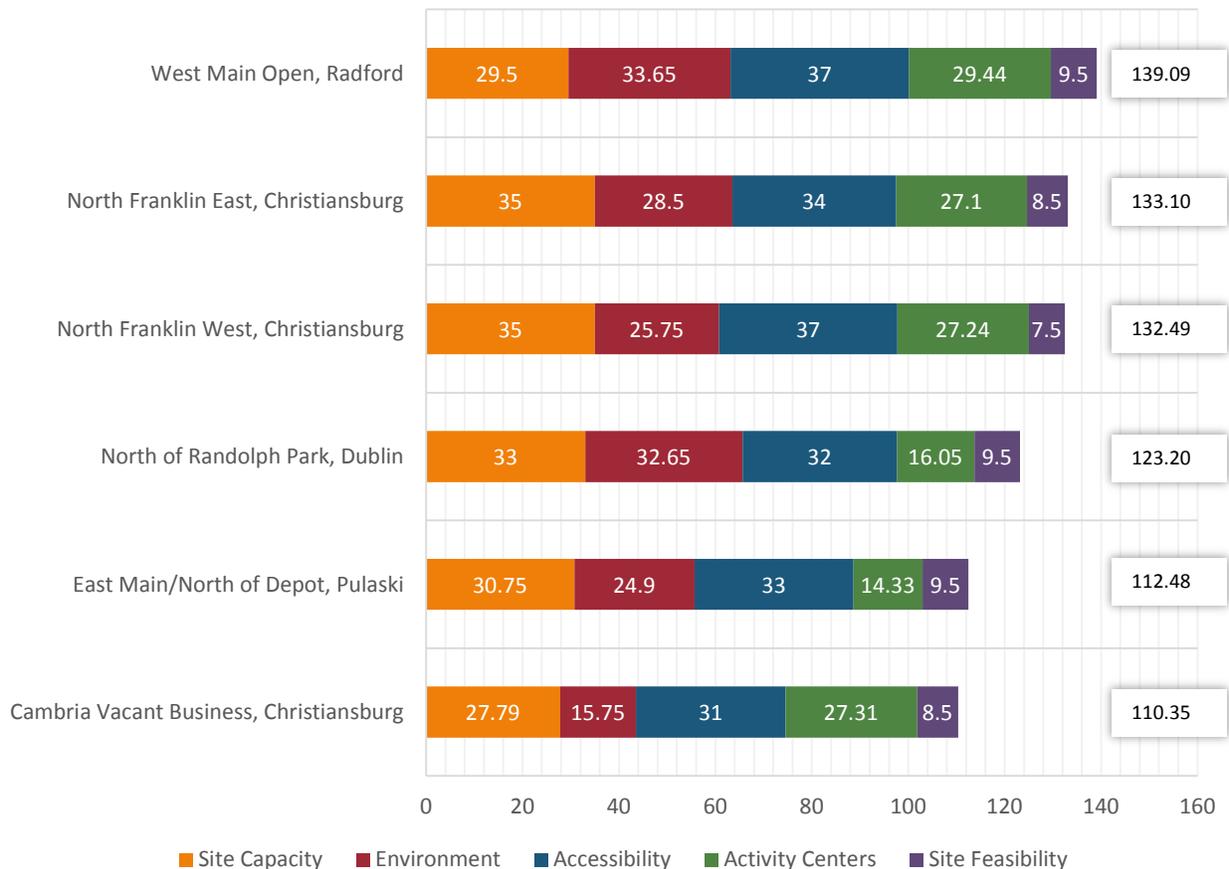
PHASE 1A			
<i>CATEGORY</i>	<i>CRITERIA DESCRIPTION</i>	<i>SCORING</i>	<i>VALUE</i>
<i>Site Capacity and Flexibility</i>	Proximity to primary rail	5 points if adjacent to main line, 3 points if 1 mile or less, 1 point otherwise	5
	Proximity to CoSS	5 points if less than 1 mile, -0.25 points for every 0.25 miles over 1 mile	5
	Space	10 points if 5 acres or more, acreage x2 down to 3.51 acres, less than 3.5 acres = 0 points	10
	Track frontage	10 points if 1,000 feet or more, track length divided by 100 otherwise	10
	Availability/Ownership	5 points if owned by local government or written permission from owner, 3 points if primarily vacant w/2 owners or less, 0 points otherwise	5
<i>Environment</i>	Potential displacement	3 points if 0 impacts; 2 points if vacant, available, or no more than 1 home/business; 1 point otherwise	3
	Floodplain	10 points if 0 impacts, 7 points if 25% or less, 3 points if more than 25% but less than 50%, and 0 points otherwise	10
	Migratory birds	3 points for lowest score, 3*(lowest impact/impact) otherwise	3
	Threatened/endangered species	5 points if 0 impacts, 3 points if simple mitigation, 0 points otherwise	5
	Historical resources	3 points if 0 impacts, -0.25 points each, 0.5 point low score	3
	Open Space/conservation easement	3 points if 0 impacts, 3*(lowest impact/impact) otherwise	3
	Agriculture district	3 points if 0 impacts, 3*(lowest impact/impact) otherwise	3
	Hazardous materials	5 points if 0 impacts, 3 points if potential encroachment, 1 point if difficult mitigation	5
TOTALS			70

*Note: CoSS is an acronym for Corridors of Statewide Significance.

PHASE 1B			
<i>CATEGORY</i>	<i>CRITERIA DESCRIPTION</i>	<i>SCORING</i>	<i>VALUE</i>
<i>Land Use and Accessibility</i>	Consistency with local Comprehensive Plan	10 points if yes, 7 points if Council willing to amend, 0 points otherwise	10
	Proximity to transit	10 points if available adjacent to property; 7 points if located within "go anywhere;" 5 points if identified in a future plan; 0 points otherwise	10
	Proximity to bike/pedestrian	5 points if located on or adjacent to property; 3 points if planned; 0 points otherwise	5
	Proximity to water	3 points if located on or adjacent to property; 1 point if planned or located within 600 feet; 0 points otherwise	3
	Proximity to sewer		3
	Proximity to power		3
	Proximity to internet		3
<i>Activity Centers</i>	Proximity to population + employment within 15-miles	30 points for highest score, 30*(impact/highest impact) otherwise	30
<i>Site Feasibility</i>	Percentage of property prime for construction	10*percentage of site prime for development and/or redevelopment	10
TOTALS			77

*Note: Three of the initial nine sites were removed from consideration due to challenges that could not be mitigated.

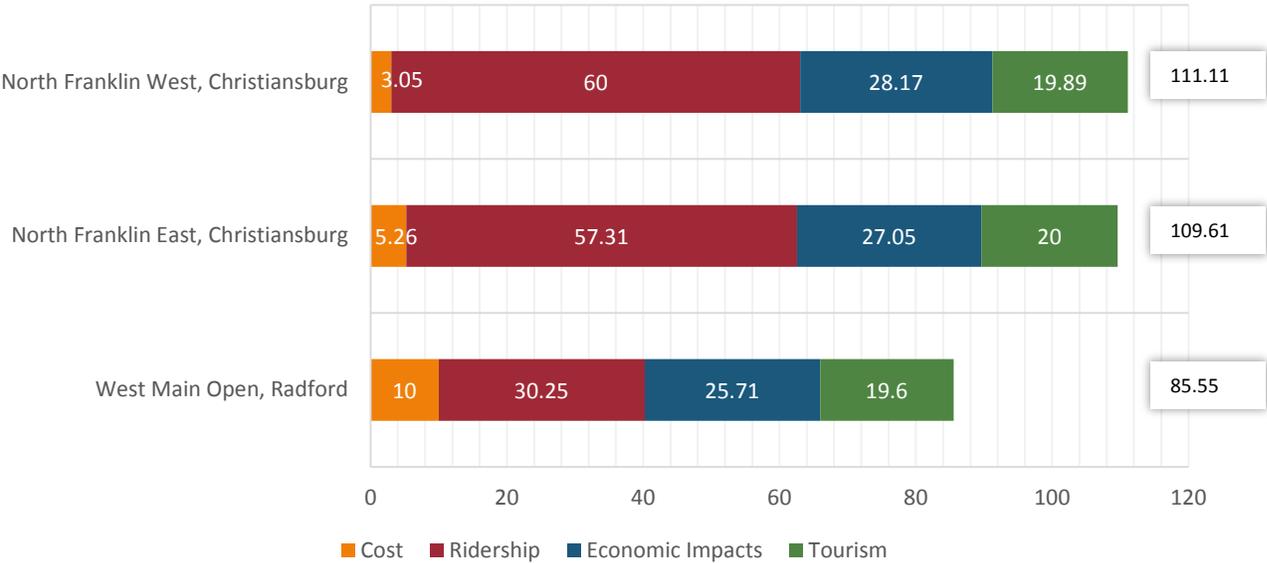
PHASE 1 RESULTS



PHASE 2 (FINAL)			
<i>CATEGORY</i>	<i>CRITERIA DESCRIPTION</i>	<i>SCORING</i>	<i>VALUE</i>
<i>Cost</i>	Low Cost	10 points lowest cost, 10*(lowest cost/cost) otherwise	10
<i>Ridership</i>	Proximity to 750,000 potential trips	Maximum points for closest proximity to number of trips; percentage based on number of trips at same radius otherwise. Example: Site A accumulates 250,000 trips at 2.3 miles. Site B has 125,000 trips at 2.3 miles. Site A = 12 points, Site B = 6 points.	30
	Proximity to 500,000 potential trips		18
	Proximity to 250,000 potential trips		12
<i>Economic Impacts</i>	Job accessibility within a 60-minute drive	9 points for highest score, 9*(impact/highest impact) otherwise	9
	Total commuting to points north	7.5 points for highest score, 7.5*(impact/highest impact) otherwise	7.5
	Development potential on or immediately adjacent to property	3 points for highest score, 3*(impact/highest impact) otherwise	3
	Development potential within a 10-mile radius	3 points for highest score, 3*(impact/highest impact) otherwise	3
	Proximity to households with 1 vehicle or less	4.5 points for highest score, 4.5*(impact/highest impact) otherwise	4.5
	Proximity to low income households	3 points for highest score, 3*(impact/highest impact) otherwise	3
<i>Tourism</i>	Household entertainment expenditures	20 points for highest score, 20*(impact/highest impact) otherwise	20
TOTALS			120

*Note: Only top three sites of Phase 1 were scored with the criteria shown above.

PHASE 2 RESULTS

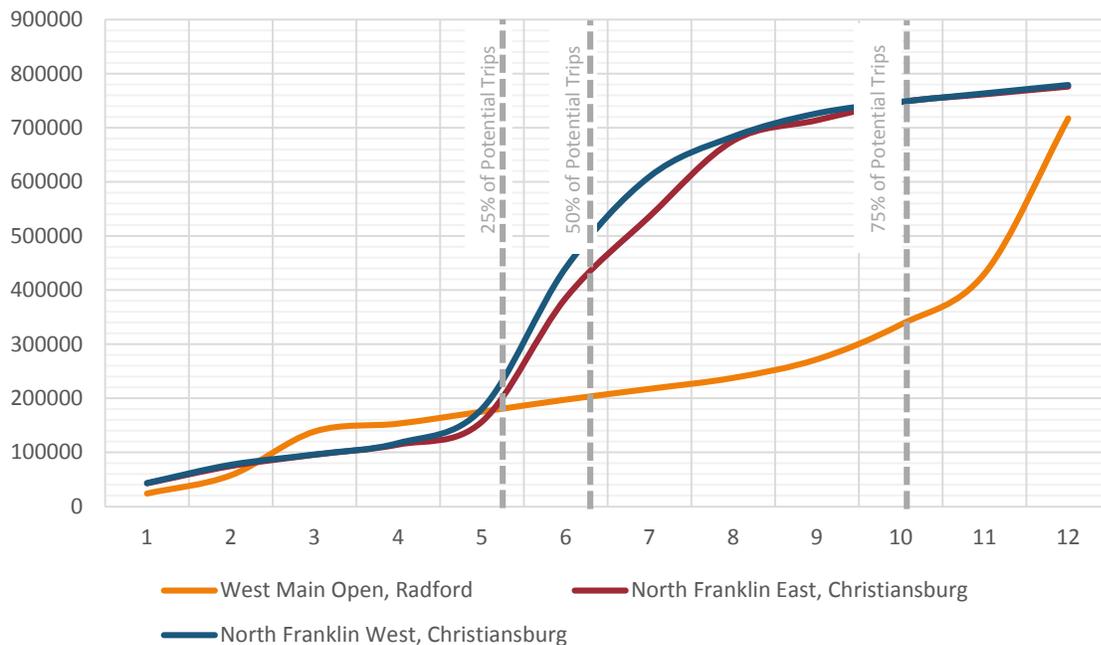


3.2.2 Determining Ridership

Much of the scoring criteria was developed utilizing data that is available through state and federal agencies. Amtrak develops Service & Ridership Fact Sheets to track annual ridership at existing stops; however, the Station Program and Planning Guide indicates that a region with our demographic profile may generate 20,000 – 100,000 annual trips. The guidelines further indicate that the presence of a college or university typically generates comparable ridership to more urbanized communities.

The New River Valley is home to Radford University and Virginia Tech. The two universities combined have more than 8,600 total personnel and more than 43,000 students. Each year both universities host thousands of visitors, including the families of current and prospective students, visiting faculty and professionals working with the universities, and attendees of conferences, sporting events and other activities. Amtrak’s Guide indicated early in the process that university related travel frequency is much higher than typical residents. The Passenger Rail Survey collected nearly 6,200 online responses and provided great insight into the travel habits of residents, faculty/staff, and students alike.

SITE PROXIMITY TO RIDERSHIP

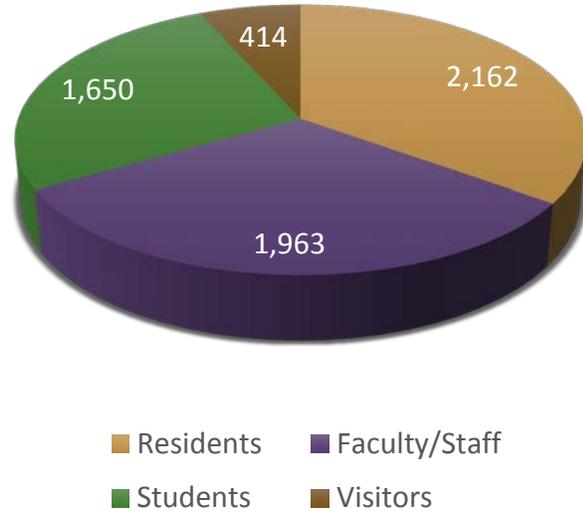


The table (above) indicates the differences in site proximity to potential north-bound trips generated from the region. According to Virginia Department of Transportation (VDOT) traffic data, the region generates nearly 1,000,000 annual trips to points north by vehicle alone. The traffic data was utilized to verify trip estimations for residents, faculty/staff, and students based on survey feedback. Combining the survey responses with decennial Census block-level data, the New River Valley Regional Commission developed a new geospatial database to assess potential advantages of locations closer to the universities. Trip frequencies were assigned to residents, faculty/staff, and students and distributed to block-level data.

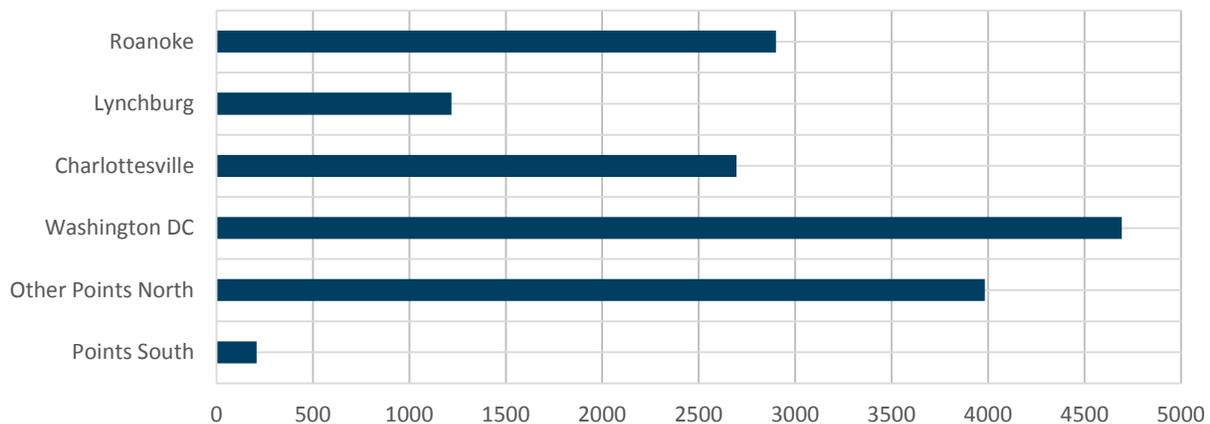
3.2.3 Measuring Demand

The New River Valley Regional Commission worked closely with local stakeholders to develop a survey to gauge ridership for the study. Originally launched on April 14, 2015, the survey captured 6,189 responses before closing on October 19, 2015. In general, the survey is reflective of 2.5% of residents, 3.8% of students, and 22.7% of faculty/staff. The response rate far exceeded initial goals and is attributed to the strong support for passenger rail in the region.

Survey feedback included information about travel habits, desirability to use a new service, importance of specific station amenities, preferences on departure/arrival, top destinations to points north, and how much potential users might be willing to pay. Top three amenities include: 1) restrooms, 2) long-term parking, and 3) on-site ticketing. The table below highlights the top destinations results.



TOP DESTINATIONS



In addition to the online survey, NRVRC staff and volunteers surveyed passengers at the Lynchburg Amtrak station in November 2015. According to Amtrak station personnel, an average of 50-60 passengers use the service on most weekdays, and 100-120 passengers use the services on Fridays and weekends. The train serves significantly more riders on holidays and the beginning and end of the semester at Liberty University.

Over 60% of passengers surveyed were from zip codes in central and southern Virginia, although 18% of respondents live in Washington DC or northeastern cities. Washington DC (35% of travelers), followed by New York City (16%) are the top destinations, with the remaining passengers travelling mainly to

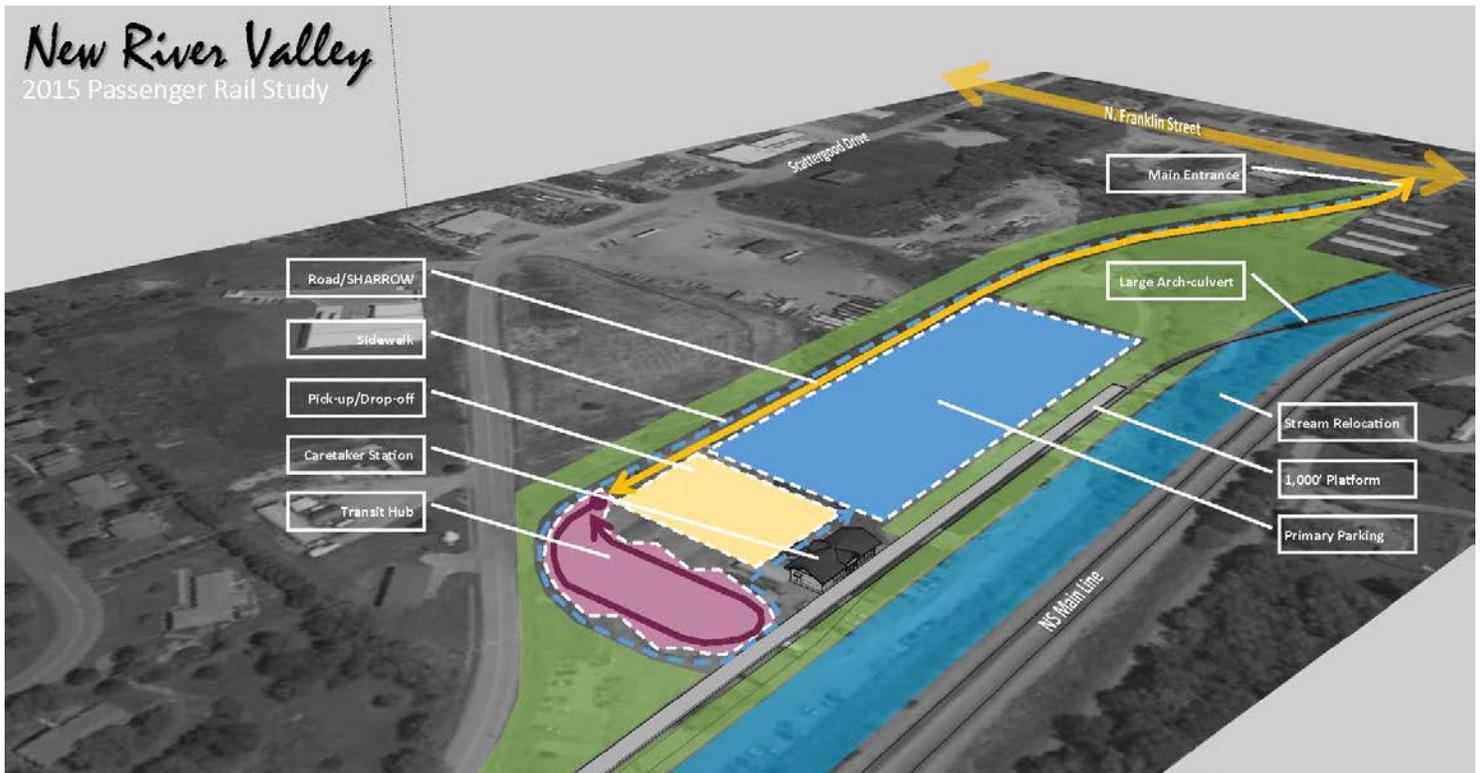
major northeastern cities. Nearly half of those surveyed indicated that they would be very likely (24%) or somewhat likely (24%) to use passenger rail services to visit the New River Valley.

Nearly half of surveyed passengers were travelling to visit family and friends, with the remaining passengers split evenly between business and vacation trips. Traveling by car is still the most frequently used mode amongst those surveyed. Passenger rail was the second most used option for those surveyed, with nearly half of all passengers using the train multiple times per year.

3.2.4 Conceptual Planning

The New River Valley Regional Commission facilitated a conceptual planning workshop on November 10, 2015. Representatives from the city of Radford, towns of Blacksburg and Christiansburg, Radford University, Blacksburg Transit, and the Blacksburg Partnership participated in the event. Workshop attendees were asked to focus on a single task at each of the final three locations: envision this site is selected as the region's passenger rail stop location, what are its needs?

Each meeting began on-site where participants were encouraged to walk the grounds and document findings. After spending 30-60 minutes on-site, participants met for an additional hour to share ideas regarding site access, location of station and platform, parking areas, and pick-up/drop-off areas for transit and vehicles. The graphic below illustrates the planning concept for Christiansburg Site 8A-B.



4 POTENTIAL ECONOMIC IMPACTS

In addition to the initial jobs and investment from the construction and ongoing operation of an Amtrak station in the New River Valley, passenger rail service would contribute to an array of other economic benefits for the region. These potential benefits include increased tourism and visitor spending, increased business activity in sectors that support tourism and transportation, and more reliable alternatives to highway travel for visitors, regional commuters and university students.

4.1 STATION IMPACTS

The construction of the station facilities and related infrastructure improvements creates a one-time economic impact during the construction period. The economic impact includes direct impacts from workers' wages and the purchases of goods and services in the region, as well as indirect and induced effects, as businesses and workers spend this new money at other businesses in the regional economy.

The initial cost of the station will vary based on the final site selection. Additionally, the final cost will vary depending on which station prototype is selected, amount of necessary parking, types of passenger amenities offered, and Amtrak operational needs. The New River Valley Regional Commission developed an economic impact model using an estimate of \$5 million for construction. Assuming that project spending is spread equally over two years, the station construction would support 37 jobs per year and generate more than \$1,220,000 in earnings.

The ongoing maintenance of the station would create several permanent jobs. Additionally, Amtrak would likely need to relocate a base crew to support new end of the line north-bound services. These new jobs would create an ongoing economic impact in the region, as workers spend a portion of their wages on other goods and services in the local economy. For example, assuming four jobs for Amtrak end of the line services and four jobs for station maintenance, three additional jobs would be created where these workers spend their earnings, generating more than \$510,000 in earnings.

4.2 VISITOR IMPACTS

The Virginia Tourism Corporation estimates that visitors spent approximately \$254,413,462 during trips to the New River Valley in 2014. The spending translates into \$5,699,909 in tax receipts and supports 2,523 jobs in hospitality related industries. VTC visitor surveys estimate that visitors spend an average of \$462 during their stay in the region (median spending was lower at \$230), at businesses such as restaurants, retail stores, hotels, gas stations, etc. Passenger rail service could draw even more visitors to the region, helping to grow these sectors of the regional economy.

Other regions analyzing the effects of passenger rail have estimated increases of 0.5% to 3% in annual visitors. A similar increase in the region would represent 2,500 to 15,000 additional tourists for the New River Valley each year. The impacts will vary depending on the number of visitors who may only visit the region because of Amtrak service; however, for every 10,000 visitors that the new service brings to the region, visitors will spend approximately \$1.92 million in the regional economy, creating 45 additional jobs in hospitality-related sectors, and generating more than \$890,000 in earnings for regional workers.

5 KEY STUDY FINDINGS & NEXT STEPS

- The New River Valley offers numerous locations for a potential passenger rail station.
 - A total of six sites meet or exceed minimum requirements to accommodate a Caretaker Station, 1,000 foot-long platform, 200+ parking spaces, and regional transit hub.
 - Each potential site location offers unique opportunities, such as: proximity to ridership, potential economic impacts, willing landowners, and site capacity.
 - Each potential site location offers unique challenges, such as: initial construction costs, necessary environmental mitigation, unwilling landowners, and proximity to ridership.
- A demand for passenger rail services exists in the New River Valley.
 - The demographic profile of the region meets Amtrak's criteria of a Caretaker Station, which typically serves 20,000 – 100,000 annual passengers.
 - Reviewing comparable service locations in Amtrak's 2014 Service & Ridership Fact Sheets for Virginia, West Virginia, and North Carolina, indicates that the region would generate 40,000 or more annual boardings/alightings.
 - To achieve 40,000 annual boardings/alightings, a 4% mode shift of NRV generated north-bound passenger vehicle trips would need to occur.
 - To achieve 40,000 annual boardings/alightings, survey respondents alone would need to choose passenger rail service 1 out of every 5 current north-bound trips.
- The idea of a new passenger rail service is strongly supported by the region's residents, university faculty/staff, and students.
 - 1,963 faculty/staff took the survey out of a total of 8,659 personnel, 22.7% response rate. Additionally, 3.8% of total students and 2.5% of residents took the survey.
 - Positive feedback includes: the need to provide more reliable access to points north; reducing the total number of household vehicles; less stressful way to travel as a family or with a large group; encourage more travel between schools for visiting friends; enhanced opportunities for economic development; compliment other existing modes of transportation (local transit, Megabus, etc.); many utilized the service through the 60's and would like to see it return; and a more appealing option for aging travelers. Overall, there was exceedingly more positive than negative feedback received through the online survey process.
- An operational analysis is needed to determine additional needs for a New River Valley Service.
 - Norfolk Southern will need to determine specific infrastructure needs between the proposed NRV location and Roanoke.
 - Amtrak will need to determine specific equipment and personnel needs.
 - The operational analysis is expected to cost \$350,000 - \$500,000 to develop.
- To stay up to date on the latest news and information, visit: www.nrvpassengerrail.org

***New River Valley
Metropolitan Planning Organization***

January 7, 2016

Resolution to approve the Passenger Rail Study for possible extension from Roanoke to the New River Valley.

On a motion by Michael Barber seconded by Anne McClung and carried with one abstention,

WHEREAS, the New River Valley Passenger Rail Committee through the New River Valley Regional Commission (NRVRC) requested the MPO to conduct a study for possible extension of passenger rail from Roanoke to the New River Valley; and

WHEREAS, VDRPT concurred that this study could be done by the MPO using FTA 5303 planning funds, and

WHEREAS, the MPO approved conducting this study at its August 7, 2014 meeting, and

WHEREAS, the NRV RC conducted this study for the MPO to determine the potential ridership as well as a preferred station location, and

WHEREAS, the study has been completed,

WHEREAS, the TAC has reviewed and recommends approval.

NOW, THEREFORE BE IT RESOLVED that:

The New River Valley MPO Policy Board approves the final report of the New River Valley Passenger Rail Study and recommends that one of the Christiansburg sites be the location of the rail station.


