

*New River Valley Executive Summary
Transportation and Housing Alliance
THA Toolkit*



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New River Valley Planning District Commission

May 2009

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Disclaimer

This report was prepared by the staff of the New River Valley Planning District Commission through funding assistance received from the Thomas Jefferson Planning District Commission, the Grantee for the Transportation Housing Alliance funds.

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Acknowledgement

The Transportation and Housing Alliance came about through the work and vision of the Virginia Board for People with Disabilities (VBPD). VBPD identified the need to develop collaboration between housing and transportation stakeholders and professionals for the purposes of building the capacity of transportation and housing access and choice communities throughout Virginia. VBPD articulated their vision for the full inclusion of people with disabilities in their communities through improving transportation and housing opportunities in their Grant Funding Announcement for 2005, issued in December 2004. The proposed Transportation and Housing Alliance project included the development of a tool to assess housing and transportation needs, project future needs, and identify overlapping issues and opportunities. VBPD identified Planning District Commissions (PDC's) as principle players in this statewide effort, working with state agencies and other organizations throughout Virginia.

Introduction

The Transportation Housing Alliance (THA) has been established as a standing committee of the Virginia Association of Planning District Commissions (VAPDC). The goal of THA is to serve as a conduit of information, resources, technical assistance and education. The THA will make public policy recommendations and work to build and improve accessibility and interconnection between housing and transportation in localities and statewide. The THA steering committee consists of stakeholders across the state, including representatives of:

- ✓ Virginia Department of Rail and Public Transit
- ✓ Virginia Department of Housing and Community Development
- ✓ Virginia Housing Development Authority
- ✓ Centers for Independent Living
- ✓ Virginia Commonwealth Transportation Board
- ✓ Virginia Department of Transportation
- ✓ Fair Housing
- ✓ Virginia Board for People with Disabilities
- ✓ Five Planning Districts in Virginia

The Purpose of the Toolkit is to assess housing and transportation needs, project future needs and identify overlapping issues and opportunities. The key outcome of using the Toolkit is a clear understanding of the current transportation and housing needs of people with disabilities and others who may otherwise be excluded from the planning process.

In conjunction with the THA Toolkit, the Planning District Commission had an opportunity to directly utilize the maps and data obtained through the compilation of data for an Employment Mobility Study which was submitted in January of 2009. This funding opportunity allowed the Commission to focus on underserved rural transportation areas through the unique investigation with transit stakeholders and local employment centers. Some of this study is highlighted in the executive summary for reference.

Scope of Work:

1. The development of a project team composed of technical and senior staff to gather and evaluate compiled data based on the program outline provided by the Transportation Housing Alliance.
 - a. Collect US Census Data: Census Tract, Block Group, Block, Disability, Income, and Household for the New River Valley
 - b. Collecting and Digitizing Data
 - c. Create a system for organizing the data for consistent file storage and access

2. Collecting Data by utilizing the following web resources:
 - a. U.S. Census Bureau: www.census.gov
 - b. Virginia Employment Commission: <http://velma.virginia.com/default.asp>
 - c. Virginia Geographic Information Network (VGIN): www.vgin.virginia.gov
 - d. Virginia Economic Development Partnership(VEDP): www.yesvirginia.org
 - e. University of Virginia Geostat Center: <http://gislib.virginia.edu>
 - f. Weldon-Cooper Center for Public Service (UVA): <http://coopercenter.org/>
 - g. Access Virginia: <http://www.accessva.org/>

3. Mapping data within a defined study area, census tract, or block group with the following concentrations to study the New River Valley for potential needs:
 - a. Disabilities
 - b. Educational Attainment
 - c. Housing Structures Types
 - d. Elderly Populations
 - e. Areas with Low Incomes
 - f. Residential Growth
 - g. Proportions of Persons Served by Transit
 - h. Population Mapping by Age

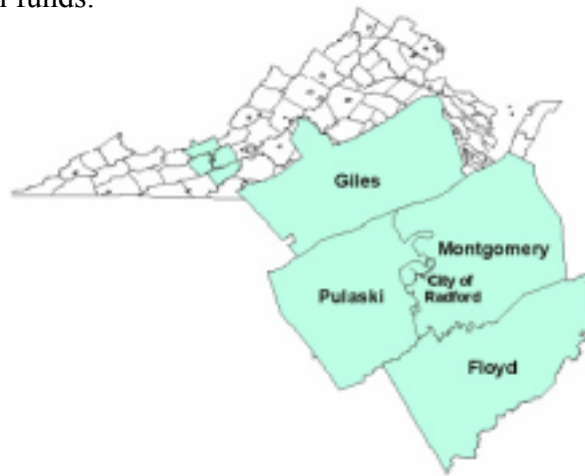
4. Evaluating the potential needs based on maps generated within the study area by relating the increasingly complex relationships between transportation, housing, and land.

Executive Summary

Defining the Study Area:

The New River Valley Planning District is one of twenty one planning districts in Virginia whose commissions are chartered under Virginia law. Also known as PDC 4, the organization encompasses the counties of Floyd, Giles, Montgomery, and Pulaski, and the City of Radford.

The commission serves the local governments in the area and their citizenry by providing a number of different services ranging from technical regional studies to economic development to regional recycling. The purpose of the planning district commission is to promote regional cooperation, to coordinate the activities and policies of member local governments, and to provide planning assistance to local governments. The commission is financed by a combination of local, state, and federal funds.



