



CAEL
Linking Learning and Work

Occupational Profiles for the Mature Worker:

**Finding and Using Detailed Information about Occupations
with the Largest Share of Mature Workers**

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A Tapping Mature Talent Publication

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The Tapping Mature Talent Paper Series: *POLICIES FOR A 21ST CENTURY WORKFORCE*

Demographic and other trends indicate that the U.S. will be seeing more mature workers actively engaged in the labor market, whether out of financial need or out of continued ability and preference. These workers are, and will continue to be, an important part of the labor force upon which our economy depends. Yet many of these mature workers will need help navigating a complex labor market, identifying career pathway opportunities, and determining needed education and training for greater employability and contributions to the workplace.

Recognizing these challenges, the U.S. Department of Labor supported a three-year Aging Worker Initiative (AWI) between 2009 and 2012. This initiative acknowledged the importance of mature workers to the economy and the need to provide them with help in preparing for new jobs and careers. The AWI funded 10 sites to test new models of serving mature workers (see box).

Over the course of this three-year initiative, the Council for Adult and Experiential Learning (CAEL) has overseen technical assistance to these sites under a grant from The Atlantic Philanthropies. The experiences of the 10 sites have underscored for us the importance of supporting the labor force participation of mature individuals in a deliberate way.

As this initiative comes to a close, CAEL invited leading experts on the mature workforce to help us showcase the work of the AWI grantees alongside their own research findings. Collectively, the papers contributed by these experts address the factors that are causing more mature individuals to continue working, the range of occupations currently held by mature workers, the value of the mature workforce to our economy, the factors that most influence employer retention and hiring as they face changing workforce demographics, the difficulties workers face as they make often irreversible decisions about when to retire, and public sector strategies that support mature workers. In addition, the conclusions reached by the authors help to inform a set of recommendations for policy makers and employers.

This publication presents the third in a five-part series of papers we are calling Tapping Mature Talent: Policies for a 21st Century Workforce. In “Occupational Profiles for the Mature Worker: Finding and Using Detailed Information About Occupations with the Largest Share of Mature Workers,” Neeta P. Fogg and

The 10 Aging Worker Initiative Sites

Tecumseh Area Partnership, Inc., Indiana

Quad Area Community Action Agency, Inc., Louisiana

Coastal Counties Workforce, Inc., Maine

Baltimore County Office of Workforce Development, Maryland

Macomb/St. Clair Workforce Development Board, Inc., Michigan

South Central Workforce Investment Board, Pennsylvania

Goodwill Industries of Houston, Inc., Texas

Vermont Associates for Training and Development, Inc., Vermont

Seattle-King County Workforce Development Council, Washington

Fox Valley Workforce Development Board, Wisconsin

Paul E. Harrington of the Center for Labor Markets and Policy at Drexel University offer a process for examining the various skills and knowledge needed for specific occupations of interest to mature workers. This approach could inform postsecondary institutions, employment advisors, and other professionals guiding the future labor market choices of the mature workforce.

The full series is as follows:

1. *New Approaches for Supporting the Mature Worker: The Experiences of the U.S. Department of Labor's Aging Workforce Initiative Grantees*, by Rebecca Klein-Collins, Council for Adult and Experiential Learning
2. *Financial Literacy and Retirement Decisions: The Choices Facing Older Workers*, by Robert L. Clark, North Carolina State University
3. *Occupational Profiles for the Mature Worker: Finding and Using Detailed Information About Occupations with the Largest Share of Mature Workers*, by Neeta P. Fogg and Paul E. Harrington, Center for Labor Markets and Policy, Drexel University
4. *Workplace Action Steps for Leveraging Mature Talent: Findings from the Talent Management Study*, by Jungui Lee, Tay McNamara, and Marcie Pitt-Catsoupes, The Sloan Center on Aging & Work at Boston College
5. *Older Workers, Rising Skill Requirements and the Need for a Re-envisioning of the Public Workforce System*, by Maria Heidkamp, John J. Heldrich Center for Workforce Development, Rutgers University

The five papers suggest several new policy ideas to consider, both for employers and for public policy leaders, that can support the mature worker in the U.S. At a national summit on May 3, 2012 held at the National Press Club and co-sponsored by CAEL and the National Governors Association, these and other policy ideas were discussed by more than 120 attendees representing organizations focused on aging issues, workforce development organizations, federal agencies, workforce investment boards, economists, and other advocates for the mature worker. These discussions helped to identify priority areas for policy change and other action at the national, state, and local levels.

To read a summary of all the papers in this series, please see <http://www.cael.org/pdfs/TMT-Executive-Summary>

To read a summary of the policy recommendations from this paper series, please see http://www.cael.org/pdfs/TMT_Summary_Policy_Recs_2012

For additional TMT publications, please visit <http://www.cael.org/How-We-Help/Older-Workers>

As more baby boomers choose to work past the traditional retirement age of 65, many will want occupational information to help them make better decisions about career choice, job search, and education and training investment activities. This chapter demonstrates how existing occupational data can help in the analysis of various occupations in terms of what kinds of workers are currently in these occupations, as well as what specific abilities, skills, knowledge areas, and work activities are needed for those occupations. With this kind of information about specific occupations, workers, and those assisting workers in a job or career search, can better determine which crossover occupations may be a good match for existing skill sets as well as where workers may need to improve skills for a particular occupation of interest.

Occupational Profiles for the Mature Worker:

Finding and Using Detailed Information about Occupations with the Largest Share of Mature Workers

by Neeta Fogg and Paul Harrington, Center for Labor Markets and Policy, Drexel University

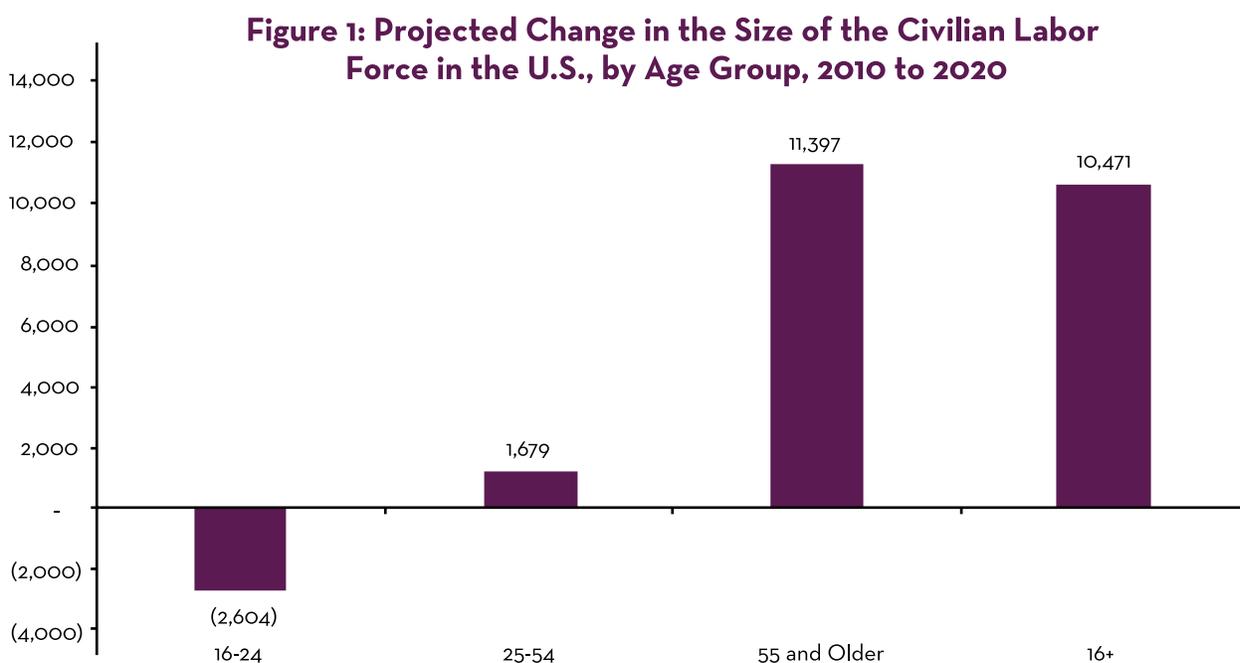
Before our recent economic downturn, economists' major worry about older adults was the need to replace them in the labor market as the baby boomers began turning 65. Instead, a number of factors have combined to bolster the job market activity of mature workers so that, for at least the next couple of decades, the baby boom generation will continue to play a central role in supplying labor to the American labor market.

This chapter explores how existing occupational data can be used to provide information to mature workers about their possible occupational pathways, as one tool to be used in their decision-making and planning process. We show how this can be done by using, as examples, 10 occupations with the largest share of mature workers. We then develop profiles of these occupations using high quality information from both the U.S. Department of Labor and the U.S. Bureau of the Census. A similar analysis can be carried out to create profiles for other occupations, in order to help mature workers make better decisions about their own future human capital investment decisions around career choice, job search, and education and training investment activities.

