Public Transportation for the Elderly, Disabled, and Low-Income: Phase I—Needs Assessment Report

February 2, 2006

Prepared for:
Richmond Area Metropolitan Planning Organization
Acknowledgment

Prepared in cooperation with the U.S. Department of Transportation, Federal Highway Administration, Federal Transit Administration, Virginia Department of Rail and Public Transportation, and the Virginia Department of Transportation.

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The Richmond Area Metropolitan Planning Organization (MPO) is the federal and state designated regional transportation planning organization that serves as the forum for cooperative transportation decision-making in the Richmond area. The Richmond Regional Planning District Commission is the contracting agent and staff for the Richmond Area MPO.

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[+ Principal project staff]
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Introduction

Mobility is essential for daily living. Whether commuting to work, shopping, going to the doctor, visiting friends and family, or simply going out for recreation, mobility is the common denominator.

The increasing suburbanization of America, the resulting increase in distance traveled per person, the continued heavy reliance on the private automobile, and the increase in transportation costs are creating a strain on our transportation system as well as those who use it. Those who have difficulty providing their own transportation as a result of their age, a disability, or income may experience even greater stress.

According to the 2000 census, 35.1 million people in the U.S. were over age 65, while 33.9 million people were living below the poverty level (see page 4 for definitions), and 44.5 million people over age 21 were disabled. Many of these people have few or no mobility options to meet their basic needs.

Mobility issues vary among these three transportation disadvantaged groups. A majority of the elderly are accustomed to the freedom and flexibility of car ownership and their expectations for public transit are very high. The population of elderly persons is growing. The 1990 census indicated approximately 82,000 people in the Richmond region were age 65 and over. The 2000 census shows the number of people age 65 and over has grown to approximately 86,000 people, about 10.5 percent of the region’s population. Data evaluated for the public transportation needs assessment indicates that older adults are dispersed throughout the Richmond region (i.e., they do not tend to live in clusters), come from varying economic classes, have varying degrees of disabilities, and have an assortment of mobility needs. Elderly people are also likely to have difficulties accessing public transit due to the many physical disabilities that result from aging.

For the disabled, the issue is the availability of transportation options that meet their needs by accommodating specific disabilities while fulfilling their desire for independence. Over 17 percent of the population age five and over in the Richmond region (approximately 130,000 people) are reported to have a disability. The census bureau defines disability as “the existence of a long-lasting physical, mental, or emotional condition that makes it difficult for a person to perform activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business.” According to a 2000 survey conducted by the National Organization on
Disabilities, 30 percent of respondents with disabilities reported difficulty in accessing transportation, compared to 10 percent of respondents without disabilities.

Families in poverty possibly require the most flexible transportation options. For the poor who have jobs, many work second or third shifts and public transit services are not available at those times. In addition, many families in poverty struggle with cultural and language barriers. Nearly nine percent of persons age five and older in the MPO study area (64,000 persons) were reported to be below the poverty rate in the 2000 census. Unlike the elderly and disabled population groups, low-income populations tend to reside in specific communities within the region. A spatial analysis of 2000 census data shows the largest concentrations of households in poverty are in the City of Richmond, Charles City County, portions of eastern Henrico County, the north side of the Town of Ashland, and an area immediately west of I-95 in Chesterfield County (see Figure 1). The poor make up an increasing share of transit users. However, statistics show that less than 10 percent of people below poverty utilize transit to commute to work. Limited availability, reliability, and perceived safety issues could be some of the reasons that the poor are more auto-dependent than transit-dependent. The poor incur the expense of car ownership in order to obtain the flexibility and mobility a car provides. However, trade-offs are made by spending less on other personal and family needs.

Every jurisdiction in the Richmond region has some form of specialized public transportation operating within its boundaries. However, not all trip purposes and disadvantaged groups are fully accommodated in each jurisdiction. The service areas, service hours, ridership eligibility requirements, rules for reservations, and fares vary by transportation provider and by jurisdiction. Generally, transportation service within a jurisdiction’s boundaries is more commonly provided than inter-jurisdiction transportation service. The limited service areas and hours, coupled with differing eligibility requirements amongst the providers, can make obtaining transportation for some disadvantaged persons very frustrating, if not nearly impossible.

**Background**

The purpose of this study is to assess the public transportation needs of transportation disadvantaged groups and the public transportation services available to these groups in the Richmond region. The study tasks include:

- Identification of transportation disadvantaged groups in the Richmond region by location and quantity in need of specialized public transportation services
- Evaluation of trip demands for these groups including major travel destinations, general travel times, and trip purposes
- Review of specialized transportation services available in the region
- Comparative analysis of transportation services available to meet the specific needs of the transportation disadvantaged in the region
- Identification of specific issues of the existing transportation system to meet the needs of the transportation disadvantaged

This assessment is intended to be used by the Metropolitan Planning Organization (MPO), local governments, GRTC, human service agencies and organizations, and transportation providers in evaluating specialized transportation services available to transportation disadvantaged persons.
Figure 1
1999 Low-Income Population Distribution

Percent of Population Below Poverty
(see p. 4)

- < 9%
- 9% - 17.9%
- 18% - 49.9%
- 50% and over

Sources:
US Census, 2000
Richmond Regional PDC, 2005
Virginia Department of Transportation, 2005

Prepared by: RRPDC, September 2005

(see p. 4)
For purposes of this study, transportation disadvantaged persons have been defined as follows:

**Elderly** – age 65 and over.

**Disabled** – based on census definition for disability that refers to persons with a long-lasting physical, mental, or emotional condition that makes it difficult for a person to perform activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business.

**Low Income** – based on census definition for poverty status that was derived from answers to the income questions in the 2000 census. Poverty status is determined by comparing a person’s total family income with the poverty threshold appropriate for that person’s family size and composition. Table 1 below shows the relationship between family size and composition and poverty status.

**Table 1 – Poverty Thresholds in 1999 by Size of Family and Number of Unrelated Children Under 18 Years Old**

<table>
<thead>
<tr>
<th>Size of Family Unit</th>
<th>Weighted Average Threshold</th>
<th>Related children under 18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>One</td>
</tr>
<tr>
<td>One person (unrelated individual)</td>
<td>8501</td>
<td>8667</td>
</tr>
<tr>
<td>Under 65 years old</td>
<td>8667</td>
<td></td>
</tr>
<tr>
<td>65 years old and over</td>
<td>7990</td>
<td>7990</td>
</tr>
<tr>
<td>Two people</td>
<td>10869</td>
<td></td>
</tr>
<tr>
<td>Householder under 65 years old</td>
<td>11214</td>
<td>11156</td>
</tr>
<tr>
<td>Householder 65 years old and over</td>
<td>10075</td>
<td>10070</td>
</tr>
<tr>
<td>Three people</td>
<td>13290</td>
<td>13032</td>
</tr>
<tr>
<td>Four people</td>
<td>17029</td>
<td>17184</td>
</tr>
<tr>
<td>Five people</td>
<td>20127</td>
<td>20723</td>
</tr>
<tr>
<td>Six people</td>
<td>22727</td>
<td>23835</td>
</tr>
<tr>
<td>Seven people</td>
<td>25912</td>
<td>27425</td>
</tr>
<tr>
<td>Eight people</td>
<td>28967</td>
<td>30673</td>
</tr>
<tr>
<td>Nine people or more</td>
<td>34417</td>
<td>36897</td>
</tr>
</tbody>
</table>

Statistics and data tables in this report related to means of transportation to work are based on “workers.” In general, workers are those persons age 16 or over who worked during the 12 months prior to the 2000 census, whether for pay or profit or without pay on a family farm or in a family business. Due to availability of census data for consistency in presenting data in this report, statistics and data related to income, disability status, and age are all reported based on persons age five years old and older.
Transportation Disadvantaged – Elderly Population

The population of older adults in the United States is growing and becoming an increasingly larger proportion of the total population. These older adults come from a broad range of economic classes, have varying degrees of health, and emphasize diverse mobility needs.

In January 2005, AARP released a Five-Year Mobility Action Agenda that identified the goal to increase the percentage of adults who have the mobility choices they need to remain independent as they age. The report noted that to live independently and age successfully, older Americans must be able to maintain a mobile lifestyle. The report also cited that when driving becomes more difficult, many Americans discover that they have few options.1

Research released through the April 2004 report Aging Americans: Stranded Without Options by the Surface Transportation Policy Project found that older non-drivers have a decreased ability to participate in the community. For example, older non-drivers make an average of 15 percent fewer trips to the doctor and 65 percent fewer trips for social and religious activities than older drivers make. This disparity of mobility leads to increased isolation of the individual and interferes with the role of that individual as a productive resource in society.2

In 1990, 31 million Americans were age 65 and over, according to the U.S. Bureau of the Census. By 2000, that number had grown to 35 million Americans, or 12.4 percent of the total U.S. population. The Census Bureau projects that this group will double to 70 million people by 2030, representing 20 percent of the total population.

Approximately 10.5 percent of the Richmond region’s population was 65 years of age or older according to the 2000 census. Table 2 below shows the elderly population by county for the Richmond region. The percent of the population that is elderly, or age 65 and above, ranges from about eight percent in Chesterfield to just under 14 percent in Charles City County. About 85 percent of the region’s 86,000 elderly people live in the City of Richmond, Chesterfield County, and Henrico County.

Table 2 - Elderly Population in the Richmond Region

<table>
<thead>
<tr>
<th>County</th>
<th>Total Population</th>
<th>Population (5 years &amp; older)</th>
<th>Elderly (Age 65 and older)</th>
<th>Percent (Age 65 and older)</th>
<th>Percent of Region's Elderly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles City</td>
<td>5,679</td>
<td>5,365</td>
<td>770</td>
<td>13.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>235,213</td>
<td>213,460</td>
<td>17,649</td>
<td>7.5%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Goochland</td>
<td>6,859</td>
<td>6,284</td>
<td>895</td>
<td>13.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Hanover</td>
<td>88,106</td>
<td>78,570</td>
<td>8,927</td>
<td>10.1%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Henrico</td>
<td>267,029</td>
<td>240,355</td>
<td>30,006</td>
<td>11.2%</td>
<td>35.0%</td>
</tr>
<tr>
<td>New Kent</td>
<td>7,126</td>
<td>6,705</td>
<td>690</td>
<td>9.7%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Powhatan</td>
<td>14,062</td>
<td>12,900</td>
<td>1,355</td>
<td>9.6%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Richmond</td>
<td>198,342</td>
<td>176,004</td>
<td>25,517</td>
<td>12.9%</td>
<td>29.7%</td>
</tr>
<tr>
<td>Total</td>
<td>822,416</td>
<td>739,643</td>
<td>85,809</td>
<td>10.4%</td>
<td></td>
</tr>
</tbody>
</table>

Sixteen percent of respondents to the Surface Transportation Policy Project survey who are over age 75 reported not having a driver’s license in 2001. In a similar AARP survey, 25 percent of
the respondents age 75 and over stated they had not driven in the last month. Another national travel survey found that seniors take most of their daily trips (about 90 percent) by automobile, either as drivers or as passengers. For the remainder, approximately eight percent of trips are by walking and two percent by other modes (including public transportation and bicycles). These statistics indicate that elderly persons generally prefer personal automobile travel and the independence that it provides or they simply do not have access to other forms of transportation or do not find their alternatives reliable.