The New River Valley which encompasses over 939,622 acres and is home to nearly 180,000 residents has a strong heritage and pride embedded in its roots. It is a dynamic area of industry and trade, partly because it is located within a day's drive to approximately three-quarters of the nation's major markets. The scenic vistas, historical and cultural attractions, and qualities inherent to the area are drawing tourists and businesses to this rapidly growing valley. Business and industry searching for a new location will appreciate the excellent natural resources found here. A critical component of success in this region is the pride and work ethic exhibited by the residents. These are the people that drive the Valley toward accomplishing its goals, success, and sustained growth.

Collecting and Organizing the Data:

Collecting the data was an integral part of the assessment process. With the amount of information resources growing it is important to compile data from multiple sources for various levels of any given study area. It was the overall goal of the Planning District Commission to prepare a visual representation such as maps that could summarize multiple data overlays and results for comparison.

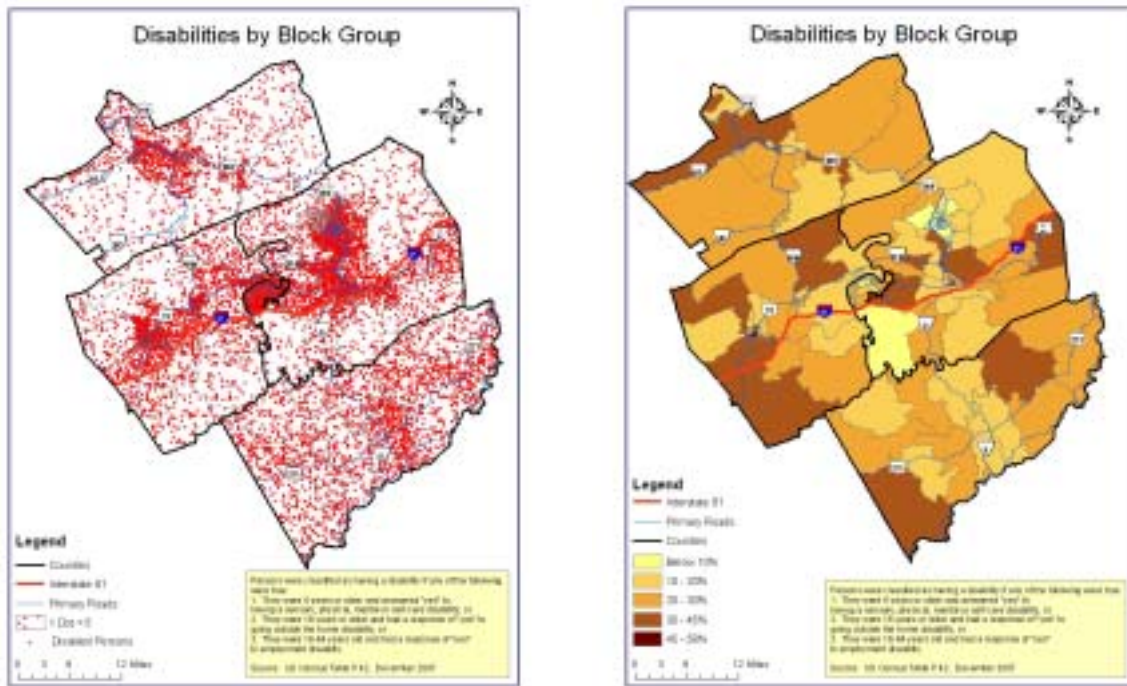
Information for preparation of the maps prepared utilized the following online resources:

- a. U.S. Census Bureau: www.census.gov
- b. Virginia Employment Commission: <http://velma.virginia.com/default.asp>
- c. Virginia Geographic Information Network (VGIN): www.vgin.virginia.gov
- d. Virginia Economic Development Partnership(VEDP): www.yesvirginia.org
- e. University of Virginia Geostat Center: <http://gislib.virginia.edu>
- f. Weldon-Cooper Center for Public Service (UVA): <http://coopercenter.org/>
- g. Access Virginia: <http://www.accessva.org/>

The U.S. Census Bureau provided the bulk of the data by utilizing Census geography. Census Geography is a collective term referring to the types of geographic areas used by the Census Bureau in its data collection and tabulation operations including their: structure, designations, and relationships to one another. The following elements comprised the terms commonly used for the data which was compiled:

- a. *Census Tracts*: small relatively permanent statistical subdivision of a county delineated by a local committee of census data users for the purpose of presenting data. Census tract boundaries tend to follow visible features, but may follow governmental unit boundaries and other non-visible features but always nesting within counties. On average each census tract inhabits around 4,000 persons and may be split by any sub-county geographic entity.

- b. *Block Group (BG)*: A subdivision of a census tract block group is the smallest geographic unit for which the Census Bureau tabulates sample data. A block group consists of all the blocks within a census tract with the same beginning number. Below is an example of data compiled:



- c. *Block*: A subdivision of a census tract which may correspond to individual city blocks bounded by streets, but blocks (especially in rural areas) may include many square miles and may have some boundaries that are not streets.
- d. *Disability*: A long-lasting physical, mental, or emotional condition which can make it difficult for a person to do activities such as: walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside of the residences for errands, work, or leisure.
- e. *Income*: of total income which is the sum of the amounts reported separately for wages, salary, commissions, bonuses, or tips; self-employment income from own non-farm or farm business, including proprietorships and partnerships; interest, dividends, net rental income, royalty income, or income from estates and trusts; social Security or Railroad Retirement income; Supplemental Security Income; retirement, survivor, or disability pensions; and any other sources of income received regularly such as Veterans' payments, unemployment compensation, child support, or alimony.
- f. *Household*: a household includes all the persons who occupy a housing unit as their usual place of residence.

