



COLORADO

Department of Local Affairs

Division of Local Government

Employment Impact from Senior Spending in Colorado in 2014

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Executive Summary

The State Demography Office (SDO) estimated more than 240,000 jobs in Colorado were supported by the spending of residents 65 years of age and older in 2014. This amounts to 8 percent of the total estimated jobs in the state. This estimate was determined by looking at the spending patterns of 65+ households throughout the United States as detailed in the 2014 Consumer Expenditure Survey (CEX). Shares of total household expenditures in detailed categories like transportation, housing, health care and food were used to estimate percentage of employment in detailed industries based upon the SDO Total Estimated Jobs series. Health care jobs were estimated by applying the share of services provided to the elderly to total industry employment. Given that seniors are the largest consumers of health care services and 65+ households spend a greater share of their income on health care it should not be a surprise that this industry accounted for about 79,000 or 1/3 of all 65+ supported jobs. Retail trade had nearly 35,000 jobs and other services tallied 28,000 positions supported by Colorado's 65+ population. Other industries with large numbers of senior supported employment included: accommodation and food services, construction, finance and insurance, and real estate, rental and leasing.

Identifying employment by industry was an intermediary step done in order to identify the occupations supported by the spending of the 65+ population. Industry employment estimates were applied to industry staffing patterns used by the Bureau of Labor Statistics (BLS) to create estimates of occupations supported by Colorado's seniors. Detailed occupations were summed into the 22 major Occupation Groups, with the most jobs occurring in office and administrative support (34,300), sales and related (30,600), and food preparation and serving related (24,600). Highly skilled workers in the medical fields comprised most of the 23,800 healthcare practitioners and technical occupations, while lesser skilled personal care workers were estimated at 21,500 and healthcare support at 16,400.

Specific occupations with the most senior supported employment included: Personal care aides (11,500), followed by retail salespersons (10,500), and registered nurses (9,200). There were also 6,700 nursing assistants, nearly 2,000 people employed as licensed practical and vocational nurses, and 1,900 medical assistants. Long-term occupation projections from the BLS showed that many of the occupations with the largest number of senior supported jobs were among those that were expected to have the fastest growth rates and/or add the most jobs over the next decade. Almost two-thirds of the top 25 senior supported occupations do not require additional education beyond high school; those positions should be relatively easy to fill as they have few barriers to entry in terms of education and experience. Other occupations such as registered nurses are currently facing shortages and many health care practitioners that require significant education and training should be subject to additional focus by workforce developers to help insure an adequate pipeline of qualified workers are available to meet the increased demand for workers created by Colorado's growing senior population. The total number of senior supported jobs in Colorado is projected to grow even faster than the state's senior population as the Baby Boomers age over the next decade.

Introduction

Colorado experienced an influx of Baby Boomers (born between 1946 and 1964) who migrated here during the 1970s and 80s, established careers and families, aged in place and are now entering their golden years. The aging of the Baby Boomers will cause our 65+ population to grow by nearly 40,000 per year over the next decade and the rate of growth in the senior population will be more than 3 times faster than that of the total population. In 2014, the State Demography Office (SDO) estimated there were nearly 680,000 Coloradans over the age of 65 and spending by these senior citizens supported over 240,000 jobs. The rapid growth of this population is expected to increase the number of senior supported jobs to more than 400,000 in 2025. Throughout the paper, 65 and older, 65 plus(+), senior(s), and older adults are used interchangeably to refer to Colorado residents over the age of 65.

Seniors typically have 3 principal sources of money they spend. The 2 most common, transfer payments and savings or asset income are explored in this paragraph, although roughly 20 percent of seniors are still employed and receiving earnings from working. Retirees in our state receive fixed incomes provided through private pensions and/or social security and nearly all of them enroll in Medicare upon turning 65 to help cover medical costs. The dollars that flow into Colorado to provide income replacement in retirement and to cover the health care needs of our senior citizens have a substantial economic impact. How big is this impact? According to the Bureau of Economic Analysis (BEA), nearly \$11.5 billion dollars in Social Security benefits were paid to Colorado residents in 2014 and another \$7.4 billion in Medicare benefits were accrued. Additionally, Veterans' Benefits and Military Medical Insurance benefits totaled \$2.1 billion dollars, bringing total government paid benefits to \$21 billion¹. To put this figure into perspective, the BEA's 2014 Gross State Product data shows only 3 industries that had an economic impact greater than \$20 billion – real estate, government, and professional and business services. Retail's economic impact at \$16.4 billion was nearly \$5 billion smaller. Many seniors also have 401ks or other Defined Contribution plans and savings to supplement their retirement income, adding to the total expenditures of seniors in our state. However, Economic Policy Institute analysis showed in 2014 401ks and IRAs accounted for only 3% of income of 65+ households. Social Security accounted for 35%, earnings accounted for 29%, public and private pensions were a combined 17%, asset income (savings, dividends and rent) was 12%, and income from all other sources was 5%.²

The spending by seniors or on their behalf for health care is an important economic driver in Colorado. The jobs that are supported by this spending are considered to be Direct Basic since the vast majority of this income comes from sources outside the state, mostly from Federal Government entitlement programs and also from dividends, interest and rent, and savings. The State Demography Office computes an estimate of Retiree Generated Jobs as part of the Economic Base Analysis. In 2014, Retiree Generated Base jobs were estimated at 189,100 – this averages to approximately .28 jobs per person over the age of 65.

