

National Harbor Economic & Workforce Analysis

Submitted to:

Prince George's County
Economic Development
Corporation

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Submitted by:



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Executive Summary

In general, the population of Prince George's county is diverse and fairly well compensated. The population in Prince George's County is increasing but not at the same rate as the state of Maryland or the United States. Over the prior ten years, population increased 6.5%, which is slightly lower than Maryland's growth rate of 7.2% and the national rate of 8.7%. The population of the region is fairly diverse; the Black/African American population outnumbers the White population significantly, and there are also strong concentrations of Hispanic and Asian individuals. At 9.7%, Prince George's County has a lower proportion of residents living below the federal poverty line than the state of Maryland (10.0%) and the nation (15.6%). Median household income for the county is slightly lower than the state but just over \$20K more than the US.

However, the majority of the regional economy's economic strength seems to be attributable to jobs in surrounding regions such as the District of Columbia and Fairfax County, Virginia, rather than those in the National Harbor region itself. All considered, the number of National Harbor residents who out-commute is more than two times larger than the number of non-residents and residents who work within the National Harbor region. Rarely do regions have such a significant imbalance between its own population and its daily workforce. Though we cannot conclude from this that residents of the National Harbor region will readily drop their current employment in order to work closer to home, we can say that there are a significant number, especially among lower wage occupations, who could be potential targets for the new jobs that will be introduced.

Currently, the economy of National Harbor is driven by Government, Accommodation and Food Services, Retail Trade, and Health Care and Social Assistance. Many of the Government jobs that exist in this region are well paying, but generally speaking the remaining sectors do not offer high wages. The greatest unique competitive strengths of the region currently are among Accommodation and Food Services, Retail Trade, and Other Services (except Public Administration).

When the MGM Grand Casino and Hotel opens, the region will gain over 3,000 new jobs directly to the Accommodations and Entertainment sectors, not to mention additional indirect jobs that will be added to complement the services at the new establishment. Currently, there is a significantly sized workforce in the Accommodation and Food Services and Retail Trade sectors, but there are relatively few jobs in the Arts, Entertainment and Recreation sector. Places where skills overlap, such as with cooks, reception clerks, waiters and waitresses, cashiers, and retail salespersons, will not be difficult positions to staff for the MGM Grand if even marginally higher wages are offered. These workers will need to come from somewhere, so will require one of several population pools to be targeted for recruitment including: resident out-commuters, non-resident in-commuters, or a population that neither lives nor works in the region currently. The latter two scenarios could potentially put a significant burden on regional transportation and infrastructure. Further compounding the upcoming workforce challenges is that workers that carry a higher level of responsibility and require a longer duration of training, such as general and operations managers, will come into very high demand because the number of them are relatively few within the region.

Introduction

MGM National Harbor is slated to open its doors in the fourth quarter of 2016. This development will bring new opportunities to the residents of Prince George's County, but could present new strains on existing businesses as incumbent workers gain new employment opportunities. Established National Harbor employers may need to draw in more workers from outside of the immediate region. To assist the Prince George's County Economic Development Corporation (EDC) and its partners in preparing for this development, this analysis provides a profile of the existing population and workforce, and emphasizes components of the labor market that are likely to be most strained by this development. These data and analysis serve as a companion to the qualitative components of Thomas P. Miller and Associate's (TPMA) study by providing talking points and a common core of knowledge for stakeholders.

Wherever possible, this study focuses on data for the National Harbor region within Prince George's County, Maryland. The primary data sources utilized by TPMA categorize data by ZIP code, so for the purposes of this report the National Harbor region includes the following three ZIP codes: 20748, 20745, and 20744. In some cases, due to limitations of data, TPMA will focus on data for Prince George's County in totality. The quantitative data analyzed for this profile include demographic and labor force characteristics, industry sector and group analysis, occupational data for those working in the Entertainment, Retail and Accommodations industries. TPMA's project team collected and analyzed data from a variety of sources including Economic Modeling Specialists Int'l. (EMSI), U.S. Census Bureau Longitudinal Employer-Household Dynamics, and the U.S. Bureau of Labor Statistics.

Demographic & Labor Force Characteristics

Population

Due to limitations in available information for population and households, the data from this portion of the analysis are based on Prince George's County, rather than the more precise zip code region analyzed later in the analysis.

The population in Prince George's County increased from 853,310 to 913,055 over the past ten years.¹ This represents a 6.5% increase, which is slightly lower than Maryland's growth rate of 7.2% and the national rate of 8.7%. Looking forward from 2015, the County's population is projected to continue to increase by 4% over the next five years. The majority of this growth will be among the non-working adults older than age 65.

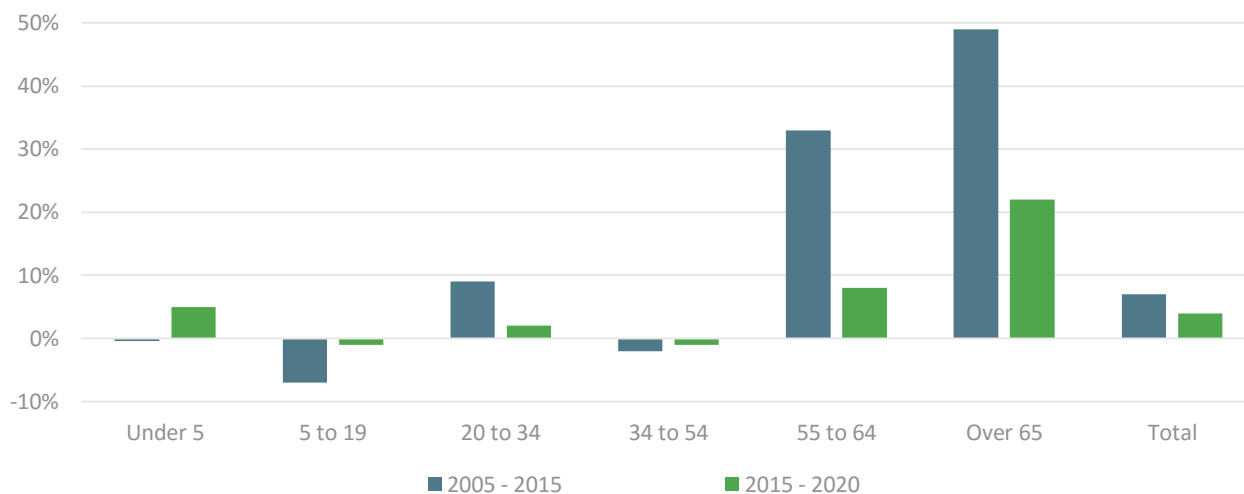
In general, the County has an aging population. Over the past ten years, the number of people 55 years and older increased significantly, while the population decreased for people ages 5 through 19 and 35 through 54. The aging population is a concern for the economy because it will impact the availability of labor over the next decade.

