Putting Food on the Table
Food Security and Access to Affordable and Nutritious Food in The Fairfax-Falls Church Area

Department of Neighborhood and Community Services
Economic, Demographic and Statistical Research
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The Fairfax-Falls Church area is one of the wealthiest areas of the United States. This wealth often obscures the fact that a substantial number of low-income persons live here. Amidst the wealth of the Fairfax-Falls Church area, over 44,000 residents received Supplemental Nutrition Assistance Program benefits and over a quarter of the students enrolled in the Fairfax County Public Schools received free- or reduced-cost lunches. Furthermore, Fairfax County is home to more than 62,000 individuals who live below poverty and another 86,000 residents who live in households with incomes 100 to 185 percent of poverty (2010 American Community Survey). It is likely that many of these low-income residents struggle to feed their families a nutritious and sufficient amount of food. This struggle is further complicated because poverty measures used by federal food programs to determine eligibility for benefits do not take into consideration varying costs of living among jurisdictions.

The Fairfax-Falls Church area is one of the more expensive places to live in the United States. The third quarter cost of living index produced by the Council for Community and Economic Research (C2ER) estimated that living in the Washington metro area was nearly one and half times more expensive than the United States as a whole. Because of the high cost of living in the Fairfax-Falls Church area, low-income households find it particularly challenging to meet their basic needs of food, housing and medical care. Households under economic stress experience a higher likelihood of periodic food insecurity as they make choices on how to budget their limited resources.

The Economic Research Service (ERS) of the U.S. Department of Agriculture defines food insecurity as “limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways without resorting to emergency food supplies, scavenging, stealing, or other coping strategies.” Persons with very low food security include those where the “eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money and other resources for food during a twelve month period.”

A national study conducted by ERS in 2010 found that 14.5 percent of the households in the United States were food insecure at least some time during the previous year and 5.4 percent had very low food security. Low-income households, single-parent households and households with Black or Hispanic heads were more likely to experience food insecurity. In 2010, 40.2 percent of U.S. households with income below poverty were food insecure; 27.3 percent of households with income 100 to 185 percent of poverty were food insecure. Among single-parent households, over a third of the households with a female head and a quarter of households headed by males were food insecure. Despite the intent of the federal food programs to help low-income households obtain better food security, only 59 percent of the nation’s food insecure households reported that they had participated in one or more of the

“Very low food security is when the eating patterns of one or more household members are disrupted and food intake reduced because of lack of money or other resources.”

…Economic Research Service
three largest federal food and nutrition assistance programs - SNAP (Supplemental Nutrition Assistance Program) formerly called food stamps; the National School Lunch Program; and WIC (Supplemental Nutrition Program for Women, Infants, and Children). (ERS, Household Food Security in the United States in 2010, Report Number 125, September 2011.)

This study provides a glimpse into food security and access issues in the Fairfax-Falls Church area. Two of the programs that help increase food security for low-income Fairfax-Falls Church households are examined in the first two sections of this study—the Supplemental Nutrition Assistance Program and the Free- and Reduced-Price Lunch Program. The third and fourth sections of the study examine two sources of local data on residents who experience low food security—Sixth, Eight, Tenth and Twelfth Grade Students Reporting Hunger; and Emergency Food Requests. The final section of the study examines the access that low-income Fairfax-Falls Church residents have to nutritious and affordable food sources.

![National Prevalence of Food Insecurity, 2010](image)

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The primary purpose of the Supplemental Nutrition Assistance Program (SNAP), formerly called Food Stamps, is to help provide sufficient access to nutritional foods to help insure food security for low-income households. National data indicate that not all U.S. households that experience food insecurity participate in SNAP. In addition, although they are low-income, not all households receiving SNAP benefits are food insecure. Nationwide, less than half of the households (40.9 percent) that are food insecure participate in SNAP.

Of all U.S. households that do participate in SNAP, Economic Research Service (ERS) estimates that 52 percent were food insecure and 20 percent had very low food security (ERS, Sept. 2011).

To be eligible for SNAP benefits, a household’s liquid financial resources must not exceed $3,250 if at least one member is age 60 years or older or $2,000 if all members are younger than 60 years. Households with gross incomes exceeding 130 percent of the federal poverty threshold cannot receive benefits unless a member of the household is older than 60 years or disabled. In addition to meeting income and resource requirements, most adult legal immigrants must live in the United States for five years before they are eligible for SNAP benefits. Federal poverty guidelines and SNAP benefits vary by family size.