However, the estimate of Retiree Generated Base jobs only includes employment that is supported by the spending of transfer payments such as Social Security, other pensions, Medicare and Medicaid,

¹ Bureau of Economic Analysis Table CA35 2014 Personal Current Transfer Receipts: https://www.bea.gov/iTable/index_regional.cfm

² <http://www.epi.org/publication/retirement-in-america/#chart1> Figures may not add to 100% due to rounding.

unearned income like dividends, interest and rent, and savings from money that was earned at an earlier point in time. While the majority of residents over the age of 65 are retired, roughly 1 in 5 seniors are still working and they support additional jobs by spending their earnings. In 2014, the Bureau of Labor Statistics estimated that 122,000 residents 65 years and older were working in Colorado accounting for 4.6 percent of total resident employment in Colorado³. The jobs that are supported by the earned income of seniors are not included in the Retiree Generated Base jobs, but rather are part of the 1.16 million estimated Worker Local Resident Service jobs. Unlike Basic or Base jobs that are supported by outside dollars, Local Resident Service are jobs that created when workers spend their earnings locally at places like grocery and department stores, restaurants, and personal services like haircuts or housekeeping.

Working seniors supported another 53,100 jobs (4.6 percent of the Local Resident Services total) through the spending of their earnings. When these senior supported Local Resident Services jobs are combined with the 189,100 Retiree Generated Base jobs, this brings estimate of the total senior supported employment in Colorado to 242,200 in 2014.

The U.S. Bureau of Labor Statistics 2014 Consumer Expenditure Survey (CEX) spending patterns for households 65 years and older were used to determine how seniors spent their income and savings. Average income before taxes for households 65 and older in 2014 was \$45,100 in the United States; total expenditures for these households were \$43,635⁴. The average income of households 65 and over in Colorado in 2014 was nearly identical at \$45,093⁵. The Consumer Expenditure Survey details the average amount of money a household spends on categories such as food, housing, apparel, transportation, entertainment, education, health care, personal care and other miscellaneous categories. Dividing the spending in each category into the total household expenditures provided percentages of income spent in each category. Using these shares, it was possible to estimate the number of jobs this direct spending supported in corresponding industries. For example, spending on “food at home” captures the expenditures of food at grocery stores and the spending at these stores supported jobs in the food and beverage stores industry. While spending on “food away from home” supported employment in food services and drinking places. Employment in the health care and social assistance industry was allocated based upon the share of services provided to and/or costs incurred by seniors since most of this spending comes from Medicare and Medicaid. For instance, nursing and residential care facility employment was equal to the share of residents age 65 and over (81 percent) in these facilities in 2010. The share of hospital employment supported by seniors was determined by the share of costs of hospital stays incurred by the 65+ population. Lastly, the share of households 65 and over were used to determine the amount of senior supported employment in the postal service and religious, grant-making, civic and other similar organizations as it is comprised mostly of non-profit firms. Spending shares by major category and examples of expenditures are shown in Appendix A.

Employment by Industry

The shares of direct spending by households 65 and over were applied to all Local Resident Service jobs that are directly supported by this spending yielded an estimated 240,500 jobs spread across 16 of the 20 major industry sectors as defined by the North American Industrial Classification System (NAICS).

³ <https://www.bls.gov/opub/gp/gpsec2.htm> Geographic Profile of Employment and Unemployment, 2014