Age Distribution

| Age Cohort | Population | | Change ('05-'15) | | Change ('15-'20) | |
|-----------------|------------|---------|------------------|-------|------------------|-----|
| | 2005 | 2015 | # | % | # | % |
| Under 5 | 60,754 | 60,483 | (271) | - <1% | 3,194 | 5% |
| 5 to 19 | 185,591 | 172,393 | (13,198) | -7% | (1,943) | -1% |
| 20 to 34 | 191,180 | 207,649 | 16,469 | 9% | 4,429 | 2% |
| 35 to 54 | 260,339 | 254,110 | (6,229) | -2% | (3,509) | -1% |
| 55 to 64 | 84,465 | 112,547 | 28,082 | 33% | 9,557 | 8% |
| Over 65 | 70,981 | 105,873 | 34,892 | 49% | 23,567 | 22% |
| Total | 853,310 | 913,055 | 59,745 | 7% | 35,296 | 4% |

¹ EMSI Analyst, 2016.2

Percent Change in Population, by Age Group



Gender

Females comprised nearly 52% of the population in 2015 and the male to female ratio is anticipated to hold fast through 2020. Both genders are anticipated to grow by 4% over the next five years.

| Age | Population | | Pop. Change ('05-'15) | | Projected Change ('15-'20) | |
|----------------|------------|---------|-----------------------|----|----------------------------|----|
| | 2005 | 2015 | # | % | # | % |
| Females | 445,768 | 473,024 | 27,256 | 6% | 17,150 | 4% |
| Males | 407,542 | 440,031 | 32,489 | 8% | 18,146 | 4% |

Race/Ethnicity Distribution

Prince George's County is quite diverse, with a majority Black (62%) and Hispanic (17%) populations in 2015. The White population has decreased 18% from its 2005 level while the Hispanic population contributed to the most growth in this same time frame. Adding 23,372 individuals over the next five years, continued and considerable Hispanic growth is projected through 2020.²

| Race/Ethnicity | Population | | Pop. Change ('05-'15) | | Projected Change ('15-'20) | |
|-----------------|------------|---------|-----------------------|------|----------------------------|-----|
| | 2005 | 2015 | # | % | # | % |
| White | 155,100 | 126,512 | (28,588) | -18% | (6,619) | -5% |
| Black | 550,012 | 566,722 | 16,710 | 3% | 13,512 | 2% |
| Hispanic | 97,016 | 157,941 | 60,925 | 63% | 23,372 | 15% |

² The Hispanic population includes Hispanics in White, Black, Two or More Races, Asian, American Indian or Alaskan Native, Native Hawaiian, or Pacific Islander.

| Race/Ethnicity | Population | | Pop. Change ('05-'15) | | Projected Change ('15-'20) | |
|-------------------------------------|------------|--------|-----------------------|-----|----------------------------|-----|
| | 2005 | 2015 | # | % | # | % |
| Asian | 34,448 | 41,216 | 6,768 | 20% | 3,616 | 9% |
| Two or More Races | 14,040 | 18,124 | 4,084 | 29% | 1,439 | 8% |
| American Indian or Alaskan Native | 2,319 | 2,126 | (193) | -8% | (58) | -3% |
| Native Hawaiian or Pacific Islander | 376 | 415 | 39 | 10% | 32 | 8% |

Income and Poverty

At 9.7%, Prince George's County has a lower proportion of residents living below the federal poverty line than the state of Maryland (10.0%) and the nation (15.6%). Median household income for the county is slightly lower than the state but just over \$20K more than the US.³

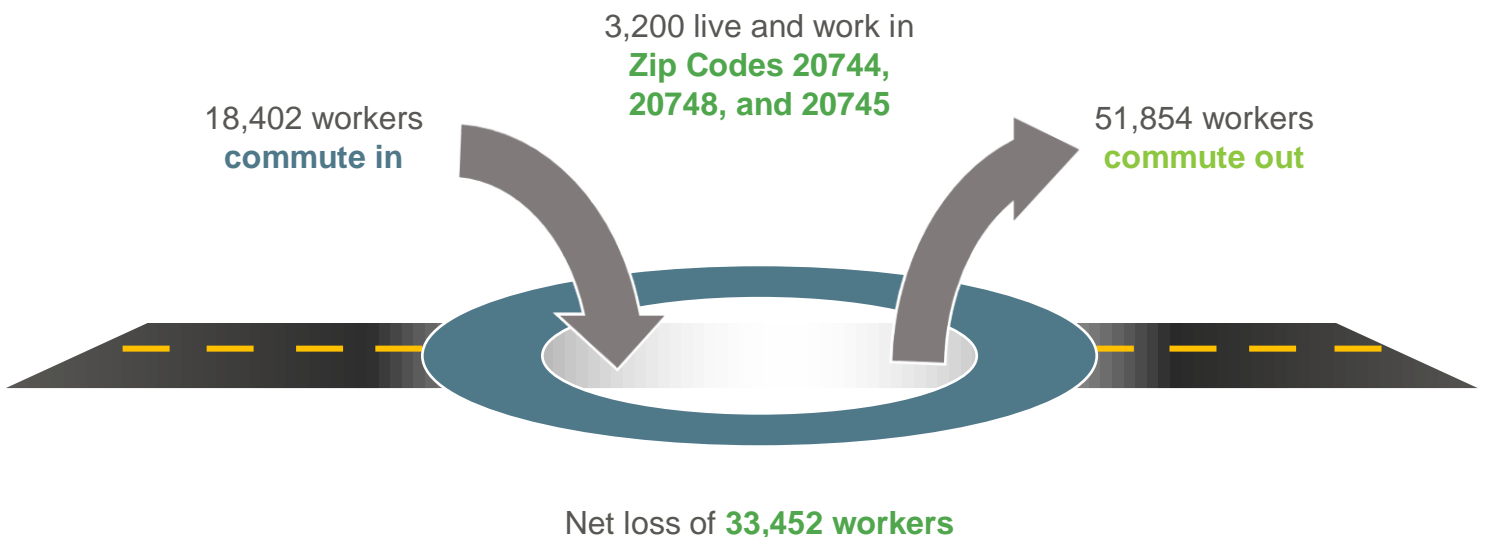
| Region | Median Household Income | Poverty Rate |
|------------------------|-------------------------|--------------|
| United States | \$53,482 | 15.6% |
| Maryland | \$74,149 | 10.0% |
| Prince George's County | \$73,856 | 9.7% |

³ US Census Bureau, 2010-2014 American Community Survey 5 Year Estimates.

Commuting Patterns

In 2014, National Harbor had more than 18,000 workers commuting into the county and more than 51,000 commuting out. A small proportion of people both lived and worked in the National Harbor area (just over 3,000).⁴ All considered, the number of National Harbor residents who out-commute is more than two times larger than the number of non-residents and residents who work within the National Harbor region. Rarely do regions have such a significant imbalance between its own population and its daily workforce. Though we cannot conclude from this that residents of the National Harbor region will readily drop their current employment in order to work closer to home, we can say that there are a significant number, especially among lower wage occupations, who could be potential targets for the new jobs that will be introduced.

Looking at these commuting patterns at the county level adds further depth to the analysis. Followed by Prince George's County itself which accounts for largest share of the regional workforce, The District of Columbia contributes the largest number of in-commuting workers (1,789, 8.3% of the regional workforce), followed by Montgomery County, MD (1,635, 7.6%), and Fairfax County, VA (1,570, 7.3%). Of those who reside in the National Harbor region, more work in the District of Columbia than in Prince George's County. To be precise, 18,970 residents work in the District of Columbia (34.5% of the region's population), and 13,832 both work and live in Prince George's County (25.1%).