The 2000 census data for workers in the Richmond region shows that approximately 80 percent of workers over age 65 drove alone to work, similar to 82.5 percent for all workers in the Richmond region. The mode of travel to work for elderly workers in the Richmond region is summarized in Table 3 below.

<table>
<thead>
<tr>
<th>Means of Transportation to Work</th>
<th>Total Workers</th>
<th>Elderly Workers (Age 65 and older)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove alone</td>
<td>82.5%</td>
<td>79.8%</td>
</tr>
<tr>
<td>Carpool</td>
<td>10.1%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Transit</td>
<td>2.2%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Bicycle/walk</td>
<td>1.7%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Taxi, motorcycle, other</td>
<td>0.7%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Worked at home</td>
<td>2.8%</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

As seniors age, their ability to drive, walk, or use public transportation may become limited by reduced reaction time; deteriorating night vision; lessening ability to climb, reach, or stand; or other physical limitations. To help ensure that transportation disadvantaged seniors have access to health and medical care, employment, and other basic services, various federal programs provide funds for a range of senior transportation services to state, local, and nonprofit agencies. In some cases, the nonprofit agencies also provide their own funds to support those services.

Many transit agencies have instituted travel-training programs that provide information, personalized orientation, and specialized training on use of public transportation options. Other programs oriented to the special needs of older adults include reduced-fare programs, expanding use of low-floor vehicles, policies that allow drivers to deviate bus routes to get as close to the requested stop as possible, and listening sessions specially designed to obtain input from older adults.
Transportation Disadvantaged – Disabled Population

According to the U.S. Census Bureau, “disability status” refers to the existence of a long-lasting physical, mental, or emotional condition that makes it difficult for a person to perform such activities as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business.

The Code of Virginia (Title 51.5, Chapter 9, Sect. 44) and the federal Americans with Disabilities Act (ADA) stipulate that people with disabilities have the same rights as other persons to the full and free use of the streets, highways, sidewalks, and walkways as part of the transportation system. State and federal statutes also provide for full and equal accommodations, advantages, facilities, and privileges of all common carriers, airplanes, motor vehicles, passenger trains, motor buses, streetcars, subways, boats, or any other public conveyances or modes of transportation.

In Virginia, the transportation system for people with disabilities is intertwined with multiple departments depending on the type of service. As the Commonwealth’s chief agency for maintaining the state highway system, the Virginia Department of Transportation’s (VDOT’s) role in supporting the transportation needs of people with disabilities, while important, is indirect, and the agency has no programs or initiatives specifically targeted toward serving the needs of people with disabilities except in areas of ensuring compliance with the Americans with Disabilities Act in all its highway-related facilities. However, VDOT has recently implemented a policy requiring sidewalks, bike lanes, shared-use paths, or other accommodations be designed for all new roadways or major reconstruction projects. The Department of Rail and Public Transportation (DRPT) provides advice, technical support, and funds for passenger rail and public bus operators, including paratransit services. DRPT’s three primary areas of focus are on rail, public transportation, and ridesharing.

The Department of Medical Assistance Services (DMAS) is the designated state agency to administer and supervise the Medicaid program under Title XIX of the Social Security Act (SSA) of 1965. The SSA requires that the state administer the provision of health care services to low-income individuals and people with disabilities under federal guidelines and that certain mandatory services will be covered by participating states. Medicaid covered services include transportation.

According to the 2000 census, approximately 19 percent of the national population above age five is reported to have a disability. Of the more than seven million residents of Virginia, approximately 1.3 million (18 percent) reported some form of disability in the 2000 census.

As shown in Table 4, the disabled population (above age five) of the Richmond region is about 130,000. This number is approximately 17.6 percent of the population of the region. Within the local jurisdictions, the population of disabled residents ranges from just over 12 percent in Goochland to just under 26 percent in Richmond. About 87 percent of the disabled people in the region live in the City of Richmond, Henrico County, and Chesterfield County.
Table 4 - Disabled Population in the Richmond Region

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Total Population (5 years &amp; older)</th>
<th>Disabled (5 years &amp; older)</th>
<th>Percent with a Disability</th>
<th>Percent of Region’s Disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles City</td>
<td>5,679</td>
<td>5,365</td>
<td>1,410</td>
<td>26.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>235,213</td>
<td>213,460</td>
<td>29,863</td>
<td>14.0%</td>
<td>23.0%</td>
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<td>Goochland</td>
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<td>770</td>
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<td>Henrico</td>
<td>267,029</td>
<td>240,355</td>
<td>38,197</td>
<td>15.9%</td>
<td>29.4%</td>
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<td>44,816</td>
<td>25.5%</td>
<td>34.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>822,416</strong></td>
<td><strong>739,643</strong></td>
<td><strong>129,799</strong></td>
<td>17.6%</td>
<td></td>
</tr>
</tbody>
</table>

According to a 2000 nationwide survey by the National Organization on Disabilities, 30 percent of respondents with disabilities reported difficulty in accessing transportation, compared to 10 percent of respondents without a disability. The 2000 census data for workers in the Richmond region shows that approximately 76 percent of workers with a disability drove alone to work compared to 82.5 percent of all workers in the Richmond region. The mode of travel to work for workers with a disability in the Richmond region is summarized in Table 5 below.

Table 5 – Means of Transportation to Work in the Richmond Region for Disabled Workers

<table>
<thead>
<tr>
<th>Means of Transportation to Work</th>
<th>Total Workers</th>
<th>Disabled Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove alone</td>
<td>82.5%</td>
<td>76.2%</td>
</tr>
<tr>
<td>Carpool</td>
<td>10.1%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Transit</td>
<td>2.2%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Bicycle/walk</td>
<td>1.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Taxi, motorcycle, other</td>
<td>0.7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Worked at home</td>
<td>2.8%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Workers with disabilities in the Richmond region utilize carpools and transit at a greater rate than workers without disabilities. However, people with disabilities are more likely to have difficulty accessing traditional public transportation due to their physical limitations.
Transportation Disadvantaged – Low-income Population

Nationwide travel survey data shows that less than two percent of all person-trips are made by public transit. Decades of decline have left the public transit industry with two major markets: downtown commuters and transit dependents. The downtown commuter market remains because of the cost and limited availability of parking in downtown areas, road congestion, and a large concentration of jobs that makes transit access relatively convenient. Transit dependents—those who are unable or unwilling to drive or who do not have access to a private vehicle—are the second major market.6

Low-income households are less likely to own a car than other households due to the prohibitive cost of purchasing, insuring, and maintaining a car, but public transportation may not provide sufficient options for their needs. Over 90 percent of public assistance recipients [nationwide] do not own a car.7 Yet, families in poverty possibly require the most flexible transportation options because many of the lower paying jobs require second or third shift work hours when public transit is generally not available.

The 2000 census reported that approximately 12 percent of the U.S. population is below poverty. In Virginia, almost 10 percent of its residents are living below the poverty level.

As shown in Table 6, the Richmond area has 64,000 people (age 5 years and older) living below poverty. This amounts to almost nine percent of the region’s population. Within the Richmond region the percentage of the population living below poverty ranges from a low of less than three percent in Goochland to over 20 percent in the City of Richmond. Over half of the region’s population that is below poverty lives in the City. The City of Richmond and Chesterfield and Henrico counties have almost 93 percent of the region’s population that is below poverty.

<table>
<thead>
<tr>
<th>Table 6 - Population Below Poverty in the Richmond Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
</tr>
<tr>
<td>Charles City</td>
</tr>
<tr>
<td>Chesterfield</td>
</tr>
<tr>
<td>Goochland</td>
</tr>
<tr>
<td>Hanover</td>
</tr>
<tr>
<td>Henrico</td>
</tr>
<tr>
<td>New Kent</td>
</tr>
<tr>
<td>Powhatan</td>
</tr>
<tr>
<td>Richmond</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Transit’s mode share is declining across all income classes. However, the loss of middle- and higher-income transit passengers has been greater than the loss of low-income passengers; hence, the poor make up an increasing share of transit users.8
Transit use in the Richmond region by people living at or below poverty is almost five times greater than the usage by those above the poverty level. Approximately 10.5 percent of workers at or below poverty use transit compared to only 2.2 percent of the total workforce. Only 60 percent of workers at or below poverty drive alone to work compared to 82.5 percent of the total workforce. In addition to transit, workers below poverty are more likely to carpool, bicycle, or walk to work than the general workforce. The mode of travel to work for workers at or below poverty in the Richmond region is summarized in Table 7 below.

**Table 7 – Means of Transportation to Work in the Richmond Region for Low-income Workers**

<table>
<thead>
<tr>
<th>Means of Transportation to Work</th>
<th>Total Workers</th>
<th>Workers at or below poverty level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove alone</td>
<td>82.5%</td>
<td>60.3%</td>
</tr>
<tr>
<td>Carpool</td>
<td>10.1%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Transit</td>
<td>2.2%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Bicycle/walk</td>
<td>1.7%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Taxi, motorcycle, other</td>
<td>0.7%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Worked at home</td>
<td>2.8%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

Census data shown in Table 8 below indicates that approximately nine percent of the total households in the Richmond region did not have access to a personal vehicle in 2000. However, more than 30 percent of households in poverty do not have access to a vehicle. Additional analysis of the data shows that 52 percent of the households without access to a vehicle were households in poverty or near poverty (150 percent of the poverty level). This statistic suggests that in most instances, vehicle ownership is not usually a choice but rather based on affordability and/or an inability to drive.