- g. *Topographical Integrated Geographic Encoding and Referencing (TIGER) system or database*: A digital geographic database that automates the mapping and related geographic activities required to support the U.S. Census Bureau's census and survey programs.

Data was pulled from the list of sources provided and digitized to prepared visual maps that would assist in future transportation planning. Below is some examples of these maps and explanation of potential future uses to better plan for the region.

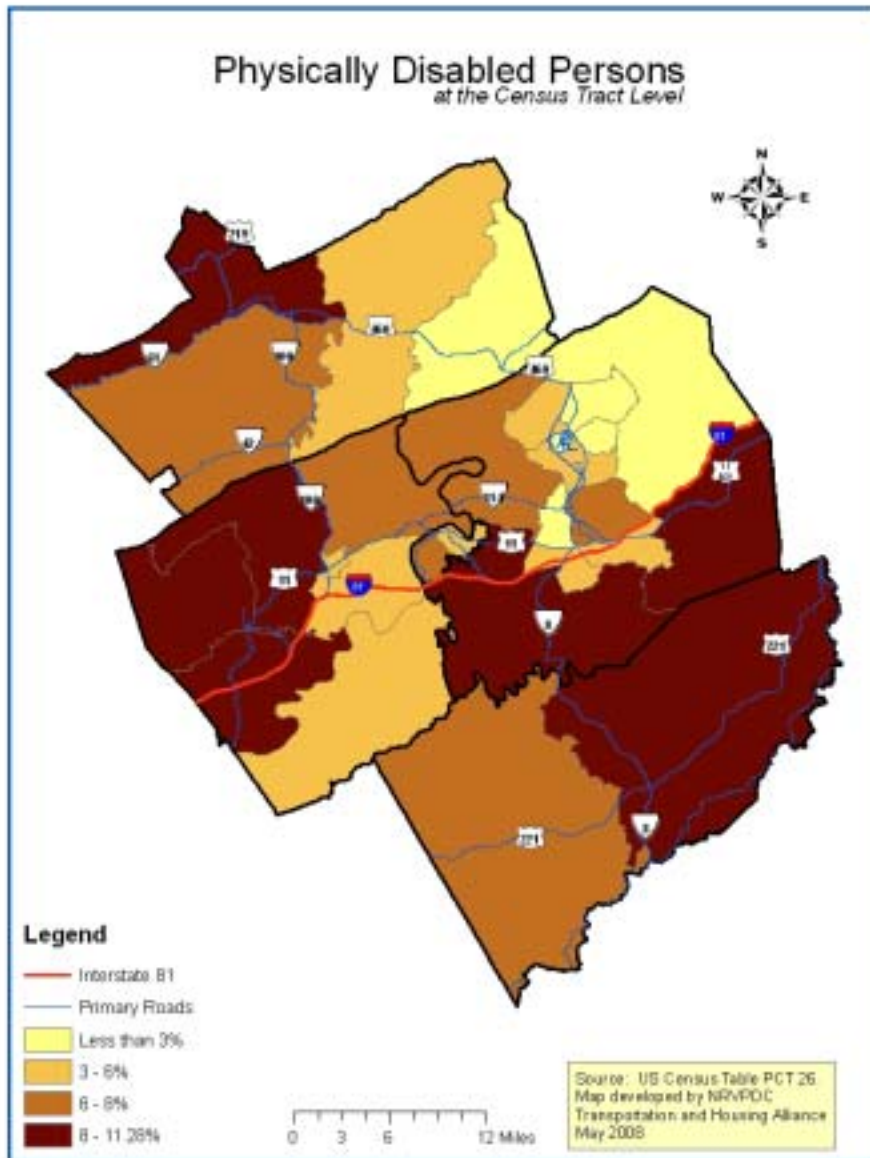
Analyzing the Results:

Through the use of the program outline and directions provided, the following mapping examples were prepared for the the New River Valley:

1. Physically Disabled Persons
2. Educational Attainment: High School or Less
3. Elderly Persons: 65 and up
4. Persons with Disability: 65 and up
5. Employment Centers
6. Housing Structures With Three or More Units
7. Family Income Less than \$35,000
8. Supplemental Security Income