⁴ U.S. Census Bureau, OnTheMap, 2014 (most recently available). <http://onthemap.ces.census.gov/>

Industry Sector Analysis

To this point, the analysis of National Harbor has focused on the socioeconomic characteristics of the region's population. Socioeconomic data are useful in understanding the economy, but to truly comprehend economic dynamics we must also analyze industry data. Industry data are classified according to the types of goods and services that are rendered by businesses. The data indicate past and projected growth trends by sector and reveal sectors in which National Harbor is well suited to be competitive.

A chart and several tables are displayed related to industry data. Each of the figures provide data that descend in order according to 2015 employment. Other data displayed include: employment growth over the past five years, forecasted growth over the next five years, growth due to competitive effect (CE), and location quotient (LQ).

The competitive effect helps to determine the amount of job growth that occurred due to the area's competitive advantages as compared to the overall national growth and the national growth rate for each sector. In other words, a positive competitive effect indicates the area experienced more growth than was expected.

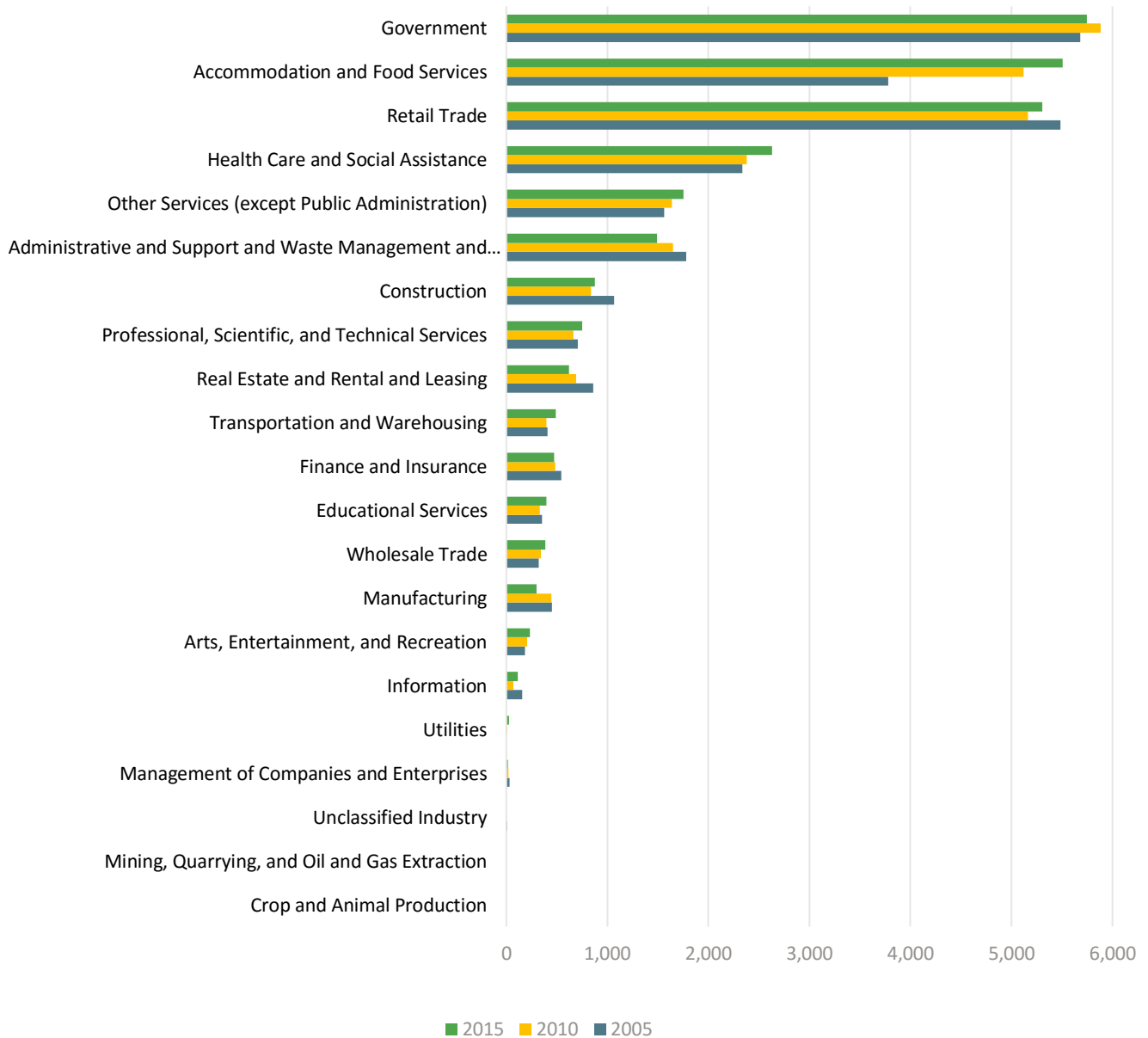
Location Quotient (LQ) measures how concentrated or specialized an industry is in a particular area and helps to demonstrate what makes an area's economy unique. A number greater than 1.25 indicates that the specific sector is considerably more concentrated than the national average. It also typically indicates that local demand for the products and/or services produced by that industry have been met and the industry is likely exporting products and/or services outside of the area. In other words, these may be industries that are bringing money into the area, rather than circulating money already present within the area.⁵

⁵ Data from this section are from Economic Modeling Specialists International (EMSI), 2016.2 Class of Worker.

Industry Sector Analysis

In 2015, there were 27,119 employees in the three-zip code area. The broad industry sectors in National Harbor employing the most workers are Government (5,746, or 21.2% of all employment), Accommodation and Food Services (5,506, 20.3%), Retail Trade (5,305, 19.6%) and Health Care and Social Assistance (2,628, 9.7%).⁶ Accommodation and Food Services experienced the most growth over the previous decade, adding 1,723 jobs since 2005.

National Harbor Industry Mix



⁶ These industries are by 2-digit NAICS code. EMSI Analyst 2016.

Administrative and Support and Waste Management and Remediation Services experienced the greatest degree of job loss in National Harbor over the past five years (158 jobs lost). As signified by the negative competitive effect, all of that job loss is due to reasons that are unique to National Harbor; the industry performed much better at the national level. Government and Manufacturing also lost a significant number of jobs in the area.