Explaining the Rising Number of Mature Workers

The most recent round of labor force projections released by the U.S. Bureau of Labor Statistics (BLS) indicate that the proportion of persons aged 55 and above who are actively engaged in the nation's job market will nearly double between 2000 and 2020 (Toossi, 2012). By the end of this decade, one in four active members in the nation's job market will be a mature worker.

A combination of a sharp rise in the number of persons aged 55 and above along with a strong increase in the share of mature workers who opt to remain in the labor market will result in the number of mature workers engaged in the nation's job market increasing by 11.4 million persons—accounting for more than the overall projected net increase in the size of the nation's labor force between 2010 and 2020 (Figure 1).

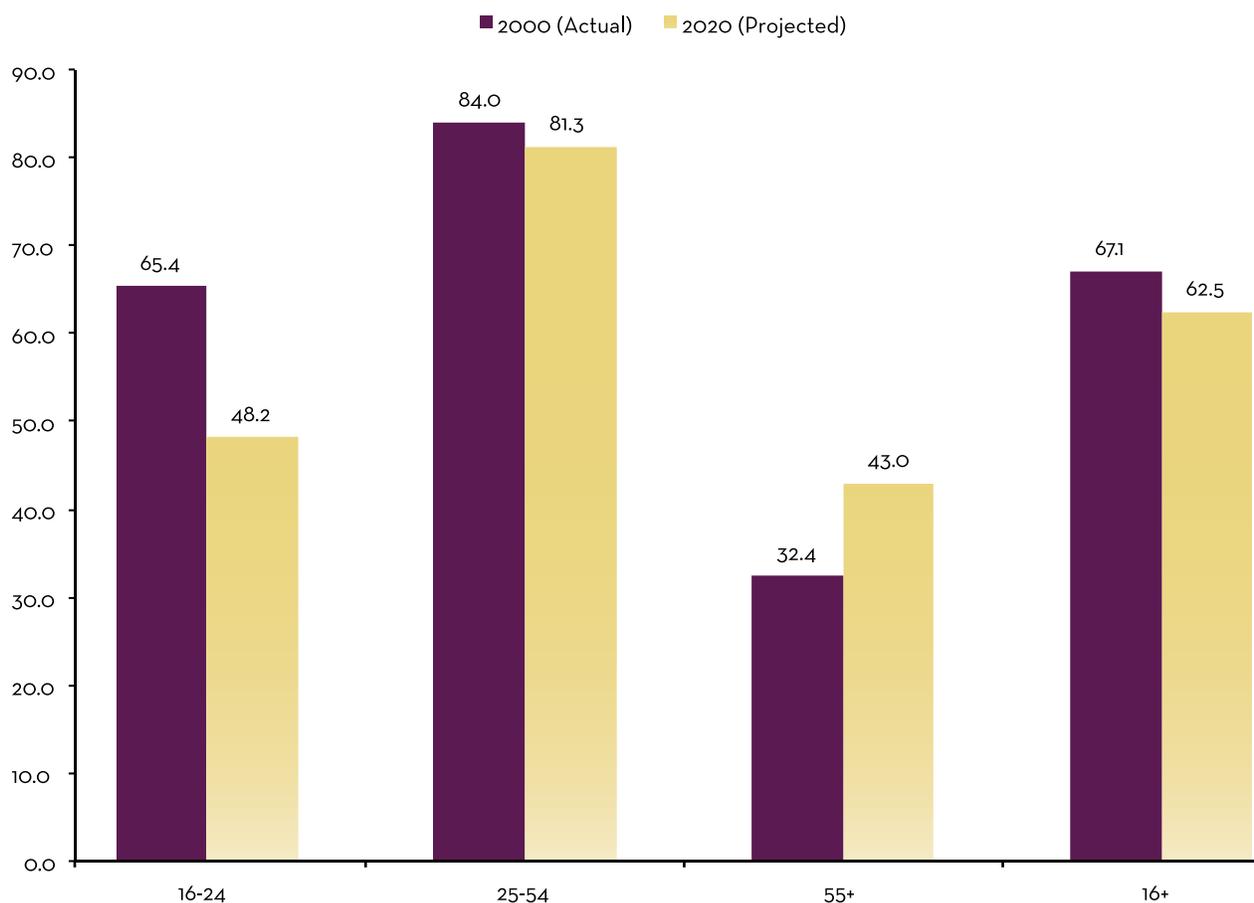


Source: "Labor Force Projections to 2020: A More Slowly Growing Workforce," by M. Toossi, January 2012. Monthly Labor Review, pp. 43-64. Copyright 2012 by the U.S. Bureau of Labor Statistics.



Of course, much of the rise in number of mature workers in the labor market is associated with the aging of baby boomers. Indeed, over the 2010 to 2020 period, the number of persons aged 55 and older is expected to rise by 21.7 million, accounting for 86% of the net increase in the U.S. working age population. At the same time, the labor force participation rate of persons aged 55 and older is projected to rise to 43% by 2020—a relative rise of one-third from its 2000 level of 32.4%—even as the labor force participation rate of every age group under the age of 55 declines over the same time period. In the case of those aged 16 to 24, the decline is precipitous, with labor force participation falling from 65.4% in 2000 to just 48.2% by 2020—a relative decline of 26% over the 2000 to 2020 period (Figure 2).

Figure 2: Actual (2000) and Projected (2020) U.S. Civilian Labor Force Participation Rates by Age Group, 2000 to 2020



Source: “Labor Force Projections to 2020: A More Slowly Growing Workforce,” by M. Toossi, January 2012. Monthly Labor Review, pp. 43–64. Copyright 2012 by the U.S. Bureau of Labor Statistics.

Part of the explanation for rising labor force attachment of mature workers is associated with the higher levels of educational attainment by the baby boom generation relative to earlier cohorts of mature workers, since better educated workers have higher rates of labor force attachment. However, it is also clear that the financial crisis and the subsequent economic recession had the surprising result of raising labor force attachment among mature workers even as labor force participation rates for those under age 55 declined. Shrinking balances in defined contribution equity retirement accounts and increasing health care costs (due to rising Medicare premiums and reduced employer contributions to retiree

health plans) are also viewed as important contributing factors to increased labor market participation among mature workers (Sass, Monk, & Haverstick, 2010; Bosworth & Smart, 2009; Johnson, 2008).

Housing values have fallen by about one-third since 2007—reducing the value of assets in the U.S. by about \$8 trillion—at the same time, short-term interest rates on government bonds are negative in real terms. Many retirees prefer low-risk bonds to riskier equity investments; but over the past few years, little income has flowed to households from the bond market and other sources of safe investment, such as CDs and money market and savings accounts. Thus, a key source of income for retirees has dried up. Mature workers make up for these losses in income by reducing spending, perhaps investing in riskier assets, drawing down on assets, and most importantly by working (Makin, 2012). In fact, over the 2007 to 2011 period, the number of employed persons aged 55 or less fell by 9.3 million while the number of employed mature workers rose by 3.1 million (Table 1).

Table 1: Trends in the Number of 55+ and Under-55 Employed Persons, U.S., 2007, 2009, and 2011

	2007	2009	2011	Absolute Change	Relative Change
Number Employed					
55 and older	25,722	27,132	28,833	3,111	12.1%
Under 55	120,325	112,745	111,036	-9,289	-7.7%
16+	146,047	139,877	139,869	-6,178	-4.2%
55+ share of all workers	17.6%	19.4%	20.6%	3.0	17.0%

Source: Labor Force Statistics from the Current Population Survey, 2012, retrieved from <http://www.bls.gov/cps/home.htm>. Copyright 2012 by the U.S. Bureau of Labor Statistics. Tabulations by Drexel University Center for Labor Markets and Policy.

As the discussion about future labor force growth suggests, a growing proportion of those in their retirement years will work—some by necessity, some by desire—but inexorably a large and growing share of those eligible for or receiving retirement income will work. This means that entering the pre-retirement years may become less a time of contemplating retirement and more a time of investing in a renewal of personal productive capacities to prepare for continuing work. As expectations of extended durations of labor force attachment develop among baby boomers, their interest in investing in their own education and training—and gaining access to information that can help them make better decisions about occupational choices—will rise.