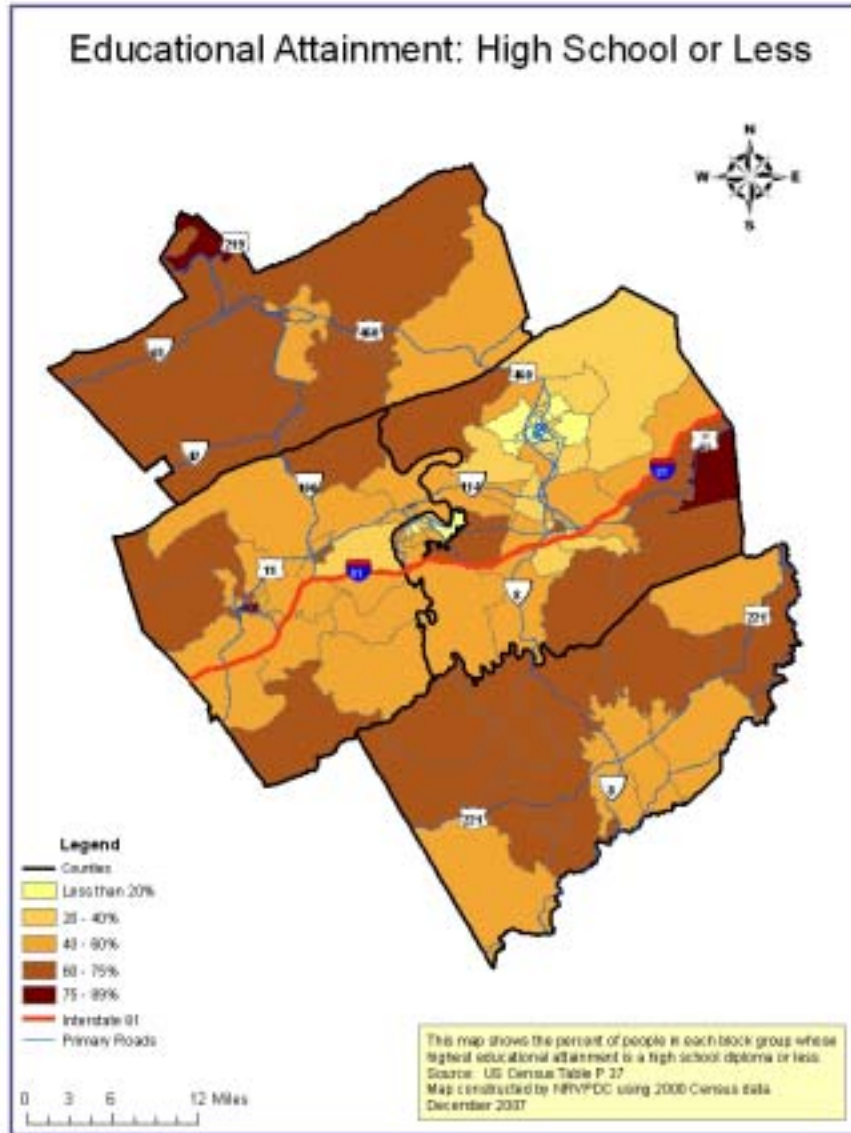
Looking at each of these elements as individual studies may not provide thorough enough information for studying rural transportation needs. However, combining these elements allows a viewer to target improvement locations. Each of these maps benefit planners in meeting with stakeholders and the public to discuss the needs of the region.

Physically Disabled Persons: Below is a map of Physically Disabled Persons in the NRV ranging from less than three (3) percent to more than eleven (11) percent of the population. The data was digitized utilizing the Block Group information and is underlayered with the major transportation network:



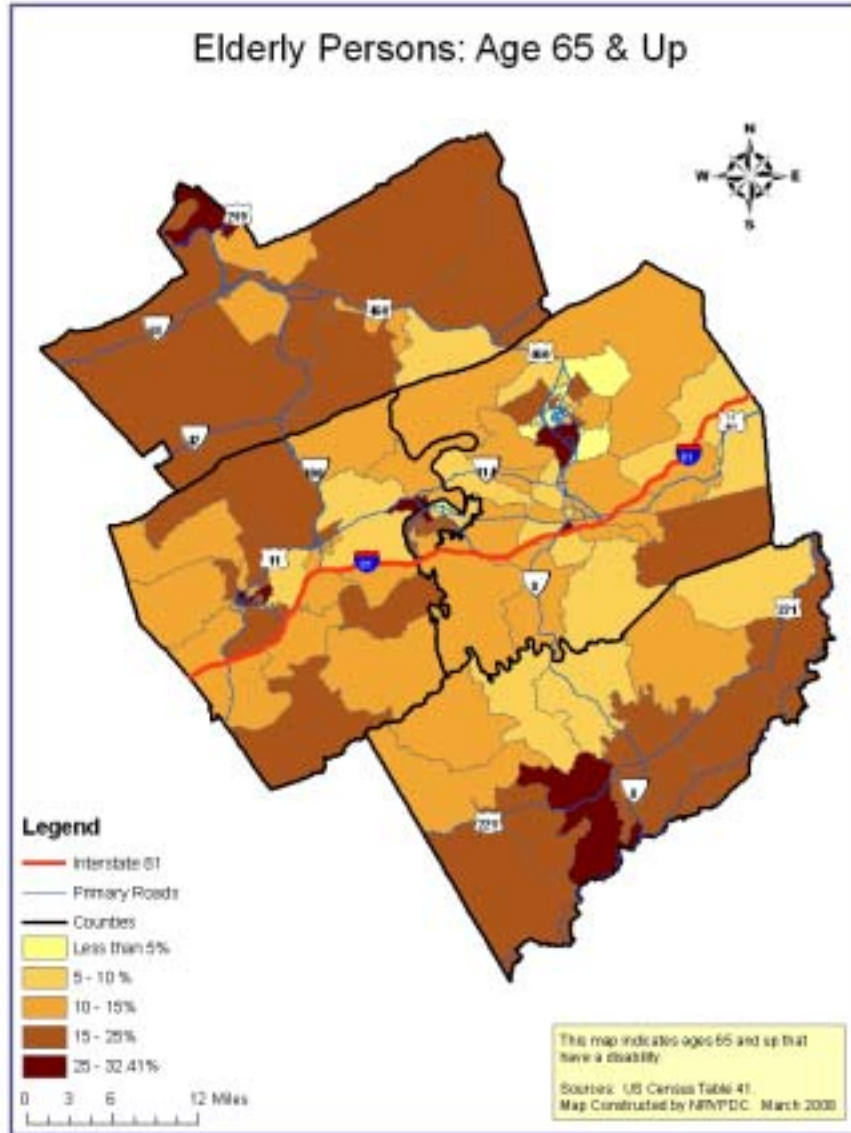
This map shows that the majority of individuals with disabilities are located outside of the Metropolitan Planning Area (MPO) located in western Montgomery County. These areas are located within a rural transportation area that is commonly surrounded by agricultural, heavily wooded and mountainous terrain.