On the positive side, Accommodation and Food Services increased by 388 jobs (8% growth from 2010) while Health Care and Social Assistance added 250 jobs in this time (11% growth). In terms of location quotient, Accommodation and Food Services, Retail Trade, and Real Estate and Rental and Leasing are three sectors with a considerable local concentration.

| Industry | 2010 Jobs | 2015 Jobs | Change 2010 -2015 # | % | Location Quotient | Comp. Effect |
|--|-----------|-----------|---------------------|---------|-------------------|--------------|
| Government | 5,885 | 5,746 | (139) | -2% | 1.36 | (45) |
| Accommodation and Food Services | 5,118 | 5,506 | 388 | 8% | 2.42 | (388) |
| Retail Trade | 5,167 | 5,305 | 138 | 3% | 1.88 | (223) |
| Health Care and Social Assistance | 2,378 | 2,628 | 250 | 11% | 0.78 | (28) |
| Other Services (except Public Administration) | 1,637 | 1,756 | 119 | 7% | 1.35 | 106 |
| Administrative and Support and Waste Management and Remediation Services | 1,648 | 1,490 | (158) | -10% | 0.88 | (424) |
| Construction | 839 | 877 | 38 | 5% | 0.61 | (41) |
| Professional, Scientific, and Technical Services | 664 | 752 | 88 | 13% | 0.44 | (1) |
| Real Estate and Rental and Leasing | 693 | 618 | (75) | -11% | 1.39 | (117) |
| Transportation and Warehousing | 395 | 489 | 94 | 24% | 0.54 | 39 |
| Finance and Insurance | 485 | 472 | (13) | -3% | 0.45 | (30) |
| Educational Services | 334 | 399 | 65 | 19% | 0.58 | 34 |
| Wholesale Trade | 344 | 388 | 44 | 13% | 0.37 | 21 |
| Manufacturing | 445 | 299 | (146) | -33% | 0.14 | (177) |
| Arts, Entertainment, and Recreation | 206 | 235 | 29 | 14% | 0.52 | 6 |
| Information | 69 | 114 | 45 | 65% | 0.23 | 43 |
| Utilities | 12 | 24 | 12 | 100% | 0.24 | 12 |
| Management of Companies and Enterprises | 19 | 16 | (3) | -16% | 0.04 | (6) |
| Mining, Quarrying, and Oil and Gas Extraction | <10 | 0 | No Data | No Data | 0.00 | (2) |
| Crop and Animal Production | <10 | <10 | No Data | No Data | 0.01 | 0 |
| Unclassified Industry | 0 | 0 | 0 | 0% | 0.00 | 0 |
| Total | 26,343 | 27,119 | 776 | 3% | | |

Highlights of Key Industries

Looking at data by 2-digit NAICS is a good way to understand high-level trends; however, 4-digit NAICS industry data provide information about the more specific drivers of growth. The following table shows the 20 largest industries in terms of 2015 employment in the three-zip codes of 20748, 20745, and 20744.⁷

Of the 20 largest industries, Federal Government (Civilian) had the highest number of jobs, followed by Restaurants and Other Eating Places. Restaurants and Other Eating Places also had the largest net job growth between 2010 and 2015, with 410 jobs, while Traveler Accommodation is predicted to gain the most jobs (417) between 2015 and 2020. Industries that added at least 100 new jobs over the past five years and which are forecasted to continue positive growth for the next five years include: Restaurants and Other Eating Places and Outpatient Care Centers.

| Industry | 2015 Jobs | Job Change 2010-2015 | | Job Change 2015-2020 | | Average Earnings 2015 | Wages |
|--|-----------|----------------------|------|----------------------|------|-----------------------|----------|
| | | # | % | # | % | | |
| Federal Government, Civilian | 4,995 | (181) | -3% | 18 | 0% | \$141,031 | \$99,391 |
| Restaurants and Other Eating Places | 2,755 | 410 | 17% | 325 | 12% | \$19,403 | \$16,662 |
| Traveler Accommodation | 2,470 | (23) | -1% | 417 | 17% | \$43,099 | \$37,252 |
| Grocery Stores | 1,299 | 37 | 3% | 74 | 6% | \$33,851 | \$27,444 |
| Services to Buildings and Dwellings | 872 | (64) | -7% | (22) | -3% | \$30,909 | \$26,616 |
| Federal Government, Military | 751 | 42 | 6% | 7 | 1% | \$56,455 | \$56,455 |
| Automobile Dealers | 635 | 112 | 21% | (34) | -5% | \$65,670 | \$55,804 |
| Religious Organizations | 542 | (1) | 0% | 44 | 8% | \$25,913 | \$25,812 |
| Outpatient Care Centers | 494 | 181 | 58% | 81 | 16% | \$80,715 | \$67,007 |
| Child Day Care Services | 486 | (23) | -5% | (21) | -4% | \$19,832 | \$17,903 |
| Offices of Physicians | 470 | 38 | 9% | 8 | 2% | \$101,832 | \$85,439 |
| Clothing Stores | 462 | (59) | -11% | (19) | -4% | \$19,254 | \$15,916 |
| Investigation and Security Services | 416 | (93) | -18% | (133) | -32% | \$28,675 | \$24,545 |
| General Medical and Surgical Hospitals | 398 | (3) | -1% | 19 | 5% | \$73,397 | \$60,004 |
| Health and Personal Care Stores | 383 | 19 | 5% | 36 | 9% | \$34,227 | \$28,350 |
| Department Stores | 335 | (13) | -4% | (23) | -7% | \$22,439 | \$18,030 |
| Automotive Repair and Maintenance | 326 | 41 | 14% | 44 | 13% | \$37,223 | \$32,548 |
| Building Equipment Contractors | 300 | 6 | 2% | 0 | 0% | \$82,885 | \$70,202 |
| Personal Care Services | 297 | 34 | 13% | 16 | 5% | \$24,021 | \$22,400 |
| Automotive Parts, Accessories, and Tire Stores | 278 | 10 | 4% | 16 | 6% | \$34,374 | \$29,188 |

⁷ These industries are by 4-digit NAICS code.

Workforce Assessment

Occupational Overview

Industries are the business units that generally drive local economic growth because they create goods and services that bring fresh dollars in from outside the region, or in the case of businesses that primarily serve a local population, retain dollars in the region that otherwise may have been spent elsewhere. Although it's important to understand these industry assets, it is also important to understand the specific occupational roles required to keep local businesses flourishing. The following occupational analysis summarizes the most critical occupations within the National Harbor area, from an overarching economic perspective to more specific, key industries of Arts, Entertainment, and Recreation; Accommodation and Food Services; and Retail Trade.

Occupational Mix

National Harbor's top occupations include Sales and Related Occupations and Office and Administrative Support Occupations, each comprising approximately 14% of total jobs in 2015.⁸ The median hourly earnings for all occupations ranges from \$11.18 for Food Preparation and Serving Related Workers to \$55.23 for Management Occupations.

As noted in the industry analysis section, location quotient scores can indicate fields where the region has a strong competitive advantage over other areas in the United States. Occupational groups where National Harbor has a strong concentration of workers (an LQ above 1.25) include Life, Physical, and Social Science; Military; Building and Grounds Cleaning and Maintenance; and Food Preparation and Serving Related Occupations.

| Occupation | 2015 Employment | % of 2015 Total | Median Hourly Earnings | Location Quotient |
|---|-----------------|-----------------|------------------------|-------------------|
| Sales and Related Occupations | 3,845 | 14% | \$14.55 | 1.40 |
| Office and Administrative Support Occupations | 3,679 | 14% | \$19.77 | 0.90 |
| Food Preparation and Serving Related Occupations | 3,310 | 12% | \$11.18 | 1.48 |
| Building and Grounds Cleaning and Maintenance Occupations | 1,826 | 7% | \$12.03 | 1.76 |
| Business and Financial Operations Occupations | 1,469 | 5% | \$40.20 | 1.10 |
| Management Occupations | 1,458 | 5% | \$55.23 | 1.00 |
| Transportation and Material Moving Occupations | 1,400 | 5% | \$16.08 | 0.80 |
| Healthcare Practitioners and Technical Occupations | 1,288 | 5% | \$44.21 | 0.89 |
| Installation, Maintenance, and Repair | 1,247 | 5% | \$24.16 | 1.21 |
| Personal Care and Service Occupations | 1,098 | 4% | \$11.53 | 1.01 |
| Computer and Mathematical Occupations | 946 | 3% | \$51.33 | 1.29 |