⁴ <https://www.bls.gov/opub/reports/consumer-expenditures/2014/home.htm>

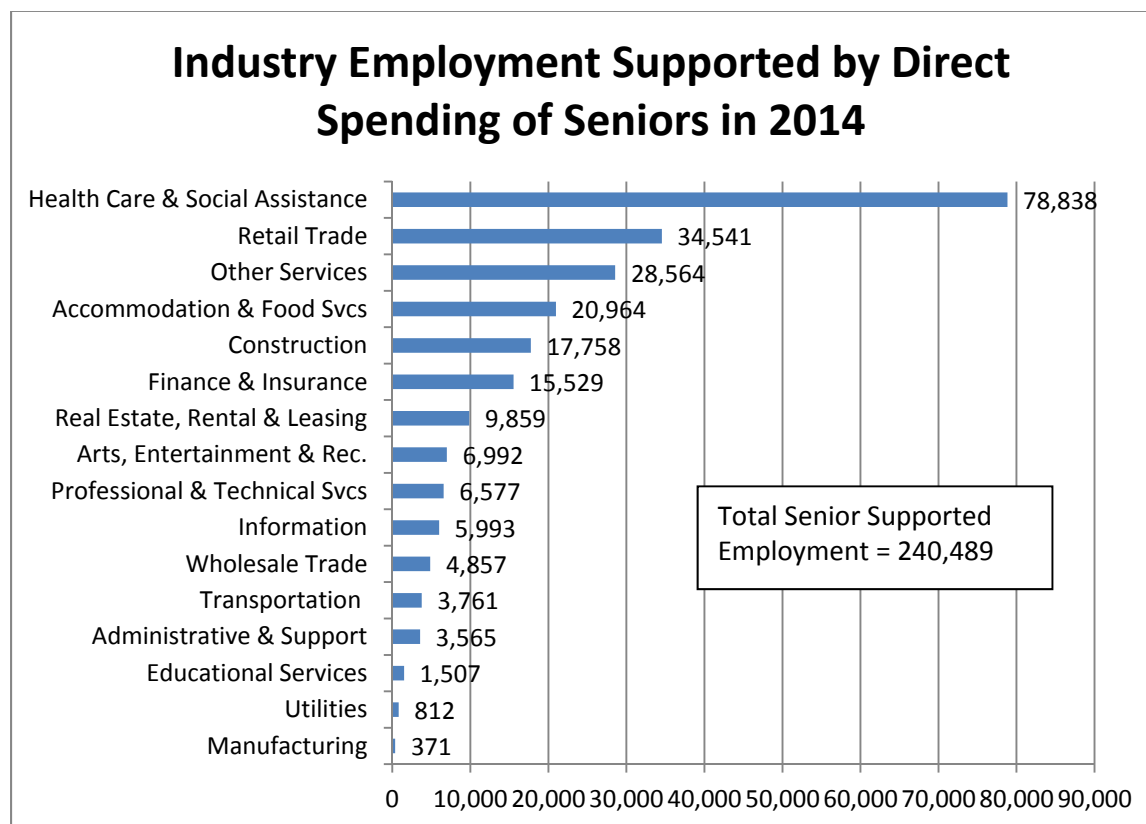
⁵ American Community Survey (ACS) 2014 1-year estimates - Table S1903

This estimate was 0.7 percent less than the combined number of senior supported jobs estimated from the base industry analysis. This difference is due to both estimate error and “leakage” of spending. The senior supported employment estimate assumes that all spending by Colorado residents 65+ occurs in within the state and does not account for “leakage” of spending to other states. Many seniors could spend a portion of their income at second homes in warmer climates and travelling outside the state or country to visit friends and relatives or to seek medical care. But at the same time Colorado also receives leakage *from* other states as their seniors spend time and money at ski homes and vacationing here. It is possible that the leakage to and from Colorado is almost a wash.

Health care and social assistance was the industry with the largest number of senior supported jobs, with nearly 79,000 jobs or approximately 1 out of every 3 jobs generated by Colorado’s seniors. Within the industry subsectors, seniors supported 27,500 ambulatory care health care workers, 23,900 employees at nursing and residential care facilities, 14,400 jobs at hospitals, and 13,100 in social assistance. The fact that these 4 subsectors rank 1st, 2nd, 5th and 6th, respectively, in terms of number of senior supported jobs is not surprising since consumers over the age of 65 are the largest consumers of health care, dedicating more than 13% of their income to this expense (seniors 75 and older spent nearly 16% of their household budget on health care). However, their spending only covers a portion of the total health care expenditures as the majority of the cost of health care is not paid directly by the seniors, but rather by nearly \$8 billion in Medicare and Military Medical Insurance Benefits. A detailed list of the top 25 subsectors with employment attributed to senior spending can be found in Appendix B.

The largest concentration of jobs outside of healthcare is in retail trade with 34,500 or 15% of all employment supported by the spending of seniors. There were 28,600 jobs attributable to senior spending in other services - an industry that includes repair & maintenance, personal and laundry services (hair, nail and skin care services, and death care services i.e. funeral homes and crematories) as well as private households employing personal and home care aides and nursing assistants. Older adults spend a slightly larger share of their incomes on travel and food combined than on health care, this leisure spending supported 21,000 positions in accommodation and food services. Demand for low maintenance housing in 55+ communities and continuing care / assisted living facilities combined with home modifications to make existing homes more accessible to those with disabilities accounted for many of the 17,800 jobs in construction. Finance and insurance had 15,500 employees supported by seniors to help ensure they had adequate insurance and their investments would last throughout retirement. Nearly 10,000 jobs in real estate, rental and leasing were attributed to the direct spending of seniors on housing and on rentals of home health care products. About 7,000 arts, entertainment and recreation workers were supported by seniors who attended sporting events or theater, gambled in casinos, and enjoyed mountain recreation. Legal, architecture, accounting and veterinary services comprised the bulk of the 6,600 professional, scientific and technical services jobs. The dollars spent by households over the age of 65 on internet, television, movies, newspapers, books and other publications supported 6,000 workers in the information industry. About 4,900 jobs in wholesale trade and 3,800 in transportation were attributed to the spending of seniors. The total amount of estimated employment supported by Colorado’s senior population spread across 16 major industries is shown in Chart 1.