**Table 8 – Vehicle Availability by Poverty Status**

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Households</th>
<th>Households Below/Near Poverty</th>
<th>Households with 0-Vehicles Available</th>
<th>Households Below/Near Poverty with 0-Vehicles Available</th>
<th>Percent of Households with 0-Vehicles Available that are also Below/Near Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles City</td>
<td>2,150</td>
<td>441</td>
<td>163</td>
<td>76</td>
<td>46.6%</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>84,068</td>
<td>6,653</td>
<td>2,715</td>
<td>933</td>
<td>34.4%</td>
</tr>
<tr>
<td>Goochland</td>
<td>2,669</td>
<td>206</td>
<td>93</td>
<td>44</td>
<td>47.3%</td>
</tr>
<tr>
<td>Hanover</td>
<td>31,995</td>
<td>2,434</td>
<td>1,073</td>
<td>441</td>
<td>41.1%</td>
</tr>
<tr>
<td>Henrico</td>
<td>108,077</td>
<td>12,134</td>
<td>6,014</td>
<td>2,227</td>
<td>37.0%</td>
</tr>
<tr>
<td>New Kent</td>
<td>2,695</td>
<td>239</td>
<td>51</td>
<td>41</td>
<td>80.4%</td>
</tr>
<tr>
<td>Powhatan</td>
<td>5,055</td>
<td>467</td>
<td>107</td>
<td>45</td>
<td>42.1%</td>
</tr>
<tr>
<td>Richmond</td>
<td>84,569</td>
<td>25,177</td>
<td>17,942</td>
<td>10,895</td>
<td>60.7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>320,378</td>
<td>47,751</td>
<td>28,158</td>
<td>14,702</td>
<td>52.2%</td>
</tr>
</tbody>
</table>

The poor travel less not because their preferences are different than the non-poor, but because of limited resources. Recent statistics and reports indicate that low-income households spend a much higher proportion of after-tax income on transportation, and the differences are increasing.
However, only the extremely poor are unlikely to own at least one car. It has been argued that one explanation for extensive car ownership among even the poorest households is the lack of high-quality transit service. Essentially, public transit can be such a poor substitute for the private automobile that people below or near poverty incur the expense of car ownership in order to obtain the mobility a car provides. Most low-income households are auto dependent rather than transit dependent. Low-income households own cars because they are the only reasonable option for basic household maintenance and income earning. Trade-offs are made by spending less on other personal and family needs.

Low-income households may further pay for auto dependence by suffering the disruptions of frequent car breakdowns—missed medical appointments, lost days of work, etc. Similarly, low-income households rely on borrowing cars, bartering or paying for rides, and paying for costly taxi rides when a private vehicle is not available.

**Transportation Disadvantaged – Summary**

The three categories of the transportation disadvantage population tend to overlap. Figure 2 below shows the number of people in each of the three categories and the overlap of persons between the categories. Table 9 on the following page shows the detailed numbers and percentages of people in the Richmond region and in each jurisdiction that fall into more than one group of the transportation disadvantaged.

**Figure 2 – Transportation Disadvantaged Population Summary**
Approximately one percent (6,700 people) of the region’s population is both elderly and below poverty. Over 60 percent of this group reside in the City of Richmond and 20 percent reside in Henrico County.

Nearly 2.5 percent (18,300 people) of the Richmond region’s population is both below poverty and disabled. Again, nearly 60 percent of this group reside in the City of Richmond and 20 percent in Henrico County. Approximately 12 percent of those both in poverty and disabled reside in Chesterfield County.

Over five percent of the Richmond region’s population (37,600 people) is both elderly and disabled. Approximately 35 percent of this group reside in the City of Richmond, 32 percent live in Henrico County, 18 percent live in Chesterfield County, and 10 percent live in Hanover County.

Approximately 4,140 people in the Richmond region are listed in all three categories: elderly, disabled, and low-income. Approximately 60 percent of this group live in the City of Richmond, 19 percent live in Henrico County, nearly 10 percent live in Hanover County, and seven percent live in Chesterfield County. For these people the need for reliable transportation is even more important. Many of them do not own their own vehicles and must rely on some form of public transportation in order to meet their daily needs, such as traveling to work and medical appointments or shopping for food. Transportation dependent persons do not have a viable option to live in jurisdictions that do not provide adequate public transportation. The populations that have the most need for public transportation are heavily concentrated within the City of Richmond and Chesterfield, Henrico, and Hanover counties.

Table 9 – Transportation Disadvantaged Summary

<table>
<thead>
<tr>
<th></th>
<th>Total Population (5 years and older)</th>
<th>Below Poverty and Elderly</th>
<th>Percent Below Poverty and Elderly</th>
<th>Below Poverty and Disabled</th>
<th>Percent Below Poverty and Disabled</th>
<th>Elderly and Disabled</th>
<th>Percent Elderly and Disabled</th>
<th>Below Poverty, Elderly, and Disabled</th>
<th>Percent Below Poverty, Elderly, and Disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles City</td>
<td>5,365</td>
<td>131</td>
<td>0.02%</td>
<td>187</td>
<td>0.03%</td>
<td>349</td>
<td>0.05%</td>
<td>56</td>
<td>0.01%</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>213,460</td>
<td>563</td>
<td>0.08%</td>
<td>2,264</td>
<td>0.31%</td>
<td>6,809</td>
<td>0.92%</td>
<td>305</td>
<td>0.04%</td>
</tr>
<tr>
<td>Goochland</td>
<td>6,284</td>
<td>45</td>
<td>0.01%</td>
<td>83</td>
<td>0.01%</td>
<td>307</td>
<td>0.04%</td>
<td>29</td>
<td>0.00%</td>
</tr>
<tr>
<td>Hanover</td>
<td>78,570</td>
<td>508</td>
<td>0.07%</td>
<td>995</td>
<td>0.13%</td>
<td>3,869</td>
<td>0.52%</td>
<td>400</td>
<td>0.05%</td>
</tr>
<tr>
<td>Henrico</td>
<td>240,355</td>
<td>1,332</td>
<td>0.18%</td>
<td>3,639</td>
<td>0.49%</td>
<td>11,997</td>
<td>1.62%</td>
<td>793</td>
<td>0.11%</td>
</tr>
<tr>
<td>New Kent</td>
<td>6,705</td>
<td>18</td>
<td>0.00%</td>
<td>32</td>
<td>0.00%</td>
<td>325</td>
<td>0.04%</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Powhatan</td>
<td>12,900</td>
<td>79</td>
<td>0.01%</td>
<td>222</td>
<td>0.03%</td>
<td>599</td>
<td>0.08%</td>
<td>69</td>
<td>0.01%</td>
</tr>
<tr>
<td>Richmond</td>
<td>176,004</td>
<td>4,015</td>
<td>0.54%</td>
<td>10,912</td>
<td>1.48%</td>
<td>13,356</td>
<td>1.81%</td>
<td>2,488</td>
<td>0.34%</td>
</tr>
<tr>
<td>Total</td>
<td>739,643</td>
<td>6,691</td>
<td>0.90%</td>
<td>18,334</td>
<td>2.48%</td>
<td>37,611</td>
<td>5.09%</td>
<td>4,140</td>
<td>0.56%</td>
</tr>
</tbody>
</table>
Specialized Transportation Providers and Programs

GRTC

GRTC Transit System is the public transportation services provider for the greater Richmond area. The public nonprofit corporation is jointly owned by the City of Richmond and Chesterfield County. GRTC provides fixed-route bus service and specialized transportation services such as CARE, CVAN, and Ridefinders.

Fixed-route service
GRTC’s fixed-route bus service consists of a fleet of 186 GRTC buses traveling 41 separate routes within the cities of Richmond and Petersburg and Henrico and Chesterfield counties (see Table 10). Eight routes serve two jurisdictions and one route serves three jurisdictions.

Table 10 – GRTC Bus Routes

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Number of Routes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richmond</td>
<td>36</td>
</tr>
<tr>
<td>Henrico</td>
<td>10</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>3</td>
</tr>
<tr>
<td>Petersburg</td>
<td>1</td>
</tr>
</tbody>
</table>

Fixed-route bus service generally operates between 5:00 am and 1:00 am seven days a week within the City of Richmond. General fares are currently $1.25 for local routes and $1.75 for express routes. Bus service operates five days a week (weekdays) between 6:00 am and 7:00 pm in Henrico County. There is no weekend service in Henrico County.

GRTC operate three express routes with stops in Chesterfield County. The Route 60 Huguenot Express stops at the Lowes store near the Chesterfield Town Center mall. The Route 82 Winterpock Express stops at the Lowes store on Hull Street (U.S. 360) and the Commonwealth 20 off Route 288. The Route 95 Richmond/Petersburg Express stops at John Tyler Community College Chester campus off Jefferson Davis Highway (U.S. Route 1). These express routes operate only on weekdays. Routes 82 and 95 cost $1.75 per one way trip. Route 60 costs $2.25 if boarding at the Lowes store.

The entire fleet of GRTC buses are equipped with wheelchair lifts and 45 of the 186 buses are low-floor buses allowing for easier access for the physically disabled. All GRTC buses are also equipped with bicycle racks.

Reduced fares are available to qualified elderly and disabled persons as well as students. Operators provide assistance to elderly and disabled customers boarding and alighting vehicles but are not allowed to leave the vehicle to assist with packages or mobility away from the vehicles. The senior/disabled cash fare is $0.50 on local routes and requires a Medicare or GRTC identification card to verify eligibility. Full fare is required on express routes and the Route 19 Pemberton service. Transfers with cash fares cost $0.15.
Transfers with tickets cost $0.10. Transfers for senior/disabled customers with a Medicare or GRTC identification card are free.

As a general rule-of-thumb, public transit customers are willing to walk a quarter-mile to a bus stop. When placing a quarter-mile buffer around local GRTC bus routes, as shown in Figure 3, the GRTC fixed-route local bus service area covers approximately 64 square miles and 191,000 potential customers. Of these customers, it is estimated that 27,000 are elderly, 47,000 have a disability, and 37,000 are at or below poverty.

**CARE**

The Americans with Disabilities Act (ADA) recognizes that some users of public transportation, due to the nature of their disability, will be unable to use fixed-route services even with full accessibility. To ensure equal access for these riders under these circumstances, public transit operators are required to offer a comparable paratransit service, which is known as ADA Paratransit. GRTC’s ADA paratransit service is called CARE (Community Assisted Ride Enterprise). Although GRTC is required to provide CARE service within ¾ mile of local bus routes and stops, Henrico County and the City of Richmond have adopted a policy of providing CARE service throughout the County and City.

Before service can be scheduled with CARE, an eligibility application must be approved by GRTC. To be eligible for CARE transportation services, a customer must be disabled or 80 years of age or older. Persons certified as ADA paratransit-eligible by transit systems outside the Richmond region are also eligible to use CARE.

The CARE service area and operating hours are described in Table 11 below.

**Table 11 - CARE Service Area and Operating Hours**

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Service Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mon - Fri</td>
</tr>
<tr>
<td>City of Richmond</td>
<td>5:30 am – 12:30 am</td>
</tr>
<tr>
<td>Henrico County</td>
<td>6:00 am – 7:00 pm</td>
</tr>
</tbody>
</table>

* Weekend and holiday service is provided in the City of Richmond only. Trips must begin and end within the city limits.

CARE provides curb-to-curb service and assistance to customers when boarding and exiting the vehicle. Operators help with seat belts, securing wheelchairs, small parcels, and up to two bags of groceries. However, operators are not allowed to leave the side or back of the CARE van; carry or push customers up or down ramps, stairs, or steps; walk customers to homes or facilities; or enter into homes.