⁸ These occupations are by 2 digit SOC code (Standard Occupation Classification System).

| Occupation | 2015 Employment | % of 2015 Total | Median Hourly Earnings | Location Quotient |
|--|-----------------|-----------------|------------------------|-------------------|
| Military Occupations | 751 | 3% | \$16.11 | 2.06 |
| Construction and Extraction Occupations | 677 | 2% | \$20.06 | 0.56 |
| Life, Physical, and Social Science Occupations | 677 | 2% | \$47.02 | 3.07 |
| Protective Service Occupations | 650 | 2% | \$20.68 | 1.07 |
| Production Occupations | 561 | 2% | \$17.59 | 0.34 |
| Education, Training, and Library Occupations | 546 | 2% | \$23.16 | 0.35 |
| Healthcare Support Occupations | 495 | 2% | \$16.02 | 0.66 |
| Architecture and Engineering Occupations | 491 | 2% | \$54.08 | 1.10 |
| Arts, Design, Entertainment, Sports, and Media Occupations | 287 | 1% | \$26.47 | 0.61 |
| Community and Social Service Occupations | 244 | 1% | \$23.77 | 0.56 |
| Legal Occupations | 163 | 1% | \$50.92 | 0.72 |
| Farming, Fishing, and Forestry Occupations | 11 | 0% | \$14.41 | 0.06 |

Detailed Analysis of Entertainment, Accommodations, and Retail Sectors

The following section provides a more in-depth look at specific sectors of principal interest to Prince George's Economic Development Corporation and National Harbor, namely: Arts, Entertainment, and Recreation; Accommodations and Food Services; and Retail Trade. For each of these sectors, the top employing industries are first detailed by 4-digit NAICS code, followed by staffing patterns at the 4-digit SOC level. Staffing patterns help to clarify the share of an industry staffed by a particular occupation. In addition to five year projections into the past and future, the competitive effect, location quotient, and average earnings are also reported.

Arts, Entertainment, and Recreation Largest Employing Industries in National Harbor (4-Digit NAICS)

This sector is the smallest of the three, with just 235 total employees in 2015. The vast majority (233) of these Arts, Entertainment, and Recreation employees worked in Other Amusement and Recreation Industries. Most 6-digit NAICS industries have no employment in 2015 and hence have not been displayed on this list. When the MGM National Harbor is up and running, Prince George's County EDC should expect to see considerable employment increases in this sector.

| Arts, Entertainment and Recreation Industries | 2015 Jobs | '10-'15 Job Change | CE '10-'15 | '15-'20 Job Change | CE '15-'20 | 2015 LQ | Average Earnings |
|---|-----------|--------------------|------------|--------------------|------------|---------|------------------|
| Other Amusement and Recreation Industries | 233 | 30 | 5 | 32 | 10 | 1.02 | \$19,896 |
| Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures | <10 | No Data | 1 | No Data | 0 | 0.45 | No Data |

Arts, Entertainment, and Recreation Top 20 Largest Employing Occupations in National Harbor (4-Digit SOC)

To gain a better understanding of the workers employed by this sector, the following table details the top 20 occupations in the Arts, Entertainment, and Recreation industry. Median hourly earnings for these occupations range from \$8.76 at the low end for Childcare Workers, to \$65.54 at the high end for General and Operations Managers. Albeit modest, nearly all occupations are anticipated to grow over the next five years. Professions with the most projected growth include Recreation and Fitness Workers as well as Miscellaneous Entertainment Attendants and Related Workers.

| Arts, Entertainment and Recreation Occupations | 2015 Employment in Sector | Job Change 2010 - 2015 | | Proj. Job Change 2015 - 2020 | | Annual Job Openings | Median Hourly Earnings |
|--|---------------------------|------------------------|-----|------------------------------|-----|---------------------|------------------------|
| | | # | % | # | % | | |
| Recreation and Fitness Workers | 37 | 4 | 12% | 7 | 19% | 4 | \$18.72 |
| Miscellaneous Entertainment Attendants and Related Workers | 29 | 4 | 16% | 4 | 14% | 4 | \$10.29 |
| Grounds Maintenance Workers | 12 | 1 | 9% | 1 | 8% | 10 | \$12.02 |
| Receptionists and Information Clerks | 11 | 2 | 22% | 1 | 9% | 6 | \$15.59 |

| Arts, Entertainment and Recreation Occupations | 2015 Employment in Sector | Job Change 2010 - 2015 | | Proj. Job Change 2015 - 2020 | | Annual Job Openings | Median Hourly Earnings |
|--|---------------------------|------------------------|-----|------------------------------|-----|---------------------|------------------------|
| | | # | % | # | % | | |
| Childcare Workers | <10 | 2 | 25% | 2 | 20% | 12 | \$8.76 |
| Waiters and Waitresses | <10 | 1 | 13% | 1 | 11% | 43 | \$10.30 |
| Athletes, Coaches, Umpires, and Related Workers | <10 | 1 | 14% | 1 | 13% | No Data | \$16.12 |
| General and Operations Managers | <10 | 1 | 17% | 1 | 14% | 14 | \$65.54 |
| Building Cleaning Workers | <10 | 1 | 17% | 1 | 14% | 63 | \$11.32 |
| Customer Service Representatives | <10 | 1 | 20% | 1 | 17% | 10 | \$18.69 |
| Cashiers | <10 | 0 | 0% | 1 | 17% | 65 | \$10.28 |
| First-Line Supervisors of Personal Service Workers | <10 | 1 | 20% | 1 | 17% | No Data | \$17.32 |
| Miscellaneous Protective Service Workers | <10 | 1 | 20% | 1 | 17% | No Data | \$13.43 |
| Maintenance and Repair Workers, General | <10 | 0 | 0% | 1 | 20% | 14 | \$21.17 |
| Miscellaneous Sales Representatives, Services | <10 | 1 | 25% | 0 | 0% | 5 | \$32.24 |
| Counter and Rental Clerks and Parts Salespersons | <10 | 0 | 0% | 1 | 25% | 6 | \$15.01 |
| Cooks | <10 | 0 | 0% | 1 | 25% | 25 | \$11.49 |
| Bartenders | <10 | 0 | 0% | 1 | 33% | 7 | \$13.45 |
| Fast Food and Counter Workers | <10 | 0 | 0% | 1 | 33% | 67 | \$8.93 |
| Secretaries and Administrative Assistants | <10 | 1 | 50% | 0 | 0% | 9 | \$21.59 |

Accommodation and Food Services Top Employing Industries in National Harbor (4-Digit NAICS)

The largest employing sub-sectors in National Harbor’s Accommodation and Food Services industry include Restaurants and Other Eating Places (with 2,755 jobs in 2015) and Traveler Accommodation, at 2,470 jobs. Traveler Accommodation has a particularly high location quotient (7.66) and has the highest average earning with just over \$43K annually. Despite job losses in recent years, Traveler Accommodation is predicted to grow the most over the next five years, adding 417 new jobs. Special Food Services and Restaurants and Other Eating Places also have LQs greater than 1.25.