F. Craig Meadows, Chairman

Appendices

Working Committee	Appendix A
Working Committee	A1
NRVMPO Policy Board	A2
Project Management Team	A3
Passenger Rail Committee	Appendix B
Brief History of Passenger Rail in the New River Valley	Appendix C
Economic Impacts	Appendix D
Economic Impacts	D1
Travel Impacts	D2
Site Identification	Appendix E
Site Identification	E1
Selection Process	E2
Phase 1 Site Evaluation	Appendix F
Phase 1 Criteria – Initial Site Evaluation	F1
Site 1C: East Main, North Depot – Phase 1 Scoring	F2
Site 2: North Randolph Park – Phase 1 Scoring	F3
Site 4A-E: West Main Open – Phase 1 Scoring	F4
Site 5A-B: East Main, Downtown – Phase 1 Scoring	F5
Site 7: Peppers Ferry Open – Phase 1 Scoring	F6
Site 8A-B: North Franklin West – Phase 1 Scoring	F7
Site 9A: North Franklin East – Phase 1 Scoring	F8
Site 9B: Cambria Vacant Business – Phase 1 Scoring	F9
Site 10B: Depot Street Triangle – Phase 1 Scoring	F10
Phase 2 Site Evaluation	Appendix G
Phase 2 Criteria – Final Site Evaluation	G1
Site 4A-E: West Main Open – Phase 2 Scoring	G2
Site 8A-B: North Franklin West – Phase 2 Scoring	G3
Site 9A: North Franklin East – Phase 2 Scoring	G4
Public Survey	Appendix H
Online Survey Results	H1
In-Person Survey Results	H2
Trip Generation Data	Appendix I
Trip Generation Data Modeling	I1
Trip Generation Data Analysis	I2



Appendix A

Working Committee

A1 WORKING COMMITTEE

The NRV Passenger Rail Study was led by the New River Valley Metropolitan Planning Organization's Technical Advisory Committee. 2015 Membership included:

City of Radford		Federal Transit Administration
Basil Edwards		Tony Cho
Dr. Bruce Brown		NRV Community College
Town of Blacksburg		Fritz Streff
Andrew Warren		NRV Metropolitan Planning Organization
Brandon Steele		Dan Brugh
Town of Christiansburg		Dr. Erik Olsen – Chair
Randy Wingfield		Randal Gwinn
Wayne Nelson		NRV Regional Commission
Montgomery County		Elijah Sharp
Brian Hamilton		Pulaski Area Transit
Emily Gibson		Monica Musick
Pulaski County		Radford Transit
Andy McCready		Brian Booth
Jared Linkous		Radford University
Virginia Department of Transportation		James Perkins
David Clarke		VA Department of Rail & Public Transit
Michael Gray		Jay Lindsey
Blacksburg Transit		Virginia Tech
Tom Fox		Debby Freed
Federal Highway Administration		VT/Montgomery Regional Airport
Kevin Jones		Michael St. Jean

A2 NRVMPPO POLICY BOARD

The New River Valley Passenger Rail Study was formally reviewed and accepted by the New River Valley Metropolitan Planning Organization’s Policy Board. 2015 membership included:

Voting Membership		Non-Voting Membership
City of Radford		Blacksburg Transit
Basil Edwards		Tom Fox
Dr. Bruce Brown		Federal Highway Administration
Town of Blacksburg		Kevin Jones
Anne McClung		Federal Transit Administration
Michael Sutphin		Tony Cho
Town of Christiansburg		NRV Community College
Adam Carpenetti		Fritz Streff
Michael Barber		NRV Metropolitan Planning Organization
Montgomery County		Dan Brugh
Annette Perkins		NRV Regional Commission
Craig Meadows – Chair		Kevin Byrd
Pulaski County		Pulaski Area Transit
Danny Wilson		Monica Musick
Ranny O’Dell		Radford Transit
Virginia Department of Transportation		Brian Booth
Ken King		Radford University
		James Perkins
		VA Department of Rail & Public Transit
		Jay Lindsey
		Virginia Tech
		Steve Mouras
		VT/Montgomery Regional Airport
		Michael St. Jean

A3 PROJECT MANAGEMENT TEAM

The New River Valley Passenger Rail Study was developed by the New River Valley Regional Commission, under contract to the New River Valley Metropolitan Planning Organization. The project team included:

- Kevin R. Byrd, Executive Director
- Elijah N. Sharp, Director of Planning & Programs
- Patrick G. Burton, Senior Planner
- Patrick O’Brien, Regional Planner II
- Zachary D. Swick, Data Systems Manager



Appendix B

Passenger Rail Committee

B1 STEERING COMMITTEE

The NRV Passenger Rail Study is strongly supported by local, regional, and statewide partners. Since December 2013, the Blacksburg Partnership has convened the Passenger Rail Steering Committee and the membership includes:

- New River Valley Metropolitan Planning Organization
- New River Valley Regional Commission
- The Blacksburg Partnership
- Montgomery County, VA
- County of Pulaski, VA
- City of Radford, VA
- Town of Blacksburg, VA
- Town of Christiansburg, VA
- Town of Pulaski, VA
- Virginia Tech
- Radford University
- New River Valley Economic Development Alliance
- Montgomery County Chamber of Commerce
- The Virginia Tech Foundation
- Senator Tim Kaine
- Senator Mark Warner
- Congressman Morgan Griffith
- Senator Ben Chafin
- Senator John Edwards
- Delegate Nick Rush
- Delegate Joseph Yost



Appendix C

NRV Rail History

C1 BRIEF HISTORY OF PASSENGER RAIL IN THE NEW RIVER VALLEY



The New River Valley has a rich history of passenger rail service. The railroad reached what is now Radford in 1854, eventually providing a rail connection between Lynchburg and Bristol. Scheduled rail service on this line began in approximately 1856. The Norfolk & Western Railway's extension line from Radford west to the coalfields, along the south shore of the New River, reached the Town of Narrows in 1882. The Virginian Railway, along the north shore of the New River, began operation in 1909. The Norfolk & Western's passenger service offered a more fully developed menu of options, while the Virginian Railway offered limited passenger service.

To serve the coal mines at Merrimac, the Virginia Anthracite Coal and Railway Company, built a branch rail line in the early 1900s that connected with the Norfolk & Western at Cambria, which is now part of Christiansburg. This line was eventually extended to Blacksburg with passenger service between Cambria and Blacksburg commencing in the fall of 1904. The new passenger rail service was a significant improvement over the largely unimproved roads in existence at that time. Owing to the berries that grew along the route, the line was affectionately referred to by locals as the "Huckleberry". For many years, the Virginia Tech Corp of Cadets traveled to the annual VPI-VMI football game at Roanoke via passenger trains originating on the Huckleberry line. Norfolk & Western assumed ownership of the Huckleberry branch in 1912. Scheduled passenger service on the line ended in 1957. Special passenger trains operating over the Huckleberry line ceased after 1963.

At the height of World War II, there were approximately 12 passenger trains passing through Radford daily. Additional east-west passenger trains operated through Cambria/Christiansburg. In the mid-1960s, there were approximately a dozen passenger trains (6 each way) passing through Christiansburg on a daily basis. Named passenger trains such as the Birmingham Special, Pelican, and Tennessean operated north-south, while trains such as the Powhatan Arrow, Pocahontas, and Cavalier operated east-west.

In the era before the interstate highway system and widespread car ownership, passenger rail was a common means of intercity travel. New River Valley residents attending college in the 1960s note that college students were frequent users of passenger rail for travel between school and home. In the event of harsh winter weather conditions, passenger rail service often represented the only reliable means of transportation. Rail stations were important pieces of the community fabric. In communities such as Christiansburg, Pulaski, and Narrows, the rail stations which still exist are recognized as significant structures contributing to the architectural and historic character of designated historic districts.

Passenger rail travel declined through the late 1960s. Remaining passenger service operated by the Norfolk & Western Railway ended in 1971. Between 1975 and 1979, Amtrak offered limited passenger rail service operating east-west through the New River Valley on trains known as the Mountaineer (1975-1977) and the Hilltopper (1977-1979).

Interest in passenger rail service in the region was renewed in the mid-1990s when the Virginia General Assembly directed the Department of Rail and Public Transportation to study the feasibility of passenger rail service between Richmond and Bristol. Those studies indicated some promise among the findings and, over time, led to the extension of Amtrak Northeast Regional service to Lynchburg in 2009. This same service will be extended to Roanoke in 2017. Amtrak Northeast Regional service provides a connection to Washington Union Station via Norfolk Southern's Piedmont/Rt. 29 corridor.

Sources:

Chapter 7 - Blacksburg Transported: From Wagons to Jet Planes, by Patricia S Neumann, in *A Special Place for 200 Years: A History of Blacksburg, Virginia*. Clara B. Cox, Editor. Town of Blacksburg, 1998.

Personal Communication, William A. Aden, P.E., November 2015.

Personal Communication, Dr. Raymond D. Smoot, Jr., November 2015.

Personal Communication, Dr. John B. White, November 2015.

Radford Then and Now: A Pictorial History. Elmer D. Johnson, Editor. American Bicentennial Commission of Radford, Virginia, 1975.



Appendix D

Economic Impacts

D1 ECONOMIC IMPACTS

In addition to the jobs and investment from the construction and ongoing operation of an Amtrak station in the New River Valley, passenger rail service would contribute to an array of other economic benefits for the region. These potential benefits include increased tourism and visitor spending, increased business activity in sectors that support tourism and transportation, and reliable alternatives to highway travel for visitors, regional commuters and university students.

Station construction:

The construction of the station facilities and related infrastructure improvements creates a one-time economic impact during the construction period. The economic impact includes direct impacts from workers’ wages and the purchases of goods and services in the region, as well as indirect and induced effects, as businesses and workers spend this new money at other businesses in the regional economy.

The cost of construction for the station will vary based on the final selection of the site, as additional bridges or other infrastructure elements may be necessary. The basic station design anticipates a simple platform and sheltered waiting area, as well as parking and transit drop-off lanes. The economic impact model uses an estimate of \$5 million for the construction of these basic features, which will be needed regardless of which site is selected. Assuming that project spending is spread equally over two years, the station construction will support 37 jobs per year.

Spending on station construction per year	Total change in jobs	Total change in earnings
\$2,500,000	37	\$1,224,627

Station maintenance:

The ongoing maintenance of the station would create several jobs, in addition to the likely need to base a train cleaning crew at this station if it becomes the end of the line for service north. These new jobs create an ongoing economic impact in the region, as these workers spend these wages on other goods and services in the local economy. For example, the additional wages in the regional economy that results from adding four jobs to the region for the train’s crew, and four jobs for station maintenance, will support an additional 3 jobs at other businesses where these workers spend their earnings.

Number of new jobs at NRV Amtrak station	Total change in jobs	Total change in earnings
8	11	\$511,963

Increased visitor spending:

The Virginia Tourism Corporation estimates that visitors spent approximately \$254,413,462 during trips to the New River Valley in 2014, generating \$5,699,909 in tax receipts and supporting 2,523 jobs in hospitality related industries. VTC visitor surveys estimate that visitors spend an average of \$462 during their stay in the region (median spending was lower at \$230), at businesses such as restaurants, retail stores, hotels, gas stations, etc. Passenger rail service holds the promise of drawing more visitors to the region, helping to grow these sectors of the regional economy.

Approximately two-thirds of university students and regional residents who took the NRV Passenger Rail survey reported that their friends and family would be more likely to visit them in the New River Valley if passenger rail service was available. If this survey finding holds true for all regional residents, Amtrak service could bring an additional 113,000 visitors to the New River Valley, although not all visitors will come every year, or may decide to use another means of transportation to visit their friends in the region.

Similarly, travelers who do not have New River Valley connections may be more likely to visit the region if the option for train travel was available. Other regions analyzing the effects of passenger rail have estimated increases of 0.5% to 3% in visitors to their regional attractions as a result of passenger rail service, which would represent 2,500 to 15,000 additional tourists to the New River Valley each year. Given the preliminary estimate of 40,000 boardings and alightings at the station each year, the initial impact of additional visitors from a passenger rail station may be smaller, as potential visitors learn about the service and make plans to visit the region.

If Amtrak service results in 50,000 total additional visitors (i.e., both guests of residents and students, as well as tourists), who spend an average of \$193 during their trip, the result is an additional \$9,610,090 in visitor spending in the New River Valley, a 3.8% increase over current annual levels. The impacts will vary depending on the number of visitors who visit the region only because of Amtrak service, but for every 10,000 visitors that the new service brings to the region, the economic impact model estimates that these visitors will spend approximately \$1.92 million in the regional economy, creating 45 additional jobs in hospitality-related sectors.

Spending per 10,000 visitors to the NRV	Change in jobs	Change in earnings
\$1,922,018	45	\$892,634

Station-related business development:

The NRV Amtrak station will create opportunities for businesses that provide services to travelers, such as hotels, restaurants, car rental agencies, etc. Existing businesses can expand to provide these services, but the benefit from a location near the station may result in the development of new businesses. The economic impacts of job creation in these sectors are largely included in those predicted in the visitor spending model, shown above. The table below lists average employment and earnings of businesses in select hospitality sectors that may locate near the station.

Type of business	Number of establishments in NRV	Average jobs per establishment	Average earnings per job
Hotels and Motels	35	18	\$21,757
Full-Service Restaurants	120	24	\$16,693
Limited-Service Restaurants	127	20	\$13,985
Gas Stations/ Convenience Stores	73	8	\$19,860

Increased property values:

Another potential impact of a passenger rail station in the New River Valley is an increase in property values for areas near the station in particular, and in the region more generally as a result of this added amenity. As noted above, station traffic may be sufficient to generate businesses that would need a location near the station. If the areas near the station are zoned appropriately, any unused parcels may become more desirable for hospitality-related businesses.

D2 TRAVEL IMPACTS

Other communities have estimated potential economic benefits from the introduction of passenger rail service through the reduction in the use of personal vehicles, as travelers take the train instead of driving. These benefits include reduced pollution and health-related costs, reduced congestion resulting in time and fuel savings for commuters, and reduced accidents and related property damage and injury costs.

Increased options for university-related travel:

The New River Valley is home to Virginia Tech and Radford University, which enroll nearly 40,000 students, and employ over 9,000 faculty and staff. University professors and students travel frequently to other areas of the state for business or visiting home, especially the Washington DC area. More than 13,000 university students' families live in the Northern Virginia/DC metro area, and another 2,800+ students hail from the northeastern states along the popular Amtrak route between Washington DC and Boston¹. Survey results indicate a high likelihood that students would use the service to visit home, and their friends and families would use it to visit the New River Valley.

In addition, the universities host thousands of visitors each year, including the families of current and prospective students, visiting faculty and professionals working with the universities, and attendees at conferences, sports and other events. All of these groups can benefit from another means of transportation to and from these centers of activity. An alternative to interstate travel is especially urgent for holidays, football games, and other high-volume travel events, when overcrowding often results in accidents and traffic jams on Interstate 81.

A variety of sources indicate the scale of potential demand for trips from the New River Valley that Amtrak service may help to serve.

Student and faculty travel

- The Zimride ride-sharing service organized by Virginia Tech records over 1,800 request for rides to Northern Virginia in 2013-14².
- Radford University and Virginia Tech students bought 5,769 tickets for weekend bus service to Northern Virginia during the 2014-15 school year³.
- Over 90% of surveyed faculty indicated they would use AMTRAK service to visit Washington DC at least once per year. Nearly 17% of university faculty surveyed said they travel out of the region on business more than once per month, many visiting Virginia Tech campuses or federal agencies in the Washington area.

¹ Analysis of Virginia Tech and Radford University student 'home' zip code data for AY 2014

² Zimride ridesharing service trip data, 2013-14

³ Home Ride bus ticket sales data, 2014-15 school year

University events

- Virginia Tech and Radford University graduate nearly 11,000 students annually, bringing thousands of visitors to graduation ceremonies each year.
- Virginia Tech hosts 6+ home football games each year, with each game attracting an average of 30,000+ fans from outside the region to Blacksburg⁴.
- Radford University estimates that sports and special events (summer camps, cultural events, etc.) bring approximately 30,000 visitors to the region each year⁵.

⁴ 'Economic Impact of Virginia Tech Football,' Virginia Tech Office of Economic Development, 2015.

⁵ 'Radford University Economic Impact,' New River Valley Planning District Commission, 2015.

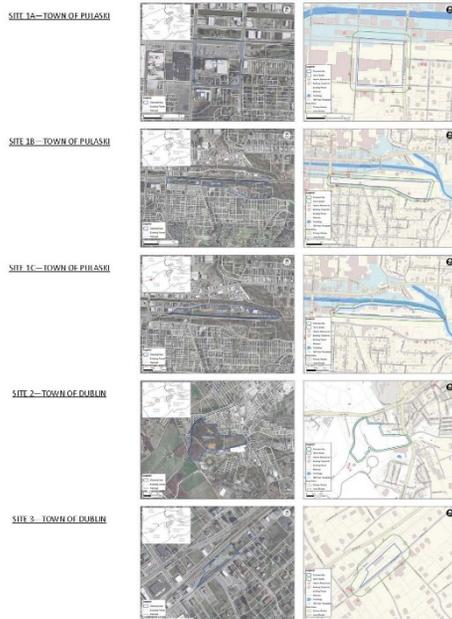
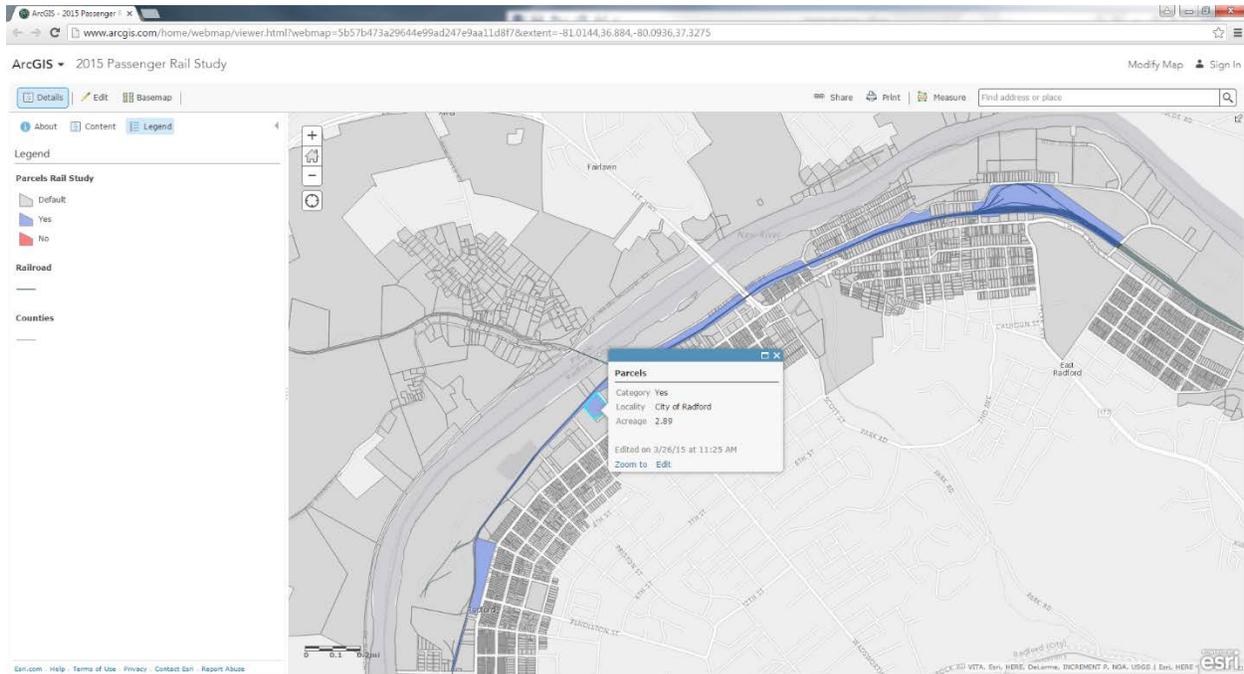


Appendix E

Site Identification

E1 SITE IDENTIFICATION

March 26, 2015 the New River Valley Metropolitan Planning Organization’s Technical Advisory Committee reviewed Amtrak’s Station Program and Planning Guidelines and sample site plans to determine site characteristics. The Committee utilized ArcGIS Online to interactively identify 29 unique parcels (or combinations of parcels) across the New River Valley region (example shown below).



April 16, 2015 the Committee reviewed preliminary environmental reports, historical resources located on or immediately adjacent to potential site, floodplain, and existing property ownership data. Each representative was asked to identify their top three site locations and one location to be removed from consideration. The votes were cast by applying stickers to evaluation boards (sample 1 of 5 shown left).

A total of 9 locations were selected to move into Phase 1 analysis. The Commission met 1-on-1 with each county, town, and city representatives to confirm site information for Phase 1 criteria. The site selection process is highlighted in Section E2 of the Passenger Rail Study Appendix. Phase 1 Site Evaluations and associated scoring is provided in Section F1.

New River Valley

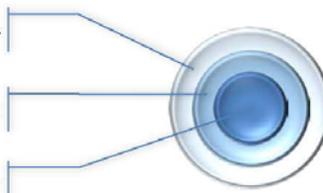
2015 Passenger Rail Study

Site Selection Discussion

Phase 1: Identify All Potential Sites

Phase 2: Detailed Site Evaluation

Phase 3: Site Selection



Phase 1 Criteria:

This Phase will incorporate all known locations along the Crescent Corridor. Initial criteria will include, but not be limited to:

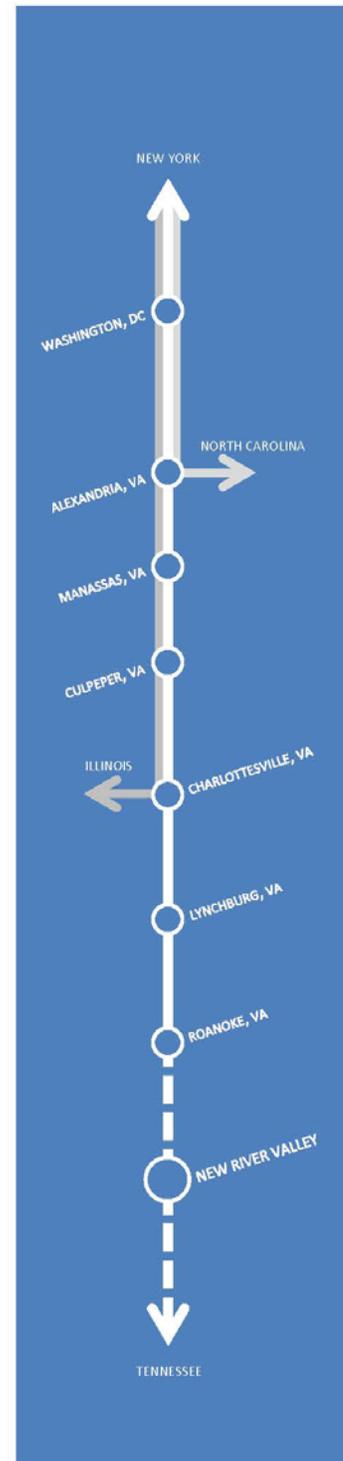
- Proximity to rail corridor
- Proximity to primary road network
- Space for station + platform + pick-up/drop-off (1.5 acres)
- Space for parking (2 acres, 250 spaces/40,000* Boardings + Alightings)
- Space for transit (1.5 acres, Gateway loop for buses & vans)
- Availability/Ownership
- Potential business/residential displacement
- Known cultural/historical resources
- Proximity to habitat, natural resources, and floodplain
- Landuse consistency with local planning
- Existing transportation system and connectivity to activity centers
- Existing accessibility to utilities
- Site capacity and flexibility

*Boardings & Alightings based on Amtrak Station Program and Planning Guidelines and interpolating 2014 VA/NC data: Greensboro/134,191, Charlottesville/132,410, Lynchburg/86,302, Durham/83,090, High Point/38,573, Ashland/27,077.

Phase 2 Criteria:

This Phase of criteria will be applied to three locations, selected by the MPOTAC. The criteria shall include, but not be limited to:

- Concept-level cost estimates
- Potential ridership and financial performance
- Economic impacts
- Tourism opportunities





Appendix F

Phase 1 Site Evaluation

F1 PHASE 1 CRITERIA – INITIAL SITE EVALUATION

PHASE 1A			
<i>CATEGORY</i>	<i>CRITERIA DESCRIPTION</i>	<i>SCORING</i>	<i>VALUE</i>
<i>Site Capacity and Flexibility</i>	Proximity to primary rail	5 points if adjacent to main line, 3 points if 1 mile or less, 1 point otherwise	5
	Proximity to CoSS	5 points if less than 1 mile, -0.25 points for every 0.25 miles over 1 mile	5
	Space	10 points if 5 acres or more, acreage x2 down to 3.51 acres, less than 3.5 acres = 0 points	10
	Track frontage	10 points if 1,000 feet or more, track length divided by 100 otherwise	10
	Availability/Ownership	5 points if owned by local government or written permission from owner, 3 points if primarily vacant w/2 owners or less, 0 points otherwise	5
Notes: Pulaski and Montgomery County, City of Radford, and Town of Christiansburg iGIS			
<i>Environment</i>	Potential displacement	3 points if 0 impacts; 2 points if vacant, available, or no more than 1 home/business; 1 point otherwise	3
	Floodplain	10 points if 0 impacts, 7 points if 25% or less, 3 points if more than 25% but less than 50%, and 0 points otherwise	10
	Migratory birds	3 points for lowest score, 3*(lowest impact/impact) otherwise	3
	Threatened/endangered species	5 points if 0 impacts, 3 points if simple mitigation, 0 points otherwise	5
	Notes: US Fish and Wildlife Service IPaC Trust Resource Report. Species found on 9 locations included Mitchell’s Satyr Butterfly, Indiana and Northern Long-eared Bat, Virginia Big-eared Bat, Virginia Fringed Mountain Snail, and Roanoke Logperch. Mitchell’s Satyr Butterfly is typically found in Floyd County. Adjacent counties, such as Pulaski and Floyd, show up in the database. As a result, mitigation difficulty is assumed to be low. The Indiana and Northern Long-eared Bat mitigation can be difficult. Particularly when trees greater than 3 inches in diameter are present, construction is restricted during the summer months (April 15 th – September 15 th). If site is located near a cave the restricted cutting season can be extended through November 15 th . When cutting less than 20 trees an emergency survey can be performed (30 minutes before sunset and 1 hour after). If no bats are seen trees may be cut that night or the next day. Virginia Big-eared Bat mitigation difficulty is not as heavily regulated by federal project funding, mitigation difficulty is medium. Virginia Fringed Mountain Snail mitigation would be the most difficult. The species is currently only located along a 70 meter stretch of the New River (only place in the world). Sites not located immediately adjacent to known location should not require mitigation. Roanoke Logperch is only located within the Roanoke River basin. Construction is not permitted during spawning season (March 15 th – June 30 th). If conditions are optimal, more extensive mitigation measures ESC and stormwater quality must be implemented. Sites not located immediately adjacent to the Roanoke River should not require mitigation.		
	Historical resources	3 points if 0 impacts, -0.25 points each, 0.5 point low score	3
Notes: Virginia Cultural Resource Information System. Report identified potential historic resources located on potential passenger rail site or on a parcel immediately adjacent to potential site (within viewshed).			

	Open Space/conservation easement	3 points if 0 impacts, 3*(lowest impact/impact) otherwise	3
	Agriculture district	3 points if 0 impacts, 3*(lowest impact/impact) otherwise	3
	Hazardous materials	5 points if 0 impacts, 3 points if potential encroachment, 1 point if difficult mitigation	5
			TOTALS
			70

PHASE 1B			
<i>CATEGORY</i>	<i>CRITERIA DESCRIPTION</i>	<i>SCORING</i>	<i>VALUE</i>
<i>Land Use and Accessibility</i>	Consistency with local Comprehensive Plan	10 points if yes, 7 points if Council willing to amend, 0 points otherwise	10
	Notes: Local Comprehensive Plan review. High score awarded if existing/Future land use of potential property identified as commercial, business, or industrial.		
	Proximity to transit	10 points if available adjacent to property; 7 points if located within "go anywhere;" 5 points if identified in a future plan; 0 points otherwise	10
	Proximity to bike/pedestrian	5 points if located on or adjacent to property; 3 points if planned; 0 points otherwise	5
	Proximity to water	3 points if located on or adjacent to property; 1 point if planned or located within 600 feet; 0 points otherwise	3
	Proximity to sewer		3
	Proximity to power		3
	Proximity to internet		3
<i>Activity Centers</i>	Proximity to population + employment within 15-miles	30 points for highest score, 30*(impact/highest impact) otherwise	30
	Notes: US Census OnTheMAp, 2011 employment data. American Community Survey 2009-2013 5-Year Summary housing data. NRVRC 15-mile radius "as crow flies," total all intersecting Census Block Group or Block Level data (whichever is finer).		
<i>Site Feasibility</i>	Percentage of property prime for construction	10*percentage of site prime for development and/or redevelopment	10
			TOTALS
			77

Unless otherwise noted above, site characteristic information was reviewed during 1-on-1 meetings between the Commission and local stakeholders. Phase 1 final criteria relevance, scoring value/weight, and scoring methodology were reviewed individually on August 20, 2015 by the MPO Technical Advisory Committee. Phase 1 Criteria was approved on September 3, 2015.