Methodology and Data

This paper provides a detailed profile of the top 10 occupations that are most relevant to mature workers. Mature workers in this paper include persons aged 55 years and older. We have defined the most relevant occupations to mature workers as the occupations in which there is a large presence of mature workers. The top 10 occupations with the largest presence of mature workers are labeled in this paper as “mature worker intensive occupations.” We identified those occupations with the highest concentration of workers aged 55 and above through an analysis of the 2010 American Community Survey (ACS) public use data files. The ACS is a very large household survey conducted each month across the nation to produce a wide range of social, economic, demographic, and housing information on an annual basis. The ACS was designed to replace the decennial census long-form survey, and the ACS questionnaire is based on the decennial census long-form questionnaire from the 2000 Census.²

Based on a sample of about three million households, the ACS data are released in the form of summary data (published estimates developed by Census staff) and microdata (data files that researchers can use to produce their own estimates when properly analyzed). Summary data are predefined tabulations for persons, families, and households in geographic areas. The basic unit of analysis in a summary data file is a geographic area, such as state, county, etc. Microdata contain data on individual housing units or persons, and the basic unit in a microdata file is a housing unit or a person. We have used the 2010 ACS microdata file, also called the 2010 ACS Public Use Microdata Sample (PUMS), to produce the estimates of worker characteristics as well as employment and earnings profiles for each occupation discussed.

We not only used the ACS to determine the top 10 mature worker intensive occupations, but we also used the ACS data in conjunction with the U.S. Department of Labor's Occupation Information Network, known as the O*NET information system, to develop the specific occupational profiles in this study. The O*NET database was developed under the sponsorship of the U.S. Department of Labor Employment and Training Administration and is a comprehensive database of worker attributes and job characteristics covering over 900 occupations. It is a replacement for the Directory of Occupational Titles (DOT), is considered to be the nation's primary source of occupational information, and is the basis for most human resource classification systems in the nation.

Every occupation requires a different mix of knowledge, skills, and abilities and is performed using a variety of activities and tasks. The O*NET provides a common language for defining and describing occupations, containing hundreds of occupation-specific descriptors. It is continually updated to capture rapidly changing job requirements by surveying a broad range of workers and occupational experts and analysts in each occupation. We have used the most recent updated O*NET database released in July 2011 (O*NET 16.0), which contains the twelfth update of the database since its first release in 1998, to profile the abilities, skills, knowledge areas, and work activities of the 10 mature worker intensive occupations in the nation that we derived from the ACS.

The first part of the occupational profiles below was produced from the 2010 ACS PUMS data and includes information about the demographic, employment intensity, earnings, and mixing work and retirement traits of the workforce employed in each profiled occupation. Those assisting mature workers who are perhaps seeking re-employment, considering a career change, or contemplating how to potentially mix work and retirement to sustain household living standards will find this type of information especially useful. The second part of the occupational profile is based upon O*NET data task-proficiency ratings of four occupational descriptors—abilities, skills, knowledge areas, and work activities. The ratings are based on the importance of and the level at which incumbent workers utilize each descriptor to perform their jobs in each occupation.

The O*NET based information is especially critical in understanding the connection between mature workers interests; aptitudes; and abilities and the knowledge; skills; and physical, sensory, and cognitive requirements of each occupation. As the baby boom generation ages, the incidence of disability will rise sharply among both the population as a whole as well as among those boomers who opt to participate in the job market (Fogg, Harrington, & McMahon, 2012). A key task of a counseling and placement professional is to guide job and career seekers toward those areas that play to their strengths and, similarly, to ward them off from those areas in which they may exhibit limitations in their daily lives. The O*NET information included in the profiles focuses on some of the key proficiencies required in each

of the occupations. Ignoring these requirements in the job search or career investment process means potentially setting an individual on a road to greater risk of failure.

We have developed a rating scale for each proficiency included in the O*NET system to identify those proficiencies that are most important in each of our 10 occupations. Using O*NET data, we rated 52 abilities, 35 skills, 33 knowledge areas, and 41 work activities for each of our 10 occupations on the importance of these occupational attributes in performing the job and the level at which these attributes are needed to perform the job. The relevance of a certain proficiency to perform a job should be gauged not only based on its importance to the job but also to the level at which it is required to perform the job. For example, the knowledge of mathematics might be important for a cashier, but the level of math required to perform the job of a cashier is likely to be quite low. In contrast, math is not only very important to perform the duties of a civil engineer, but it is also utilized at a very high level by individuals working in the civil engineering occupation.

In the O*NET data, the importance of each proficiency is measured on a five point scale from 1 being not important to 5 being extremely important. The level of each proficiency is measured on a seven point scale from 1 being the lowest level to 7 being the highest level. Level was assigned a value of zero if the attribute was not relevant to the occupation. Using the O*NET data that contain the mean importance and level rating for each occupation, we have computed a measure of the relevance of the descriptor item to the occupation. This measure, which we call the relevance score, is the product of the importance and level rating with a maximum value of 35 (7*5) and a minimum value of zero. The relevance score is a summary measure that gauges the importance and level of the occupational attribute; a higher relevance score of an attribute means that the attribute has a greater relevance (importance and level) to performing the work in that occupation, so a higher score suggests a high degree of relevance for a particular attribute in an occupation.

The O*NET occupational profile for each of the occupations included in this paper also contains the following items from the O*NET database: the description of each occupation, including a list of the tasks performed by workers; the projected employment growth and projected job openings between 2008 and 2018; and the top industries that employ workers in these occupations.³

Analysis

The top 10 occupations with the highest concentrations of mature workers include occupations that span the skill/ability spectrum, ranging from cab drivers and chauffeurs to chief executives and dentists. Although these occupations do not yet have a majority mature workforce, there is definitely a sizable presence of mature workers in these jobs. At the time of the 2010 ACS survey, the concentration of mature workers in these occupations ranged from a high of 44% among tax preparers to over one-third among interviewers (Table 2).⁴

The median age of workers in 8 out of these 10 mature worker intensive occupations in 2010 was over 50. This means that half of all workers in 8 out of the top 10 mature worker intensive occupations had already celebrated their fiftieth birthday in 2010. The median worker in the remaining two mature worker intensive occupations (taxi driver and chauffeur and interviewer) was 49 and 46 years old, respectively. It is likely that by 2020 the majority of workers in several of these occupations will be aged 55 or older.

Table 2: The Share of Mature Workers and Median Age of Those Employed in the Mature Worker Intensive Occupations, U.S., 2010

Occupations	Total Employed 55+	Employed	Share of 55+	Median Age
All Occupations	157,158,086	31,565,538	20.1%	41
Mature Worker Intensive Occupations				
Tax Preparers	144,252	62,983	43.7%	51
Clergy	456,635	198,565	43.5%	52
Bus Drivers	658,330	273,855	41.6%	52
Psychologists	197,794	81,018	41.0%	51
Librarians	178,612	69,821	39.1%	50
Real Estate Brokers and Sales Agents	841,861	327,366	38.9%	50
Chief Executives	1,092,461	404,792	37.1%	51
Dentists	166,897	61,560	36.9%	50
Taxi Drivers and Chauffeurs	377,752	134,416	35.6%	49
Interviewers, except Eligibility and Loan	317,226	107,858	34.0%	46

Source: "2010 American Community Survey Public Use Microdata Sample." Copyright 2012 by the U.S. Census Bureau. Tabulations by Drexel University Center for Labor Markets and Policy.

Demographic Characteristics of Workers in the Mature Worker Intensive Occupations

We have produced a variety of tabulations about the characteristics of mature workers that are included in the appendix tables of this paper (http://www.cael.org/pdfs/TMT_Occupational_Profiles_Appendix). Among the most important findings from our analysis of the ACS data files are those related to the educational attainment and class of worker—the latter focusing on the important role of self-employment in a number of mature worker intensive occupations.

The overall educational attainment of incumbent workers is a reasonable measure of the educational requirements in that occupation even though there may be cases when workers are overqualified or underqualified to perform work in that field. Table 3 contains the distribution of all workers employed in the mature worker intensive occupations by their educational attainment. The first row contains a distribution of the entire workforce (workers in all occupations) by educational attainment. One out of 11 workers in the U.S. labor market were high school dropouts; one-third had completed high school without any postsecondary education; about one-quarter had completed some postsecondary education below the bachelor's degree level; one-fifth had earned a bachelor's degree; and the remaining 11% had earned a master's or a higher degree.

Workers employed in most of the mature worker intensive occupations possessed above average educational levels. This result is not surprising. Mature workers with fewer years of schooling participate in the labor market at lower rates than better educated counterparts. Moreover, the cognitive demands of many of the mature worker occupations are high, while the physical demands of these jobs are low—suggesting better employment options for mature workers with better educational credentials. All dentists, 93% of psychologists, 61% of librarians, and over half of all clergy had a master's or a higher degree. Chief executives and tax preparers also had above average shares of workers with a master's or a higher degree. Five out of the 10 mature worker intensive occupations had more than half of their workforce with at least a bachelor's degree and two other occupations had over 45% of their workforce with a bachelor's or a higher degree. The nature of job growth and decline over the working lives of

the baby boom generation has largely worked to the benefit of those with higher levels of educational attainment. The higher labor market attachment of better-educated mature workers is reflected in the more rapid aging of the workforce in jobs with high educational requirements.