| Accommodation and Food Services Industries | 2015 Employment | '10-'15 Change | CE '10-'15 | '15-'20 Change | CE '15-'20 | 2015 LQ | Average Earnings |
|--|-----------------|----------------|------------|----------------|------------|---------|------------------|
| Restaurants and Other Eating Places | 2,755 | 410 | 17 | 325 | 58 | 1.58 | \$19,403 |
| Traveler Accommodation | 2,470 | (23) | (239) | 417 | 307 | 7.66 | \$43,099 |
| Special Food Services | 207 | 1 | (32) | (5) | (13) | 1.56 | \$32,562 |
| Drinking Places (Alcoholic Beverages) | 75 | 0 | (5) | (10) | (12) | 1.13 | \$20,800 |
| Rooming and Boarding Houses | 0 | 0 | 0 | 0 | 0 | 0.00 | \$0 |
| RV (Recreational Vehicle) Parks and Recreational Camps | 0 | 0 | 0 | 0 | 0 | 0.00 | \$0 |

Accommodation and Food Services Top 20 Largest Employing Occupations in National Harbor (4-Digit SOC)

In 2015, a large portion the top 20 occupations in the Accommodation and Food Services industry included: Fast Food and Counter Workers (851 jobs), Building Cleaning Workers (768), Waiters and Waitresses (611), and Cooks (532). Building Cleaning Workers and Fast Food and Counter Workers are anticipated to continue expanding, adding another 131 and 146 new jobs, respectively.

All of the top 20 occupations employed by the Accommodation and Food Services sector are expected to grow over the next five years, many at double-digit rates. With the exception of First-Line Supervisors of Office and Administrative Support Workers and General and Operations Managers, median hourly earnings are below \$23/hour.

| Accommodation and Food Services Occupations | 2015 Employment in Sector | Job Change 2010 - 2015 | | Proj. Job Change 2015 - 2020 | | Annual Job Openings | Median Hourly Earnings |
|---|---------------------------|------------------------|-----|------------------------------|-----|---------------------|------------------------|
| | | # | % | # | % | | |
| Fast Food and Counter Workers | 851 | 136 | 19% | 146 | 17% | 67 | \$8.93 |
| Building Cleaning Workers | 768 | (1) | 0% | 131 | 17% | 63 | \$11.32 |
| Waiters and Waitresses | 611 | 43 | 8% | 56 | 9% | 43 | \$10.30 |
| Cooks | 532 | 51 | 11% | 43 | 8% | 25 | \$11.49 |
| Hotel, Motel, and Resort Desk Clerks | 335 | 0 | 0% | 61 | 18% | 33 | \$13.45 |

| Accommodation and Food Services Occupations | 2015 Employment in Sector | Job Change 2010 - 2015 | | Proj. Job Change 2015 - 2020 | | Annual Job Openings | Median Hourly Earnings |
|---|---------------------------|------------------------|-----|------------------------------|-----|---------------------|------------------------|
| | | # | % | # | % | | |
| Supervisors of Food Preparation and Serving Workers | 334 | 47 | 16% | 45 | 13% | 20 | \$17.94 |
| Cashiers | 183 | 26 | 17% | 16 | 9% | 65 | \$10.28 |
| Food Preparation Workers | 166 | 22 | 15% | 19 | 11% | 12 | \$10.59 |
| Driver/Sales Workers and Truck Drivers | 147 | 28 | 24% | 16 | 11% | 16 | \$16.08 |
| Dishwashers | 146 | 7 | 5% | 9 | 6% | 9 | \$10.41 |
| Maintenance and Repair Workers, General | 145 | 1 | 1% | 23 | 16% | 14 | \$21.17 |
| Bartenders | 127 | 8 | 7% | 11 | 9% | 7 | \$13.45 |
| Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop | 107 | 8 | 8% | 8 | 7% | 10 | \$10.22 |
| Dining Room and Cafeteria Attendants and Bartender Helpers | 87 | 4 | 5% | 13 | 15% | 7 | \$9.97 |
| Food Servers, Non-restaurant | 83 | (1) | -1% | 7 | 8% | 5 | \$12.60 |
| Food Service Managers | 66 | 4 | 6% | 6 | 9% | 3 | \$22.69 |
| General and Operations Managers | 66 | 5 | 8% | 8 | 12% | 14 | \$65.54 |
| Security Guards and Gaming Surveillance Officers | 59 | 1 | 2% | 6 | 10% | 6 | \$15.81 |
| First-Line Supervisors of Office and Administrative Support Workers | 58 | 0 | 0% | 9 | 16% | 8 | \$30.66 |
| Laundry and Dry-Cleaning Workers | 55 | (1) | -2% | 10 | 18% | 4 | \$11.36 |

Retail Trade Top Largest Employing Industries in National Harbor (4-Digit NAICS)

The majority (75%) of the top twenty largest Retail Trade industries have a location quotient greater than 1.25, indicating this the sector is uniquely concentrated in the region. Collectively employing just over 700 workers, Florists, Shoe Stores, Used Merchandise Stores, as well as Beer, Wine, and Liquor Stores each have location quotients above 4. The largest employing sub-sectors include Grocery Stores (with 1,299 jobs in 2015), Automobile Dealers (635), and Clothing Stores (462). Automobile Dealers have the highest average earnings at \$65,670 annually, while Clothing Stores have the lowest at \$19,254.

Albeit slight, several Retail Trade industries are projected to decline over the next five years; negative competitive effects (CE '15-'20) point toward local dynamics more so than national trends.

| Retail Trade Industries | 2015 Jobs | '10-'15 Change | CE '10-'15 | '15-'20 Change | CE '15-'20 | 2015 LQ | Average Earnings |
|--|-----------|----------------|------------|----------------|------------|---------|------------------|
| Grocery Stores | 1,299 | 37 | (66) | 74 | 27 | 2.74 | \$33,851 |
| Automobile Dealers | 635 | 112 | 7 | (34) | (78) | 2.87 | \$65,670 |
| Clothing Stores | 462 | (59) | (34) | (19) | (29) | 2.52 | \$19,254 |
| Health and Personal Care Stores | 383 | 19 | 1 | 36 | 18 | 2.08 | \$34,227 |
| Department Stores | 335 | (13) | 21 | (23) | 9 | 1.42 | \$22,439 |
| Automotive Parts, Accessories, and Tire Stores | 278 | 10 | (17) | 16 | (1) | 2.85 | \$34,374 |
| Used Merchandise Stores | 244 | 26 | (29) | 22 | (18) | 6.56 | \$24,196 |
| Other General Merchandise Stores | 241 | 17 | (32) | 30 | (15) | 0.76 | \$19,879 |
| Beer, Wine, and Liquor Stores | 224 | (17) | (38) | 2 | (15) | 8.17 | \$39,973 |
| Gasoline Stations | 192 | 19 | 3 | (3) | (9) | 1.22 | \$26,000 |
| Shoe Stores | 185 | 22 | 1 | 22 | 3 | 5.08 | \$21,254 |
| Building Material and Supplies Dealers | 179 | 13 | 2 | (2) | (10) | 0.93 | \$36,040 |
| Electronics and Appliance Stores | 108 | 16 | 20 | (6) | (4) | 1.17 | \$36,705 |
| Office Supplies, Stationery, and Gift Stores | 74 | (28) | (18) | (16) | (5) | 1.41 | \$30,594 |
| Specialty Food Stores | 68 | (35) | (41) | (21) | (21) | 1.57 | \$22,154 |
| Florists | 65 | 16 | 21 | 20 | 31 | 4.78 | \$31,775 |
| Other Miscellaneous Store Retailers | 64 | 13 | 6 | (1) | (5) | 1.00 | \$22,740 |
| Home Furnishings Stores | 58 | (16) | (23) | (15) | (16) | 1.25 | \$41,858 |
| Jewelry, Luggage, and Leather Goods Stores | 56 | 2 | 2 | (5) | (2) | 1.99 | \$22,313 |
| Other Motor Vehicle Dealers | 44 | (10) | (16) | (2) | (4) | 1.68 | \$48,055 |