F2 SITE 1C: EAST MAIN, NORTH DEPOT – PHASE 1 SCORING



Site Capacity and Flexibility					
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available
Measure	0 miles	3.25 miles	6.17 acres	1,780 feet	3 parcels 2 owners
Score	5	2.75	10	10	3

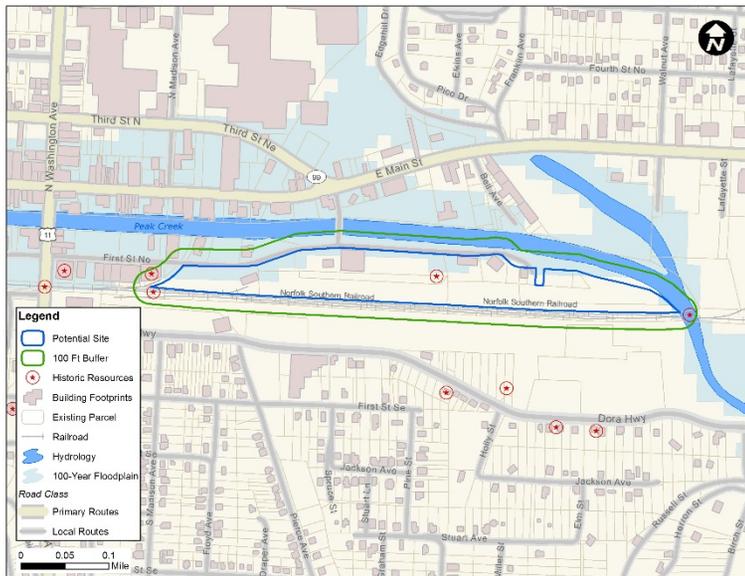
Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	none	23%	17	med/high	3	no	no	high
Score	3	7	2.65	3	2.25	3	3	1

Land Use and Accessibility							
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet
Measure	no	yes	planned	yes	yes	yes	no
Score	10	10	3	3	3	3	1

Activity Centers			
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles
Measure	86,292	21,271	107,563
Score	NA	NA	14.33

Site Feasibility	
Criteria	Percentage of site prime for construction
Measure	95%
Score	9.50

Site 1C: East Main, North Depot – Summary			
Low Score	High Score	Score Ranking	Site Score
0	139.09	5th	112.48



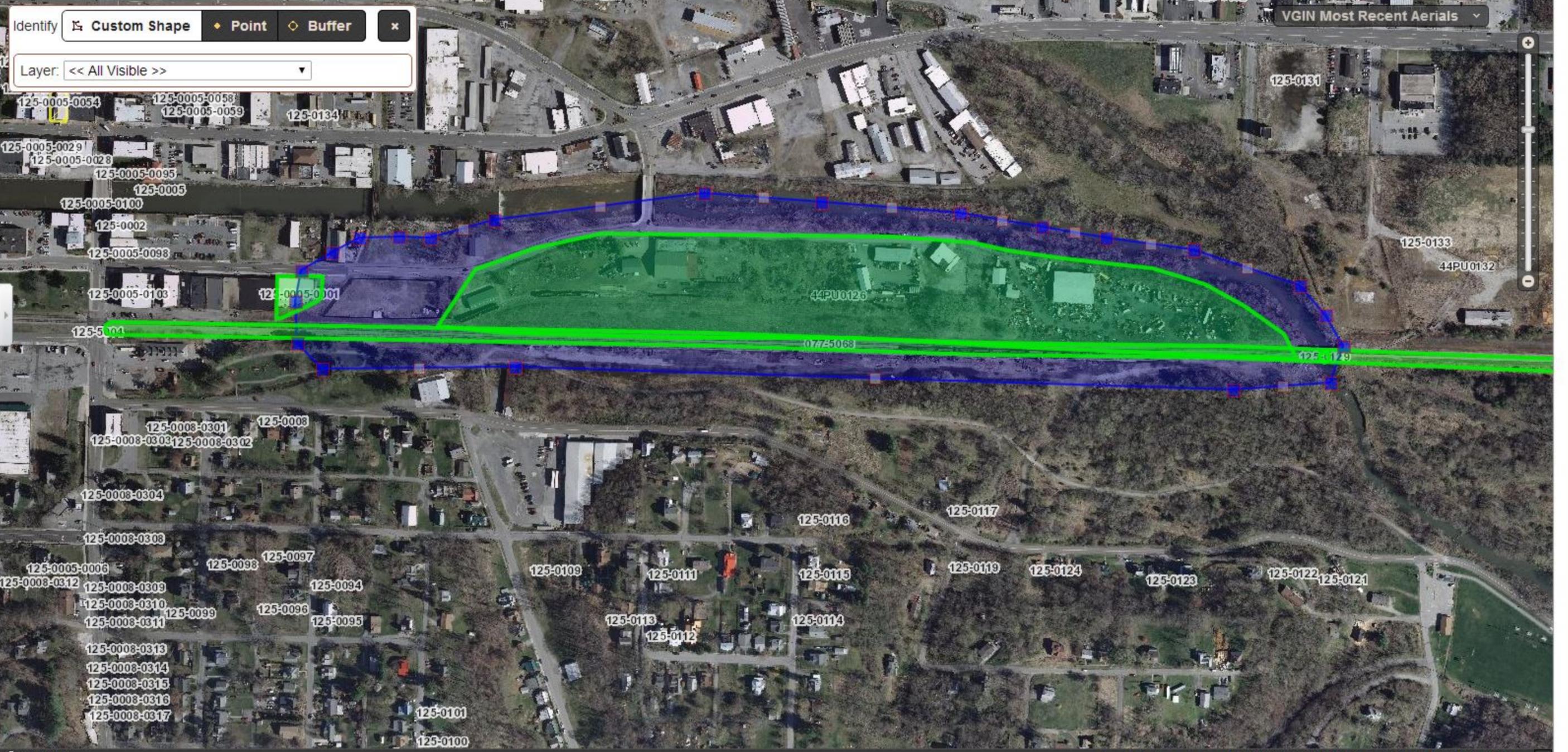
Map Layers **Results**

(1) Archaeology Labels

Tools Site Name

44PU0126
Site Name: Pulaski Iron Iron Company Furnace

[more info...](#)



(5) Architecture Labels

Per Page: 10

Map Layers **Results**

(1) Archaeology Labels

(5) Architecture Labels

Tools Property Names

077-5068
Property Names: Cripple Creek Extension (Historic), New River Trail State Park Historic District (Current), North Carolina Branch, Norfolk and Western Railway (Historic)
[more info...](#)

125-0005-0001
Property Names: Industrial Building, 92 First Street (Current)
[more info...](#)

125-0005
Property Names: Pulaski Commercial Historic District (Alternate Spelling), Pulaski Historic Commercial District (NRHP Listing)
[more info...](#)

125-0008
Property Names: Pulaski South Historic Residential and Industrial District (NRHP Listing), Pulaski South Residential and Industrial Historic District (Alternate Spelling)
[more info...](#)

125-0129
Property Names: Railroad Bridge, Peak Creek (Historic/Current)
[more info...](#)

1 of 1 Per Page: 10

Tools Print Bookmarks Map Manager Help

Address: Search

Identify Custom Shape Point Buffer

Layer: << All Visible >>

VGIN Most Recent Aerials

250 ft

Deg Min Sec ^ Lon (X): 80° 46' 27.64"W Lat (Y): 37° 02' 40.67"N

Site 1- Pulaski

IPaC Trust Resource Report

Generated September 10, 2015 03:14 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 1- Pulaski

PROJECT CODE

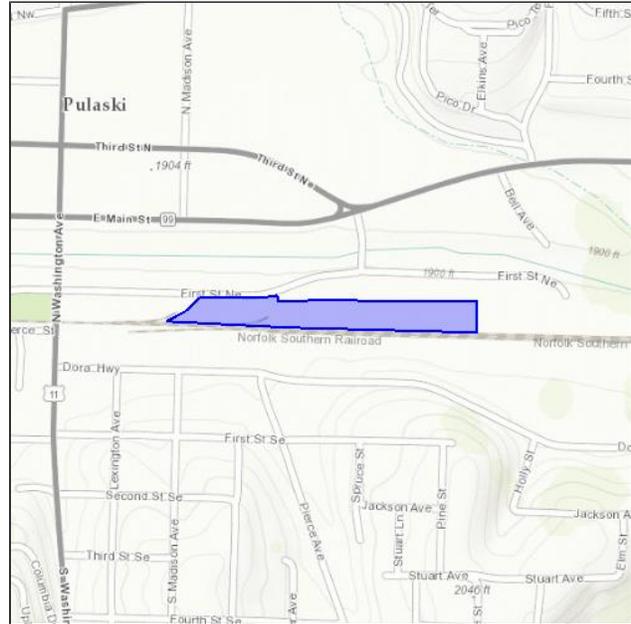
44NGY-U2MSZ-BT5E7-TIO2H-ZJH65E

LOCATION

Pulaski County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Virginia Big-eared Bat *Corynorhinus (=Plecotus) townsendii virginianus* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A080>

Snails

Virginia Fringed Mountain Snail *Polygyriscus virginianus* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=G00Z>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Canada Warbler <i>Wilsonia canadensis</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
<p>Henslow's Sparrow <i>Ammodramus henslowii</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B09D</p>	Bird of conservation concern
<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Year-round</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern

Wood Thrush *Hylocichla mustelina*

Season: Breeding

Bird of conservation concern

Worm Eating Warbler *Helminthos vermivorum*

Season: Breeding

Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Season: Breeding

Bird of conservation concern

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FR>

Refuges

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There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

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DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

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There are no wetlands identified in this project area

F3 SITE 2: NORTH RANDOLPH PARK – PHASE 1 SCORING



Site Capacity and Flexibility					
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available
Measure	0.15 miles	1.0 mile	10.47 acres	1,260 feet	3 parcels 2 owners
Score	3	5	10	10	5

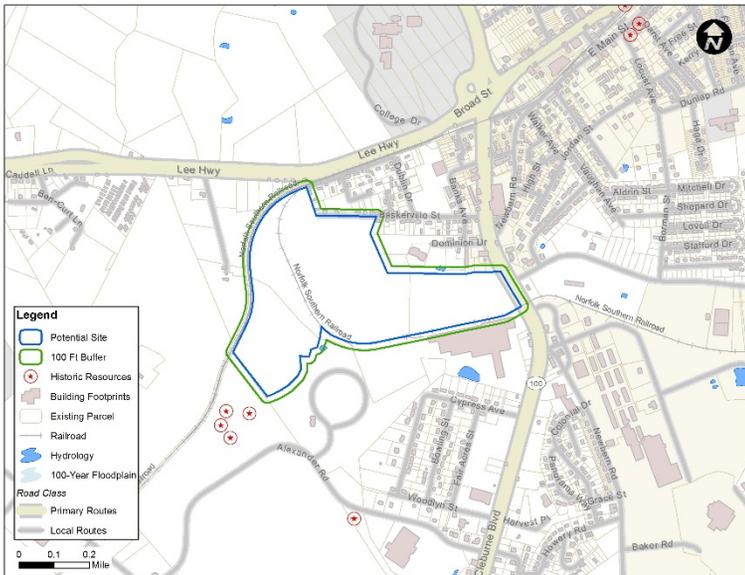
Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	none	0%	17	med/high	0	no	no	no
Score	3	10	2.65	3	3	3	3	5

Land Use and Accessibility							
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet
Measure	no	¼ mile	planned	yes	yes	yes	yes
Score	10	7	3	3	3	3	3

Activity Centers			
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles
Measure	98,478	21,958	120,436
Score	NA	NA	16.05

Site Feasibility	
Criteria	Percentage of site prime for construction
Measure	95%
Score	9.50

Site 2: North Randolph Park – Summary			
Low Score	High Score	Score Ranking	Site Score
0	139.09	4th	123.20



No Results

Identify Custom Shape Point Buffer x
Layer: << All Visible >>

44PU0094 44PU0100
44PU0098
44PU0099

500 ft

Deg Min Sec ^ Lon (X): 80° 42' 10.64"W Lat (Y): 37° 05' 36.68"N

Site 2- Dublin

IPaC Trust Resource Report

Generated September 10, 2015 03:08 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 2- Dublin

PROJECT CODE

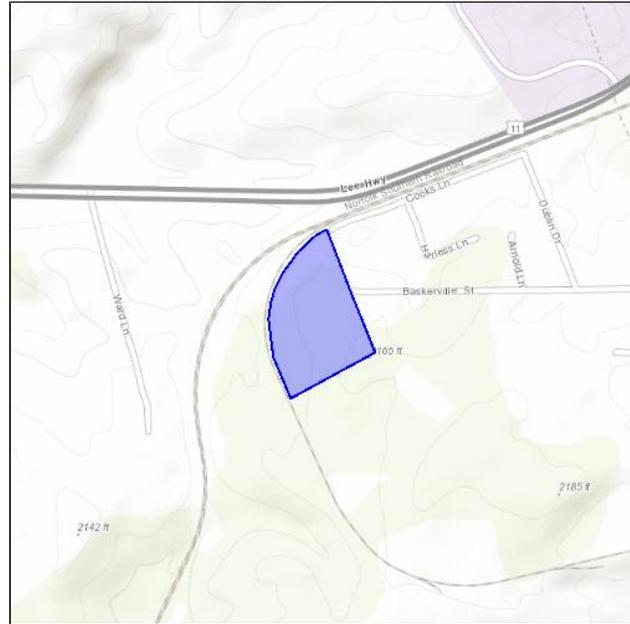
WZNHS-KXKSF-HTBDS-JVGAO-CCZBPE

LOCATION

Pulaski County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A0JE>

Virginia Big-eared Bat *Corynorhinus (=Plecotus) townsendii virginianus* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A080>

Snails

Virginia Fringed Mountain Snail *Polygyriscus virginianus* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=G00Z>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

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<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Canada Warbler <i>Wilsonia canadensis</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
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<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
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<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern

Wood Thrush *Hylocichla mustelina*

Season: Breeding

Bird of conservation concern

Worm Eating Warbler *Helminthos vermivorum*

Season: Breeding

Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Season: Breeding

Bird of conservation concern

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FR>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

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There are no wetlands identified in this project area

Site 2.2- Dublin

IPaC Trust Resource Report

Generated September 11, 2015 09:11 AM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 2.2- Dublin

PROJECT CODE

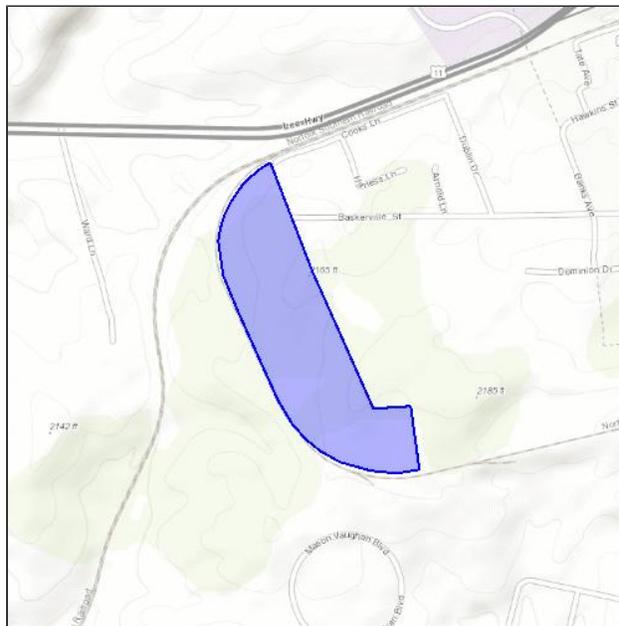
Z6UGL-UBKDB-AUTHJ-MUS2W-XN5TFA

LOCATION

Pulaski County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

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A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Virginia Big-eared Bat *Corynorhinus (=Plecotus) townsendii virginianus* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A080>

Snails

Virginia Fringed Mountain Snail *Polygyriscus virginianus* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=G00Z>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

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<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Canada Warbler <i>Wilsonia canadensis</i> Season: Breeding</p>	Bird of conservation concern
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Season: Breeding

Bird of conservation concern

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Season: Breeding

Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Season: Breeding

Bird of conservation concern

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FR>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

Refuge data is unavailable at this time.

Wetlands

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There are no wetlands identified in this project area

Site 2.3- Dublin

IPaC Trust Resource Report

Generated September 11, 2015 09:13 AM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 2.3- Dublin

PROJECT CODE

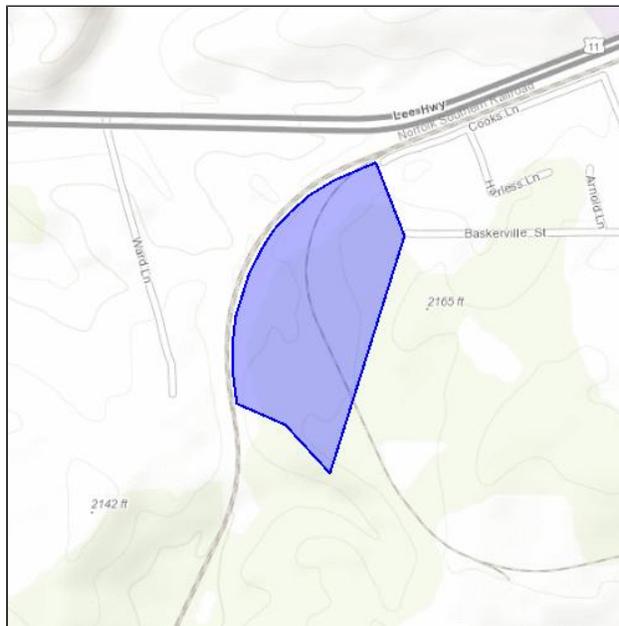
N2NEM-RN3PV-BTPEI-D44PX-6KMPNQ

LOCATION

Pulaski County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

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Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Virginia Big-eared Bat *Corynorhinus (=Plecotus) townsendii virginianus* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A080>

Snails

Virginia Fringed Mountain Snail *Polygyriscus virginianus* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=G00Z>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

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<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
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<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
<p>Henslow's Sparrow <i>Ammodramus henslowii</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B09D</p>	Bird of conservation concern
<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Year-round</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern

Wood Thrush *Hylocichla mustelina*

Season: Breeding

Bird of conservation concern

Worm Eating Warbler *Helminthos vermivorum*

Season: Breeding

Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Season: Breeding

Bird of conservation concern

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FR>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

Refuge data is unavailable at this time.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

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Wetland data is unavailable at this time.

F4 SITE 4A-E: WEST MAIN OPEN – PHASE 1 SCORING



Site Capacity and Flexibility					
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available
Measure	1.0 mile	2.5 miles	6.3 acres	1,021 feet	1 parcel 1 owner
Score	3	3.5	10	10	3

Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	1 bus.	0%	17	0	0	no	no	no
Score	2	10	2.65	5	3	3	3	5

Land Use and Accessibility							
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet
Measure	no	yes	yes	yes	yes	yes	yes
Score	10	10	5	3	3	3	3

Activity Centers			
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles
Measure	164,092	56,820	220,912
Score	NA	NA	29.44

Site Feasibility	
Criteria	Percentage of site prime for construction
Measure	95%
Score	9.50

Site 4A-E: West Main Open – Summary			
Low Score	High Score	Score Ranking	Site Score
0	139.09	1 st	139.09



No Results

Identify | **Custom Shape** | Point | Buffer | X

Layer: << All Visible >>

250 ft

Deg Min Sec ^ Lon (X): 80° 35' 26.07"W Lat (Y): 37° 07' 20.77"N

Site 3- Radford

IPaC Trust Resource Report

Generated September 10, 2015 03:09 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 3- Radford

PROJECT CODE

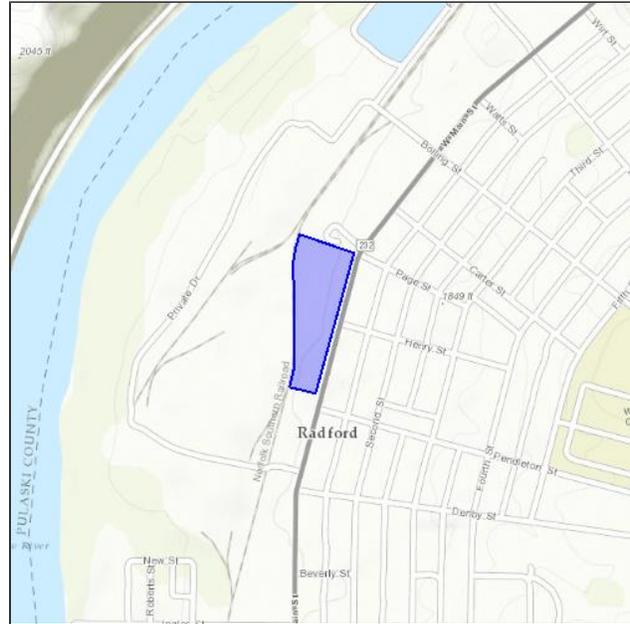
DGRSD-RXAOB-FDPIU-B4Q2Z-FQL5J4

LOCATION

Radford County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

There are no endangered species identified for this project area

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Canada Warbler <i>Wilsonia canadensis</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
<p>Henslow's Sparrow <i>Ammodramus henslowii</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B09D</p>	Bird of conservation concern
<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Year-round</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern

Wood Thrush *Hylocichla mustelina*

Season: Breeding

Bird of conservation concern

Worm Eating Warbler *Helminthos vermivorum*

Season: Breeding

Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Season: Breeding

Bird of conservation concern

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FR>

Refuges

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There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

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Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

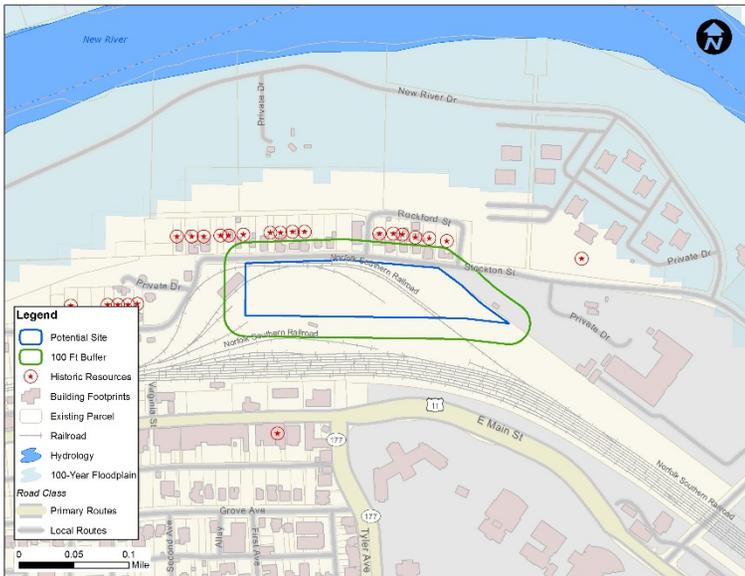
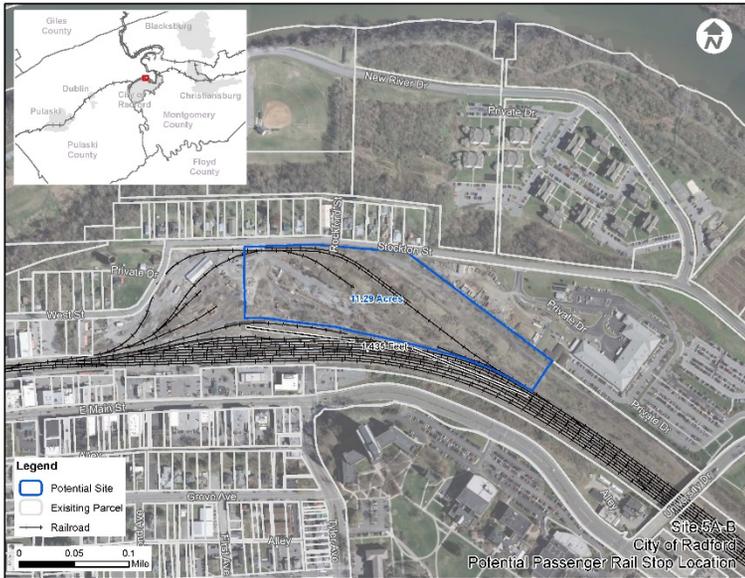
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

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There are no wetlands identified in this project area

F5 SITE 5A-B: EAST MAIN, DOWNTOWN – PHASE 1 SCORING



Site Capacity and Flexibility								
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available			
Measure	0 miles	4.25 miles	11.29 acres	1,435 feet	1 parcel 1 owner			
Score	5	1.75	10	10	0: Remove			
Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	1 bus.	0%	17	0	13	no	no	maybe
Score	1	10	2.65	5	0.5	3	3	3
Land Use and Accessibility								
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet	
Measure	no	yes	planned	yes	yes	yes	yes	
Score	10	10	3	3	3	3	3	
Activity Centers								
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles					
Measure	168,278	56,848	225,126					
Score	NA	NA	30					
Site Feasibility								
Criteria	Percentage of site prime for construction							
Measure	85%							
Score	8.50							
Site 5A-B: East Main, Downtown – Summary								
Low Score	High Score	Score Ranking	Site Score					
0	139.09	T9 th	0					

(16) Architecture Labels

Tools Property Names

- 126-0084-0166
Property Names: Block House (1012 Stockton Street) (Descriptive)
[more info...](#)
- 126-0084-0156
Property Names: Collins House (Historic)
[more info...](#)
- 126-0084
Property Names: East Radford Historic District (Current)
[more info...](#)
- 126-0084-0163
Property Names: Frame House (1044 Stockton Street) (Descriptive)
[more info...](#)
- 126-0084-0162
Property Names: Frame House (1048 Stockton Street) (Descriptive)
[more info...](#)
- 126-0084-0174
Property Names: Frame House (900 Stockton Street) (Descriptive)
[more info...](#)

1 of 1 Per Page: 25

Identify Custom Shape Point Buffer

Layer: << All Visible >>

VGIN Most Recent Aerials

44MY0257

126-0084-0166 126-0084-0167 126-0084-0171 126-0084-0172 126-0084-0174 126-0084-0163 126-0084-0162 126-0084-0179 126-0084-0180 126-0084-0158 126-0084-0160 126-0084-0161 126-0084-0164 126-0084-0165 126-0084-0166 126-0084-0167 126-0084-0168 126-0084-0169 126-0084-0170 126-0084-0171 126-0084-0172 126-0084-0173 126-0084-0174 126-0084-0175 126-0084-0176 126-0084-0177 126-0084-0178 126-0084-0179 126-0084-0180 126-0084-0181 126-0084-0182 126-0084-0183 126-0084-0184 126-0084-0185 126-0084-0186 126-0084-0187 126-0084-0188 126-0084-0189 126-0084-0190 126-0084-0191 126-0084-0192 126-0084-0193 126-0084-0194 126-0084-0195 126-0084-0196 126-0084-0197 126-0084-0198 126-0084-0199 126-0084-0200

125 ft

Deg Min Sec ^ Lon (X): 80° 33' 24.44"W Lat (Y): 37° 08' 40.40"N

Site 4- Radford

IPaC Trust Resource Report

Generated September 10, 2015 03:10 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 4- Radford

PROJECT CODE

C7JN5-LBS3J-FSTKE-J5KJB-53I3RY

LOCATION

Radford County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

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There are no endangered species identified for this project area

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

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<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Year-round</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern
<p>Wood Thrush <i>Hylocichla mustelina</i> Season: Breeding</p>	Bird of conservation concern

Worm Eating Warbler *Helmitheros vermivorum*

Season: Breeding

Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Season: Breeding

Bird of conservation concern

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B0FR>

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DATA EXCLUSIONS

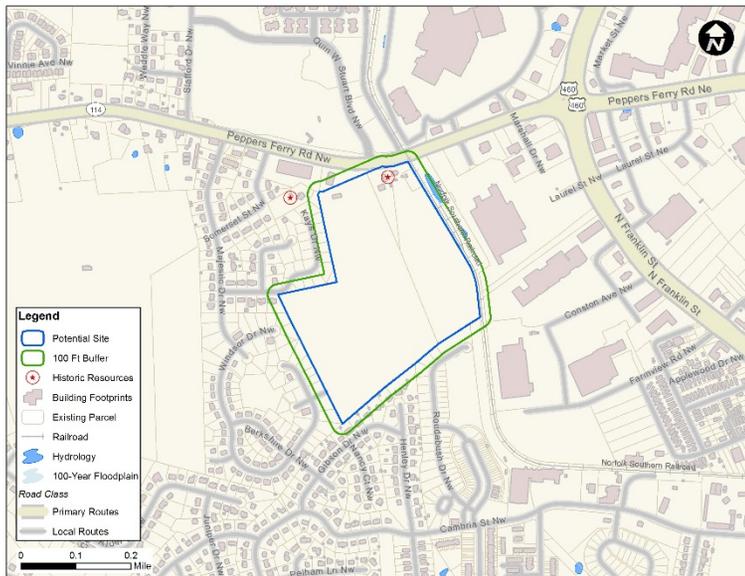
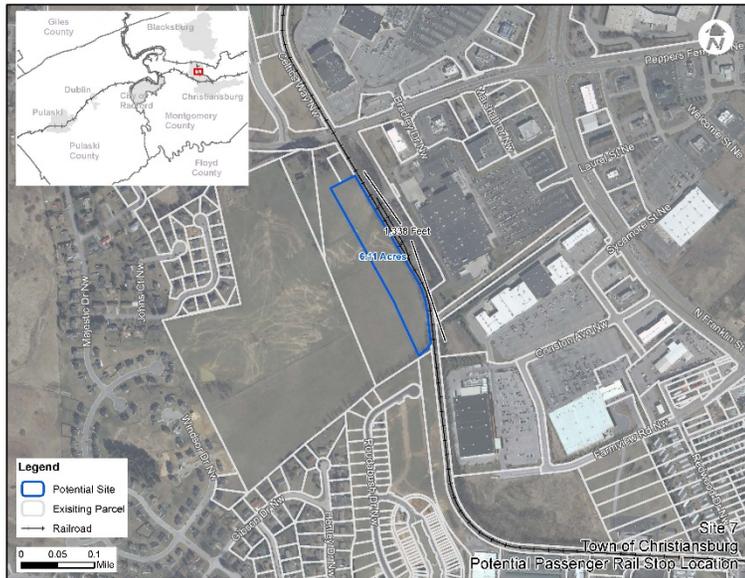
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There are no wetlands identified in this project area