Education Attainment: High School or Less: Below is a map of the percentage of persons in the NRV who have a educational attainment of high school or less in the NRV which ranges from less than twenty (20) percent to more than seventy five (75) percent.



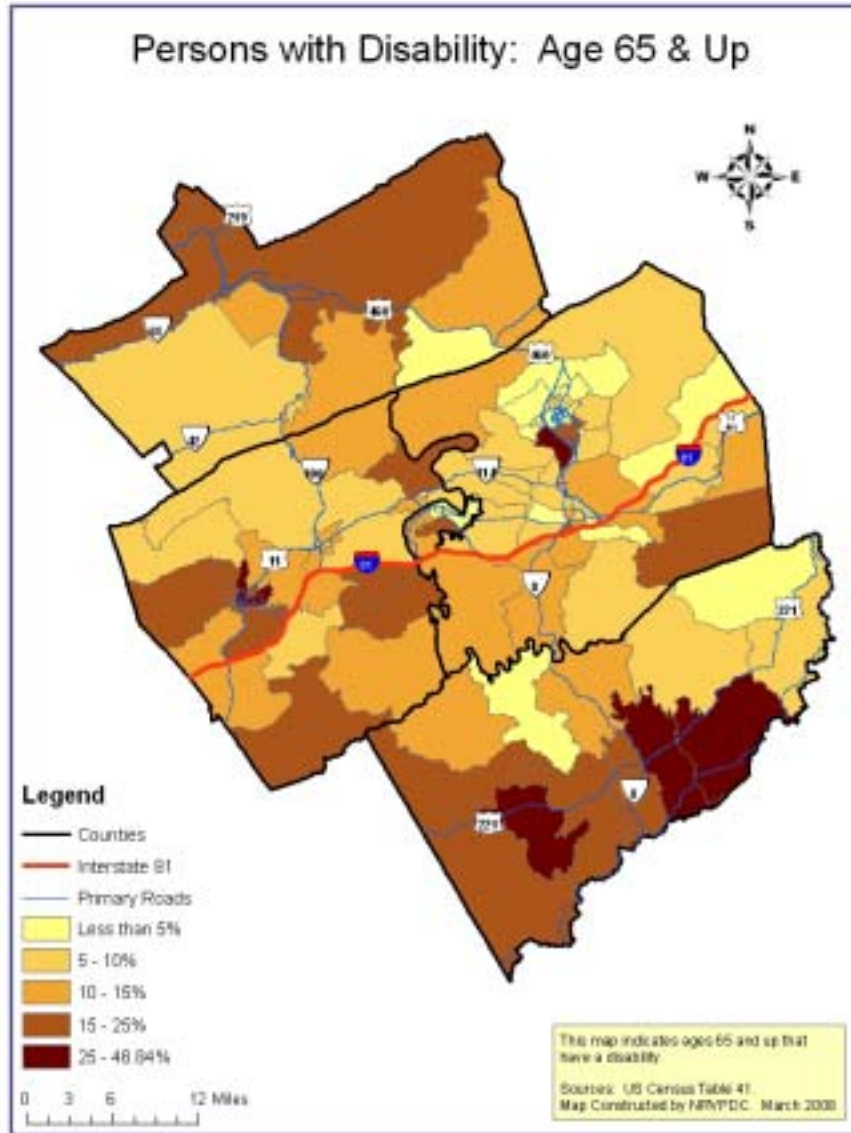
The less than twenty (20) percent of population portions are located in the vicinity of Virginia Tech University and Radford University with a very small ripple effect into their corresponding communities. Principally it can be viewed that the more rural parts of the region tend to have a higher percentage of high school or less educational attainment.

Elderly Persons: 65 and up: Below is a map of Elderly Persons aged sixty five (65) years or older. The NRV ranges from less than five (5) to more than twenty five (25) percent of the population.