Chart 1



Source: SDO analysis of 65+ spending patterns and Local Resident Service Employment

Jobs by Occupation

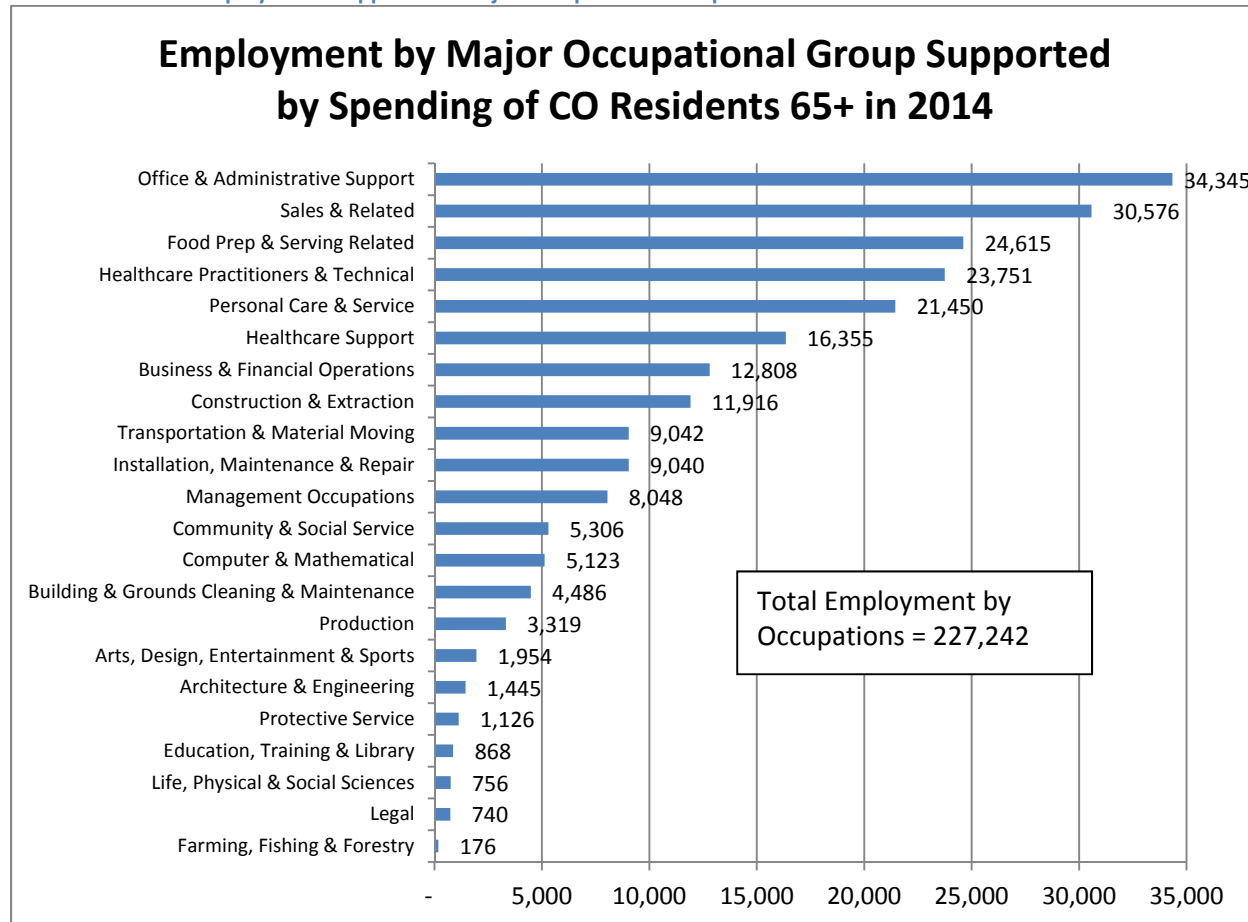
After determining the share of employment by industry, these jobs were mapped into specific occupations using Staffing Patterns provided by the Occupational Employment Statistics (OES) division of Colorado’s Labor Market Information (LMI) office. Spending of seniors in our state was directly responsible for supporting jobs in nearly 600 detailed occupations across all 22 major occupational groups shown in Chart 2. Approximately 95% of industry employment was mapped into specific occupations, resulting in over 227,000 jobs that were matched by occupation.