F6 SITE 7: PEPPERS FERRY OPEN – PHASE 1 SCORING

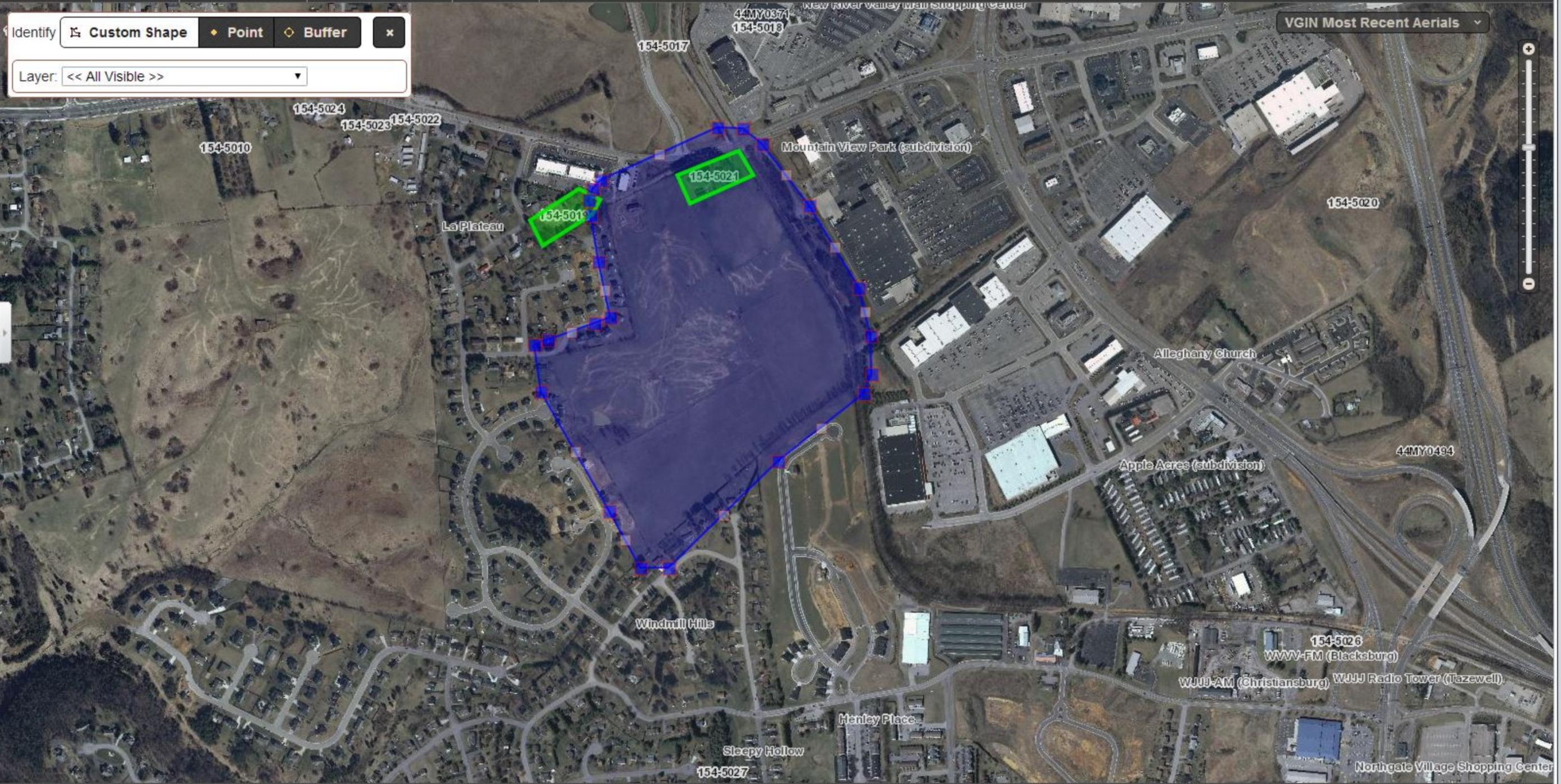


Site Capacity and Flexibility								
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available			
Measure	2.75 miles	1.0 mile	6.11 acres	1,338 feet	4 parcels 1 owner			
Score	1	5	10	10	0: Remove			
Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	none	0%	15	med	1	no	maybe	no
Score	3	10	3	3	2.75	3	3	5
Land Use and Accessibility								
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet	
Measure	no	yes	yes	yes	yes	yes	yes	
Score	0	10	5	3	3	3	3	
Activity Centers								
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles					
Measure	157,914	49,147	207,061					
Score	NA	NA	27.59					
Site Feasibility								
Criteria	Percentage of site prime for construction							
Measure	95%							
Score	9.50							
Site 7: Peppers Ferry Open – Summary								
Low Score	High Score	Score Ranking	Site Score					
0	139.09	T9 th	0					

(2) Architecture Labels

Tools Property Names

- 154-5019
Property Names: Frank Ridinger House, 450 Old Peppers Ferry Rd (Historic/Location)
[more info...](#)
- 154-5021
Property Names: House, 300 Peppers Ferry Road (Function/Location)
[more info...](#)



Site 5- Christiansburg

IPaC Trust Resource Report

Generated September 10, 2015 03:15 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 5- Christiansburg

PROJECT CODE

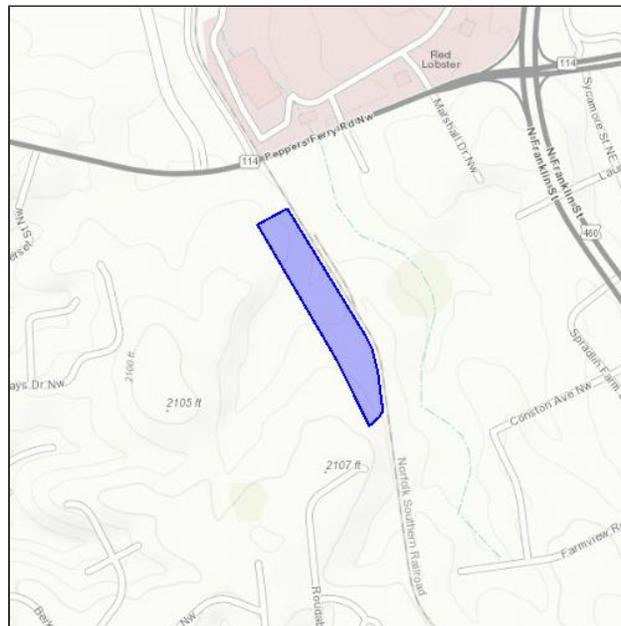
CXSEO-IPVSF-EYFO2-KVIOK-AUAMEA

LOCATION

Montgomery County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

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Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

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<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
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<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Year-round</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern
<p>Wood Thrush <i>Hylocichla mustelina</i> Season: Breeding</p>	Bird of conservation concern
<p>Worm Eating Warbler <i>Helmitheros vermivorum</i> Season: Breeding</p>	Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Bird of conservation concern

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FR>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

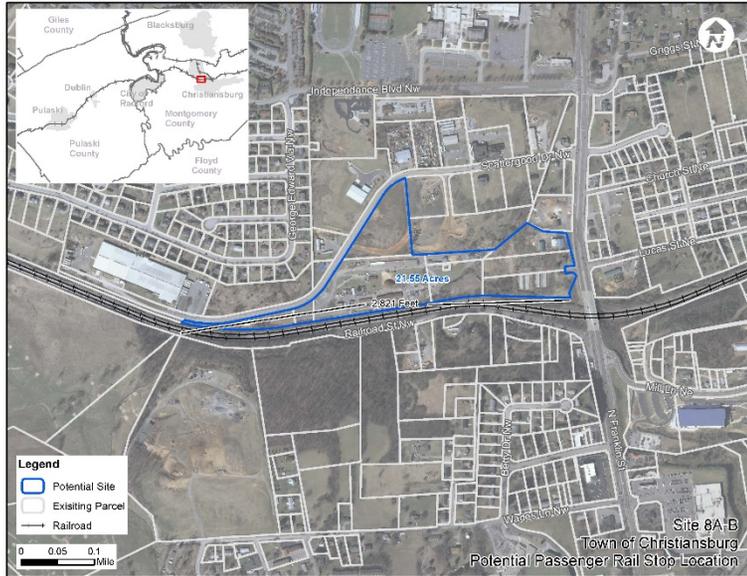
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.

F7 SITE 8A-B: NORTH FRANKLIN WEST – PHASE 1 SCORING



Site Capacity and Flexibility					
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available
Measure	0 miles	1.0 mile	21.5 acres	2,821 feet	8 parcels 3 owners
Score	5	5	10	10	5

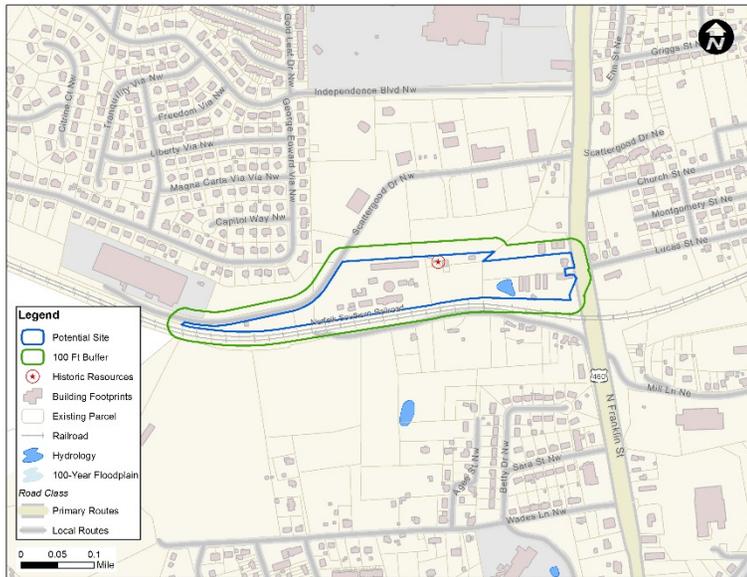
Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	none	44%	15	med	1	no	no	no
Score	3	3	3	3	2.75	3	3	5

Land Use and Accessibility							
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet
Measure	no	yes	yes	yes	yes	yes	yes
Score	10	10	5	3	3	3	3

Activity Centers			
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles
Measure	155,632	48,817	204,449
Score	NA	NA	27.24

Site Feasibility	
Criteria	Percentage of site prime for construction
Measure	75%
Score	7.50

Site 8A-B: North Franklin West – Summary			
Low Score	High Score	Score Ranking	Site Score
0	139.09	3 rd	132.49



(1) Archaeology Labels

Tools Site Name

44MY0351
Site Name: null
[less info...](#)

DHR_ID: [44MY0351 \(View Details\)](#)
ArchaeologySiteSurveyID: 31593
Other Dhr IDs: null
Site Name: null
Site Types: Cemetery
EvaluationStatus: null
Shape.STArea(): 2278.828125
Shape.STLength(): 180.20637529354735



Site 6- Christiansburg

IPaC Trust Resource Report

Generated September 10, 2015 03:13 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 6- Christiansburg

PROJECT CODE

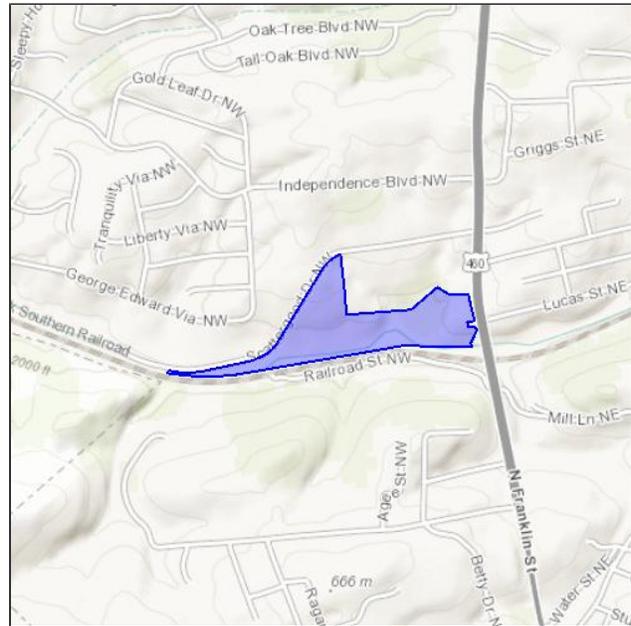
6VXMG-JKQKZ-CWJI2-AD7XL-KLLLJQ

LOCATION

Montgomery County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
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Yellow-bellied Sapsucker *sphyrapicus varius*

Bird of conservation concern

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FR>

Refuges

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Refuge data is unavailable at this time.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

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DATA EXCLUSIONS

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Wetland data is unavailable at this time.



Town of Christiansburg, Virginia 24073

100 East Main Street ~ Telephone 540-382-6128 ~ Fax 540-382-7338

September 10, 2015

ESTABLISHED
NOVEMBER 10, 1792

INCORPORATED
JANUARY 7, 1833

MAYOR
D. MICHAEL BARBER

COUNCIL MEMBERS
SAMUEL M. BISHOP
R. CORD HALL
STEVE HUPPERT
HENRY SHOWALTER
BRADFORD J. "BRAD" STIPES
JAMES W. "JIM" VANHOOZIER

TOWN MANAGER
BARRY D. HELMS

DIRECTOR OF
FINANCE/TOWN TREASURER
VALERIE L. TWEEDIE

CLERK OF COUNCIL
MICHELE M. STIPES

TOWN ATTORNEY
GUYNN & WADDELL, P.C.

Charles E Long
940 NORTH FRANKLIN ST
CHRISTIANSBURG VA 24073

RE: Rail Station Site Selection
940 NORTH FRANKLIN ST; Parcel ID #003584

Dear Mr. Long:

The Town of Christiansburg, in association with the New River Valley Metropolitan Planning Organization (MPO), is attempting to bring rail service back to the New River Valley. The MPO is comprised of localities in and including Montgomery County, Pulaski County and the City of Radford. The MPO Technical Advisory Committee is currently evaluating 9 potential rail station sites in Radford, Dublin, Pulaski and the Town of Christiansburg and will eventually select one preferred rail station site to begin the final operations study by Amtrak. The Town of Christiansburg has 5 potential station sites under consideration, one of which includes your property referenced above.

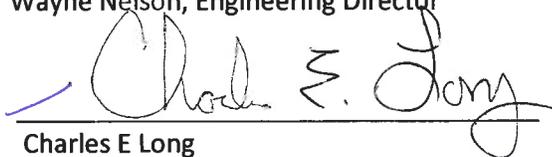
By signing below, you indicate your willingness for your property to be placed under further consideration as part of the MPO site evaluation process. This also indicates you understand this is not a firm commitment by you or the MPO but indicates only your willingness to allow the site evaluation process to continue. Should the site involving your property be selected, further discussion and negotiations would follow.

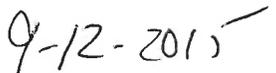
Should you have any further questions, please feel free to contact Randy Wingfield, Assistant Town Manager and MPO Representative, at 540-382-6128 ext. 1119. We will keep you informed when a final site location has been determined. On behalf of the Town of Christiansburg and the New River Valley MPO, we appreciate your cooperation in helping bring rail service back to the New River Valley.

Sincerely,


Barry D. Helms
Town Manager
Town of Christiansburg

cc: Randy Wingfield, Assistant Town Manager
Wayne Nelson, Engineering Director


Charles E Long
Signature


Date



ESTABLISHED
NOVEMBER 10, 1792

INCORPORATED
JANUARY 7, 1833

MAYOR
D. MICHAEL BARBER

COUNCIL MEMBERS
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TOWN MANAGER
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CLERK OF COUNCIL
MICHELE M. STIPES

TOWN ATTORNEY
GUYNN & WADDELL, P.C.

Town of Christiansburg, Virginia 24073

100 East Main Street ~ Telephone 540-382-6128 ~ Fax 540-382-7338

September 10, 2015

Kathy Kanode Stone
1742 WHITE OAK LN
CHRISTIANSBURG VA 24073

RE: Rail Station Site Selection
850 NORTH FRANKLIN ST; Parcel ID #004908
900 NORTH FRANKLIN ST; Parcel ID #010043

Dear Ms. Stone:

The Town of Christiansburg, in association with the New River Valley Metropolitan Planning Organization (MPO), is attempting to bring rail service back to the New River Valley. The MPO is comprised of localities in and including Montgomery County, Pulaski County and the City of Radford. The MPO Technical Advisory Committee is currently evaluating 9 potential rail station sites in Radford, Dublin, Pulaski and the Town of Christiansburg and will eventually select one preferred rail station site to begin the final operations study by Amtrak. The Town of Christiansburg has 5 potential station sites under consideration, one of which includes your properties referenced above.

By signing below, you indicate your willingness for your property to be placed under further consideration as part of the MPO site evaluation process. This also indicates you understand this is not a firm commitment by you or the MPO but indicates only your willingness to allow the site evaluation process to continue. Should the site involving your property be selected, further discussion and negotiations would follow.

Should you have any further questions, please feel free to contact Randy Wingfield, Assistant Town Manager and MPO Representative, at 540-382-6128 ext. 1119. We will keep you informed when a final site location has been determined. On behalf of the Town of Christiansburg and the New River Valley MPO, we appreciate your cooperation in helping bring rail service back to the New River Valley.

Sincerely,


Barry D. Helms
Town Manager
Town of Christiansburg

cc: Randy Wingfield, Assistant Town Manager
Wayne Nelson, Engineering Director


Kathy Kanode Stone
Signature


Date



ESTABLISHED
NOVEMBER 10, 1792

INCORPORATED
JANUARY 7, 1833

MAYOR
D. MICHAEL BARBER

COUNCIL MEMBERS
SAMUEL M. BISHOP
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TOWN ATTORNEY
GUYNN & WADDELL, P.C.

Town of Christiansburg, Virginia 24073

100 East Main Street ~ Telephone 540-382-6128 ~ Fax 540-382-7338

September 10, 2015

NRV Regional Water Authority
3515 PEPPERS FERRY RD
RADFORD VA 24141

RE: Rail Station Site Selection
Parcel ID #070083

To Whom It May Concern:

The Town of Christiansburg, in association with the New River Valley Metropolitan Planning Organization (MPO), is attempting to bring rail service back to the New River Valley. The MPO is comprised of localities in and including Montgomery County, Pulaski County and the City of Radford. The MPO Technical Advisory Committee is currently evaluating 9 potential rail station sites in Radford, Dublin, Pulaski and the Town of Christiansburg and will eventually select one preferred rail station site to begin the final operations study by Amtrak. The Town of Christiansburg has 5 potential station sites under consideration, one of which includes your property referenced above.

By signing below, you indicate your willingness for your property to be placed under further consideration as part of the MPO site evaluation process. This also indicates you understand this is not a firm commitment by you or the MPO but indicates only your willingness to allow the site evaluation process to continue. Should the site involving your property be selected, further discussion and negotiations would follow.

Should you have any further questions, please feel free to contact Randy Wingfield, Assistant Town Manager and MPO Representative, at 540-382-6128 ext. 1119. We will keep you informed when a final site location has been determined. On behalf of the Town of Christiansburg and the New River Valley MPO, we appreciate your cooperation in helping bring rail service back to the New River Valley.

Sincerely,

Barry D. Helms
Town Manager
Town of Christiansburg

cc: Randy Wingfield, Assistant Town Manager
Wayne Nelson, Engineering Director

NRV Regional Water Authority
Signature

09/11/2015

Date



ESTABLISHED
NOVEMBER 10, 1792

INCORPORATED
JANUARY 7, 1833

MAYOR
D. MICHAEL BARBER

COUNCIL MEMBERS
SAMUEL M. BISHOP
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STEVE HUPPERT
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TOWN MANAGER
BARRY D. HELMS

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FINANCE/TOWN TREASURER
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MICHELE M. STIPES

TOWN ATTORNEY
GUYNN & WADDELL, P.C.

Town of Christiansburg, Virginia 24073

100 East Main Street ~ Telephone 540-382-6128 ~ Fax 540-382-7338

September 15, 2015

New River Valley Planning District Commission
C/O Elijah N. Sharp, Director of Planning & Programs
6580 Valley Center Drive, Suite 124
Radford, VA 24141

RE: Rail Station Site Selection

Parcel ID #033384, Parcel ID #070354, Parcel ID #071283, Parcel ID #030261,
Parcel ID #032114, Parcel ID #180276 and Parcel ID #033539

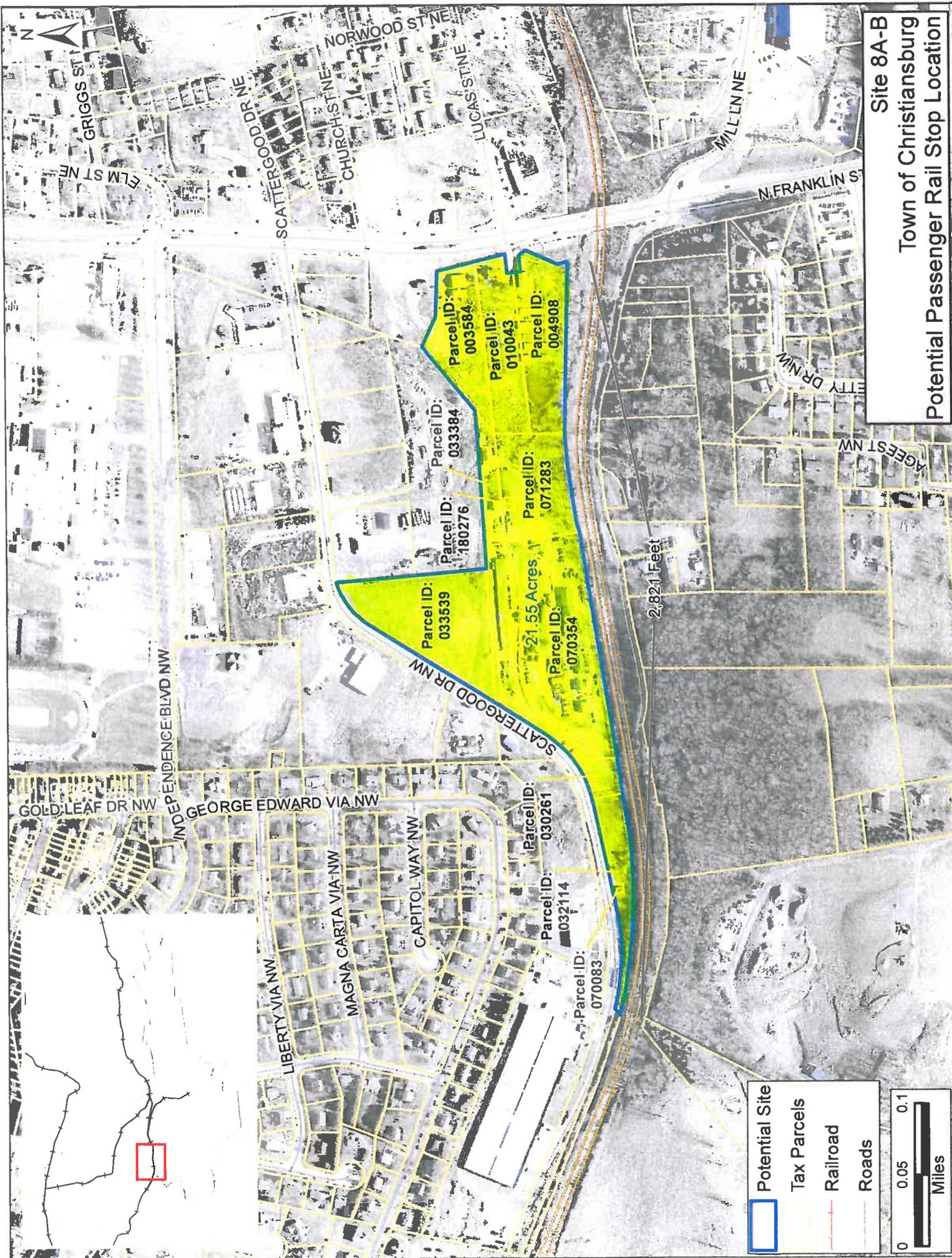
Dear Eli,

By my signature below and on behalf of the Christiansburg Town Council, I indicate the Town of Christiansburg's willingness for our properties indicated above to be placed under further consideration as part of the MPO site evaluation process. This also indicates our understanding this is not a firm commitment by us or the MPO but indicates only our willingness to allow the site evaluation process to continue. Should the site involving our property be selected, I understand further discussion and negotiations would follow.

Sincerely,


Barry D. Helms
Town Manager
Town of Christiansburg

cc: Randy Wingfield, Assistant Town Manager
Wayne Nelson, Engineering Director



Site 8A-B
Town of Christiansburg
Potential Passenger Rail Stop Location

Legend

- Potential Site
- Tax Parcels
- Railroad
- Roads



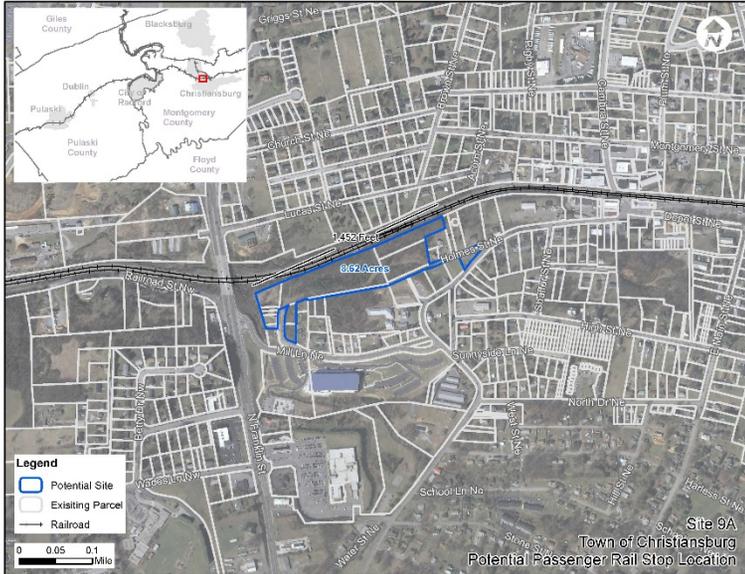
Parcel IDs:
Parcel ID: 033539
Parcel ID: 180276
Parcel ID: 033384
Parcel ID: 003584
Parcel ID: 010043
Parcel ID: 004908
Parcel ID: 071283
Parcel ID: 070354
Parcel ID: 030261
Parcel ID: 032114
Parcel ID: 070083

Streets:
GRIGGS ST
ELM ST NE
SCATTERGOOD DR NE
NORWOOD ST NE
CHURCH ST NE
LUCAS ST NE
MILL LN NE
N FRANKLIN ST
AGEST NW
LIBERTY DR NW
LIBERTY VIA NW
MAGNA CARTA VIA NW
CAPITOL WAY NW
GOLD LEAF DR NW
INDEPENDENCE BLVD NW
GEORGE EDWARD VIA NW
SCATTERGOOD DR NW

Other Labels:
2,821 Feet
21.55 Acres



F8 SITE 9A: NORTH FRANKLIN EAST – PHASE 1 SCORING



Site Capacity and Flexibility					
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available
Measure	0 miles	1.0 mile	8.6 acres	1,248 feet	5 parcels 3 owners
Score	5	5	10	10	5

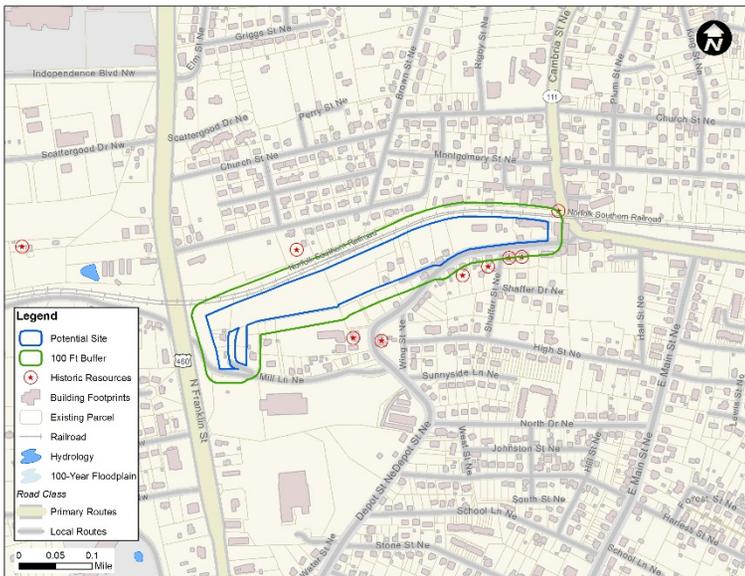
Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	1 res.	<1%	15	med	2	no	no	no
Score	2	7	3	3	2.5	3	3	5

Land Use and Accessibility							
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet
Measure	yes	yes	yes	yes	yes	yes	yes
Score	7	10	5	3	3	3	3

Activity Centers			
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles
Measure	155,259	48,109	203,368
Score	NA	NA	27.10

Site Feasibility	
Criteria	Percentage of site prime for construction
Measure	85%
Score	8.50

Site 9A: North Franklin East – Summary			
Low Score	High Score	Score Ranking	Site Score
0	139.09	2 nd	133.10



(7) Architecture Labels

Tools Property Names

- 154-0048
Property Names: Cambria Historic District (Descriptive)
[more info...](#)
- 154-0052
Property Names: House, 210 Lucas Street (Function/Location)
[more info...](#)
- 154-0048-0040
Property Names: House, 515 Depot Street (Function/Location)
[more info...](#)
- 154-0048-0038
Property Names: House, 535 Depot Street (Function/Location)
[more info...](#)
- 154-0048-0037
Property Names: House, 555 Depot Street (Function/Location)
[more info...](#)
- 154-0048-0036
Property Names: House, 565 Depot Street (Function/Location)
[more info...](#)

1 of 1 Per Page: 10

Identify Custom Shape Point Buffer

Layer: << All Visible >>

VGIN Most Recent Aerials

250 ft

Deg Min Sec ^ Lon (X): 80° 24' 26.29"W Lat (Y): 37° 08' 30.76"N

Site 7- Christiansburg

IPaC Trust Resource Report

Generated September 10, 2015 03:16 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 7- Christiansburg

PROJECT CODE

2SF3S-W3OQR-CKXPC-2BFIC-ZYDMNY

LOCATION

Montgomery County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

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A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Year-round</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern
<p>Wood Thrush <i>Hylocichla mustelina</i> Season: Breeding</p>	Bird of conservation concern
<p>Worm Eating Warbler <i>Helmitheros vermivorum</i> Season: Breeding</p>	Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Bird of conservation concern

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FR>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.