Retail Trade Top 20 Largest Employing Occupations in National Harbor (4-Digit SOC)

Drilling a bit deeper than industry sub-sectors, the following table displays the top 20 occupations staffing the Retail Trade industry. Retail trade contains a wide variety of individual occupational categories. The largest occupations are Retail Salespersons (1,161) and Cashiers (1,142). Median hourly earnings for these occupations range from \$8.93 at the low end for Fast Food Counter Workers to \$65.54 at the high end for General and Operations Managers. Two of the lowest hourly earnings, Cashiers and Fast Food and Counter Workers, unsurprisingly also have the most annual job openings.

On net, there is very little job gain or loss expected for these occupations over the next five years – with the most job growth in Retail Salespersons (16 new jobs) and Stock Clerks and Order Fillers (15).

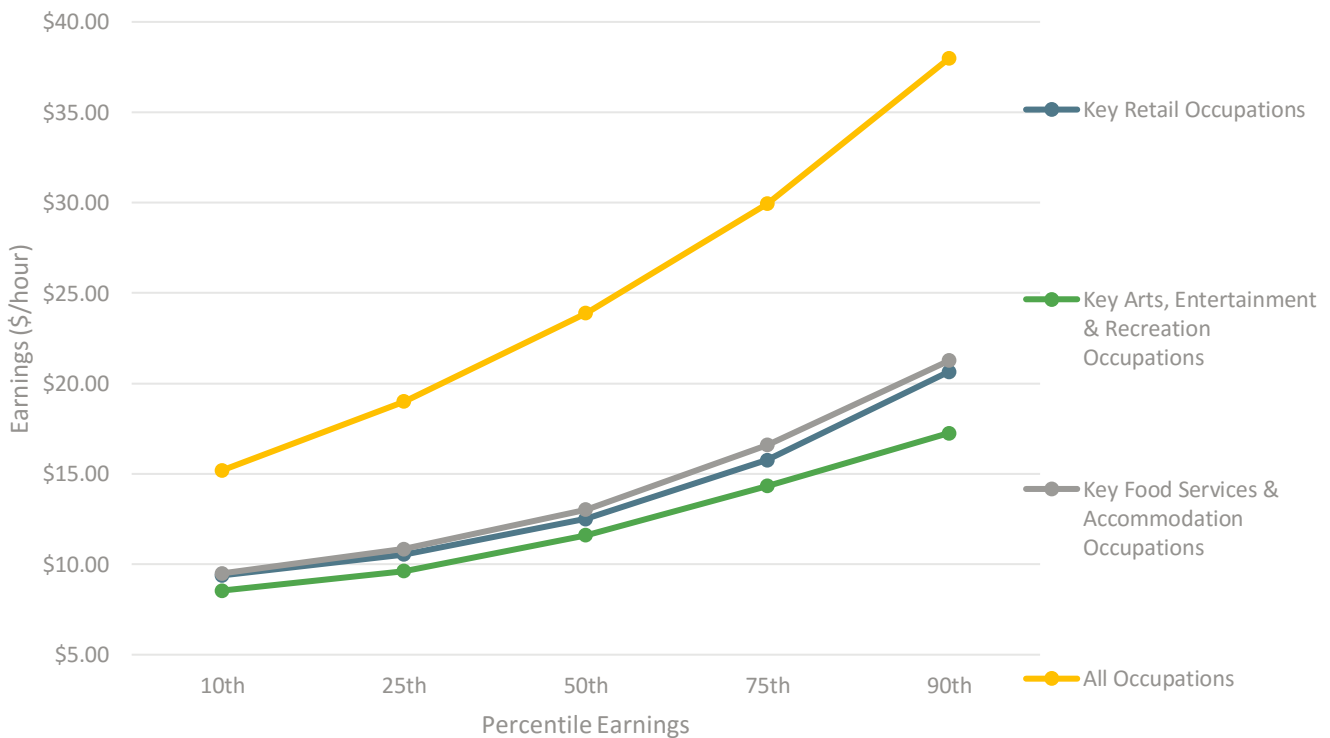
| Retail Trade Occupations | 2015 Employment in Sector ment | Proj. Job Change 2010-2015 | | Proj. Job Change 2015-2020 | | Annual Job Openings | Median Hourly Earnings |
|---|--------------------------------|----------------------------|-----|----------------------------|-----|---------------------|------------------------|
| | | # | % | # | % | | |
| Retail Salespersons | 1,161 | 1 | 0% | 16 | 1% | 49 | \$11.06 |
| Cashiers | 1,142 | 10 | 1% | 11 | 1% | 65 | \$10.28 |
| First-Line Supervisors of Sales Workers | 515 | (15) | -3% | (9) | -2% | 15 | \$21.13 |
| Stock Clerks and Order Fillers | 443 | 6 | 1% | 15 | 3% | 20 | \$12.19 |
| Automotive Technicians and Repairers | 214 | 32 | 18% | (9) | -4% | 13 | \$23.52 |
| Laborers and Material Movers, Hand | 188 | 8 | 4% | 1 | 1% | 21 | \$11.68 |
| Driver/Sales Workers and Truck Drivers | 121 | 14 | 13% | 7 | 6% | 16 | \$16.08 |
| Counter and Rental Clerks and Parts Salespersons | 117 | 10 | 9% | 1 | 1% | 6 | \$15.01 |
| Customer Service Representatives | 107 | 8 | 8% | 3 | 3% | 10 | \$18.69 |
| General and Operations Managers | 102 | 6 | 6% | 1 | 1% | 14 | \$65.54 |
| Health Practitioner Support Technologists and Technicians | 77 | 5 | 7% | 4 | 5% | 3 | \$18.40 |
| First-Line Supervisors of Office and Administrative Support Workers | 74 | 5 | 7% | 2 | 3% | 8 | \$30.66 |
| Food Preparation Workers | 61 | 2 | 3% | 4 | 7% | 12 | \$10.59 |
| Pharmacists | 50 | 1 | 2% | 0 | 0% | 2 | \$58.44 |
| Fast Food and Counter Workers | 49 | 0 | 0% | 4 | 8% | 67 | \$8.93 |
| Butchers and Other Meat, Poultry, and Fish Processing Workers | 49 | (1) | -2% | 2 | 4% | No Data | \$18.41 |

| Retail Trade Occupations | 2015 Employment in Sector ment | Proj. Job Change 2010-2015 | | Proj. Job Change 2015-2020 | | Annual Job Openings | Median Hourly Earnings |
|---|--------------------------------|----------------------------|-----|----------------------------|-----|---------------------|------------------------|
| | | # | % | # | % | | |
| Miscellaneous Vehicle and Mobile Equipment Mechanics, Installers, and Repairers | 42 | 2 | 5% | 2 | 5% | 2 | \$12.27 |
| Office Clerks, General | 40 | 1 | 3% | 0 | 0% | 7 | \$17.92 |
| Bookkeeping, Accounting, and Auditing Clerks | 39 | (1) | -3% | (2) | -5% | 6 | \$21.94 |
| Secretaries and Administrative Assistants | 39 | 2 | 5% | (1) | -3% | 9 | \$21.59 |

