

RAIL TRAIL PROPERTY VALUATION IMPACT LITERATURE REVIEW MEMO

VDOT STAUNTON DISTRICT PLANNING – SEPTEMBER 2021

As part of the Shenandoah Valley Rail Trail Feasibility Study being conducted by the Virginia Department of Transportation (VDOT), in collaboration with the Department of Conservation and Recreation (DCR) and the Department of Rails and Public Transportation (DRPT), the study team planned to assess the potential impacts of the rail trail facility on property valuations along the study corridor. Greenways or other recreational trail corridors can have a positive influence on property values, as this type of improvement enhances opportunities for non-motorized access within communities and improves quality of life with environmental, aesthetic, and health benefits¹. Studies that have previously addressed this topic often rely on a statistical, hedonic model that determines a pricing premium associated with the trail facility by comparing the price of residential properties with similar attributes in terms of structure, location, and amenities, with the exception of proximity to the subject trail. In this context, a hedonic analysis seeks to quantify the impact of the benefit derived from a given amenity (e.g. – a nearby trail) on the market value of a good (e.g. – a nearby home). With distance and access to the trail facility as the primary variable, a quantitative value can be determined based on property proximity to the facility². Property owner surveys to assess qualitative benefits of trail impacts on property values have also been utilized³. Both of these approaches rely on the subject trail facility being in place for an adequate duration of time to result in an influence of property values that can be estimated. Additionally, since the hedonic model methodology requires that the sample of residential properties have similar attributes (in terms size, base value, geographic location, etc.), model study areas are generally determined based on smaller regions or neighborhoods that are more homogeneous in nature.

The characteristics of the Shenandoah Valley Rail Trail study corridor are considerably varied based on both the overall length of the corridor at 48.5 miles and the numerous small towns along the rail line, connected by rural, agricultural land uses that dominates much of the study area. While the communities along the rail line may seem similar at initial glance in terms of general size and location within the Shenandoah Valley, each contain unique economic and demographic characteristics that may translate to different priorities and values in terms of both residential real estate considerations and perceived importance of recreational trails. While all towns in the study area still operate in some capacity in the traditional sense of economic hubs supporting the surrounding agricultural uses, some have developed into commuter communities over the past several decades as other localities, both internal and external to the Shenandoah Valley have grown in population and employment opportunities. Whether by choice of more affordable housing or desire for a change in lifestyle, many of the communities within the study area have experienced an influx in younger, working families, in addition to more affluent retirees. For example, the accelerated growth of Harrisonburg and James Madison University (JMU) over the past 20 years has resulted in new housing growth in the Town of Broadway and other neighboring towns, while at the northern end of the valley, communities such as Strasburg, Front Royal and Woodstock have become bedroom communities for Northern Virginia and the Winchester region. The resulting variability in demographics is certain to have a considerable influence on desired attributes, values, and priorities when considering housing purchases.

¹ (Racca and Dhanju)
² (Munroe, Parker and Campbell)
³ (Crompton)

In addition to societal variables, the range of property types along the study corridor is even greater. From traditional residential neighborhoods and supporting business properties in the towns, to larger lot signal family dwellings, industrial and manufacturing facilities, and multiple acre farms in the surrounding counties, the existing composition of land use types along the rail line would result in a significant spectrum of property value influences. Depending on the location along the study corridor, property valuation could vary from a potentially significant influence as a result of a rail trail, to minimal impact or even a perceived detrimental, negative impact depending on the land use and attributes of specific parcels. It is worth noting that, while some existing studies show a positive influence on property values related to trails and greenways, there are often public concerns related to loss of privacy, opportunities for increased crime, and negative visual effects due to lack of facility maintenance that may have adverse impacts to property values⁴. The study “Economic Impacts of River, Trails and Greenways” developed by the National Park Service in 1995 emphasizes that, “Increases in nearby property values depend upon the ability of developers, planners and greenway proponents to successfully integrate neighborhood development and open space. Designing greenways to minimize potential homeowner – park user conflicts and maximize the access and views of the greenway can help avoid a decrease in property values of immediately adjacent properties.”⁵ This theme of overall project success based on attention to planning, design and facility maintenance involving coordination with property owners is identified in supporting studies⁶.

Given the scale, scope and likelihood of significant variabilities associated with the Shenandoah Valley Rail Trail study area, the study team determined that a literature review and summary of similar study efforts would be more appropriate in the consideration of property value influences based on the potential 48.5-mile rail trail corridor. The following summaries begin with three recent study examples in Virginia, followed by assessments of out-of-state studies that contain characteristics similar to the study corridor and this review exercise. Following the summaries, this memo provides a recommendation for considering the potential impacts to property values as a result of the implementation of the Shenandoah Valley Rail Trail.

Capital Trails Coalition Impact Report (2021), prepared by ESI Solutions for the Capital Trails Coalition of the Washington DC Metropolitan Region

- The study consisted of an evaluation of residential property value increases based on ¼ and ½ mile buffers from the trail network of the Washington, D.C. capital region.
- Previous studies referenced in the report show that property value premiums near or adjacent to trails across a metropolitan region can increase 3.75% to 6% based on the community.
- Early coordination with property owners during the trail planning stage is critical to ensure the trail impacts are positive and not a detriment.