ESTABLISHED
NOVEMBER 10, 1792

INCORPORATED
JANUARY 7, 1833

MAYOR
D. MICHAEL BARBER

COUNCIL MEMBERS
SAMUEL M. BISHOP
R. CORD HALL
STEVE HUPPERT
HENRY SHOWALTER
BRADFORD J. "BRAD" STIPES
JAMES W. "JIM" VANHOOZIER

TOWN MANAGER
BARRY D. HELMS

DIRECTOR OF
FINANCE/TOWN TREASURER
VALERIE L. TWEEDIE

CLERK OF COUNCIL
MICHELE M. STIPES

TOWN ATTORNEY
GUYNN & WADDELL, P.C.

Town of Christiansburg, Virginia 24073

100 East Main Street ~ Telephone 540-382-6128 ~ Fax 540-382-7338

September 10, 2015

Mary Epperly
10 MILL LN
CHRISTIANSBURG VA 24073

RE: Parcel ID #021975, Parcel ID #006096, Parcel ID #006095, Parcel ID #006094 and
10 MILL LN; Parcel ID #006093

Dear. Ms. Epperly:

The Town of Christiansburg, in association with the New River Valley Metropolitan Planning Organization (MPO), is attempting to bring rail service back to the New River Valley. The MPO is comprised of localities in and including Montgomery County, Pulaski County and the City of Radford. The MPO Technical Advisory Committee is currently evaluating 9 potential rail station sites in Radford, Dublin, Pulaski and the Town of Christiansburg and will eventually select one preferred rail station site to begin the final operations study by Amtrak. The Town of Christiansburg has 5 potential station sites under consideration, one of which includes your properties referenced above.

By signing below, you indicate your willingness for your property to be placed under further consideration as part of the MPO site evaluation process. This also indicates you understand this is not a firm commitment by you or the MPO but indicates only your willingness to allow the site evaluation process to continue. Should the site involving your property be selected, further discussion and negotiations would follow.

Should you have any further questions, please feel free to contact Randy Wingfield, Assistant Town Manager and MPO Representative, at 540-382-6128 ext. 1119. We will keep you informed when a final site location has been determined. On behalf of the Town of Christiansburg and the New River Valley MPO, we appreciate your cooperation in helping bring rail service back to the New River Valley.

Sincerely,

Barry D. Helms
Town Manager
Town of Christiansburg

cc: Randy Wingfield, Assistant Town Manager
Wayne Nelson, Engineering Director

Mary Epperly
Signature

Sandra E. Shouse (POA)

Date



ESTABLISHED
NOVEMBER 10, 1792

INCORPORATED
JANUARY 7, 1833

MAYOR
D. MICHAEL BARBER

COUNCIL MEMBERS
SAMUEL M. BISHOP
R. CORD HALL
STEVE HUPPERT
HENRY SHOWALTER
BRADFORD J. "BRAD" STIPES
JAMES W. "JIM" VANHOOZIER

TOWN MANAGER
BARRY D. HELMS

DIRECTOR OF
FINANCE/TOWN TREASURER
VALERIE L. TWEEDIE

CLERK OF COUNCIL
MICHELE M. STIPES

TOWN ATTORNEY
GUYNN & WADDELL P.C.

Town of Christiansburg, Virginia 24073

100 East Main Street ~ Telephone 540-382-6128 ~ Fax 540-382-7338

September 10, 2015

Community Housing Partners Corporation
448 DEPOT ST NE
CHRISTIANSBURG VA 24073

RE: Rail Station Site Selection
Parcel ID #030256, Parcel ID #017062, Parcel ID #031098 and Parcel ID #031097

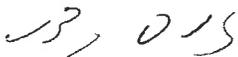
To Whom It May Concern:

The Town of Christiansburg, in association with the New River Valley Metropolitan Planning Organization (MPO), is attempting to bring rail service back to the New River Valley. The MPO is comprised of localities in and including Montgomery County, Pulaski County and the City of Radford. The MPO Technical Advisory Committee is currently evaluating 9 potential rail station sites in Radford, Dublin, Pulaski and the Town of Christiansburg and will eventually select one preferred rail station site to begin the final operations study by Amtrak. The Town of Christiansburg has 5 potential station sites under consideration, one of which includes your properties referenced above.

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Sincerely,


Barry D. Helms
Town Manager
Town of Christiansburg

cc: Randy Wingfield, Assistant Town Manager
Wayne Nelson, Engineering Director


Community Housing Partners Corporation
Signature


Date



ESTABLISHED
NOVEMBER 10, 1792

INCORPORATED
JANUARY 7, 1833

MAYOR
D. MICHAEL BARBER

COUNCIL MEMBERS
SAMUEL M. BISHOP
R. CORD HALL
STEVE HUPPERT
HENRY SHOWALTER
BRADFORD J. "BRAD" STIPES
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TOWN MANAGER
BARRY D. HELMS

DIRECTOR OF
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MICHELE M. STIPES

TOWN ATTORNEY
GUYNN & WADDELL, P.C.

Town of Christiansburg, Virginia 24073

100 East Main Street ~ Telephone 540-382-6128 ~ Fax 540-382-7338

September 10, 2015

Benny Hagy Jr
45 JAMES ST
CHRISTIANSBURG VA 24073

RE: Rail Station Site Selection
490 DEPOT ST; Parcel ID #020705

Dear Mr. Hagy:

The Town of Christiansburg, in association with the New River Valley Metropolitan Planning Organization (MPO), is attempting to bring rail service back to the New River Valley. The MPO is comprised of localities in and including Montgomery County, Pulaski County and the City of Radford. The MPO Technical Advisory Committee is currently evaluating 9 potential rail station sites in Radford, Dublin, Pulaski and the Town of Christiansburg and will eventually select one preferred rail station site to begin the final operations study by Amtrak. The Town of Christiansburg has 5 potential station sites under consideration, one of which includes your property referenced above.

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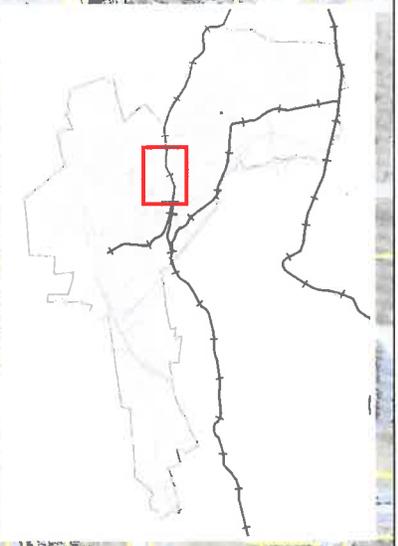
Sincerely,

Barry D. Helms
Town Manager
Town of Christiansburg

cc: Randy Wingfield, Assistant Town Manager
Wayne Nelson, Engineering Director

Benny Hagy Jr
Signature

9/11/15
Date



Legend:

- Potential Site (Blue outline)
- Tax Parcels (Yellow outline)
- Railroad (Orange line)

Scale: 0, 0.05, 0.1 Miles

Parcel ID: 021975
Parcel ID: 006096
Parcel ID: 006095
Parcel ID: 006093
Parcel ID: 006094

Parcel ID: 017062
Parcel ID: 030256
Parcel ID: 030256
Parcel ID: 031098
Parcel ID: 031097
Parcel ID: 020705

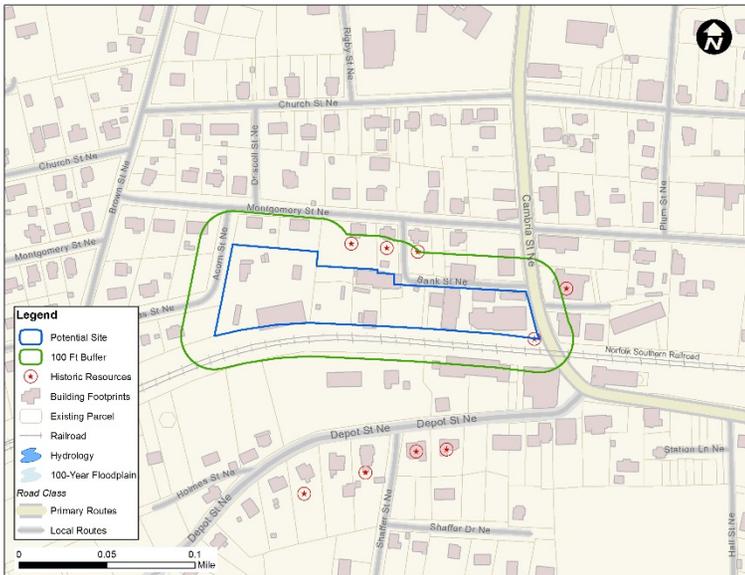
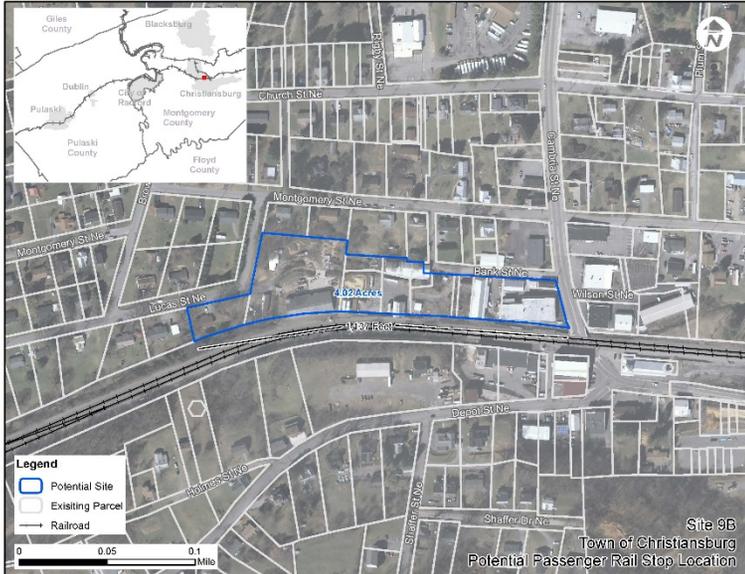
1,452 Feet

Street Right-of-Way

Site 9A
Town of Christiansburg
Potential Passenger Rail Stop Location



F9 SITE 9B: CAMBRIA VACANT BUSINESS – PHASE 1 SCORING



Site Capacity and Flexibility					
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available
Measure	0 miles	1.25 miles	4.02 acres	1,137 feet	14 parcels 6 owners
Score	5	4.75	8.04	10	0

Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	>1 bus.	>50%	15	med	5	no	no	high
Score	1	0	3	3	1.75	3	3	1

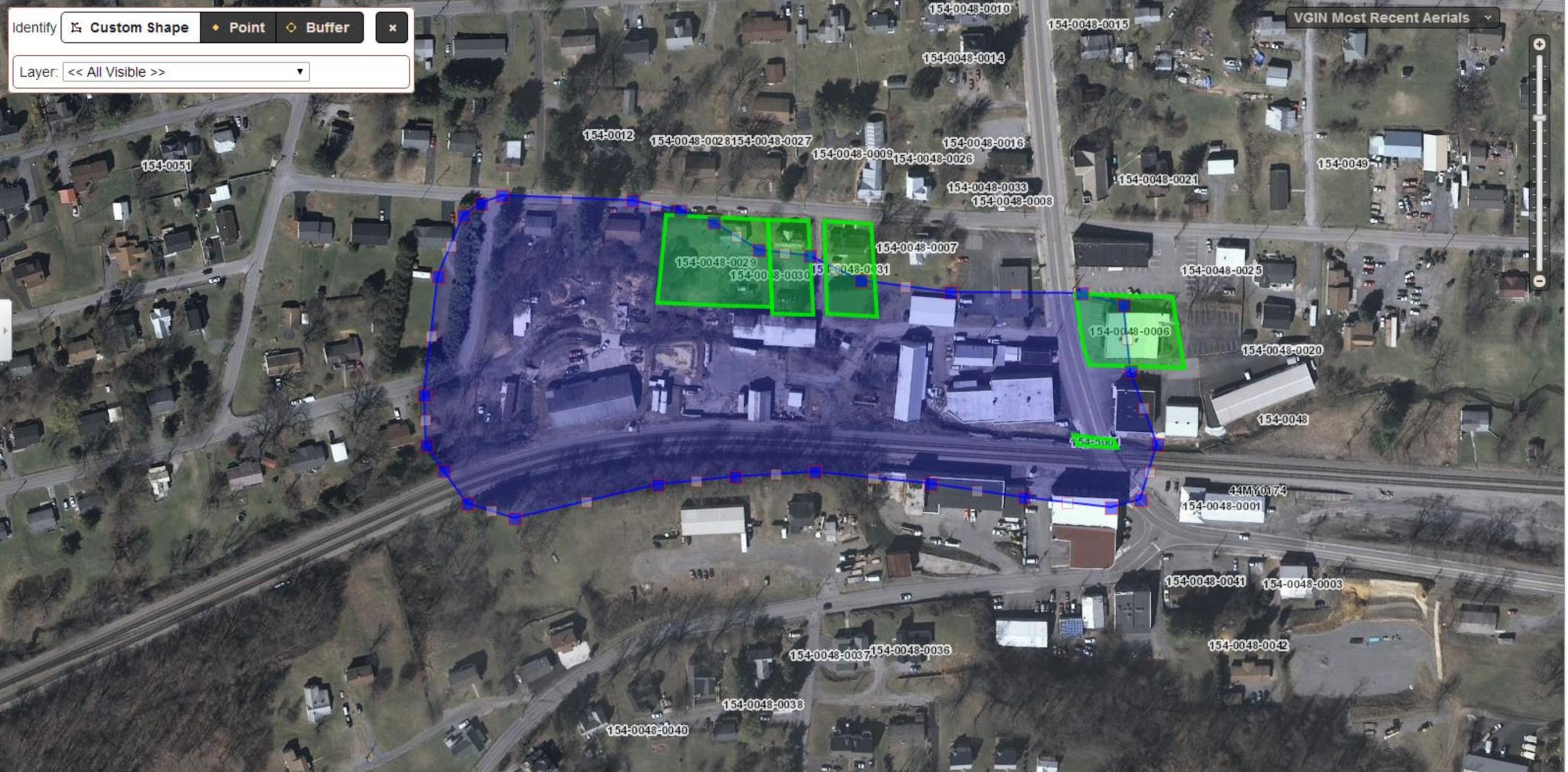
Land Use and Accessibility							
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet
Measure	yes	go any	yes	yes	yes	yes	yes
Score	7	7	5	3	3	3	3

Activity Centers			
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles
Measure	157,047	47,925	204,972
Score	NA	NA	27.31

Site Feasibility	
Criteria	Percentage of site prime for construction
Measure	85%
Score	8.50

Site 9B: Cambria Vacant Business – Summary			
Low Score	High Score	Score Ranking	Site Score
0	139.09	6 th	110.35

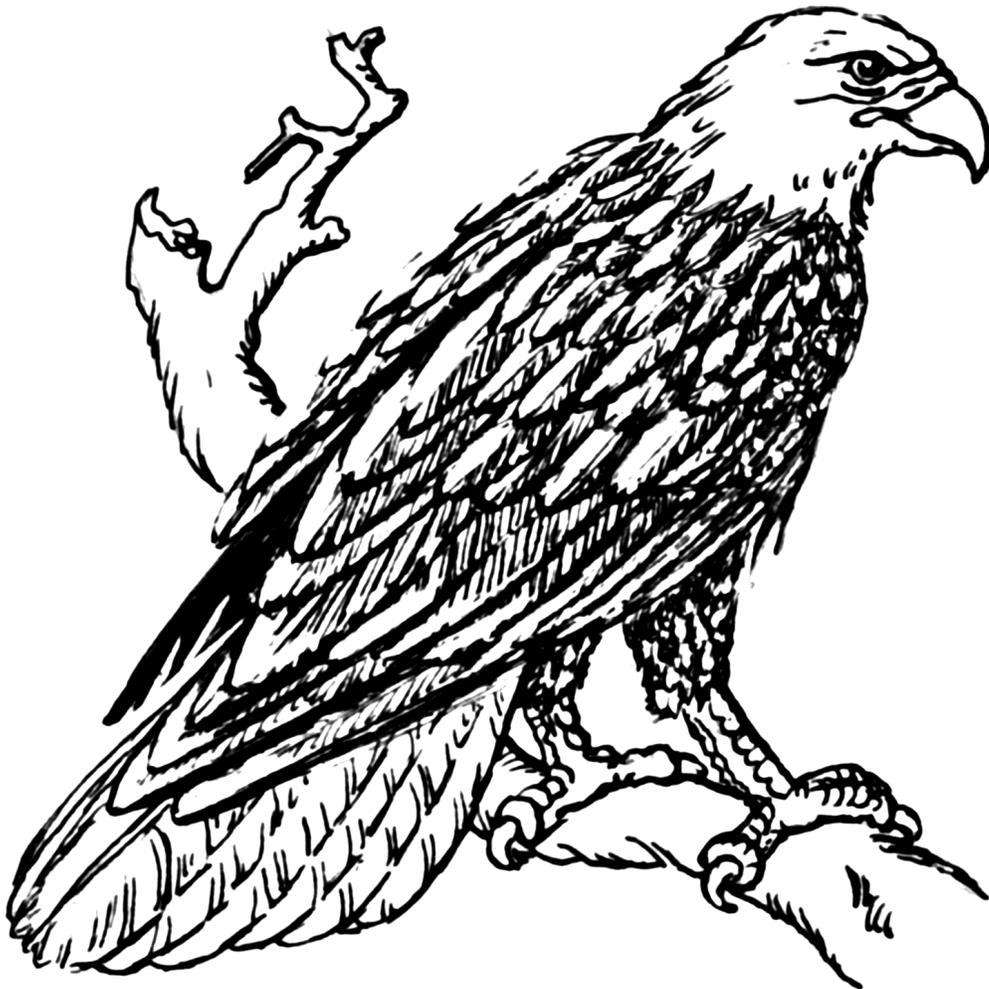
- (6) Architecture Labels
- Tools | Property Names
- 154-0048-0006
Property Names: Auto Dealership and Garage, 930 Cambria Street (Function/Location)
[more info...](#)
 - 154-5001
Property Names: Bridge #1802, Route 111, Crab Creek (Function/Location)
[more info...](#)
 - 154-0048
Property Names: Cambria Historic District (Descriptive)
[more info...](#)
 - 154-0048-0029
Property Names: House, 515 Montgomery Street (Function/Location)
[more info...](#)
 - 154-0048-0030
Property Names: House, 525 Montgomery Street (Function/Location)
[more info...](#)
 - 154-0048-0031
Property Names: House, 545 Montgomery Street (Function/Location)
[more info...](#)
- 1 of 1 | Per Page: 10



Site 8- Christiansburg

IPaC Trust Resource Report

Generated September 10, 2015 03:17 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 8- Christiansburg

PROJECT CODE

JLUNZ-ZFIPF-ESPLA-ULOSU-AG6UYY

LOCATION

Montgomery County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
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<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
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<p>Worm Eating Warbler <i>Helmitheros vermivorum</i> Season: Breeding</p>	Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Bird of conservation concern

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FR>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

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Wetlands

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Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

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Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

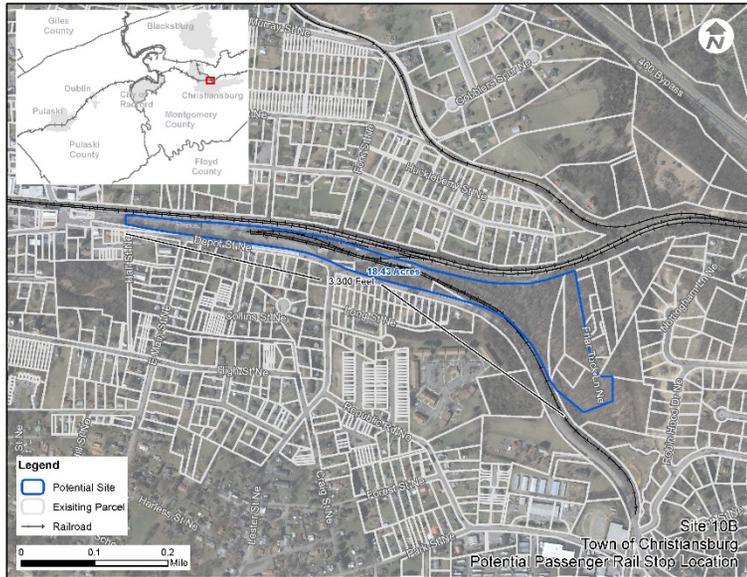
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DATA PRECAUTIONS

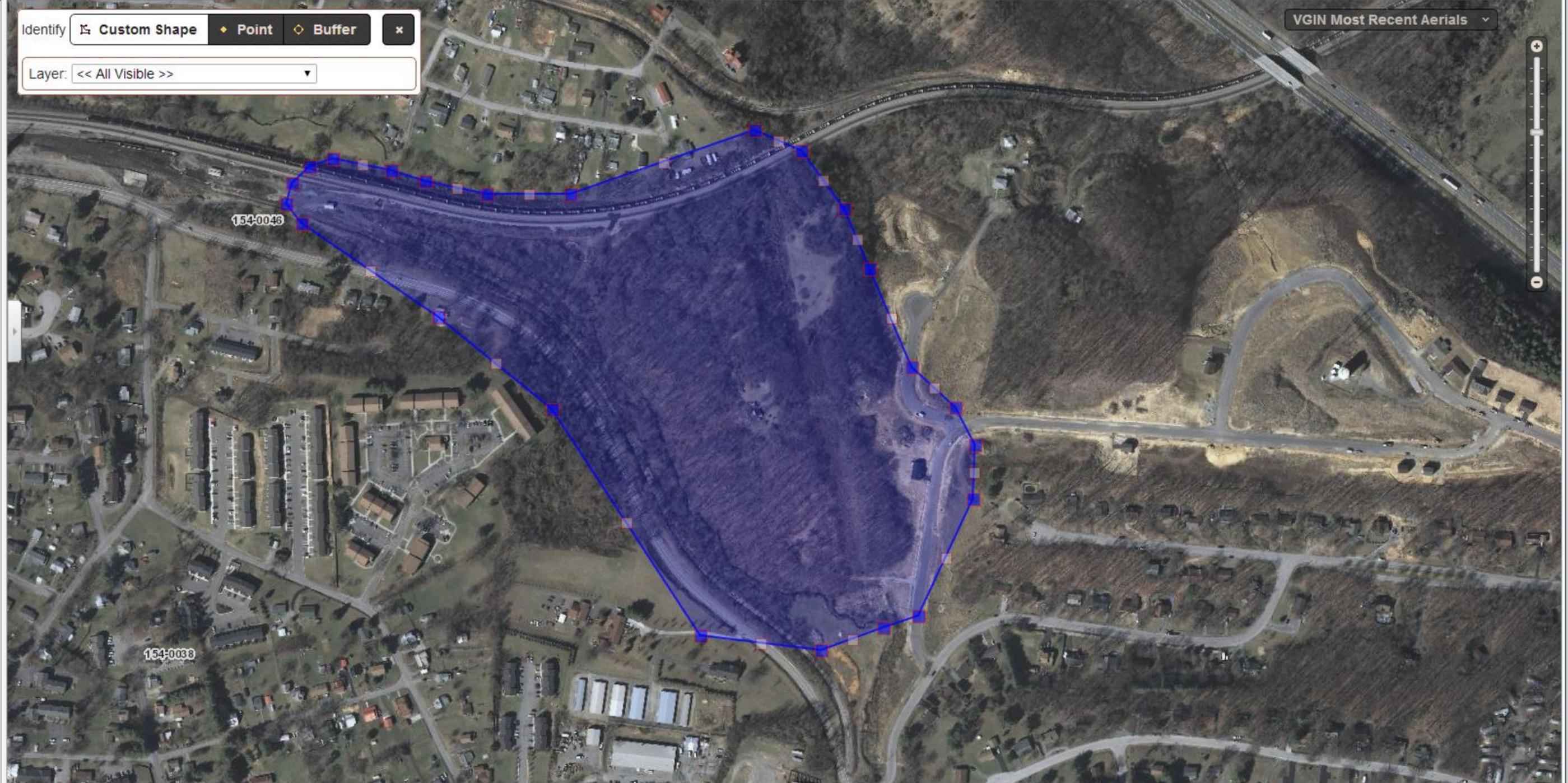
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Wetland data is unavailable at this time.

F10 SITE 10B: DEPOT STREET TRIANGLE – PHASE 1 SCORING



Site Capacity and Flexibility								
Criteria	Prox. Rail	Prox. CoSS	Space	Frontage	Available			
Measure	0 miles	1.5 miles	18.43 acres	3,300 feet	6 parcels 5 owners			
Score	5	4.5	10	10	0: Remove			
Environment								
Criteria	Displace	Flood	Birds	Species	Historic	Open	Ag. Dist.	Hazard
Measure	>1 bus.	21%	15	med	5	no	no	maybe
Score	1	7	3	4	1.75	3	3	3
Land Use and Accessibility								
Criteria	Comp.	Transit	Bike/ped	Water	Sewer	Power	Internet	
Measure	no	go any	yes	yes	yes	yes	yes	
Score	10	7	5	3	3	3	3	
Activity Centers								
Criteria	Population 15 miles	Employment 15 miles	Combination 15 miles					
Measure	158,222	48,509	206,731					
Score	NA	NA	27.55					
Site Feasibility								
Criteria	Percentage of site prime for construction							
Measure	95%							
Score	9.50							
Site 10B: Depot Street Triangle – Summary								
Low Score	High Score	Score Ranking	Site Score					
0	139.09	T9 th	0					



No Results

Identify Custom Shape Point Buffer X

Layer: << All Visible >>

Site 9- Christiansburg

IPaC Trust Resource Report

Generated September 10, 2015 03:18 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Site 9- Christiansburg

PROJECT CODE

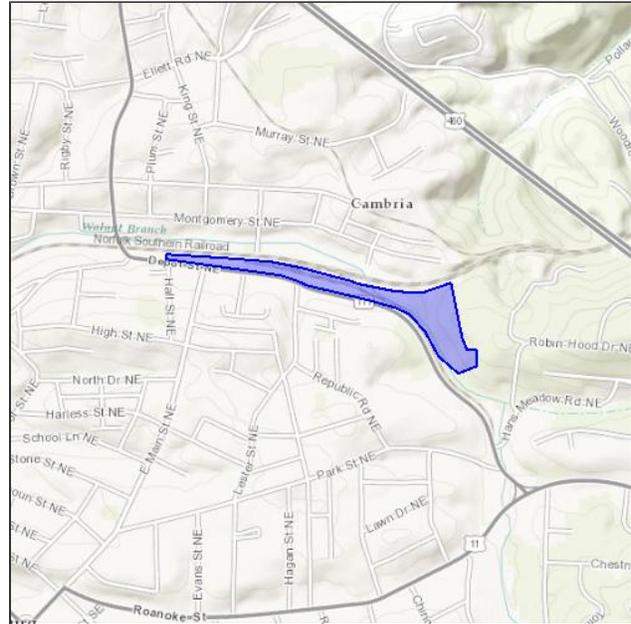
B6AXO-WW3IJ-EDBPW-UBRU7-J44MEU

LOCATION

Montgomery County, Virginia

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

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Fishes

Roanoke Logperch *Percina rex* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E01G>

Insects

Mitchell's Satyr Butterfly *Neonympha mitchellii mitchellii* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I00K>

Mammals

Indiana Bat *Myotis sodalis* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

Northern Long-eared Bat *Myotis septentrionalis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

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You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008</p>	Bird of conservation concern
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HI</p>	Bird of conservation concern
<p>Blue-winged Warbler <i>Vermivora pinus</i> Season: Breeding</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering</p>	Bird of conservation concern
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0G4</p>	Bird of conservation concern
<p>Kentucky Warbler <i>Oporornis formosus</i> Season: Breeding</p>	Bird of conservation concern
<p>Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY</p>	Bird of conservation concern
<p>Louisiana Waterthrush <i>Parkesia motacilla</i> Season: Breeding</p>	Bird of conservation concern
<p>Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round</p>	Bird of conservation concern
<p>Prairie Warbler <i>Dendroica discolor</i> Season: Breeding</p>	Bird of conservation concern
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> Year-round</p>	Bird of conservation concern
<p>Rusty Blackbird <i>Euphagus carolinus</i> Season: Wintering</p>	Bird of conservation concern
<p>Wood Thrush <i>Hylocichla mustelina</i> Season: Breeding</p>	Bird of conservation concern
<p>Worm Eating Warbler <i>Helmitheros vermivorum</i> Season: Breeding</p>	Bird of conservation concern

Yellow-bellied Sapsucker *sphyrapicus varius*

Bird of conservation concern

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FR>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

Refuge data is unavailable at this time.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.



