



Carroll County Commuter Survey

Prepared by

Matthew Kachura
The Jacob France Institute
University of Baltimore
1420 N. Charles Street
Baltimore, Maryland 21201
(410) 837-4727
www.ubalt.edu/jfi

May 2002

Carroll County

Commuter Survey

Prepared by

Matthew Kachura

The Jacob France Institute

University of Baltimore

1420 N. Charles Street

Baltimore, Maryland 21201

(410) 837-4727

www.ubalt.edu/jfi

May 2002

Carroll County Commuter Survey

Executive Summary

In an effort to collect information on the commuting habits of Carroll County residents, the Carroll County Department of Economic Development retained the Jacob France Institute of the University of Baltimore to conduct a survey of Carroll County residents. The Jacob France Institute developed and implemented a phone survey, to collect information on the commuting habits, occupation, education level, and other related labor force characteristics of 807 Carroll County residents.

According to the Maryland Department of Labor, Licensing and Regulation (DLLR), the Carroll County labor force was comprised of 84,264 workers in 2001. The survey respondents were randomly selected from Carroll County residents and represent 0.01% of the Carroll County labor force. The survey results are a random, valid sample of the Carroll County workforce +/- 3.4%.

Location of Employment

- Of those persons that are employed outside of their home, **62% work outside of Carroll County**. The major destinations for out-of-county commuters are Baltimore County (20%) and Baltimore City (13%).
- Thirty-eight percent (38%) of persons employed outside of their home work in Carroll County, with the most frequent locations of employment being Westminster (50%), Hampstead (10%), Eldersburg (9%), and Sykesville (7%).

Commuting Habits

- Ninety-five percent (95%) of Carroll County residents surveyed who work outside of their home commute to their job by car.
- Forty-five percent (45%) of Carroll residents surveyed that work outside of the home responded that their 1-way commute to work is 1 to 19 miles, 38% responded that it is 20 to 39 miles, and 17% responded that it is 40 miles or more.
- Of those Carroll residents that work outside of the home, 28% indicated that their round-trip commute to work takes up to 30 minutes daily, 27% responded that it takes 30 minutes to an hour, and 45% indicated that it takes an hour or more daily.
- Of those persons that commute to work, 78% responded that they are satisfied with their commute to work and 21% indicated that they are not satisfied with their commute to work.

Telecommuting

- Nineteen percent (19%) of surveyed Carroll residents who work outside of their home have the option to telecommute. Of these persons, 61% telecommute to their jobs.
- Of the persons who do not have the option to telecommute, 35% would like to have the option to telecommute to their jobs.

Occupation and Industry of Employment

- Fifteen percent (15%) of Carroll County residents that were surveyed responded that they are self-employed and 5% indicated that they consider themselves to be employed in the biotechnology industry.
- The most frequent occupations held by Carroll residents who work in Carroll County included Sales and related occupations (12%), Education, training and library occupations (12%), Personal care and service occupations (8%), Healthcare practitioners and technical occupations (7%), and Management occupations (7%).
- The most frequent occupations held by Carroll residents who work outside of Carroll County included Management occupations (12%), Computer and mathematical occupations (11%), Business and financial operations occupations (11%), Sales and related occupations (9%), and Architecture and engineering occupations (8%).
- The most frequently cited industries in which surveyed Carroll County residents are employed in are services (28%), government (19%), construction (10%), manufacturing (10%), retail trade (10%), and finance, insurance and real estate (10%).

Educational Attainment

- Twenty-three percent (23%) of surveyed Carroll residents have a high school degree, 6% have a technical or vocational degree, 23% have taken some college classes, 8% have an Associates degree, 24% have a Bachelor's degree, 13% have a Masters degree, and 5% have a professional degree.
- According to the United States Bureau of the Census, 32% of Maryland residents over 25 years old have a Bachelor's degree or higher in 2000. The percentage of Carroll residents that were surveyed having a Bachelor's degree or higher is 41% indicating that Carroll residents are generally more educated than the average Maryland resident.
- Forty-six percent (46%) of Carroll residents that work outside of the County have a Bachelor's degree or higher as compared to 36% of Carroll residents that work in Carroll County.
- Thirty-seven percent (37%) of surveyed Carroll residents hold special licenses or certifications that are required by their occupation.