Although health care and social assistance was the top industry supported by seniors, health care practitioners ranked 4th and health care support was 6th in terms of the number of senior supported positions among all occupational groups. Many people employed at doctors’ offices, hospitals and assisted living facilities fill non-medical jobs like receptionists, office and billing clerks, secretaries and bookkeepers, performing office and administrative functions, while others provide management and custodial functions.

Office and administrative support is the top occupational group with more than 34,300 jobs supported by the spending of seniors. Secretaries and administrative assistants, office clerks, receptionists, customer service representatives, stock clerks, bookkeepers, medical secretaries, and the supervisors of these office workers are employed across all industries, helping to explain why this group outranks all other occupations. Sales and related occupations ranked second, with nearly 30,600 jobs. The top 4

occupations within this group: retail sales persons, cashiers, sales representatives along with first-line supervisors account for a combined 22,000 jobs. Food preparation and serving related occupations such as cooks, dishwashers and servers had more than 24,500 senior supported jobs; many of these are typically associated with the food service and drinking places industry, but a number of these workers are also employed by hospitals, nursing homes and even grocery stores.

Chart 2 Estimated Employment mapped into Major Occupational Groups



Source: SDO Estimate of Occupational Employment using OES Staffing Patterns and 2010 Standard Occupational Classification System (SOC) Codes

Health care practitioners consist of high-paying positions such as doctors, nurses, technicians, and EMTs; the vast majority of these 23,800 workers are employed at hospitals and ambulatory health care services. Since many of these positions are already experiencing shortages in Colorado and they often require extensive education and training, these important senior supported occupations are detailed in Appendix C. The personal care services occupational group has almost 21,500 senior supported jobs; just over half of these are personal and home care aides. Examples of the remaining 10,000 personal care workers include: hairdressers, funeral service workers, gaming services workers, and skincare specialists. Health care support occupations are comprised of many aides, orderlies, and assistants; most of these 16,400 jobs are found throughout the health care and social assistance industry. Business and Financial occupations consist of accountants, real estate assessors, loan officers, insurance underwriters and financial advisors; 12,800 of these and similar positions are supported by seniors. Construction and

extraction occupations include electricians, carpenters, building inspectors, roofers and plumbers; a total of 11,900 jobs in this occupational group were attributable to the direct spending of seniors.

The fact that all occupational groups have at least a portion of their employment supported by the spending of seniors is reflective of the wide variety of goods and services purchased by the senior population. While one might traditionally think that seniors spend their money mostly on health services and at “early bird specials” at restaurants, the broad array of occupations that are related to their direct spending demonstrates the importance of their dollars to many sectors of the economy.

Projected Growth through 2025 and Top 25 Senior Supported Occupations

By 2025, the size of the 65 plus population in Colorado is projected to grow to nearly 1.1 million, representing an increase of more than 400,000 or 57% from 2014. Only the youngest Baby Boomers (born after 1960) will be under the age of 65; the majority of Boomers will be covered by Medicare and likely retired. As the size of the senior population grows, their spending will support an even larger share of statewide employment. The SDO forecast for Retirees Base jobs is 316,700 in 2025 compared to the 2014 estimate of 189,100 – an increase of 127,600 jobs. The State Demography Office projects the size of the 65 plus labor force will grow to 258,700 in 2025; additionally the labor force participation rate for 65 plus residents is projected to increase by 2.3 percentage points. With more seniors working, the number of Local Resident Service jobs supported by workers over the age of 65 will increase to 93,700 in 2025, bringing the projected total senior supported jobs in 2025 to 410,400, representing an increase of 69 percent from the 2014 estimate.

Changes in spending patterns over the next decade combined with changing technology and innovation make it difficult to forecast with much accuracy the industry distribution of jobs in 2025. A simple approach to estimate industry employment supported by seniors in 2025 would be to take the 2014 industry employment shown in Chart 1 and Appendixes B and C and multiply it by 1.69, the expected growth in the senior supported employment. Using this method, the number of senior supported jobs in health care would grow to 133,000 in 2025. This approach would likely overstate the amount of senior supported jobs in 2025 for a number of industries since productivity gains and other efficiencies make it unlikely that there is a linear relationship between the growth in the senior population and the number of jobs they support especially in industries such as information, wholesale trade, and retail trade. However, it is important to examine what industries and occupations will see the most growth as this can help to ensure that there is an adequate supply of workers to meet the future demand.