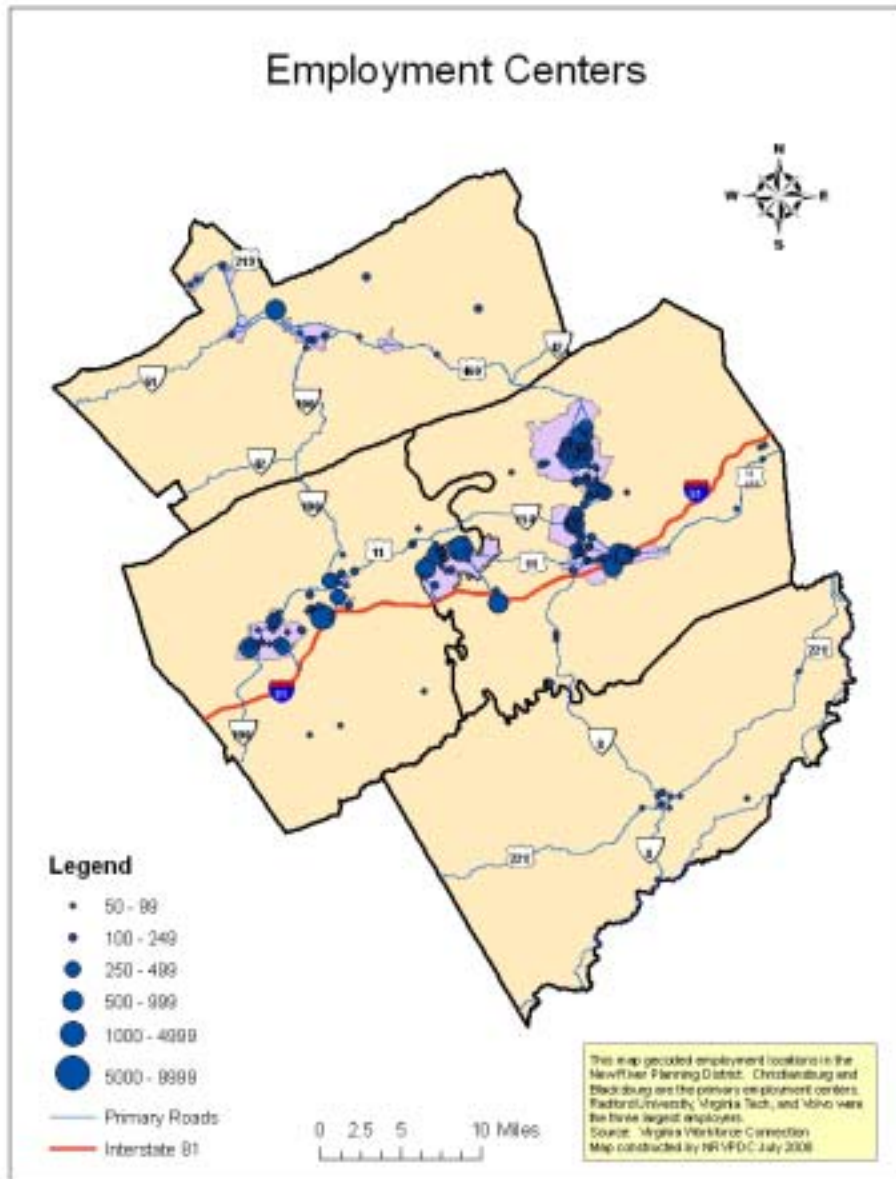
The majority of the elderly population sixty five (65) years or greater reside close to small communities or rural towns with the exception of a small portion in the Blacksburg (urban) area. The elderly community, especially within the small towns located throughout the region, could benefit tremendously from transit improvements.

Persons With Disabilities: 65 and up: Below is a map of the Physically Disabled Persons that are sixty five (65) years of age or greater. The NRV ranges from less than five (5) to more than forty five (45) percent of the population.



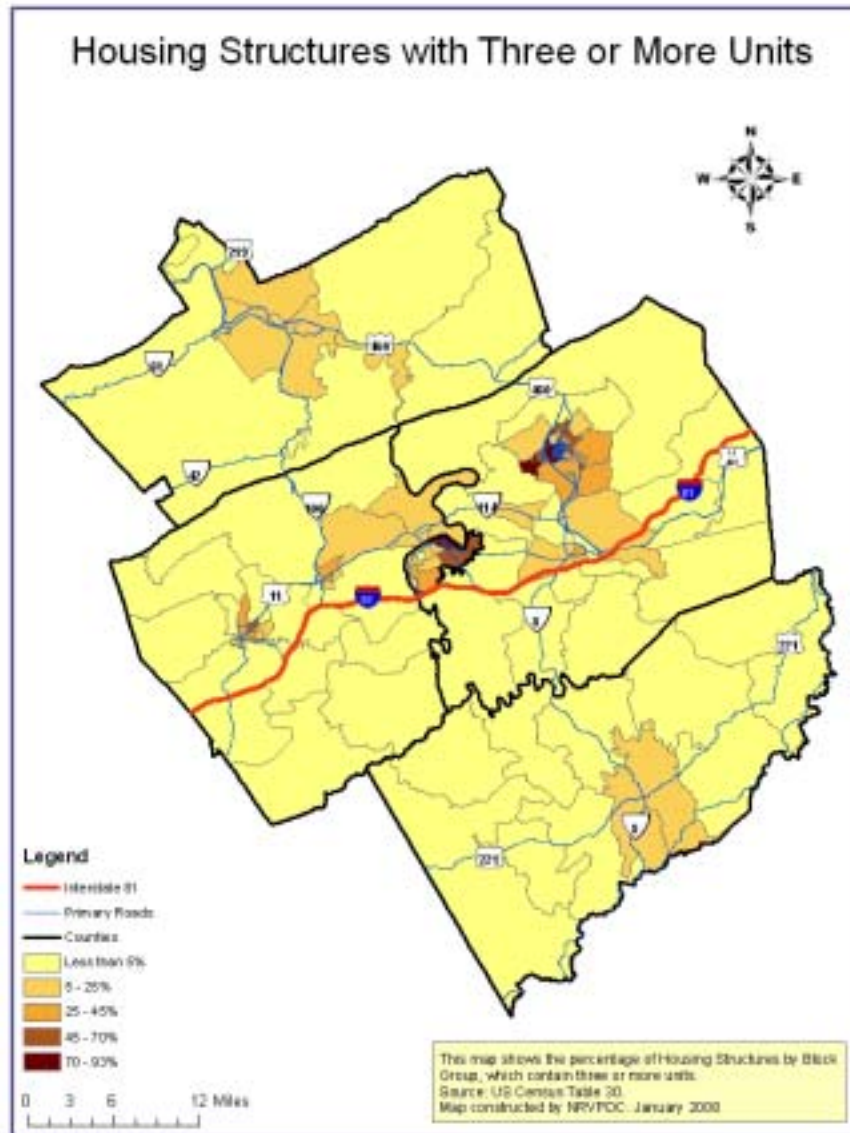
Comparing this map to the previous map pertaining to persons who were sixty five (65) years or older demonstrates that most of the elderly population does not have a physical disability in the NRV. However areas which had a smaller elderly population tend to have a greater percentage of individuals with physical disabilities.