CARE service is provided by reservation only. Reservations are allowed on a space available basis and should be made at least one day in advance, but no more than 14 days in advance. A one-way fare on CARE is $2.25. In addition, CARE customers are eligible for reduced fares on GRTC fixed-route buses except the express routes and the
#19 Pemberton route. Personal care assistants (PCAs) are allowed to ride free of charge with a customer once approved. One guest may accompany a customer on a CARE van and will be charged a ticket each way. Additional guests are allowed on a space available basis. Customers under the age of seven must travel with someone responsible for their supervision. Children seven years of age or older may travel alone if they are eligible ADA riders. Children under age four are required to travel in a car seat provided by a guardian.

Since CARE service is a shared-ride program, the CARE van can be expected to arrive no more than 15 minutes early or 15 minutes after the scheduled arrival time. Customers must be seated in the van within five minutes of the arrival of the van.

The existing CARE service area includes all of the City of Richmond and Henrico County, an area of approximately 307 square miles, and has the potential to serve approximately 81,383 persons with disabilities and 4,795 persons age 80 and over.

Data provided by GRTC indicates there were an average of 16,800 passenger trips per month in 2004 provided by CARE, with City of Richmond residents accounting for 66 percent of the trips and Henrico County residents accounting for 34 percent of the trips. Lift equipment was used an average of 1,082 times per month. Data also indicates there was an average of 687 weekend passenger trips per month in 2004 (all of which were in the City of Richmond, given that there is no CARE service provided in Henrico County on weekends).

**CVAN**

Central Virginia Area Network System (CVAN) provides transportation assistance for Virginia Initiative for Employment not Welfare (VIEW) participants. Transportation options include curb-to-curb service through public transit and shared-ride services to work and daycare facilities. All CVAN customers must be referred to CVAN by the Department of Social Services. Eligibility requirements call for the customer to have an income level below poverty and to have a dependent child involved for service to daycare facilities.

CVAN is operated by GRTC Transit System and will pick up customers in the City of Richmond, Henrico, Chesterfield, or Hanover counties. The service provides access to jobs in each of the pick-up jurisdictions as well as to some employers in Petersburg, Dinwiddie, and Amelia. CVAN provides transportation to employment 24 hours per day, seven days per week. The cost of a one way ride on CVAN is $25.75 regardless of the distance traveled.

CVAN currently operates 21 vehicles and averages 50,000 rides per year (round trip) and about 150 one-way trips per day (approximately 75 customers per day). None of the CVAN vehicles are equipped with wheelchair lifts. GRTC estimates that CVAN’s client database eligible to use the service is approximately 1,500 persons.
RideFinders

RideFinders is a commuter oriented service that seeks to increase the efficiency of our regional transportation infrastructure, improve the air we breathe, enhance quality of life, and sustain a healthy economy.

From an inventory aspect, RideFinders does not own any vehicles and is not equipped to assist with disabled transportation. However, RideFinders is certainly a provider of effective mobility solutions which may directly assist underserved citizens.

RideFinders’ service area extends from Hanover to Prince George and from Charles City to Powhatan counties. The fluidity of their car and vanpool matching service provides the ability to cross jurisdictional lines and reach commuters with nontraditional work schedules.

Services are not dependent on fixed-route service. They have the ability to assist citizens and jurisdictions that are not served by transit routes and remain a viable alternative for meeting mobility challenges.

In addition, RideFinders provides transit route information, rider training sessions, and promotes the Telework VA! Program which can have a significant impact on expanding the regional labor pool to underserved segments of the population while negating some mobility issues.

Bay Transit

Bay Transit, Inc. offers transportation and para-transit services to ten counties of the Middle Peninsula and Northern Neck regions as well as New Kent and Charles City counties in the Richmond region. Bay Transit is a private transportation provider that operates out of the Bay Aging office in Urbanna. Since it was founded in 1996, Bay Transit has grown from one bus to 15 vehicles providing more than 5,000 rides per month throughout northeast Virginia. In addition to public transit service, Bay Transit has also been involved in providing Welfare Reform “journey to work” public transportation services and coordinating with “Ride Share” programs.

In October 2005 Bay Transit began providing demand response, curb-to-curb transportation services to New Kent and Charles City county residents. Other than county residency, there are no eligibility requirements for this transportation service (i.e., it is available to the general public for any trip purpose). Fares are $1 each way anywhere in Charles City or New Kent counties. The service operates between the hours of 6:00 a.m and 6:00 p.m Monday thru Friday. Service is not currently available on weekends.

Bay Transit currently operates with two vehicles in New Kent and Charles City counties. Both vehicles are equipped with wheelchair lifts. They anticipate to be operating with three vehicles early in 2006. In addition, Bay Transit is anticipating to expand their services to include transportation for county residents to specific locations in Williamsburg and the City of Richmond.
Access Chesterfield

Access Chesterfield is Chesterfield County’s coordinated transportation program available to Chesterfield residents who are disabled or over age 60 or who meet federal income guidelines regarding poverty levels (200 percent of household poverty level).

Access Chesterfield contracts transportation services with Van-Go, Inc. Transportation service is provided within Chesterfield County, the metro areas of Richmond and Petersburg, Hopewell, Fort Lee, and Colonial Heights. There are no limits on trip purpose within the service area.

Service is available through advance reservations only, Monday thru Friday 6:00 a.m. to 8:30 p.m. and Saturday 8:30 a.m. to 4:30 p.m. Reservations may be made one day or up to four days in advance. The cost for a pack of 10 vouchers is $25. All one-way trips require two vouchers, regardless of the distance traveled. There is no fee for personal assistants, 18 years of age and older, to ride with registered passengers. Ridership has steadily increased since Access Chesterfield began in mid-November 2004. Ridership trends are shown in Figure 4.

Figure 4 - Access Chesterfield Growth in Ridership (November 2004 – June 2005)

Logisticare

Logisticare is a transportation broker that provides scheduling and routing for non-emergency Medicaid transportation providers. All trip purposes must be medically related. Logisticare is a national company and their service area includes all of Virginia.

Transportation services scheduled through Logisticare are curb-to-curb and are generally available 24 hours a day, 7 days per week. Reservations typically require 48 hours notice. Service is only available to Medicaid eligible persons, verifiable by the Department of Medical Assistance. Eligible Medicaid customers are allowed one escort as needed.
**Powhatan-Goochland Community Action Agency**

The Powhatan-Goochland Community Action Agency (PGCAA) provides limited transportation services in Powhatan, Goochland, and Hanover counties. Currently, five of PGCAA vehicles are equipped with wheelchair lifts. PGCAA transports seniors to congregate meal sites, referred to as “Friendship Cafes” Monday through Wednesday in Hanover County and Monday through Thursday in Powhatan and Goochland counties. The service uses four vans and is contracted to PGCAA by Senior Connections, the Capital Area Agency on Aging.

PGCAA transports disabled persons who reside in Powhatan County to and from their places of employment (within Powhatan County) Monday through Friday. Eligible riders must be referred by the Powhatan/Goochland Community Services Board and/or the Department of Rehabilitative Services. PGCAA operates one van for this service.

PGCAA also works with volunteers of the Coalition of Churches to transport seniors within and outside of Powhatan as needed. Privately-owned automobiles of volunteers are used for this service.

In addition, a pilot program in partnership with Powhatan County is planned to provide Powhatan seniors with transportation to post offices, grocery stores, medical appointments, and other services within Powhatan County. This transportation program is planned to start with the use of one van.

**Goochland Fellowship and Family Services**

Goochland Fellowship and Family Services (GFFS) provides free transportation services for Goochland County residents who cannot provide transportation for themselves due to age, disabilities, or poverty. GFFS employs one full time van driver. Transportation is provided with one handicapped accessible van to medical and dental appointments and for pharmaceutical needs.

Service is provided by reservations Monday through Friday. Reservations are requested to be made 24 hours in advance. Transportation to Richmond metro area medical related appointments is provided on Mondays and Fridays. Transportation within Goochland County to medical and dental appointments and pharmacies is provided Tuesday through Thursday.

During 2005 GFFS provided transportation to 649 individuals and made 201 trips to medical and dental appointments and to local pharmacies.

**Quin Rivers Community Action Agency**

Quin Rivers Community Action Agency (CAA) provides limited transportation services in New Kent and Charles City counties. Quin Rivers CAA transports seniors to congregate meal sites, referred to as “Friendship Cafes” in New Kent and Charles City counties. The service uses one van and is contracted by Senior Connections.

Quin Rivers CAA contracts out with Cyprus Enterprises to provide transportation to shelter workshops for physically and mentally disabled adults. In addition, Quin Rivers CAA also
provides limited on-demand transportation services for medical appointments and for mentally disabled persons within New Kent and Charles City counties.

Recently, the Boards of Supervisors in New Kent County and in Charles City County voted to fund transportation services with Bay Transit to operate three vehicles within the two counties. The service is scheduled to begin in fall 2005. Future plans call for adding two additional vehicles, for a total of five vehicles, and to add routes to Richmond and Williamsburg for transportation to employment. It is anticipated that Quin Rivers CAA’s fleet of vehicles may be consolidated with Bay Transit’s fleet of vehicles and services.

Senior Connections, The Capital Area Agency on Aging

Senior Connections partners with the Goochland-Powhatan Community Action Agency and Quin Rivers Community Action Agency to provide transportation for seniors to congregate meal sites called “Friendship Cafes” in several rural counties in the region including Powhatan, Goochland, Hanover, New Kent, and Charles City. To be eligible to attend the friendship cafes and thus qualify for the transportation to the meal site, a person must be age 60 or over and independent enough to attend on their own without an aid or personal care assistant. Each cafe site has a site manager that handles reservations and communicates with drivers. Reservations are accepted up until the day before the event. There is no fee to the seniors for the meal or the ride. However, donations are accepted at the meal sites and the collections are divided 70 percent toward the cost of the meal and 30 percent toward the cost of the transportation.

In fiscal year 2004 (October through September), Senior Connections had 274 unduplicated seniors attend Friendship Cafes across the region at approximately 10 different cafe sites. Along with several other agency partners providing transportation, including the Crater District Area on Aging, the Richmond Community Action Program, Sudexho Senior Services, and Good Shepherd, the agencies provided approximately 39,000 one-way trips in 2004 associated with the Friendship Cafes.

SmartRide

SmartRide is a fundraising service of the Designated Drivers Association, a nonprofit, membership-driven, organization, focused on providing transportation for the elderly, the blind and visually impaired, and those who are physically or medically unable to drive themselves. SmartRide does not have ADA accessible vehicles; therefore, the organization makes referrals to other providers when this service when requested. In addition, SmartRide will provide transportation service to low-income persons upon referral and payment from other agencies. SmartRide is a door-through-door service. Drivers escort people into buildings as well as assist with packages as needed.