The U.S. Department of Agriculture’s (USDA’s) Thrifty Food Plan provides the basis for the maximum SNAP benefit by family size. The Thrifty Food Plan is a national standard for a nutritious diet at a minimal cost. SNAP benefits, however, are not adjusted for varying costs of living among areas of the United States. The Council for Community and Economic Research (C2ER) tracks price differences between cities on a quarterly basis and provides the most reliable source of information for city to city comparisons. As of third quarter 2010, C2ER’s ACCRA Cost of Living Index showed that groceries in the Washington metropolitan area cost 7.9 percent more than the national average. Another source for food expenditures comes from the U.S. Bureau of Labor Statistics (BLS). BLS conducts the Consumer Expenditure Survey.

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**Nationally, 52% of the U.S. households receiving SNAP benefits were food insecure.”**

...Economic Research Service

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**SNAP Income and Benefit Maximums by Family Size**

<table>
<thead>
<tr>
<th>Family Size</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<tbody>
<tr>
<td>Annual Income at 130% of Federal Poverty</td>
<td>$14,157</td>
<td>$19,123</td>
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<td>$29,055</td>
<td>$34,021</td>
<td>$38,987</td>
<td>$43,953</td>
<td>$48,919</td>
<td>$53,885</td>
<td>$58,851</td>
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<tr>
<td>Max. Monthly SNAP Benefit</td>
<td>$200</td>
<td>$367</td>
<td>$526</td>
<td>$668</td>
<td>$793</td>
<td>$952</td>
<td>$1,052</td>
<td>$1,202</td>
<td>$1,352</td>
<td>$1,502</td>
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</table>

The Fairfax County Department of Family Services (DFS) determines eligibility for SNAP in Fairfax County and the cities of Fairfax and Falls Church. In fiscal year 2011, DFS received 17,703 applications for SNAP, an average of 1,475 new applications per month. In the Fairfax-Falls Church area, SNAP provided benefits to nearly 23,000 households containing 54,332 total persons of which 44,373 persons were eligible to receive benefits in October 2011. In these households, there were 23,560 children under age 18.

As indicated above, not every household member is eligible to receive SNAP benefits. In 27.9 percent of the Fairfax-Falls Church households receiving SNAP benefits, one or more members were ineligible to receive benefits. The most frequent reason for the ineligibility of household members was immigration status. In addition to meeting income and resource requirements, most adult legal immigrants must live in the U.S. for five years before they are eligible for SNAP benefits. Among households containing ineligible members, 45.7 percent contained two or more members who were ineligible to receive SNAP benefits. Low-income households where not all members are eligible for SNAP benefits are likely to experience greater food insecurity than those households where all members received benefits.

Nearly 90 percent of the Fairfax-Falls Church households receiving SNAP benefits have incomes below poverty. For many households receiving SNAP benefits, income varies significantly from month to month. As of October 2011, the median monthly gross income of Fairfax-Falls Church households receiving SNAP benefits was $674 which translates to a median annual household income of $8,088. In contrast, the 2010 median annual income for all Fairfax County households was $103,010 as estimated by the Census Bureau’s 2010...
American Community Survey.

The average size of all households receiving SNAP benefits, 2.40 persons, was smaller than the average household size of all households in Fairfax County, 2.75 persons. The average size of a household with children that received SNAP benefits was 3.53 persons and the average number of children was 2.02 children. (For this analysis, children are defined as persons younger than 18 years.) Of those Fairfax-Falls Church households receiving SNAP benefits, half contained children and a quarter contained a senior age 65 years or older. Very few households (0.7 percent) contained both children and seniors. Nearly 60 percent of the households with children contained only one adult, age 18 years or older. Research conducted by ERS suggests that single-parent families are at greater risk of experiencing food insecurity, especially those families headed by single women.

Three-quarters of the households receiving SNAP benefits spoke English at home, 15.3 percent spoke Spanish and 9.2 percent spoke other languages. Among the households with children that receive SNAP benefits, Spanish (27.2 percent) was more likely to be spoken at home than among other Fairfax-Falls Church households. Nearly 70 percent of the households with children that receive SNAP benefits spoke English at home and only 3.3 percent spoke a language other than English or Spanish.