Employment Opportunities in Carroll County

- When Carroll County residents who worked outside of the County were asked if they would consider changing employers if a position having similar pay and responsibilities were available in the County, 62% responded that they would change employers.
- Forty-five percent (45%) responded that Carroll County has sufficient employment opportunities and 55% responded that the County does not have sufficient employment opportunities.

Gross Income of Carroll Residents

- Eleven percent (11%) of respondents earned less than \$20,000 annually, while over half (54%) earned from \$20,000 to \$59,999 and 34% earned over \$60,000 annually.
- Out-of-county commuters had higher incomes than that of residents that worked in Carroll County. For instance, nearly double the percentage of persons that make over \$80,000 annually work outside of Carroll County (22%) as compared to those persons who work in Carroll County (12%).

TABLE OF CONTENTS

| | |
|---|----|
| Introduction and Project Description..... | 1 |
| Location of Employment | 1 |
| Commuting Habits | 7 |
| Telecommuting | 5 |
| Occupation and Industry of Employment | 7 |
| Educational Attainment..... | 11 |
| Employment Opportunities in Carroll County..... | 13 |
| Gross Income of Carroll Residents | 14 |

LIST OF TABLES

| | | |
|----------|--|---|
| Table 1 | Do You Work At Home or Outside the Home | 1 |
| Table 2 | Of Persons Working Outside of the Home, do you Work in Carroll County..... | 2 |
| Table 3 | State and County That Carroll Residents Work..... | 2 |
| Table 4 | Where in Carroll County do you Work..... | 3 |
| Table 5 | How Do You Commute to Your Job | 3 |
| Table 6 | How Many Miles is Your 1-Way Commute to Work..... | 4 |
| Table 7 | What is the Length of Time it Takes for You Round-trip Commute..... | 5 |
| Table 8 | How Satisfied are you With Your Commute to Work..... | 5 |
| Table 9 | In Your Job, Do You Have The Option to Telecommute | 6 |
| Table 10 | If You Have the Option to Telecommute, Do You Currently Telecommute | 6 |
| Table 11 | How Many Hours Per Month Do You Telecommute..... | 7 |
| Table 12 | If You Do Not Telecommute, Would you Like the Option to Telecommute | 7 |
| Table 13 | Are You Self Employed..... | 8 |

| | | |
|----------|---|----|
| Table 14 | Is Your Occupation Considered to be in the Biotechnology Industry..... | 8 |
| Table 15 | Occupational Classifications of Surveyed Carroll County Residents..... | 10 |
| Table 16 | What Industry are You Employed By..... | 11 |
| Table 17 | What is the Highest Level of Education that You Have Completed | 12 |
| Table 18 | Do You Hold any Special Licenses or Certifications Required by Your Occupation..... | 12 |
| Table 19 | Types of Licenses or Certifications Required by Survey Respondents Occupation..... | 13 |
| Table 20 | If a Position Having Similar Pay and Responsibilities Were Available in Carroll County, Would You be Willing to Change Employers | 14 |
| Table 21 | Do You Think that Carroll County has Sufficient Employment Opportunities for Persons in Your Profession | 14 |
| Table 22 | Which of the Following Best Describes Your Gross Annual Income | 15 |

Carroll County Commuter Survey

Introduction and Project Description

In an effort to collect information on the commuting habits of Carroll County residents, the Carroll County Department of Economic Development retained the Jacob France Institute of the University of Baltimore to conduct a survey of 800 Carroll County residents. The Jacob France Institute developed and implemented a phone survey to collect information on the commuting habits, occupation, education level, and other related labor force characteristics of 807 Carroll County residents.