SmartRide provides transportation to members for whatever purposes needed, including medical appointments, shopping, and visiting friends. Transportation is provided in company owned and volunteer operated vehicles. SmartRide membership currently includes about 120 persons.

The service area of SmartRide currently includes the City of Richmond as well as Chesterfield and Henrico counties. SmartRide is currently planning and arranging to provide service to Powhatan and Goochland counties and eventually to Hanover and New Kent counties.
Reservations are requested to be made one to two days in advance of an appointment. Reservations requested with less than 24 hour notice are granted based on availability. Transportation is generally provided between 7 am and 7 pm, although the service hours are flexible. Weekend and holiday service are arranged as necessary.

A book of 10 ride tickets costs $110 (which includes membership). Four ride tickets cost $50. Most local rides are $10 to $15. There is a $5 charge for each additional stop.

**Human Service Agencies**

**American Red Cross**

The Greater Richmond Chapter of the American Red Cross provides free door-through-door transportation services to non-emergency medical appointments for qualified persons living in the City of Richmond, and Henrico, Hanover and Chesterfield counties. The Red Cross utilizes four part-time paid drivers and many volunteer drivers who use Red Cross vehicles. Five of the Red Cross vehicles are equipped for wheelchairs.

Transportation services are available only for medical appointments to qualified elderly, disabled, and low-income individuals who have no other transportation resources. Due to the limited number of volunteer drivers, persons who are eligible for services through other transportation providers are encouraged to use other providers. Eligibility is determined through a screening process and verification with the medical provider.

Transportation service is available Monday through Friday between 9 am and 3 pm. Reservations are recommended to be made two weeks in advance and are accommodated on a first-come-first-serve basis.

The Red Cross provides an average of 800 one-way trips per month. More trips would be provided if more volunteer drivers were available.

**Shepherd’s Center of Richmond**

The Shepherd’s Center of Richmond provides transportation services to seniors age 60 and older who cannot provide transportation for themselves. All transportation services through the Shepherd’s Center are performed by volunteers using their own personal vehicles. Therefore, wheelchairs cannot be accommodated.

Transportation is provided to medical appointments, for grocery shopping, and other essential needs. The service is provided between 9 am and 3:30 pm. Reservations are requested to be made one week in advance. The service is free; however, donations are accepted. The Shepherd’s Center has approximately 60 volunteer drivers providing a total of approximately 1,700 rides per year.

The Shepherd’s Center of Richmond provides full transportation service in the following zip codes: 23219, 23220, 23221, 23225, 23226, 23227, 23228, 23229, 23230, 23233, 23235, 23236, 23238, 23112, 23113, and 23114 (City of Richmond and portions of Henrico and Chesterfield counties). Requests for transportation to medical appointments
only are accepted from the following zip codes: 23222, 23224, and 23234 (areas in southern Richmond and northeastern Chesterfield County). See Figure 5 for a general map of the Shepherd’s Center of Richmond service area.

**Shepherd’s Center of Chesterfield**

The Shepherd’s Center of Chesterfield provides transportation services to seniors age 50 and older. All transportation services through the Shepherd’s Center are performed by volunteers using their own personal vehicles. Wheelchairs cannot be accommodated.

Transportation is provided to medical appointments, for grocery shopping, and other essential needs. Reservations are requested to be made four days in advance. The service is free; however, donations are accepted.

During the last year, The Shepherd’s Center of Chesterfield volunteers have provided transportation to 70 individuals and have made 476 trips to medical appointments and grocery shopping.

The Shepherd’s Center of Chesterfield provides transportation services to seniors who live in the following zip codes: 23112, 23113, 23237, 23831, 23832, 23836, and 23838. See Figure 5 for a general map of the Shepherd’s Center of Chesterfield service area.
Figure 5
Shepherd's Center
Transportation Service Area

Sources: US Census, 2000
Richmond Regional PDC, 2005
Virginia Department of Transportation, 2005
Shepherd's Center, 2005
Prepared by: RRPDC, September 2005
**SUMMARY OF TRANSPORTATION PROVIDERS**

Table 12 below illustrates the transportation services provided to transportation disadvantaged persons, as well as the general public, by local transportation providers.

**Table 12 – Disadvantaged Transportation Services by Providers**

<table>
<thead>
<tr>
<th>Transportation Providers</th>
<th>General Public</th>
<th>Elderly</th>
<th>Disabled*</th>
<th>Low-Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRTC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed-Route (Bus)</td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>CARE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CVAN</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>RideFinders</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Bay Transit</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Access Chesterfield</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Logisticare</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Powhatan-Goochland CAA</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Goochland Fellowship and Family Services</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Quin Rivers CAA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Senior Connections</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SmartRide</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>American Red Cross</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Shepherds Center</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The universal symbol used to denote services for disabled persons does not guarantee that the provider has lift-equipped vehicles.

Table 13 on the following page illustrates the transportation services provided for transportation disadvantaged persons, as well as the general public to local jurisdictions in the Richmond region.

Table 14 provides a comparison of fares charged to users versus the cost of providing the transportation service. It should be noted that this information either was not available or was not provided for several of the transportation providers.
Table 13 – Disadvantaged Transportation Services to Local Jurisdictions by Providers

<table>
<thead>
<tr>
<th>Transportation Providers</th>
<th>Charles City</th>
<th>Chesterfield</th>
<th>Goochland</th>
<th>Hanover</th>
<th>Henrico</th>
<th>New Kent</th>
<th>Powhatan</th>
<th>Richmond</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRTC</td>
<td>&amp; $ $ $</td>
<td>&amp; $ $ $</td>
<td></td>
<td>&amp; $ $</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Fixed-Route (Bus)¹</td>
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<td>&amp; $ $ $</td>
<td></td>
<td>&amp; $ $</td>
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<td>$ $ $ $</td>
<td></td>
<td>&amp; $ $</td>
<td></td>
<td></td>
<td></td>
<td>$ $ $</td>
</tr>
<tr>
<td>RideFinders³</td>
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<td>&amp; $ $ $ $</td>
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<td>&amp; $ $</td>
<td></td>
<td></td>
<td></td>
<td>&amp; $ $</td>
</tr>
<tr>
<td>Bay Transit</td>
<td>&amp; $ $ $</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access Chesterfield</td>
<td></td>
<td>&amp; $ $ $</td>
<td></td>
<td>&amp; $ $</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logisticare⁴</td>
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<td>$ $ $ $</td>
<td></td>
<td>&amp; $ $</td>
<td></td>
<td></td>
<td></td>
<td>$ $ $</td>
</tr>
<tr>
<td>Powhatan-Goochland CAA</td>
<td></td>
<td>&amp; $ $ $</td>
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<td>&amp; $ $</td>
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<td></td>
<td></td>
<td>&amp; $ $</td>
</tr>
<tr>
<td>Goochland Fellowship and Family Services⁵</td>
<td>&amp; $ $</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quin Rivers CAA</td>
<td>&amp; $ $ $</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&amp; $</td>
</tr>
<tr>
<td>Senior Connections</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&amp; $</td>
</tr>
<tr>
<td>SmartRide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Red Cross⁵</td>
<td>&amp; $ $ $</td>
<td>&amp; $ $ $</td>
<td></td>
<td>&amp; $ $</td>
<td></td>
<td></td>
<td></td>
<td>&amp; $ $</td>
</tr>
<tr>
<td>Shepherds Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&amp; $</td>
</tr>
</tbody>
</table>

¹ Express bus route service only in Chesterfield
² Employment and daycare only
³ For employment purposes only
⁴ Medicaid transportation only
⁵ Medical appointments only

General public
Elderly
Disabled
Low income
Table 14 – Transportation Service Fares Versus Provider Costs

<table>
<thead>
<tr>
<th>Transportation Provider</th>
<th>Service Hours</th>
<th>Average Fare</th>
<th>Average Provider Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRTC</td>
<td>Fixed-Route (Bus) Daily 5am - 1am (Richmond)</td>
<td>$1.25 (local) $1.75 (express)</td>
<td>$3.00</td>
</tr>
<tr>
<td></td>
<td>M-F 6am - 7pm (Henrico)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARE</td>
<td>M-F 5:30am - 12:30 am (Sat &amp; Sun only in Richmond)</td>
<td>$2.25</td>
<td>$18.51</td>
</tr>
<tr>
<td>CVAN</td>
<td>24/7</td>
<td>nc</td>
<td>$25.75</td>
</tr>
<tr>
<td>RideFinders</td>
<td>M-F (time varies)</td>
<td>$2.98</td>
<td>na</td>
</tr>
<tr>
<td>Bay Transit</td>
<td>M-F 6am - 6pm</td>
<td>$1.00</td>
<td>na</td>
</tr>
<tr>
<td>Access Chesterfield</td>
<td>M-F 6am - 8:30pm</td>
<td>$5.00</td>
<td>$25.00</td>
</tr>
<tr>
<td></td>
<td>Sat 8:30am - 4:30pm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logisticare</td>
<td>24/7</td>
<td>na</td>
<td>$15.41</td>
</tr>
<tr>
<td>PGCAA</td>
<td>varies</td>
<td>nc</td>
<td>na</td>
</tr>
<tr>
<td>GFFS</td>
<td>M-F (time varies)</td>
<td>nc</td>
<td>na</td>
</tr>
<tr>
<td>Quin Rivers CAA</td>
<td>varies</td>
<td>nc</td>
<td>$30.00</td>
</tr>
<tr>
<td>Senior Connections</td>
<td>varies</td>
<td>nc</td>
<td>na</td>
</tr>
<tr>
<td>SmartRide</td>
<td>7am - 7pm</td>
<td>$17.50</td>
<td>$17.50</td>
</tr>
<tr>
<td>American Red Cross</td>
<td>M-F 9am - 3pm</td>
<td>nc</td>
<td>$23.51</td>
</tr>
<tr>
<td>Shepherds Center</td>
<td>M-F 9am - 3:30pm</td>
<td>nc</td>
<td>na</td>
</tr>
</tbody>
</table>

*nc - no charge
*na - not available*
Destinations: Major Trip Generators and Attractors

In addition to where people live, it is vital to understand where people desire to travel to better evaluate the level of accessibility that is available to disadvantaged population groups. There are several different types of trip generators or attractors in the Richmond region including employment locations, medical and healthcare facilities, retail locations, government service facilities, and recreation areas. These major travel destinations are scattered throughout the entire region. In order to better comprehend the range of major destinations and compare them with transportation services within the region, the different types of trip generators were categorized and plotted on a map. The major trip generators/attractors are shown on Figure 6 and are described in greater detail below.