In comparison to all Fairfax-Falls Church households, households containing seniors (age 65 years and older) that received SNAP benefits were less likely to speak English or Spanish at home but were more likely to speak other languages such as Vietnamese (8.6 percent), Korean (5.7 percent), Farsi (4.2 percent) or a Chinese dialect (2.9 percent). In total, there were nearly 6,500 seniors age 65 years or older living in households receiving SNAP benefits in the Fairfax-Falls Church area. One out of seven of these seniors was age 85 years or older. In the households containing seniors, only 10.0 percent had members younger than 65 years, nearly three-quarters of the seniors lived alone (71.6 percent), and 18.4 percent lived with another senior. The average size of these households with seniors was 1.36 persons. As shown by the density maps, the distribution of households with seniors receiving SNAP benefits was different from that of other household types. The senior households were less concentrated and were spread more evenly throughout the county.
Density of Fairfax-Falls Church Area
Households Receiving Supplemental Nutritional Assistance (SNAP) Benefits
As of October 2011

Density of Households Receiving SNAP Benefits

- All Households
- Households with Children
- Households with Seniors

Source: Fairfax County Department of Family Services, Supplemental Nutrition Assistance Program (SNAP), October 2011.
The purpose of the National School Lunch Program is to provide nutritionally balanced, low-cost or free lunches to low-income children. Economic Research Service (ERS) estimates that 48 percent of the U.S. households that participated in free- or reduced-cost lunches were food insecure and 15.6 percent had very low food security (ERS, Sept. 2011). Families who earn less than 130 percent of the poverty level are eligible for free meals and those with incomes between 130 and 185 percent of poverty qualify for reduced-price meals. The maximum income guidelines for families of children receiving free- or reduced-price lunches are shown in the chart.

Currently, students who qualify for reduced-price lunches pay 40 cents for lunch and can receive breakfast at no cost. Breakfast is served in 159 Fairfax County Public Schools (FCPS) sites. FCPS operates 194 schools and centers and serves approximately 140,000 meals per day (Fairfax County Public Schools, About FCPS web site, December 2011).

During the 2010-2011 school year, 44,018 FCPS students (25.5 percent) received free- or reduced-price meals. More than half of these students (24,920) were in elementary school. Elementary school students (27.1 percent) were more likely than middle school or high school (23.3 percent) students to participate in the free- or reduced-price meal program. The FCPS system had 139 elementary schools in 2010-2011. In 28 of these elementary schools, more than half of the membership received free- or reduced-price meals. In five elementary schools, more than three-quarters of the children received free- or reduced-price meals—Mount Eagle (77.6 percent), Lynbrook (79.1 percent), Mount Vernon Woods (81.3 percent), Graham Road (83.3 percent) and Hybla Valley (85.9 percent). Among students of all ages who received free- or reduced-price meals, four out of every five of these students received free meals.

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Annual Income</th>
<th>Monthly Income</th>
<th>Weekly Income</th>
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<tbody>
<tr>
<td>2</td>
<td>$27,214</td>
<td>$2,268</td>
<td>$524</td>
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<tr>
<td>3</td>
<td>$34,281</td>
<td>$2,857</td>
<td>$660</td>
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<td>4</td>
<td>$41,348</td>
<td>$3,446</td>
<td>$796</td>
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<tr>
<td>5</td>
<td>$48,415</td>
<td>$4,035</td>
<td>$932</td>
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<tr>
<td>6</td>
<td>$55,482</td>
<td>$4,624</td>
<td>$1,067</td>
</tr>
<tr>
<td>7</td>
<td>$62,549</td>
<td>$5,213</td>
<td>$1,203</td>
</tr>
<tr>
<td>8</td>
<td>$69,616</td>
<td>$5,802</td>
<td>$1,339</td>
</tr>
<tr>
<td>For each additional family member add:</td>
<td>$7,067</td>
<td>$589</td>
<td>$139</td>
</tr>
</tbody>
</table>

Source: Fairfax County Public Schools, August 8, 2011.
Percent of Elementary Students Receiving Free- or Reduced-Price Lunches, School Year 2010-11