According to the Maryland Department of Labor, Licensing and Regulation (DLLR), the Carroll County labor force was comprised of 84,264 workers in 2001. The survey respondents were randomly selected from Carroll County residents the survey results represent a random, valid sample of the Carroll County workforce +/- 3.4%.

Location of Employment

Table 1 shows that of the 807 persons surveyed who reside in Carroll County, 10% work in their home and 90% work in locations outside of their home.

Table 1
Do You Work At Home or Outside of the Home

| | Number | Percent |
|-----------------------|--------|---------|
| Total Responses | 807 | |
| No Response | 0 | 0.0% |
| Total Valid Responses | 807 | |
| At Home | 78 | 9.7% |
| Outside of the Home | 729 | 90.3% |

Of those persons that work outside of their home, 38% work in Carroll County and **62% work outside of Carroll County** (see Table 2). Ninety-seven percent (97%) of all persons surveyed in Carroll County work within Maryland. Forty-four percent (44%) of survey respondents work in Carroll County, 19% work in Baltimore County, 12% work in Baltimore City, 7% work in Anne Arundel County, and 6% work in Howard County. One percent (1%) of persons surveyed each work in Pennsylvania, Virginia, and Washington, D.C. (see Table 3).

Table 2
Of Persons Working Outside of the Home,
Do You Work in Carroll County

| | Number | Percent |
|-----------------------|--------|---------|
| Total Responses | 729 | |
| No Response | 0 | 0.0% |
| Total Valid Responses | 729 | |
| Yes | 277 | 38.0% |
| No | 452 | 62.0% |

Table 3
State and County That Carroll Residents Work

| | All Respondents | | Respondents Working Outside Home | |
|-------------------------|-----------------|--------------|----------------------------------|--------------|
| | Number | Percent | Number | Percent |
| Total Responses | 807 | | 729 | |
| No Response | 0 | 0.0% | 0 | 0 |
| Total Valid Responses | 807 | | 729 | |
| Maryland | 784 | 97.1% | 706 | 96.8% |
| Anne Arundel | 54 | 6.7% | 54 | 7.4% |
| Baltimore City | 98 | 12.1% | 98 | 13.4% |
| Baltimore County | 149 | 18.5% | 149 | 20.4% |
| Carroll | 355 | 44.0% | 277 | 38.0% |
| Frederick | 26 | 3.2% | 26 | 3.6% |
| Harford | 3 | 0.4% | 3 | 0.4% |
| Howard | 50 | 6.2% | 50 | 6.9% |
| Montgomery | 33 | 4.1% | 33 | 4.5% |
| Prince George's | 16 | 2.0% | 16 | 2.2% |
| Pennsylvania | 8 | 1.0% | 8 | 1.1% |
| Virginia | 7 | 0.9% | 7 | 1.0% |
| Washington, D.C. | 8 | 1.0% | 8 | 1.1% |

With 38% of the persons surveyed that work outside of their home employed within Carroll County, it is important to note where in the County that they work (see Table 4). Half (50%) of the persons who work in Carroll County are employed in Westminster, 10% work in Hampstead, 9% work in Eldersburg, 7% work in Syskesville, 5% work in Finksburg, and 3% work in Taneytown. Other locations cited by respondents in Carroll County were Union Bridge, Mt. Airy, and Manchester.

Table 4
Where in Carroll County do you Work

| | Number | Percent |
|-----------------------|--------|---------|
| Total Responses | 355 | |
| No Response | 78 | 22.0% |
| Total Valid Responses | 277 | |
| Westminster | 137 | 49.5% |
| Hampstead | 27 | 9.7% |
| Eldersburg | 26 | 9.4% |
| Sykesville | 20 | 7.2% |
| Finksburg | 13 | 4.7% |
| Taneytown | 8 | 2.9% |
| Other | 46 | 16.6% |

Commuting Habits

Table 5 shows the primary means of commuting to work for persons who work outside of their home is by car (95%), with 2% using a combination of travel means, and less than 1% each using the bus and the train.