Appendix G

Phase 2 Site Evaluation

G1 PHASE 2 CRITERIA – FINAL SITE EVALUATION

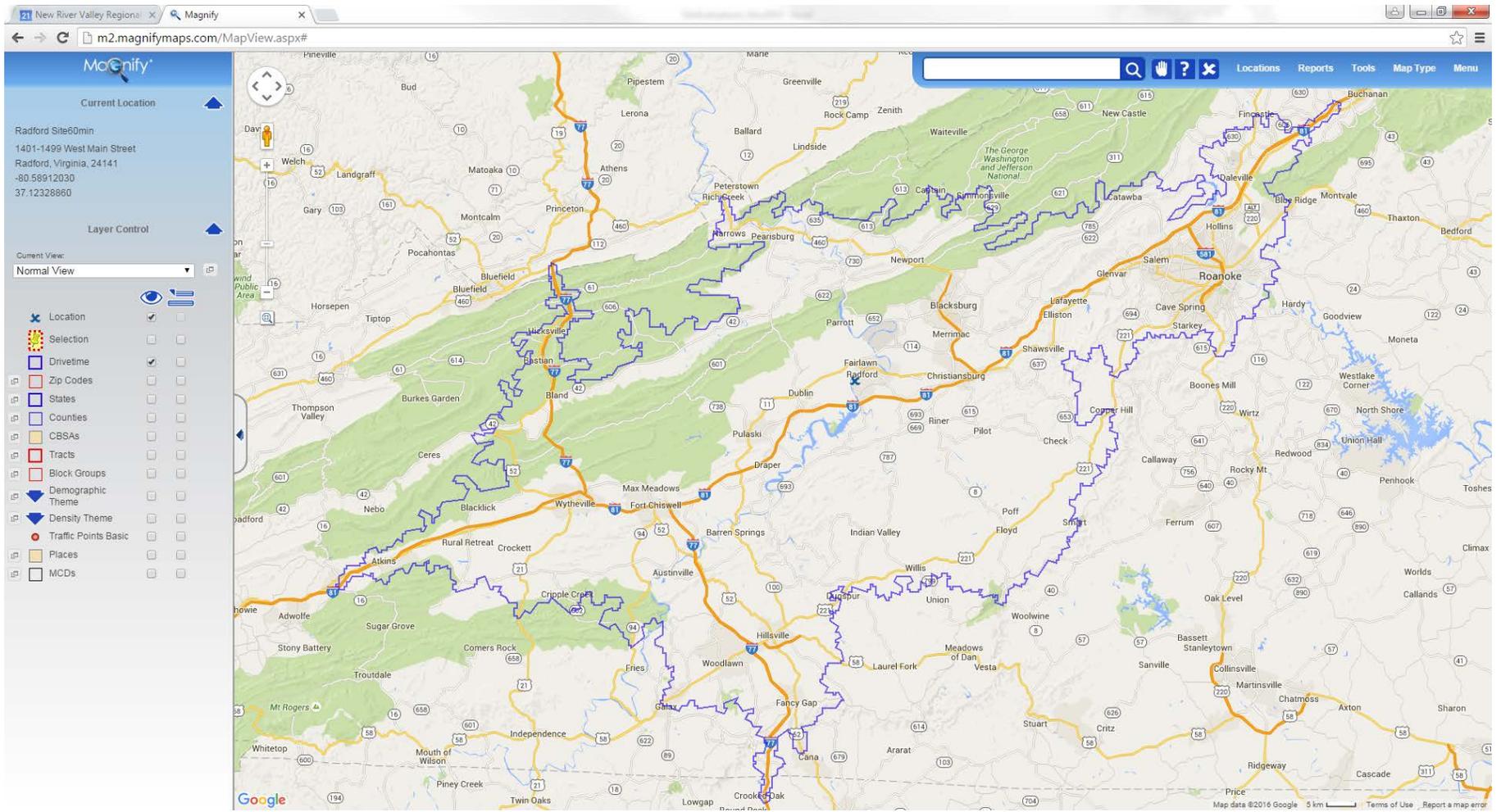
PHASE 2 (FINAL)			
CATEGORY	CRITERIA DESCRIPTION	SCORING	VALUE
Cost	Low Cost	10 points lowest cost, 10*(lowest cost/cost) otherwise	10
	Notes: Based on quantity of material estimates developed by the Commission with the assistance of Christiansburg Engineering Department staff, and local engineering firms, including: Anderson & Associates, Draper Aden, and Whitman Requardt & Associates.		
Ridership	Proximity to 750,000 potential trips	Maximum points for closest proximity to number of trips; percentage based on number of trips at same radius otherwise. Example: Site A accumulates 250,000 trips at 2.3 miles. Site B has 125,000 trips at 2.3 miles. Site A = 12 points, Site B = 6 points.	30
	Proximity to 500,000 potential trips		18
	Proximity to 250,000 potential trips		12
	Notes: NRVRC 2015. Census Block Level data edited to reflect 1,000,000 annual trips to points north. Potential trips assigned to residents, faculty/staff, and students based on 6,000+ online survey responses.		
Economic Impacts	Job accessibility within a 60-minute drive	9 points for highest score, 9*(impact/highest impact) otherwise	9
	Notes: Magnify, Employment Workers Current Year Report. 60 minute drive time, 2015 all workers 16 years and over.		
	Total commuting to points north	7.5 points for highest score, 7.5*(impact/highest impact) otherwise	7.5
	Notes: Census OnTheMap, Home Destination Report. All localities immediately adjacent to Amtrak service corridor.		
	Development potential on or immediately adjacent to property	3 points for highest score, 3*(impact/highest impact) otherwise	3
	Development potential within a 10-mile radius	3 points for highest score, 3*(impact/highest impact) otherwise	3
	Notes: VEDP, retrieved from virginiascan.yesvirginia.org.		
	Proximity to households with 1 vehicle or less	4.5 points for highest score, 4.5*(impact/highest impact) otherwise	4.5
	Notes: Magnify, Socio Economic Benchmark Report. 60 minute drive time.		
Proximity to low income households	3 points for highest score, 3*(impact/highest impact) otherwise	3	
Notes: Magnify, Socio Economic Benchmark Report. 60 minute drive time.			
Tourism	Household entertainment expenditures	20 points for highest score, 20*(impact/highest impact) otherwise	20
	Notes: Magnify, Expenditure: Leisure Report. 60 minute drive time.		
TOTALS			120

Unless otherwise noted above, site characteristic information was reviewed during 1-on-1 meetings between the Commission and local stakeholders. Phase 2 final criteria relevance, scoring value/weight, and scoring methodology were reviewed individually and approved on September 3, 2015 by the MPO Technical Advisory Committee.

G2 SITE 4A-E: WEST MAIN OPEN – PHASE 2 SCORING



Cost						
<i>Criteria</i>	Construction	Engineering/Administration	Total Cost + 10%			
<i>Measure</i>	\$4,230,550.00	\$430,749.50	\$5,127,429.45			
<i>Score</i>	NA	NA	10.00			
Ridership						
<i>Criteria</i>	250,000	500,000	750,000			
<i>Measure</i>	182,109	208,316	350,992			
<i>Score</i>	8.71	7.50	14.04			
Economic Impacts						
<i>Criteria</i>	Job Access	North Com.	Development	10-mile Dev.	<1 Vehicle	Low Income
<i>Measure</i>	215,501	2,377	highest	33	73,675	120,074
<i>Score</i>	8.78	3.43	3.00	3.00	4.50	2.99
Tourism						
<i>Criteria</i>	2015 Households	2015 Spending per Home	2015 Household Spending			
<i>Measure</i>	191,515	\$2,459.71	\$471,071,360.70			
<i>Score</i>	NA	NA	19.60			
Site 4A-E: West Main Open – Summary						
	Low Score	High Score	Score Ranking	Site Score		
	85.55	111.11	3 rd	85.55		



<i>Socio Economic Benchmark Report</i>			<i>Expenditure: Leisure Report</i>		
<i>Average Household Income</i>	<i>Percentage of Households</i>	less than \$10,000	8.69%	2015 Total Households (60 minute drive time)	191,515
\$62,558		\$10,000 to \$14,999	6.27%	2015 Household Average Entertainment Expenditures	\$2,459.71
<i>80% Average Household Income Low-Moderate Income (LMI)</i>		\$15,000 to \$19,999	6.42%	2015 Examples of Household Average Expenditures:	
\$50,046		\$20,000 to \$24,999	6.10%	Fees and admissions	\$575.81
<i>Total Percentage of Households Low-Moderate Income (LMI)</i>		\$25,000 to \$29,999	5.45%	Recreation expenses, out-of-town trips	\$18.37
62.70%		\$30,000 to \$34,999	5.25%	Fees for participant sports	\$93.39
		\$35,000 to \$39,999	5.39%	Movie, other admissions, out-of-town trips	\$44.49
		\$40,000 to \$44,999	5.40%	Play, theatre, opera concert	\$37.48
		\$45,000 to \$49,999	4.96%	Admission to sporting events	\$40.29
	\$50,000 to \$59,999	8.77%	Fees for recreational lessons	\$93.35	

West Main Open, Radford**Passenger Rail Station Estimate**

Item Description	Quantity	Units	Price	Total
Demolition/Clearing	275000	SF	2.00	550,000.00
Grading/Earthwork	1	LS	50,000.00	50,000.00
New Sidewalk	2000	LF	80.00	160,000.00
Standard Caretaker Station	2800	SF	200.00	560,000.00
Platform (1,000'x15'x4')	1	LS	300,000.00	300,000.00
Permeable Parking Lot	80000	SF	6.50	520,000.00
Pick-up/Drop-off	16000	SF	10.00	160,000.00
Transit Hub	22000	SF	10.00	220,000.00
Architectural Style Lighting	40	Ea.	2,500.00	100,000.00
CG-12 (Detectable Warning/Ramps)	6	LS	1,500.00	9,000.00
Standard Rail/Track	2625	LF	200.00	525,000.00
Standard No. 10 Turn Out	2	LS	125,000.00	250,000.00
Pedestrian Crosswalks	3	Ea.	5,000.00	15,000.00
Landscaping	1	LS	50,000.00	50,000.00
Incidentals	1	LS	50,000.00	50,000.00
Signage	1	LS	20,000.00	20,000.00
Property Acquisition	1	LS	261,500.00	261,500.00
Sanitary Sewer/Water Connection	1	LS	50,000.00	50,000.00
Construction Contingency (10%)	1	LS	190,025.00	190,025.00
Mobilization (10% Max of Construction)	1	LS	190,025.00	190,025.00
<i>Subtotal:</i>				4,230,550.00
Engineering & Surveying	1	LS	211,527.50	211,527.50
Environmental	1	LS	50,000.00	50,000.00
Contract Administration	1	LS	84,611.00	84,611.00
Inspection	1	LS	84,611.00	84,611.00
<i>Subtotal:</i>				430,749.50
Project Total:				4,661,299.50
10% Flex:				466,129.95
Total Cost Estimate Projection:				5,127,429.45
Prepared December 2015				

Radford - West Main

Site: 4A
Size: 6.3 Acres
Number of Parcels: 1
Ownership: Private
Track Frontage: 1,021 ft.
Proximity to Rail: 1.0 mile/spur
Proximity to CoSS: 2.5 miles
Displacement: minimal
Floodplain: no
Migratory Birds: 17
Endangered Species: 0
Historical Resources: 3
Open/Conservation: no
Prime Farmland: no
Hazardous Materials: no
Local Plan Conflicts: no
Existing Transit: yes
Existing Bike/Ped: yes
Existing Water: yes
Existing Sewer: yes
Existing Power: yes
Existing Internet: yes
15-Mile Activity: 220,912
Prime Construction: 95%



Notes:

Radford - West Main

Conceptual Scale:

Amtrak Station:



50 Parking Spaces:

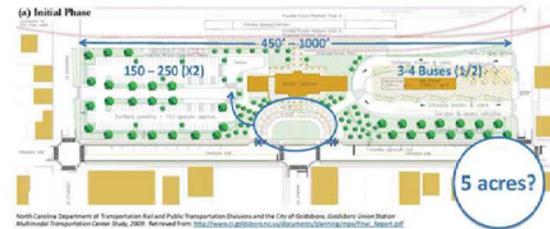


Regional Transit Hub:



Notes:

Site Planning - Concept of Scale



NRV Regional Commission
6580 Valley Center Drive
Radford, VA 24141
Tel: (540) 858-9313

New River Valley MPO
735 Roanoke Street, Suite 21
Christiansburg, VA 24073
Tel: (540) 394-2145

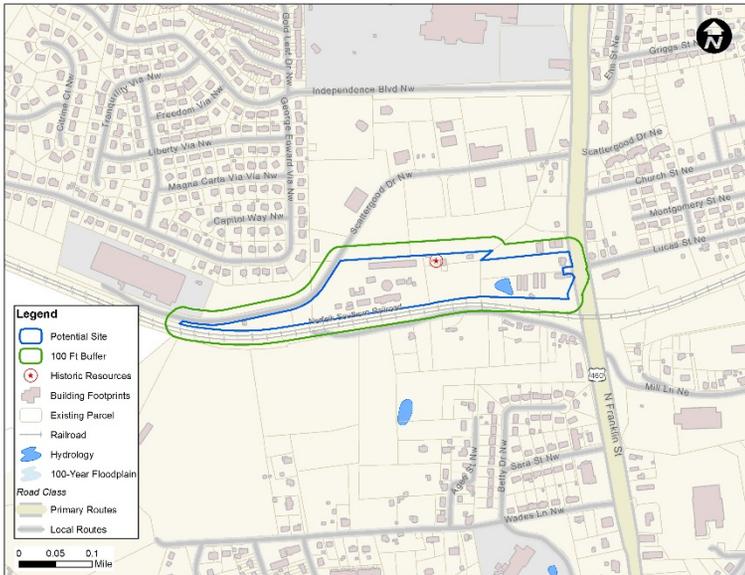
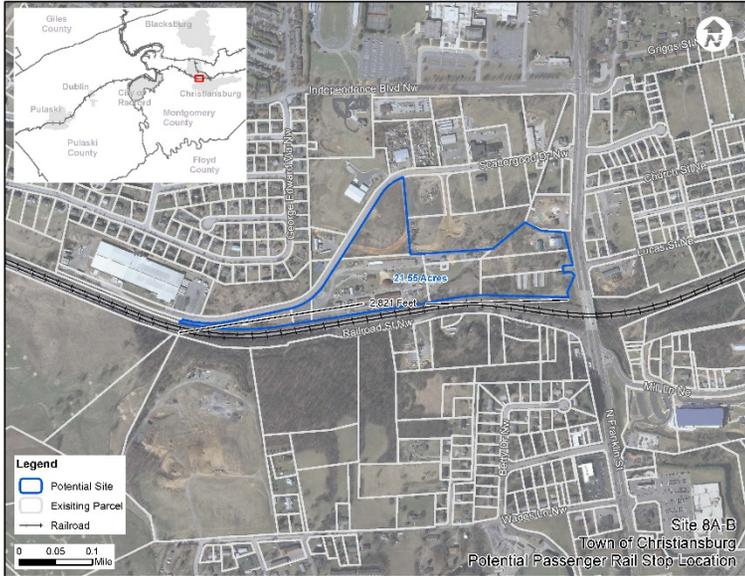
Site Worksheet

New River Valley
2015 Passenger Rail Study

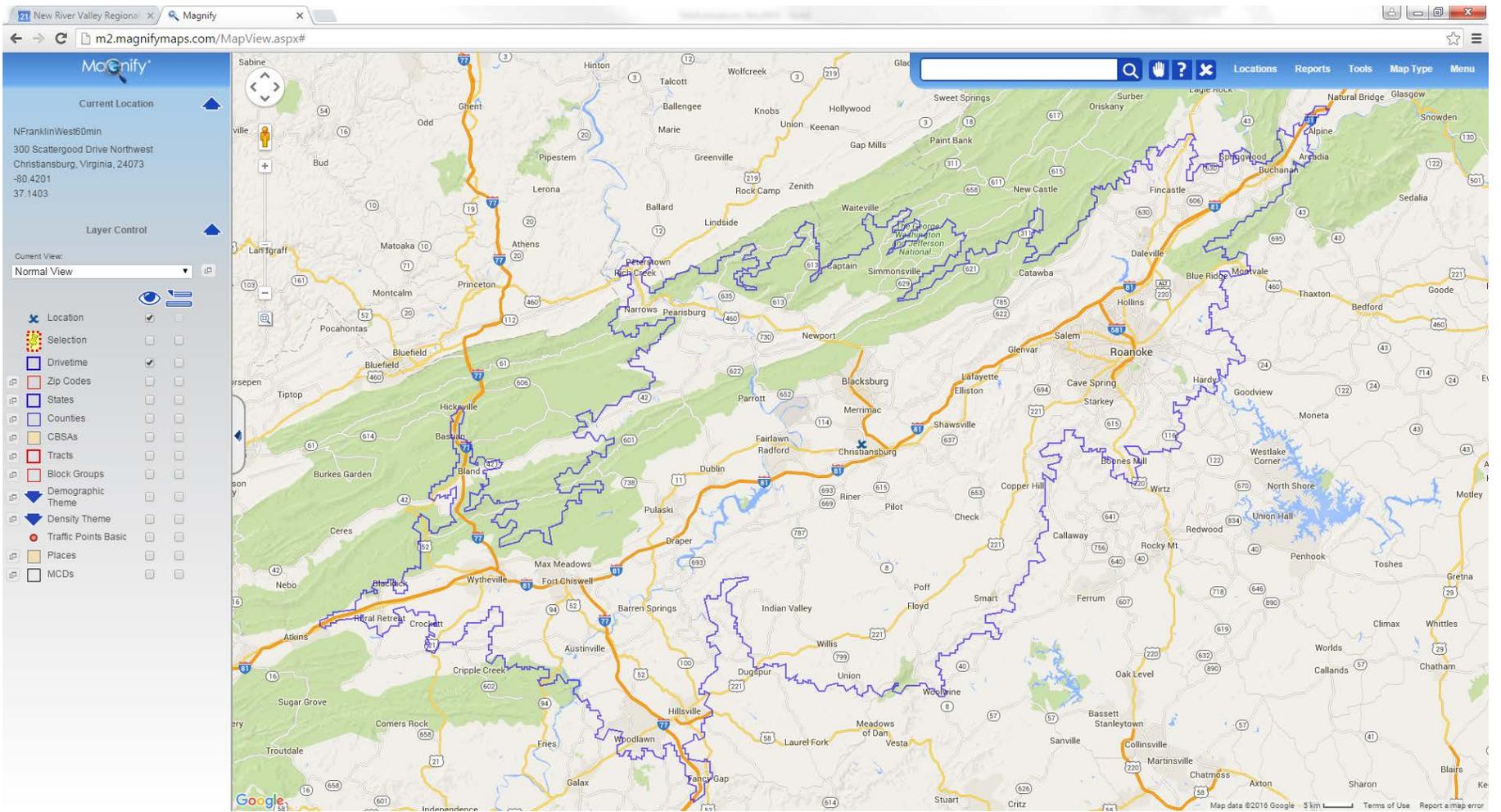
pln

02

G3 SITE 8A-B: NORTH FRANKLIN WEST – PHASE 2 SCORING



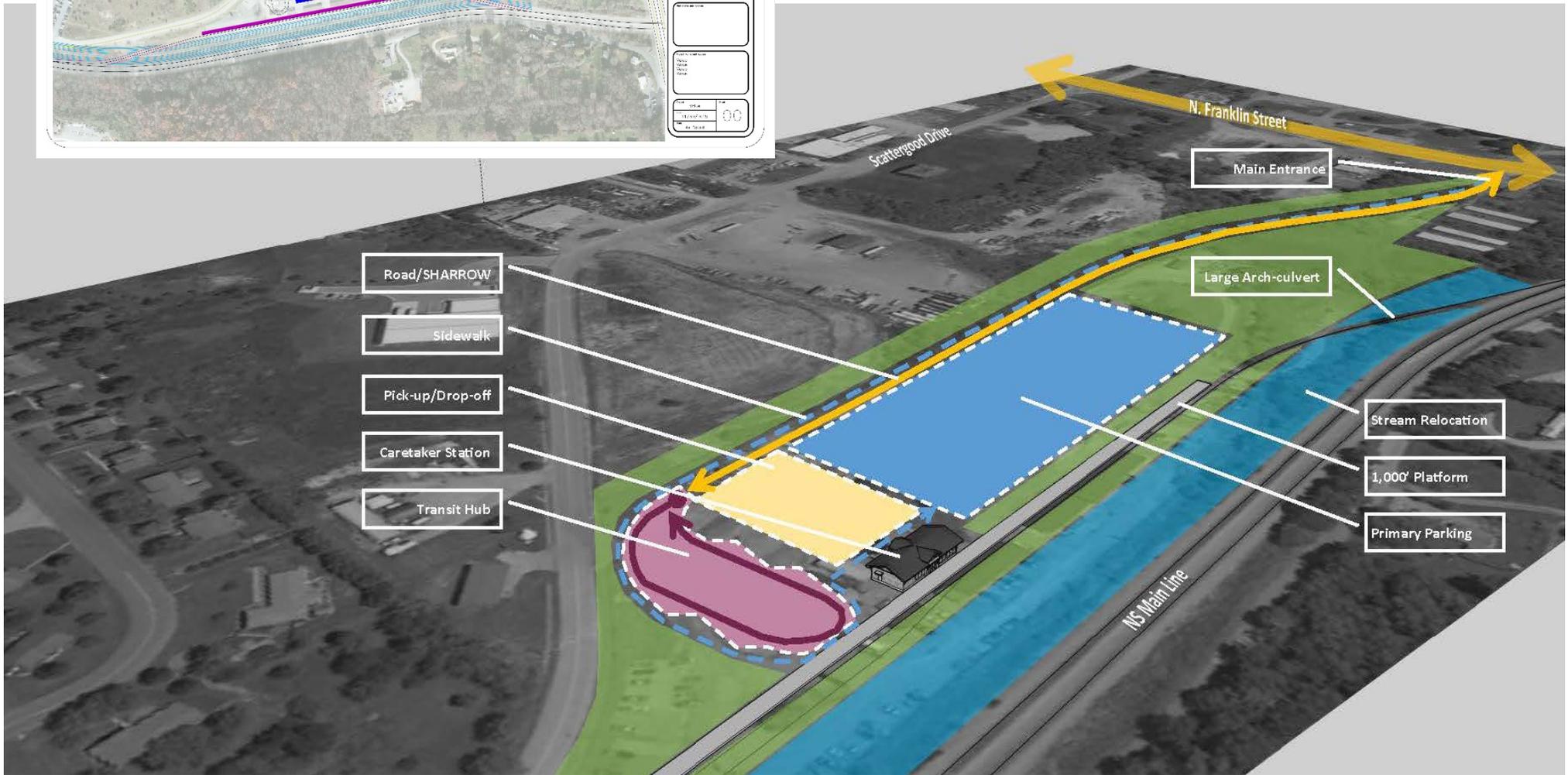
Cost						
<i>Criteria</i>	Construction	Engineering/Administration	Total Cost + 10%			
<i>Measure</i>	\$14,002,158.00	\$1,350,194.22	\$16,887,587.44			
<i>Score</i>	NA	NA	3.05			
Ridership						
<i>Criteria</i>	250,000	500,000	750,000			
<i>Measure</i>	250,857	499,755	750,173			
<i>Score</i>	12.00	18.00	30.00			
Economic Impacts						
<i>Criteria</i>	Job Access	North Com.	Development	10-mile Dev.	<1 Vehicle	Low Income
<i>Measure</i>	219,800	5,194	mid	24	72,840	119,774
<i>Score</i>	8.96	7.50	2.10	2.18	4.45	2.98
Tourism						
<i>Criteria</i>	2015 Households	2015 Spending per Home	2015 Household Spending			
<i>Measure</i>	193,508	\$2,471.24	\$478,204,709.90			
<i>Score</i>	NA	NA	19.89			
Site 8A-B: North Franklin West – Summary						
	Low Score	High Score	Score Ranking	Site Score		
	85.55	111.11	1 st	111.11		



<i>Socio Economic Benchmark Report</i>			<i>Expenditure: Leisure Report</i>		
<i>Average Household Income</i>	Percentage of Households	less than \$10,000	8.46%	2015 Total Households (60 minute drive time)	193,508
\$63,638		\$10,000 to \$14,999	6.13%	2015 Household Average Entertainment Expenditures	\$2,471.24
<i>80% Average Household Income Low-Moderate Income (LMI)</i>		\$15,000 to \$19,999	6.19%	2015 Examples of Household Average Expenditures:	
\$50,910		\$20,000 to \$24,999	5.96%	Fees and admissions	\$580.11
<i>Total Percentage of Households Low-Moderate Income (LMI)</i>		\$25,000 to \$29,999	5.41%	Recreation expenses, out-of-town trips	\$18.49
		\$30,000 to \$34,999	5.17%	Fees for participant sports	\$93.98
61.90%		\$35,000 to \$39,999	5.41%	Movie, other admissions, out-of-town trips	\$44.84
		\$40,000 to \$44,999	5.36%	Play, theatre, opera concert	\$37.76
		\$45,000 to \$49,999	4.92%	Admission to sporting events	\$40.62
	\$50,000 to \$59,999	8.89%	Fees for recreational lessons	\$94.19	



Conceptual Site Plan (shown below)
 CAD Estimating Drawing (shown left)



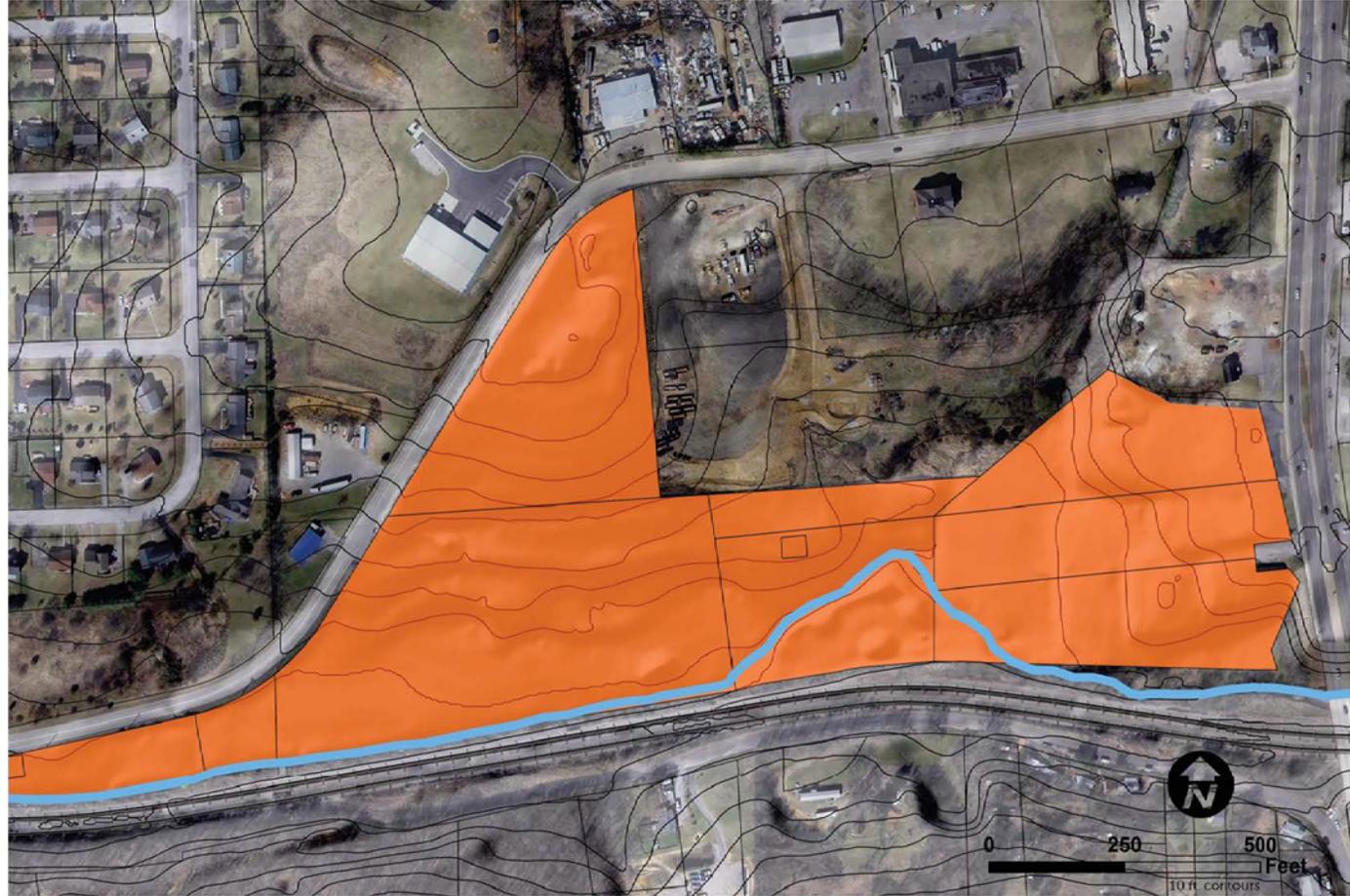
North Franklin West, C'burg

Passenger Rail Station Estimate

Item Description	Quantity	Units	Price	Total
Demolition/Clearing	500000	SF	1.00	500,000.00
Grading/Earthwork	1	LS	250,000.00	250,000.00
New Sidewalk	2550	LF	80.00	204,000.00
Standard Caretaker Station	2800	SF	200.00	560,000.00
Platform (1,000'x15'x4')	1	LS	300,000.00	300,000.00
Permeable Parking Lot	110000	SF	6.50	715,000.00
Asphalt SM 12.5D	374	TON	125.00	46,750.00
Asphalt BM 25.0	825	TON	100.00	82,500.00
Aggregate Base	3117	TON	90.00	280,530.00
Pick-up/Drop-off	17000	SF	10.00	170,000.00
Transit Hub	26600	SF	10.00	266,000.00
Stream - Self Mitigating 100-yr Flood	2400	LF	500.00	1,200,000.00
Arch Culvert (custom)	2	Ea.	800,000.00	1,600,000.00
Wetland Mitigation (road/spillway)	1	LS	100,000.00	100,000.00
Architectural Style Lighting	50	Ea.	2,500.00	125,000.00
CG-12 (Detectable Warning/Ramps)	2	LS	1,500.00	3,000.00
Standard Rail/Track	2300	LF	200.00	460,000.00
Standard No. 10 Turn Out	2	LS	125,000.00	250,000.00
Retaining Wall(s)	0	SF	200.00	0.00
CG-6 Curb and Gutter	0	LS	40,000.00	0.00
Pedestrian Crosswalks	1	Ea.	5,000.00	5,000.00
Intersection Signalization	1	LS	350,000.00	350,000.00
Landscaping	1	LS	50,000.00	50,000.00
Incidentals	1	LS	50,000.00	50,000.00
Signage	1	LS	20,000.00	20,000.00
Asset Reolocation (gravel lot)	1	LS	200,000.00	200,000.00
Asset Relocation (office buildings)	10000	SF	200.00	2,000,000.00
Asset Relocation (storage buildings)	30000	SF	35.00	1,050,000.00
Asset Relocation (land)	1	LS	300,000.00	300,000.00
Property Acquisition	1	LS	1,546,000.00	1,546,000.00
Sanitary Sewer/Water Connection	1	LS	50,000.00	50,000.00
Construction Contingency (10%)	1	LS	634,189.00	634,189.00
Mobilization (10% Max of Construction)	1	LS	634,189.00	634,189.00
<i>Subtotal:</i>				14,002,158.00
Engineering & Surveying	1	LS	700,107.90	700,107.90
Environmental	1	LS	50,000.00	50,000.00
Flood Study	1	LS	40,000.00	40,000.00
Contract Administration	1	LS	280,043.16	280,043.16
Inspection	1	LS	280,043.16	280,043.16
<i>Subtotal:</i>				1,350,194.22
Project Total:				15,352,352.22
10% Flex:				1,535,235.22
Total Cost Estimate Projection:				16,887,587.44