The Bureau of Labor Statistics (BLS) does this every other year with its release of 10-year industry and occupation projections for the United States. These projections focus on long-term trends such as an aging population and the continued shift in employment shares towards service-providing sectors. The current national projections run through 2024, but will be updated through 2026 at the end of 2017. The impact of the aging population is evident in the following statement published by the BLS when the 2024 projections were released. “The health care and social assistance sector increased from 10.8

percent of all wage and salary jobs in 2004 to 12.8 percent in 2014 and is projected to increase to 14.5 percent by 2024. This increase is by far the largest for any sector from 2004 to 2024.”⁶

Analysis of BLS long-term occupation projections through 2024 also shows the impact of the aging population on employment growth trends is not unique to Colorado. Aside from wind turbine service technicians, which rank as the fastest growing occupation with projected growth of 108% (due largely to a small base of 4,400), the next 4 fastest growing occupations largely provide services to older adults: occupational therapy assistants (43%), physical therapy assistants (41%), physical therapy aides (39%), and home health aides (39%). The growing share of older adults in the population is one of the main reasons these 4 occupations are all projected to grow six times faster than the 6.5 percent growth rate for all occupations. In terms of magnitude, 4 of the top 6 occupations with the most new jobs projected nationally through 2024 are also found in the top 6 senior supported occupations in Colorado in 2014 (home health aides at 13th and cashiers are the exception). An aging population is the driving force behind the projected growth of 458,100 personal care aides, 439,900 registered nurses, 348,400 home health aides and 262,000 nursing assistants through 2024. Additionally the growing spending power of senior citizens will help support a number of the projected 343,500 combined food prep and servers and the 314,200 retail salespersons⁷. These 6 occupations nationally are projected to add over 2.1 million jobs through 2024 and account for 22% of all job growth.

The Colorado Department of Labor and Employment produces long-term (10-year) employment and occupation projections annually using the same methodology as the BLS. Comparing the projected growth rates in industries with large amounts of employment associated with the senior population to the 24% expected growth for all industries highlights the impact that the 65 plus population has on expected job creation. Analysis of Labor Market Information’s (LMI) Long-term industry projections from 2015 to 2025 shows many of the fastest growing industries over the next decade are analogous to those with the largest shares of senior supported employment. Social assistance (51%), ambulatory health care services (46%), and specialty trade contractors (43%) are expected to be the 3 fastest growing industries, expanding about two times faster than the projected total for all industries. Hospital employment is expected to grow 50% faster than all industries; its 36% projected growth is the 9th fastest of all industries. The absolute number of job growth in these industries is even more impressive than their rapid growth rates. Combined, these 4 industries are projected to account for 24% of the total job growth in Colorado by adding 155,500 jobs over the next decade, despite only comprising 13% of total statewide employment in 2015⁸.

Table 1 shows the top 25 occupations supported by the spending of Colorado’s 65+ population in 2014. The minimum education requirements for the occupation, the Median Wage (either annual or hourly) from May 2015, and the annual growth rate projected by LMI are also provided⁹. Only 9 of the top 25 occupations require any level of education beyond a high school degree; it also happens that these comprise 7 of the 8 occupations that pay more than the statewide average wage (**bolded** in the table).

⁶ <https://www.bls.gov/opub/mlr/2015/article/industry-employment-and-output-projections-to-2024.htm>

⁷ <https://www.bls.gov/ooh/most-new-jobs.htm>

⁸ <http://www.colmigateway.com> Industry Employment and Projections (Long Term)

⁹ <http://www.colmigateway.com> Occupation Employment and Projections (Long Term)

The other 16 occupations, with low barriers to entry and low educational requirements, pay wages less than the statewide median for all occupations of \$18.65 per hour or \$38,801 annually.

Table 1.