Table 5
How Do You Commute to Your Job

| | Number | Percent |
|-------------------------|--------|---------|
| Total Responses | 729 | |
| No Response | 0 | 0.0% |
| Total Valid Responses | 729 | |
| Car | 695 | 95.3% |
| Bus | 4 | 0.5% |
| Train | 2 | 0.3% |
| Combination of Methods | 15 | 2.1% |
| Other Methods of Travel | 13 | 1.8% |

With 90% of persons surveyed working outside of their home, survey respondents were asked the distance of their one-way commute to their job (Table 6). Twenty-four percent (24%) of respondents indicated that their one-way commute is from 1 to 9 miles, 21% indicated that their commute is from 10 to 19 miles, 21% responded that their commute is from 20 to 29 miles, 17% responded that their commute is from 30 to 39

miles, 9% responded that their commute is from 40 to 49 miles, and 8% responded that their one-way commute to their work is over 50 miles.

Table 6
How Many Miles is Your 1-Way Commute to Work

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 729 | |
| No Response/Don't Know | 7 | 1.0% |
| Total Valid Responses | 722 | |
| 1 to 9 Miles | 173 | 24.0% |
| 10 to 19 Miles | 153 | 21.2% |
| 20 to 29 Miles | 153 | 21.2% |
| 30 to 39 Miles | 124 | 17.2% |
| 40 to 49 Miles | 62 | 8.6% |
| Over 50 Miles | 57 | 7.9% |

Knowing the distance of the commute made by Carroll County residents each day is only one part of the required information on commuting patterns. Survey respondents were also asked how long it takes to commute to work each day (see Table 7). Thirteen percent (13%) of respondents indicated that their commute takes less than 15 minutes, 15% responded that their commute takes from 15 to 30 minutes, 27% responded that their commute takes from 30 minutes to 1 hour, 35% responded that their commute takes from 1 to 2 hours, and 10% responded that their commute takes over 2 hours each day.

Table 7
What is the Length of Time it Takes for Your Roundtrip Commute

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 729 | |
| No Response/Don't Know | 4 | 0.5% |
| Total Valid Responses | 725 | |
| Less than 15 Minutes | 95 | 13.1% |
| 15 to 30 Minutes | 108 | 14.9% |
| 30 Minutes to 1 Hour | 196 | 27.0% |
| 1 to 2 Hours | 255 | 35.2% |
| Over 2 Hours | 71 | 9.8% |

Carroll County residents that worked outside of the home were asked to indicate their overall level of satisfaction with their commute to work (see Table 8). Seventy-eight percent (78%) of persons surveyed indicated that they are satisfied with their

commute to work while 21% are not satisfied with their commute to work. Forty-three percent (43%) of the persons who worked outside of their home were very satisfied with their commute to work.

Table 8
How Satisfied are You
With Your Commute to Work

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 729 | |
| No Response/Don't Know | 1 | 0.1% |
| Total Valid Responses | 728 | |
| Very Satisfied | 315 | 43.3% |
| Somewhat Satisfied | 252 | 34.6% |
| Somewhat Dissatisfied | 97 | 13.3% |
| Very Dissatisfied | 64 | 8.8% |

Telecommuting

Table 9 shows that 19% of the Carroll County residents that were surveyed who work outside of their home have the option to telecommute. Of those persons who have the option to telecommute, 61% of them do telecommute to their jobs (see Table 10). Monthly, 26% of persons telecommute less than 10 hours, 23% telecommute 10 to 19 hours, 14% telecommute 20 to 29 hours, 12% telecommute 30 to 39 hours, and 26% telecommute 40 or more hours per month (see Table 11).