Earnings Scales of Entertainment, Retail and Accommodations Industries

The occupations that are so critical to the Arts, Entertainment, and Recreation; Accommodations; and Retail Trade industries tend to be fairly low paying. The chart below displays earnings scales for some of the key occupations in these three industry categories. The horizontal axis shows the earnings at various percentile levels between 10th and 90th. Percentiles are a statistical tool for determining the distribution of a number across an entire group of people. To apply the principal to this case, earnings at the 10th percentile mean that 10 percent of workers in that category earn that wage level or less; likewise, the interpretation of the 90th percentile is that 90 percent of workers earn that wage level or less.

Along with earnings for the three key industry groups, also shown are earnings for all occupations within the National Harbor region. There is an obvious disparity in earnings between those in hospitality-related industries and those in other industries. For example, at the median (i.e.: an average person) wages for all occupations are around \$24.00/hour, whereas in the Arts, Entertainment, and Recreation; Accommodations; and Retail Trade industries wages are between \$11.50 and \$13.00/hour. The implication of these data is that most workers in these industries are fairly low-paid in comparison to other industries, which means it will be difficult to get and retain talented workers, unless wages are increased.

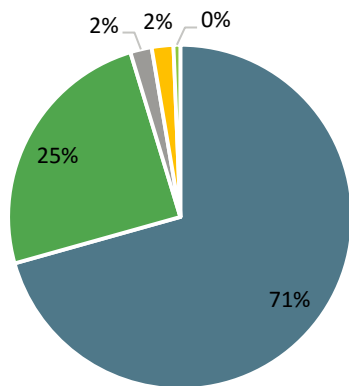


Education and Training Requirements

In pursuit of increasing workforce skills, it is necessary to understand the typical educational and training requirements of the workforce. The research team examined all occupations in the Entertainment, Retail and Accommodations industries with greater than 30 employees in 2016. The reason for narrowing the list in this way is to avoid overemphasizing occupations that make up a small overall proportion of the workforce. In examining these fifty-three occupational categories, however, we are narrowing in on over 90 percent of the overall employment composing these industry groups.

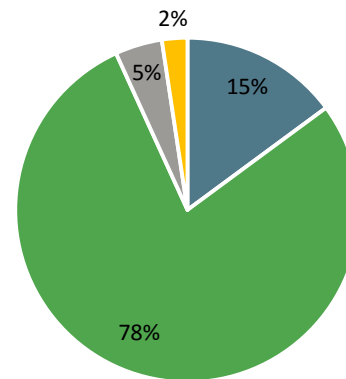
Of the core occupational mix within these industries very little formal postsecondary education is required. Eighty-six percent of jobs typically require a high school diploma or less. In terms of training and experience requirements, the vast majority are trained through “short term on-the-job training” (78% of all jobs). Just 7% require moderate or long term on the job training. The short list of jobs that typically require higher levels of education and training includes: Bookkeeping, Accounting, and Auditing Clerks, and Sales Manager.

Typical Entry Level Education



- No formal educational credential
- High school diploma or equivalent
- Postsecondary nondegree award
- Bachelor's degree
- Some college, no degree

Typical On-The-Job Training



- None
- Short-term on-the-job training
- Moderate-term on-the-job training
- Long-term on-the-job training

Knowledge, Skills and Abilities

Employment and earnings statistics are a necessary starting point for understanding workforce needs for a given industry group. In recent years, technology companies have progressed at providing the next level of information on the workforce. Hence this sector is focused on the most critical skills for workers in the three key industry groups, namely, Arts, Entertainment, and Recreation; Accommodations; and Retail Trade.

Unlike other portions of this analysis, where data are derived from federal databases such as the US Department of Labor, the root source for skills data are job postings data from across the internet. Though the exact number of sites that are included in this process is difficult to determine because the number and type of these sites is ever changing and growing. To give an idea of scale, in July 2016 (the latest date where data are available) EMSI provided job postings analytics on 18.9 million job postings, a substantive portion of all web-based recruiting activity. Skills data are separated into two groups. “Hard skills” tend to be topical and are generally more cognitive or mechanical in nature, whereas “soft skills” are more about interactions with other people including both co-workers and customers.

Top Ranking Hard Skills

| Skill | Percent of Postings Containing Term |
|------------------------|-------------------------------------|
| Sales | 37.4% |
| Management | 34.6% |
| Customer Service | 33.9% |
| Retailing | 26.4% |
| Training | 20.6% |
| Merchandising | 17.7% |
| Operations | 16.2% |
| Communications | 16.0% |
| Recruitment | 15.0% |
| Restaurant Operation | 12.3% |
| Selling Techniques | 12.1% |
| Lifting | 12.0% |
| Cleaning | 11.8% |
| Maintenance | 9.0% |
| Information Security | 7.9% |
| Marketing | 7.0% |
| Retail Sales | 7.0% |
| Appointment Scheduling | 6.9% |
| Administration | 6.8% |
| Hospitality | 6.7% |

Top Ranking Soft Skills

| Skill | Percent of Postings Containing Term |
|---------------------------------|-------------------------------------|
| Scheduling (Project Management) | 21.3% |
| Leadership | 8.7% |
| Leading | 6.4% |
| Cleanliness | 5.9% |
| Listening | 4.8% |
| Learning | 4.6% |
| Coordinating | 1.9% |
| Ethics | 1.8% |
| Depth Perception | 1.4% |
| Telephone Skills | 1.1% |
| Creativity | 1.1% |
| Team Building | 0.8% |
| Leadership Development | 0.8% |
| Career Development | 0.8% |
| Creative Problem-Solving | 0.7% |
| Literacy | 0.6% |
| Cooperation | 0.5% |
| Team Leading | 0.5% |
| Conversation | 0.4% |
| Listening Skills | 0.4% |

Hard skill categories that appeared in 20 percent or higher of all job postings include sales; management; customer service; retailing; and training. Soft skills are less common in general, as there is only one category that appeared in greater than 20 percent of postings. The top five soft skill categories include scheduling (project management); leadership; leading; cleanliness; and listening.

The advent of the MGM National Harbor will certainly modify the blend of skills required of new workers, due in part to the fact that many new job categories will be introduced that do not currently exist in the region. However, these lists still provide a helpful cross-section of skills that are generally needed for workers in retail, food service and entertainment industries.