⁴ (Racca and Dhanju)

⁵ (Rivers, Trails and Conservation Assistance, National Park Service, U.S. Department of the Interior)

⁶ (Racca and Dhanju)

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- The study provided a summary of results from previous ESI Solutions studies:
 - Greenspace Alliance and Delaware Valley Regional Planning Commission: properties in close proximity to open space in Greater Philadelphia Region saw an added value of \$10,000 per household.
 - Ecusta Rail-to-Trail in Brevard / Hendersonville, NC (under development) estimated a 4% property value increase within ¼ mile of the trail.
 - East Coast Greenway in Great Philadelphia Region estimated a 5% property value increase within ¼ mile of the greenway.
- The study used hedonic regression analysis with the results estimating a 5% property value increase within ¼ mile buffer and a 2% property value increase between ¼ and ½ mile buffer, based on median house values and number of housing units in the established buffers.

James River Park System Economic Impact Study (2017), prepared by Virginia Commonwealth University

- The study estimated that, for every quarter-mile closer to the James River Park System a single family property is located, the property’s assessed value increased by a total of \$8,963 (\$6.79 increase per foot).
- For every quarter-mile closer to the James River Park System a duplex property is located, the property’s assessed value increased by a total of \$9,517 (\$7.21 increase per foot).
- For every quarter-mile closer to the James River Park System a multi-family property is located, the property’s assessed value increased by a total of \$7,656 (\$5.80 increase per foot).
- The study results were based on a regression model that evaluated all 59,786 residential properties in the City of Richmond. The dependent variable was the distance from the property centroid to the closest park boundary. The independent variable was the 2016 property assessments.

Economic and Fiscal Impacts of the Virginia Capital Trail (2019), prepared by the Institute for Service Research for the Virginia Capital Trail Foundation

- Full completion of the Virginia Capital Trail occurred in 2015, with some segments open as early as 2005.
- Between 2014 and 2016, properties that bordered the Virginia Capital Trail increased in assessed value an average of 3.7% more than similar properties not adjacent to the trail.
- The study analysis compared properties in the same localities that shared similar qualities in terms of property type, valuation, condition, school district performance, and access to amenities.
- Many of the higher-end mixed-use and multi-family developments in the City of Richmond and adjacent Henrico County (Rockets Landing area) were omitted from the analysis due to unavailability of comparable similar developments.

Property Value / Desirability Effects of Bike Paths Adjacent to Residential Areas (2006), prepared by the University of Delaware for the Delaware Center for Transportation and Delaware Department of Transportation

- The study consisted of a literature review of numerous similar study efforts and a hedonic pricing model exercise to evaluate the impacts of existing bike paths on residential properties in New Castle County, DE.
- The study analysis considered properties immediately adjacent to bike paths and within a 50-meter proximity to bike paths.
- The analysis determined that a 4% property value premium existed for properties within the 50-meter buffer, which was consistent with other studies that were reviewed⁷.

The Varied Impact of Greenways on Residential Property Values in a Metropolitan, Micropolitan, and Rural Areas: The Case of the Catawba Regional Trail (2004) prepared by Ohio State University, George Mason University, and University of North Carolina at Charlotte

- The study evaluated the impact of the Catawba Regional Trail on property values using a hedonic model in a variety of land use types ranging from urban centers in the City of Charlotte, Mecklenburg County, NC, rural and suburban settings in Gaston County, NC, and a micropolitan setting in York County, SC.
- Given the range of land development characteristics associated with the study area, inconsistencies and concerns with the model results did arise and needs for further investigation were noted. For example, newer housing developments along the greenway in the micropolitan setting compared to older, lower income housing adjacent to the greenway in the metropolitan areas was believed to have had a disproportionate effect on model results.
- The study determined that the micropolitan setting, a so-called best of both urban and rural living, benefited the greatest in positive property value impacts related to proximity to the greenway. The more urbanized settings saw the lowest benefit, with rural areas falling in the middle.

The Impact of Trails and Greenways on Property Values (2020) prepared by John L. Crompton, Ph.D for the National Recreation and Parks Association Monthly Magazine

- The article summarized the research of reviewing property owner surveys from the 1980s and 1990s. The subject surveys asked residents if trail proximity increased or decreased their property's value and selling ability. Responses from 2,647 households within proximity to 24 urban trails and 1,212 households within proximity to 8 rural trails were analyzed.
- The urban household responses indicated a much higher opinion of trail benefit with 47% claiming a positive impact and only 6% with a negative impact, compared to 16% positive and 6% negative in the rural responses.
- The ability to sell a property followed similar results, with 62% claiming a faster sale to only 8% slower in the urban areas, and 29% faster to 9% slower in the rural areas.

⁷ (Racca and Dhanju)

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- The author noted that these outcomes support the idea that continued exposure to trail facilities following their completion eases property owner perceptions that trails may have adverse impacts on their properties.
- The article then compares these findings to a summary of 20 studies using more current outreach methods beginning in the late 1990s that indicate trails generally have a positive impact on adjacent residential property values of 3% to 5%.

Based on this review and summary of existing literature, it is conceivable that the Shenandoah Valley Rail Trail, through successful planning and design, could have the potential to provide modest increases in residential property values of 3% to 4% within the more developed towns along the corridor. It's also plausible that the rail trail's influence may diminish in the more rural areas between population centers with a negligible to no impact on property values.

References

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