Table 9
In Your Job,
Do You Have the Option to Telecommute

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 729 | |
| No Response/Don't Know | 1 | 0.1% |
| Total Valid Responses | 728 | |
| Yes | 137 | 18.8% |
| No | 591 | 81.2% |

Table 10
If You Have the Option to Telecommute,
Do You Currently Telecommute

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 137 | |
| No Response/Don't Know | 0 | 0.0% |
| Total Valid Responses | 137 | |
| Yes | 84 | 61.3% |
| No | 53 | 38.7% |

Table 11
How Many Hours Per Month Do You Telecommute

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 137 | |
| No Response/Don't Know | 59 | 43.1% |
| Total Valid Responses | 78 | |
| Less than 10 Hours | 20 | 25.6% |
| 10 to 19 Hours | 18 | 23.1% |
| 20 to 29 Hours | 11 | 14.1% |
| 30 to 39 Hours | 9 | 11.5% |
| 40 or More Hours | 20 | 25.6% |

Of those persons who do not have the option to telecommute, 35% would like to have the option to telecommute and 65% would not like to have the option to telecommute (see Table 12). The reasons that residents provided as to why they do not want to telecommute ranged from having to meet with clients daily, to that their job required them to travel, to expressing that they like having to go to an office location, to that they did not have a computer at their home.

Table 12
If You Do Not Telecommute,
Would You Like the Option to Telecommute

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 591 | |
| No Response/Don't Know | 14 | 2.4% |
| Total Valid Responses | 577 | |
| Yes | 202 | 35.0% |
| No | 375 | 65.0% |

Occupation and Industry of Employment

A core goal of this survey was to collect information on the occupation and industry of employment of County residents. Carroll County is a major commuter county sending workers to both the Washington Suburbs and Baltimore area. According to the 1990 United States Census, (data from the 2000 Census has not yet been released) 70% of Carroll County residents that are 16 years or older commute to their jobs. Identifying the occupation and industry of employment for County residents provides important information that the County could use to identify businesses interested in accessing the highly educated pool of labor that resides in the County. Carroll County residents that responded indicated that they worked in positions that required a high level of education or certification and possessed a strong base of occupational skills.

Table 13 shows that 15% of Carroll County residents that were surveyed responded that they are self-employed. In Table 14, 5% of all respondents stated that they work in occupations considered to be in the biotechnology industry. Compared to the State of Maryland, a greater percentage of persons that work in the biotechnology field reside in Carroll County. Across the State, the percentage of persons that are employed in the biotechnology industry is 0.3% of total private employment in 2000¹.

¹ It is important to note that the 0.3% biotechnology industry employment figure is for employment by the businesses classified by the Maryland Department of Labor, Licensing and Regulation's (DLLR) *Maryland High Technology Report*, while these figures represent self reported industry of employment. The DLLR biotechnology employment figure does not include the High Technology Research sector in which many biotechnology companies are classified. Furthermore, the self reported "biotechnology industry" of employment could include biotechnology-related occupations employed in the health care or other sectors of the economy.

Table 13
Are you Self-Employed

| | Number | Percent |
|-----------------------|--------|---------|
| Total Responses | 807 | |
| No Response/Refused | 1 | 0.1% |
| Total Valid Responses | 806 | |
| Yes | 117 | 14.5% |
| No | 689 | 85.5% |

Table 14
Is Your Occupation Considered to be in the
Biotechnology Industry

| | Number | Percent |
|-----------------------|--------|---------|
| Total Responses | 807 | |
| No Response/Refused | 4 | 0.5% |
| Total Valid Responses | 803 | |
| Yes | 40 | 5.0% |
| No | 763 | 95.0% |

Carroll County residents that were surveyed were additionally asked to provide their occupation and a description of their occupation. From this information, the occupations were coded into the major occupational codes established by the United States Bureau of Labor Statistics, Occupational Employment Statistics (http://www.bls.gov/oes/2000/oes_md.htm) (see Table 15). Of the valid and coded responses, the most frequent occupations held by Carroll residents included: Sales and related occupations (11%), Management occupations (10%), Business and financial operations occupations (9%), Education, training and library occupations (8%), Computer and mathematical occupations (8%), Healthcare practitioners and technical occupations (7%), Office and administrative support occupations (6%), and Architecture and engineering occupations (5%). These positions indicate that the County has a highly skilled and educated workforce that could meet the needs of new or expanding businesses.