Christiansburg - W. Franklin

Site: 8A-B
Size: 21.55 Acres
Number of Parcels: 8
Ownership: Public/Private
Track Frontage: 2,821 ft.
Proximity to Rail: adjacent to main
Proximity to CoSS: 1.0 mile
Displacement: minimal/signatures
Floodplain: 9.4 acres/43%
Migratory Birds: 15
Endangered Species: 3/simple mit.
Historical Resources: 1
Open/Conservation: no
Prime Farmland: no
Hazardous Materials: no
Local Plan Conflicts: no
Existing Transit: yes
Existing Bike/Ped: yes
Existing Water: yes
Existing Sewer: yes
Existing Power: yes
Existing Internet: yes
15-Mile Activity: 204,449
Prime Construction: 75%



Notes:



NRV Regional Commission
6580 Valley Center Drive
Radford, VA 24141
Tel: (540) 639-9313

New River Valley MPO
725 Roanoke Street, Suite 21
Christiansburg, VA 24073
Tel: (540)394-2145

Site Worksheet

New River Valley
2015 Passenger Rail Study

pln

03

Christiansburg - W. Franklin

Conceptual Scale:

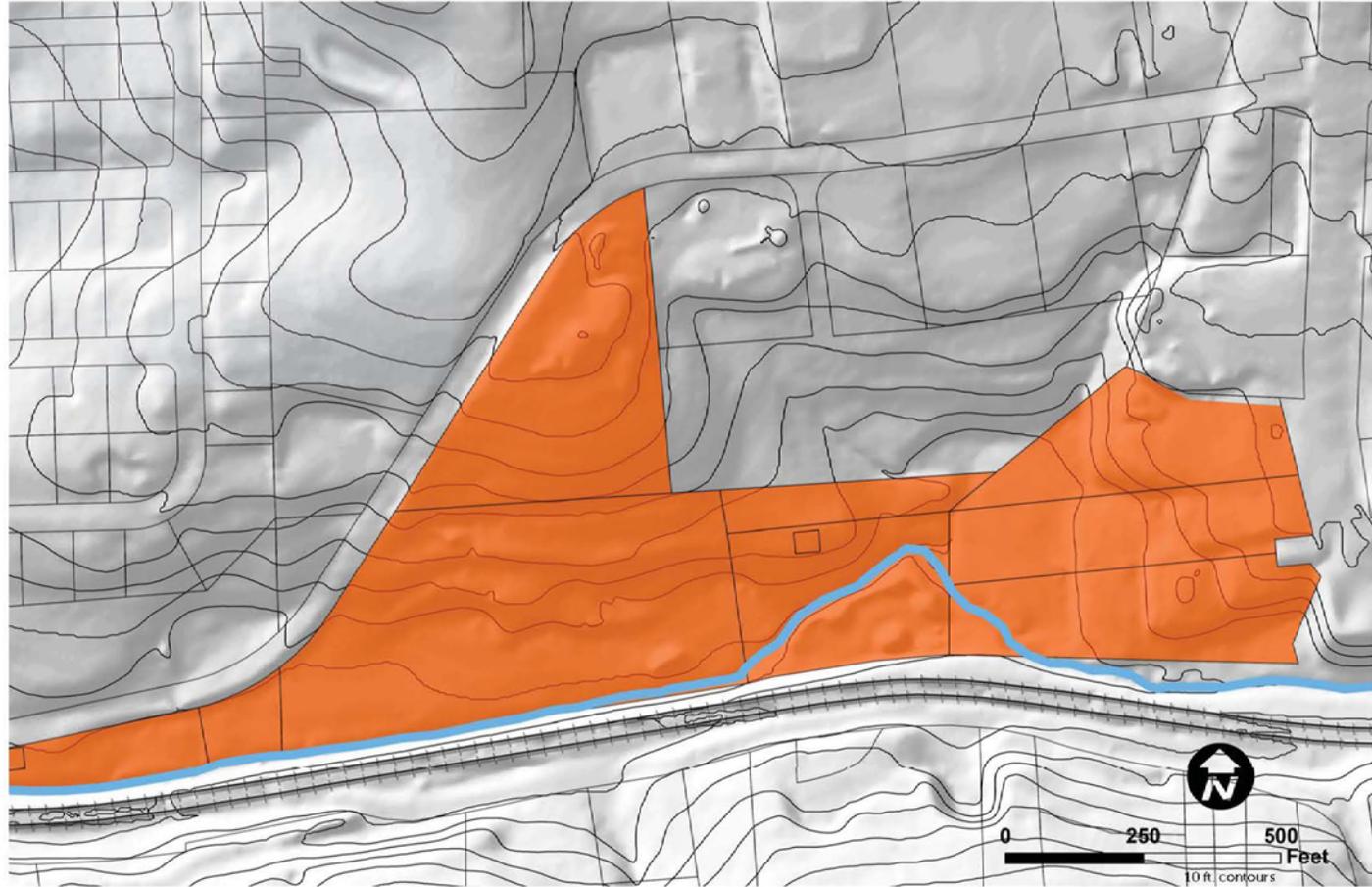
Amtrak Station:



50 Parking Spaces:

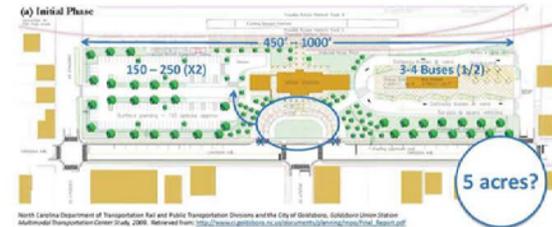


Regional Transit Hub:



Notes:

Site Planning - Concept of Scale



NRV Regional Commission
6580 Valley Center Drive
Piedmont, VA 24141
Tel: (540) 639-5513

New River Valley MPO
755 Roanoke Street, Suite 21
Christiansburg, VA 24073
Tel: (540) 394-2145

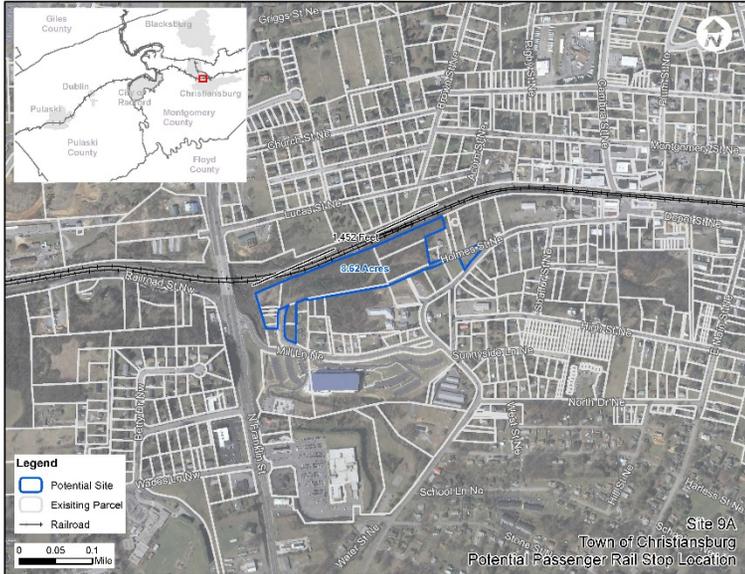
Site Worksheet

New River Valley
2015 Passenger Rail Study

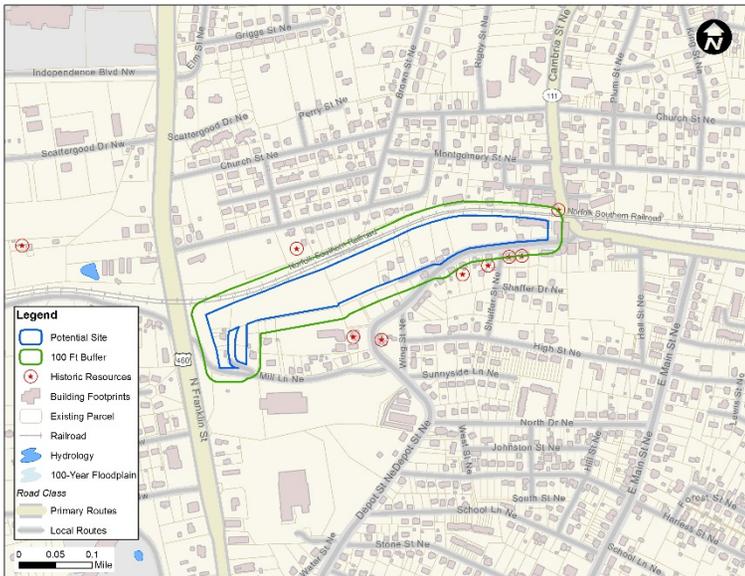
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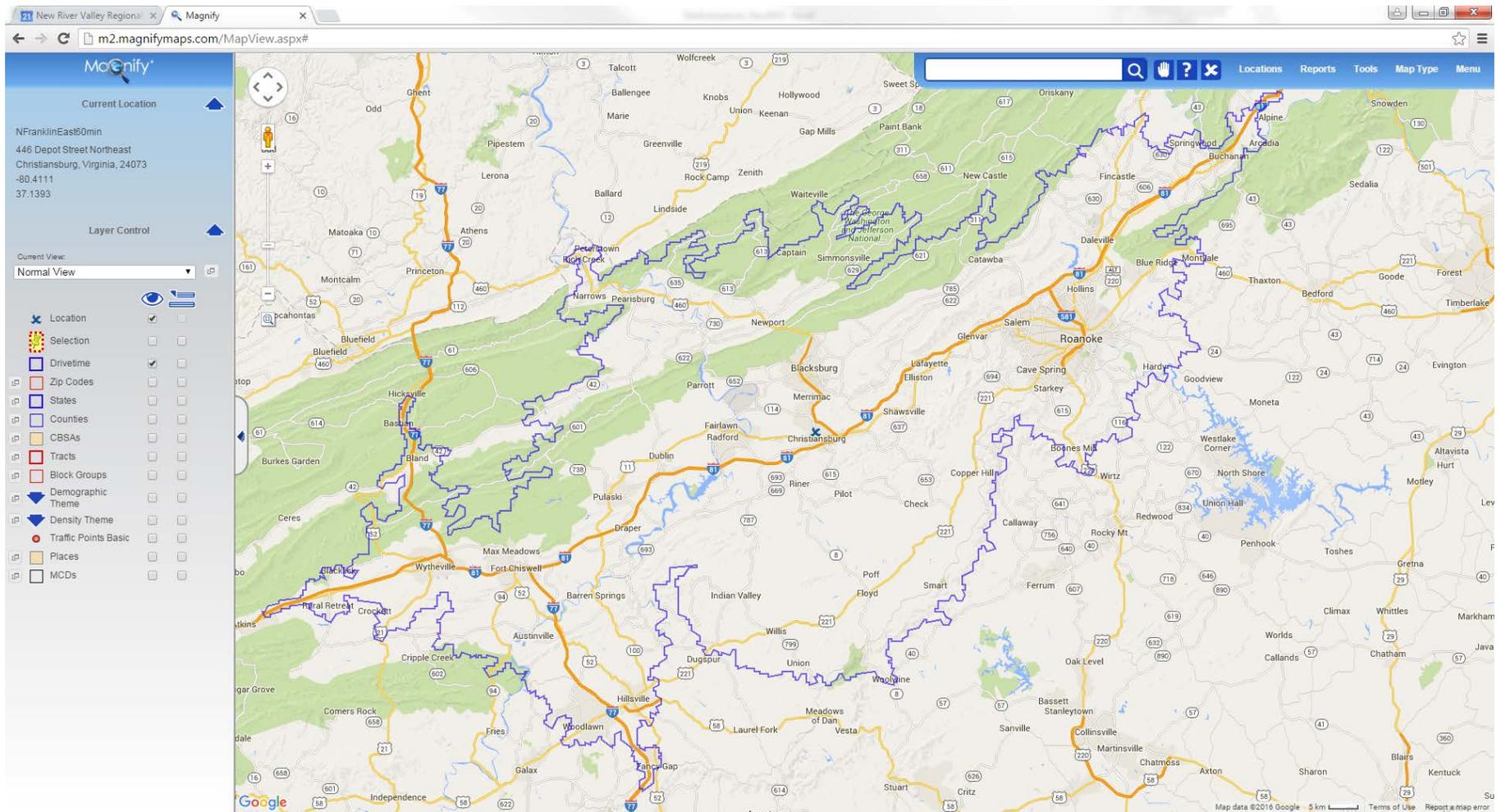
04

G4 SITE 9A: NORTH FRANKLIN EAST – PHASE 2 SCORING



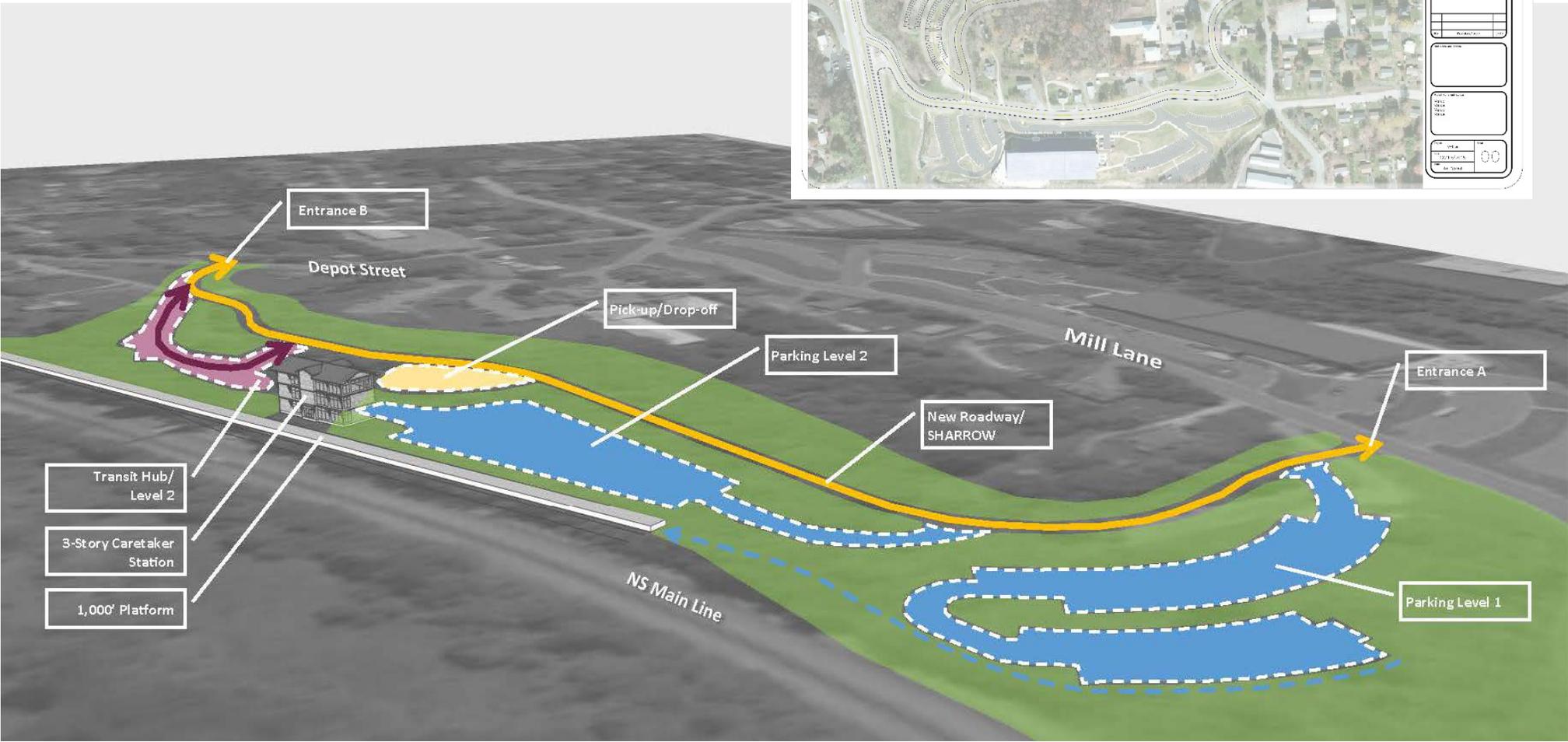
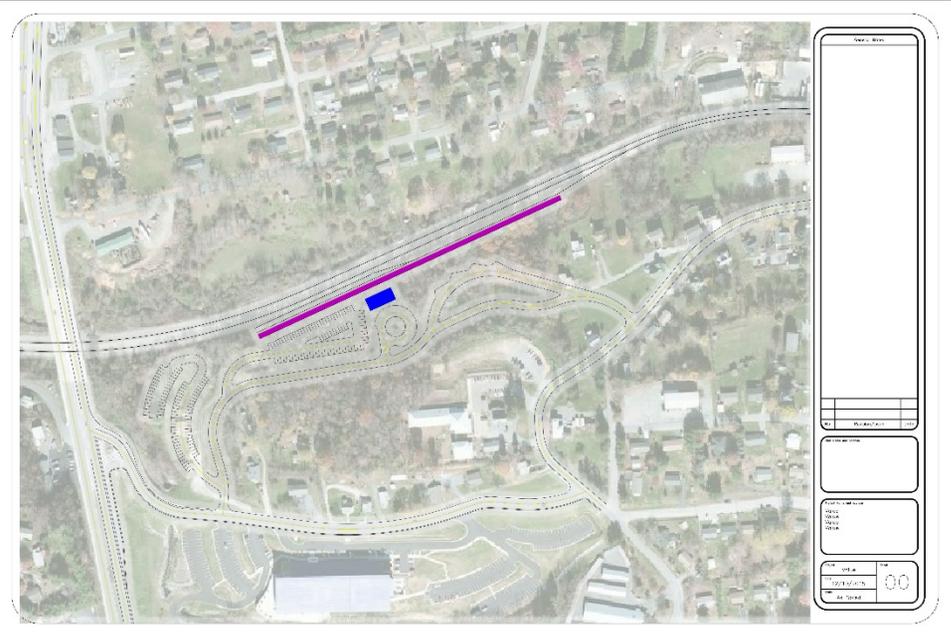
Cost						
<i>Criteria</i>	Construction	Engineering/Administration	Total Cost + 10%			
<i>Measure</i>	\$8,115,290.00	\$780,376.10	\$9,785,232.71			
<i>Score</i>	NA	NA	5.26			
Ridership						
<i>Criteria</i>	250,000	500,000	750,000			
<i>Measure</i>	209,050	481,548	749,280			
<i>Score</i>	10.00	17.34	29.96			
Economic Impacts						
<i>Criteria</i>	Job Access	North Com.	Development	10-mile Dev.	<1 Vehicle	Low Income
<i>Measure</i>	220,882	5,194	low	24	73,099	120,378
<i>Score</i>	9.00	7.50	0.90	2.18	4.46	3.00
Tourism						
<i>Criteria</i>	2015 Households	2015 Spending per Home	2015 Household Spending			
<i>Measure</i>	194,511	\$2,471.68	\$480,768,948.50			
<i>Score</i>	NA	NA	20.00			
Site 9A: North Franklin East – Summary						
	Low Score	High Score	Score Ranking	Site Score		
	85.55	111.11	2 nd	109.61		





<i>Socio Economic Benchmark Report</i>			<i>Expenditure: Leisure Report</i>		
<i>Average Household Income</i>	Percentage of Households	less than \$10,000	8.45%	2015 Total Households (60 minute drive time)	194,511
\$63,629		\$10,000 to \$14,999	6.13%	2015 Household Average Entertainment Expenditures	\$2,471.68
<i>80% Average Household Income Low-Moderate Income (LMI)</i>		\$15,000 to \$19,999	6.18%	2015 Examples of Household Average Expenditures:	
\$50,903		\$20,000 to \$24,999	5.96%	Fees and admissions	\$580.20
<i>Total Percentage of Households Low-Moderate Income (LMI)</i>		\$25,000 to \$29,999	5.41%	Recreation expenses, out-of-town trips	\$18.50
		\$30,000 to \$34,999	5.18%	Fees for participant sports	\$93.99
		\$35,000 to \$39,999	5.41%	Movie, other admissions, out-of-town trips	\$44.85
		\$40,000 to \$44,999	5.36%	Play, theatre, opera concert	\$37.77
61.89%	\$45,000 to \$49,999	4.91%	Admission to sporting events	\$40.62	
	\$50,000 to \$59,999	8.89%	Fees for recreational lessons	\$94.22	

Conceptual Site Plan (shown below)
CAD Estimating Drawing (shown right)



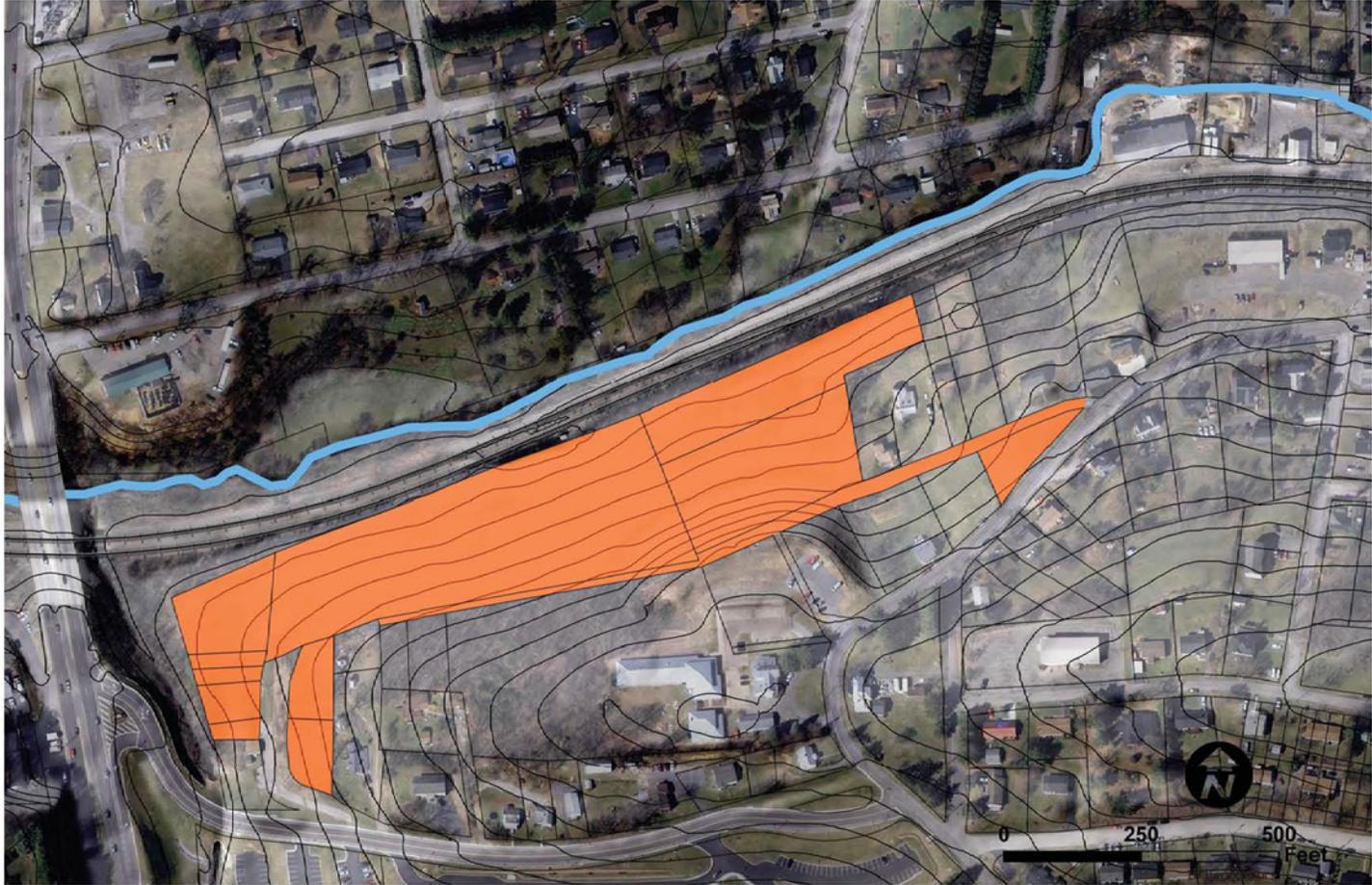
North Franklin East, C'burg

Passenger Rail Station Estimate

Item Description	Quantity	Units	Price	Total
Demolition/Clearing	400000	SF	1.00	400,000.00
Grading/Earthwork	1	LS	1,000,000.00	1,000,000.00
New Sidewalk	1500	LF	80.00	120,000.00
3-Story Caretaker Station	8400	SF	200.00	1,680,000.00
Platform (1,000'x15'x4')	1	LS	300,000.00	300,000.00
Permeable Parking Lot	80000	SF	6.50	520,000.00
Asphalt SM 12.5D	510	TON	125.00	63,750.00
Asphalt BM 25.0	1125	TON	100.00	112,500.00
Aggregate Base	4250	TON	90.00	382,500.00
Pick-up/Drop-off	14000	SF	10.00	140,000.00
Transit Hub	1575	SF	10.00	15,750.00
Watermain Relocation	1700	LF	350.00	595,000.00
Architectural Style Lighting	35	Ea.	2,500.00	87,500.00
Standard Rail/Track	2500	LF	200.00	500,000.00
Standard No. 10 Turn Out	2	LS	125,000.00	250,000.00
Retaining Wall(s)	500	SF	200.00	100,000.00
Intersection Signalization	1	LS	350,000.00	350,000.00
Landscaping	1	LS	50,000.00	50,000.00
Incidentals	1	LS	50,000.00	50,000.00
Signage	1	LS	20,000.00	20,000.00
Property Acquisition	1	LS	518,400.00	526,900.00
Sanitary Sewer/Water Connection	1	LS	125,000.00	125,000.00
Construction Contingency (10%)	1	LS	363,195.00	363,195.00
Mobilization (10% Max of Construction)	1	LS	363,195.00	363,195.00
<i>Subtotal:</i>				8,115,290.00
Engineering & Surveying	1	LS	405,764.50	405,764.50
Environmental	1	LS	50,000.00	50,000.00
Contract Administration	1	LS	162,305.80	162,305.80
Inspection	1	LS	162,305.80	162,305.80
<i>Subtotal:</i>				780,376.10
Project Total:				8,895,666.10
10% Flex:				889,566.61
Total Cost Estimate Projection:				9,785,232.71
Prepared December 2015				

Christiansburg - E. Franklin

Site: 9A
Size: 8.62 Acres
Number of Parcels: 5
Ownership: Public/Private
Track Frontage: 1,248 ft.
Proximity to Rail: adjacent to main
Proximity to CoSS: 1.0 mile
Displacement: minimal/signatures
Floodplain: yes/silver
Migratory Birds: 15
Endangered Species: 3/simple mit.
Historical Resources: 2
Open/Conservation: no
Prime Farmland: no
Hazardous Materials: no
Local Plan Conflicts: yes/Comp
Existing Transit: yes
Existing Bike/Ped: yes
Existing Water: yes
Existing Sewer: yes
Existing Power: yes
Existing Internet: yes
15-Mile Activity: 203,368
Prime Construction: 85%



Notes:



NRV Regional Commission
6580 Valley Center Drive
Radford, VA 24141
Tel: (540) 639-5113

New River Valley MPO
755 Roanoke Street, Suite 21
Christiansburg, VA 24073
Tel: (540)394-2145

Site Worksheet

New River Valley
2015 Passenger Rail Study

pln

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Appendix H
Public Survey

H1 ONLINE SURVEY RESULTS

The NRVRC created an online survey tool to collect input on the travel habits of regional residents, students and visitors, and preferences for passenger rail station service and station amenities. The survey was promoted in regional media and through mailing lists, social media pages, and newsletters of partner organizations, such as Virginia Tech, Radford University, regional economic development and local government organizations, among others. The survey was available online from April through October of 2015, with coordinated publicity efforts to encourage participation in April, and again in September.