Occupation Code	Occupation Title	2014 Senior Supported Employment	Minimum Educational Requirements	Median Wage (May 2015)	Annual Growth 2015-25
39-9021	Personal Care Aides	11,483	On-the-Job Training	\$20,980	4.6%
41-2031	Retail Salespersons	10,467	On-the-Job Training	\$10.60/hr	2.2%
29-1141	Registered Nurses	9,203	Associates Degree	\$67,490	3.4%
41-2011	Cashiers	7,124	On-the-Job Training	\$9.28/hr	1.6%
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	6,860	On-the-Job Training	\$9.16/hr	2.8%
31-1014	Nursing Assistants	6,736	High School + Certificate	\$25,710	3.0%
35-3031	Waiters and Waitresses	5,121	On-the-Job Training	\$9.25/hr	2.0%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, & Executive	5,020	High School Diploma	\$36,500	1.7%
43-9061	Office Clerks, General	4,271	High School Diploma	\$14.22/hr	1.8%
11-1021	General and Operations Managers	3,918	Bachelor's Degree	\$102,690	2.2%
43-4171	Receptionists and Information Clerks	3,787	High School Diploma	\$13.12/hr	2.3%
43-4051	Customer Service Representatives	3,509	High School Diploma	\$15.25/hr	2.5%
31-1011	Home Health Aides	3,486	On-the-Job Training	\$21,290	4.6%
43-5081	Stock Clerks and Order Fillers	3,466	High School Diploma	\$26,240	2.0%
13-1199	Business Operations Specialists, All Other	3,350	Bachelor's Degree	\$78,435	2.0%
39-5012	Hairdressers, Hairstylists, and Cosmetologists	2,685	Certificate / License	\$11.40/hr	2.9%
35-2014	Cooks, Restaurant	2,671	On-the-Job Training	\$10.44/hr	3.1%
49-9071	Maintenance and Repair Workers, General	2,473	On-the-Job Training	\$36,630	2.0%
41-1011	First-Line Supervisors of Retail Sales Workers	2,447	High School Diploma	\$46,102	1.9%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,387	High School Diploma	\$37,250	0.6%
13-2011	Accountants and Auditors	2,284	Bachelor's Degree	\$67,190	2.6%
47-2111	Electricians	2,125	Post-secondary + License	\$51,880	3.8%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,980	Bachelor's Degree	\$58,022	1.9%
29-2061	Licensed Practical and Vocational Nurses	1,924	Associates Degree	\$46,536	2.5%
31-9092	Medical Assistants	1,921	Post-secondary + Certificate	\$30,590	3.2%
	Total for All Occupations	227,242	N/A	\$18.65/hr \$38,801	2.2%
Occupations Highlighted in Yellow are projected to grow faster than the Total for All Occupations					
Occupations that are BOLD paid more than the Statewide average for All Occupations					

The impact on job growth due to Colorado's rapidly expanding senior population can also be seen in nearly all of the 13 occupations highlighted in the table; these are expected to grow faster than the 2.2% annual average growth long-term growth rate projected by LMI from 2015-2025 for all occupations. Personal care aides and home health aides are expected to expand at twice the pace of all occupations and are among the fastest growing occupations at 4.6%; however, these are also low wage occupations. Only 4 occupations: registered nurses, accountants and auditors, electricians, and licensed practical and vocational nurses both pay above average wages and have above average projected growth rates.

The industry and occupation projections produced by the BLS and LMI are used by the U.S. Department of Labor and many local workforce boards to help make sure there is an adequate pipeline of qualified, skilled workers to meet the future workforce demand. The Workforce Innovation and Opportunity Act (WIOA) requires states to submit four-year strategies to help prepare an educated and skilled workforce that meets employer needs. This type of information is used by the Colorado Workforce Development Council and partners to develop Colorado's Talent Pipeline Report. Health Care Support occupations like nursing assistants (CNAs), home health aides, medical assistants, and licensed practical nurses (LPNs) are among the top 25 senior supported occupations in Colorado and they have also been identified as Tier 2 Top Jobs in the Talent Pipeline Report, while registered nurses are highlighted as Tier 1 Top Jobs due to their higher pay¹⁰. There are a number of similarities between the top senior supported occupations shown in Chart 1 and the share of Top Jobs projected job openings by occupation cluster identified by the Talent Pipeline. Organizations that are concerned about having enough qualified workers to meet the growing labor force demands created by the aging population should partner with local workforce agencies and similar resources.

Many of the occupations and industries providing goods and services to the 65+ population also provide goods and services to the entire population like retail, cooks, bookkeeping and registered nurses. Total population trends as well as other industry innovations will drive much of the future demand in these industries. However, there are some industries and occupations that primarily serve the 65+ population; one such industry is nursing homes and residential care, with an estimated 81% of its employment supported by seniors. Many occupations that serve the 65+ population are gerontologists, such as geriatricians, registered nurses, social workers, psychologists, and other care givers who gain special skills in caring for the elderly through additional coursework and continuing education. Other occupations that work primarily with seniors include: personal care aides, home health aides, elder care and geriatric advocates, and lawyers specializing in elder law.

Conclusion

The spending of seniors is an important component of Colorado's economy, currently supporting more than 240,000 workers across a broad array of industries and in every occupational group. Since the majority of the jobs that are supported by the senior spending are lower paying service jobs and there are relatively few higher paying professional and health care jobs this occupational mix will likely lead to continued bifurcation in our labor market. The economic impact related to the spending of seniors will continue to expand along with the size of our 65 plus population and their spending will also help to

¹⁰ https://www.colorado.gov/pacific/sites/default/files/17-0109_2016_CO_Talent_Pipeline_Report_1.pdf

insulate Colorado against future economic downturns. Unlike wage & salary employees who might get laid off during a recession and lose their income or insurance coverage, retirees enjoy steady fixed incomes that tend to rise with inflation and they have near universal health care coverage through Medicare. Forecasting the future demand for workers serving the 65+ is not straight forward, but many of the jobs identified as being supported by senior spending are among those expected to see the fastest growth over the next decade. Although the 65+ population is projected to increase by 57% between 2015-2025, younger age groups with slower growth will temper this growth; the population 45-64 is only increasing by 6% over the same period, for example. Total population growth along with industry growth and occupation growth forecasts will be important to watch as they are updated annually, especially for industries with significant employment supported by senior spending. Identifying industries and occupations serving the 65+ population and showing forecasts of their potential growth was the intent of this research. Additional research should be completed and additional industry partnerships should be formed to understand the talent pipeline for occupations primarily serving the 65+, especially the health care practitioners in Appendix C that have barriers to entry.