When looking at those residents surveyed that are employed within Carroll County and those residents that are employed outside of the County, some variations in occupation are seen. The most frequent occupations held by Carroll residents who work in Carroll County include: Sales and related occupations (12%), Education, training and library occupations (12%), Personal care and service occupations (8%), Healthcare practitioners and technical occupations (7%), and Management occupations (7%). The most frequent occupations held by Carroll residents who work outside of Carroll County

include: Management occupations (12%), Computer and mathematical occupations (11%), Business and financial operations occupations (11%), Sales and related occupations (9%), and Architecture and engineering occupations (8%). While there is similarity in the occupational employment between those persons that work in the County and those persons that work outside of the County, more persons working outside of Carroll County are employed in technical and supervisory occupations.

Table 15
Occupational Classifications of Surveyed Carroll County Residents

| | All Persons | | Persons who Work in Carroll County | | Persons who Work Outside of Carroll | |
|--|-------------|---------|---------------------------------------|---------|--|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| Total Responses | 807 | | 355 | | 452 | |
| No Response/Refused | 6 | 0.7% | 3 | 0.8% | 3 | 0.7% |
| Unclassifiable | 87 | 10.8% | 36 | 10.1% | 51 | 11.3% |
| Total Valid Responses | 714 | | 316 | | 398 | |
| Sales and Related Occupations | 75 | 10.5% | 39 | 12.3% | 36 | 9.0% |
| Management | 69 | 9.7% | 21 | 6.6% | 48 | 12.1% |
| Business and Financial Operations | 61 | 8.5% | 19 | 6.0% | 42 | 10.6% |
| Education, Training and Library | 58 | 8.1% | 38 | 12.0% | 20 | 5.0% |
| Computer and Mathematical | 57 | 8.0% | 14 | 4.4% | 43 | 10.8% |
| Healthcare Practitioners and Technical | 48 | 6.7% | 22 | 7.0% | 26 | 6.5% |
| Office and Administrative Support | 43 | 6.0% | 20 | 6.3% | 23 | 5.8% |
| Architecture and Engineering | 38 | 5.3% | 7 | 2.2% | 31 | 7.8% |
| Production Occupations | 35 | 4.9% | 13 | 4.1% | 22 | 5.5% |
| Personal Care and Service | 33 | 4.6% | 24 | 7.6% | 9 | 2.3% |
| Installation, Maintenance and Repair | 30 | 4.2% | 11 | 3.5% | 19 | 4.8% |
| Construction and Extraction | 29 | 4.1% | 13 | 4.1% | 16 | 4.0% |
| Transportation and Material Moving | 29 | 4.1% | 15 | 4.7% | 14 | 3.5% |
| Healthcare Support | 19 | 2.7% | 10 | 3.2% | 9 | 2.3% |
| Food Preparation and Serving | 19 | 2.7% | 13 | 4.1% | 6 | 1.5% |
| Legal | 17 | 2.4% | 6 | 1.9% | 11 | 2.8% |
| Protective Service | 16 | 2.2% | 4 | 1.3% | 12 | 3.0% |
| Building and Grounds Cleaning and Maintenance | 14 | 2.0% | 10 | 3.2% | 4 | 1.0% |
| Community and Social Services | 10 | 1.4% | 8 | 2.5% | 2 | 0.5% |
| Arts, Design, Entertainment, Sports, and Media | 8 | 1.1% | 6 | 1.9% | 2 | 0.5% |
| Farming, Fishing and Forestry | 5 | 0.7% | 3 | 0.9% | 2 | 0.5% |
| Life, Physical and Social Science | 1 | 0.1% | 0 | 0.0% | 1 | 0.3% |

It is also important to identify the industry of employment for Carroll County residents (see Table 16). Twenty-eight percent (28%) of survey respondents work in services, 19% work for the government, 10% work each in construction, manufacturing, retail trade, and finance, insurance, and real estate, and 9% work in transportation, communications, and public utilities. Six percent (6%) work in wholesale trade and no persons interviewed work in the mining industry.