Elementary School Attendance Areas
Percent of Students Free or Reduced Priced Lunches
- Under 20%
- 20.1% to 35%
- 35.1% to 50%
- 50.1% to 75%
- Greater than 75%
- Interstate Highways

Source: Virginia Department of Education, National School Lunch Program (NSLP) Free and Reduced Price Eligibility Report, By Schools 2010-2011
Fairfax County conducts an annual survey of students in sixth, eighth, tenth and twelfth grades. On the 2010 surveys a question asked students, ‘During the past 30 days, how often did you go hungry because there was not enough food in your home?’ One out of every five students reported going hungry at least some of the time and 2.2 percent reporting that they went hungry ‘most of the time’ or ‘always.’ The students who reported any level of hunger were more likely to live in single-parent families, speak a language other than English at home, and be racial or ethnic minorities. Hunger is one characteristic of persons with very low food security.

Nearly 17 percent of all students who responded to the Youth Survey lived in single-parent families. Students who reported that they had ‘never’ gone hungry in the past 30 days were less likely to live in a single-parent family, only 14.5 percent. Among students who reported experiencing any level of hunger, a quarter lived in single-parent families. As the degree of hunger reported increased, so did the probability of living in a single-parent family. Almost 27 percent of students who reported that they had been hungry ‘most of the time’ or ‘always’ during the past 30 days lived in a single-parent family. Amongst all students living in single-parent households, 30.0 percent reported experiencing some level of hunger during the past 30 days.

Only 9.3 percent of the sixth, eighth, tenth and twelfth graders responding to the 2010 survey spoke Spanish at home. These Spanish-speaking students were 1.7 times more likely to have experienced some level of hunger. Amongst students who spoke Spanish at home, more than a third indicated that they had experienced hunger during the past 30 days. Students who spoke languages other than English or Spanish at home also were more likely to experience hunger. Amongst these students more than a quarter reported experiencing at least some of the time in the past 30 days.”

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**Percent Reporting Going Hungry by Selected Characteristics**

**Students in Grades 6, 8, 10 and 12, 2010**

- White, Not Hispanic: 12.6%
- Asian/Pacific Islander: 24.8%
- Black/African American: 26.2%
- Hispanic: 30.9%
- Speak English at home: 17.5%
- Speak Spanish at home: 34.3%
- Speak other language at home: 26.2%
- Live with one parent: 30.0%
- All students: 20.3%

Source: Fairfax County Department of Neighborhood and Community Services, 2010 Youth Survey.
least some hunger in the past 30 days.

Studies suggest that students who are hungry are absent more frequently from school and have more difficulty learning. These statements appear to be substantiated by the Youth Survey results. Eighth, tenth and twelfth grade students were asked, “During the last four weeks, how many days of school have you missed because you skipped or ‘cut’?” Students reporting any level of hunger were much more likely to have reported that they had skipped or cut school one or more days during the past four weeks. Among those reporting no hunger, 27.7 percent skipped some school, but among those reporting any level of hunger, 41.8 percent skipped some school.

Students who reported going hungry indicated that they had lower grades than their counterparts who reported ‘never’ going hungry. In addition, the degree of hunger reported appeared to have a correlation to the grades students reported that they received. Students who reported being hungry ‘most of the time’ or ‘always’ indicated that their grades were lower than those reporting going hungry ‘rarely’ or ‘sometimes.’ Among students who said they ‘never’ went hungry, 54.5 percent reported their grades were mostly A’s; among students who said they were hungry ‘rarely’ or ‘sometimes,’ 33.9 percent reported their grades were mostly A’s; and among students who said they were hungry ‘most of the time’ or ‘always,’ 29.0 percent reported their grades as mostly A’s.

As shown by the map to the right, the school pyramids where the highest levels of hunger were reported were located inside of the Capital Beltway (I-495) south of Falls Church City, along the I-95 corridor, the Richmond Highway corridor and the Centreville area.
Households that seek emergency food assistance often are those experiencing very low food security. These households tend to struggle to feed their members a nutritionally adequate diet even when they are able to obtain sufficient quantities of food. When adequate quantities of food are unavailable, they turn to emergency food supplies and it is likely that at least some members experience hunger during these times.