Table 3: Percentage Distribution of Workers in Top 10 Mature Worker Intensive Occupations by Educational Attainment, U.S., 2010

	Total Number Employed	High School Dropout	High School Graduate or GED	Some College or Associate's Degree	Bachelor's Degree	Master's or Higher Degree
All Occupations	157,158,086	9.2%	32.7%	26.0%	19.3%	10.8%
Mature Worker Intensive Occupations						
Tax Preparers	144,252	3.7%	20.9%	29.8%	30.7%	14.8%
Clergy	456,635	1.7%	9.4%	14.1%	23.9%	50.8%
Bus Drivers	658,330	9.9%	54.5%	28.0%	5.9%	1.5%
Psychologists	197,794	0.0%	0.3%	0.7%	6.4%	92.6%
Librarians	178,612	0.1%	3.7%	14.6%	20.5%	61.1%
Real Estate Brokers and Sales Agents	841,861	1.4%	21.1%	31.5%	35.8%	10.1%
Chief Executives	1,092,461	1.6%	13.7%	18.8%	38.4%	27.5%
Dentists	166,897	0.0%	0.1%	0.4%	1.5%	98.0%
Taxi Drivers and Chauffeurs	377,752	14.8%	47.1%	23.3%	11.5%	3.2%
Interviewers, except Eligibility and Loan	317,226	2.4%	30.8%	36.7%	21.4%	8.1%

Source: "2010 American Community Survey Public Use Microdata Sample." Copyright 2012 by the U.S. Census Bureau. Tabulations by Drexel University Center for Labor Markets and Policy.

However, not all mature worker intensive occupations are staffed with a highly educated workforce. Three of the 10 mature worker intensive occupations were staffed by workers with much lower levels of education. Workers employed as bus drivers, taxi drivers, and chauffeurs had much lower levels of educational attainment than the average for all occupations in the nation, and the share of high school graduates and dropouts employed as interviewers was only slightly lower than the average for all occupations. Ten percent of bus drivers and 15% of taxi drivers and chauffeurs were high school dropouts. About half of all bus drivers, taxi drivers, and chauffeurs and 31% of interviewers were able to secure employment in these jobs with just a high school education. The physical demands of these jobs are not as high as that of many blue-collar occupations, suggesting that these occupations are more capable of accommodating the physical limits of a mature workforce, while at the same time the duties in these occupations do not demand high levels of educational attainment or particularly strong cognitive abilities.

Among the most surprising findings of our analysis of the mature worker intensive occupations are those associated with what is known as "sector of employment." Sector of employment categories include wage and salary workers (traditional payroll employees where an employer-employee relationship exists) in private for-profit and private nonprofit organizations (important since nonprofit earnings tend to be consistently lower than for-profit earnings, holding other factors constant); self-employed workers (including proprietors, partners, and corporate owners); and government employees.

Each type of work has different job search and career choice implications for mature workers. For example, our analysis of the mature worker intensive occupations reveals that self-employment is much more common in these occupations relative to other occupations in the nation's job market—indeed, 1 in 4 persons employed in our 10 occupations are self-employed, compared to just 10% self-employment

among all workers. However, the pattern of self-employment varies enormously across even these 10 occupations. Self-employment was quite high among workers in 6 out of the 10 intensive mature worker occupations. Nearly two-thirds of all dentists, 55% of real estate brokers and sales agents, 37% of psychologists, 30% of chief executives, and one-quarter of taxi drivers and tax preparers were self-employed (Table 4). Self-employment often requires a set of personal characteristics that are markedly different from those employed as wage and salary workers in either for-profit or nonprofit business establishments or in government employment, including a greater willingness to take risks, greater independence, and the ability to engage in both the occupation at hand as well as related business management activities. Self-employed persons often report that they are happier in their occupations; although, their annual earnings are lower than their wage and salary counterparts (Brooks, 2010).

Table 4: Percentage Distribution of Workers in Mature Worker Intensive Occupations by Sector of Employment, U.S., 2010

	Total Number Employed	Private For-Profit	Private Nonprofit	Self-Employed	Government
All Occupations	157,158,086	67%	8%	10%	15%
Mature Worker Intensive Occupations					
Tax Preparers	144,252	72%	1%	23%	4%
Clergy	456,635	2%	96%	0%	2%
Bus Drivers	658,330	43%	5%	2%	50%
Psychologists	197,794	17%	15%	37%	32%
Librarians	178,612	11%	20%	0%	69%
Real Estate Brokers and Sales Agents	841,861	43%	1%	55%	1%
Chief Executives	1,092,461	56%	8%	29%	7%
Dentists	166,897	28%	3%	65%	4%
Taxi Drivers and Chauffeurs	377,752	60%	8%	25%	7%
Interviewers, except Eligibility and Loan	317,226	27%	10%	1%	61%

Source: "2010 American Community Survey Public Use Microdata Sample." Copyright 2012 by the U.S. Census Bureau. Tabulations by Drexel University Center for Labor Markets and Policy.

Jobs that are concentrated in the government sector may require different career strategies (different training, application, certification, etc.) than jobs in the for-profit or nonprofit private sector. On average, the level of educational attainment in government employment is quite high, and frequently special provisions for various protected population groups influence the selection process for government employment. Surprisingly, among our 10 mature worker intensive occupations, an above average share of employment is concentrated in government organizations. About one in five workers in these occupations is employed by the government while only 15% of all employed persons are employed by a government organization. Once again we see sharp disparities in government employment across our occupations. More than 60% of interviewers work for a government organization while nearly 70% of librarians are government workers. One in three psychologists work for the government, along with librarians who most often work in public school settings. Half of all bus drivers work for government agencies as well.

The private, for-profit sector employed far fewer than two-thirds of workers in 9 out the 10 mature worker intensive occupations. The only occupation with a slightly higher share of private for-profit employment was among tax preparers (72%). The private nonprofit sector employed almost all clergy, 20% of librarians, 15% of psychologists, and 10% of interviewers. In comparison, 8% of all U.S. workers were employed in the private nonprofit sector.

Intensity of Work among Workers in the Mature Worker Intensive Occupations

Another trait of a job that would be of interest to mature workers would be the intensity of work—weekly hours and annual weeks of work of typical workers in an occupation. Using the 2010 ACS data, we have provided an analysis of the mean weekly hours a worker usually spent on a job in which they were employed during the year prior to the ACS interview. We have also provided data that examines the shares of workers who worked in a year-round schedule (40 weeks or more) at their jobs during the year prior to the ACS interview. Tables 5 and 6 present the work intensity of workers of all ages (16+) and of mature workers (55+) who were employed in mature worker intensive occupations during the year prior to the ACS survey.

Findings in Table 5 indicate that, across all occupations, the intensity of work measured by mean weekly hours of employment for workers of all ages (16+) was not very different from the work intensity of mature workers. In 2010, the mean weekly hours of employment among workers of all ages was 38 hours; only one hour more than the mean weekly hours of employment among mature workers.

The weekly work schedule on average of workers in 6 out of the 10 mature worker intensive occupations exceeded a full-time schedule (35 hours or more). Workers in the remaining four occupations also worked quite intensively, albeit less than the full-time threshold of 35 hours per week or more. Tax preparers, bus drivers, and librarians were employed for an average of 34 hours per week while workers employed in the interviewer occupation were employed for an average workweek of 31 hours.

The work intensity of mature workers was also quite high, although, not as high as that of workers of all ages employed in the same occupations. Mature workers who were employed as interviewers on average worked a 29 hour workweek. The average workweek among other mature workers was 31 hours for bus drivers, 33 hours among tax preparers, and 34 hours among librarians. Mature workers employed in the remaining six occupations were employed in full-time schedules ranging from 35 hours among psychologists, dentists, and taxi drivers; 37 weekly hours among real estate brokers and agents; 40 hours among clergy; and 44 weekly hours among chief executives. Mature workers who were employed in these 10 occupations work quite intensively, showing little evidence of a large scale phased-in retirement in the form of part-time work.

Table 5: Mean Weekly Hours of All Workers and Mature Workers in Mature Worker Intensive Occupations, U.S., 2010

	All Workers (16+)	Mature Workers (55+)
All Occupations	38	37
Mature Worker Intensive Occupations		
Tax Preparers	34	33
Clergy	43	40
Bus Drivers	34	31
Psychologists	36	35
Librarians	34	34
Real Estate Brokers and Sales Agents	39	37
Chief Executives	47	44
Dentists	38	35
Taxi Drivers and Chauffeurs	40	35
Interviewers, except Eligibility and Loan	31	29

Source: “2010 American Community Survey Public Use Microdata Sample.” Copyright 2012 by the U.S. Census Bureau. Tabulations by Drexel University Center for Labor Markets and Policy.