Employment Centers: Below is a map of the major employment centers in the NRV which ranges from less than fifty (50) employees to more than nine thousand (9,000) employees.



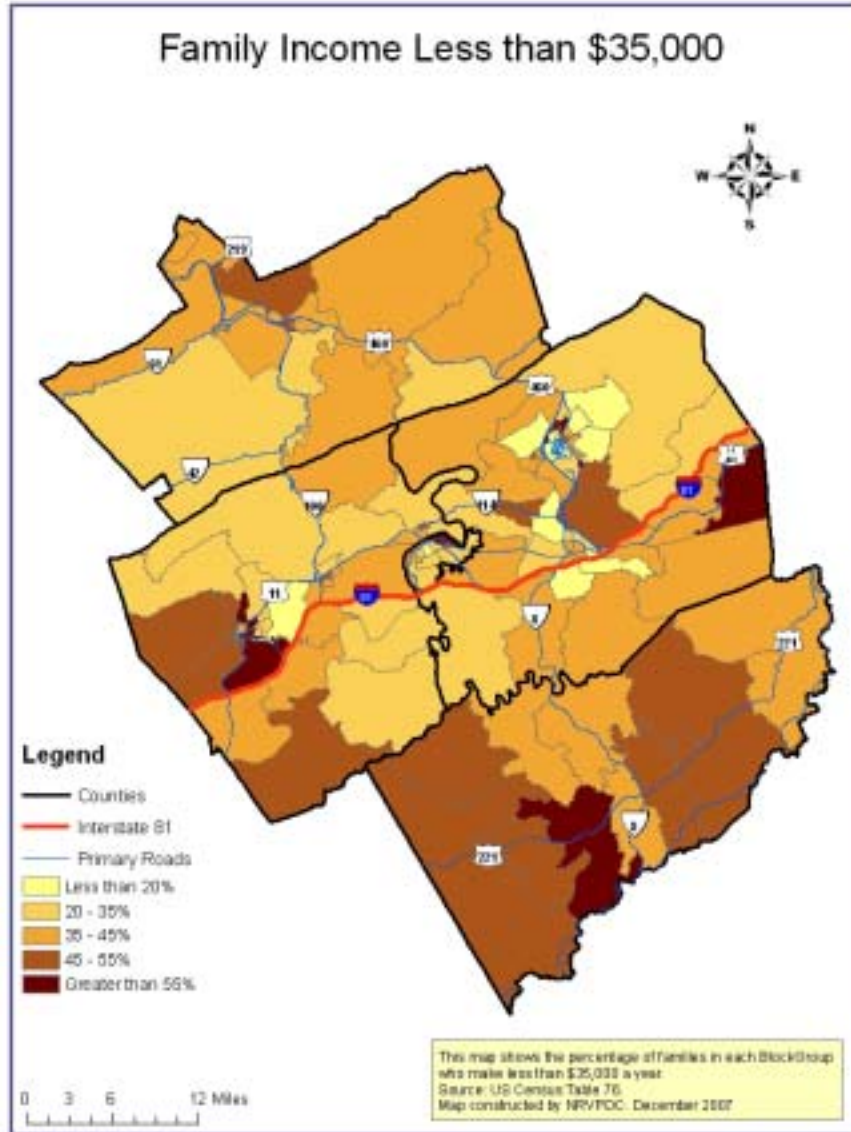
This map confirms a typical rule of thumb in that small towns and communities are often located near major employment centers which often provide the life line for the surrounding area. Major employment centers are located primarily along each of the major roadway corridors in the region with minimal employment in more rural areas of the region.

Housing Structures with Three or More Units: Below is a map of the housing structures that have three or more units (multiple family dwellings such as apartments) in the NRV which ranges from less than five (5) percent to more than seventy (70) percent of the structures in the region.