Appendix

Appendix A

2014 Consumer Expenditures by Category

Category	Share of 65+ Household Spending	Examples
Transportation	15.9%	Vehicle purchases, finance charges, gas, repairs, and insurance
Healthcare	13.4%	Health insurance, medical services, prescription drugs, medical supplies
Housing	33.9%	
Owned dwellings	12.5%	Mortgage interest, property taxes & insurance, repairs & maintenance
Rented dwellings	4.4%	Rent & parking fees
Other lodging	1.5%	Vacation homes, hotels, motels, and camp grounds
Utilities & public services	8.5%	Electric, heating, water, trash & telephone
Misc. Household expenses	7.0%	Furniture, appliances, housekeeping, laundry, cleaning supplies
Food and Beverage	13.3%	
Food at home	7.8%	Food purchased at Grocery stores
Food away from home	4.7%	Restaurants, take-out, fast food
Alcoholic beverages	0.8%	Beer, wine, & liquor
Miscellaneous	23.5%	
Apparel	2.5%	Clothing and shoes
Entertainment	5.5%	Memberships, tickets, reading, and TV
Cash Contributions	5.8%	Religious, charitable, political, and family gifts
Personal insurance & pensions	5.2%	Premiums for life insurance and contributions to pensions & Soc. Security
Personal care, education, misc.	4.5%	Haircuts, books, continuing education, tobacco, & other miscellaneous

Appendix B Top 25 NAICS Subsectors with Senior Supported Employment

Industry Code	Name	Employment
621	Ambulatory Health Care Services	27,477
623	Nursing & Residential Care Facilities	23,851
722	Accommodation & Food Services	20,753
238	Specialty Trade Contractors	15,815
622	Hospitals	14,367
624	Social Assistance	13,144
812	Personal & Laundry Services	10,928
813	Religious, Civic, and Other Organizations	8,806
445	Grocery Stores	7,684
531	Real Estate, Rental & Leasing	7,011
713	Amusement, Gambling & Recreation	6,992
541	Professional, Scientific & Technical	6,577
522	Credit Intermediation	6,176
442	Furniture & Home Furnishing Stores	5,938
524	Insurance Carriers & Related	5,745
452	General Merchandise Stores	5,577
811	Repair & Maintenance	4,495
424	Merchant Wholesalers, Nondurables	4,396
814	Private Households	4,334
441	Motor Vehicle & Parts Dealers	3,805
523	Securities & Other Financial Investments	3,608
561	Administrative Support & Waste Management	2,963
532	Rental & Leasing Services	2,849
446	Health & Personal Care Stores	2,483
517	Telecommunications	2,458
Total of Top 25 3-Digit Industries		218,232
All other Industries		22,257
Total Estimated Senior Supported Jobs		240,489

Appendix C.
Top Senior Supported Health Care Practitioner Occupations

Occupation Code	Occupation Title	2014 65+ Supported Employment
29-1141	Registered Nurses	9,203
29-2061	Licensed Practical and Licensed Vocational Nurses	1,924
29-2021	Dental Hygienists	1,083
29-1123	Physical Therapists	1,033
29-1051	Pharmacists	820
29-2052	Pharmacy Technicians	698
29-2041	Emergency Medical Technicians and Paramedics	629
29-2034	Radiologic Technologists and Technicians	577
29-1071	Physician Assistants	531
29-2099	Health Technologists and Technicians, All Other	522
29-1122	Occupational Therapists	498
29-1171	Nurse Practitioners	495
29-1069	Physicians and Surgeons, All Other	449
29-1021	Dentists, General	448
29-2011	Medical and Clinical Laboratory Technologists	428
29-2012	Medical and Clinical Laboratory Technicians	397
29-2071	Medical Records and Health Information Technicians	379
29-1126	Respiratory Therapists	319
29-1127	Speech-Language Pathologists	313
29-2055	Surgical Technologists	277
29-1067	Surgeons	264
29-2081	Opticians, Dispensing	257
29-1011	Chiropractors	232
29-1031	Dietitians and Nutritionists	185
	Total Health Care Practitioner 65+ Supported Jobs	23,750