Another measure of work intensity is the number of weeks of employment per year. We have provided in Table 6 the share of workers of all ages (16+) and of mature workers (55+) in the mature worker intensive occupations who were employed in year-round jobs, defined as 40 or more weeks during the year prior to the ACS interview. There was considerable variation in this measure of year-round employment among workers in the top 10 occupations. Less than half (44%) of tax preparers and interviewers were employed for 40 or more weeks each year. Employment in these two occupations is more likely to be part-year employment. Year-round employment (40+ weeks) was much more prevalent in the remaining eight occupations ranging from 8 out of 10 bus drivers and taxi drivers to over 90% of workers in the remaining six occupations who were employed on a year-round basis.

Table 6: Percentage of All Workers and Mature Workers that are Employed Year-Round (40 Weeks or More During the Year), and Percentage of Mature Workers Employed Mixing Work and Retirement, U.S., 2010

	Percentage Employed 40+ Weeks During the Year		Percentage of Mature Employed Workers (55+) Mixing Work and Retirement
	All Workers (16+)	Mature Workers (55+)	
Mature Worker Intensive Occupations			
Tax Preparers	44%	35%	59.0
Clergy	92%	89%	40.6
Bus Drivers	78%	73%	49.3
Psychologists	90%	88%	33.3
Librarians	87%	85%	25.6
Real Estate Brokers and Sales Agents	85%	82%	42.1
Chief Executives	93%	90%	29.8
Dentists	94%	93%	27.3
Taxi Drivers and Chauffeurs	79%	77%	49.3
Interviewers, except Eligibility and Loan	44%	32%	58.8

Source: "2010 American Community Survey Public Use Microdata Sample." Copyright 2012 by the U.S. Census Bureau. Tabulations by Drexel University Center for Labor Markets and Policy.

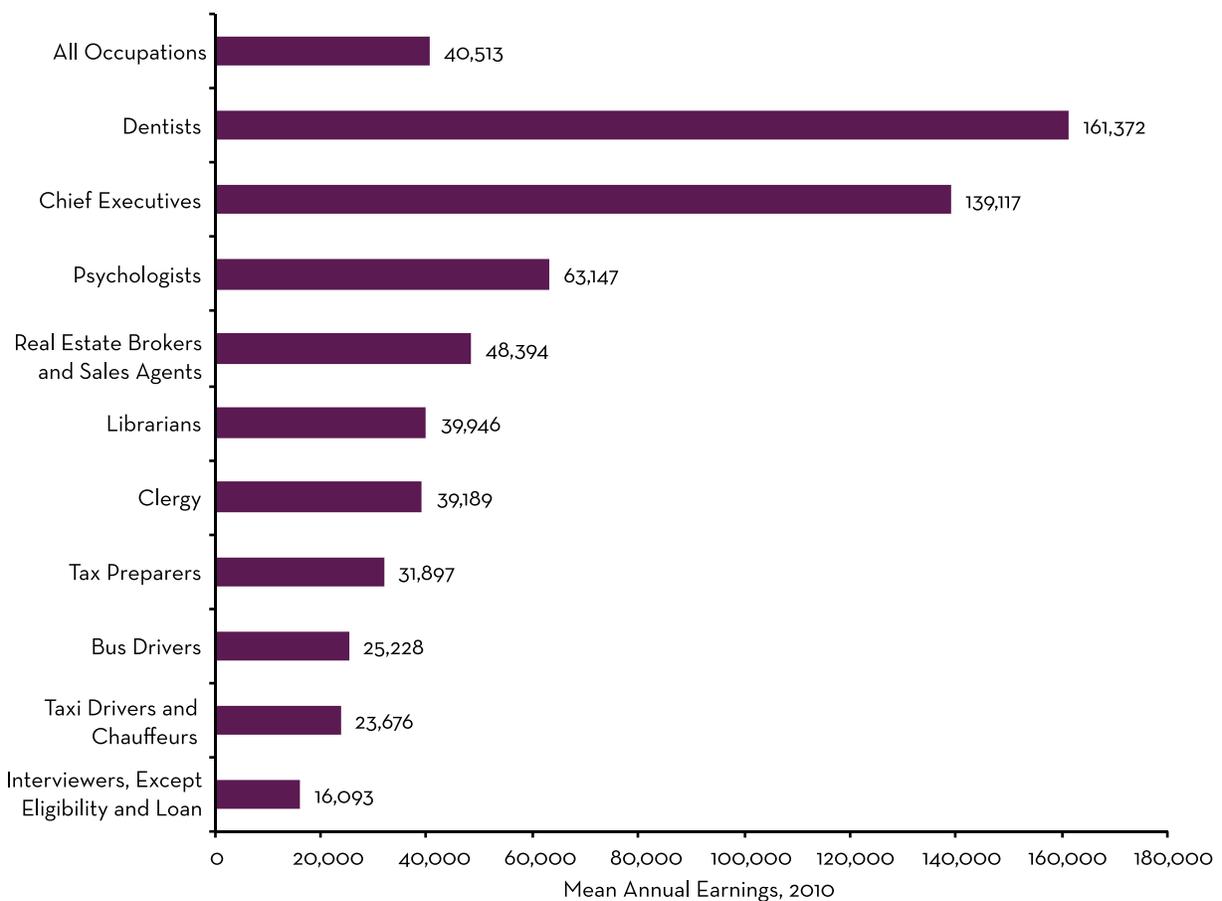
Mature workers employed in these occupations were slightly less likely to work year-round (40+ weeks). About one-third of 55+ tax preparers and interviewers were employed for 40 or more weeks during the year. Year-round employment occurred three-quarters of the time among bus drivers and taxi drivers. The remaining six occupations employed mature workers in year-round positions between 85% and 93% of the time. The intensity of work varies across the 10 mature worker intensive occupations and within each occupation, and mature workers were employed only somewhat less intensively than their younger counterparts.

Table 6 also contains a measure of the degree to which mature workers who were employed in mature worker intensive occupations mixed work and retirement income over the course of a year. Any worker aged 55 years or older who was employed in the occupation during the year prior to the 2010 ACS survey and who had received any kind of retirement income during the same year was considered to be mixing work and retirement. Findings in the last column of Table 6 reveal that mature workers worked less intensively when they combined work with retirement. For example, nearly 60% of mature workers in interviewer and tax preparer jobs (with smallest share of full-time and year-round workers) mixed work and retirement, while only one-quarter to one-third of mature workers in the psychologists, chief executives, librarians, and dentists occupations (with the largest share of full-time, year-round workers) mixed work and retirement.

Annual Earnings in the Mature Worker Intensive Occupations

A key occupational trait of central interest to workers is of course annual earnings. The annual earnings measure includes the pre-tax wages and salaries (including the salary of owners of incorporated businesses and any tips, commissions, and bonuses) before deductions on all jobs held during the year prior to the 2010 ACS survey, including the profit or loss from sole proprietor or partnership self-employment. We have provided the mean annual earnings of all workers who were employed in the top 10 mature worker intensive occupations. The mean annual earnings of workers in these occupations vary widely and are closely associated with the educational attainment and work intensity of workers employed in these occupations. The highest earnings are observed among dentists and chief executives with mean annual earnings of \$161,000 and \$139,000, respectively. At the lower end are interviewers, with earnings of just \$16,100, and the two blue-collar jobs of bus and taxi drivers, which pay workers a mean annual salary of \$24,000 to \$25,000. Between these two extremes, the mean earnings of workers ranged from \$63,100 among psychologists and \$48,400 among real estate brokers to \$39,000 among librarians and clergy and \$32,000 among tax preparers (Figure 3).