During February 2009, a survey of nonprofit organizations and houses of worship captured data on need in the community for food and financial assistance. Eighty-nine organizations provided information about the assistance they provided during the fourth quarter of 2008. These organizations indicated that they had provided emergency food assistance to 32,044 households, an increase of 39 percent over fourth quarter 2007. Over a quarter of these organizations providing emergency food assistance indicated that during some part of the fourth quarter of 2008 they were unable to serve households due to a lack of resources. (Fairfax County Department of Systems Management, Survey of Fairfax County Basic Needs Providers: Trends in Participation, Demand and Service Levels, 4th Quarter 2007—4th Quarter 2008, March 2009)

Although the majority of requests for emergency food go directly to nonprofits and houses of worship, a portion of these requests are assessed and referred through Fairfax County’s emergency needs assistance hotline. Coordinated Services Planning (CSP) was established to handle urgent human services-related situations. CSP coordinators assess these situations over the telephone and connect residents with personal, community-based and public resources to meet their basic and immediate needs. Emergency food assistance referrals are one of the types of services provided by CSP. During calendar year 2008, CSP received 4,095 requests for emergency food assistance, 890 of these requests occurred during the fourth quarter. By calendar year 2010, CSP received over 6,000 requests for emergency food, an increase of 50 percent over 2008. As shown by the map, the highest concentrations of emergency food requests came from residents who lived inside of the Capital Beltway south of Falls Church City, the Richmond Highway corridor and the Centreville area.
Coordinated Services Planning
Emergency Food Requests for 2010

Number of Emergency Food Requests
- 1 - 3
- 4 - 9
- 10 - 19
- 20 - 29
- 30 - 43

Density of Emergency Food Requests
- Very Low
- Low
- Low to Medium
- Medium
- Medium to High
- High
- Very High
- County Border

Source: Pike County Department of Neighborhood and Community Services
Coordinated Services Planning, ASSIST Food Requests, CY 2010
Food Deserts and Access to Food

The ability to obtain a wide variety of nutritious and affordable foods is an important component of food security. Past studies have measured access to food by determining the distance or travel time from consumers’ homes to major food retailers that have annual sales in excess of $2 million. Only major food retailers are included because these “supermarkets” carry the variety of foods necessary for a nutritionally adequate diet and have lower costs than smaller markets. During FY 2008, nationwide data showed that 84 percent of SNAP benefits were redeemed in supermarkets or supercenters, 4 percent in convenience stores, 2 percent in other groceries (annual income $500,000 to $2 million) and 9 percent in all other places. Economic Research Service (ERS) defines food deserts as “areas with limited access to affordable and nutritious food.” For urban areas, households living within a half mile of the nearest “supermarket” are designated as having “high” access to nutritious and affordable food; households living between half a mile and one mile are designated as having “medium” access; and those living more than a mile, “low” access. These designations were developed because it is assumed that low-income urban households have limited access to motor vehicles. In 2009, ERS estimated that 28.5 percent of all U.S. low-income households had “high” access to food, 33.3 percent “medium” access and 38.1 percent “low” access. Among low-income households without motor vehicles residing in urban areas, ERS estimated 50.2 percent had “high” access to food, 38.4 percent “medium” access and 11.3 percent “low” access. Households that reside in “low” food access areas without a means of transportation to get to a “supermarket” are considered by ERS as households living in food deserts. These households pose a higher risk of food insecurity. (ERS, Access to Affordable and Nutritious Food—Measuring and Understanding Food Deserts and Their Consequences, June 2009).

Most food desert research has focused on urban or rural areas, attempting to estimate where food deserts occur using data summarized by block group or other small-area geographies—little attention has been paid to suburban areas. Households in suburban areas who have motor vehicles typically have easy access to a wide variety of affordable food sources. However, suburban households that do not have motor vehicles face greater challenges than urban households.
households because suburban housing is less densely concentrated and most suburbs lack well developed public transportation networks. The 2010 American Community Survey (ACS) conducted by the U.S. Census Bureau estimates that only 4.0 percent of Fairfax-Falls Church area households do not have a motor vehicle. The likelihood of not having a motor vehicle, however, increases dramatically for low-income households. Among households with incomes below 185 percent of poverty, nearly one out of every six households do not have a motor vehicle and nearly a quarter of those households below poverty do not have a motor vehicle. Low-income households containing members age 65 years and older are even less likely to have motor vehicles. Less than half of the households with incomes below poverty and at least one member age 65 years or older have motor vehicles. (2010 ACS, PUMS). Although households with incomes up to 130 percent of poverty can qualify for SNAP benefits, nearly 90 percent of the Fairfax-Falls Church households receiving benefits have incomes below poverty.