Medical and Healthcare Locations
Most of the hospitals and medical centers in the Richmond region are located in the City of Richmond and Henrico, Chesterfield, and Hanover counties. Approximately 17 of the 27 major medical facilities identified in this report fall within the GRTC fixed-route (bus) service area. However, this does not mean that all residents’ medical transportation needs are served, as many of the medical facilities only provide specialized services and some of the major hospitals and medical centers are located outside of the GRTC service area. For example, Bon Secours St. Francis Medical Center and Johnston-Willis Hospital in Chesterfield County, Bon Secours Memorial Regional Medical Center, and Hanover Outpatient Surgery Center in Hanover County, and several of the VCU Health System locations are located outside of the GRTC fixed-route bus service area. Access for transportation disadvantaged persons to these healthcare facilities must be provided by transportation service providers other than GRTC. For example, access to the new Bon Secours St. Francis Medical Center in western Chesterfield County is provided by Access Chesterfield, Logisticare (for Medicaid customers), the Greater Richmond Chapter of the American Red Cross, and the Shepherd’s Center of Chesterfield.

Government Services
Government services are located in each county, town, and city of the region. Most of the state government offices are located in the City of Richmond and are, therefore, accessible by the GRTC fixed-route (bus) service or CARE service. On the other hand, most local government services in the surrounding counties are located outside of GRTC’s service area. For example, only the City of Richmond and Henrico County’s government offices are located within GRTC’s service area. Access to Chesterfield County government facilities is provided through Access Chesterfield. Hanover, Goochland, Powhatan, New Kent, and Charles City counties and the Town of Ashland’s government facilities are not accessible to the transportation disadvantaged by means of a public transportation provider.

Employment Locations
Employment sites are located all over the Richmond region and are made up of many different types of businesses and services. All of the destinations shown on Figure 6 are considered to be employment locations. For the purpose of this study, only the largest employment complexes are identified on the map under the heading of major employers. Some examples of major employers in the region are Anthem, Capitol One, HCA, VCU Health Systems, Circuit City,
Philip Morris, Bon Secours Health Systems, Wachovia Corporation, Dominion Resources, and Sun Trust Banks.

Retail Locations
Many of the major retail locations fall outside of the current GRTC fixed-route (bus) service area in Richmond’s surrounding suburbs. Although transportation to retail locations may not seem to be as significant as transportation to medical, government, or employment locations, major retail facilities provide for needs such as food, clothing, and other personal and home care products, as well as being a major source of employment and recreation/entertainment. The retail locations shown on Figure 6 are all major shopping complexes and typically have adjacent or neighboring shopping centers.

Table 15 illustrates the transportation services provided for transportation disadvantaged persons, as well as for the general public, to major attractions and destinations in the Richmond region. It is important to note that while it appears in Table 13 that most of the destinations have at least one transportation service provider, the services are not always available to all transportation disadvantaged persons in the region. Each service provider has eligibility requirements that may limit the service based on residency of a particular jurisdiction, age, disability, income, or trip purpose.
Figure 6
Major Trip Generators and Attractions

Prepared by: RRPDC, September 2005
Sources: US Census, 2000
Richmond Regional PDC, 2005
Virginia Department of Transportation, 2005


<table>
<thead>
<tr>
<th>Major Destinations</th>
<th>GRTC Fixed Route</th>
<th>CARE</th>
<th>CVANx</th>
<th>RideFinders</th>
<th>Bay Transit</th>
<th>Access</th>
<th>Chesterfield</th>
<th>Logistic</th>
<th>Powhatan-Goochland CAA</th>
<th>Goochland Fellowship and Family Services</th>
<th>Quin Rivers CAA</th>
<th>Senior Connections</th>
<th>SmartRide</th>
<th>Red Cross</th>
<th>Shepherd Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bon Secours - St. Mary's</td>
<td>4</td>
<td>5</td>
<td>S</td>
<td>5</td>
<td>S</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>S</td>
<td>S</td>
<td>5</td>
<td>S</td>
<td>S</td>
<td>S</td>
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</tr>
<tr>
<td>Central VA Health Network</td>
<td>4</td>
<td>5</td>
<td>S</td>
<td>5</td>
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<td>S</td>
</tr>
<tr>
<td>Children's Hosp. - Brook Rd</td>
<td>4</td>
<td>5</td>
<td>S</td>
<td>5</td>
<td>S</td>
<td>5</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>Children's Hosp. (Outpatient) - Midlothian Tyke</td>
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<td>S</td>
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<td>S</td>
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<td>4</td>
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<td>HealthSouth Rehabilitation Center - Richmond</td>
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<td>4</td>
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<td>5</td>
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<td>Richmond Community Hospital - N. 29th St</td>
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<td>S</td>
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<tr>
<td>Richmond Eye and Ear Hosp.</td>
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<td>5</td>
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<td>5</td>
<td>4</td>
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<td>S</td>
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</tr>
<tr>
<td>VCU/MCV Hospital - Downtown</td>
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<td>S</td>
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<td>S</td>
<td>5</td>
<td>4</td>
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</tr>
<tr>
<td>VCU/MCV Medical Center - Huguenot Rd</td>
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<td>5</td>
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<td>5</td>
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<td>5</td>
<td>4</td>
<td>5</td>
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<td>5</td>
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<tr>
<td>VCU/MCV Health System - Radford Rd</td>
<td>4</td>
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<td>4</td>
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<td>5</td>
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<tr>
<td>VCU/MCV Health System - Southside Phase</td>
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* CVAN provides transportation services for qualified low-income persons to all destinations in the Richmond region (medical, government, and retail) for employment purposes only.

* RideFinders provides transportation services for the general public, elderly and low-income persons to all destinations in the Richmond region (medical, government, and retail) for employment purposes only.
Summary of Transportation Disadvantaged Needs and Issues

The Richmond Regional Planning District Commission (RRPDC) in partnership with the United Way and Senior Connections, The Capital Area Agency on Aging hosted Transportation Disadvantaged Forums on May 23 and May 25, 2005. The purpose of the forums was to identify and discuss mobility issues and barriers to accessing transportation. Over 160 human service agencies that serve elderly, disabled, or low-income persons were invited to the forums. In addition to human service agencies, local transportation providers were also invited to participate. Approximately 55 people participated in the forums.

In preparation for and as supplemental information to the forums, transportation surveys were provided to human service agencies and transportation providers to solicit information and data related to the mobility issues of the elderly, disabled, or low-income persons. Approximately 28 surveys were completed and returned to the RRPDC.

Mobility issues for transportation disadvantaged persons discussed at the forums and communicated in survey responses were grouped into seven categories (i.e., communication, coordination, cost, service, policy/guidelines, the built environment, and outside factors). Major issues from the surveys and forums are summarized below. Specific comments from the forums and surveys are provided in the appendix.

Communication
There are several levels of communication issues for the transportation disadvantaged. The most obvious is a general lack of awareness of the transportation options available throughout the region. In addition, the issue of a lack of communication between transportation providers and their customers was raised. Often times, customers do not understand the schedules or the need to be flexible with regard to pick-up and wait times. Similarly, providers do not always ensure that they fully comprehend the service needed by a customer when scheduling the service.

All of the transportation disadvantaged groups also mentioned that to some degree they feel the transportation providers, the general public, as well as decision makers, do not fully understand how their circumstances lead to their disadvantage regarding mobility options. For example, many of the lower income jobs are hourly and often include off-shift (i.e., evening and weekend) work hours. Basic public transit may not provide service during their shift or even to their job location, much less to a child care provider that may be required while the parent is at work.

Coordination
The issue that was raised most often in the forums was a lack of coordination among transportation providers. Coordinating services can take on many forms including pooling resources and funds, sharing and training drivers and volunteers, maximizing use of vehicles, coordinating scheduling, and increasing cooperation among local governments and agencies.

Coordination of services was an issue raised for all three of the transportation disadvantaged groups. Customers may have to rely on different transportation providers for different needs or to access different locations. For example, a provider may be able to transport a customer to a
medical appointment but not to pick up a prescription after the appointment. A different provider would be needed for a shopping trip to pick up the prescription or other items that might be recommended by a health care professional.

Many of the human service agencies that rely heavily on volunteers to transport their customers identified the limited number of volunteer drivers and the need for additional vehicles equipped to serve the disabled as major barriers.

Cost
Issues regarding the cost of transportation services were emphasized for more than just the low-income population. The increasing cost of providing transportation services, the need for additional funding to meet demands for specialized transportation services, and the diminishing affordability of these services for the customer affect all three of the transportation disadvantaged groups.

The elderly feel they need more options than just Medicaid transportation providers. The disabled and low-income state they often need financial assistance while waiting to qualify for services. Low-income persons point out that long bus trips cost them in both time and money. New transportation service providers indicate they need financial assistance during their start-up phase.

Service
The need for improved transportation services in terms of quality and quantity were raised as issues at the forums and in the surveys. All three disadvantaged groups expressed that fixed-route bus service does not provide access to many employment areas in the region (especially in rapidly growing suburban locations where the most new job opportunities are located) as well as many of the attractions which require transportation. All groups also mentioned lack of weekend service throughout the region as an issue. Low-income representatives expressed the need for services to access evening and night jobs as well as greater midday service to accommodate other family needs.

The elderly and disabled representatives expressed the need for door-to-door services beyond the curbside services currently provided. They need assistance with packages, maneuvering between the curb and the home or business, and getting through doorways. Each group also discussed the issues of long wait times for service and long rides. They expressed the need for shorter and more frequent trips such as direct shuttle services. The issue of service timeliness, consistency and reliability were raised to varying degrees by all disadvantaged groups.

Policy/Guidelines
Many of the issues raised by the transportation disadvantaged community relate to the policies of the transportation providers. The rules and requirements regarding eligibility, scheduling, and companions/aids varies from provider to provider, creates some confusion among customers, and is a barrier to coordinating many of the provider services. Representatives of the elderly community specifically mentioned how the definition of elderly is inconsistent among the different transportation providers. For example, Access Chesterfield provides service to persons
Representatives of the low-income population expressed that transportation providers needed more flexible polices that allow for accommodating additional family members on trips, especially multiple children. In addition, policies should also be more flexible with regard to persons who are borderline eligible for services with regard to income and disabilities.

The Built Environment
The disabled and elderly population groups voiced their concerns that direct access to transportation is often hampered by inadequate access to stops, a lack of sidewalks and pedestrian facilities leading to stops, and a lack of bus shelters protecting customers from inclement weather and natural elements. One example provided at the forum described how the driveway access design at some apartment complexes and elderly retirement developments did not accommodate the size and turning radius of GRTC vehicles. Therefore, the larger transportation provider vehicles could not pick up elderly and disabled persons directly at the front entrance of the building; rather, the residents had to wait at the edge of the road.

The low-income community pointed out safety as an issue. Some stops and pick up locations are in areas that are often secluded and not well lit early in the morning or late in the evenings. Low-income groups also mentioned access to suburban employment, retail, and medical centers as an issue due to increased suburbanization without an expansion of public transportation service to these areas. Many of the newer suburban developments do not appear to take into consideration access to jobs, education and training, and human service facilities for the transportation disadvantaged who may require specialized transportation services.