Figure 3: Mean Annual Earnings of All (16+) Workers Employed in the Mature Worker Intensive Occupations, U.S., 2010



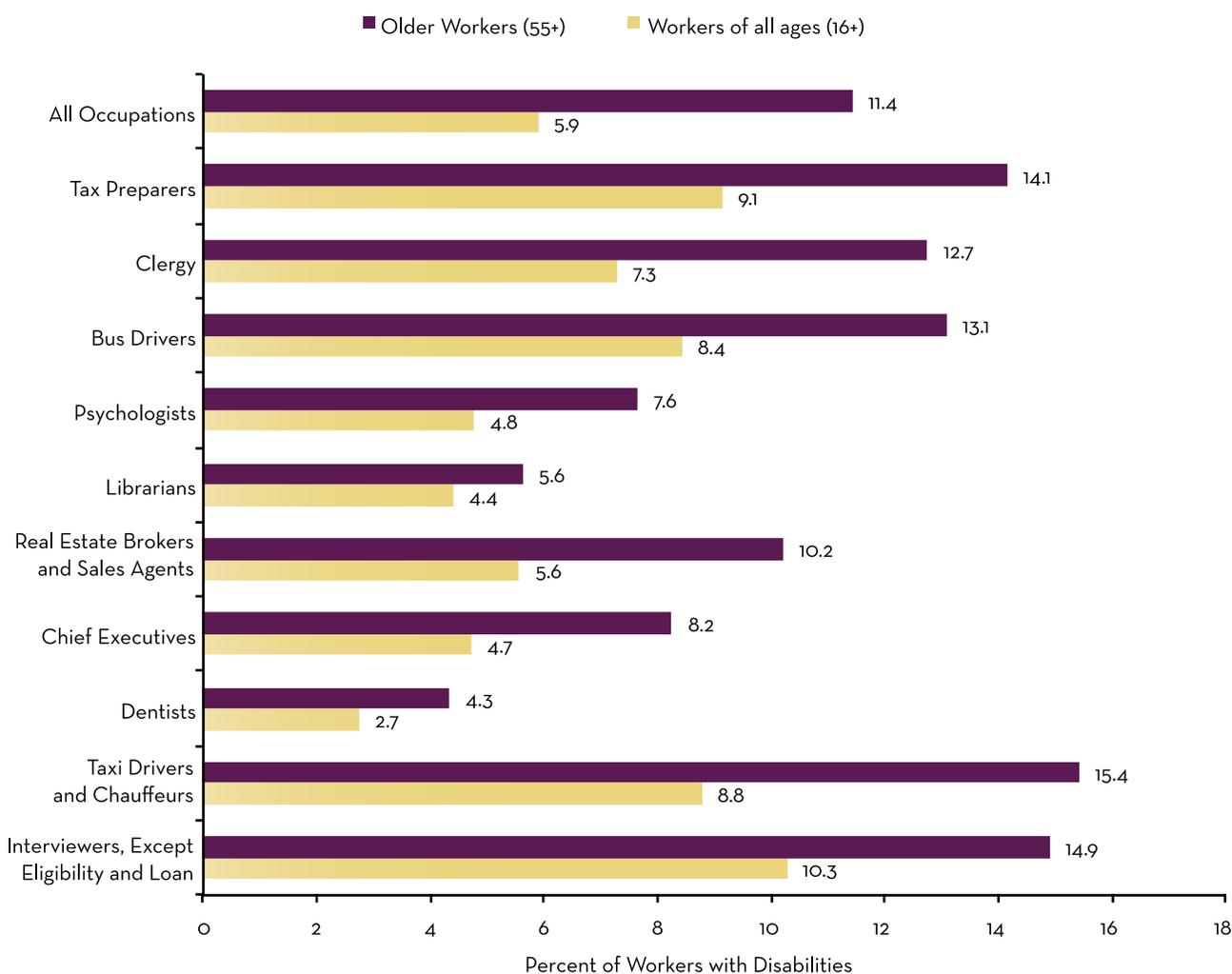
Source: "2010 American Community Survey Public Use Microdata Sample." Copyright 2012 by the U.S. Census Bureau. Tabulations by Drexel University Center for Labor Markets and Policy.

Prevalence of Disability in Mature Worker Intensive Occupations

In 2010, nearly 6% of all workers reported a disability. Disability was reported among a higher share of workers in 5 out of the top 10 mature worker intensive occupations—tax preparers (9.1%), clergy (7.3%), bus drivers (8.4%), taxi drivers (8.8%), and interviewers (10.3%). We have also presented the rate of disability among mature workers (55+) employed in the top 10 mature worker intensive occupations. As expected, mature workers were more likely to have a disability. Among all mature workers the incidence of disability was 11.4%, nearly twice as high as the rate of disability among workers of all ages (Figure 4).

Within the 10 occupations, the rate of disability among mature workers ranged from 15% among taxi drivers and chauffeurs and interviewers to only 4% among dentists. In each of the 10 occupations, disability was almost twice as prevalent among mature workers as among all workers (young and old). These findings indicate that mature workers with disabilities are able to find employment. While these individuals report various physical, cognitive, sensory, and emotional limitations on their daily activities, they have been able to find employment in occupations that allow them to capitalize on their capabilities and minimize the restrictive effects of their disability.

Figure 4: Percentage of Workers with Disabilities, U.S., 2010



Source: "2010 American Community Survey Public Use Microdata Sample." Copyright 2012 by the U.S. Census Bureau. Tabulations by Drexel University Center for Labor Markets and Policy.

Using O*NET Data to Identify Abilities, Skills, Knowledge Areas, and Work Activities of Workers in the Mature Worker Intensive Occupations

Now we turn to data from O*NET and present our analysis of the ratings by incumbent workers, occupational experts, and analysts of 52 abilities, 35 skills, 33 knowledge items, and 41 work activities in each of the 10 mature worker intensive occupations. The 10 mature worker intensive occupations found in the ACS are composed of 16 somewhat more detailed occupations included in the O*NET database. The 16 more detailed O*NET occupations map into the 10 from the Census ACS. In this section, we present the top-rated ability and top-rated skill for each of the 10 occupations and introduce the same information for the top-rated knowledge area and top-rated work activity (see online appendix for additional detail).

Recall from the methodology section above that we have used the mean importance and level rating of each descriptor item and produced a measure—the relevance score—that combines the two ratings for each descriptor item. The relevance score is the product of the importance and level rating with a maximum value of 35 (7×5) and a minimum value of zero.⁶ For example, if the mean value of the importance rating of “near vision” ability for the tax preparer occupation is 4.4 and the mean value of its level rating is 5.1, then the relevance score for the near vision (item) ability (descriptor) for the tax preparers is ($4.4 \times 5.1 =$) 22.44 (see online appendix for additional detail).

Abilities

Table 7 provides information on that specific ability that was rated as being the most relevant by our analysis of the O*NET database for each of the mature worker intensive occupations. The O*NET defines abilities as the enduring attributes of the individual that influence performance. The O*NET database contains data on ratings of 52 abilities including cognitive, psychomotor, physical, and sensory abilities (see online appendix for additional detail).

Our analysis reveals that tax preparers rated the ability of near vision at the top of a list of 52 abilities. Based on their assessment of the importance and level of near vision in the performance of their job, tax preparers give it a relevance score of 15.94; a score that was 1.24 times (or 24%) higher than the 12.85 mean relevance score of the near vision ability in the performance of work across all 862 occupations. The relevance rating of near vision by tax preparers places the occupation in the highest quartile of the distribution of relevance scores of the near vision ability across all 862 occupations. Absent near vision proficiencies, the chance of success in this field is greatly diminished for job seekers or those considering an investment in a second career.

Both bus driver occupations—transit and intercity and school or special client—have the control precision ability as the top ability necessary to perform the job, albeit with different relevance scores—14.00 among transit and intercity bus drivers and 10.99 among school bus drivers. Control precision ability is the ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions. The importance and level of the control precision ability among bus drivers exceeds that of all occupations—by 65% among school bus drivers and 110% among transit and intercity bus drivers. Both relevance scores are in the highest quartile of the relevance score distribution across all occupations. A mature worker or any worker with a limitation in the psychomotor ability of controlling and manipulating objects is not well-suited for a bus driver job.

A look further down the list of occupations finds that control precision is also the top-rated ability in the dentist occupation. However, the importance and level rating of the control precision ability in the dentist occupation is much higher than among bus drivers. The mean relevance score for the control precision ability in the dentist occupation is 24.62; 3.7 times the mean relevance score for the same ability across all occupations (6.67).

Table 7: The Highest Rated Ability by Workers in Each of the Top 10 Mature Worker Intensive Occupations, U.S., 2011

Occupations	Highest Rated Ability	Relevance Score out of 35		Col. 1/ Col. 2	Curr. Occ. Score in Quartile of All Occs.
		(Col. 1) Current Occ.	(Col. 2) All Occs.		
Tax Preparers	Near Vision	15.94	12.85	1.24	4
Clergy	Speech Clarity	25.47	11.36	2.24	4
Bus Drivers					
<i>Transit and Intercity</i>	Control Precision	14.00	6.67	2.10	4
<i>School or Special Client</i>	Control Precision	10.99	6.67	1.65	4
Psychologists					
<i>School</i>	Oral Comprehension	21.38	14.83	1.44	4
<i>Clinical</i>	Problem Sensitivity	23.09	12.88	1.79	4
<i>Counseling</i>	Oral Comprehension	21.44	14.83	1.45	4
<i>Industrial-Organizational</i>	Oral Expression	19.52	14.63	1.33	4
<i>Neuropsychologist</i>	Inductive Reasoning	26.57	11.79	2.25	4
Librarians	Oral Comprehension	18.06	14.83	1.22	4
Real Estate					
<i>Brokers</i>	Oral Comprehension	17.06	14.83	1.15	3
<i>Sales Agents</i>	Oral Expression	16.48	14.63	1.13	3
Chief Executives	Oral Expression	21.96	14.63	1.50	4
Dentists	Control Precision	24.62	6.67	3.69	4
Taxi Drivers and Chauffeurs	Response Orientation	13.58	3.51	3.86	4
Interviewers, except Eligibility and Loan	Oral Comprehension	15.52	14.83	1.05	3

Source: O*Net 16.0 Database. Copyright 2012 by the U.S. Department of Labor, Employment and Training Administration. Tabulations by Drexel University Center for Labor Markets and Policy.