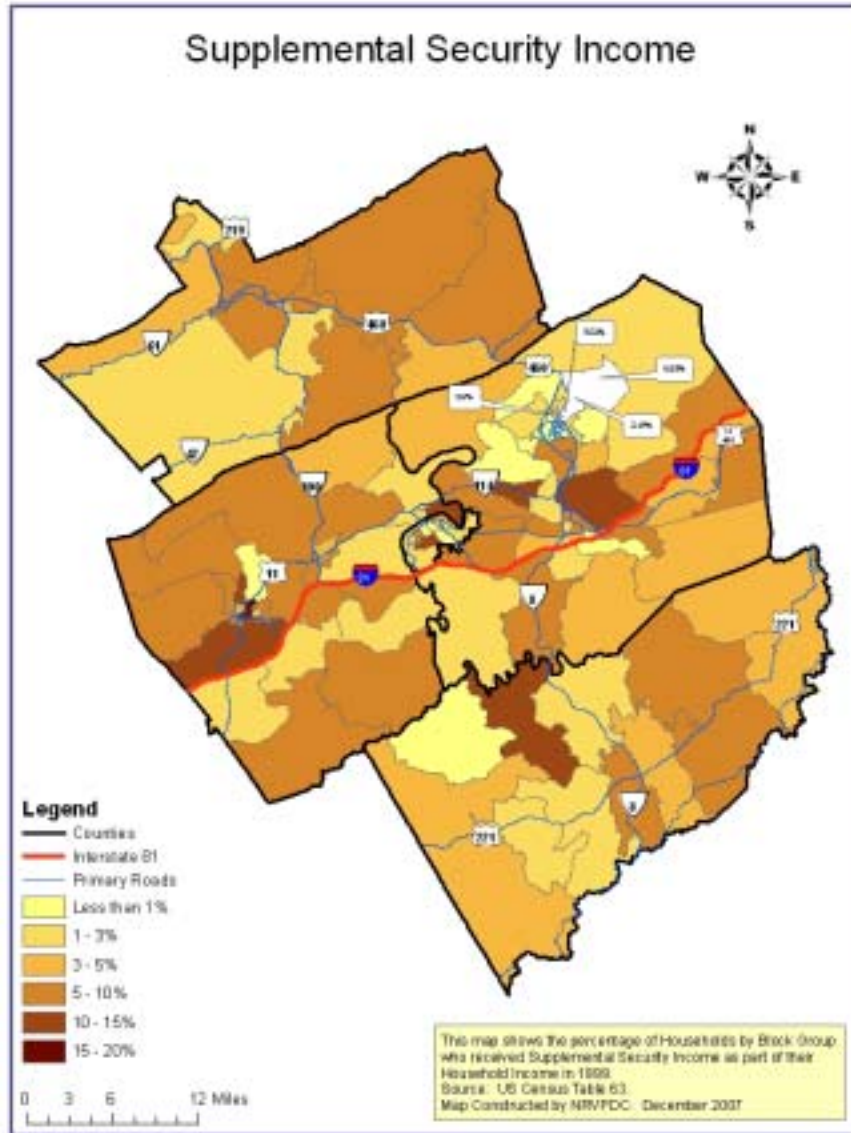
Typically the higher percentages of housing structures with three or more units are located near the two universities (greater than seventy (70) percent) and within town epicenters located throughout the region (five (5) percent to seventy (70) percent).

Family Income Less than \$35,000: Below is a map of the family incomes that do not exceed \$35k per year in the NRV. These figures range from less than twenty (20) percent to more than fifty five (55) percent of the population.



This map could easily be compared with the elderly population and housing structures with three or more units. Often times incomes less than \$35,000 are found in the more rural areas as generally reflected in this map. However, we can see that some of the more historical (older) communities there is a large portion of residents.

Supplemental Security Incomes: Below is a map of the persons whom currently receive supplemental security income in the NRV, ranging from less than one (1) percent to more than fifteen (15) percent of the population.



This map shows that the majority of individuals requiring supplemental security income funds reside in the more rural areas of the NRV. Lower percentages of SSI assistance are found in the NRV's more urbanized areas.

The Planning District Commission was able to apply the methods demonstrated in the THA Toolkit toward its existing Employment Mobility Study. The purpose of the Employment Mobility Study was to develop a vision for rural transportation within the New River Valley. The study focused on the existing barriers of transportation and explored solutions through the use of surveys and knowledge of an established stakeholder group. This study identified the following deficiencies to the existing rural transportation system:

1. 20% of individuals had been late for work due to unreliable transportation
2. 13% of individuals had missed entire days of work due to unreliable transportation
3. 55% of individuals said they would pay \$2-\$3.50 for public transportation
4. NRV Employment Centers were mapped to identify major commuter routes
5. Family incomes less than \$35,000 were generally the furthest away from employment centers

Conclusions:

The recommended scope of work and allotted funding has allowed the New River Valley Planning District Commission to become aware of typically underserved areas found in rural and low populated areas. The basic demographic breakdown was a fitting study area for Planning District Commissions throughout the state as they tend to staff regional committees that focus on transportation improvements to the region. The New River Valley is comprised of many small communities that require careful future multimodal planning to be inclusive of all residents of the region while increasing connectivity.

This information has established an excellent foundation that will be utilized for future grant writing and studies to accommodate multiple multimodal non-discernment transportation planning initiatives. As the New River Valley and Commonwealth of Virginia continue to move forward it will become increasingly important to make planners and transportation leaders aware of not only the physical characteristics of a potential improvement area, but also of the special circumstances that need to be considered to enhance the resourcefulness and quality of life for the region.

The New River Valley Planning District Commission proposes to share the information obtained through the utilization of this Toolkit to make the region aware of the importance the existing transportation and housing needs of people with disabilities and others who may otherwise be traditionally excluded from the planning process.