Using local information on SNAP recipients and retailers that accept SNAP transactions, an analysis was conducted to determine the access of Fairfax-Falls Church households receiving SNAP benefits to a wide variety of nutritious and affordable foods. The methodology applied by ERS forms the basis for the Fairfax-Falls Church analysis. The ERS study only included food retailers that were large supermarkets or supercenters with annual sales over $2 million because ERS concluded that these retailers are the only ones providing a wide variety of affordable food. For the Fairfax-Falls Church study, a list of all food retailers that accept SNAP transactions were obtained from the U.S. Department of Agriculture’s SNAP Retailer Locator web site for Virginia. Retailers located in adjacent jurisdictions also were included in the analysis if they were located within three-quarters of a mile of the Fairfax-Falls Church border. The retailers were classified by type and size using information provided by Manta, a web site that provides business classifications and estimates of annual sales. Three general classifications were used—supermarkets (grocery stores having annual sales of $2.5 million or more), other groceries (grocery stores having annual sales of $500,000 to $2.5 million), and other retailers. A total of 444 stores accept SNAP transactions in the Fairfax-Falls Church area; 128 of these stores were classified as supermarkets, 22 stores as other groceries and 294 stores as other retailers. Most of the stores classified as supermarkets have multiple locations in the Fairfax-Falls Church area. Large food retailers that require a membership fee such as Costco, BJ’s and Sam’s Club were classified as other retailers. Although these membership retailers offer a wide variety of nutritious and affordable food and accept SNAP transactions, the membership fees may act as a barrier to use.

As with the ERS studies, the Fairfax-Falls Church study considers households living within a half-mile of a food retailer to have “high” access, those living

<table>
<thead>
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<th>Fairfax-Falls Church Supermarkets</th>
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<tbody>
<tr>
<td>Bien Hoa</td>
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<tr>
<td>Bloom</td>
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<tr>
<td>Bottom Dollar</td>
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<tr>
<td>Eden Supermarket</td>
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<tr>
<td>El Grande</td>
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<tr>
<td>Fair Food Supermarket</td>
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<tr>
<td>Food Lion</td>
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<tr>
<td>Food Star Supermarket</td>
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<tr>
<td>Foodway</td>
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<tr>
<td>Ft Belvoir Commissary</td>
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<tr>
<td>Giant Food</td>
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<td>H Mart</td>
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<td>Harris Teeter</td>
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<td>Lotte Plaza</td>
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<td>Magruders</td>
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<td>Mom’s Organic Market</td>
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<tr>
<td>Safeway</td>
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<tr>
<td>Shoppers Food Warehouse</td>
</tr>
<tr>
<td>Trader Joe’s</td>
</tr>
<tr>
<td>Walmart</td>
</tr>
<tr>
<td>Wegmans</td>
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<tr>
<td>Whole Foods Market</td>
</tr>
</tbody>
</table>
more than a half-mile to one-mile of a food retailer are considered to have “medium” access, and those living further than a mile are considered to have “low” access. Unlike the ERS study the access of households in the Fairfax-Falls Church area is measured for three combinations of food retailers—supermarkets, supermarkets combined with other groceries, and all retailers that accept SNAP transactions.

The spatial network analysis conducted by the Fairfax-Falls Church study also allows more precise measurement than the ERS methodology. The Fairfax-Falls Church study utilizes actual addresses for both households receiving SNAP benefits and food retailers that accept these transactions. In addition, the study uses the Fairfax-Falls Church area’s actual road network to determine travel distances to food retailers because pedestrians typically must walk along roadways to get to stores. The results of the Fairfax-Falls Church network analysis provides information on households receiving SNAP benefits that have “high,” “medium” or “low” access to food retailers.