Table 16
What Industry are You Employed By

| | Number | Percent |
|---|--------|---------|
| Total Responses | 807 | |
| No Response/Don't Know | 176 | 21.8% |
| Total Valid Responses | 631 | |
| Mining | 0 | 0.0% |
| Construction | 62 | 9.8% |
| Manufacturing | 61 | 9.7% |
| Wholesale Trade | 37 | 5.9% |
| Retail Trade | 61 | 9.7% |
| Transportation, Communications and Public Utilities | 57 | 9.0% |
| Finance, Insurance and Real Estate | 62 | 9.8% |
| Services | 174 | 27.6% |
| Government | 117 | 18.5% |

Educational Attainment

Survey respondents were also asked to provide the highest level of education that they have completed (see Table 17). Twenty-three percent (23%) of respondents have a high school degree or a GED, 6% have a technical or vocational degree, 23% have some college credits, 8% have an Associates degree, 24% have a Bachelor's degree, 13% have a Masters degree, and 5 % have a professional degree. According to the United States Bureau of the Census, 32% of Maryland residents over 25 years old have a Bachelor's degree or higher in 2000. The percentage of Carroll residents that were surveyed having a Bachelor's degree or higher is 41% indicating that Carroll residents are generally more educated than the average Maryland resident.

When the level of educational attainment is analyzed by where the Carroll County residents are employed, it can be seen that persons having a higher level of education tended to work outside of Carroll County. While 41% of Carroll residents have at least a Bachelor's degree, 46% of Carroll residents that work outside of Carroll County have a Bachelor's degree or higher as compared to 36% of Carroll residents that work in Carroll County.

Table 17
What is the Highest Level of Education that You Have Completed

| | All Persons | | Persons who Work in Carroll County | | Persons who Work Outside of Carroll | |
|-------------------------|-------------|---------|---------------------------------------|---------|--|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| Total Responses | 807 | | 355 | | 452 | |
| No Response/Don't Know | 2 | 0.2% | 2 | 0.6% | 0 | 0.0% |
| Total Valid Responses | 805 | | 353 | | 452 | |
| High School/GED | 181 | 22.5% | 102 | 28.9% | 79 | 17.5% |
| Technical or Vocational | 45 | 5.6% | 16 | 4.5% | 29 | 6.4% |
| Some College | 184 | 22.9% | 87 | 24.6% | 97 | 21.5% |
| Associate Degree | 62 | 7.7% | 21 | 5.9% | 41 | 9.1% |
| Bachelor's Degree | 194 | 24.1% | 69 | 19.5% | 125 | 27.7% |
| Masters Degree | 101 | 12.5% | 39 | 11.0% | 62 | 13.7% |
| Professional Degree | 38 | 4.7% | 19 | 5.4% | 19 | 4.2% |

Besides their educational degree, persons in a variety of industries and occupations hold specialized licenses or certifications for their occupation. Table 18 shows that 37% of respondents hold specialized licenses or certificates and 63% do not. Of those persons who do have specialized licenses or certifications, 19% are medical related, 11% are teaching related, 8% are business related, 6% are specialized drivers licenses (such as a commercial drivers license), 5% are computer related, and 3% are legal related (see Table 19).