The control precision ability is ranked as number one for bus drivers as well as dentists. However, the importance and level rating for this ability is considerably higher for dentists than for bus drivers. These comparisons suggest that the ability, skill, knowledge, and work activity information presented in this paper must be used in its entirety—not just the number ranking but the actual relevance score measuring the importance and level of each descriptor item.

There are five psychologist occupations presented in Table 7, and each has high cognitive ability requirements. Cognitive abilities—oral comprehension, problem sensitivity, oral expression, and inductive reasoning—received the highest importance and level rating for each psychologist occupation. Moreover, the relevance scores of the top-rated abilities in the five psychologist occupations was between 33% and 125% higher than the mean relevance score of the same cognitive ability across all 862 occupations.

Response orientation is ranked the number one ability to perform the job of a taxi driver. Response orientation is the ability to choose quickly between two or more movements in response to two or more different signals (lights, sounds, pictures). This importance and level of this ability is rated as much higher (3.9 times) for taxi drivers compared to workers in all occupations.

Skills

Using analyst ratings for each of the 862 occupations, the O*NET database provides the importance and level ratings of 35 different skills, including basic skills and cross-functional skills. The O*NET defines “basic skills” as “developed capacities that facilitate learning or the more rapid acquisition of knowledge.” Examples include reading comprehension, active listening, speaking, mathematics, and critical thinking. “Cross-functional skills” are defined as “developed capacities that facilitate performance of activities that occur across jobs.” Examples include social perceptiveness, negotiation, persuasion, operation and control, judgment, and decision making.

Key findings from our analysis of the rating of skills for the mature worker intensive occupations are presented in Table 8. Similar to the findings presented earlier on the top-rated ability, we have presented the relevance scores for the top-rated skill in each of the mature worker intensive occupations with a comparison of the importance and level rating of the same skill relative to all other occupations.

Reading comprehension is rated as the number one skill for workers in 4 out of the top 10 mature worker intensive occupations. However, the relevance scores of this skill vary widely from a high of 25.41 for the neuropsychologist occupation—a score that is twice as high as 12.55 for all occupations—to 19.4 among industrial-organizational psychologists; 16 among librarians; and 14.5 among tax preparers. Reading comprehension skill is regarded as a much more important and relevant skill to perform in the neuropsychologist occupation than it is for the remaining three occupations that also have reading comprehension rated as the number one skill.

Analyst ratings of the importance and level of the social perceptiveness skill were higher for the clergy occupation and for three out of the five psychologist occupations (school, clinical, and counseling psychologist) than their ratings of the remaining 34 skills. The relevance score for social perceptiveness for these occupations was 2 to 2.5 times higher than the relevance score of social perceptiveness for all occupations. Social perceptiveness was also ranked the number one skill for school bus drivers, albeit with a much lower relevance score than the relevance score for psychologists and clergy.

Operation and control skill is the number one skill for transit and intercity bus drivers with a relevance score of 12.11, 2.3 times higher than the average relevance score of this skill for all occupations. Speaking skill is the number one rated skill for real estate brokers, and persuasion skill is ranked the number one skill for real estate sales agents.

The top skill for each occupation provides insight into the main skill requirement of the job or occupation. But the ranking only tells part of the story. As in the abilities analysis, a more complete assessment is made by looking at the actual size of the relevance score of the skill for the occupation, which provides information on the magnitude of the importance and level at which the skill is necessary to perform the job. The comparison of the importance and level of a skill (or ability, or knowledge, or work activity) in a specific occupation with the relevance of the same skill in other occupations sheds light on the degree to which that skill is required in either occupation. With this kind of information about specific occupations,

workers, and those assisting workers in a job or career search, can better determine which crossover occupations may be a good match for existing skill sets as well as where workers may need to improve skills for a particular occupation of interest.

Table 8: The Highest Rated Skill by Workers in the Top 10 Mature Worker Intensive Occupations, U.S., 2011

Occupations	Highest Rated Skill	Relevance Score out of 35			Curr. Occ. Score in Quartile of All Occs.
		(Col. 1) Current Occ.	(Col. 2) All Occs.	Col. 1/ Col. 2	
Tax Preparers	Reading Comprehension	14.55	12.55	1.16	3
Clergy	Social Perceptiveness	23.04	9.96	2.31	4
Bus Drivers					
<i>Transit and Intercity</i>	Operation and Control	12.11	5.17	2.34	4
<i>School or Special Client</i>	Social Perceptiveness	9.73	9.96	0.98	median
Psychologists					
<i>School</i>	Social Perceptiveness	20.74	9.96	2.08	4
<i>Clinical</i>	Social Perceptiveness	24.26	9.96	2.43	4
<i>Counseling</i>	Social Perceptiveness	24.86	9.96	2.49	4
<i>Industrial-Organizational</i>	Reading Comprehension	19.40	12.55	1.55	4
<i>Neuropsychologist</i>	Reading Comprehension	25.41	12.55	2.02	4
Librarians	Reading Comprehension	16.00	12.55	1.27	4
Real Estate					
<i>Brokers</i>	Speaking	17.00	12.25	1.39	4
<i>Sales Agents</i>	Persuasion	15.99	7.89	2.03	4
Chief Executives	Judgment & Decision Making	25.29	10.50	2.41	4
Dentists	Critical Thinking	19.18	12.53	1.53	4
Taxi Drivers and Chauffeurs	Active Listening	10.50	12.69	0.83	2
Interviewers, except Eligibility and Loan	Active Listening	15.45	12.69	1.22	3

Source: O*Net 16.0 Database. Copyright 2012 by the U.S. Department of Labor, Employment and Training Administration. Tabulations by Drexel University Center for Labor Markets and Policy.

Knowledge Areas

Possessing different types of knowledge is a critical ingredient to successfully perform work in an occupation. Workers seeking employment in a variety of jobs would find it beneficial to learn about the kinds of content knowledge areas that are important in different occupations so that they can find a better match between their own knowledge and the knowledge required to work in different occupations.

The O*NET database contains data on 33 fundamental knowledge areas that may be required to work effectively in a given occupation. The 33 knowledge areas include knowledge of business and management, manufacturing and production, engineering and technology, mathematics and science, health services, education and training, law and public safety, communications, and transportation. Using a process similar to the one that we used to rank abilities and skills, we have produced the top-rated knowledge area for each of the mature worker intensive occupations presented in Table 9.

Unsurprisingly, “transportation” is the highest rated knowledge area for bus drivers and “medicine and dentistry” is the highest rated area for dentists, and the relevance scores for both of these areas far exceed the average for all occupations. “Customer and personal service” is the highest area for both clergy and real estate brokers, but its relevance score is higher for real estate brokers (22.60) than for clergy (15.73).

Table 9: The Highest Rated Knowledge by Workers in Each of the Mature Worker Intensive Occupations, U.S., 2011

Occupations	Highest Rated Skill	Relevance Score out of 35		Col. 1/ Col. 2	Curr. Occ. Score in Quartile of All Occs.
		(Col. 1) Current Occ.	(Col. 2) All Occs.		
Tax Preparers	Economics and Accounting	22.22	4.04	5.50	4
Clergy	Customer and Personal Service	15.73	13.62	1.15	3
Bus Drivers					
<i>Transit and Intercity</i>	Transportation	19.98	4.38	4.56	4
<i>School or Special Client</i>	Transportation	18.62	4.38	4.25	4
Psychologists					
<i>School</i>	Psychology	30.78	6.91	4.45	4
<i>Clinical</i>	Therapy and Counseling	34.03	3.51	9.69	4
<i>Counseling</i>	Therapy and Counseling	34.44	3.51	9.80	4
<i>Industrial-Organizational</i>	Personnel and Human Resources	30.56	5.75	5.32	4
<i>Neuropsychologist</i>	Psychology	34.85	6.91	5.04	4
Librarians	English Language	22.24	13.26	1.68	4
Real Estate					
<i>Brokers</i>	Customer and Personal Service	22.60	13.62	1.66	4
<i>Sales Agents</i>	Customer and Personal Service	24.75	13.62	1.82	4
Chief Executives	Administration and Management	27.81	9.38	2.97	4
Dentists	Medicine and Dentistry	29.45	3.44	8.56	4
Taxi Drivers and Chauffeurs	Customer and Personal Service	13.49	13.62	0.99	Near Median
Interviewers, except Eligibility and Loan	Customer and Personal Service	16.93	13.62	1.24	3

Source: O*Net 16.0 Database. Copyright 2012 by the U.S. Department of Labor, Employment and Training Administration. Tabulations by Drexel University Center for Labor Markets and Policy.