Unfortunately, motor vehicle information specific to these households receiving SNAP benefits is not available, but Census’s ACS information suggests that a substantial proportion of these households may not have motor vehicles. The areas of Fairfax-Falls Church that have “low” access to supermarkets are what researchers conventionally label as ‘food deserts’ for households without motor vehicles. Households without motor vehicles living in food deserts must find alternative ways to travel to food retailers—using public transportation, relying on others for transportation, using taxis, etc—or shop at smaller retailers with higher prices and less nutritional variety.

The Fairfax-Falls Church study of households receiving SNAP benefits found that 37.1 percent of all households and 40.7 percent of households with members age 65 and older live in “low” food access areas when only the largest food retailers are considered, supermarkets and supercenters. These are the stores that offer the greatest nutritional variety and the most affordable prices. Walking more than half a mile to shop for food may be difficult for many

<table>
<thead>
<tr>
<th>Access to Food Sources</th>
<th>All Households</th>
<th>Households with Members Age 65 and Older</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Access to Supermarkets</td>
<td>25.1%</td>
<td>37.8%</td>
</tr>
<tr>
<td>Access to Supermarkets &amp; Other Groceries</td>
<td>30.9%</td>
<td>38.6%</td>
</tr>
<tr>
<td>Access to All Food Retailers</td>
<td>49.4%</td>
<td>32.5%</td>
</tr>
</tbody>
</table>

Source: Fairfax County Department of Neighborhood and Community Services, Economic, Demographic and Statistical Research, SNAP Network Analysis, November 2011.
Distance Analysis of SNAP Households to Supermarkets and Supercenters, 2011

Distance Analysis of SNAP Households
- Half Mile from Supermarkets
- One Mile from Supermarkets

SNAP Households Living More than One Mile from Retailer
- Households Without Persons Age 65 and Older
- Households With Persons Age 65 and Older

Source: Fairfax County Department of Neighborhood and Community Services, Coordinated Services Planning, Food Requests, CY 2010; and U.S. Department of Agriculture, Food & Nation Service SNAP Retail Locator, November 2011
persons but especially for older persons and persons with disabilities. Three quarters of the Fairfax-Falls Church households containing members age 65 years or older live more than half a mile from a supermarket. Among these seniors receiving SNAP benefits, 54.6 percent are 75 years or older and 14.0 percent are 85 years and older.

A second spatial network analysis was conducted on the calendar year 2010 emergency food requests received by Coordinated Services Planning (CSP). Households requesting emergency food supplies are those experiencing low food security. The majority of requests for emergency food are fulfilled using community-based resources such as food pantries and distributions of food from motor vehicles that park at specific distribution locations. The addresses of the persons requesting emergency food and the addresses of emergency food distribution sites were used to conduct the analysis. Requests that came from addresses within a walkable half mile of an emergency food distribution site were considered to have “high” access to emergency food supplies; requests from addresses that were a half mile to one mile had “medium” access, and those more than a mile had “low” access. However, it should be noted that proximity to an emergency food distribution site does not insure that food is available from that site when the request was made.

The results of the spatial network analysis on the Fairfax-Falls Church area emergency food requests revealed that most of these requests (79.4 percent) came from areas with “low” access to emergency food distribution sites. Less than one out of every ten requests for emergency food came from a “high” access area that was within a half mile of an emergency food distribution site. The remaining 10.8 percent of emergency food requests came from “medium” access areas that were a half mile to one mile from an emergency food distribution site.

<table>
<thead>
<tr>
<th>Access to Emergency Food Distribution Sites</th>
<th>CSP Emergency Food Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households Requesting Emergency Food Through CSP</td>
<td>High</td>
</tr>
<tr>
<td>Access to Emergency Food Distribution Site</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

Source: Fairfax County Department of Neighborhood and Community Services, Economic, Demographic and Statistical Research, Emergency Food Requests Network Analysis, November 2011.
Distance Analysis of Emergency Food Request Locations to Food Distribution Sites, 2010

Emergency Food Requests Density
Number of Requests More Than a Mile from a Food Distribution Site
- 1 - 4
- 5 - 9
- 10 - 19
- 20 - 29
- 30 - 43
- Food Distribution Sites

Source: Fairfax County Department of Neighborhood and Community Services; Coordinated Services Planning, ASSIST Food Requests, CY 2010 and Human Services Resource Guide