A lack of basic transportation design features such as sidewalks, curb cuts, railings, bus shelters, readable signage, and traffic signals that give priority to pedestrians can make pedestrian travel and access to public transportation difficult and less desirable.

Outside Factors
There are many transportation issues that are outside of direct control of either the providers or the customers. Increases in liability insurance, lack of volunteerism, traffic congestion and road conditions, increases in the number of transportation disadvantaged persons in each of the three categories, increasing travel distances due to suburbanization, and public attitudes toward transportation subsidies are some of the issues expressed in the surveys and at the transportation forums.
Findings

According to the 2000 census, approximately 10.5 percent of the population (86,000 people) in the Richmond region are age 65 or over. More than 17 percent of the population (130,000 people) age five and over in the Richmond region reported to have a disability. Nearly nine percent of the population (64,000 persons) age five and older in the region were reported to be below poverty. Many of these elderly, disabled, and low-income persons have few or no mobility options to meet their basic needs.

Every jurisdiction in the Richmond region has at least one provider of public transportation operating within its boundaries. However, not all of the transportation disadvantaged groups are fully accommodated in each jurisdiction. Mobility options in the City of Richmond and Henrico and Chesterfield counties are more prevalent than options in the less urbanized counties surrounding Richmond. However, even within the City and the more urbanized counties there are limits and barriers to the level of transportation provided to the elderly, disabled, and low-income. A matrix of transportation services available to disadvantaged groups of persons is shown in Table 16. A matrix of transportation service limitations for the disadvantaged groups of persons is shown in Table 17.

The City of Richmond and Chesterfield and Henrico counties have the fewest transportation provider service area limitations for any of the transportation disadvantaged groups, especially for the disabled. The primary provider in Chesterfield County, Access Chesterfield, provides service for elderly, disabled, and low-income persons to the Richmond and Petersburg metro areas. The primary transportation providers for the City of Richmond and Henrico County, GRTC and CARE, provide access throughout the City and Henrico County. However, no weekend service is available in Henrico County. The general public has limited local and express fixed-route bus service through GRTC in Henrico County and limited express service in Chesterfield County.

Charles City and New Kent counties have full access to public transportation through Bay Transit, but only within and between the two counties. Charles City and New Kent county residents do not full public transportation access to other parts of the Richmond region, with the exception of limited access to ridesharing to employment provided by RideFinders and limited access to medical appointments for Medicaid recipients.

Access to retail establishments and government facilities is severely limited for all three transportation disadvantaged groups in Goochland, Hanover, and Powhatan counties. In addition, transportation to employment and medical facilities is generally limited within these counties. Disabled persons in Goochland, Powhatan, and Hanover counties have no public transportation service available to access retail and government facilities.

Low-income persons have access to medical appointments through Medicaid funded transportation providers within all of the counties of the Richmond region. Elderly and disabled persons have full access to transportation services within the City of Richmond, Henrico, Chesterfield, New Kent, and Charles City counties.
Table 16 – Summary of Available Access to Transportation for Disadvantaged Persons

<table>
<thead>
<tr>
<th>Locality</th>
<th>Gen. Public</th>
<th>Elderly</th>
<th>Disabled</th>
<th>Low Income</th>
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</thead>
<tbody>
<tr>
<td>Charles City</td>
<td>Full access within Charles City &amp; New Kent counties; access to rideshare opportunities</td>
<td>Full access within Charles City &amp; New Kent counties</td>
<td>Full access within Charles City &amp; New Kent counties</td>
<td>Full access within Charles City &amp; New Kent counties; limited access to employment and medical appointments in metro Richmond</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>Access limited to express commuter routes and rideshare opportunities</td>
<td>Full access within Chesterfield and metro Richmond &amp; Petersburg</td>
<td>Full access within Chesterfield and metro Richmond &amp; Petersburg</td>
<td>Full access within Chesterfield and metro Richmond &amp; Petersburg</td>
</tr>
<tr>
<td>Goochland</td>
<td>Access to rideshare opportunities</td>
<td>Access to congregate meal sites and limited access to medical related activities</td>
<td>Limited access to medical related activities</td>
<td>Limited access to medical related activities and employment opportunities</td>
</tr>
<tr>
<td>Hanover</td>
<td>Access to rideshare opportunities</td>
<td>Access to congregate meal sites and limited access to medical related appointments</td>
<td>Limited access to medical related activities</td>
<td>Limited access to medical related activities and employment opportunities</td>
</tr>
<tr>
<td>Henrico</td>
<td>Full access within Henrico and the City of Richmond; limited access to employment opportunities outside of Henrico &amp; Richmond</td>
<td>Full access within Henrico and the City of Richmond; limited access to medical &amp; employment opportunities outside of Henrico &amp; Richmond</td>
<td>Full access within Henrico and the City of Richmond; limited access to medical &amp; employment opportunities outside of Henrico &amp; Richmond</td>
<td>Full access within Henrico and the City of Richmond; limited access to medical &amp; employment opportunities outside of Henrico &amp; Richmond</td>
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<tr>
<td>New Kent</td>
<td>Full access within New Kent &amp; Charles City counties; access to rideshare opportunities</td>
<td>Full access within New Kent &amp; Charles City counties</td>
<td>Full access within New Kent &amp; Charles City counties</td>
<td>Full access within New Kent &amp; Charles City counties; limited access to employment &amp; medical appointments in metro Richmond</td>
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<tr>
<td>Powhatan</td>
<td>Access to rideshare opportunities</td>
<td>Access to congregate meal sites and limited access to retail &amp; medical related appointments</td>
<td>Limited access to employment opportunities</td>
<td>Limited access to medical related activities and employment opportunities</td>
</tr>
<tr>
<td>Richmond</td>
<td>Full access within the City of Richmond and Henrico County</td>
<td>Full access within the City of Richmond &amp; Henrico County; limited access to medical &amp; employment opportunities outside of Richmond &amp; Henrico</td>
<td>Full access within the City of Richmond &amp; Henrico County; limited access to medical &amp; employment opportunities outside of Richmond &amp; Henrico</td>
<td>Full access within the City of Richmond &amp; Henrico County; limited access to medical &amp; employment opportunities outside of Richmond &amp; Henrico</td>
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Table 17 – Summary of Access Limitations to Transportation for Disadvantaged Persons

<table>
<thead>
<tr>
<th>Locality</th>
<th>Gen. Public</th>
<th>Elderly</th>
<th>Disabled</th>
<th>Low Income</th>
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<tbody>
<tr>
<td>Charles City</td>
<td>No access to retail &amp; govt facilities outside New Kent &amp; Charles City; limited access to employment &amp; medical facilities outside New Kent &amp; Charles City</td>
<td>No access to retail &amp; govt facilities outside Charles City &amp; New Kent; limited access to employment &amp; medical facilities outside Charles City &amp; New Kent</td>
<td>No access to retail &amp; govt facilities outside Charles City &amp; New Kent; limited access to employment &amp; medical facilities outside Charles City &amp; New Kent</td>
<td>No access to retail &amp; govt facilities outside Charles City &amp; New Kent; limited access to employment &amp; medical facilities outside Charles City &amp; New Kent</td>
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<tr>
<td>Chesterfield</td>
<td>No access to retail &amp; govt facilities; limited access to employment &amp; medical facilities</td>
<td>No access outside of Chesterfield, metro Richmond &amp; Petersburg</td>
<td>No access outside of Chesterfield, metro Richmond &amp; Petersburg</td>
<td>No access outside of Chesterfield, metro Richmond &amp; Petersburg</td>
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<tr>
<td>Goochland</td>
<td>No access to retail, medical &amp; govt facilities; limited access to employment</td>
<td>Limited access to employment &amp; medical facilities; no access to retail &amp; govt facilities</td>
<td>Limited access to employment &amp; medical facilities; no access to retail &amp; govt facilities</td>
<td>Limited access to employment &amp; medical facilities; no access to retail &amp; govt facilities</td>
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<tr>
<td>Hanover</td>
<td>No access to retail, medical &amp; govt facilities; limited access to employment</td>
<td>No access to retail &amp; govt facilities; limited access to employment &amp; medical facilities</td>
<td>No access to retail, employment &amp; govt facilities; limited access to employment &amp; medical facilities</td>
<td>No access to retail &amp; govt facilities; limited access to employment &amp; medical facilities</td>
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<tr>
<td>Henrico</td>
<td>No access outside of Henrico &amp; Richmond; no weekend access</td>
<td>No access to retail &amp; govt facilities outside of Henrico &amp; Richmond; limited access to employment &amp; medical facilities; no weekend access</td>
<td>No access to retail &amp; govt facilities outside of Henrico &amp; Richmond; limited access to employment &amp; medical facilities; no weekend access</td>
<td>No access to retail &amp; govt facilities outside of Henrico &amp; Richmond; limited access to employment &amp; medical facilities; no weekend access</td>
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<tr>
<td>New Kent</td>
<td>No access to retail &amp; govt facilities outside New Kent &amp; Charles City; limited access to employment &amp; medical facilities outside New Kent &amp; Charles City</td>
<td>No access to retail &amp; govt facilities outside New Kent &amp; Charles City; limited access to employment &amp; medical facilities outside New Kent &amp; Charles City</td>
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<tr>
<td>Powhatan</td>
<td>No access to retail, medical &amp; govt facilities; limited access to employment</td>
<td>Limited access to retail, employment, medical &amp; govt facilities</td>
<td>No access to retail &amp; govt facilities; limited access to employment &amp; medical facilities</td>
<td>No access to retail &amp; govt facilities; limited access to employment &amp; medical facilities</td>
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<tr>
<td>Richmond</td>
<td>No access outside of Henrico &amp; Richmond</td>
<td>No access to retail &amp; govt facilities outside of Henrico &amp; Richmond; limited access to employment &amp; medical facilities outside of Henrico &amp; Richmond</td>
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<td>No access to retail &amp; govt facilities outside of Henrico &amp; Richmond; limited access to employment &amp; medical facilities outside of Henrico &amp; Richmond</td>
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The flexibility and independence associated with the private automobile is virtually impossible to replicate in public transportation. As people age, they want to maintain their flexibility and independence when it comes to mobility. Fixed-route bus service in the region has a limited service area in order to stay efficient and provide a more regular schedule. This limited service area decreases the number of places that a person can access in the region by limiting it to the urbanized areas surrounding the downtown area. Specialized transportation services may provide access further out into the suburbs and surrounding communities, but they tend to operate by prior reservation and thus do not generally offer the flexibility and independence expected by the elderly population.

Development and transit trends are making jobs, medical services, and government and retail centers less accessible to the region’s mobility restricted populations. The region is becoming more auto dependent, such that costly specialty transportation providers are increasingly needed to serve the poor, elderly, and disabled who cannot drive.