Work Activities

The fourth attribute of occupations is the work activities performed by workers on the job. A work activity is a set of similar actions that are performed together in many different jobs. For example, the top work activity for transit and intercity bus drivers, as well as taxi drivers/chauffeurs, is “operating vehicles,” both with high relevance scores. Dentists spend most of their time “making decisions and solving problems,” and clinical psychologists spend their time “assisting and caring for others” (Table 10).

Having this kind of information about a job being considered could help mature workers understand not just the skills and knowledge that are needed, but also how someone in that particular occupation spends time at work. Information about the extent to which someone in an occupation works with machines as opposed to interacting with people gets at the heart of whether someone is likely to be suited to a particular job—or whether they will like doing the work that would be required.

Table 10: The Highest Work Activity by Workers in Each of the Top 10 Mature Worker Intensive Occupations, U.S., 2011

Occupations	Top Work Activity	Relevance Score out of 35		Col. 1/ Col. 2	Curr. Occ. Score in Quartile of All Occs.
		(Col. 1) Current Occ.	(Col. 2) All Occs.		
Tax Preparers	Processing Information	20.01	14.05	1.42	4
Clergy	Establishing and Maintaining Interpersonal Relationships	28.55	16.53	1.73	4
Bus Drivers					
<i>Transit and Intercity</i>	Operating Vehicles, Mechanized Devices, or Equipment	24.87	5.60	4.44	4
<i>School or Special Client</i>	Inspecting Equipment, Structures, or Material	18.57	10.11	1.84	4
Psychologists					
<i>School</i>	Establishing and Maintaining Interpersonal Relationships	26.22	16.53	1.59	4
<i>Clinical</i>	Assisting & Caring for Others	30.72	9.01	3.41	4
<i>Counseling</i>	Assisting & Caring for Others	30.65	9.01	3.40	4
<i>Industrial-Organizational</i>	Provide Consultation & Advice to Others	30.96	9.24	3.35	4
<i>Neuropsychologist</i>	Getting Information	27.91	17.25	1.62	4
Librarians	Getting Information	22.67	17.25	1.31	4
Real Estate					
<i>Brokers</i>	Communicating with Persons Outside Organization	21.02	12.25	1.72	4
<i>Sales Agents</i>	Resolving Conflicts and Negotiating with Others	23.46	10.26	2.29	4
Chief Executives	Communicating with Persons Outside Organization	29.80	12.25	2.43	4
Dentists	Making Decisions and Solving Problems	25.20	16.60	1.52	4
Taxi Drivers and Chauffeurs	Operating Vehicles, Mechanized Devices, or Equipment	17.74	5.60	3.17	4
Interviewers, except Eligibility and Loan	Establishing and Maintaining Interpersonal Relationships	19.34	16.53	1.17	3

Source: O*Net 16.0 Database. Copyright 2012 by the U.S. Department of Labor, Employment and Training Administration. Tabulations by Drexel University Center for Labor Markets and Policy.

Conclusion

The increasing numbers of mature workers that have chosen to remain in the labor market well past the traditional retirement age, and the increasing numbers who are likely to do so, will require high quality information to support their career choices and job search. The data and analysis presented here utilize ACS and O*NET data to produce custom-designed occupational profiles for the mature worker. All of this information can give job seekers contemplating a certain field invaluable insights about occupations in which they are interested. Knowing the traits of the people that work in a particular field, the average

earnings of that occupation, as well as the way in which the work is organized can serve as a basis for workers to think through how their own work needs may or may not fit into the respective parameters or trends of an occupation.

The information that we have produced and presented in this paper and in the online appendix should be seen as illustrative and presents only one of the numerous ways in which custom-designed sets of information can be produced and made available to job seekers and those involved in the job development process. Furthermore, all of this information can be updated regularly so that job seekers and job developers can be provided the most current profile of each occupation. What we have produced here merely scratches the surface of the wide variety of ways in which the ACS and O*NET data can be used to produce custom-designed information for different groups of job seekers or career changers, as well as new labor market entrants and re-entrants.

Additional data tables are found in an online appendix at
http://www.cael.org/pdfs/TMT_Occupational_Profiles_Appendix

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Notes

- 1 Our list of the top 10 mature worker intensive occupations excludes residual occupations such as “all other management occupations” and occupations that have a sample of fewer than 500 older workers. Using these criteria, our list has excluded the following occupations from the top 10 list:

Motor Vehicle Operators, All Other	Residual
Embalmers and Funeral Attendants	Below sample threshold
Crossing Guards	Below sample threshold
Shoe and Leather Workers and Repairers	Below sample threshold
Tailors, Dressmakers, and Sewers	Below sample threshold
Farmers, Ranchers, and Other Agricultural Managers	Residual
Tool Grinders, Filers, and Sharpeners	Below sample threshold
Religious Workers, All Other	Residual
Model Makers and Patternmakers, Metal and Plastic	Below sample threshold
Appraisers and Assessors of Real Estate	Below sample threshold
Paperhangers	Below sample threshold
Fire Inspectors	Below sample threshold
Proofreaders and Copy Markers	Below sample threshold
Models, Demonstrators, and Product Promoters	Below sample threshold
Directors, Religious Activities and Education	Below sample threshold
Travel Agents	Below sample threshold
Construction and Building Inspectors	Below sample threshold
Other Education, Training, and Library Workers	Residual
Health Diagnosing and Treating Practitioners, All Other	Residual
Switchboard Operators, Including Answering Service	Below sample threshold

- 2 A copy of the 2010 American Community Survey is available at: <http://www.census.gov/acs/www/Downloads/questionnaires/2010/Quest10.pdf>
- 3 The job openings and job growth data are derived from the O*NET; and at the time of the writing of this paper, the O*NET had not yet updated the occupational profiles with the 2010–2020 employment projections.
- 4 The interviewer occupation has three categories. One is “eligibility interviewers, government programs” who determine eligibility of persons applying to receive assistance from government programs such as unemployment benefits, welfare, public housing, etc. This occupation is not among the top 10 mature worker intensive occupations. The second occupation of interviewers, except eligibility and loan, includes workers who interview persons by phone, mail, or in person to assist in completing forms, applications, or questionnaires. These workers have job titles such as admissions clerk, admissions representative, registrar, market research interviewer, patient services representative, etc. The latter occupation has a much larger concentration of older

workers (34%) and is one of the 10 mature worker intensive occupations. The former, eligibility interviewers, has a relatively smaller concentration of older workers (25%). The third interviewer occupation consists of loan interviewers who interview loan applicants to elicit information. Only 13% of these workers are 55 years or older.

- 5 Retirement income includes social security, railroad retirement, any retirement, or survivor payments received from companies; unions; federal, state, or local governments; the U.S. military; and income from annuities and IRA or KEOGH retirement plans.
- 6 An ability, skill, knowledge area, or work activity that was not relevant to the performance of the job in an occupation was assigned a level of zero in the O*NET database.

Additional CAEL Resources for Tapping Mature Talent

For Employers:

Just Add the Seasoning: A Business Case for Tapping Mature Talent - by CAEL (supported by The Atlantic Philanthropies), 2012. http://www.cael.org/pdfs/2012_TMT_Employer_Paper

For State Policy Leaders:

State Strategies to Support the Maturing Workforce: A Paper for CAEL's Tapping Mature Talent Initiative - by CAEL (supported by The Atlantic Philanthropies), 2011. http://www.cael.org/pdfs/2011_TMT_State_Policy_email

For Those Interested in the Direct Experience of Mature Workers:

Maturity in the Workplace: Stories of Workers Aged 55+ on Their Journeys to New Work and Careers - by CAEL (supported by The Atlantic Philanthropies), 2011. http://www.cael.org/pdfs/2011_TMT_Profiles_for_email

Earlier Publications from Tapping Mature Talent:

Developing the Workforce as It Matures - by CAEL and the Council on Competitiveness (supported by The Atlantic Philanthropies), 2011. This monograph describes the work of the U.S. Department of Labor's Aging Worker Initiative grantees and emerging practices at the mid-point of the project. <http://www.cael.org/pdfs/TMT-Monograph>

Regional Economic and Workforce Strategies: A Focus on the Mature Workforce New Opportunities for Meeting Skill Needs - by CAEL and the Council on Competitiveness - (supported by Atlantic Philanthropies), 2009. http://www.cael.org/pdfs/115_regionaleconomicandworkforcestrategies_final



CAEL

Linking Learning and Work

We advocate and innovate on behalf of adult learners to increase access to education and economic security. We provide adults with career guidance and help them earn college credit for what they already know. We equip colleges and universities to attract, retain, and graduate more adult students. We provide employers with smart strategies for employee development. We build workforce organizations' capacity to connect worker skills to employer demands.

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