Participation in the survey was very strong, with over 6,000 responses. The survey asked respondents to specify whether they were university staff or students, regional residents generally, or visitors to the region, allowing NRVRC staff to analyze the travel habits of these differing groups.

Survey respondent characteristics

Types of respondents	Response Percent	Response Count
University student	26.7%	1650
University faculty/staff	31.8%	1963
Regional resident- I live in the New River Valley (Giles, Floyd, Montgomery, Pulaski counties, City of Radford)	35.0%	2162
Visitor to the New River Valley	6.6%	405
	<i>Total</i>	6180

Student response summary

University students represent a significant potential source of users of Amtrak services, with approximately 40,000 students enrolled at Virginia Tech and Radford University. The vast majority of students' families live outside the region, creating a large demand for travel options for students to return home to visit friends and family. Analysis of students' 'home' zip code from university records indicate that at least 13,000 students are from the Washington DC metro area, and a further 2,000+ are from the major northeastern cities along the popular Amtrak route between Washington and Boston. Over 80% of survey respondents said they travel outside the region to visit family more than once per year, with 30% reporting they do so more than once per month. Over 60% of respondents travel more than once a year to visit friends, and 50% do so for vacation or school-related events.

Conversely, over 60% of students reported that friends and family travel to the New River Valley to visit them more than once per year. Nearly 70% of students reported that their family and friends would be more likely to visit if Amtrak service were available to the New River Valley.

Nearly 70% of students surveyed reported that they had their own car, and reported that driving was the transportation option they used most often for trips outside the region. Over 70% of respondents said they drive their own car more than once per year for trips outside the region, while nearly 80% said they were a passenger in someone else's car. Over 60% of students said they never used car rental or car sharing, Megabus service, or Amtrak service for such trips.

The Washington DC metro area was the most common destination for survey respondents, with 77% of students saying they visit the area at least once per year. Other common destinations include the Richmond region, Charlottesville, and Hampton Roads, and New York City, respectively, with at least 20% of respondents indicating they visit these areas once per year or more.

Survey respondents rarely use passenger rail service currently, with nearly 50% indicating they never use the service, and an additional 29% reporting they use it once per year or less. The survey responses indicate a potential for significantly greater use if service comes to the New River Valley, with 70% of students reporting they would be very likely to use the service, and an additional 22% reporting they would be somewhat likely. Only 3% said they would be very unlikely to use the service. Over 80% said they would use the service to travel to the Washington DC area, and 65% said they would use the service to visit other cities on the northeast corridor route (New York, Philadelphia, etc.). Over 50% said they would use the service to visit Roanoke, and nearly 40% would use it to visit Charlottesville.

Survey respondents indicated their preference for station amenities, ranking bathroom facilities as the most important station feature. Other important features include bus/transit service to the station, charging stations for phones/devices, maps and visitor information, on-site staff and ticketing facilities, long term parking, and climate controlled waiting area, respectively. Food and beverage service, and car or bike rental services were ranked as least important.

Surveyed students did not indicate a strong preference for train departure or arrival times, indicating a slight preference for late morning or afternoon departures on weekdays, and a preference for early or mid-morning departures on weekends. The preference for arrival times for trains returning the New River Valley was stronger, with late afternoon or evening as the preferred time for both weekdays and weekends.

Nearly 50% of surveyed students indicated they would be willing to pay up to \$100 for a round trip ticket to Washington DC, although 40% of students said they would not pay more than the \$50 for their tickets.

University employee response summary

The nearly 9,000 faculty and staff of the region's universities were enthusiastic participants in the passenger rail survey, with nearly 25% of all faculty participating. Survey respondents indicated another potentially large source of demand, with frequent travel for both business and personal reasons. Over 80% of survey respondents said they travel outside the region to visit family more than once per year, with 30% reporting they do so more than once per month. Over 70% of respondents travel more than once a year to visit friends, or for vacation and leisure travel. Approximately 68% travel outside the region for business purposes more than once a year, with 17% travelling for business two or more times per month.

Conversely, over 77% of respondents reported that friends and family travel to the New River Valley to visit them more than once per year. Over 60% reported that their family and friends would be more likely to visit if AMTRAK service were available to the New River Valley.

Nearly all surveyed university employees reported that they had their own car, and reported that driving was the transportation option they used most often for trips outside the region. Over 96% of respondents said they drive their own car more than once per year for trips outside the region, while 53% said they were a passenger in someone else's car. About 66% of survey respondents said they used air travel more than once per year, and over 35% of survey respondents used car rental or ride sharing services. Over 60% of respondents said they never used Megabus service or Amtrak service for such trips.

The Washington DC metro area was the most common destination for survey respondents, with 83% of respondents saying they visit the area at least once per year. Other common destinations include Charlottesville, Richmond, Hampton Roads, Lynchburg, New York City and Atlanta, respectively, with at least 20% of respondents indicating they visit these areas once per year or more.

Survey respondents rarely use passenger rail service currently, with nearly 55% indicating they never use the service, and an additional 35% reporting they use it once per year or less. The survey responses indicate a potential for significantly greater use if service comes to the New River Valley, with 80% of respondents reporting they would be very likely to use the service, and an additional 16% reporting they would be somewhat likely. Only 2% said they would be very unlikely to use the service. Nearly 93% said they would use the service to travel to the Washington DC area, and 80% said they would use the service to visit other cities on the northeast corridor route (New York, Philadelphia, etc.). Approximately 58% said they would use the service to visit Roanoke and Charlottesville, respectively.

Survey respondents indicated their preference for station amenities, ranking bathroom facilities as the most important station feature. Other important features include long-term parking, on-site staff and ticketing facilities, climate controlled waiting area, bus/transit service to the station, maps and visitor information, and charging stations for phones/devices. Food and beverage service, and car or bike rental services were ranked as least important.

Survey respondents indicated a strong preference for train departure or arrival times, preferring early or mid-morning departure times for trains leaving the New River Valley, and preferred arrival times for trains returning the New River in the late afternoon or evening.

Over 50% of surveyed university faculty/staff indicated they would be willing to pay up to \$100 for a round trip ticket to Washington DC, and 20% said they would pay up to \$150. Nearly 24% said they would not pay more than \$50 for their tickets.

Regional resident response summary

The New River Valley is home to nearly 180,000 residents, with most living in the urban areas around Blacksburg, Christiansburg and Radford, near the proposed station. Over 80% of survey respondents said they travel outside the region to visit family more than once per year, with over 30% reporting they do so more than once per month. Over 70% of respondents travel more than once a year to visit friends, while 75% travel more than once a year vacation and leisure travel. Approximately 60% travel outside the region for business purposes more than once a year, with 17% travelling for business two or more times per month.

Conversely, over 70% of respondents reported that friends and family travel to the New River Valley to visit them more than once per year. Over 60% reported that their family and friends would be more likely to visit if AMTRAK service were available to the New River Valley.

Nearly all surveyed regional residents reported that they had their own car, and reported that driving was the transportation option they used most often for trips outside the region. Over 98% of respondents said they drive their own car more than once per year for trips outside the region, while 58% said they were a passenger in someone else's car. About 52% of survey respondents said they used air travel more than once per year, and over 25% of survey respondents used car rental or ride sharing services. Over 60% of respondents said they never used Megabus service or Amtrak service for such trips.

The Washington DC metro area was the most common destination for survey respondents, with 76% of respondents saying they visit the area at least once per year. Other common destinations include Charlottesville, Richmond, Hampton Roads, Lynchburg, New York City and Atlanta, respectively, with at least 20% of respondents indicating they visit these areas once per year or more.

Survey respondents rarely use passenger rail service currently, with nearly 58% indicating they never use the service, and an additional 32% reporting they use it once per year or less. The survey responses indicate a potential for significantly greater use if service comes to the New River Valley, with 80% of respondents reporting they would be very likely to use the service, and an additional 15% reporting they would be somewhat likely. Only 2% said they would be very unlikely to use the service. Nearly 91% said they would use the service to travel to the Washington DC area, and 80% said they would use the service to visit other cities on the northeast corridor route (New York, Philadelphia, etc.). Approximately 56% said they would use the service to visit Roanoke and Charlottesville, respectively.

Survey respondents indicated their preference for station amenities, ranking bathroom facilities as the most important station feature. Other important features include long-term parking, on-site staff and ticketing facilities, climate controlled waiting area, maps and visitor information, charging stations for phones/devices, and bus/transit service to the station. Food and beverage service, and car or bike rental services were ranked as least important.

Survey respondents indicated a strong preference for train departure and arrival times, preferring early or mid-morning departure times for trains leaving the New River Valley, and preferred arrival times for trains returning the New River in the late afternoon or evening.

Over 53% of surveyed regional residents indicated they would be willing to pay up to \$100 for a round trip ticket to Washington DC, and 18% said they would pay up to \$150. Nearly 25% said they would not pay more the \$50 for their tickets.

H2 IN-PERSON SURVEY RESULTS

In-person surveys were conducted at the Amtrak station in Lynchburg and on the Virginia Tech campus. This section highlights the feedback received at an existing passenger rail station and Home Ride bus services.

Amtrak passenger survey

NRVRC staff and volunteers surveyed passengers at the Lynchburg Amtrak station waiting for the 7:38am northbound train, on three days in November 2015. NRVRC collected 37 total responses from passengers at the Lynchburg Amtrak station. A summary of the survey results appears below.

According to Amtrak station personnel, an average of 50-60 passengers use the service on most weekdays, and 100-120 passengers use the services on most weekends. The train serves significantly more riders on holidays, and at the beginning and end of the semester at Liberty University.

Passenger home locations and destinations

Over half of all passengers surveyed (54%) live in the Lynchburg metro area, while about 18% of respondents live in Washington DC (10%) or northeastern states (8%) along the Amtrak route. Another 5% of travelers live in the Roanoke area, and 5% live in eastern Tennessee.

The top destination for travelers was Washington DC (35%), followed by New York City (16%). Most of the remaining passengers were travelling to other northeastern cities (Baltimore, Boston, Newark, Philadelphia, and Providence), although about 10% of passengers were travelling to other Virginia destinations, including Alexandria, Charlottesville and Manassas.

Travel habits

Nearly half of surveyed passengers were travelling to visit family and friends, with the remaining passengers split evenly between business and vacation trips. Although car travel is the most frequent mode of travel for those surveyed, passenger rail was the second most frequent, with nearly half of those surveyed using the train multiple times per year. Air travel and carpooling were also frequent options, but very few passengers used an intercity bus more than once per year.

Passengers indicated that they visit nearby Virginia cities frequently, as well as major cities along the AMTRAK route. The most common destinations that respondents visit at least once per year were Charlottesville, Lynchburg, Roanoke, Richmond, Washington DC, and New York City, respectively. Conversely, respondents were more likely to use Amtrak service to visit more distant cities. The most common destinations that respondents said they would use Amtrak to visit at least once per year were New York City, Washington DC, Roanoke, Lynchburg, Charlottesville and Hampton Roads, respectively.

Nearly half of those surveyed indicated that they would be very likely (24%) or somewhat likely (24%) to use passenger rail services to visit the New River Valley, although 30% of travelers said they would be very unlikely to use Amtrak service to visit the New River Valley.

Passenger rail service and station preferences

Most travelers preferred a similar schedule for service from the New River Valley as the service from Lynchburg. Nearly half (48%) preferred a train leaving the New River Valley before 8am, with most others (32%) preferring a departure time of 8a-12p. The preferred times for trains returning to the New River Valley are 4p-8p (35%), or 12p-4p (27%).

Passenger ranked the importance of train station features, identifying parking as the most important feature for a passenger rail station. Respondents ranked climate controlled waiting area as the next important, followed by device charging stations, food and beverage service, maps and visitor information, car rental services, bus and transit connections, and bike parking/rental services.

Home Ride bus survey

Volunteers collected several surveys from students on the Virginia Tech campus waiting for the Home Ride bus service, which travels from several university campuses to the Washington, Richmond and Hampton Roads area. Several buses leave each Friday and return each Sunday on weekends during the fall and spring semesters. Home Ride staff indicated the service is most highly used in the fall semester and around holidays, and typically has fewer riders during the busy end of semester period.

Nearly all survey respondents were from the Washington metro area, except for one student from the Midwest who was using the bus to reach train service in Washington. All were travelling to Washington, DC, except for two who were going to visit friends in Harrisonburg. All respondents indicated that the purpose of their trip was to visit family or friends.

The most common method of travel for respondents is carpooling or riding as a passenger in someone else's car, followed by home ride bus and driving your own car. Most respondents never used the Megabus, zip car, or air travel for trips outside the region.

All survey respondents stated that they would visit Washington DC at least once per year, with other destinations including Charlottesville and Richmond. Although most respondents do not use rail services frequently at present, all respondents indicated that they and/or their family/friends would be likely to use Amtrak service to the New River Valley.

The most important station features for respondents were parking, bus/transit service, climate controlled waiting area, food/beverage service, maps/visitor information, device charging stations, car rental services, and bike parking/rental.

New River Valley Passenger Rail Study Survey -- Introduction: The New River Valley Metropolitan Planning Organization is partnering with the New River Valley Regional Commission to identify potential station locations, as well as information about the types of travelers who would use passenger rail service. The process includes learning more about the travel habits of current bus and rail users. Your responses to this survey will allow our regional partners to understand the potential for passenger rail use in the New River Valley, and ensure that a new station would offer services that travelers need most. Thank you for your input!

Part I: Questions about travel habits

What is the zip code of your place of residence? _____

For college students only- do you live on campus? Yes___ No___

What city/station is your final destination today? _____

What is the primary reason for your trip today?

- Business/work-related trip Vacation/tourism
- Visiting family/friends Other _____

Including your trip to this bus station, what other transportation will you use to reach your final destination?

- Bike Taxi Intercity passenger train
- Public transit (bus, subway) Drive your own car Intercity bus (greyhound, etc.)
- Rental car Air travel Other _____

How often do you use the Lynchburg AMTRAK service?

- Once a month or more Multiple times per year Once per year or less

When you travel out of town, how often do use the following transportation options?

Drive your own car

- Once a month or more Multiple times per year Once per year or less Never

Passenger in someone else's car/carpool

- Once a month or more Multiple times per year Once per year or less Never

Intercity bus (Greyhound, Megabus, Homeride Bus)

- Once a month or more Multiple times per year Once per year or less Never

Air travel

- Once a month or more Multiple times per year Once per year or less Never

Which of these areas do you visit at least once a year? (check all that apply)

- Atlanta area Charlottesville area Hampton Roads area
- Lynchburg area New York City Richmond area
- Roanoke area Washington D.C. area



Part II: questions about passenger rail service preferences

If passenger rail service were available for travel from the New River Valley, how likely is it that you would use it at least once per year?

- Very likely Somewhat likely Somewhat unlikely Very unlikely

Which of these cities would you use AMTRAK services to visit at least once per year? (check all that apply)

- Atlanta area Charlottesville area Hampton Roads area
 Lynchburg area New York City Richmond area
 Roanoke area Washington D.C. area

For your typical travel plans, what would be a convenient time for trains DEPARTING the New River Valley, northbound? (Check all that apply)

- Before 8am 8am – 12pm 12pm – 4pm 4pm – 8pm 8pm or later

For your typical travel plans, what would be a convenient time for trains ARRIVING in the New River Valley? (Check all that apply)

- Before 8am 8am – 12pm 12pm – 4pm 4pm – 8pm 8pm or later

How important are the following services at the train station to you?

	Very important	Somewhat important	Not important
Parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car rental services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus/transit services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate controlled waiting area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Device charging stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bike parking/rental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food/beverage services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maps/visitor information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS:



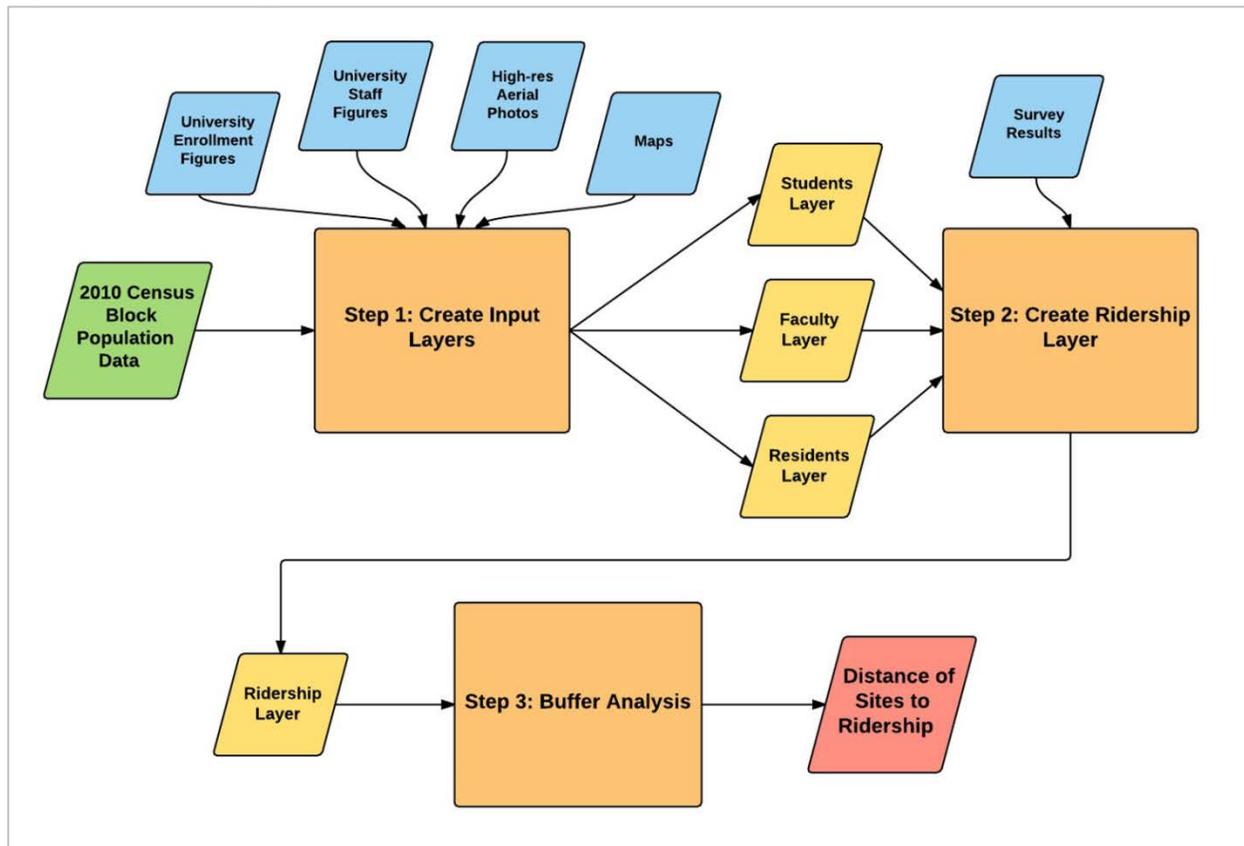
Appendix 1

Trip Generation Data

11 TRIP GENERATION DATA MODELING

An original spatial dataset was created to model distance to ridership for the three finalist sites. All GIS processing and analysis was performed using ArcGIS Desktop v. 10.3 (Esri: Redlands, Calif.). The primary data source was the U.S. Census Bureau's 2010 TIGER/Line shapefile representing population by block (tabblock2010_51_pophu). Additional inputs included official university staff and student enrollment figures, campus maps, and high-resolution aerial photography. Together, these formed a series of layers covering residents, faculty, and students.

High-level Methodology

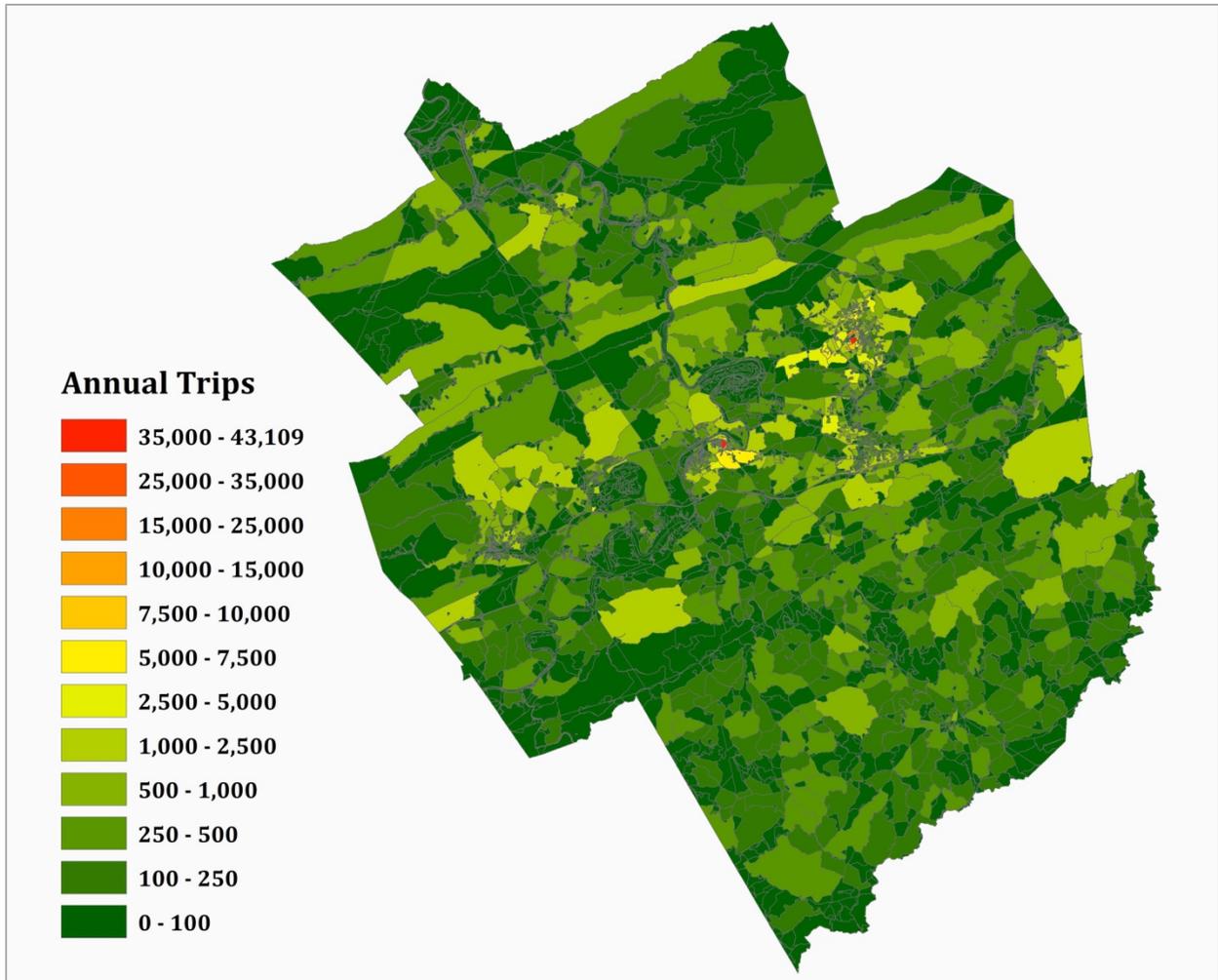


First, using the input data, blocks exclusively containing on-campus university students were determined and their population was classified as students. The remainder of each university's enrollment was distributed throughout Blacksburg and Radford proportional to a block's population and subtracted from the blocks overall population. Second, blocks containing university facilities were selected and university staff were distributed among these blocks dependent on the blocks density and the types of buildings located within it. Last, the remaining population attached to any block was classified as residents.

Next, these layers were combined so that each census block would have an attribute representing its total number of students, faculty, and residents. According to Virginia Department of Transportation traffic data, NRV average daily traffic totals 17,520 cars, for a total of 6,394,800 annual trips. The NRV generates approximately 2,628 northbound vehicles per day, originating in Pulaski and Montgomery Counties, for an annual estimate of 959,220 trips annually. The total was rounded up to 1,000,000 for modeling purposes.

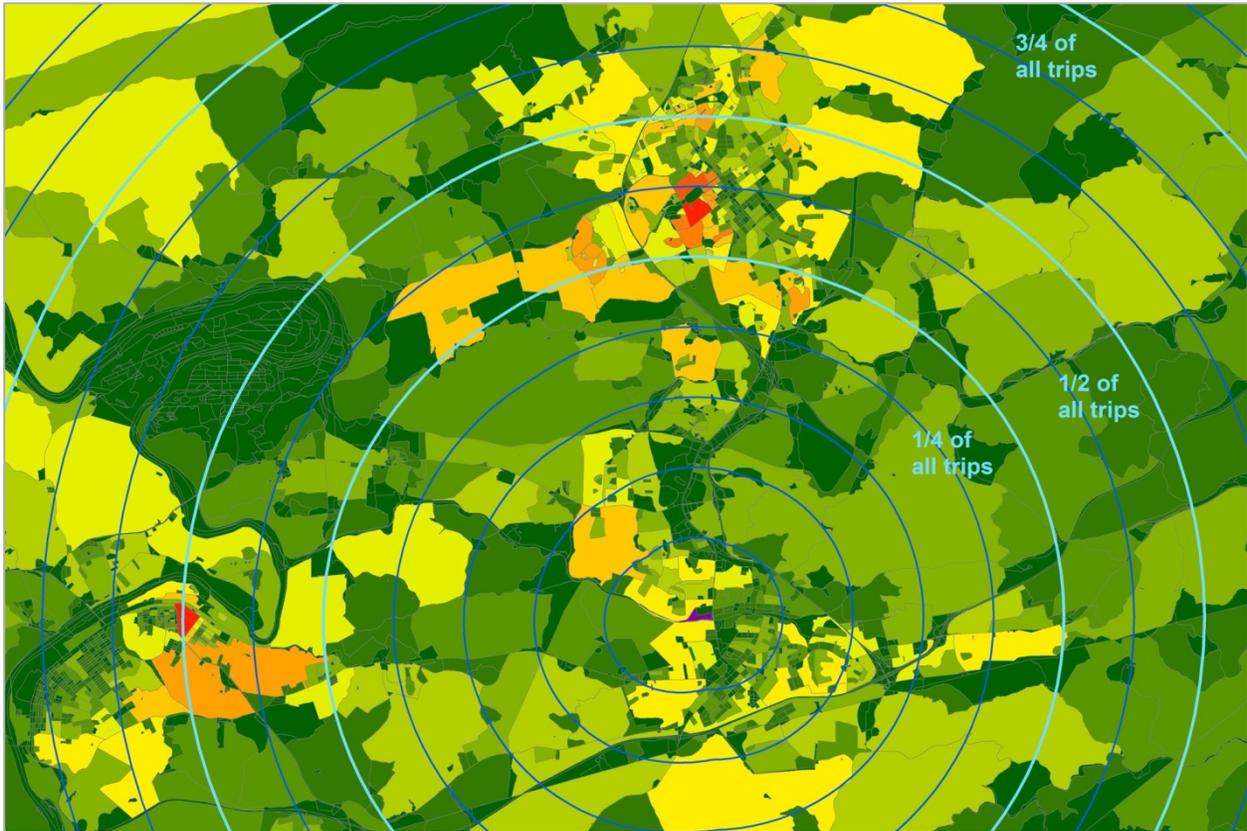
The percentage of trips assigned to students, faculty, and residents was based on nearly 6,200 responses captured in the public survey (22.5%, 22.5%, and 55% respectively). The image (below) illustrates the calculated northbound trips, as a result of assigning the 1,000,000 estimated trips, for each Census Block.

Ridership Layer



12 TRIP GENERATION DATA ANALYSIS

North Franklin West Buffering (1-Mile Intervals)



Buffer analyses were conducted to determine the distances between a potential passenger site and north-bound trip origins. When a buffer intersected a block it would 'capture' all of the block's potential trips. Buffer selections at one-mile intervals were performed to demonstrate the overall distribution of a site's proximity to ridership. Knowing the general distribution, the distances at which a site captured 25%, 50%, and 75% of all trips was calculated to the tenth of a mile. The chart below illustrates the final three site location's proximity to potential ridership.