In places where public transportation exists but is not easily accessible to older or disabled adults, it will not offer a useful mobility option. The elimination of barriers that prevent people with disabilities from more easily accessing public transportation is an important task. Transportation design features such as sidewalks, curb cuts, railings, bus shelters, readable signage, and traffic signals that give priority to pedestrians can help make public transportation more easily accessible for disabled pedestrians and transit users.

There are many options for improving public transportation services for low-income persons. Some examples include concentrating traditional fixed-route services in the most promising markets; using new technology to improve the safety, reliability, and efficiency of the system; reconfiguring service to support decentralized travel patterns into the suburbs; providing specialized services to niche markets; and using other alternatives where fixed-route transit is not cost efficient. Some of the other alternatives may be development related and include promoting land use and housing policies that encourage people to locate in areas that are accessible to multiple modes of transportation and transportation policies that implement more mobility options to disadvantaged persons.

People will choose to use public transportation in areas that are well served by a quality and reliable system that is designed to meet their needs. When good public transportation exists, people will use it.
1 Millar, William W., *Expanding Mobility Options for Older Adults: Community Design Incentives*, White House Conference on Aging Officially Designated Event, Transportation Solutions for an Aging Society, MIT Faculty Club, Cambridge, MA, April 2005

2 Millar, William W., *Expanding Mobility Options for Older Adults: Community Design Incentives*, White House Conference on Aging Officially Designated Event, Transportation Solutions for an Aging Society, MIT Faculty Club, Cambridge, MA, April 2005


4 U.S. Department of Transportation, Bureau of Transportation Statistics, Federal Highway Administration, and National Highway Traffic Safety Administration, 2001 *National Household Travel Survey.*


6 Giuliano, Genevieve, *Low Income, Public Transit and Mobility*, Transportation Research Board, November 2004


APPENDIX
Transportation Disadvantaged Forum: Elderly, Disabled and Low Income Persons

United Way of Greater Richmond & Petersburg
224 East Broad Street
Richmond, VA 23241

May 23, 2005
1:15 PM – 3:30 PM

1:15 PM  Registration & Refreshments

1:30 PM  Welcome & Introductions  Sherrie L. Brach  (United Way)

1:40 PM  Transportation Disadvantaged Study  Michael O. Clements  (Richmond Regional Planning District Commission – RRPDC)
- Summary Presentation
- Questions & Answers
- Discussion of Survey

RRPDC staff will provide a presentation of the Public Transportation Needs Assessment for Disadvantaged Population Groups that is currently underway. Participants will be given the opportunity to ask questions and comment on the study data and assumptions. Additional data and comments are being requested through a survey to transportation providers and social service agencies.

2:15 PM  Break

2:20 PM  Defining the Transportation Issues for Michael O. Clements  (RRPDC)
- Elderly
- Disabled
- Low-Income

A structured discussion in which participants will be asked to provide input on the transportation issues and barriers that each of the identified disadvantaged groups confront. Comments will be posted and summarized.

3:00 PM  Overcoming Barriers  Michael O. Clements  (RRPDC)

A structured discussion in which participants will be asked to provide recommendations and potential improvements that can help disadvantaged groups overcome mobility barriers. Comments will be posted and summarized. Results to be incorporated into Phase II of the study.

3:25 PM  Closing Remarks  Meade Boswell  (United Way)
Transportation Disadvantaged Forum: 
Elderly, Disabled and Low Income Persons

Senior Connections, Capital Area Agency on Aging  
24 East Cary Street  
Richmond, VA 23219

May 25, 2005  
9:15 AM – 11:30 AM

9:15 AM  Registration & Refreshments

9:30 AM  Welcome & Introductions  
Thelma Bland Watson  
(Senior Connections, The Capital Area Agency on Aging)

9:40 AM  Transportation Disadvantaged Study  
Michael O. Clements  
(Richmond Regional Planning District Commission – RRPDC)

- Summary Presentation
- Questions & Answers
- Discussion of Survey

RRPDC staff will provide a presentation of the Public Transportation Needs Assessment for Disadvantaged Population Groups that is currently underway. Participants will be given the opportunity to ask questions and comment on the study data and assumptions. Additional data and comments are being requested through a survey to transportation providers and social service agencies.

10:15 AM  Break

10:20 AM  Defining the Transportation Issues for  
Michael O. Clements  
(RRPDC)

- Elderly
- Disabled
- Low-Income

A structured discussion in which participants will be asked to provide input on the transportation issues and barriers that each of the identified disadvantaged groups confront. Comments will be posted and summarized.

3:00 PM  Overcoming Barriers  
Michael O. Clements  
(RRPDC)

A structured discussion in which participants will be asked to provide recommendations and potential improvements that can help disadvantaged groups overcome mobility barriers. Comments will be posted and summarized. Results to be incorporated into Phase II of the study.

11:25 AM  Closing Remarks  
Harris Spindle  
(Senior Connections)
Summary of Mobility Issues and Barriers
for Disadvantaged (Elderly, Disabled & Low-Income) Population Groups
from May 23 & 25, 2005 Transportation Disadvantaged Forum

ELDERLY

Communication
- Lack of understanding and flexibility in scheduling appointments with regard to lead time, wait time, and return pick-up time
- Customer & provider communication difficulties (hearing, clarity, ensuring comprehension of needed services)
- Lack of communication and awareness of transportation options

Coordination
- Lack of coordination among social service agencies
- Need for pooling and coordination of existing resources
- Politics/regional cooperation – more local government cooperation is needed

Cost
- Increasing transportation costs and diminishing affordability – need for additional funding (need for more than Medicaid funding to meet transportation needs)

Service
- Need for more door-to-door service (versus curb-to-curb service)
- Driver training to recognize ailments affecting elderly and disabled (i.e., dementia, Alzheimer’s, etc.) and how to respond to special needs
- Need for assistance with packages
- Need more short and frequent trips (shuttles)
- Need for driving assistance and directions
- Lack of assistance for using public transit
- Long waiting times for rides and trips
- Need for scheduling assistance
- Reliability of providers is lacking

Policy/Guidelines
- Need for consistency of rules among providers regarding guests/companions/aids (required by Medicaid) – scheduling guests ahead of time
- Recognition of other forms of eligibility (out-of-state, etc.)
- Varying definition of elderly
- Need for flexible guidelines regarding borderline eligibility cases

The Built Environment
- Need for building designs to accommodate transit
- Lack of sidewalks/safe trips to stops/pedestrian facilities

Outside Factors
- Liability (agency/providers) – liability insurance hampers more transportation resources – public awareness for “good Samaritan” work (volunteerism)
- Driving patterns, roads, traffic, congestion
Ride-sharing, resistance to dependency
- Crime
- Lack of transportation to many destinations
- Health issues (driving home from appointments)
- Driving into city or unfamiliar places
- Rural road conditions/weather related concerns
- Increase in elderly population
- Increased travel distance (due to suburbanization)

DISABLED

Communication
- Customer & provider communication difficulties
- Understanding the needs of the disabled due to a lack of public awareness— the role of the Media
- Options for the blind (understanding needs for blind) - Blind community is underrepresented in community – number of options is more limited for the blind
- Need for greater clarity of schedules
- Lack of awareness and communication of transportation options

Coordination
- Need for consistency among providers and services provided (i.e., comment that Logisticare may broker with a different company for the same client on different days)
- Need for pooling and coordination of existing resources
- Politics/regional cooperation – more local government cooperation is needed

Cost
- Increasing costs to consumer, agencies, and providers
- Need for start-up help for transportation providers
- Affordability of specialized services – (assistance while waiting to qualify for services)

Service
- Need for more door-to-door service (versus curb-to-curb service)
- Need for better strategies for new services – out-of-the-box solutions, innovative marketing, different ways to transport people
- Lack of weekend service in Henrico and Chesterfield counties
- Limited service weekend and holidays
- Expanded specialized services geographically
- Expanding fixed route service geographically
- Need for more services than just fixed routes (GRTC) or CARE services
- Weekday/weekend route consistency
- Need for driving assistance and directions
- Lack of assistance for using public transit
- Need for door-through-door service for visually impaired
- Need for attendants on vans/transit for mentally disabled persons
- Long waiting times for rides and trips
- Need for scheduling assistance
- Reliability of providers
Transportation needs for developmentally disabled abuse victims to/from shelters, services, etc.
Driver training to recognize ailments affecting disabled (i.e., dementia, Alzheimer’s, etc.) and how to respond to special needs
Reliability of transportation providers

Policy/Guidelines
Need for consistency of rules among providers regarding guests/companions/aids (required by Medicaid) – scheduling guests ahead of time
Need for flexible guidelines regarding borderline eligibility cases

The Built Environment
Accessibility to stops, lack of sidewalks, access from transportation to destination

Outside Factors
Dollar is the bottom line in provision of service – more emphasis given to efficiencies than quality
Liability (agency/providers) – liability insurance hampers more transportation resources
Maintaining organization efficiency to achieve public support
Abuses and support for disabled
Assistance with daily living activities
Increase in the number of disabled persons
Increased travel distance (due to suburbanization)
Public attitudes - Census data shows 91% of households have their own transportation – so why support other’s needs?

LOW INCOME
Communication
Understanding the needs of the low-income – the role of the media for public awareness
Incomplete awareness and education of poverty circumstances – hourly jobs, job security, lack of basic necessities (including on-demand transportation), etc.
Lack of awareness and communication of transportation options

Coordination
Need for pooling and coordination of existing transportation resources

Cost
Cost in time and money of long bus trips
Increasing transportation costs and diminishing affordability – need for additional funding
Affordability of specialized services – (assistance while waiting to qualify for services)

Service
Schedule consistency and reliability creates difficulties (schedules vary by time of day, day of week, holidays, and by jurisdiction)
Timeliness of specialized services
Expanding fixed route service geographically – Transportation for employment –
(increase of employment opportunities further outside the city in areas not served by
transit)

- Number of transfers greatly increases trip length
- Reverse commutes for employment (i.e., city to suburbs)
- Henrico routes – consistency, availability, weekend service
- Off peak work shifts – transportation needs for evening and night shifts
- Need greater midday service to accommodate minor family emergency needs
- More variety in routes and times
- Transportation needs for victims of domestic violence to/from shelters, employment,
  social services
- Juveniles without transportation who need to work

Policy/Guidelines
- The need for accommodating additional family members on trips, especially multiple
  children
- Access to childcare facilities
- Need for flexible guidelines regarding borderline eligibility cases
- Desire to transport children back to original school from temporary shelters

The Built Environment
- Access to suburban employment/resources – medical etc. (suburban expansion)
- Need for greater pedestrian access, lack of sidewalks and bus shelters
- Safety of bus stops (secluded areas in early mornings, evenings)
- Vehicle access to apartments and developments

Outside Factors
- Greater number of Medicaid clients with need for access to suburban medical
  appointments
- Increase in low-income population