Table 18
**Do You Hold any Special Licenses or Certifications
Required by Your Occupation**

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 807 | |
| No Response/Don't Know | 0 | 0.0% |
| Total Valid Responses | 807 | |
| Yes | 298 | 36.9% |
| No | 509 | 63.1% |

Table 19
Types of Licenses or Certifications
Required by Survey Respondents Occupation

| | Number | Percent |
|----------------------------|--------|---------|
| Total Responses | 298 | |
| No Response/Don't Know | 3 | 1.0% |
| Total Valid Responses | 295 | |
| Medical | 55 | 18.6% |
| Teaching | 33 | 11.2% |
| Business | 23 | 7.8% |
| Commercial Drivers License | 19 | 6.4% |
| Computer | 14 | 4.7% |
| Legal | 10 | 3.4% |
| Social Worker | 2 | 0.7% |
| Real Estate | 2 | 0.7% |
| Other | 137 | 46.4% |

Employment Opportunities in Carroll County

When Carroll County residents who worked outside of the County were asked if they would consider changing employers if a position having similar pay and responsibilities were available in the County, 62% responded that they would change employers (See Table 20). Twenty-six percent (26%) of residents responded that they would not change employers and 12% were unsure. Of those residents that would not change employers, the primary reasons that they provided as to why they would not change employers ranged from they enjoy where they are employed, to benefit issues, to being close to their retirement at their current employer.

Table 20
If a Position Having Similar Pay and Responsibilities
Were Available in Carroll County, Would You be Willing
to Change Employers

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 452 | |
| No Response/Don't Know | 3 | 0.7% |
| Total Valid Responses | 449 | |
| Yes | 276 | 61.5% |
| No | 118 | 26.3% |
| Maybe, It Depends | 55 | 12.2% |

Carroll County residents that were surveyed were asked if they feel that Carroll County has sufficient employment opportunities for persons in their profession (see Table 21). Forty-five percent (45%) responded that Carroll County does have sufficient employment opportunities and 55% responded that the County does not have sufficient employment opportunities.

Table 21
Do You Think that Carroll County has Sufficient Employment
Opportunities for Persons in Your Profession

| | Number | Percent |
|------------------------|--------|---------|
| Total Responses | 807 | |
| No Response/Don't Know | 65 | 8.1% |
| Total Valid Responses | 742 | |
| Yes | 333 | 44.9% |
| No | 409 | 55.1% |

Gross Income of Carroll Residents

Table 22 shows the average gross annual income for Carroll County residents that were surveyed. Eleven percent (11%) of respondents earned less than \$20,000 annually, while over half (54%) earned from \$20,000 to \$59,999 and 34% earned over \$60,000 annually.

When comparing those persons that work in Carroll County to those persons that work outside of Carroll, those persons that earning higher levels of income tended to be employed outside of the County. Fifty-nine percent (59%) of persons that work in Carroll County earn less than \$40,000 compared to 23% of persons that are employed outside of the County. Forty-one percent (41%) of respondents that works in Carroll

County earn over \$40,000 and 77% of persons employed outside of the County earn over \$40,000. Nearly double the percentage of persons that make over \$80,000 annually work outside of Carroll County (22%) as compared to those persons who work in Carroll County (12%).

Table 22
Which of the Following Best Describes Your Gross Annual Income

| | All Persons | | Persons who Work in Carroll County | | Persons who Work Outside of Carroll | |
|---------------------------|-------------|---------|---------------------------------------|---------|--|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| Total Responses | 807 | | 355 | | 452 | |
| No Response/Don't Know | 83 | 10.3% | 41 | 11.5% | 42 | 9.3% |
| Total Valid Responses | 724 | | 314 | | 410 | |
| Less than \$20,000 | 79 | 10.9% | 69 | 22.0% | 10 | 2.4% |
| From \$20,000 to \$39,999 | 199 | 27.5% | 115 | 36.6% | 84 | 20.5% |
| From \$40,000 to \$59,999 | 193 | 26.7% | 61 | 19.4% | 132 | 32.2% |
| From \$60,000 to \$79,999 | 125 | 17.3% | 32 | 10.2% | 93 | 22.7% |
| Over \$80,000 | 128 | 17.7% | 37 | 11.8% | 91 | 22.2% |

Prepared by:



Merrick School of Business
The University of Baltimore
1420 N. Charles Street
Baltimore, Maryland 21201
www.ubalt.edu/jfi
(410) 837-4727